

From: James Kujawa <surfacewatersolutions@outlook.com>
Sent: Tuesday, January 5, 2021 9:05 AM
To: Dusty Finke
Cc: Jim Stremel; Judie Anderson; tg@mwimn.com; Anderson, David T.; Batty, Ronald H.; Debra Peterson; Lisa DeMars; Beverly Love
Subject: RE: New application - LR-20-284 - Meadowview Commons - 2nd Addn
Attachments: 2020-017 FOF 12-2-20 DECISION-updated SWMP.pdf

Hi Dusty,

This project was been approved by the ECWMC in October 2020. Attached are the updated findings and decision dated December 2, 2020. Below is the decision contingencies. No other review or application is necessary for this site plan at this time.

Please let me know if you have any questions.

Jim

Approved contingent upon:

- 1) Design information on the irrigation pump and augmentation water source must be provided within 6 months of the final plat approval.*
- 2) An operation and maintenance agreement of the stormwater ponds must be approved by the City and Commission. The agreement must provide for operation and maintenance on the irrigation pump system. Said agreement must be recorded on the property title with a copy of the recorded document provided to the Commission within 9 months of the final plat approval.*

James C. Kujawa
Surface Water Solutions LLC
6533 Neddersen Circle
Brooklyn Park, MN 55445-3206
952-456-4091
surfacewatersolutions@outlook.com

elm creek

Watershed Management Commission

ADMINISTRATIVE OFFICE
3235 Fernbrook Lane
Plymouth, MN 55447
PH: 763.553.1144
email: judie@jass.biz
www.elmcreekwatershed.org

TECHNICAL OFFICE
Barr Engineering
4300 Market Point Drive, Suite 200
Minneapolis, MN 55435
PH: 612.834.1060
Email: jHerbert@barr.com

Meadow View Medina, Project #2020-017

Project Overview: This is a 22-acre project located south of Meander Road and north of Hwy 55. Lennar Homes is proposing to build 125 townhomes with their necessary infrastructure on this site. The plans call for 7.78 acres of new impervious areas.

This project will trigger the Commission's Appendix C Rules and Standards as indicated below.

- | | | |
|---|--------|------------------------------|
| X | Rule D | Stormwater Management |
| X | Rule E | Erosion and Sediment Control |
| X | Rule F | Floodplain Alterations |
| X | Rule G | Wetland Alteration |
| | Rule H | Bridge and Culvert Crossings |
| X | Rule I | Buffer Strips |

Applicant & Agent: Lennar Homes, Attention Paul Tabone, 16305 36th Ave. N. Suite 600, Plymouth, MN 55443. Phone: 952-249-3075. Email: paul.tabone@lennar.com

Agent/Engineer: ISG, Attention Jerremy Foss, 7900 International Drive, Suite 550, Minneapolis, MN 55425. Phone: 952-426-0699. Email: Jerremy.foss@ISGInc.com

Exhibits:

- 1) ECWMC Request for Plan Review and Approval dated and received May 19, 2020
- 2) Authorization to review received via email by the City of Medina May 18, 2020
- 3) Project review fees, \$2,375.00 received May 29, 2020
- 4) Lennar Homes Meadow View Preliminary Plat site plan submittal by ISG. Dated August 12, 2020, except as noted.
 - a. Sheet 1 of 49 Title Sheet
 - b. Sheet 2 of 49, Phasing Plan
 - c. Sheet 3 of 49, Estimated Quantities
 - d. Sheets 4 to 12 of 49, Construction Notes and Site Details
 - e. Sheets 13 to 15 of 49, Utility Schedule
 - f. Sheet 16 of 49, SWPPP Narrative, Latest revision date of October 14, 2020
 - g. Sheets 17 to 19 of 49, Stormwater Pollution Prevention Plan SWPPP Notes and Details. Latest revision date of October 14, 2020

- h. Sheet 22 of 49, Existing Site Removal Plan
 - i. Sheets 23 to 25 of 49, Site Utility Plans
 - j. Sheet 26 of 29, Hydrant Coverage and Fire Truck Plan
 - k. Sheets 27 to 36 of 49, Planned Street and Utility Construction.
 - l. Sheets 37 to 39 of 49, Storm Drain Details
 - m. Sheets 39 and 40 of 49, Grading Plan. Latest revision date of October 27, 2020
 - n. Sheet 41 of 49, Grading Plan (West). Latest revision date of October 14, 2020
 - o. Sheet 42 of 49, Wetland Buffer Plan. Latest revision date of October 14, 2020
 - p. Sheet 43 of 49, Buffer Seeding Notes. Latest revision date of October 14, 2020
 - q. Sheet 44 of 49, Signage Plan
 - r. Sheets 45 to 49 of 49, Landscape Plan
- 5) Lennar Homes Meadowview Development Stormwater Management Report by ISG dated October 27, 2020
- a. HydroCAD existing conditions (print date August 4, 2020) and proposed conditions (print date August 11, 2020) with existing and proposed drainage maps
 - b. Geotechnical Evaluation Report by STS Consultants dated May 7, 2020
 - c. MPCA Wet Basin Sizing
 - d. Ramsey Washington Metro Watershed District Stormwater Reuse Calculator
 - e. MIDS Calculations
- 6) LGU MN WCA Notices
- a. Meadow View Replacement Plan Decision dated September 21, 2020
 - b. Rolling Green Property, Wetland Boundary/Type Decision dated July 13, 2020
 - c. Meadow View Wetland Replacement Plan Notice of Application dated August 12, 2020
 - d. Meadow View Wetland Boundary/Type Decision dated May 4, 2020
- 7) Meadow View Compensatory Storage Exhibit received via email September 14, 2020.
- 8) Meadowview draft stormwater operation and maintenance agreement received October 28, 2020
- 9) Meadowview PondNet Spreadsheet, received October 28, 2020

Findings:

General

- 1) Since the October 2020 Commission approval, the City of Medina requested the applicant to provide abstraction by irrigation only, thus eliminating the filter basin. This review is for the updated changes from the applicant dated October 14 and October 27, 2020.
- 2) This project was approved by the ECWMC on October 14, 2020 with the following conditions.
 - a. The mean (average) depth on the west wet-detention pond must be 4.0' or deeper.
 - b. Buffer strip monumentation and vegetation maintenance plans must conform to the Commission's requirements.
 - c. An operation and maintenance agreement of the stormwater ponds must be approved by the City and Commission. Said agreement must be recorded on the property title with a copy of the recorded document provided to the Commission.
 - d. Erosion and sediment controls must conform to the Commission's requirements.

- 3) A complete application was received on May 29, 2020. The decision period per MN Statute 15.99 was on October 20, 2020. The project decision was rendered October 14, 2020.
- 4) Drainage on this site flows into Elm Creek in the NW corner of the intersection of CR 116 and Hwy 55.
- 5) The Hennepin County Soil Survey shows Shorewood silty clay loams and Hamel complex in this area. Geotechnical soil borings show clay loam soils with poor infiltration capabilities and high-water tables.
- 6) The City of Medina requires that landowners assume responsibility for the long-term operation and maintenance of the stormwater basins. An O & M agreement must be approved by the City and Watershed and recorded within 90-days after final plat approval on the title to this property. A copy of the recorded agreements must be provided to the Commission. Note, the agreement must provide for operation and maintenance on the irrigation pump system.
- 7) Three wetland impacts will occur on this development. Filling 6,867 square feet of wetlands in three areas has been approved by the City of Medina (LGU) for this site plan.

Stormwater Management (Rule D)

General

- 1) Existing Site Area = 22.58 acres of agriculture uses
 - a. no impervious areas
 - b. ~17 acres cropland and 5 acres meadow/hay/wetland
- 2) Proposed Site Area = 22.58 acres of residential townhomes
 - a. 8.55 acres impervious areas
 - b. 14.80 acres grass cover
- 3) All homes on site are proposed as slab-on-grade construction. Lowest most floors will meet the Commission's requirements for 2.0-foot freeboard above the 100-year elevations on adjacent ponds, wetlands, and storm basins
- 4) Design changes requested by the City of Medina converted the east basin from a biofiltration basin to a wet detention pond. The westerly basin will remain the same and be constructed as a wet detention pond with stormwater used for irrigation on the homeowner's association property.
- 5) **REQUIRED ACTION:** Design information on the irrigation pump and augmentation water source must be provided.

Rate Controls

- 1) Rate controls **meet** the Commission's requirements
- 2) Overall peak flows will be controlled at the two pond discharge points. These flow south and east into the Elm Creek floodplain wetland for about 300 feet before entering the creek
- 3) Table 1 shows the existing and proposed flow rates from this site

Table 1 Rate Control Summary

		2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
South/East to Elm Creek (23.25 Acres)	Pre-Development	39.7	79.4	144.9
	Post-Development	10.9	30.7	65.3
	Change	-28.8	-48.7	-79.6

Abstraction Controls

- 1) Abstraction controls **do not meet** the Commission’s requirement.
- 2) After development there will be 8.55 acres of new impervious area.
- 3) True abstraction will not occur because soil infiltration rates (based on geotechnical report) are too low to absorb a 1.1-inch rainfall event over 48 hours.
- 4) In lieu of true abstraction, the west wet detention pond will use stormwater for irrigating 7.8 acres of the homeowner’s association property.
 - a. The west wet-detention pond will provide irrigation volume of 81,239 cubic feet (1.86-acre feet) per year based on the Ramsey-Washington Metro Watershed Organization Reuse Credit Calculator
- 5) Table 2 summarizes the abstraction controls provided on this site plan.
- 6) REQUIRED ACTION: Design information on the irrigation pump and augmentation water source must be provided.
- 8) REQUIRED ACTION: A copy of the recorded operation and maintenance plan agreements must be provided to the Commission. The agreement must provide for operation and maintenance on the irrigation pump system.

Water Quality Controls

- 1) Water quality controls **meet** the Commission’s requirements.
- 2) Table 2 summarizes the total phosphorus (TP) and total suspended solids (TSS) leaving this site before and after development.

Table 2 Stormwater Summary

CONDITION (22.6 AC.)	TP LOAD (LBS/YR)	TSS LOAD (LBS/YR)	ABSTRACTION (CU. FT.) ⁽¹⁾	ANNUAL VOLUME ⁽²⁾ (AC. FT.)
Pre-development (baseline)	18.47	3,481	N/A	12.81
Post-development without BMPs	21.22	3,855	34,140	26.01
Post-development with BMPs	4.94	310	81,239 ⁽³⁾	12.32
Net Change	-13.5	-3,171	+47,099	-0.49

(1) 8.55 acres impervious areas
 (2) Based on ECWMC staff analysis
 (3) Irrigation reuse

Buffer Strips (Rule I).

- 1) Buffer strip information on the SWPPP narrative and details dated October 14, 2020 **meet** the Commission's requirements.
- 2) The Commission requires a 25-foot average and 10-foot minimum buffer width for all wetlands.
 - a. Where slopes within a buffer are graded, any final slope steeper than 6:1 must increase buffer widths 5 feet horizontally for every 1 foot of vertical increase (i.e., 5:1=30 feet, 3:1 = 45 feet average)
- 3) Wetland buffers average 35 feet wide along the Elm Creek wetland basin and 25 feet on the interior wetland basin. This complies with the Commission's buffer width requirement.
- 4) Wetland buffer areas are shown to be restored and maintained with native vegetation for a minimum of 2 full growing season after planting. This meets the Commission's buffer vegetations standard for native seed.
- 5) Wetland buffer monumentation locations meet the Commission's requirements.

Wetland Alterations (Rule G)

- 1) Wetland alterations **meet** the Commission's requirements.
- 2) The City of Medina is the LGU in charge of administering the MN Wetland Conservation Act. Three wetland impacts are proposed that will fill 6,867 square feet.
 - a. The City of Medina's wetland and zoning codes follow the Commission's wetland alteration rules.
 - b. Wetland replacement plans have been approved by the City of Medina (LGU).
- 3) RECOMMENDATION: We recommend the normal water level (NWL) of wetland 2A be determined with an outlet pipe established at said elevation routed to CBMH A-8A.

Floodplain Alterations (Rule F).

- 1) The floodplain alteration plan **meets** the Commission's requirements.
- 2) The Elm Creek Watershed and Meadow View stormwater management plans have the base flood elevation (BFE) at 982.26 for the section of Elm Creek that runs along the south and easterly area of this site.
- 3) Floodplain impacts will occur along the fringe area of the Elm Creek floodplain.
 - a. Estimated floodplain fill below 982.3 will be 213 cubic yards.
 - b. Compensatory floodplain mitigation will be 396 cubic yards.

Erosion and Sediment Control (Rule E)

- 1) Erosion and sediment controls **meet** the Commission's requirements.

Decision from Elm Creek Commissioners on October 14, 2020

Approval contingent upon: (*NOTE conditions 1,2 and 4 have been met with updated plans)

- 1) *The mean (average) depth on the west wet-detention pond must be 4.0' or deeper.
- 2) *Buffer strip monumentation and vegetation maintenance plans must conform to the Commission's requirements.

- 3) An operation and maintenance agreement of the stormwater ponds must be approved by the City and ECWMC. Said agreement must be recorded on the property title with a copy of the recorded document provided to the ECWMC.
- 4) *Erosion and sediment controls must conform to the ECWMC requirement.

Note; Grading and erosion controls were administratively approved by technical staff September 30, 2020 on the condition that:

- a. the applicant accepts all risks for any changes required to obtain final approval by the Commission, and
- b. the City of Medina grants approvals for said grading

Decision for updated plan set received October 28, 2020.

Approval contingent upon:

- 1) Design information on the irrigation pump and augmentation water source must be provided.
- 2) An operation and maintenance agreement of the stormwater ponds must be approved by the City and Commission. The agreement must provide for operation and maintenance on the irrigation pump system. Said agreement must be recorded on the property title with a copy of the recorded document provided to the Commission.

On Behalf of Barr Engineering
Advisor to the Commission



James C. Kujawa
Surface Water Solutions LLC

December 2, 2020
Date

Attachments

- | | |
|----------|---------------------------|
| Figure 1 | Location Map |
| Figure 2 | 2018 Aerial Photograph |
| Figure 3 | Grading and Drainage Plan |

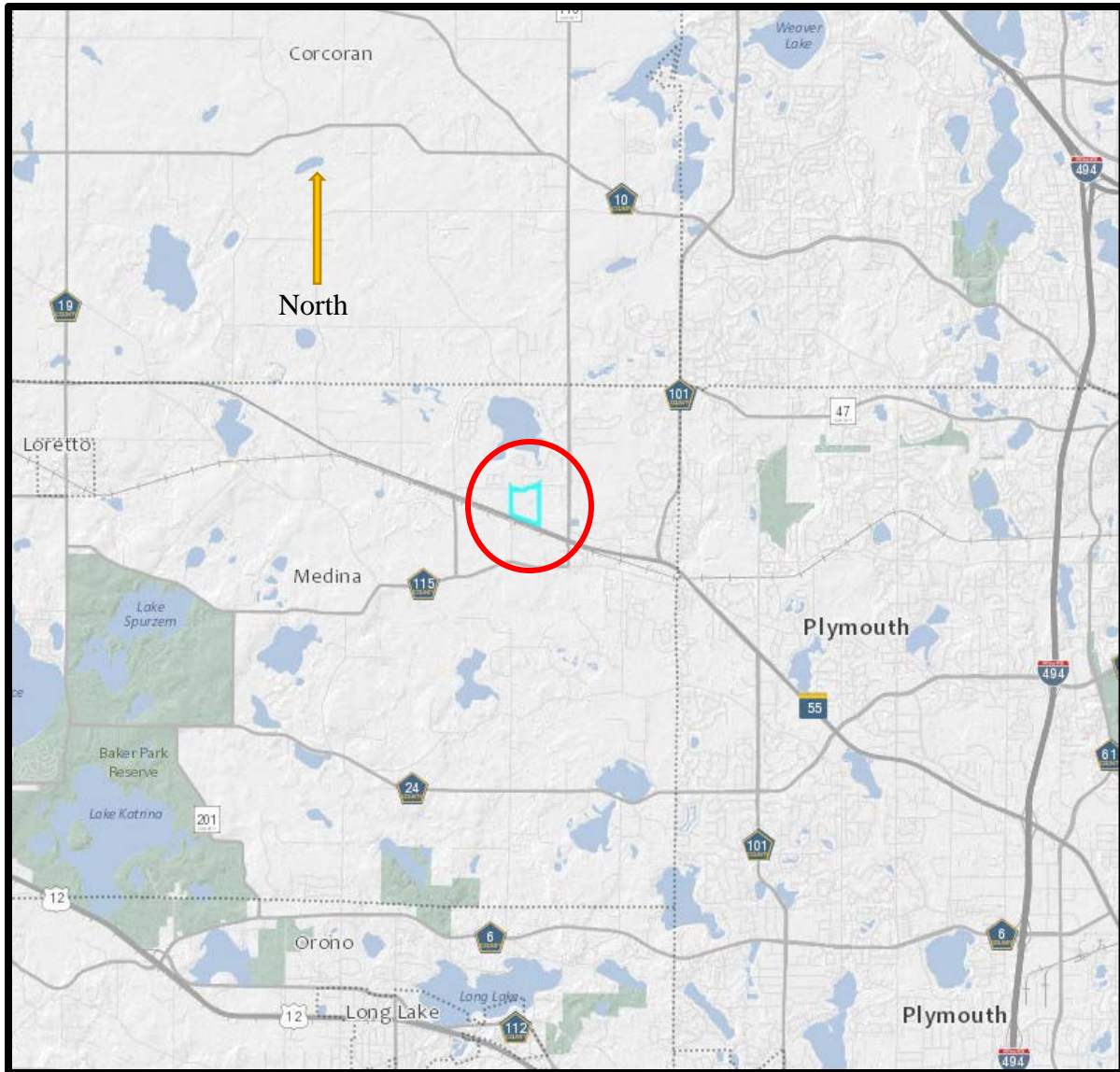


Figure 1 **Location Map**



Figure 2 2018 Aerial Photograph

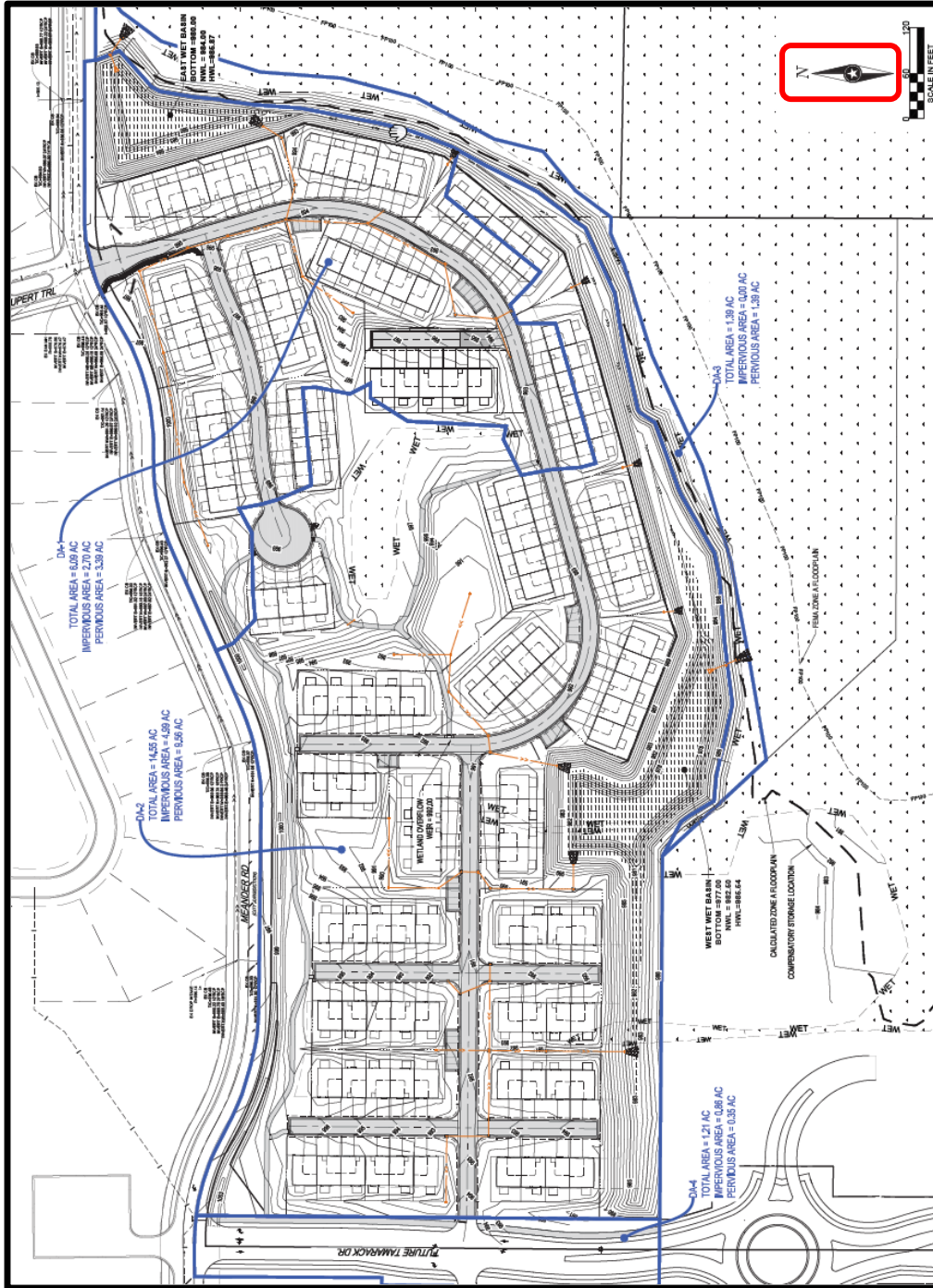


Figure 3, Grading and Drainage Plan