

elm creek Watershed Management Commission

ADMINISTRATIVE OFFICE
3235 Fernbrook Lane
Plymouth, MN 55447
PH: 763.553.1144
FAX: 763.553.9326
Email: judie@jass.biz
www.elmcreekwatershed.org

TECHNICAL OFFICE
Hennepin County
Dept. of Environment and Energy
701 Fourth Ave S Suite 700
Minneapolis, MN 55415-1600
PH: 612.348.7338
FAX: 612.348.8532
Email: James.Kujawa@co.hennepin.mn.us

REVISED
AGENDA
Regular Meeting
November 13, 2019

The meeting packet may be found on the Commission's website: <http://elmcreekwatershed.org/minutes--meeting-packets.html>

1. Call Regular Meeting to Order.
 - a. Approve **Revised** Agenda.*
2. Consent Agenda.
 - a. Minutes last Meeting.*
 - b. Treasurer's Report and Claims.*
3. Open Forum.
4. Action Items. *(Also see Staff Report. *)*
 - a. Project Reviews.
 - 1) 10.n. 2019-028 Howell Meadows, Maple Grove.*
 - 2) 10.m. 2019-027 Havenwood at Maple Grove.*
 - 3) 10.o. 2019-029 South Prominence, Maple Grove.*
 - b. Watershed-Based Funding Grant – Cooperative and Subgrant Agreement.*
 - 1) Attachment 1 – Project Description.*
 - 2) Attachment 2 – BSWR Agreement.*
 - c. Approve Professional Services Agreement with Barr Engineering.*
 - d. Liability Coverage Waiver Form.*
5. Old Business.
6. New Business.
7. Communications.
8. Education.
 - a. WMWA - Update.**
9. Grant Opportunities and Updates.

(over)

*in meeting packet
**available at meeting or on website

10. Project Reviews. (See Staff Report.*)

Report No.					Project No.	Project Name
ag.				AR	2013-046	Woods of Medina, Medina.
ah.				AR	2014-015	Rogers Drive Extension, Rogers.
a.					2015-004	Kinghorn Outlet A, Rogers.
ai.				AR	2015-030	Kiddiegarten Child Care Center, Maple Grove.
aj.				AR	2016-002	The Markets at Rush Creek, Maple Grove.
ak.				AR	2016-005W	Ravinia Wetland Bank Plan, Corcoran.
b.					2016-040	Kinghorn 4 th Addition, Rogers.
c.					2016-047	Hy-Vee North, Maple Grove.
al.				AR	2017-014	Laurel Creek, Rogers.
am.				AR	2017-017	Mary Queen of Peace Catholic Church, Rogers.
an.				AR	2017-029	Brayburn Trails, Dayton.
d.					2017-039	Rush Creek Apartments, Maple Grove.
e.					2017-050W	Ernie Mayers Wetland/floodplain violation, Corcoran.
ao.				AR	2018-018	Summers Edge Phase II, Plymouth.
f.					2018-020	North 101 Storage, Rogers.
ap.				AR	2018-026	Windrose, Maple Grove.
aq,				AR	2018-028	Tricare Third Addition, Maple Grove.
ar.					2018-038	Vincent Woods of Roger.
as.				AR	2018-044	OSI Phase II, Medina.
g.					2018-046	Graco, Rogers
at.				AR	2018-048	Faithbrook Church Phase 2, Dayton.
h.					2019-001	Fernbrook View Apartments, Maple Grove.
au.					2019-002	Parkside Villas, Champlin.
i.					2019-016	Rogers Retail Development, Rogers.
av.					2019-021	Brenly Meadows, Rogers.
aw.					2019-022	Comlink Midwest, Corcoran.
ax.				AR	2019-023	99th Avenue Apartments, Maple Grove.
j.					2019-024	Boston Scientific Weaver Lake Road Building 2 East Addition, Maple Grove.
k.					2019-025	Dayton Parkway Interchange, Dayton.
l.					2019-026	Interstate Power Systems, Rogers.
m.	A	E			2019-027	Havenwood at Maple Grove.
n.	A	E			2019-028	Howell Meadows, Maple Grove.
o.	A	E			2019-029	South Prominence, Maple Grove.

= Action item E = Enclosure provided I = Informational update will be provided at meeting RPFI - removed pending further information
R = Will be removed RP= Information will be provided in revised meeting packet..... D = Project is denied AR awaiting recordation

11. Other Business.

Z:\Elm Creek\Meetings\Meetings 2019\11 Regular Meeting Agenda .docx

*in meeting packet
**available at meeting or on website

CHAMPLIN - CORCORAN - DAYTON - MAPLE GROVE - MEDINA - PLYMOUTH - ROGERS

elm creek

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PH: 763.553.1144
E-mail: judie@jass.biz

TECHNICAL OFFICE
Hennepin County Public Works
Department of Environment and Energy
701 Fourth Ave. South, Suite 700
Minneapolis, MN 55415
PH: 612.348.7338
E-mail: james.kujawa@hennepin.us

Havenwood of Maple Grove **Maple Grove Project #2019-027**

Project Overview: This is a 5.6-acre site located in the NW intersection of Bass Lake Road (CR10) and Troy Lane (CR101). The site is proposed to be subdivided into two lots. The southerly lot will be 4.5-acres with a 150-unit senior living facility. The remaining outlot (~1.3 acres) is anticipated to be a daycare. The project will create a total of 3.53 acres of new impervious areas. This site plan triggers the Commission's review for conformance to Rule D (Stormwater Management) and Rule E (Erosion and Sediment Control).

Applicant: Roers Companies, Attention Jeff Koch, 1100 Cheshire Lane, Suite 120, Minnetonka, MN 55305. Phone: 952-221-0712. Email: jeff@roerscompanies.com

Engineer: Sambatek, Attention George Abernathy, 12800 Whitewater Drive, Suite 300, Minnetonka, MN 55343. Phone: 763-259-6012. Email: gabrenathy@sambatec.com

Exhibits:

- 1) Elm Creek Watershed Management Commission Request for Plan Review and Approval received September 19, 2019 with application fee of \$1,495.00
- 2) Preliminary Stormwater Management Plan for Havenwood of Maple Grove by Sambatek, dated September 13, 2019.
- 3) Site Development Plans for Havenwood Senior Living by Sambatek, dated July 1, 2019 with latest revision date of September 13, 2019.
 - a. Sheet C1.01, Title Sheet
 - b. Sheet C2.01, Existing Conditions
 - c. Sheet C3.01, Site Plan
 - d. Sheets C5.01 to 5.04, Erosion Control Plans, Notes & Details
 - e. Sheets C5.05 & 5.06, SWPP Narrative
 - f. Sheet C6.01, Utility Plan
 - g. Sheets C9.01 to C9.03, Details
 - h. Sheets L1.01 to L4.01, Landscape, shrub and Irrigation Plans and Details.
- 4) Wetland Conservation Act Notice of Application, wetland boundary and type and incidental determination dated June 17, 2019. Notice of Decision, boundary and type and incidental determination dated July 11, 2019.
- 5) Initial PUD comments from Maple Grove Water Resource Engineer dated July 15, 2019.
- 6) Project 2017-039 Pond 5 Stormwater Memo by Alliant Engineering dated August 7, 2017.

Findings:

- 1) A complete application was received October 9, 2019. The initial 60-day decision period per MN Statute 15.99 expires December 8, 2019.
- 2) The area summary lists this site as 6.05 acres with Lot 1, Block 1 (Senior Living project) being 4.52 acres, Outlot A (proposed daycare center) being 1.34 acres and ROW being 0.19 acres in size. Project work will consist of mass grading the site to accommodate the infrastructure and building of the Senior Living and proposed daycare facilities. Grading will help accommodate a future pond/filter basin when the access road from CR 101 is constructed by the City of Maple Grove in 2020.
- 3) This area was rough graded in 2010 during the construction and realignment of County Roads 10 and 101. Storm sewer infrastructure was installed as part of that project to provide drainage into the regional pond system designed for the Markets at Rush Creek (EC project 2009-004). The Commission approved that development in April 2009. The Markets at Rush Creek system was designed to meet the Commission's 2nd Generation Stormwater Management Plan standards.
- 4) There are no wetlands or floodplains on this site.

Stormwater Management

General:

- 5) Per the regional stormwater design on project 2009-004, this site is proposed to drain to the southwest under CR 10 into regional pond #5.
- 6) A remnant area of the old CR 10 ROW from this site will drain to the NE. The new impervious areas for the access road connected into this site from CR 10 will be treated in a future pond/filtration basin to be constructed by the City of Maple Grove in 2020.
- 7) An irrigation pond is proposed for the ECWMC volume abstraction requirements. This irrigation pond and system must have an operation and maintenance plan approved by the City and Commission and recorded on the title for this property. A copy of said recorded document must be provided to the Commission.

Rate Controls - will meet the Commission's Standards.

- 8) For rate and water quality controls from this site, pond #5 on the south side of CR 10 was installed as part of a regional stormwater system. It is connected into this property by a 36" diameter storm sewer under CR 10.
 - a. The design for regional Pond 5 assumed the drainage area from this site to be 6.4 acres with 3.12 acres of impervious areas. The actual design for this site proposes a drainage area 6.7 acres and 3.15 acres of impervious area.
 - b. The additional irrigation pond proposed on this site will treat the small increase in drainage and impervious areas. It will treat 3.15 acres of impervious area and detain 4.4 acres of drainage areas. The inflows to the regional pond are as follows:

b) (continued; regional pond inflows proposed and actual)

Existing Regional Pond #5 inflows from this site	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Proposed*	11.0	18.5	35.8
Actual	9.6	17.2	32.9

* proposed is based on Alliant Engineering memo dated August 7, 2017

- 9) ROW areas for access to this site from the northeast will be treated with a future pond/filter basin to be constructed at the intersection of CR 101 and the entry road to the Lord of Life Church. The future pond will be designed to treat a total of 5 acres drainage areas with 0.45 acres of impervious area.

NE Pond (Future) (5.0 acres DA, 0.45 acres impervious)	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Existing	5.1	9.2	13.1
Proposed	1.8	5.1	12.8

Water Quality – will meet the Commission’s requirements.

- 10) Regional pond #5 was approved by the Commission and designed to meet phosphorus requirements based on 49% impervious area draining to it. This site will have 47% overall impervious areas draining into pond 5. Additionally, phosphorus will be reduced by 32% and TSS by 43% from the new stormwater irrigation pond constructed on site.
- 11) The NE pond/filter basin will reduce phosphorus loads from 2.7 lbs/year to 1.0 lbs. year and TSS from 496 lbs/year to 8 lbs/year.

Abstraction – will meet the Commission’s requirements.

- 12) Abstraction requirements were not part of the watersheds requirements in 2009. With this expansion, the applicant must provide for this requirement on the new impervious areas. 3.14 acres of new imperious areas will be treated by a new stormwater pond that will be used for irrigation on site. 0.39 acres of new imperious areas from the access road will be treated in a future stormwater pond/filtration basin at that intersection when that area is reconstructed (2020).
- a. Stormwater irrigation pond.
 - i. 3.14 acre of new impervious areas requires 12,565 cubic feet of abstraction.
 - ii. 1.1 acres will be irrigated.
 - iii. Based on analysis of the irrigation system and how it is modeled in the Ramsey/Washington stormwater reuse calculator, 17,069 cubic feet of credit is provided from the planned irrigation system.
 - iv. The location of the irrigation pump is necessary on sheet C3.01.
 - b. NE Stormwater pond with filter (future pond)
 - i. 0.39 acres of new impervious area requires 1,538 cubic feet of abstraction.
 - ii. The filter bench will abstract 2,142 cubic feet of water.

- iii. This pond is proposed to be designed as a level 3 (per MIDS modeling) basin.

Erosion and Sediment Controls – meet the Commission's requirements.

Recommendation:

Approval contingent upon

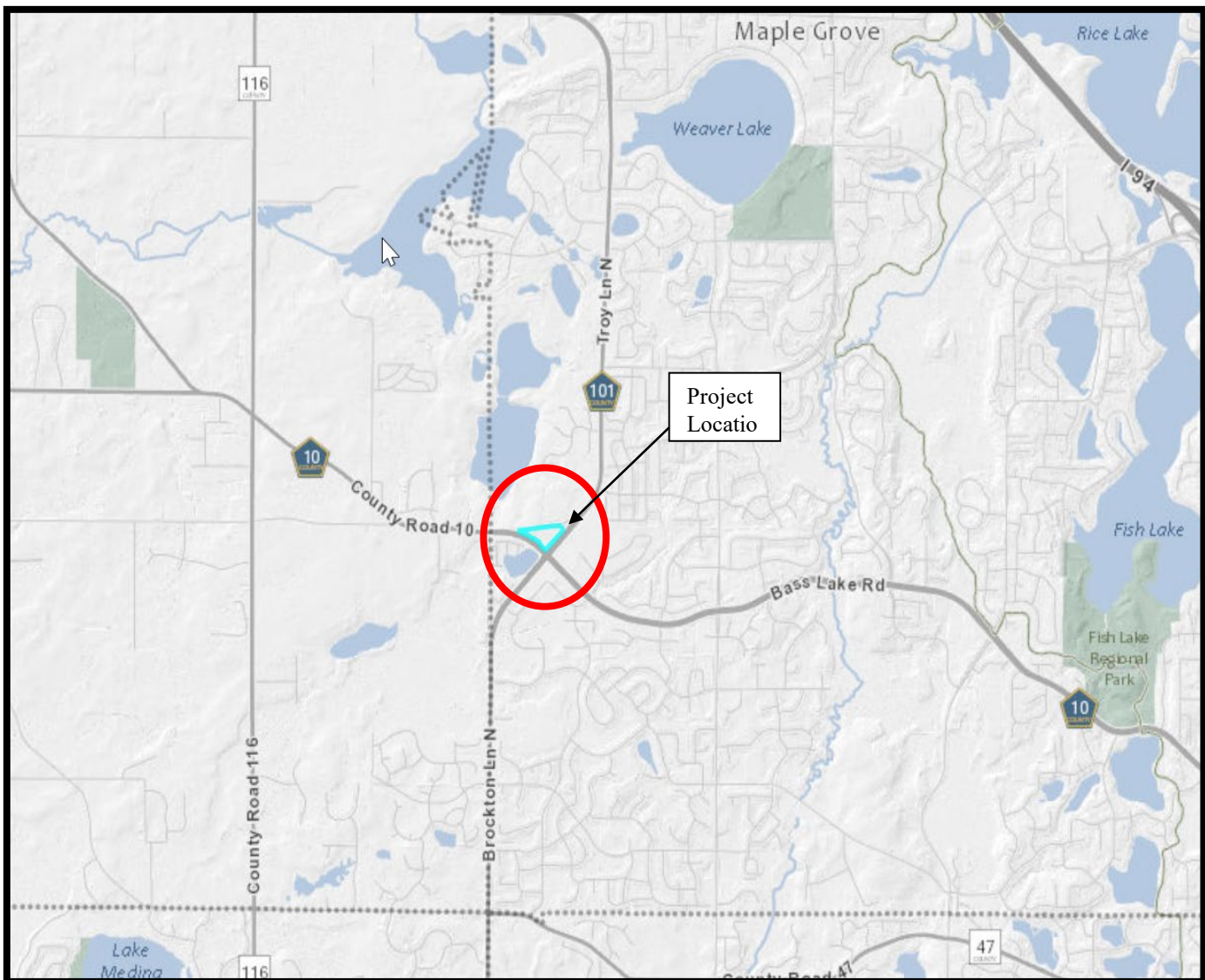
- 1) The irrigation pond and system must have an operation and maintenance plan approved by the City and Commission and recorded on the title for this property. A copy of said recorded document must be provided to the Commission.

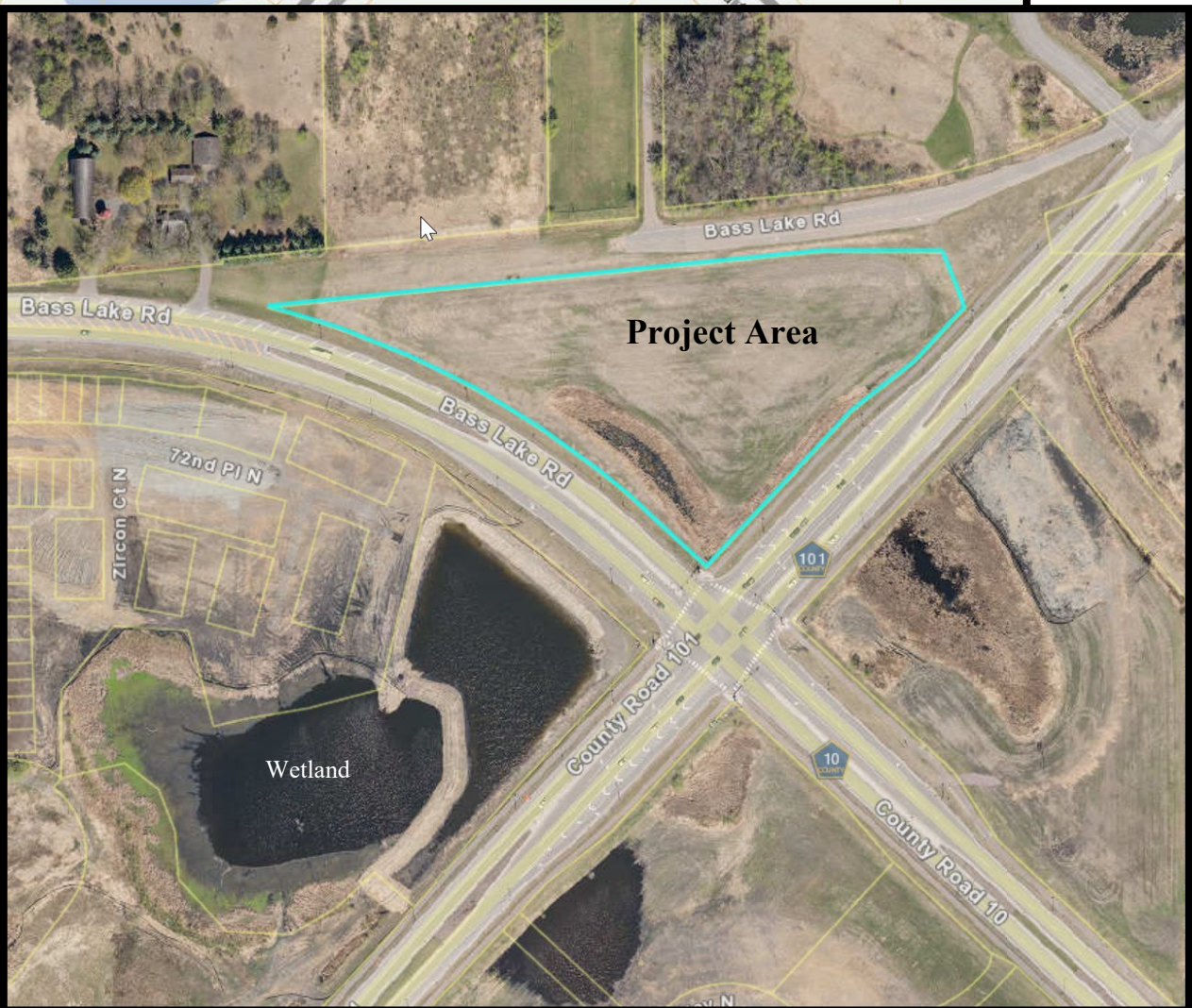
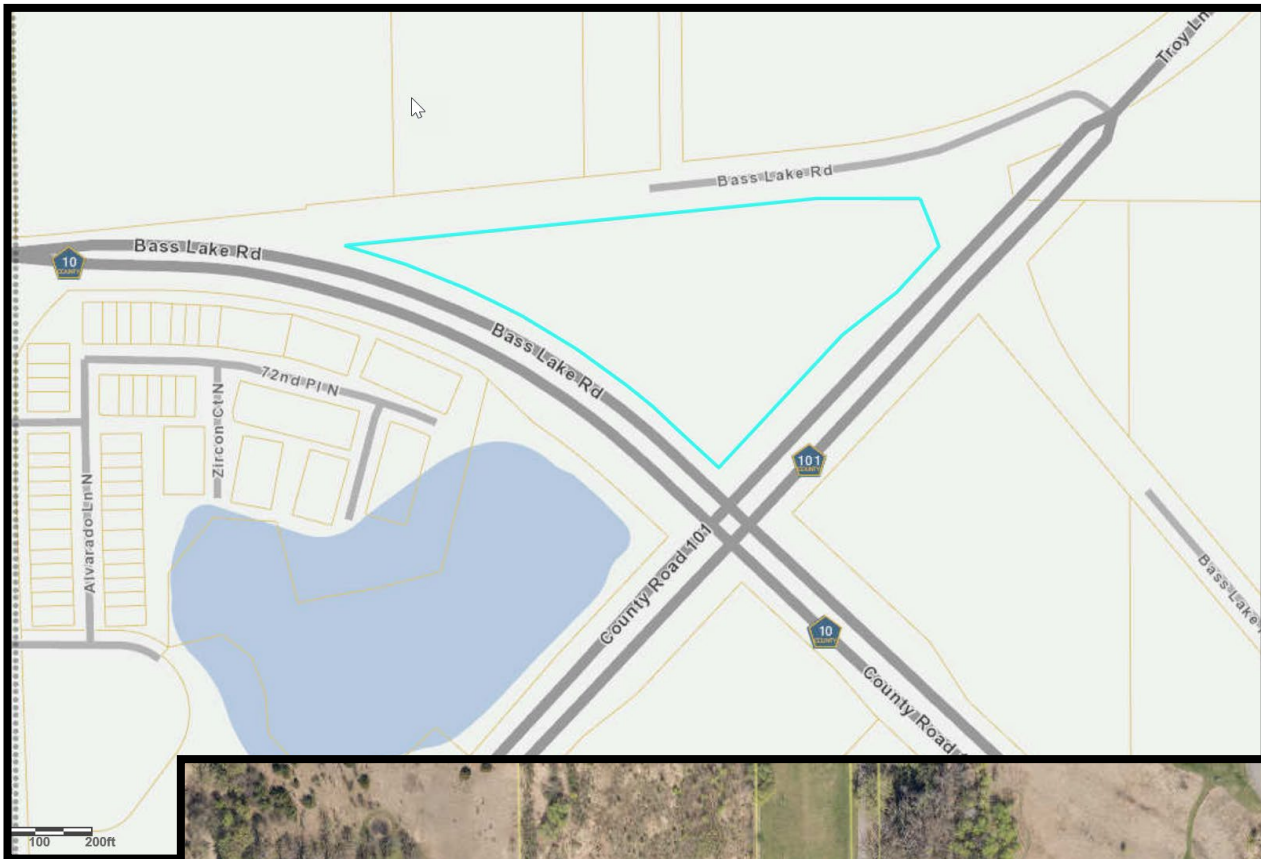
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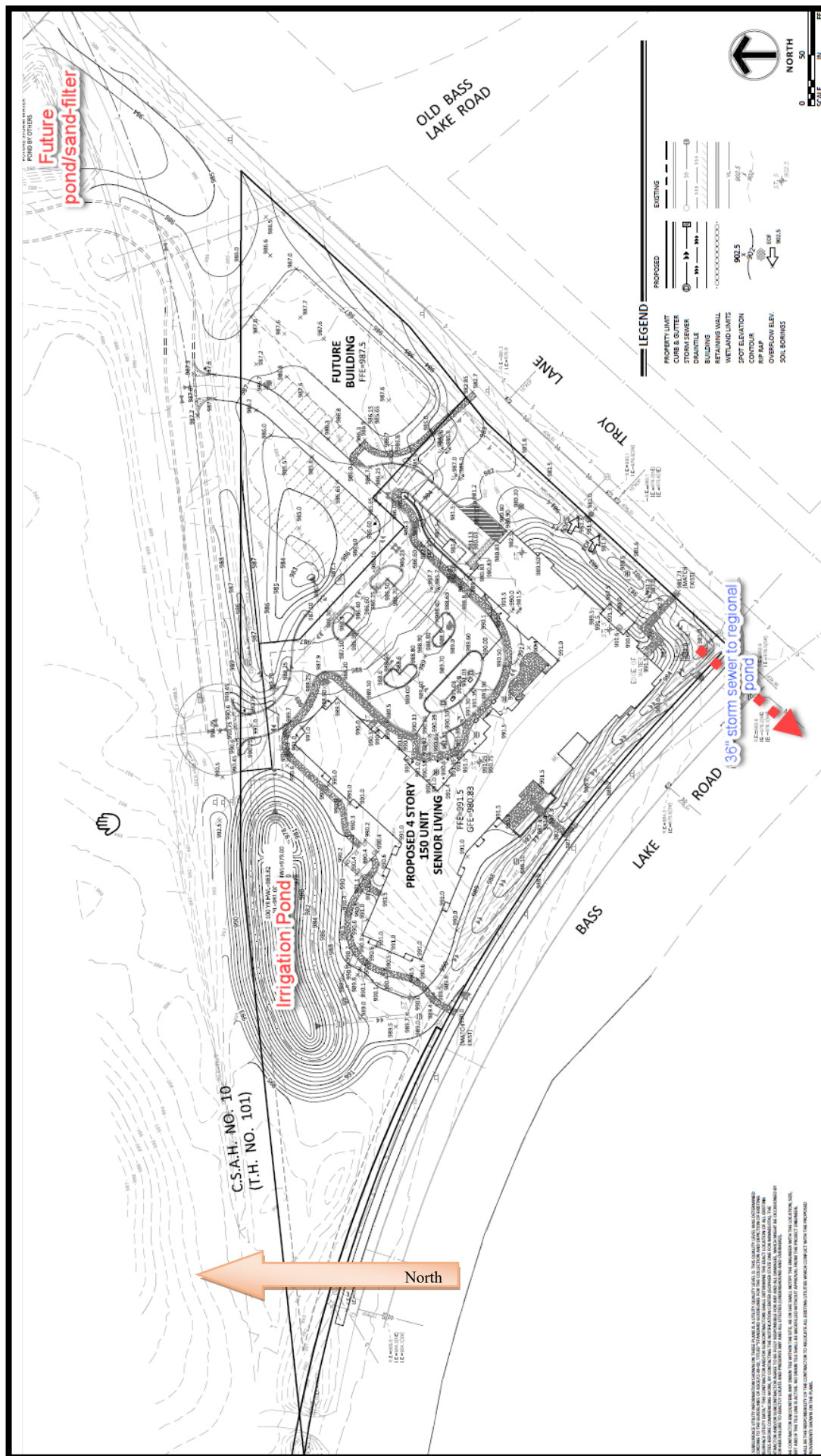


October 17, 2019

Location Map







elm creek

Watershed Management Commission

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3235 Fernbrook Lane
Plymouth, MN 55447
PH: 763.553.1144
E-mail: judie@jass.biz

TECHNICAL OFFICE
Hennepin County Public Works
Department of Environment and Energy
701 Fourth Ave. South, Suite 700
Minneapolis, MN 55415
PH: 612.348.7338
E-mail: james.kujawa@hennepin.us

South Prominence

Maple Grove Project #2019-029

Project Overview: This is a 12-acre site located on the north side of Fieldstone Blvd. N. between near 63rd Avenue. It consists of two large lot residential parcels proposed to be developed into 21 residential lots. This a remnant piece of property surrounded by the Fieldstone development on the north, south and west sides and the Prominence Woods project (2005-024) on the east side of this parcel. The South Prominence site includes a four (4) lot area that is already platted (the Prominence Woods development), two areas that will be ghost platted into eight (8) lots in the future and this site plan, which is 13 lots. The project will create a total of 2.5 acres of new impervious areas on the ghost platted (8 lots) and South Prominence (13 lots) parcels. This site plan triggers the Commission's review for conformance to Rule D (Stormwater Management), Rule E (Erosion and Sediment Control) and Rule I (Buffer Strips).

Applicant: Serenity on the Green, Inc. attn. Nate Herman, 10850 Old County Road 15, Suite 200, Plymouth, MN 55441. Phone: 763-360-1307. Email: nate@gonyecompany.com

Agent/Engineer: Sathre-Bergquist, Inc. attn. Bob Molstad, 150 Broadway Ave. S., Wayzata, MN 55391. Phone: 952-476-6000. Email: molstad@sathre.com

Exhibits:

- 1) Elm Creek Watershed Management Commission Request for Plan Review and Approval received October 2, 2019 with application fee of \$1,150.00.
- 2) South Prominence Development Stormwater Management Plan updated October 2019.
- 3) Prominence Woods 2005-024 ECWMC project file.
- 4) South Prominence Site Plans by Sathre-Bergquist dated July 18, 2019 with last revision date of October 2, 2019.
 - a. Sheet TI, Title Sheet
 - b. Sheet PP, Preliminary Plat dated July 12, 2019 with latest revision date of September 17, 2019.
 - c. Sheets UP1 and UP2 of 2, Preliminary Utility Plan
 - d. Sheets GP1 and GP2 of 2, Preliminary Grading Plan
 - e. Sheets GP1 and GP2 of 2, Ultimate Grading Plan
 - f. Sheet EC1, Preliminary Erosion Control Plan

Findings;

- 1) A complete application was received October 2, 2019. The initial 60-day decision period per MN Statute 15.99 expires December 1, 2019.
- 2) This is an in-fill site with the surrounding Fieldstone and Prominence Woods developments. The applicant proposes to provide extra water quality/abstraction treatment by expanding an existing pond (Fieldstone Pond 11) that is along the westerly side of the property. One other pond is proposed in the future on the southerly ghost plat to handle runoff from 4 lots on that plat. The existing Fieldstone pond 11 was reanalyzed with updated Atlas 14 storm events and as-built conditions to ensure no flooding will occur to the existing or future lots around it.
- 3) A wetland replacement plan has been received for the South Prominence parcels. Approximately 8,970 sq. ft. of impacts are proposed in two wetland basins on lots 9 and 10, Block 1.
 - a. Approximately 3,780 sq. ft. in one of the basins is proposed to be exempted under an incidental wetland exemption.
 - b. Replacement wetlands are proposed at a 2:1 ratio. 1:1 will be from the Engstrom Bank (account 1643) in Dayton and 1:1 will from the Hair Bank (account 1537) in Anoka County.
 - c. The City of Maple Grove is the LGU in charge of administering the Wetland Conservation Act on this site. No decision has been noticed at the time this report was completed.
- 4) There are no FEMA or Elm Creek 1% floodplains on this site.

Stormwater Management

General;

- 5) The drainage patterns on this site will generally remain the same. This site ultimately drains through the Fieldstone development to the east where it enters a backwater wetland/floodplain near Fieldstone Blvd. and 63rd Ave. The water flows through this area for about 1,600' before entering Elm Creek near the Maple Grove/Plymouth boarder.
- 6) The South Prominence site includes;
 - a. A four (4) lot area that is already platted (the Prominence Woods development). This project was approved by the Commission in 2005.
 - b. Two areas that will be ghost platted into eight (8) lots in the future, and
 - c. this development area which is 13 lots.
 - d. The total new impervious areas for South Prominence Woods and the ghost plats will be 2.5 acres.
- 7) One NURP pond with an iron enhanced filter bench is proposed to handle the stormwater controls for this site development.
- 8) A future pond is proposed within the southerly ghost plat to handle runoff from 4 lots from that site when it is developed.

- 9) The City of Maple Grove assumes the responsibility for the operation and maintenance on residential stormwater basins. Drainage and Utility Easements are proposed over these facilities.

Rate Controls - will meet the Commission's Standards.

- 10) When this site is fully developed the sum of the flow rates will meet the Commission's standards. If you consider the two main discharge points, the discharge to the northwest reach is higher post development for the 10-and 100-year flow rates vs pre development rates. These flows are shown in the following table

Total sum discharge	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Existing - 41.22 acres	11.5	22.6	41.0
Proposed – 40.80 acres	8.4	17.0	36.7
Discharge to North/west	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Existing - 5.98 acres	6.8	12.4	18.4
Proposed - 4.39 acres	6.8	13.2	26.4
Discharge to South	2-yr (cfs)	10-yr (cfs)	100-yr (cfs)
Existing - 35.24 acres	4.9	10.8	23.9
Proposed – 36.51 acres	2.8	10.0	19.3

- 11) Technically this site will meet the Commission's standards, although it is noted here for the City of Maple Grove that the discharge rates increase to the north/west discharge point from this site.
- a. The applicant with the City's concurrence modeled the existing storm pond N of this site for the increased discharges. Modifications to this pond's emergency overflow are proposed to maintain the desired discharge and address low floor elevations on existing homes.

Water Quality/Abstraction – will meet the Commission's requirements.

- 12) Since the development is an in-fill development, portions of the site are unable to be captured and directed into on-site water quality BMP's. Water quality BMP's were calculated on a mass-balance bases to meet the Commission's standards for post-development Tp and TSS loads. Abstraction/TSS and TP were analyzed under fully developed conditions which includes the 8 lots in the two ghost plats
- 13) To meet water quality and abstraction design requirements, existing pond 11 is proposed to be expanded by construction of an iron enhanced sand filter bench in the SE corner of the pond, extending it into the SW corner of this development.
- 14) An increase of 2.5 acres of new impervious areas equates to 9,993 cubic feet of abstraction volume necessary to meet the Commission's standards. Based on the filtration design, the newly expanded filter bench will route 19,950 cubic feet of water through it within 35 hours. Note: to help meet Tp requirements, iron enhanced sand will be added to the drain tile beneath the filtration bench.

- 15) Filter basin design details do not include iron enhanced sand bench standards or details. These must be included in the plan set.

Stormwater Summary

Condition (based on 4.4 acres)	TP Load (lbs/yr)	TSS Load (lbs/yr)	Filtration (cu. ft.)	Annual Volume (ac. ft.)
Pre-development (baseline)	3.4	1058	N/A	7.12
Post-development without BMPs	6.6	2043	9,993	9.63
Post-development with BMPs	-7.9*	990	19,950	9.63
Net Change	-4.3*	68	-9,957	+2.51

Treatment exceeds the proposed increase in loadings due to modifying the regional basin for treatment which included upstream/off-site areas.

Wetlands and Buffers:

- 16) The project proposes 0.1191 acre of permanent wetland impact to Wetlands 2&3. They are asking the LGU for a determination on an additional 0.09 acres of exemptions. Replacement at a 2:1 ration is proposed from BWSR bank accounts 1643 (Engstrom in Dayton) and 1537 (Hair in Anoka Co)
- 17) Maple Grove is the LGU in charge of administering the Wetland Conservation act for this project. A decision on the replacement plan has not been received by the Watershed as of this update.
- 18) Wetland buffers on this site meet the Commissions requirements of 10 foot minimum and 25-foot average.
- 19) Buffer monumentation meet the Commission's standard.

Erosion and Sediment Controls – meet the Commission's requirements.

- 20) Erosion and Sediment Control Plans adequately protect the resources on site and control sediment discharges off site during and after construction.

Recommendation:

Approval contingent upon;

- 1) LGU approval of WCA wetland impacts/replacement plans.
- 2) Iron enhanced filter basin details must be provided with the plan and approved by Maple Grove and the Commission staff.
- 3) City approval of the discharge increase to the North.

Hennepin County
Department of Environment and Energy
Advisor to the Commission

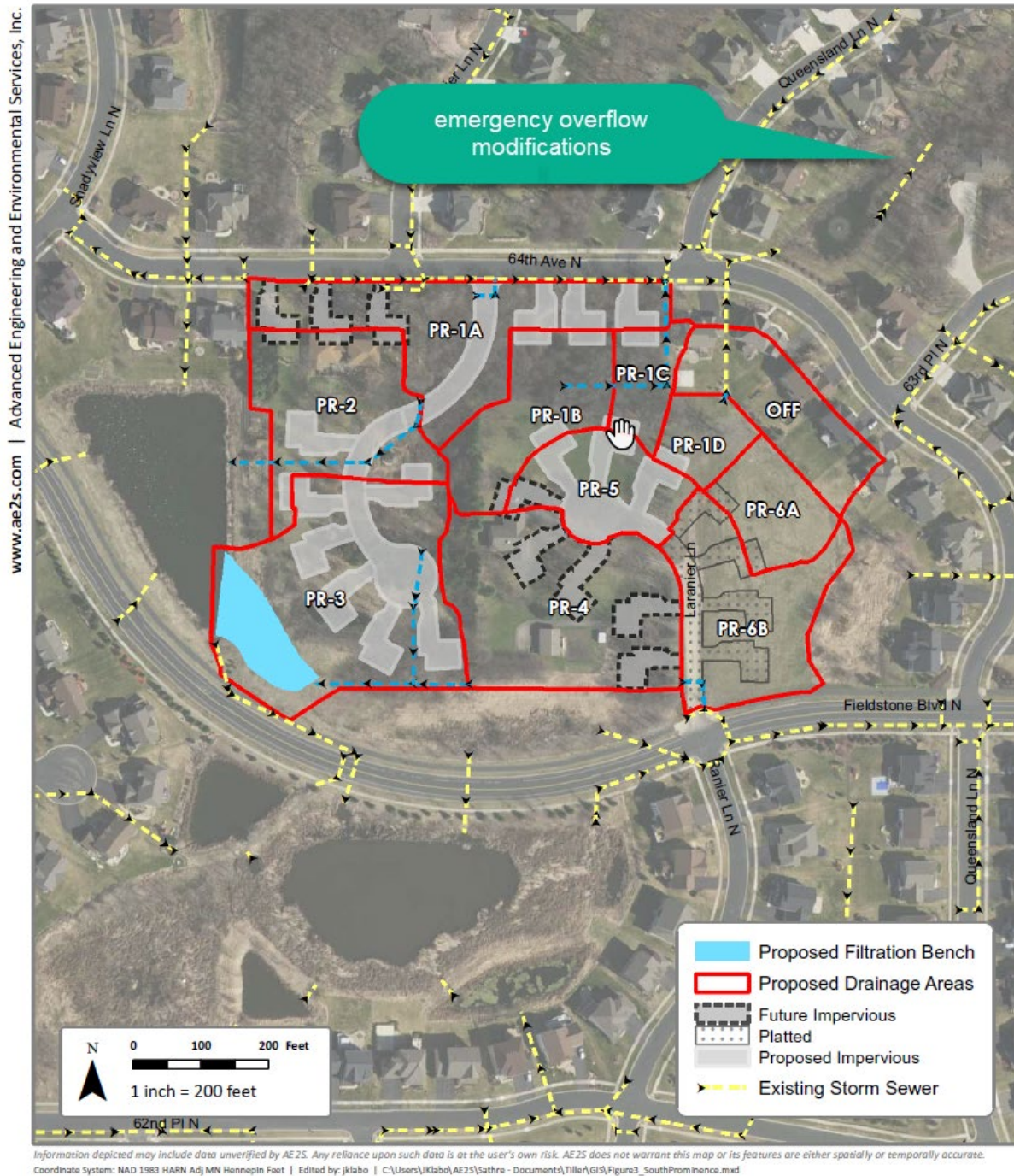


James C. Kujawa

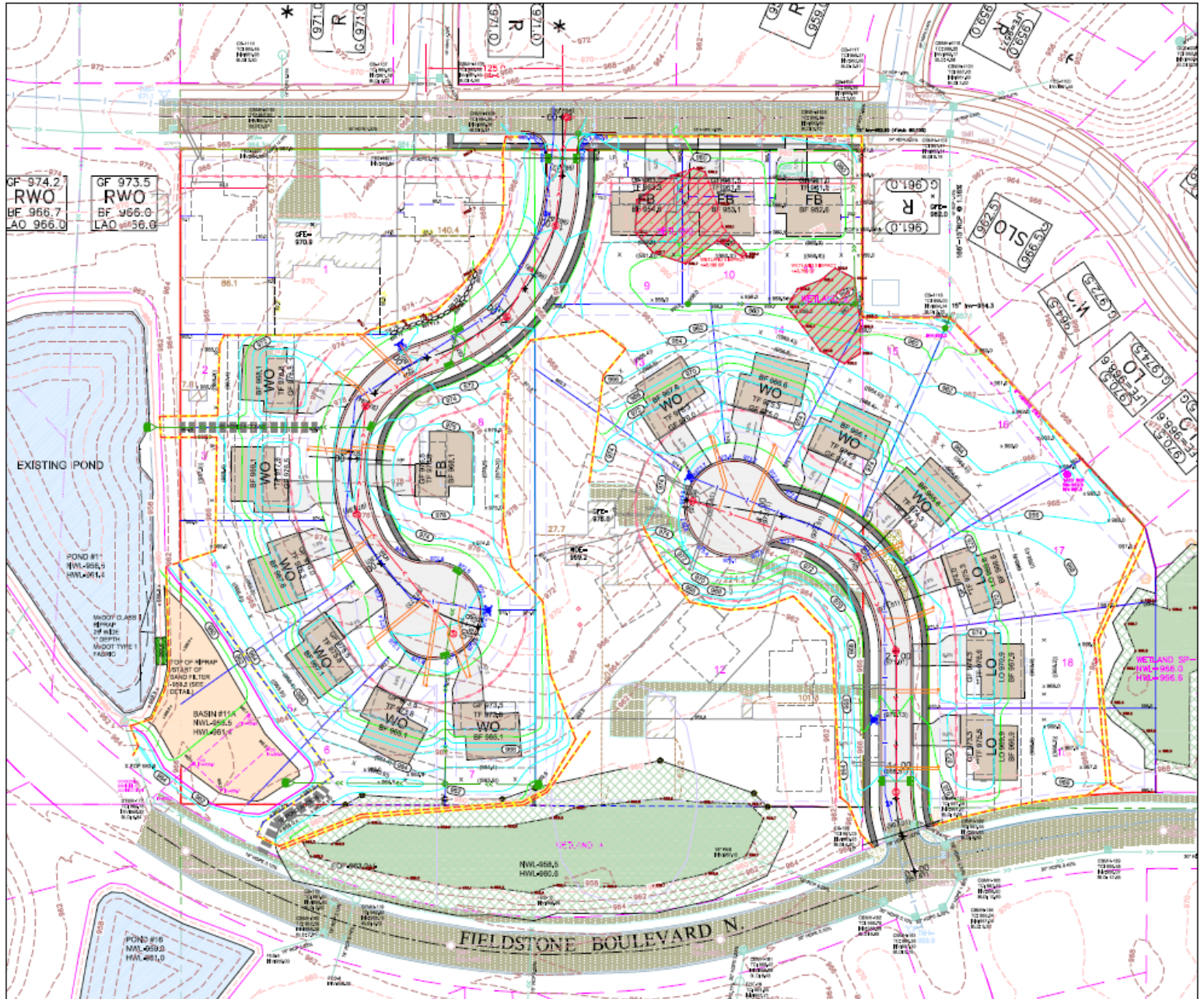
November 13, 2019
Date

Information depicted may include data unverified by AE2S. Any reliance upon such data is at the user's own risk. AE2S does not warrant this map or its features are either spatially or temporally accurate.
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Proposed Project Area



Proposed Grading



Future Grading

