CITY OF CORCORAN

Corcoran Planning Commission Agenda
July 2, 2020 - 7:00 pm

Meeting Held Via Telephone/Other Electronic Means

Call-in Instructions:
Call: +1 312 626 6799 US
Enter Meeting ID: 894 8235 9428
Press *9 to speak during the Public Comment Sections.
Video Instructions:
Click this link: https://us02web.zoom.us/j/89482359428
OR visit www.zoom.us and enter Meeting ID: 815 4766 0164
Participants can utilize the Raise Hand function to be recognized to speak during the Public Comment Sections. Participant video feeds will be muted.
For more information on options to provide public comment visit: www.corcoranmn.gov

1. **Call to Order / Roll Call**
2. **Pledge of Allegiance**
3. **Agenda Approval**
4. **Open Forum**
5. **Minutes**
   a. Minutes – June 4, 2020*
6. **New Business - <u>Public Comment Opportunity</u>**
   a. Sign Variance for the Corcoran Crossroads property located at 7625 County Road 116 (PID 26-119-23-11-0013) (city file no. 20-014)
      i. Staff Report
      ii. Commission Discussion & Recommendation
   b. Sign Variance for property at 9350 County Road 19 (PID 07-119-23-43-0004) (city file no. 20-020)
      i. Staff Report
      ii. Commission Discussion & Recommendation
   c. **Public Hearing.** Site Plan, Conditional Use Permit and Preliminary Plat for Eagle Brook Church on property located at the northwest corner of Hackamore Road and CR 101 (PID 36-119-23-44-0008, 36-119-23-44-0010, 36-119-23-44-0009, 36-119-23-44-0013, 36-119-23-44-0014) (city file no. 20-023)
      i. Staff Report
      ii. Open Public Hearing
      iii. Close Hearing
      iv. Commission Discussion & Recommendation
   d. Final PUD Development Plan for Bellwether 5th Addition (PID 0-119-23-43-0011) (city file no. 20-024)
      i. Staff Report
      ii. Commission Discussion & Recommendation
7. **Reports/Information**
   a. Planning Project Update*
   b. City Council Report* – Council Liaison Schultz
   c. Other Business

***Includes Materials** - *Materials relating to these agenda items can be found in the House Agenda Packet by Door.*

8. Commissioner Liaison Calendar

City Council Meetings

7/9/20	7/23/20	8/13/20	8/27/20	9/10/20	9/24/20
Vehrenkamp	Wu	Shoulak	Jacobs	Dickman	Vehrenkamp

9. Adjournment

Due to the COVID-19 health pandemic, the Planning Commission's regular meeting place is not available and is not open to the public. Pursuant to Minnesota Statute 13D.021 the one or more members of the Planning Commission may participate by telephone or other electronic means.

***Includes Materials -** *Materials relating to these agenda items can be found in the House Agenda Packet by Door.*

CITY OF CORCORAN

Corcoran Planning Commission Minutes
June 4, 2020 - 7:00 pm

The Corcoran Planning Commission met on June 4, 2020 at City Hall in Corcoran, Minnesota.

Present via telephonic or other electronic means were: Chair Jacobs, Commissioner Wu, Commissioner Dickman, Commissioner Shoulak, and Commissioner Vehrenkamp.

Also present via telephonic or other electronic means were: City Administrator Martens, City Planner Lindahl, and Council Liaison Schultz. Compliance Official Pritchard was present at City Hall.

1. **Call to Order / Roll Call**
   Chair Jacobs called the meeting to order at 7:01pm.
2. **Pledge of Allegiance**
3. **Agenda Approval**
   Motion made by Vehrenkamp seconded by Dickman to approve the agenda with the removal of Agenda Item 6d.
   Voting Aye: Jacobs, Wu, Dickman, Shoulak, and Vehrenkamp. (Motion carried 5:0)
4. **Open Forum – NONE**
5. **Minutes**
   a. Minutes – May 7, 2020
   Motion made by Wu seconded by Vehrenkamp to approve the agenda with correction to voting on item 6a.
   Voting Aye: Jacobs, Wu, Dickman, Shoulak, and Vehrenkamp. (Motion carried 5:0)
6. **New Business**
   a. **Public Hearing.** Park Dedication Ordinance Update (20-004)
      i. Staff Report – Planner Lindahl presented her staff report.
      ii. Open Public Hearing – Chair Jacobs opened the public hearing. NONE
      iii. Close Hearing
      Motion made by Wu seconded by Shoulak to close the public hearing.
      Voting Aye: Jacobs, Wu, Dickman, Shoulak, and Vehrenkamp.
      (Motion carried 5:0)
      iv. Commission Discussion & Recommendation – Staff clarified Park Dedication is based on actual/ fair market value.
      Motion made by Dickman seconded by Wu to recommend approval of the resolution as presented.
      Voting Aye: Jacobs, Wu, Dickman, Shoulak, and Vehrenkamp. (Motion carried 5:0)

   b. **Public Hearing.** Preliminary Plat for Kariniemi Addition (PID 33-119-23-22-0004 and 33-119-23-21-0001) (city file 20-016)
      i. Staff Report – Planner Lindahl presented her staff report.
      ii. Open Public Hearing – Chair Jacobs opened the public hearing.
      Two public comment letters were received prior to the meeting.
      Andrew Wyffels, 6840 Rolling Hills Rd, shared concerns with the private drive, including setbacks, snow storage and crop kill, ditch location and drainage, especially regarding existing drain tile disturbance, as well as dust control. He also asked form clarification regarding septic sites, Lot 4 access and development rights. Mr. Wyffels also stated that the development was denser than the surrounding area.
      Armand Brachman, 6855 Rolling Hills Rd, shared concerns with calculating development rights from wetland areas. He also shared concern with allowing a private driveway vs. a city street. He shared that septic sites might be challenging in the area as other neighbors

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had issues locating septic sites. Mr. Brachman also stated that the development is out of character for the surrounding area.
Donovan Demarais, 26175 Birch Bluff La. Excelsior, (Realtor, Partner Developer of Rolling Hills Acres) shared that the subdivision was a surprise and not conveyed by the purchaser. He also shared concerns about drainage and run-off as well as the driveway and septic sites/soil conditions.
Phillip Kothrade 6627 Co Rd 5, Annandale, (Developer of Rolling Hills Acres) shared concerns with existing drain tile and the private drive including location, ditch and setback from the property line. He said the development is out of character for the area and that transfer of development rights creates burden on other properties. He also shared concern with septic sites.
Mark Radintz, 6890 Rolling Hills Rd, stated he is currently building his home on Lot 1 Rolling Hills Acres and agrees with the other concerns shared. He is concerned about his elevations and how this development may impact his drainage.
Nate Kariniemi, 19927 Larkin Rd, Applicant/developer, stated the development would meet or exceed code, the private drive would be built to City standards, and the stormwater management and wetland delineation were approved. He stated the there is a septic application pending with Hennepin County. Mr. Kariniemi also stated he grew up and still lives in Corcoran and would be open for discussion with anyone.

iii. Close Hearing
Motion made by Vehrenkamp seconded by Shoulak to close the public hearing.
Voting Aye: Jacobs, Wu, Dickman, Shoulak, and Vehrenkamp.
(Motion carried 5:0)

iv. Commission Discussion & Recommendation -Staff clarified and answered questions raised during the public hearing: The applicant still has a number of conditions to address as part of approval; private drives are allowed per City Code; development rights can be reassigned when platting and an OSP could allow this number to double; septic is reviewed by Hennepin County prior to plat approval; HOA will be required for private drive.
The Commission discussed development rights and calculation based on buildable acreage vs. non-buildable as well as the "transfer" of rights.
The Commission inquired about access to the 40-acre property. Staff stated they had access to the east for the existing homestead and that any new access would most likely require wetland fill and that there is currently no approval for this. Staff briefly clarified the wetland fill process.
The Commission discussed driveway design/construction and drainage and shared concerns that there wasn't enough information provided. They discussed that even though they approve the plat, the conditions would need to be met prior to release and construction; staff confirmed and shared that this has been a Council policy, to keep applications moving through the process (with conditions) rather than holding the application up. Staff also clarified the final plat process and how conditions are resolved and that this application had several conditions prior to final plat.

Motion made by Jacobs seconded by Wu to recommend approval of the resolution as presented.
Voting Aye: Jacobs, Wu, Dickman, Shoulak, and Vehrenkamp. (Motion carried 5:0)

c. **Public Hearing.** Spanier Conditional Use Permit and Variance for the Property located at 10580 Cain Road (PID 02-119-23-23-004) (city file no. 20-019)

i. Staff Report – Planner Lindahl presented her staff report.
ii. Open Public Hearing – Chair Jacobs opened the public hearing. NONE
iii. Close Hearing
Motion made by Wu seconded by Dickman to close the public hearing.
Voting Aye: Jacobs, Wu, Dickman, Shoulak, and Vehrenkamp.
(Motion carried 5:0)
iv. Commission Discussion & Recommendation – The Commission briefly discussed the

setback non-conformity and that it would not expand.
Motion made by Shoulak seconded by Wu to recommend approval of the resolution as presented.
Voting Aye: Jacobs, Wu, Dickman, Shoulak, and Vehrenkamp. (Motion carried 5:0)

d. *Sign Variance at 9350 CR 19 (city file 20-020)* **REMOVED**

Chair Jacobs called a five-minute recess. (9:05) Chair Jacobs called the meeting back to order at 9:10pm.

e. **Public Hearing.** Comprehensive Plan Amendment, Rezoning, Preliminary Plat and Preliminary PUD Development Plan for "Tavera" (PID 35-119-23-44-0001, 35-119-23-11-0001, 35-119-23-12-0002, 35-119-23-41-0001 and 35-119-23-43-0001) (City File 20-017)
   i. Staff Report – Planner Lindahl presented her staff report.
   ii. Open Public Hearing – Chair Jacobs opened the public hearing.
   One public comment letter was received prior to the meeting.
   Paul Tabone, Lennar, Applicant/Developer, gave an overview of the project and PUD request and thanked the Commission and staff and stated he was available for questions.
   Mark Lanterman, 6936 Oakridge Dr., referenced his public comment letter and reiterated his concerns with lot size and the PUD vs. variance process. He stated that a PUD should be treated the same as a variance and the plat should be required to meet code. Mr. Lanterman also referenced information included in his letter regarding a 2014 federal investigation and $13.2 M settlement for violations of the False Claims Act for originating and writing bad loans.
   Greg Hoglund, 19220 Hackamore Rd, shared concerns with the City's website and the packet being too large to download and the location. He also asked for information on eminent domain process for the sewer route. He also shared his opinion that the development would be approved in a 5:0 vote.
   Nick Ashworth, 4760 Medina Lake Dr, shared concerns with density and that it should be lower.
   iii. Close Hearing
   Motion made by Vehrenkamp seconded by Jacobs to close the public hearing.
   Voting Aye: Jacobs, Wu, Dickman, Shoulak, and Vehrenkamp.
   (Motion carried 5:0)
   iv. Commission Discussion & Recommendation – At the request of the Commission, Staff clarified and answered a few questions: Staff clarified that the PUD and variance processes and requirements are distinctively and legally different and that a PUD does not need to meet variance standards per Code. The Commission is reviewing the application not the applicant and therefor the lawsuit is not relevant. Staff thanked Mr. Hoglund for the website comments and stated that eminent domain has not been voted on/finalized by the City Council.
   Mr. Lanterman asked for the floor and it was granted by Chair Jacobs. Mr. Lanterman stated that he believes his comments are relevant.
   The Commission asked Lennar for more information about their neighborhood meetings, why there was no amenity center proposed as well as cul de sac design and rear setback flexibility.
   Mr. Tabone stated neighborhood meetings had approximately 10-15 attendants and included questions on landscaping, drainage, stormwater, traffic, product type and design, as well as the referenced lawsuit. Rear setback flexibility is being requested to allow decks to be included. Mr. Tabone stated they are focusing on more natural amenities in lieu of a club house. They elected to leave out the cul de sac islands to simplify the plan as they were found to be problematic in construction and maintenance.
   Commissioner Vehrenkamp thanked Lennar for the work they've done to provide open space and conserve natural areas.
   Staff clarified the Theis parcel is included with the project.
   The Commission asked if allowing flexibility would set precedence. Staff clarified that PUD

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is unique to this project only and does not create or set precedence for other projects.
The Commission shared concerns with tree preservation, fragmented ecologically significant areas and forests, preserving rural/natural character, as well as the possibility of requiring a conservation easement.
The Commission discussed if there is enough benefit vs flexibility for the PUD.
Buffering and screening was discussed, including the use of berms, larger trees, and more landscaping/existing natural landscape preservation, including working with and landscaping on neighboring properties.
The Commission discussed the garage flexibility and the "gateway" sign.
Paul Tabone responded that they could work with their landscape architect to address buffering in specific areas but that planting off their property is very difficult. Paul stated the topography and wetlands play a part in the site design as well as meeting Met Council density. These numbers could not be met without townhomes and twin homes and smaller lots. Paul clarified garage flexibility as well as setbacks. He also discussed grading and their reasoning for their request for early grading.

Motion made by Wu seconded by Shoulak to recommend approval of all resolutions with amendments to the PUD resolution to add condition 54 requiring cul de sac islands, revise condition 34c. to require a conservation easement and add condition 35 to require additional landscaping and buffering to multiple lots.
Voting Aye: Wu, Shoulak, and Vehrenkamp. Voting Nay: Jacobs and Dickman. (Motion carried 3:2)

7. Reports/Information

a. Planning Project Update – Information only.
b. City Council Report – Council Liaison Schultz updated the Commission on Council activities.
a. Other Business – The Commission discussed tree preservation ordinance.
Staff reminded the Commission of the July 2 meeting and confirmed attendance.

8. Commissioner Liaison Calendar

City Council Meetings

6/11/20	6/25/20	7/9/20	7/23/20	8/13/20	8/27/20
Jacobs	Dickman	Vehrenkamp	Wu	Shoulak	Jacobs

9. Adjournment

Motion made by Shoulak seconded by Wu to adjourn.
Voting Aye: Jacobs, Wu, Dickman, Shoulak, and Vehrenkamp. (Motion carried 5:0)
Meeting adjourned at 12:47am, Friday June 5, 2020.

Submitted by Mike Pritchard
Code Compliance Official

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LANDFORM
From Site to Finish

105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401

Tel: 612-252-9070
Fax: 612-252-9077
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TO: Corcoran Planning Commission

FROM: T.J. Hofer through Kendra Lindahl, Landform

DATE: June 25, 2020 for the July 2, 2020 Planning Commission Meeting

RE: Corcoran Crossroads Marketplace Variances for the Property located at 7625 Co Rd No 116 (PID 26-119-23-11-0013) (city file no. 20-014)

60-DAY REVIEW DEADLINE: July 31, 2020

1. Application Request

The applicant has requested approval of variances to exceed the total allowed sign area and to allow a second dynamic display.

The applicant will also require a variance for the construction of the new canopy. The existing canopy is a legal, nonconforming structure that could be expanded, but the application's plan to remove and rebuild the canopy eliminates the legal, non-conformity.

2. Context

Zoning and Land Use

The property is in the Neighborhood Commercial (C-1) District and is guided Commercial on the Future Land Use Map.

Surrounding Properties

The surrounding properties are also zoned Neighborhood Commercial (C-1) and guided Commercial.

Natural Characteristics of the Site

There are no relevant natural characteristics or resources near the site.

Compliance with Minnesota Statutes

Staff notes that Section 1030 of the Corcoran City Code is not in compliance with the Minnesota State Statute §462.357 Subd. 1e. Staff has reviewed this application using the standards set forth within the Minnesota Statutes.

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3. Analysis of Request

The applicant recently purchased the property and is making improvements as part of a rebranding of the Corcoran Crossroads gas/convenience store.

Sign Variance

The applicant is requesting a variance to exceed the total allowable wall sign area and to allow the use of two dynamic displays on the site. The code allows for wall sign area equal to 10% of the primary building face. The primary building face is 980 sq. ft., which allows for 98 sq. ft. of wall sign area. The applicant is proposing 154.93 sq. ft. of sign area, which includes the existing wall sign on the primary building face, the proposed Marathon Channel Letter sign on the canopy and the proposed two dynamic displays. The site currently has approximately 158 sq. ft. of wall signage.

The code also restricts a use to one dynamic display and the applicant is proposing the use of two. Section 1070.040 of the Zoning Ordinance describes the variance process and standards. The burden of proof is on the applicant to show that all of the following criteria have been met:

1. *That there are practical difficulties in complying with the Zoning Ordinance.*

   The site currently exceeds the amount of wall signage permitted by ordinance. The existing building signage totals 93 sq. ft., which would leave only five sq. ft. for the canopy signage. The canopy currently has approximately 65 sq. ft. of signage.

   The applicant is requesting a variance to allow two dynamic price signs. With only one dynamic display the canopy would only be able to advertise to traffic traveling one way along County Road 116. Currently, the canopy has a dynamic display on both the north and south side of the structure. This allows traffic coming from either way to identify the site as a motor fuel station and see the prices available. The same effect could be achieved by a free-standing sign, but given the proximity to County Road 116, a free standing sign would likely need to occupy the right-of-way.

2. *That the conditions upon which a petition for a variation is based are unique to the parcel of land for which the variance is sought and were not created by the landowner.*

   The parcel is located along County Road 116, where some of the largest setbacks are required in the City. This limits the amount of space available for sign placement and this requires that more wall signage be made available. Another gas station is unlikely to be constructed along the road, and if it were, it would be subject to the setbacks that are established then and could plan for more freestanding signage.

   Many businesses are not required to advertise with immediate pricing, but fuel stations are expected to advertise to potential customers at all time. The area that would normally house a freestanding sign with a dynamic display on both sides is within the right-of-way of County Road 116, and is not able to be used.

3. *That the granting of the variation will not alter the essential character of the locality.*

   The sign area will not be altered significantly from what the site currently has today and therefore does not alter the character of the locality.

   The existing canopy has two dynamic displays on it, and the applicant is looking to repeat this. It will not alter the character of the locality.

4. *The proposed variance would be in harmony with the general purposes and intent of the Ordinance.*

   The intent of the Code is to limit the amount of signage so that the signage does not become a public nuisance. The proposed variances will maintain what currently exists now.

5. *The variance is consistent with the Comprehensive Plan.*

   The Commercial land use is intended to allow business in areas where sewer and water are available. Approving the variance will allow the business to grow and expand its service while maintain the business's ability to advertise to its potential customers. The Commercial land use is intended to use the adopted Design Guidelines and updating the current signs to a more modern style will accomplish this.

6. *The City may impose conditions on the variance to address the impact of the variance.*

   The design and size of the building is comparable to other fuel station canopies and staff believes there are no adverse impacts to the surrounding property owners.

Setback Variance

The existing canopy on the site is a legal, nonconforming structure as it does not meet the front setback requirements. The applicant plans to demolish and construct a new larger canopy. Staff notes that the City Code has not been updated since Minnesota Statutes §462.357 Subd. 1e. was updated in 2004 to regulate the rights of a legal, nonconforming uses and allowed repair, replacement, restoration, maintenance, but not expansion of the legal non-conforming structures. This is an expansion of the existing canopy size and is not simply restoration of a legal non-conforming structure; therefore, the legal, non-conforming status is lost and a variance is required.

Constructing the new canopy will require an additional variance.

The applicant is requesting a variance to construct a structure within the setbacks from County Road 116. The code requires a 100-ft. setback from the right-of-way of County Road 116. The applicant has proposed construction of the canopy 30.9-ft. setback where a 29.5-ft. setback currently exists. Section 1070.040 of the Zoning Ordinance describes the variance process and standards. The burden of proof is on the applicant to show that all of the following criteria have been met:

1. *That there are practical difficulties in complying with the Zoning Ordinance.*

   The 100-ft. setback from County Road 116 creates a practical difficulty due to the size of the lot. The lot is approximately 200-ft. deep and enforcing the 100-ft. setback would render over half the lot unusable. The lot could not be used for the intended use of a motor fuel station with the 100-ft. setback as the canopy could not be built and the canopy is required for the use. The new canopy would be no closer to the front setback than the existing structure.

2. *That the conditions upon which a petition for a variation is based are unique to the parcel of land for which the variance is sought and were not created by the landowner.*

   The parcel is located along County Road 116, where some of the largest setbacks are required in the City. This limits the amount of space available for the placement of the canopy. Another gas station is unlikely to be constructed along the road, and if it were, it would be subject to the setbacks that are established then and would be required to build on an appropriately sized lot to accommodate the required structures.

3. *That the granting of the variation will not alter the essential character of the locality.*

   The canopy will be set back further than it is now and will increase in size, but will not alter the character of the locality significantly.

4. *The proposed variance would be in harmony with the general purposes and intent of the Ordinance.*

   The intent of the Code is to establish a corridor along County Road 116 where buildings can be placed. Enforcing the setback would ultimately render the lot unusable and would set the building considerably further back than neighboring properties.

5. *The variance is consistent with the Comprehensive Plan.*

   The Commercial land use is intended to allow business in areas where sewer and water are available. Approving the variance will allow the business to grow and expand its service and serve more customers. The Commercial land use is intended to use the adopted Design Guidelines and updating the current signs to a more modern style will accomplish this.

6. *The City may impose conditions on the variance to address the impact of the variance.*

   The design and size of the building is comparable to other fuel station canopies and staff believes there are no adverse impacts to the surrounding property owners.

4. Conclusions

The Planning Commission must first determine if the variance standards have been met. If the Commission finds that the variance standards have been met, they may recommend approval of the variances.

If the Planning Commission finds that the variance standards have not been met, they should recommend denial of the requests.

5. Recommendation

Staff recommends approval of the resolution approving the variance for exceeding the total wall sign area and the allowance of two dynamic displays and the variance to allow for a reduced setback.

Attachments

1. Draft Resolution approving Variances
2. Site Location Map
3. Applicant's Narrative dated June 1, 2020
4. Site Plan received May 27, 2020
5. Site Renderings received June 1, 2020

City of Corcoran
County of Hennepin
State of Minnesota

July XX, 2020

RESOLUTION NO. 2020-XX

Motion By:
Seconded By:

APPROVAL OF VARIANCES TO EXCEED TOTAL WALL SIGN AREA, ALLOWTWO DYNAMIC DISPLAYS AND ALLOW A REDUCED SETBACK FROM THE CANOPY AT THE PROPERTY LOCATED AT 7625 CO RD NO 116 CORCORAN, MN 55340 (PID 02-119-23-23-0004) (CITY FILE NO. 20-019)

WHEREAS, Mahant, LLC. is requesting approval of a variance to allow for the construction of signs that exceed the total wall sign area allowed, allow two dynamic displays and allow a reduced canopy setback at the property described as follows:

See Attachment A

WHEREAS, the Planning Commission has reviewed the variance at a duly called public meeting and recommends approval.

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF CORCORAN, MINNESOTA, that it should and hereby does approve the request for a variance and conditional use permit approval, subject to the following findings and conditions:

1. Approval is granted to allow for the construction of a replacement gas canopy as shown on application and plans received by the City on April 8, 2020 and revisions received on April 17, 2020, April 24, 2020, May 18, 2020, May 27, 2020 and June 1 2020, except as amended by this resolution.

2. A variance to allow for more wall sign area than is allowed and two dynamic displays, is approved subject to the following findings:

    a. There are practical difficulties for the applicant in complying with the Zoning Ordinance. The site currently exceeds the amount allowed. The existing signage after the demolition of the canopy leaves only five square feet of wall signage. Without two dynamic displays the property has no ability to advertise to the northbound and southbound traffic at the same time.

    b. The conditions upon which the variance request is based are unique to this parcel due to there being no other fuel stations located along County Road 116. Fuel stations have a unique need for signage.

    c. The variance will not alter the essential character of the locality. The proposed variance will essentially reconstruct what already exists.

    d. The variance is in harmony with the general purposes and intent of the Ordinance and the standards for the C-1 District.

    e. The sign area will be greater than allowed and the second dynamic display will be more than is allowed, but is otherwise consistent with the Comprehensive Plan. The

variance is consistent with the commercial nature of the zoning district.

3. A variance to allow a 30.9-foot setback from County Road 116 where 100 feet is required, is approved subject to the following findings:

   a. There are practical difficulties for the applicant in complying with the Zoning Ordinance. The site is restricted due to setbacks from County Road 116. Enforcing the setbacks would render the site unusable for the proposed use due to the depth of the lot.

   b. The conditions upon which the variance request is based are unique to this parcel due to there being no other fuel stations located along County Road 116. Fuel stations have a unique need for additional structures.

   c. The accessory structure will not alter the essential character of the locality. The proposed variance will essentially reconstruct what already exists and expand it.

   d. The accessory structure is in harmony with the general purposes and intent of the Ordinance and the standards for the C-1 District.

   e. The structure is proposed to be set further back than currently exists and supports a use consistent with the Comprehensive Plan. The variance is consistent with the commercial nature of the zoning district.

4. A building permit is required prior to beginning construction of the canopy.

5. Prior to issuance of building permits, the applicant/landowner must record the approving resolution at Hennepin County and provide proof of recording to the City.

6. Approval shall expire within one year of the date of approval unless the applicant commences the authorized use and the required improvements.

RESOLUTION NO. 2020-XX

VOTING AYE	**VOTING NAY**
☐ **Thomas, Ron**	☐ **Thomas, Ron**
☐ **Bottema, Jon**	☐ **Bottema, Jon**
☐ **Dejewski, Brian**	☐ **Dejewski, Brian**
☐ **Anderson, Thomas**	☐ **Anderson, Thomas**
☐ **Schultz, Alan**	☐ **Schultz, Alan**

Whereupon, said Resolution is hereby declared adopted on this XXrd day of July 2020.

_____
Ron Thomas - Mayor

ATTEST:

_____

City Seal

Jessica Beise – City Clerk/ Administrative Services Coordinator

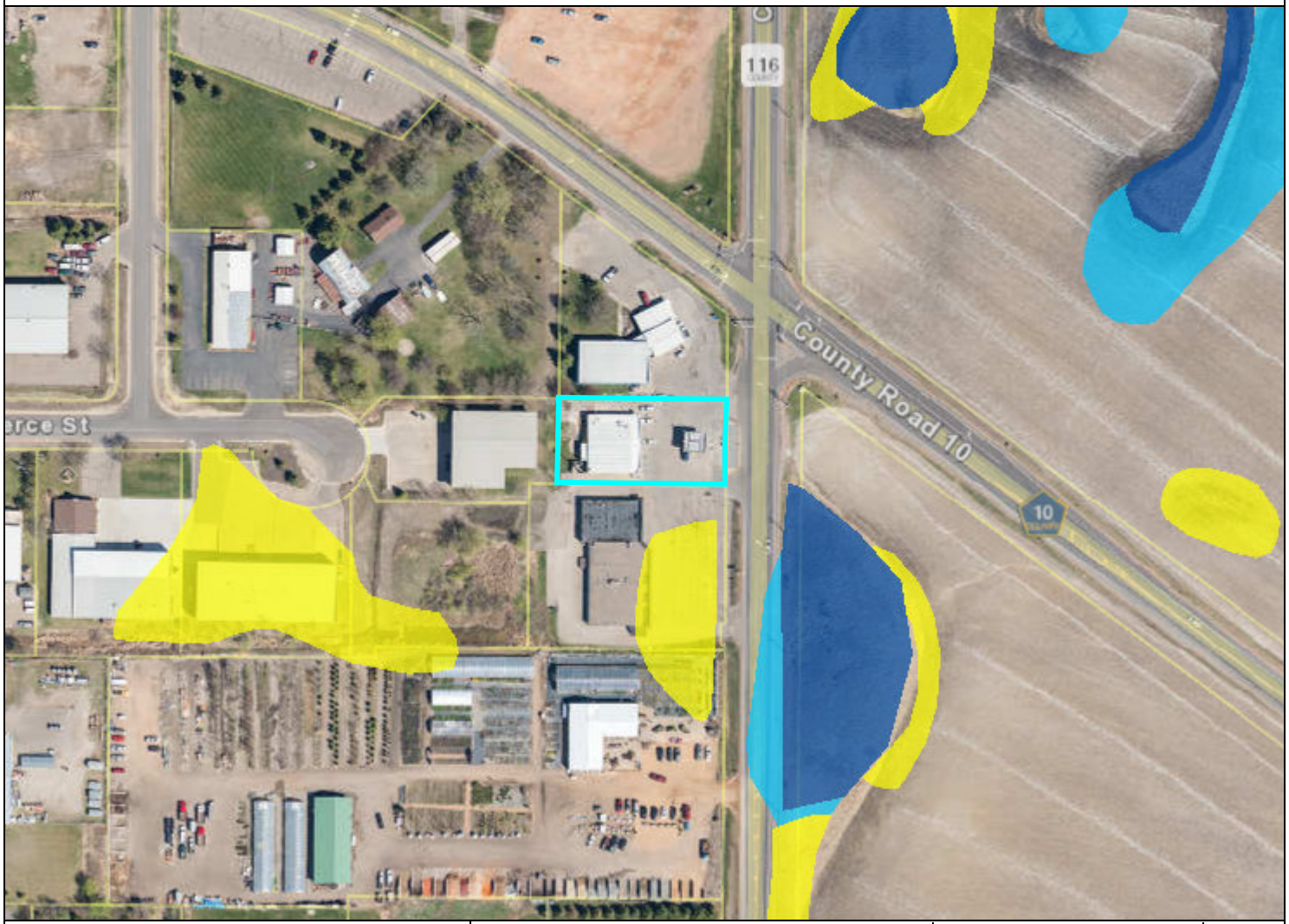
RESOLUTION NO. 2020-XX

Attachment A

That part of the Northeast Quarter of the Northeast Quarter of Section 26, Township 119, Range 23 Hennepin County, Minnesota described as follows: Commencing at the northeast corner of the Northeast Quarter of said Section 26; thence Southerly along the east line thereof 553.25 feet to the point of beginning; thence Westerly at right angles 242 feet; thence Southerly at right angles 102.75 feet; thence Easterly at right angles 242 feet to the east line of said Northeast Quarter; thence Northerly along said east line 102.75 feet to the point of beginning. Except Road.

Hennepin County Natural Resources Map

Date: 6/25/2020



Legend

FEMA Floodplains - 100 Year

- A
- AE FLOODPLAIN
- AH
- AO
- AE FLOODWAY

Wetlands

- Potential Wetland - HCWI
- Probable Wetland - HCWI
- Probable Wetland - NWI

PID: 2611923110013
Address: 7625 CO RD NO 116, CORCORAN
Owner Name: MAHANT LLC
Acres: 0.48

Comments:

1 inch = 200 feet

N

This data (i) is furnished 'AS IS' with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is notsuitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this data.

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Corcoran Crossroads Marketplace
Food Deli Fuel
Locally Owned // Community Supporter

DATE: 06/01/2020

VARIANCE REQUEST LETTER.

To: City of Corcoran, MN

From: Mahant LLC / 7625 County RD 116, Corcoran, MN-55340

CC: Kendra Lindahl, AICP, LANDFORM

MAHANT LLC, is the current owner of the property/ gas station located at 7625 county rd 116, Corcoran, MN-55340. As new development comes to the surrounding area, community is requesting us to bring Biodiesel and non- oxy fuel at this site. To support the community, we would like to add pumps for additional dispensing capacity to satisfy customers' needs.

As we have gone through preliminary requirements including site survey and scope of work with the city staff members to add one dispenser in addition to two existing 2 dispensers. In addition, we will be adding an underground 20000gallon fuel tank with multiple compartments. To make this project possible, we will be required to demolish existing canopy and replace it with new canopy. This plan is also aimed to maintain safe access to the pump by public and will also comply with the current and upcoming standards.

Our objective is with this variance request is an effort to build the front structure of the property with modern canopy and new dispensers to serve the community's need while considering customers safety and maintaining current and upcoming requirements.

Our Requests are as follows.

1. **Dynamic Gas price sign Display:**

   Currently we have two dynamic display signs on the canopy, one on the north side of the canopy and another on the south side of the canopy. Community and traffic find this convenient as they are used to such display. If only one dynamic display is allowed, the traffic moving in one direction will be able to see the sign. This will create lots of inconvenience to the traffic coming from other direction. In addition to the inconvenience, this can also be a safety concern as it may distract the drivers trying to look for the gas price while driving in opposite direction.

In addition, as a business owner, we like to make sure that dynamic displays are properly displayed and conveniently visible to the customer in the competitive market. Considering

all these reasons, ideally, we would like to maintain the same dynamic display we currently have. However, per ordinance mentioned in your letter, only one dynamic display is allowed. So, we would like City council to consider our request for variance to allow 23.86 sq. ft. display sign (which will include gas and diesel price display) each to the north and south side of the canopy, which is less than the total current display sign on the canopy.

In general, in most gas station, in addition to one standard dynamic display sign permitted under section 84.05, gas stations in any district are permitted to display one additional 12 square foot dynamic display as one wall sign or freestanding sign. This means, if we have free standing MID sign, the ordinance will allow additional dynamic display sign. However, since the property is close to highway, it will be difficult to have MID sign because of the safety reason. So, in lieu of this option, we would appreciate if you can consider addition dynamic sign option sign on the option.

2. **Exceed total allowable sign area:**

The front side building area is 14' x 70'= 980 sq. ft., which will permit 98 sq. ft of signage for the business as per city ordinance. We would like to keep the existing signs on the front side of the building, which is 93 sq. ft. because these 93 sq. ft. signs mainly covers the name of the business and important products, which is common for any business. This means only 5 sq. ft. spare space is available for sign area on the canopy to advertise gas price which is practically not possible.

All these signs are essential to the success for gas station and c-store type business. As keeping business name sign as the owner of the business and community take prides in the name of **"Corcoran Crossroads Marketplace"** Which has been historical and well respected in the community. Therefore, removing the business sign may adversely affect business as well as emotions of the community. Considering all these crucial factors it's not possible to remove the existing business sign. While we respect the ordinances defined by the city for the display sign, considering above mentioned practical difficulties, we are requesting to the city council to allow proposed sign as to describe below.

Existing Building sign:

Corcoran Crossroads Sign 36'*25' = 75 Sqft
Java Sign 3'*3' = 9 sqft
Crossroads Deli Sign: 3'*3'= 9 Sqft
Total Sign area on Building: 93 sqft

Purposed sign on Canopy:

2 Gas & Diesel Price Canopy price sign: 11.88 Sqft each *4 QTY = 47.52 Sqft.

North Side | | South Side

Marathon Channel Letter: 15” *138” = 14.38 sqft

Total Sign area on Canopy: 61.90 sqft.

Total sign area including canopy and front part of the building= 154.93 sq.ft.

We hope you agree with our request for the variances and will be able accept our proposal per above mentioned explanation. We sincerely think that this project will be better for our community and better for the business. We appreciate your time and efforts you are putting in reviewing this application. We will be open to work with you, if you have any specific suggestions to make this project successful.

Thank you,

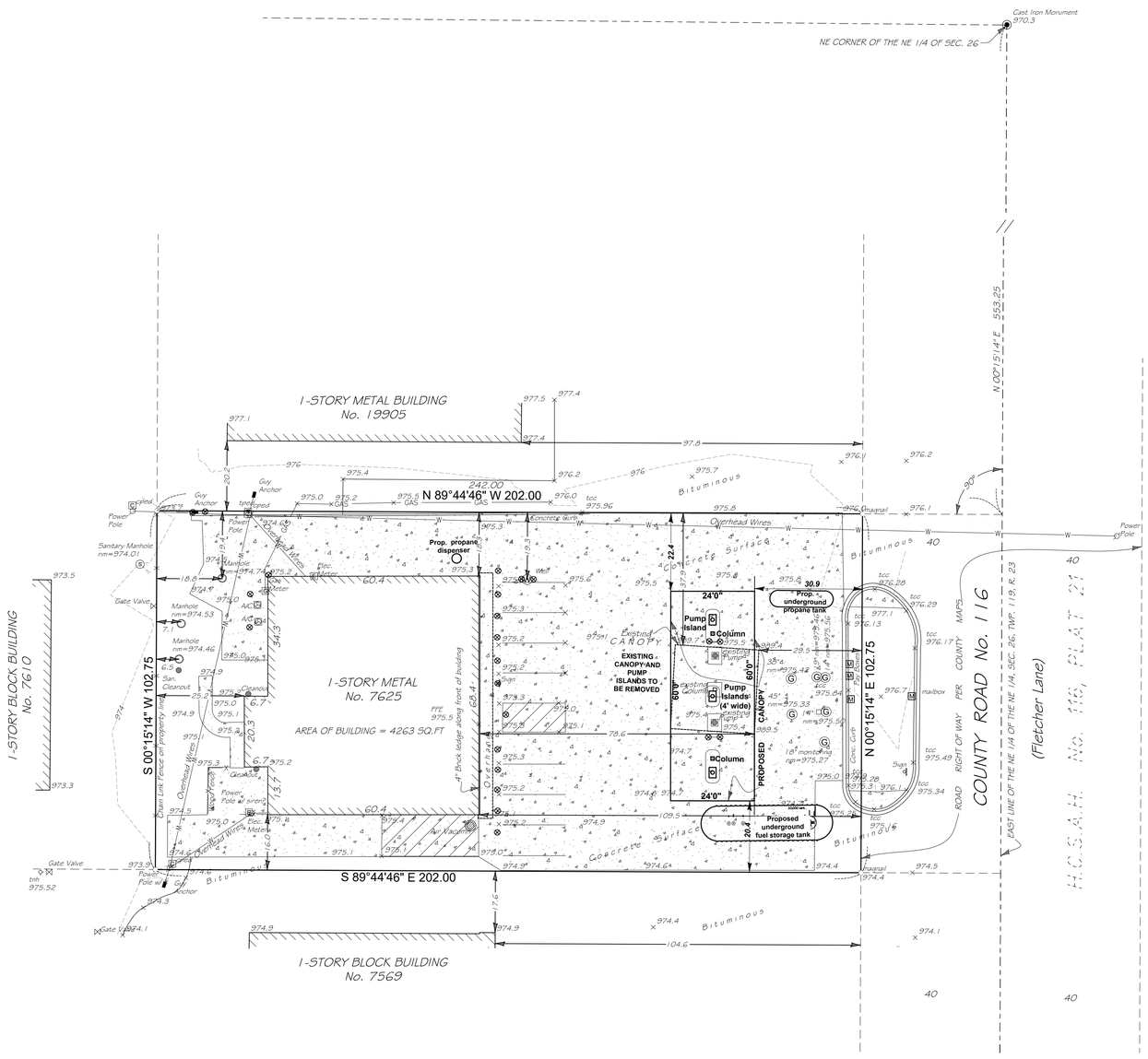
Sincerely yours,

RAJ Patel
For Corcoran Crossroads Marketplace

SITE PLAN SURVEY FOR:

MAHANT, LLC

7625 County Road No. 116
Corcoran, MN 55340


Cast Iron Monument
970.3
NE CORNER OF THE NE 1/4 OF SEC. 26
N 00°15'14" E 553.25
1-STORY METAL BUILDING
No. 19905
977.5
977.4
977.1
977.4
97.8
976
975.4
242.00
N 89°44'46" W 202.00
976.2
976
975.7
Bituminous
976.0
tcc
975.96
976.1
976.2
976.1
Found
Power Pole
Guy Anchor
tped
974.6
Guy Anchor
975.0
975.2
975.5
GAS
Concrete Curb
Overhead Wires
Power Pole
Sanitary Manhole
nm=974.01
974.7
Manhole
nm=974.7
975.2
elec. meter
Prop. propane dispenser
975.3
975.6
975.5
975.8
Bituminous
40
Power Pole
18.8
974.9
Low Point
974.0
Gate Valve
Manhole
nm=974.53
A/C
A/C
Manhole
nm=974.46
975.0
975.1
24.4
Concrete Surface
975.4
30.9
Prop. underground propane tank
tcc
976.28
tcc
976.29
977.1
976.13
tcc
976.17
24'0"
Pump Island
Column
975.5
975.4
975.2
975.1
Existing CANOPY
EXISTING CANOPY AND PUMP ISLANDS TO BE REMOVED
Existing Gasoline Pumps
38'±
nm=975.42
29.5
975.33
975.64
975.4
975.2
975.3
975.2
975.1
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974.9
975.1
975.2

Crossroads

7625 County Rd 116
Corcoran MN 55340

Building Size
14’ x 70’
980 sq ft

Existing sign to keep = 93 sq ft
Corcoran Sign
36” x 25’
75 SF

Java Sign
3’ x 3’ = 9 sq ft

Fresh Deli Sign
3’ x 3’ = 9 sq ft

New signs to add

Channel Letter (1 qty) 14.38 sq ft.
15” h x 138” l

Gas price Sign (4 qty) **47.52 sq ft**
11.88 SF active area ea

Asking for 154.98 sq ft of 98 sq ft

Crossroads

7625 County Rd 116
Corcoran MN 55340

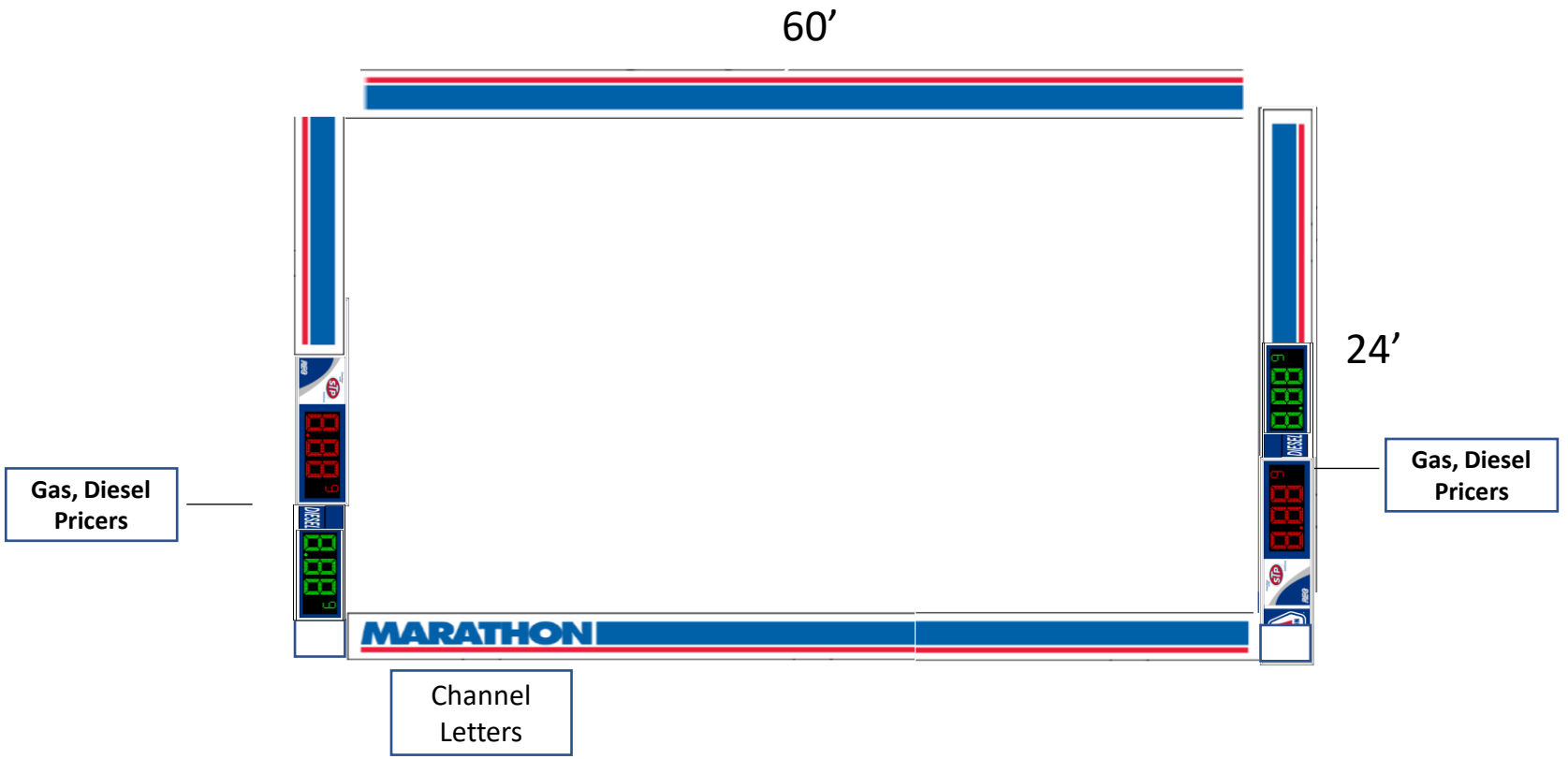
Canopy
60 x 24’ x 36”

Remove all existing Signs on canopy

Crossroads

7625 County Rd 116
Corcoran MN 55340

Marathon Non Illuminated canopy fascia.



We are asking for a variance for the second 12 sq ft pricer

Crossroads

7625 County Rd 116
Corcoran MN 55340

Channel Letter (1 qty)
15” h x 138” l
14.38 sq ft.

Pricer example

Sign Size (2 qty)
30” x 57”
11.88 SF Active area ea.

Sign Size (2 qty)
30” x 57”
11.88 SF Active Area ea.

Agenda Item: 6.b.

LANDFORM
From Site to Finish

105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401

Tel: 612-252-9070
Fax: 612-252-9077
www.landform.net

TO: Corcoran Planning Commission

FROM: Kevin Shay through Kendra Lindahl, Landform

DATE: June 24, 2020 for the July 2, 2020 Planning Commission Meeting

RE: Sign Variance for the Property located at 9350 County Road 19 (PID 07-119-23-43-0004) (city file no. 20-020)

60-DAY REVIEW DEADLINE: July 18, 2020

1. Application Request

The applicant has requested approval of a variance to allow three freestanding signs, where one is allowed and 204 square feet of freestanding signage where 64 square feet is allowed.

2. Context

Zoning and Land Use

The property is in the Rural Commercial (CR) District and is guided Rural Service/Commercial on the Future Land Use Map.

Surrounding Properties

The surrounding properties are also zoned Rural Commercial (CR) and guided Rural Service/Commercial.

Natural Characteristics of the Site

The site is a developed site with no wetlands or major natural characteristics.

3. Analysis of Request

Variance

The property at 9350 County Road 19 currently has three freestanding signs on the site. Staff finds no record of these sign permits at City Hall, but it is an older site and we are proceeding under the assumption that they are legal, non-conforming signs. The existing signs were likely installed meeting setback standards and have since become legal, nonconforming signs due to changes in the property lines related to acquisition of right-of-way related to the County Road 19 improvements several years ago. The applicant is proposing to modify these signs in the following manner:

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1. The first sign is located along County Road 10 on the east side of the site and is an 81-square foot freestanding sign that is approximately 16 feet tall. The applicant is proposing to leave the sign in the existing location and reface the top cabinet of the sign. This modification is allowed as maintenance of a non-conforming sign.

2. The second sign is located on the corner of County Road 10 and 19 and is a 102-square foot freestanding sign that is partially located outside the property line and does not meet setback standards (again this is due to acquisition of right-of-way as part of the County Road 19 project). The applicant is proposing to reface the top two cabinets of the existing sign and remove the bottom cabinet from the sign. The resulting sign would be 66 square feet with 30 square feet for the top cabinet and 36 square feet for the middle cabinet. The sign would still be partially located outside the property line. This modification is allowed as maintenance of a non-conforming sign.
    a. Staff recommends reducing this sign from 66 square feet to 64 square feet for it to comply with the current freestanding sign area standards.

3. The third sign is located on the northwest side of the site along County Road 19 and is an 89 square foot and 19.8-foot-tall freestanding sign. The applicant is proposing to replace the existing sign with a new sign in the same location. The proposed sign will have 56.8 square feet of signage (includes 11.7 square feet of dynamic display) and will be 16 feet tall. The new sign complies with city code requirements.

4. They are also proposing new canopy signage. The applicant is proposing to remove the two 30 square foot existing canopy signs attached to the gas station canopy to install a single 12 square foot sign on the front of the gas canopy.

The applicant is requesting a variance to allow three freestanding signs on the property. The site currently has three freestanding signs which do not comply with Section 84.05 of the Zoning Ordinance which allows one freestanding sign on the property. Removal of the third sign results in the loss of the legal non-conformity. The burden of proof is on the applicant to show that all of the following criteria have been met:

1. *That there are practical difficulties in complying with the Zoning Ordinance.*

    In order to comply with the Zoning Ordinance, the applicant would be required to remove two existing signs to replace any of the existing signs. This would remove needed signage for the multi-tenant commercial site and would create a hardship for existing tenants.

2. *That the conditions upon which a petition for a variation is based are unique to the parcel of land for which the variance is sought and were not created by the landowner.*

    The property is unique with multiple tenants located on one parcel creating the need for greater than usual signage to advertise the businesses. The three freestanding signs exist today and the applicant is requesting to improve upon those signs while complying with City Code standards for all new signage. If the variance is approved the total square footage of the freestanding signs will be reduced by 68 square feet.

3. *That the granting of the variation will not alter the essential character of the locality.*

   The area is characterized by numerous commercial businesses and the proposed signage will not alter the essential character of the area. The new signage will reflect the new tenant in the gas/convenience store and will provide a refresh the look of the multi-tenant business area.

4. *The proposed variance would be in harmony with the general purposes and intent of the Ordinance.*

   The proposed sign variance is in harmony with the general purposes and intent of the Ordinance. The new freestanding sign complies with the ordinance requirements while removing a sign that does not comply with ordinance standards.

5. *The variance is consistent with the Comprehensive Plan.*

   In the Comprehensive Plan it is identified that a goal is to enhance the City's commercial development and facilitate expansion of existing businesses. The variance is consistent with the Comprehensive Plan goals for commercial businesses

6. *The City may impose conditions on the variance to address the impact of the variance.*

   The design, size and height of the new freestanding sign meet the City Code standards for a freestanding sign in the Rural Commercial zoning district. We encourage the applicant to reduce the sign are on the second sign from 66 to 64 square feet, which would also bring that sign into compliance with the size area standards.

4. Conclusions

Staff has reviewed the signage plans against the applicable standards outlined in the Comprehensive Plan and Zoning Ordinance and finds that the standards for a variance have been met.

The Planning Commission must determine if the variance standards have been met. If the Commission finds that the variance standards have been met, they may recommend approval of the variance.

5. Recommendation

Staff recommends approval of the resolution approving the sign variance to allow three freestanding signs.

Attachments

1. Draft Resolution 2020-xx approving the Variance
2. Site Location Map
3. Applicant's Narrative dated May 7, 2020
4. Survey received May 13, 2020
5. Sign Exhibits

City of Corcoran
County of Hennepin
State of Minnesota

July XX, 2020

RESOLUTION NO. 2020-XX

Motion By:
Seconded By:

APPROVAL OF A VARIANCE ALLOWING THREE FREESTANDING SIGNS AT 9350 COUNTY ROAD 19 (PID 07-119-23-43-0004) (CITY FILE NO. 20-020)

WHEREAS, Rose City Inc. is requesting approval of a variance to allow three freestanding signs on property legally described as follows:

> *All that part of the South 629.00 feet of the Southeast Quarter of Section 7, Township 119, Range 23, Hennepin County, Minnesota, which lies West of the following described line and its extension:*
>
> *Commencing at the Southwest corner of said Southeast Quarter; thence on an assumed bearing of North 89 degrees 50 minutes 29 seconds East along the South line thereof, a distance of 709.5 feet to the actual point of beginning of the line to be described; thence North 00 degrees 09 minutes 31 seconds West to the North line of said South 629.00 feet of the Southeast Quarter and there terminating except the South 22 rods of the East 16 rods of the West 43 rods of said Southeast Quarter.*

WHEREAS, the Planning Commission has reviewed the variance and recommends approval.

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF CORCORAN, MINNESOTA, that it should and hereby does approve the request for a variance, subject to the following findings and conditions:

1. Approval is granted to allow three freestanding signs totaling 204 square feet and new canopy signage as shown on application and plans received by the City on May 7, 2020 and revised materials received on May 13, 2020 and June 4, 2020, except as amended by this resolution.

2. A variance to allow three freestanding signs totaling 204 square feet where one 64 square foot sign is allowed, is approved subject to the following findings:

    a. In order to comply with the zoning ordinance, the applicant would be required to remove two existing signs to replace any of the existing signs. This would remove needed signage for the multi-tenant commercial site.

    b. The property is unique with multiple tenants located on one parcel creating the need for greater than usual signage to advertise the businesses. The three freestanding signs exist today and the applicant is requesting to improve upon those signs while complying with city code standards for all new signage. If the variance is approved the total square footage of the freestanding signs will be reduced by 68 square feet

    c. The area is characterized by commercial businesses and the proposed signage will not alter the essential character of the area. The new signage will provide a refresh the look of the multi-tenant business area.

RESOLUTION NO. 2020-XX

d. The proposed sign variance is in harmony with the general purposes and intent of the Ordinance. The new freestanding sign complies with the ordinance requirements while removing a sign that does not comply with ordinance standards.

e. In the Comprehensive Plan it is identified that a goal is to enhance the City's commercial development and facilitate expansion of existing businesses. The variance is consistent with the Comprehensive Plan goals for commercial businesses.

3. The signage shall comply with all ordinance requirements, except as specifically approved by this resolution.

4. A sign permit is required prior to beginning construction.

5. Although not required on this legal, non-conforming sign, the City encourages the developer to consider reducing the sign area for the second sign from 66 to 64 square feet in area to bring into compliance with the sign standards for a new freestanding sign.

6. Approval shall expire within one year of the date of approval unless the applicant commences the authorized use and the required improvements.

VOTING AYE	**VOTING NAY**
☐ **Thomas, Ron**	☐ **Thomas, Ron**
☐ **Bottema, Jon**	☐ **Bottema, Jon**
☐ **Dejewski, Brian**	☐ **Dejewski, Brian**
☐ **Anderson, Thomas**	☐ **Anderson, Thomas**
☐ **Schultz, Alan**	☐ **Schultz, Alan**

Whereupon, said Resolution is hereby declared adopted on this xx day of July 2020.

_____
Ron Thomas - Mayor

ATTEST:

_____

City Seal

Jessica Beise – Administrative Services Director

Hennepin County Property Map

Date: 6/25/2020

PARCEL ID: 0711923430004

OWNER NAME: Ess Real Estate Llc

PARCEL ADDRESS: 9350 Co Rd No 19, Corcoran MN 55374

PARCEL AREA: 7 acres, 304,815 sq ft

A-T-B: Torrens

SALE PRICE: $2,725,000

SALE DATA: 10/2006

SALE CODE: Excluded From Ratio Studies

ASSESSED 2019, PAYABLE 2020
- PROPERTY TYPE: Commercial-Preferred
- HOMESTEAD: Non-Homestead
- MARKET VALUE: $1,873,000
- TAX TOTAL: $65,853.66

ASSESSED 2020, PAYABLE 2021
- PROPERTY TYPE: Commercial-preferred
- HOMESTEAD: Non-homestead
- MARKET VALUE: $1,967,000

Comments:

This data (i) is furnished 'AS IS' with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is notsuitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this data.

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ROSE CITY
INCORPORATED
CANOPY. ELECTRIC. SIGN. VINYL GRAPHICS.

Corcoran City Hall
Kendra Lindahl
8200 County Road 116
Corcoran, MN 55340

Re: PID# 0711923430004
Marathon/Tom Thumb
9350 Co Rd No 19
Loretto, MN 55374

Hearing Date: June 4, 2020

With the above site we have proposed within the city the following signage that the Marathon standards:
1) Canopy signage proposed is 3 sides of illuminated fascia on the gas canopy with 3 sets of Marathon decals (12.3sq ft ea).
2) Sign #2 we are proposing that we reface the one existing sign cabinet only.
3) Sign #1 We have proposed a 24' Sign with 71.9sq ft of signage and 20.7 sq ft of Electronic Message Center and have a blue lit bar on the side of the sign.

To comply with the city's ordinances and comply with Marathon standards we have reduced our signage proposed to
1)Canopy signage to have non-illuminated fascia & only (1) set of illuminated channel letters that comply with Section 84.05 Subd 3-f.
2)Sign #2 we are compliant.
3)Sign #1 new sign with 45.1 sq ft and 11.7 sq ft Electronic Message Center. This will conform with the city's ordinances Section 84.04 Subd 7, 8 and 9. Section 84.05, Section 84.10, and 84.11.

The variance that is being proposed for the above business is as follows. Remove the existing main sign and install new footings and a new Marathon sign in the same area as the old sign on the property.

(TOLL FREE)
1-800-594-9451
www.rosecityinc.com
31208 County RD 71, Eagle Bend MN 56446
(FAX)
1-218-738-3187

A) We are installing a new sign that is 56.8 sq ft total and the existing sign is 102 sq ft. that is older and in need of upgrading. It also has a metal catwalk around the sign to change out the manual reader board. With the proposed sign this will be eliminated. The existing sign is also closer to the intersection and with the new sign it will be closer in the property line and comply with 84.04 subd 2-a.
B) This is unique to this parcel within the city. This is a multi-tenant property. The signage proposed would be incorporating a new image with the gas station and re-fresh the look of the sign and canopy.
C) Granting a variation will clean up the image of the business's façade. And have a sign that is compliant with the city's ordinances. And the sign will be moved back from obstructing the intersection with less things to look around.
D) With an approved variance, the site would be within the city's ordinance and have a new sign to enlighten the business front & curb appeal which is good for the business and the community. The new sign lighting inside and out will also comply with the city ordnance of Section 84.04 subd 8 a-h.

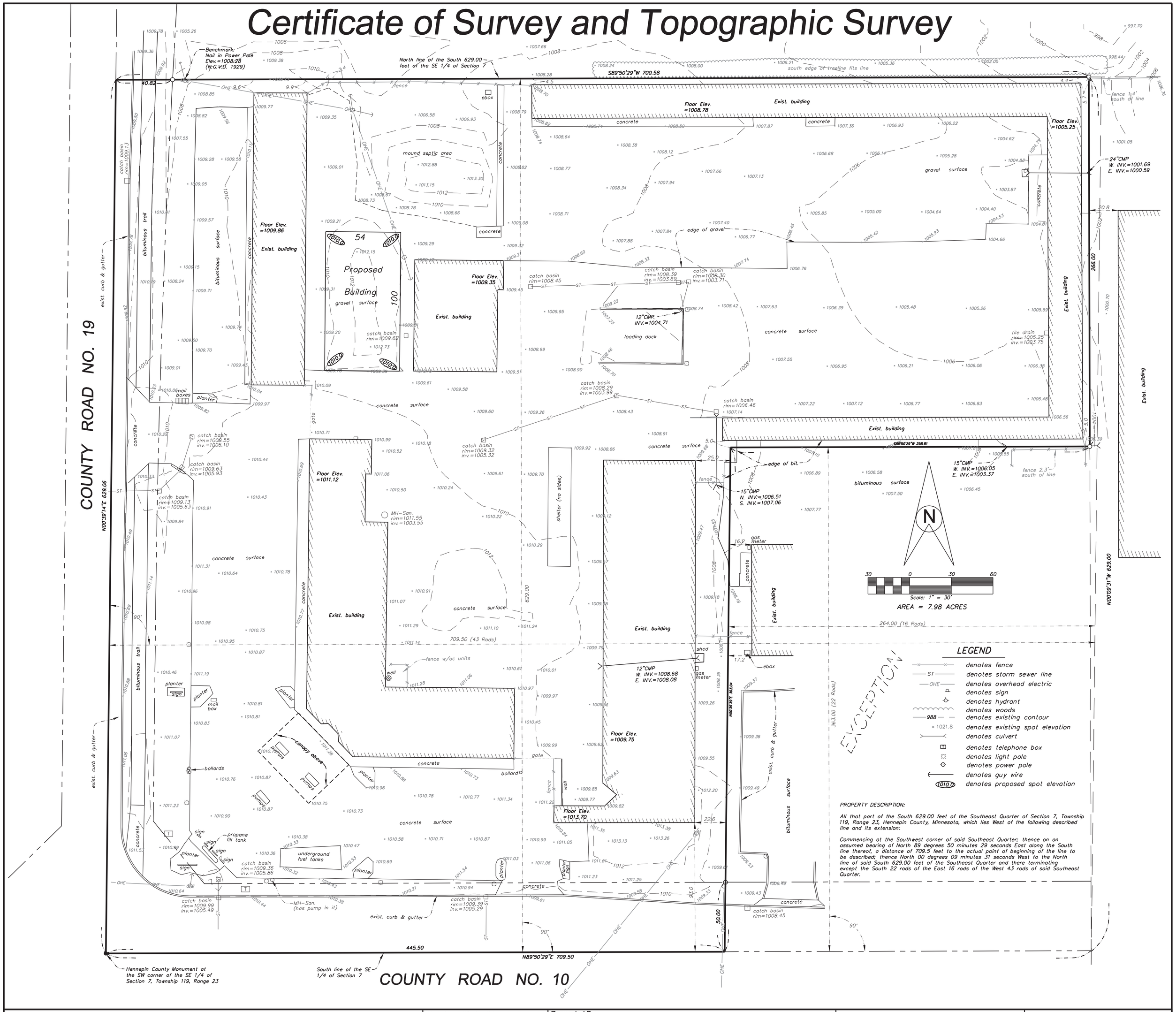
If you have any questions please feel free to call

Sincerely,

Tammy Westerberg
218-738-3188

Customer agrees to order according to the above quote.
Date __/__/__ Authorization_____

Certificate of Survey and Topographic Survey



Certificate of Survey and Topographic Survey on part of the Southeast Quarter of Section 7, Township 119, Range 23, Hennepin County, Minnesota

Revised:

I hereby certify that this survey, plan, or report was prepared by my or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Paul E. Otto
License #40062 Date: 11/15/13

Requested By:

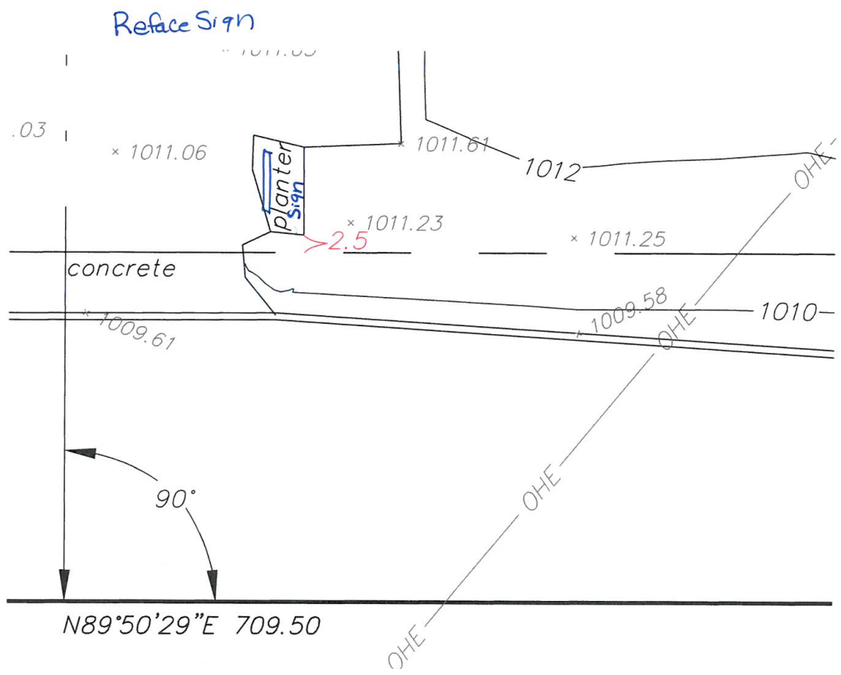
Ess Brothers & Sons, Inc.

Date:	Drawn By:	Scale:	Checked By:
11/11/13	M.L.H.	1" = 30'	P.E.O.

OTTO ASSOCIATES
Engineers & Land Surveyors, Inc.
www.ottoassociates.com
9 West Division Street
Buffalo, MN 55313
(763)682-4727
Fax: (763)682-3522

● denotes iron monument found
○ denotes 1/2 inch by 14 inch iron pipe set and marked by License #40062

Project No. 13-0525



Location Map

Existing Sign

Proposed Sign

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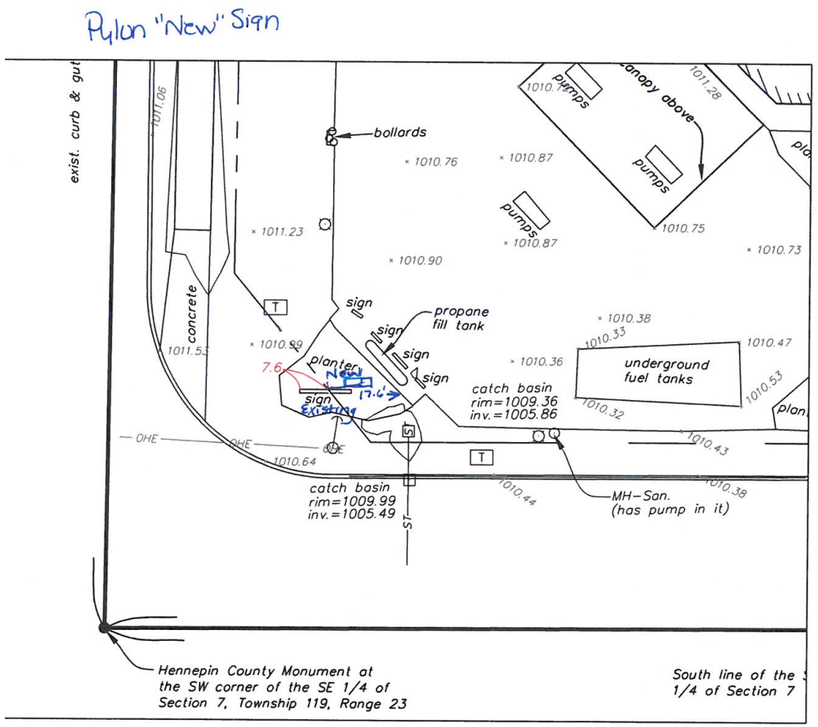

Location Map

Existing Sign

Proposed Sign

LANDFORM
From Site to Finish

Sign #2

SIGN VARIANCE AT 9350 CR 19 • Corcoran, MN

06.24.2020

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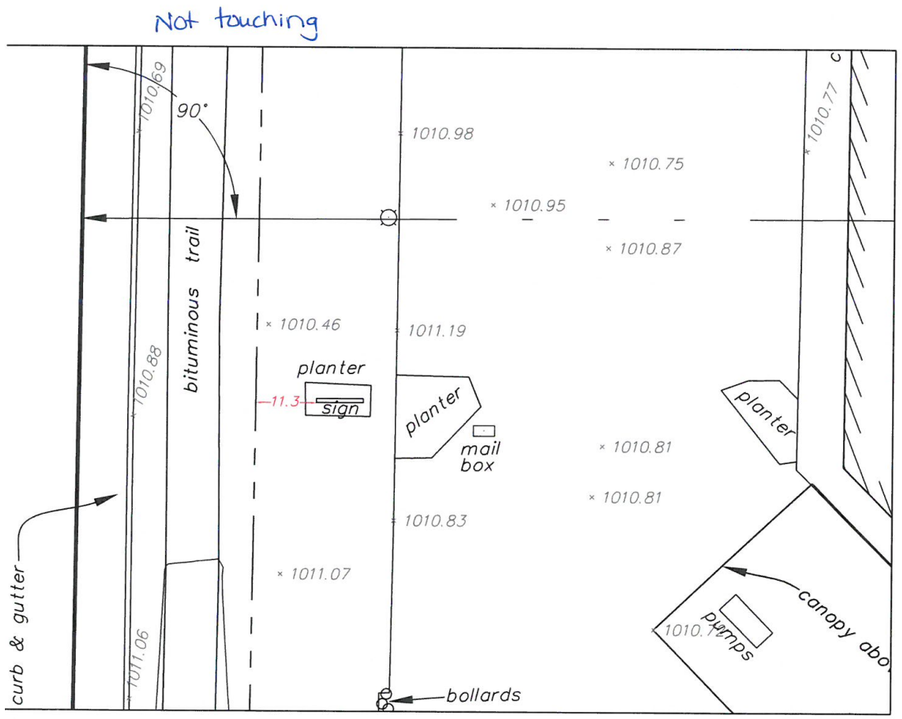

Location Map

Existing Sign

Proposed Sign

LANDFORM
From Site to Finish

Sign #3
SIGN VARIANCE AT 9350 CR 19 • Corcoran, MN
06.24.2020

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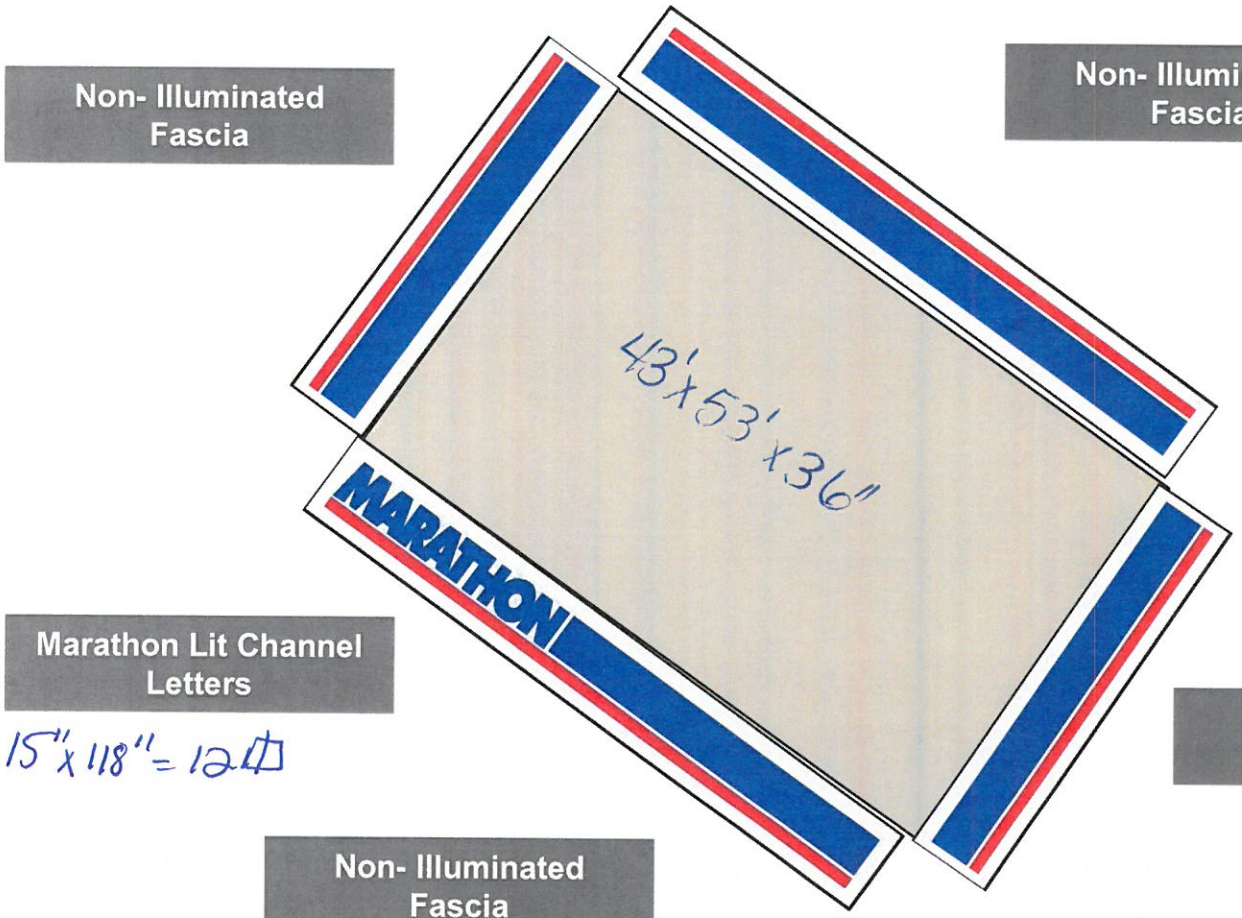
Canopy Signage Existing

2 Signs @ 30" x 144" 30# ea



Long Side : 159 + 10% = 15.9
Short Side : 129 + 10% = 12.9

8350 County Rd 19
Corcoran, MN

ROSE CITY
CANOPY AND SIGN

Agenda Item: 6.c.

LANDFORM
From Site to Finish

105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401

Tel: 612-252-9070
www.landform.net

TO: Corcoran Planning Commission

FROM: Kendra Lindahl, Landform

DATE: June 24, 2020 for the July 2, 2020 Planning Commission Meeting

RE: **PUBLIC HEARING.** Site Plan, Conditional Use Permit and Preliminary Plat for Eagle Brook Church for property at the northwest quadrant of Hackamore Road and CR 101 (PID 36-119-23-44-0008, 36-119-23-44-0010, 36-119-23-44-0009, 36-119-23-44-0013, 36-119-23-44-0014) (city file no. 20-023)

REVIEW DEADLINE: August 9, 2020

1. Description of Request

The applicants are requesting approval of a site plan, conditional use permit and preliminary plat for a proposed place of worship. The facility is planned as a 70,000 sq. ft. single story structure with 1,500 seats in the worship auditorium, a lobby with cafe, an administrative area for approximately ten staff and a children's ministry classroom area for weekend kid's programming use.

2. Context

Level of City Discretion in Decision-Making

The City's discretion in approving a site plan is limited to whether or not the plan meets the standards outlined in the Zoning Ordinance. If it meets these standards, the City must approve the site plan amendment.

The City's discretion in approving or denying a conditional use permit is limited to whether or not the proposed request meets the standards outlined in the City Code. If it meets these standards, the City must approve the conditional use permit.

The City's discretion in approving or denying a preliminary plat is limited to whether or not the proposed plat meets the standards outlined in the subdivision and zoning ordinance. If it meets these standards, the City must approve the preliminary plat.

Background

The site is made up of five lots with PID numbers 36-119-23-44-0008, 36-119-23-44-0009, 36-119-23-44-0010, 36-119-23-44-0013 and 36-119-23-44-0014. Each lot has a single family residential structure on it and four of them contain accessory structures.

The Council reviewed a concept plan on April 23rd and was generally supportive of the request provided that access issues were addressed.

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Zoning and Land Use

The site is guided Low Density Residential in the Comprehensive Plan and is zoned RSF-2 (Single Family Residential 2). Places of Worship/Assembly (such as churches) are a conditional use in residential districts.

Surrounding Properties

The property to the north and west is zoned PUD (Planned Unit Development), is guided for Low Density Residential and is part of the Ravinia development. The properties to the south and east are outside the City of Corcoran and are in the cities of Medina and Maple Grove, respectively.

Natural Characteristics of the Site

There are natural plant communities on the site identified as Wet Prairie on the Natural Resource Inventory Areas Map in the Comprehensive Plan. Further, multiple wetlands are shown on Hennepin County's Natural Resources mapping software as shown on the Site Location map.

3. Analysis:

Staff has reviewed the application for consistency with Comprehensive Plan, Zoning Ordinance and City Code requirements, as well as City policies. The City Engineer's comments are incorporated into this staff report.

Site Plan

Eagle Brook Church has several sites around the metropolitan area and church services are broadcast live from the Lino Lakes campus to their other campuses each weekend. Eagle Brook holds four services each weekend (4:00 pm and 6:00 pm on Saturday and 9:00 am and 11:00 am on Sunday); however, additional services may be added.

Design Guidelines/Architecture

The property is located in the Southeast District of the City and subject to the design standards in Appendix B and the building standards in Section 1060.060 of the Zoning Ordinance. Architectural elevations were submitted showing a mix of architectural precast concrete, architectural metal panels and glass. The cross spire is natural stone with an aluminum cross. This feature is exempt from height limits in the Zoning Ordinance. The building articulation would help break up the mass of the building.

The ordinance limits curtain wall panels of steel, fiberglass and aluminum (non-structural, non-load bearing) to 20% of any wall surface (excludes overhead doors). It does appear that the building may exceed these standards. The applicant did not provide a percentage of materials and must provide these details prior to issuance of a building permit to ensure compliance with ordinance requirements. A material sample board with proposed colors shall be provided for City review and approval.

The plans note that mechanical equipment will be screened as required by Section 1060.030 of the Zoning Ordinance, but details must be provided to ensure compliance with these standards.

Lot Standards

The site complies with the RSF-2 zoning standards:

	Required	**Proposed**
Minimum Lot Area	11,000 sq. ft.	27 +/- acres
Minimum lot width	80 feet	1,010 feet
Minimum Principal Structure Setbacks:		
Front, From Major Roadways*	100 feet	550 +/- feet
Front, From all other streets	20 feet	50 +/- feet from Larkspur 470 +/- feet from Hackamore
Side (living)	10 feet	N/A
Side (garage)**	5 feet	N/A
Rear	30 feet	225 +/- feet
Maximum Principal Building Height	35 feet	35 feet

**Major Roadways are Principal Arterial, A Minor Reliever, A Minor Expander and A Minor Connector Roadways as shown on the 2030 Roadway Functional Classification map in the 2030 Comprehensive Plan.*
***Minimum separation between structures on adjacent parcels shall be 15 feet.*

The 70,000 sq. ft. building is similar to other Eagle Brook Church facilities in other communities. As a comparison, some data for other campuses is provided below:

Location	**Building Sq. Ft.**	**Seats**
Lino Lakes Campus	85,000 sq. ft. (two stories)	2,100 Seats
Woodbury Campus	75,000 sq. ft. (two stories)	1,500 Seats
Blaine Campus	61,500 sq. ft.	1,500 Seats
Anoka Campus	59,000 sq. ft.	1,000 Seats

Like the proposed Corcoran site, these campuses are in or adjacent to residential areas. Churches can be an asset to a community but must be well designed to transition the large structure to the adjacent residential properties. In this case, the structure is centrally located on the site and does provide larger setbacks and landscaping to transition to the adjacent residential. The landscaping is discussed in more detail later in this this report.

Parking

The plan shows 848 parking stalls for this 1,500 seat facility. The code requires one space for every 4 seats, based on the design capacity of the facility. The code would require 375 parking stalls for a facility of this size. The church indicates that the 848 stalls proposed (2.26 times the minimum standard) are required based on data from other facilities. The applicant indicates that they have studied parking at their other facilities and find an average of 1.5 people per car. While they acknowledge that parking proposed may be more than required for an average weekend, they believe it is important to provide the proposed parking.

The code states that a “pedestrian circulation route shall be provided from all parking areas and loading zones as may be applicable to the entrance of the building. Such circulation routes shall be surfaced with material such as asphalt, concrete, or equivalent material determined acceptable by the Zoning Administrator.” The plans show sidewalks near the building but no pedestrian routes through the parking lot. Given the number of people and vehicles using the site during peak times, clear pedestrian routes from the south parking lots must be identified on the plans. Additionally, staff recommends that a sidewalk connection be provided from Hackamore Road to CR 101 to connect to the planned trails.

Parking areas with 4 or more stalls shall be screened from properties guided or zoned residential and from public streets. Screening to a height of at least 3 feet shall be provided to screen vehicle headlights. No such screening is shown and plans must be provided to address this standard. This is also discussed in the landscape section of the staff report and is included as a condition of approval.

Snow storage is a significant issue for a parking lot of this size. The applicant shall provide additional information showing the location of snow storage on site. While there are no limits to the hours of operation for snow plowing operations, the applicant should work to minimize disruptions to adjacent residential properties.

Landscaping

Section 1060.070 of the Zoning Ordinance lists the landscaping requirements. The church landscaping plan meets minimum requirements.

The applicant has indicated areas of tree preservation around the perimeter of the site, which will provide a buffer to adjacent residential areas. As noted earlier, in addition to the minimum standards in the ordinance, screening from adjacent residential properties must be provided. Staff finds the combination of tree preservation and new landscaping, combined with larger than required setbacks, provides an appropriate transition the adjacent residential. However, if the Planning Commission finds that additional landscaping is needed, they should provide specific direction to the staff and the applicant.

Parking areas with 4 or more stalls shall be screened from properties guided or zoned residential and from public streets. Screening to a height of at least 3 feet shall be provided to screen vehicle headlights. All exterior sides of the different parking lots are subject to these screening standards and the landscape plans shall be revised to add shrubs to screen headlights from adjacent properties.

Underground irrigation is required for all new non-residential development where municipal water is available. An irrigation plan must be provided.

Signage

The ordinance allows one 32 sq. ft. sign up to 6 feet high for non-residential uses in the RSF-2 district. The plans show one sign 31.5 sq. ft. sign at the Hackamore Road entrance with stone and metal to match the building. It is not clear how the sign will be lit. The applicant must apply for a sign permit to ensure compliance with ordinance standards.

Sidewalks and Trails

Pedestrian connections should be provided within the site. The future public street that will connect Larkspur to Lupine will include a sidewalk on one side of the street. As noted in the parking section, additional sidewalk connections should be provided from the planned trails on Hackamore Road and CR 101 to the building entrance.

New public trails are planned on CR 101 and Hackamore Road within the right-of-way. Each of those trails will be constructed when the associated street is reconstructed. The County has requested 60-foot ½ right-of-way for CR 101, but for Ravinia they requested an additional 5-foot trail easement adjacent to the right-of-way and we expect the same to be required for this project. The trail along Hackamore is being designed as part of the street improvement project. We expect that in addition to the right-of-way dedication, a trail easement will be required to accommodate the trail north of Hackamore. The engineer's memo notes that the developer will be required to install the trail as part of the project, but the street plans are still in design and final details should be available prior to approval of the final plat.

Park Dedication

The subdivision ordinance does not require park dedication for this site. The ordinance states "Development of land for schools, religious institutions or other non-profit organizations may create additional demand on the City's park and recreational land and facilities. The City may create partnerships with these organizations that foster cooperative use of school, non-profit and park properties for recreational activities."

A trail will be installed on the north side of Hackamore Road as part of the Hackamore Road improvements. These costs will be incorporated into that project and the church responsibility for costs will be 50% of the project from the property's western boundary to County Road 101. No additional park dedication is required.

Transportation/Access

The City Engineer has completed a feasibility study to address all infrastructure needs. That study is attached to the memo included in this report.

The public street connecting Lupine and Larkspur must be dedicated as a public right-of-way with this plat. After review, public safety finds that the emergency vehicle access is not required. No access to the church is planned from this future street, but the street will be constructed when Outlot A is developed. Utilities will be constructed in this right-of-way as part of the church project.

The applicant is proposing two accesses onto Hackamore Road (one entrance/one exit) and one new access onto CR 101. The Hackamore Road street improvements are currently being designed in partnership with the City of Medina. The developer is responsible for a portion of the improvements as outlined in the engineer's memo.

Additionally, a new right-in/right-out access is proposed on County Road 101. Hennepin County has reviewed the requested access and supports this access with improvements required on CR 101 as

noted in their memo, which is attached as an appendix to the City Engineer's memo. Additionally, the City Engineer is requesting that the applicant work with Lennar and the City to Consider internal street access/temp turnarounds on Goldenrod Trail and 63rd Avenue (Amethyst Lane).

Utilities

Utilities can be extended through the site from the adjacent Ravinia developments to service the site. Utilities will be stubbed to Outlot A for future development.

Public Safety Review

The public safety team reviewed the plans and will require additional details to ensure that turning radii for emergency vehicles is met. The plans must be revised to show the require turning radius and hydrant locations. The draft resolution includes conditions to address the public safety requirements.

Ponding

Two treatment ponds are provided adjacent to the wetlands on the south. Stormwater ponding can be provided on site in compliance with local and state requirements with some modifications. More detail is provided in the engineer's memo.

Wetlands

There are a number of wetlands on site. The applicant has submitted a wetland delineation for review and approval by the City as the LGU for the WCA. Wetland impacts are proposed for the County Road 101 access and mitigation will be required.

The applicant must comply with the wetland buffer and setback requirements in Section 1050.010 of the Zoning Ordinance. The wetlands require an average buffer of 25 feet and a structure setback of 15 feet from the buffer. Wetland buffers, setbacks and buffer monument signs must be shown on the plans in compliance with ordinance requirements. Wetland buffer planting mix must be installed by the applicant and the applicant must provide a buffer maintenance plan for review and approval by City staff.

Conditional Use Permit

A conditional use permit for the place of worship must be reviewed against the standards outlined in the Zoning Ordinance. Staff finds that they meet those standards as follows:

A. Compliance with and effect upon the Comprehensive Plan, including public facilities and capital improvement plans.

The church facility is consistent with the types of uses typically found in residential districts, which includes educational facilities, government facilities and places of worship.

B. The establishment, maintenance or operation of the conditional use will promote and enhance the general public welfare and will not be detrimental to or endanger the public health, safety, morals or comfort.

The church facility complies with all ordinance standards for development in the RSF-2 district standards. Churches have historically been located in residential neighborhoods and there is no empirical data to suggest that it would be detrimental to the public health, safety, morals or comfort in the community.

C. The conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood.

The church will not be injurious to the use and enjoyment of other property in the immediate vicinity for the permitted uses in the RSF-2 district. Staff is not aware of any evidence to suggest that the development will diminish or impair property values in the neighborhood.

D. The establishment of the conditional use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.

The development will not impede normal and orderly development for uses permitted in the district. The surrounding properties have developed on the north and west as Ravinia residential development and public streets border the east and south property lines. The project will access existing streets and will allow for a future street connection through the northern portion of the site. That street right-of-way will be dedicated when the church is built and will be constructed as a new street when the outlot is developed in the future.

E. Adequate public facilities and services are available or can be reasonably provided to accommodate the proposed use.

Adequate public facilities are available to serve the site and the development will need to pay for improvements on adjacent public streets.

F. The conditional use shall, in all other respects, conform to the applicable regulations of the district in which it is located.

The conditional use conforms to the regulations in the RSF-2 district with the conditions noted in the staff report and draft resolution.

G. The conditional use and site conforms to performance standards as specified by this Chapter.

With conditions noted in the staff report and draft resolutions, the use will conform to the performance standards in the Zoning Ordinance.

Preliminary Plat

The preliminary plat application complies with ordinance standards and would create one 27.05-acre lot for the church and one 4.38-acre outlot for future development from the five existing parcels. The two parcels would be separated by an easement for a future street that would be constructed when Outlot A is planned for development. The plat includes dedication of additional right-of-way for Hackamore Road and County Road 101.

The church's narrative indicates that they do not have plans to develop the outlot, but it would be available for development in the future. The church has provided a concept plan that shows how the property could be developed with residential lots. Any plat for future subdivision would require a public hearing for preliminary plat approval and final plat approval.

There are existing driveway and utility easements running north/south and east/west to the Schnell property that must be vacated/released prior to approval of the final plat. There is also a utility easement running north/south that must be vacated. As part of the Ravinia 11th Addition, Lennar requested vacation of the easement but the two other benefitting landowners (who own the property that the church is purchasing) were unwilling to release the easement. City staff has had several discussions with this applicant about the issue and have directed them to reach out Lennar to obtain agreement for release of the easement. This has been included as a condition of approval. If the applicant reaches out and is unable to reach agreement with Lennar, the City Attorney will work with staff and the applicant on other options to bring forward with the final plat.

Conclusion

The proposal appears to comply with ordinance requirements if the conditions in the staff report and draft resolutions are met.

If the application is approved, the next step would be for applicant to apply for a final plat. The final plat and development contract, which outlines all financial responsibilities, would be reviewed and approved by the City Council.

4. Recommendation:

Move to recommend approval of the following:

1. Draft Resolution Approving Site Plan and Conditional Use Permit
2. Draft Resolution Approving Preliminary Plat

Attachments

1. Draft Resolution Approving Site Plan and Conditional Use Permit
2. Draft Resolution Approving Preliminary Plat
3. Site Location Map
4. Public Safety Memo dated June 24, 2020
5. City Engineer's Memo dated June 24, 2020
6. Applicant Narrative received June 10, 2020
7. Topographic/Tree Survey received on May 19, 2020
8. Site Graphics received May 19, 2020
9. Site Photometrics received May 19, 2020
10. Preliminary Plat received May 19, 2020
11. Ghost Plat for outlot received June 10, 2010
12. Sign Plan graphics received June 10, 2020
13. Letters from Residents

City of Corcoran *July xx, 2020*
County of Hennepin
State of Minnesota

RESOLUTION NO. 2020-___

Motion By:
Seconded By:

APPROVING A SITE PLAN AND CONDITIONAL USE PERMIT FOR EAGLE BROOK CHURCH FOR PROPERTY AT THE NORTHWEST QUADRANT OF HACKAMORE ROAD AND CR 101 (PID 36-119-23-44-0008, 36-119-23-44-0010, 36-119-23-44-0009, 36-119-23-44-0013, 36-119-23-44-0014) (CITY FILE NO. 20-023)

WHEREAS, the Eagle Brook Church has requested site plan and conditional use permit approval for the construction of a 70,000 square foot worship facility on property legally described as follows:

See Attachment A

WHEREAS, the Planning Commission has reviewed the site plan and conditional use permit at a duly called Public Hearing and recommends approval;

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF CORCORAN, MINNESOTA, that it should and hereby does approve the request for a site plan and conditional use permit, based on the following findings and conditions:

1. A site plan amendment and conditional use permit is approved to allow construction of an approximately 70,000 square foot worship facility with associated uses and parking, in accordance with the application and plans received by the City on May 19, 2020 and additional material received on June 10, 2020, except as amended by this resolution.

2. Approval is granted for development on Lot 1 only. Any further subdivision or development of Outlot A must be processed in accordance with City regulations, prior to development.

3. A conditional use permit for the worship facility is approved, based on the finding that the standards in Section 1070.020 of the Zoning Ordinance have been met. Specifically:

    a. The church facility is consistent with the types of uses typically found in residential districts, which includes educational facilities, government facilities and places of worship.

    b. The church facility complies with all ordinance standards for development in the RSF-2 district standards. Churches have historically been located in residential neighborhoods and there is no empirical data to suggest that it would be detrimental to the public health, safety, morals or comfort in the community.

    c. The church will not be injurious to the use and enjoyment of other property in the immediate vicinity for the permitted uses in the RSF-2 district. Staff is not aware of any evidence to suggest that the development will diminish or impair property values in the neighborhood.

    d. The development will not impede normal and orderly development for uses permitted in the district. The surrounding properties have developed on the north

and west as Ravinia residential development and public streets border the east and south property lines. The project will access existing streets and will allow for a future street connection through the northern portion of the site. That street right-of-way will be dedicated when the church is built and will be constructed as a new street when the outlot is developed in the future.

e. Adequate public facilities are available to serve the site and the development will need to pay for improvements on adjacent public streets.

f. The conditional use conforms to the regulations in the RSF-2 district with the conditions noted in the staff report and draft resolution.

g. With conditions noted in the staff report and draft resolutions, the use will conform to the performance standards in the Zoning Ordinance.

4. The applicant must comply with the public safety memo dated June 24, 2020.

5. The applicant must provide detailed plans to show compliance with Section 1060.050 of the Zoning Ordinance which limits curtain wall panels of steel, fiberglass and aluminum (non-structural, non-load bearing) to 20% of any wall surface (excludes overhead doors). Plans must be revised to show material percentages.

6. The applicant must provide a material sample board with proposed colors for review and approval by the City.

7. The applicant must provide detailed drawings to ensure that mechanical equipment is screened as required by Section 1060.030.

8. The applicant shall provide lighting fixture cut sheets and pole details to ensure cut-off fixture requirements and maximum pole height requirements are met.

9. The plans shall be revised to provide a pedestrian route via sidewalk from the trails planned on Hackamore Road and County Road 101 to the front entry to the facility.

10. Clear pedestrian routes shall be provided from the large parking lots on the south to the front entry to the facility.

11. A snow storage plan shall be submitted for review and approval by staff.

12. The landscape plan shall be revised to provide a 3-foot high landscape screen around the perimeter of all parking areas as required by the Zoning Ordinance.

13. Underground irrigation is required for all new non-residential development. An irrigation plan must be submitted for City review and approval.

14. A sign permit with additional details about sign lighting will be required to be submitted prior to sign construction.

15. FURTHER, that the following conditions be met prior to issuance of building permits:

RESOLUTION NO. 2020-___

a. The applicant shall comply with the preliminary plat (Resolution 2020-__) conditions.

b. The applicant shall submit any and all necessary permits to Hennepin County for septic system abandonment on site and provide proof of application to the City.

c. The applicant shall submit any and all necessary permits to the State of Minnesota for the construction of a well and provide proof of application to the City.

d. The applicant shall submit any and all necessary permits to the watershed and receive approval and shall provide proof of permits to the City.

e. Record the approving resolution and required easements at Hennepin County and provide proof of recording to the City.

f. Drainage and utility easements in recordable form must be provided to the city in recordable form for review and approval by the City Attorney.

g. Enter into a development contract and submit a financial guarantee for the proposed work as outlined in Section 1070.050, Subd. 9 of the Zoning Ordinance.

   i. Any request to inspect the required landscaping in order to reduce financial guarantees must be accompanied by recertification/verification of field inspection by the project landscape architect. A letter signed by the project landscape architect verifying plantings have been corrected and is in compliance with the plans and specifications will suffice.

16. Approval shall expire within one year of the date of approval unless the applicant commences the authorized use and completes the required improvements.

VOTING AYE	**VOTING NAY**
☐ **Thomas, Ron**	☐ **Thomas, Ron**
☐ **Bottema, Jon**	☐ **Bottema, Jon**
☐ **Dejewski, Brian**	☐ **Dejewski, Brian**
☐ **Anderson, Thomas**	☐ **Anderson, Thomas**
☐ **Schultz, Alan**	☐ **Schultz, Alan**

Whereupon, said Resolution is hereby declared adopted on this XX day of July 2020.

_____
Ron Thomas - Mayor

ATTEST:

_____ ***City Seal***
Jessica Beise – Administrative Services Director

RESOLUTION NO. 2020-___

ATTACHMENT A

The North 310.00 feet of the South 1010.00 feet of East 780.00 feet of Southeast Quarter of the Southeast Quarter of Section 36, Township 119, Range 23, Hennepin County, Minnesota.

And

The East 874.5 feet of the South 400 feet of the Southeast Quarter (SE 1/4) of the Southeast Quarter (SE 1/4) of Section 36, Township 119, Range 23, West of the 5th Principal Meridian according to the U.S. Government Survey thereof, Hennepin County, Minnesota.

And

The South 700 feet of that part of the Southeast Quarter (SE1/4 of SE1/4) of Section 36, Township 119 North, Range 23, West of the Fifth Principal Meridian, lying West of the East 780 feet thereof and which lies North of the South 700 feet thereof, according to the U.S. Government Survey thereof.

And

That part of the Southeast Quarter of the Southeast Quarter (SE1/4 of SE1/4) of Section 36, Township 119 North, Range 23, West of the Fifth Principal Meridian, lying West of the East 780 feet thereof and which lies North of the South 700 feet thereof, according to the U.S. Government Survey thereof.

And

The East 874.5 feet of the North 300 feet of the South 700 feet of the Southeast Quarter of the Southeast Quarter_ (SE1/4 of SE1/4) of Section 36, Township 119, Range 23, Hennepin County, Minnesota

City of Corcoran *July xx, 2020*
County of Hennepin
State of Minnesota

RESOLUTION NO. 2020-____

Motion By:
Seconded By:

APPROVING A PRELIMINARY PLAT EAGLE BROOK CHURCH FOR PROPERTY AT THE NORTHWEST QUADRANT OF HACKAMORE ROAD AND CR 101 (PID 36-119-23-44-0008, 36-119-23-44-0010, 36-119-23-44-0009, 36-119-23-44-0013, 36-119-23-44-0014) (CITY FILE NO. 20-023)

WHEREAS, the Eagle Brook Church has requested preliminary plat approval for the property legally described as follows:

See Attachment A

WHEREAS, the Planning Commission reviewed the submitted preliminary plat at a duly called Public Hearing and recommends approval, and;

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF CORCORAN, MINNESOTA, that it should and hereby does approve the request for preliminary plat subject to the following findings and conditions:

1. A preliminary plat is approved to allow the creation of one lot and one outlot, in accordance with the application and plans received by the City on May 19, 2020 and additional material received on June 10, 2020, except as amended by this resolution.

2. Park dedication is not required for religious institutions. However, the applicant must provide the required trail easements on Hackamore Road and County Road 101.

3. The application shall comply with all conditions in the City Engineer's memo dated June 24, 2020.

4. The application is subject to the review and approval by Hennepin County. The applicant shall comply with any conditions of approval from the letter from the County dated June 18, 2020.

5. The applicant shall provide the required wetland buffer, buffer setback and buffer monuments in compliance with Section 1050.10, Subd. 5 of the Zoning Ordinance.

    a. The plans must be revised to show the wetland buffer, the wetland buffer setback and the wetland buffer signs and submitted for City review and approval.
    b. The wetland buffer planting must be installed as required by the ordinance.
    c. The applicant must provide a wetland buffer maintenance plan for review and approval by staff.
    d. Drainage and utility easements shall be provided over the wetland and wetland buffer.
    e. All permanent wetland buffer monument signs must be erected along the wetland buffer line as required by Section 1050.010, Subd. 7 of the Zoning Ordinance prior issuance of building permits.

RESOLUTION NO. 2020-____

f. Wetland signs shall be purchased from the City.
g. Wetland buffer signs must be installed at each lot line where it crosses a wetland buffer and where needed to indicate the contour of the buffer, with a maximum spacing of 200 feet of wetland edge as shown on the preliminary plat.
h. The final locations must be inspected and approved by City staff.

6. The wetland delineation and wetland mitigation plan must be approved prior to final plat approval. The preliminary and final plat must reflect the approved delineation.

7. There is a public driveway agreement easement and utility easement on the property that will need to be vacated/released prior to approval of the final plat. If the applicant is unable to obtain approval from all affected parties after a good faith effort, staff and the City Attorney will work with them to provide an acceptable alternative for Council approval.

8. Approval of the preliminary plat shall expire within one year of the date of approval unless the applicant has filed a complete application for approval of a final plat.

VOTING AYE	**VOTING NAY**
☐ **Thomas, Ron**	☐ **Thomas, Ron**
☐ **Bottema, Jon**	☐ **Bottema, Jon**
☐ **Dejewski, Brian**	☐ **Dejewski, Brian**
☐ **Anderson, Thomas**	☐ **Anderson, Thomas**
☐ **Schultz, Alan**	☐ **Schultz, Alan**

Whereupon, said Resolution is hereby declared adopted on this XX day of July 2020.

_____
Ron Thomas - Mayor

ATTEST:

City Seal

_____
Jessica Beise – Administrative Services Director

RESOLUTION NO. 2020-____

ATTACHMENT A

The North 310.00 feet of the South 1010.00 feet of East 780.00 feet of Southeast Quarter of the Southeast Quarter of Section 36, Township 119, Range 23, Hennepin County, Minnesota.

And

The East 874.5 feet of the South 400 feet of the Southeast Quarter (SE 1/4) of the Southeast Quarter (SE 1/4) of Section 36, Township 119, Range 23, West of the 5th Principal Meridian according to the U.S. Government Survey thereof, Hennepin County, Minnesota.

And

The South 700 feet of that part of the Southeast Quarter (SE1/4 of SE1/4) of Section 36, Township 119 North, Range 23, West of the Fifth Principal Meridian, lying West of the East 780 feet thereof and which lies North of the South 700 feet thereof, according to the U.S. Government Survey thereof.

And

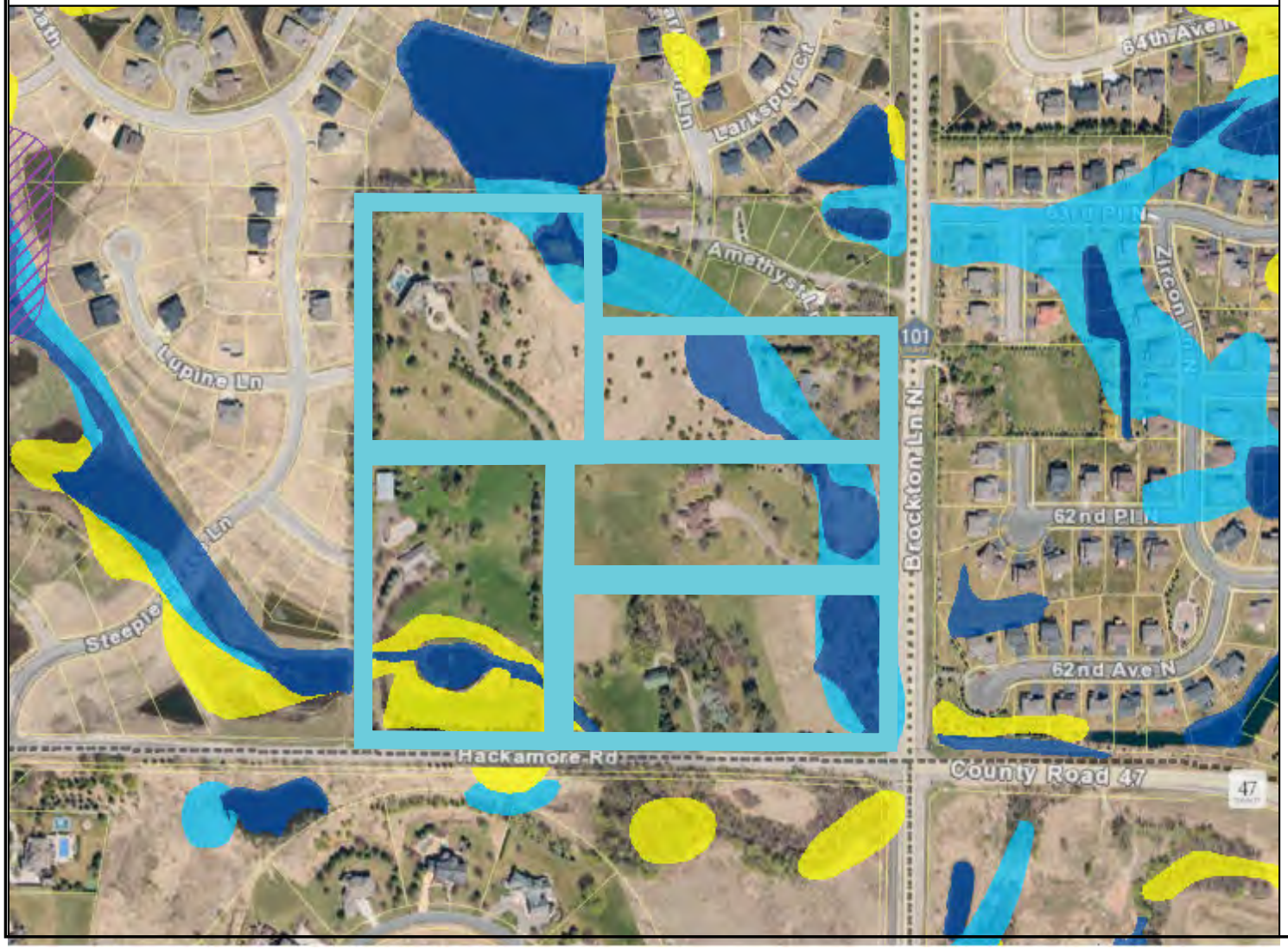
That part of the Southeast Quarter of the Southeast Quarter (SE1/4 of SE1/4) of Section 36, Township 119 North, Range 23, West of the Fifth Principal Meridian, lying West of the East 780 feet thereof and which lies North of the South 700 feet thereof, according to the U.S. Government Survey thereof.

And

The East 874.5 feet of the North 300 feet of the South 700 feet of the Southeast Quarter of the Southeast Quarter_ (SE1/4 of SE1/4) of Section 36, Township 119, Range 23, Hennepin County, Minnesota

Hennepin County Natural Resources Map

Date: 4/14/2020



Legend

FEMA Floodplains - 100 Year

- A
- AE FLOODPLAIN
- AH
- AO
- AE FLOODWAY

Wetlands

- Potential Wetland - HCWI
- Probable Wetland - HCWI
- Probable Wetland - NWI

CITY OF CORCORAN
8200 County Road 116, Corcoran, MN 55340
763.420.2288
E-mail - general@ci.corcoran.mn.us / Web Site - www.ci.corcoran.mn.us

Memo

To: Planning (Planner Lindahl)

From: Director Gottschalk

Date: June 24, 2020

Re: Eagle Brook Church Plan Review

On June 19, 2020, the public safety plan review committee discussed (via email) the updated Eagle Brook Church plans and proposals. Feedback was received from Director of Public Safety Gottschalk, Lieutenant Burns, Fire Chief Feist, Fire Chief Leuer, Building Inspector Geske, and Code Compliance Official Pritchard. The following additional comments on the plan are provided:

With the inclusion of right in, right out, access from County Road 101 the group can support the elimination of the gravel access road on the North end of the project; however, the group did express some concerns about hydrant locations and other fire-fighting needs/requirements. Additionally, demonstrated turn radiuses, hydrant locations, and sprinkler room details will still need to be addressed by the developer and public safety group. These details are typically addressed when more detailed plans are received but felt it was important to note. Based on the most recent information the proposed site planning for the project is acceptable to the public safety group.

This memo serves as a concept review and assumes that all specifications not articulated in the concept meet City standards. Additional fire and building codes will apply.

Technical Memo

WENCK
Responsive partner.
Exceptional outcomes.

To: Kevin Mattson, P.E., Public Works Director

From: Kent Torve, P.E., City Engineer

Date: June 24, 2020

Subject: Plan Review – Eagle Brook CUP

0.0 Background

This review was conducted for the CUP review. Feasibility Study and concept plan Engineering Memo are included by reference.

A stormwater review has been completed and a second model iteration will be required prior to WMO submittal. Those changes may affect comments below and will be incorporated in further reviews. The stormwater review memo is Attachment A, County comments on CSAH 101 are Attachment B, and Feasibility Study is Attachment C.

1.0 Transportation

CSAH 101

1.1 Hennepin County provided review which is Attachment B. The memo describes a right-in/right-out access with additional design requirements.

1.2 Updated traffic signal and intersection improvements to be required as part of this project per Feasibility Study.

Hackamore Road

1.3 Entrance road widths meet City standard.

1.4 Eastbound left turn lane and westbound right turn lane at CSAH 101 shall be required as part of this project per Feasibility Study. Project design currently underway with Medina.

1.4.1 Coordinate east approach grades with the Hackamore Road improvements project. Vertical curve being lowered per State Aid design.

1.5 Consider internal street access/temp turnarounds on Goldenrod Trail and 63rd Avenue (Amethyst Lane). Coordinate with City and adjacent property owners.

Internal

1.6 Radius at east entrance on Hackamore Road to be 25’.

1.7 Larkspur Lane will be connected to Lupine Lane and shall be dedicated as public right-of-way. Grading and platting are required.

1.8 Emergency access routes to pass roll test as observed by City Engineer.

2.0 Trails

2.1 A trail is proposed from west boundary of Ravinia to CSAH 101 as part of the overall Hackamore Project as noted in Feasibility Study

2.1.1 Trail to be graded with this development and easements to be provided on north side of Hackamore Road.

2.1.2 Trail alignment and elevation to be provided by City.

3.0 Sewer

3.1 Install SDR 26 (as opposed to SCH 40) for sanitary sewer within City right-of-way to SAN MH 2, per City Standards.

3.1.1 SAN MH 2 along west property line will be the transition point from public to private sewer. Easement or access agreement to be provided to allow for maintenance.

3.2 Review and relabel any duplicate sanitary manholes, for example there are duplicate SAN MH 2.

3.3 All sewer services shall be in accordance with State building code.

3.4 Watermain is stubbed east of sanitary sewer on Goldenrod Trail. Precautions shall be made to protect watermain while core-drilling the existing sanitary manhole.

3.5 Coordinate sewer utility stub to Outlot A with City.

4.0 Water

4.1 Coordinate water utility stub to Outlot A with City.

4.2 Install DIP on hydrant leads per City standards.

4.3 Temporary hydrant on Larkspur Lane to be relocated/reinstalled when connecting to watermain.

4.4 Hydrant at Lupine Lane to be relocated to high point of watermain.

4.5 Hydrant spacing to be reviewed by public safety.

4.6 Domestic water service is to be stubbed directly from City owned and maintained watermain. Unless Eagle Brook provides and agreement to access private property for the shut off valve.

4.7 Water valves required at tie-in points, or provide documentation developer's contractor is willing to test against existing City valves.

4.8 Watermain alignment to be installed on the south side of future road (Larkspur Lane). Connect to north side of Lupine Lane using bends. Watermain on south side of road is necessary to accommodate the future sanitary sewer extension.

4.9 City recommends considering an additional watermain connection to both 63rd Avenue and Goldenrod Trail. The additional connection will facilitate continued water service when any repairs are needed, or the construction connection is made to Outlot A in the future.

4.10 Water valve locations for the private water line to be located at the right-of-way line.

4.11 Hydrants to be located at highpoints of watermain.

4.12 Retaining wall on Larkspur Lane may need to be reinstalled after watermain installation. Coordination with Lennar and City is required.

5.0 Storm Sewer, Grading and Stormwater

As noted previously, a stormwater memorandum was previously provided that required modifications. The memo is attached.

5.1 Developments creating significant impervious areas have contributed funding towards offsite water quality projects. In lieu of this approach, Eagle Brook shall provide ponding area for Hackamore Road improvements.

5.2 From the existing 30% Hackamore design, there will be approximately 50,000 cubic feet of storage required. More information will be provided on the breakdown of water quality vs live (rate control) storage.

5.3 There is some potential for small cost credits for the road improvement for stormwater assistance.

Storm Sewer

5.4 City recommends RCP for storm sewer under pavement areas.

5.5 City recommends RCP for all outlets from ponds and wetlands. Eagle Brook retains ownership of the BMPs and provides easement to the City.

5.6 Drainage along Larkspur Lane right-of-way to be coordinated with City.

5.7 Storm sewer may be needed to collect Hackamore drainage.

5.8 Culvert conveying public drainage connecting the two wetlands under the CSAH 101 access road to be RCP.

5.9 Relocate FES on west property edge to be away from the existing FES, coordinate with City, a structure may be required to connecting pipes.

5.10 Culvert under Hackamore Road to be improved (extended or replaced) with the Hackamore improvements project.

5.11 Existing outlet in SE corner to be coordinated/reviewed by Hennepin County.

5.12 Label existing pipe size and material. Verify condition of the culverts leaving site.

Grading

5.13 Larkspur Lane will require EOF near connection with existing Larkspur Lane at an elevation lower than 985.0 as shown on Ravinia 11th Addition plans. Secondary pipe may be needed.

5.14 East driveway access on Hackamore to show an overland EOF or additional piped outlets may be required.

5.15 Existing homestead driveway off Hackamore Road culvert crossing to be removed and hydraulic effects downstream should be reviewed with City.

5.16 Grading adjacent to Larkspur Lane to be no steeper than a 3:1. All other grading adjacent to wetlands and other water features to be graded no steeper than a 3:1.

5.17 10:1 maintenance access bench to be provided to all ponds.

5.18 Swale between 2 wetlands on east property line to be stabilized.

5.19 Modify grading plan to stay off adjacent properties or coordinate with property owner.

5.20 Plastic sheet pile weir along north property line to be removed. Permanent feature to be installed and coordinated with City and Lennar per feasibility study.

6.0 Erosion Control

6.1 City of Corcoran is an MS4 city and site visits to be conducted weekly

6.2 Compliance with owner's MS4 permit will be monitored

7.0 General

7.1 2020 detail plates to be incorporated in plan set

7.2 Abandon culverts and driveway accesses off CSAH 10 and Hackamore Road.

7.3 Submit irrigation plan.

7.4 Submit signage plan. Signage within right-of-way to meet City or County standards

7.5 Snow storage areas to have pre-treatment prior to discharge to water bodies.

8.0 Plat

8.1 60' half right-of-way on CSAH 101 is adequate.

8.2 Hackamore road concept design is at 30%. Additional right-of-way and trail easements shall be coordinated with plans and provided at final plat.

8.3 Blanket drainage and utility easement required over Outlot A

8.4 Existing private driveway easement to be abandoned along Ravinia 11th. Coordinate with Lennar.

8.5 Drainage and utility easement to be required on public drainage areas between wetlands on east property edge.

8.6 Provide 20' easement centered on manhole SAN MH 2 at Goldenrod Trail.

8.7 10' drainage and utility easement required on both sides of the Larkspur Lane right-of-way

WENCK ASSOCIATES

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Attachment A

Technical Memo

WENCK
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To: Kevin Mattson, PE, Public Works Director

From: Danielle Tourtillott, EIT
Kent Torve, PE (MN)

Date: June 11, 2020

Subject: Eagle Brook Runoff Model Preliminary Review

Background

The purpose of this memorandum is to provide preliminary review comments on the HydroCAD model submitted by Loucks and Associates. In order to increase review efficiency for applicants and City staff, these guidelines were created to promote a standardized approach to hydraulic and hydrologic modeling on every proposed development.

The WMO has requested that development models be in general compliance with City requirements before the applicant submits information to the WMO. Doing so will increase consistency between the City and WMO approval and ultimately result in better overall stormwater management.

Model Modifications

Below are required modifications for a second iteration before the City authorizes submittal to the WMO:

HWLs, NWLs, and Methodology

- Establish an existing and proposed NWL and HWL for all wetlands. Wetlands shared with offsite properties shall be modeled and City will assist with any offsite coordination.
- Revise time of concentration calculations for a maximum sheet flow length of 100-ft.
- Justify changing the Reach Routing/Pond Routing Method between existing and proposed conditions. If the applicant desires to use the Sim-Route method, outlet devices must be entered downstream to upstream.

Curve Numbers

- Assume land use covers listed in TR-55/HydroCAD are in "good" condition, unless proof is provided to document poor or fair condition.
- Assign CN of 77 for existing conditions.
- Assign CN 85 for proposed conditions pervious area.
- Assign CN 98 for wetlands, ponds and impervious surfaces.

EOFs

- Separate EOF pipe may be needed from west of main entrance towards CR 101 if pipe failure under Hackamore will cause flooding risk for properties upstream (Ravinia).
- West access (Exit) EOF shall be designed to protect upstream properties.

Water Quality

- City prefers a pond with filter bench rather than filtration (sand) basins. Applicant shall provide alternative design (that is acceptable to WMO) for review.

Other

- Provide treatment for the runoff from the curb cut on the south driveway before it reaches the wetland.
- Label biofiltration basin cross section with basin-specific elevations.
- North property boundary has plastic weir that will need to be addressed with final construction plans.

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Attachment B

HENNEPIN COUNTY
MINNESOTA

June 18, 2020

Ms. Kendra Lindahl, AICP
Principal Consultant
City of Corcoran
8200 County Road 116
Corcoran, MN 55340

Re: Preliminary Plat Review – Eagle Brook Church (Received 05/22/20)
County State Aid Highway (CSAH) 101 at Hackamore Road
Hennepin County Plat Review ID #3829A (Reviewed 05/26/20)

Dear Ms. Lindahl:

Please consider the following county staff comments in your review of this preliminary plat proposal to redevelop five single family homesteads into a 1,500-seat church and campus:

Access: This plat proposes three new accesses, one inbound and one outbound on Hackamore Road and a third right-in/right-out access on County Road 101. From a safety and operations standpoint, no new access on County Road 101 is recommended for this site. However, we recognize the desire for this access based on the projected traffic demands and to accommodate emergency vehicles. Therefore, we will accept a right-in/right-out access that is limited to weekend (Saturday and Sunday) services. Preferably, the location of the access would be halfway between Hackamore Road and 63rd Place. Given the constraints of wetlands west of County Road 101, we ask that the proposed access be located as close to the mid-point as feasible and that adequate sight distance be verified.

To maintain safety and mobility along County Road 101, the proposed access will need to include a southbound right-turn lane and raised concrete center median along County Road 101. The median will need to extend 100 feet on both sides of the new access. The southbound right-turn lane length will need to provide adequate space for vehicles to safely decelerate and to accommodate the county's preferred turn lane dimensions. To ensure traffic impacts to County Road 101 will be limited to weekend hours, the access will need to incorporate a barricade (e.g. chain, gate, etc.) to be opened only during weekend services. Details of the access permit, as well as the design of the access, median, and right-turn lane will need to be formally reviewed by county staff during the permitting process.

Hennepin County Transportation Project Delivery
Public Works Facility, 1600 Prairie Drive, Medina, MN 55340
612-596-0300 | hennepin.us

Hennepin

Right-of-Way: We request right-of-way dedication (approximately 10 feet) necessary along County Road 101 to match our preferred 60-foot half right-of-way section allowing for future roadway needs, such as an off-road trail.

Bicycle and Pedestrian: Consistent with the Hennepin County Bicycle Plan, we recommend the inclusion of an off-road trail along County Road 101 to both connect to the existing trail system south of Hackamore Road as well as the city's planned Hackamore Road trail. This would provide transportation choices and create connectivity within and between transportation modes for both the church community and surrounding neighborhoods. We welcome further discussion between the developer and city on how best to plan for and deliver this important multi-modal amenity.

Americans with Disabilities Act (ADA) ramps and Accessible Pedestrian Signal (APS) infrastructure at the intersection of County Road 101 and Hackamore Road will need to be coordinated through the cities' planned Hackamore Road project.

Storm Water / Drainage: Please ensure discharge rates remain less than existing flow rates. The county storm water system will not take water from new drainage areas. Additional treatments may be necessary if flow rates cannot match existing. *Contact: Drew McGovern at 612-596-0208 or drew.mcgovern@hennepin.us*

Permits: Please inform the developer that all construction within county right-of-way requires an approved Hennepin County permit prior to beginning construction. This includes, but is not limited to, driveway and street access, drainage and utility construction, trail development, and landscaping. Please also ensure the removal of all vacated driveways along County Road 101 and regrading of the ditch drainage. *Contact: Michael Olmstead, Permits Coordinator at 612-596-0336 or michael.olmstead@hennepin.us*

More Information: Please contact us for any further discussion of these items. *Bob Byers: 612-596-0354, robert.byers@hennepin.us or Jason Gottfried: 612-596-0394, jason.gottfried@hennepin.us*

Sincerely,

Carla Stueve

Carla Stueve, PE, PTOE
County Highway Engineer

Hennepin

Hennepin County Natural Resources Map

Date: 3/2/2020

Legend

Streams

Wetlands

Potential Wetland - HCWI

Probable Wetland - HCWI

Probable Wetland - NWI

No results

Comments:

1 inch = 400 feet

N

This data (i) is furnished 'AS IS' with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is notsuitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this data.

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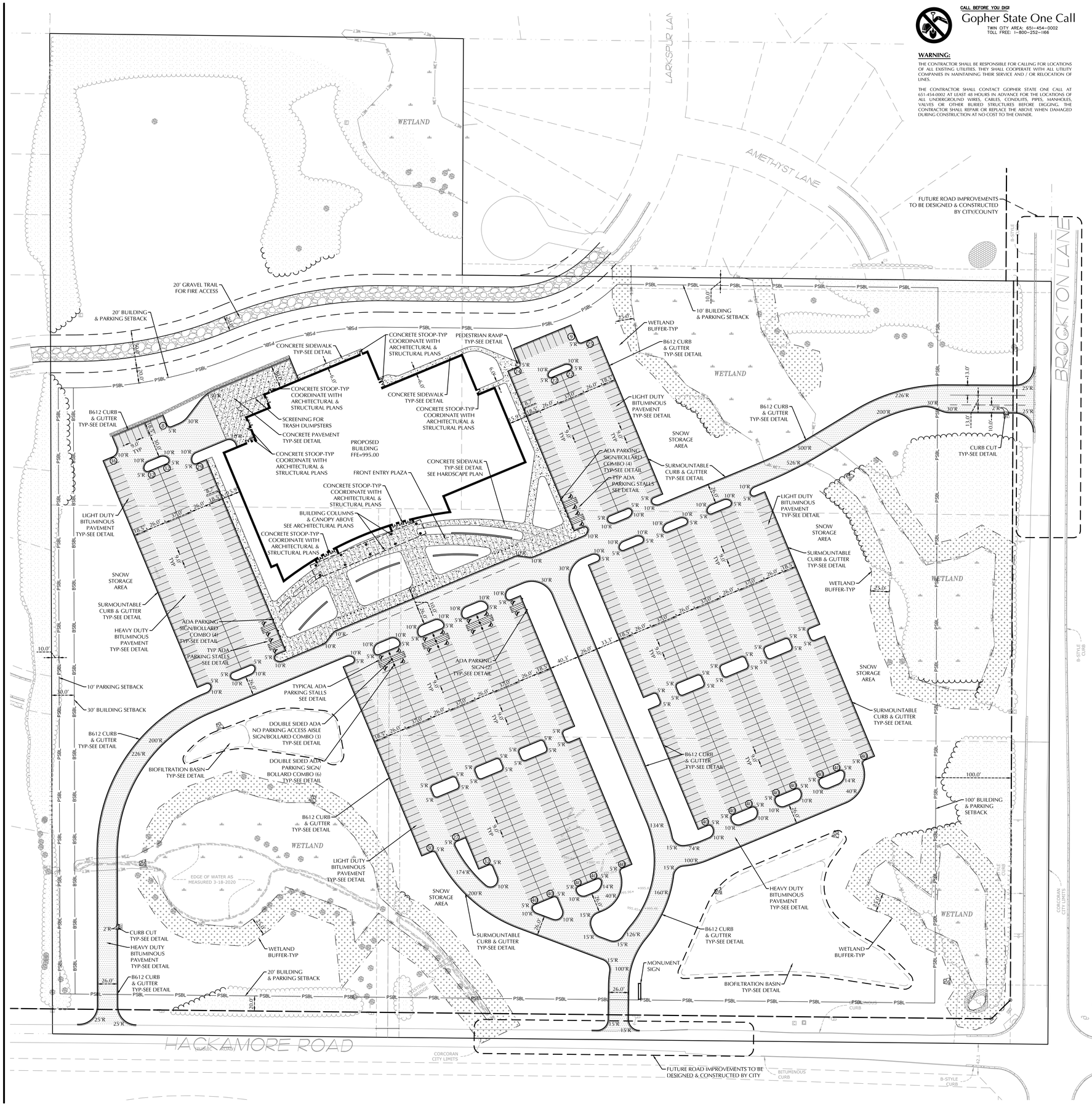

CALL BEFORE YOU DIG!

Gopher State One Call

TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

NOTE:
EXISTING CONDITIONS INFORMATION SHOWN IS FROM A TOPOGRAPHIC SURVEY PREPARED BY E. G. RUD & SONS, INC. AND DATED APRIL, 2020.

N

0 50 100
SCALE IN FEET

PAVEMENT TYPES

- CONCRETE SIDEWALK
- CONCRETE PAVEMENT
- LIGHT DUTY BITUMINOUS PAVEMENT

NOTE:
SEE PAVEMENT SECTIONS ON GEOTECHNICAL ENGINEER'S REPORT FOR TYPE AND DEPTH INFORMATION.

CIVIL LEGEND

EXISTING		PROPOSED
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATEVALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOIL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
W	WATER SERVICE	
S	SANITARY SERVICE	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
	SPOT ELEVATION	
	CONTOURS	
	SANITARY SEWER	
	STORM SEWER	
	WATERMAIN	
FM	FORCEMAIN	FM
DT	DRAINTILE	DT
	SILT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREELINE	
	EASEMENT LINE	
	SETBACK LINE	
X	FENCE LINE	X
TEL	UNDERGROUND TELE	
GAS	UNDERGROUND GAS	
OH	OVERHEAD UTILITY	
FO	UNDERGROUND FIBER OPTIC	
ELE	UNDERGROUND ELECTRIC	
CTV	UNDERGROUND CABLE TV	
	PROPERTY LINE	
	CONIFEROUS TREE	
	DECIDUOUS TREE	
	PARKING COUNTS	23

SITE DATA

CURRENT ZONING: RSF-2
PROPOSED ZONING: RSF-2

PROPERTY AREA:	32.45 AC
DISTURBED AREA:	25.26 AC
EXISTING IMPERVIOUS AREA:	1.95 AC (6.0%)
PROPOSED IMPERVIOUS AREA:	10.68 AC (32.9%)

DEVELOPMENT AND DESIGN STANDARDS

YARD (BUILDING) SETBACKS:

FRONT (FROM 101)	100 FT MINIMUM
SIDE (FROM HACKAMORE)	20 FT MINIMUM
SIDE	10 FT MINIMUM
REAR	30 FT MINIMUM

OFF-STREET PARKING AND DESIGN STANDARD REQUIREMENTS

OFF-STREET PARKING SETBACKS:

FRONT (FROM 101)	100 FT MINIMUM
SIDE (FROM HACKAMORE)	20 FT MINIMUM
SIDE	10 FT MINIMUM
REAR	10 FT MINIMUM

MINIMUM PARKING LAYOUT DIMENSIONS (90 DEGREE PATTERN):

PARKING SPACE WIDTH	= 9 FT
PARKING SPACE LENGTH	= 18.5 FT
DRIVE LANE WIDTH	= 26 FT

OFF-STREET PARKING CALCULATIONS

PROPOSED CHURCH: XX,XXX SF @ X STALLS PER XXXX = XXX STALLS

TOTAL PARKING REQUIRED = XXX STALLS

TOTAL PARKING PROVIDED = 848 STALLS

ACCESSIBLE PARKING

PROPOSED ACCESSIBLE PARKING: 22 STALLS

REQUIRED ACCESSIBLE PARKING: 17 STALLS**

***REQUIRED MINIMUM NUMBER OF ACCESSIBLE SPACES FOR 501 TO 1000 STALLS (2% OF TOTAL STALLS PROVIDED)*

SITE NOTES

1. ALL PAVING, CONCRETE CURB, GUTTER AND SIDEWALK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN PER THE DETAIL SHEET(S) AND STATE/LOCAL JURISDICTION REQUIREMENTS.
2. ACCESSIBLE PARKING AND ACCESSIBLE ROUTES SHALL BE PROVIDED PER CURRENT ADA STANDARDS AND LOCAL/STATE REQUIREMENTS.
3. ALL CURB DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. ALL BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF WALL UNLESS OTHERWISE NOTED.
5. TYPICAL FULL SIZED PARKING STALL IS 9' X 18.5' UNLESS OTHERWISE NOTED.
6. ALL CURB RADII SHALL BE 5.0' UNLESS OTHERWISE NOTED.
7. BITUMINOUS IMPREGNATED FIBER BOARD TO BE PLACED AT FULL DEPTH OF CONCRETE ADJACENT TO EXISTING STRUCTURES AND BEHIND CURB ADJACENT TO DRIVEWAYS AND SIDEWALKS.
8. SEE SITE ELECTRICAL PLAN FOR SITE LIGHTING.

SIGNAGE AND STRIPING NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE SIGNAGE AND STRIPING AS SHOWN ON THIS PLAN.
2. CONTRACTOR SHALL PAINT ALL ACCESSIBLE STALLS, LOGOS AND CROSS HATCH LOADING AISLES WITH WHITE PAVEMENT MARKING PAINT, 4" IN WIDTH.
3. CONTRACTOR SHALL PAINT ANY/ALL DIRECTIONAL TRAFFIC ARROWS, AS SHOWN, IN WHITE PAINT.
4. ALL SIGNAGE SHALL INCLUDE POST, CONCRETE FOOTING AND STEEL CASING WHERE REQUIRED.
5. ALL SIGNAGE NOT PROTECTED BY CURB, LOCATED IN PARKING LOT OR OTHER PAVED AREAS TO BE PLACED IN STEEL CASING, FILLED WITH CONCRETE AND PAINTED YELLOW. REFER TO DETAIL.
6. ANY/ALL STOP SIGNS TO INCLUDE A 24" WIDE PAINTED STOP BAR IN WHITE PAINT, PLACED AT THE STOP SIGN LOCATION, A MINIMUM OF 4' FROM CROSSWALK IF APPLICABLE. ALL STOP BARS SHALL EXTEND FROM DIRECTIONAL TRANSITION BETWEEN LANES TO CURB.
7. ALL SIGNS TO BE PLACED 18" BEHIND BACK OF CURB UNLESS OTHERWISE NOTED.

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CIVIL ENGINEERING
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ENVIRONMENTAL
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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed/Registered Professional Engineer under the laws of the State of Minnesota

Name
Trevor D. Grays - PE
Date 05-19-2020 Lic./Reg. No. 53706

Issued For

Item	Date
SD ISSUE	04-29-2020
CUP ISSUE	05-19-2020

NOT FOR CONSTRUCTION

This Sheet may be a Reduced Copy.
The bar above is 1" long on a Full Size Sheet. Drawing Scales apply to Full Size Sheets.

Comm. No. 3.2019023.00
Drawn TDG/ZBM/MDC

Sheet Title

SITE PLAN

Sheet No.

220.CS

WENCK ASSOCIATES

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Attachment C

WENCK File #2294-0054
May 2020

Eagle Brook Church Draft Infrastructure Feasibility Study

Prepared for:

City of Corcoran, MN

8200 County Road 116
Corcoran, MN 55340

WENCK
Responsive partner.
Exceptional outcomes.

Prepared by:

WENCK Associates, Inc.
1800 Pioneer Creek Center
Maple Plain, MN 55359
Phone: 763-479-4200
Fax: 763-479-4242

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1 Site Plan and Infrastructure Impacts

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A Traffic Volumes
B Preliminary Hackamore Design for Two Options
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1.0 Introduction

Eagle Brook Church is proposing to construct a facility located on Hackamore Road and CSAH 101 in southeast Corcoran. The area is currently large lot (rural) residential and had previously been ghost platted as urban residential, so the change in use is under review for infrastructure impacts and needs related to traffic, sewer service, water supply, drainage and stormwater. This Draft Feasibility Study is the basis for cost estimating on public infrastructure needs for the site. Figure 1 shows the site layout and infrastructure impacts for the facility.

2.0 Transportation

2.1 BACKGROUND

This study examined weekday, Saturday, and Sunday peak hour traffic impacts of the proposed project at the following intersections:

- County Road 116/Hackamore Road
- CSAH 101/Hackamore Road
- Hackamore Road/west development access
- Hackamore Road/east development access
- CSAH 101/development access

2.2 PROPOSED DEVELOPMENT CHARACTERISTICS

For purpose of the traffic impact analysis, the proposed project will consist of the construction of a new church building with 1,500 seats (70,000 square feet). The project includes approximately 850 on-site parking spaces. The project has two access points on Hackamore Road, with the western access having dual lanes exit only and the eastern access, also dual lanes and enter only. A right in/right out access is proposed on CSAH 101.

Church activities consist of the following:

- Weekday activities between 8:00 am and 5:00 pm are conducted with 15 employees on site.
- Wednesday evening student activities occur between 6:00 pm and 9:00 pm. Church staff estimate these activities involve 350 students and 35 adult volunteers.
- On Saturdays, the church plans to hold services at 4:00 pm and 6:00 pm.
- On Sundays, the church plans to hold services at 9:00 a.m. and 11:00 a.m.

The project is expected to be completed in early 2022.

2.3 EXISTING CONDITIONS

The proposed site consists of five existing single family homes and one house may remain (northwest lot), but four will be removed as part of the project. The project site is bounded by CSAH 101 on the east, Hackamore Road on the south, and single family homes (Lennar) to the west and north.

Adjacent to the site, CSAH 101 is a two-lane undivided roadway with turn lanes at major intersections. On the south, Hackamore Road is a two-lane undivided roadway. Existing conditions near the proposed project location are further described below.

County Road 116/Hackamore Road - The signalized intersection provides one left turn lane and one through/right turn lane on the northbound and southbound approaches. The eastbound and westbound approaches consist of one lane shared by all movements.

CSAH 101/Hackamore Road - The signalized intersection provides one left turn lane, one through lane, and one right turn lane on the northbound and southbound approaches. The eastbound and westbound approaches consist of one lane shared by all movements.

2.4 EXISTING TRAFFIC VOLUMES

Existing weekday turn movement volumes for the CSAH 101/Hackamore Road and CR 116/Hackamore Road collected for the Hackamore Road design project were obtained from City staff. This data was used for the weekday a.m. and p.m. peak hour forecasts.

The significant reduction in traffic volumes due to closures associated with COVID-19 eliminated the possibility of collecting accurate volume data for the Wednesday evening, Saturday, and Sunday time periods. Traffic volumes during these time periods were estimated using data from nearby MnDOT Automatic Traffic Recording locations collected in 2019. Using this data, hourly adjustment factors were developed and applied to the current weekday data, resulting in reasonable estimates for the Wednesday evening, Saturday, and Sunday time periods. These volumes were used in the development of traffic forecasts as described next.

2.5 TRAFFIC FORECASTS

To adequately address the impacts of the proposed project, forecasts and analyses were completed for the years 2023 and 2030. Specifically, traffic forecasts were developed for the following time periods:

- Weekday a.m. and p.m. peak hours
- Wednesday from 6:00-7:00 pm and 9:00 to 10:00 pm
- Saturday from 3:15 to 4:15 pm, 5:00 to 6:00 pm, and 7:00 pm to 8:00 pm
- Sunday from 8:15 – 9:15 a.m., 10:00 – 11:00 a.m., and 12:00 – 1:00 p.m.

These time periods were chosen based on information from Church staff, the church service times on Saturday and Sunday, and the time periods for student instruction on Wednesday evenings.

In addition, traffic forecasts were developed both with and without the proposed right in/right out access on CSAH 101.

Traffic forecasts were developed for following scenarios:

- *2020 Existing*. Existing volumes were determined through traffic counts at the subject intersections. The existing volume information includes trips generated by nearby uses.

- *2023 No-Build*. Existing volumes at the subject intersections were increased by 1.0 percent per year. In addition, traffic generated by nearby approved residential developments were added to determine *2023 No-Build* volumes. The 1.0 percent per year growth rate was calculated based on both recent growth experienced near the site and projected growth in the area.

- *2023 Build.* Trips generated by the proposed development were added to the 2023 No-Build volumes to determine *2023 Build* volumes.

- *2030 No-Build*. Existing volumes at the subject intersections were increased by 1.0 percent per year. In addition, traffic generated by nearby approved residential developments were added to determine *2030 No-Build* volumes. The 1.0 percent per year growth rate was calculated based on recent growth experienced near the site

and projected growth in the area.

- *2030 Build*. Trips generated by the proposed project and the additional development to the west were added to the *2030 No-Build* volumes to determine *2030 Build volumes*.

The expected development trips were determined from detailed attendance information provided by Eagle Brook Church. Attendance information from the existing Wayzata High School location was analyzed to establish the expected attendance at the proposed location. Based on this data and growth estimates for this area, the following attendance estimates were developed:

- Wednesday evening – 350 students and 35 adult volunteers
- Saturday services – 840 persons for the 4:00 pm service and 750 persons for the 6:00 pm service
- Sunday services – 1,200 persons for the 9:00 am service and 1,410 persons for the 11:00 am service.

Expected vehicle occupancy and entering and exiting percentages were based on data from existing Eagle Brook Church locations. The entering and exiting percentages from this data were applied to the forecasted vehicle counts, resulting in the trip generation information in Tables 1 to 4.

Table 1. Weekday Peak Hour Trip Generation for Proposed Church

Time Period	Trips	
	In	Out
A.M. Peak Hour	20	0
P.M. Peak Hour	0	20

Table 2. Wednesday Evening Trip Generation for Proposed Church

Time Period	Trips	
	In	Out
6-7 pm	235	200
9-10 pm	200	235

Table 3. Saturday Trip Generation for Proposed Church

Time Period	Trips	
	In	Out
315-330 p.m.	18	0
330-345 p.m.	96	0
345-400 p.m.	261	0
400-415 p.m.	106	0
500-515 p.m.	26	221
515-530 p.m.	95	210
530-545 p.m.	236	35
545-600 p.m.	73	13
700-715 p.m.	0	155
715-730 p.m.	0	223
730-745 p.m.	0	37
745-800 p.m.	0	14

Table 4. Sunday Trip Generation for Proposed Church

Time Period	Trips	
	In	Out
815-830 a.m.	25	0
830-845 a.m.	137	0
845-900 a.m.	372	0
900-915 a.m.	152	0
1000-1015 a.m.	48	316
1015-1030 a.m.	179	300
1030-1045 a.m.	442	50
1045-1100 a.m.	136	19
1200-1215 p.m.	0	291
1215-1230 p.m.	0	419
1230-1245 p.m.	0	69
1245-100 p.m.	0	27

Trip distribution percentages for the subject development trips were established based on information from Church staff. The distribution percentages for trips generated by the proposed development are as follows:

- 25 percent to/from the north on CSAH 101
- 11 percent to/from the east on Hackamore Road
- 28 percent to/from the south on CSAH 101
- 13 percent to/from the north on CR 116
- 4 percent to/from west (of CR 116) on Hackamore Road
- 19 percent to/from the south on CR 116

Development trips were assigned to the surrounding roadway network using the preceding trip distribution percentages. Traffic volumes were established for all the forecasting scenarios described earlier. The resultant traffic volumes are shown in the appendix.

2.6 TRAFFIC ANALYSIS

Traffic analyses were completed for the subject intersections for all scenarios described earlier using Synchro software. Year 2020 analysis was completed using existing geometrics, control, and signal timing. Year 2023 and 2030 analyses assumed the following improvements had been implemented on Hackamore Road:

- CSAH 101/Hackamore Road – East and west approaches expanded to provide one left turn lane, one through lane, and one right turn lane
- CR 116/Hackamore Road - East and west approaches expanded to provide one left turn lane, one through lane, and one right turn lane
- Hackamore Road/east development access – westbound right turn lane and eastbound left turn lane provided
- CSAH 101/right turn access – southbound right turn lane provided

Capacity analysis results are presented in terms of level of service (LOS), which is defined in terms of traffic delay at the intersection. LOS ranges from A to F. LOS A represents the best

intersection operation, with little delay for each vehicle using the intersection. LOS F represents the worst intersection operation with excessive delay. The following is a detailed description of the conditions described by each LOS designation:

- Level of service A corresponds to a free flow condition with motorists virtually unaffected by the intersection control mechanism. For a signalized or an unsignalized intersection, the average delay per vehicle would be approximately 10 seconds or less.

- Level of service B represents stable flow with a high degree of freedom, but with some influence from the intersection control device and the traffic volumes. For a signalized intersection, the average delay ranges from 10 to 20 seconds. An unsignalized intersection would have delays ranging from 10 to 15 seconds for this level.

- Level of service C depicts a restricted flow which remains stable, but with significant influence from the intersection control device and the traffic volumes. The general level of comfort and convenience changes noticeably at this level. The delay ranges from 20 to 35 seconds for a signalized intersection and from 15 to 25 seconds for an unsignalized intersection at this level.

- Level of service D corresponds to high-density flow in which speed and freedom are significantly restricted. Though traffic flow remains stable, reductions in comfort and convenience are experienced. The control delay for this level is 35 to 55 seconds for a signalized intersection and 25 to 35 seconds for an unsignalized intersection.

- Level of service E represents unstable flow of traffic at or near the capacity of the intersection with poor levels of comfort and convenience. The delay ranges from 55 to 80 seconds for a signalized intersection and from 35 to 50 seconds for an unsignalized intersection at this level.

- Level of service F represents forced flow in which the volume of traffic approaching the intersection exceeds the volume that can be served. Characteristics often experienced include long queues, stop-and-go waves, poor travel times, low comfort and convenience, and increased accident exposure. Delays over 80 seconds for a signalized intersection and over 50 seconds for an unsignalized intersection correspond to this level of service.

The LOS results for the study intersections are presented in Tables 5 and 6.

Table 5. Level of Service Results without CSAH 101 Access

CSAH 101/ Hackamore	Weekday AM	Weekday PM	Wed 6-7 pm	Wed 9-10 pm	Sat 315-415 pm	Sat 5-6 pm	Sat 7-8 pm	Sun 815-915 am	Sun 10-11 am	Sun 12-1 pm
2020 Existing	B (c)	B (c)	B (c)	B (c)	B (c)	B (c)	B (c)	B (c)	A (c)	B (c)
2023 No-Build	B (d)	B (d)	B (d)	B (c)	B (c)	B (c)	B (c)	B (c)	A (c)	B (c)
2023 Build	B (d)	B (d)	B (d)	B (c)	B (c)	B (c)	B (c)	B (c)	C (d)	C (c)
2030 No-Build	C (d)	B (d)	C (d)	B (c)	B (c)	B (c)	B (c)	B (c)	C (d)	C (c)
2030 Build	C (d)	B (d)	C (d)	B (c)	B (d)	C (c)	B (c)	B (c)	C (d)	C (d)
CR 116/ Hackamore										
2020 Existing	B (c)	B (c)	B (c)	A (c)	A (c)	A (c)	A (c)	A (c)	A (c)	A (c)
2023 No-Build	B (d)	B (c)	B (c)	A (c)	B (c)	A (c)	A (c)	A (c)	A (c)	A (c)
2023 Build	B (d)	B (c)	B (d)	B (c)	B (c)	B (c)	B (c)	B (c)	B (d)	B (c)
2030 No-Build	B (d)	C (d)	C (d)	B (c)	B (c)	B (c)	B (c)	B (c)	B (d)	B (c)

CSAH 101/ Hackamore	Weekday AM	Weekday PM	Wed 6-7 pm	Wed 9-10 pm	Sat 315-415 pm	Sat 5-6 pm	Sat 7-8 pm	Sun 815-915 am	Sun 10-11 am	Sun 12-1 pm
2030 Build	B (d)	C (d)	C (d)	B (c)	B (c)	B (c)	B (c)	B (c)	B (d)	B (c)
Hackamore/ East access										
2023 Build	A (a)	A (a)	A (a)	A (a)	A (a)	A (a)	A (a)	A (a)	A (b)	A (a)
2030 Build	A (a)	A (a)	A (a)	A (a)	A (a)	A (a)	A (a)	A (a)	A (b)	A (a)
Hackamore/ West access										
2023 Build	A (a)	A (b)	A (b)	A (b)	A (a)	A (c)	A (b)	A (b)	F (f)	D (e)
2030 Build	A (a)	A (b)	A (b)	A (b)	A (a)	A (c)	A (b)	A (b)	F (f)	D (f)

A=Overall intersection LOS, (b) = Worst movement LOS

Table 6. Level of Service Results with CSAH 101 Access

CSAH 101/ Hackamore	Weekday AM	Weekday PM	Wed 6-7 pm	Wed 9-10 pm	Sat 315-415 pm	Sat 5-6 pm	Sat 7-8 pm	Sun 815-915 am	Sun 10-11 am	Sun 12-1 pm
2020 Existing	B (c)	B (c)	B (c)	B (c)	B (c)	B (c)	B (c)	B (c)	A (c)	B (c)
2023 No-Build	B (d)	B (d)	B (d)	B (c)	B (c)	B (c)	B (c)	B (c)	A (c)	B (c)
2023 Build	B (d)	B (d)	B (d)	B (c)	B (c)	B (d)	B (c)	B (c)	C (d)	B (c)
2030 No-Build	C (d)	B (d)	B (d)	B (c)	B (c)	B (c)	B (c)	B (c)	C (d)	C (c)
2030 Build	C (d)	B (d)	B (d)	B (c)	B (d)	B (d)	B (c)	B (c)	C (d)	C (c)
CR 116/ Hackamore										
2020 Existing	B (c)	B (c)	B (c)	A (c)	A (c)	A (c)	A (c)	A (c)	A (c)	A (c)
2023 No-Build	B (d)	B (c)	B (c)	A (c)	B (c)	A (c)	A (c)	A (c)	A (c)	A (c)
2023 Build	B (d)	B (c)	B (d)	B (c)	B (c)	B (c)	B (c)	B (c)	B (d)	B (c)
2030 No-Build	B (d)	C (d)	C (d)	B (c)	B (c)	B (c)	B (c)	B (c)	B (d)	B (c)
2030 Build	B (d)	C (d)	C (d)	B (c)	B (c)	B (c)	B (c)	B (c)	B (d)	B (c)
CSAH 101/ access										
2023 Build	A (a)	A (a)	A (b)	A (b)	A (a)	A (b)	A (b)	A (a)	A (b)	A (c)
2030 Build	A (a)	A (a)	A (b)	A (b)	A (a)	A (b)	A (b)	A (a)	A (b)	A (c)
Hackamore/ East access										
2023 Build	A (a)	A (a)	A (a)	A (a)	A (a)	A (a)	A (a)	A (a)	A (b)	A (a)
2030 Build	A (a)	A (a)	A (a)	A (a)	A (a)	A (a)	A (a)	A (a)	A (b)	A (a)
Hackamore/ West access										
2023 Build	A (a)	A (b)	A (b)	A (b)	A (a)	A (b)	A (b)	A (a)	A (c)	A (b)
2030 Build	A (a)	A (b)	A (b)	A (b)	A (a)	A (b)	A (b)	A (a)	A (d)	A (c)

A=Overall intersection LOS, (b) = Worst movement LOS

As shown in Table 5, all movements and intersections with one exception operate at acceptable levels of service under the scenario with no access on CSAH 101. The one exception is the Hackamore Road/west access intersection, which operates poorly during the Sunday 10-11 am and Sunday 12-1 pm time periods. The poor level of service is due to the high volume of exiting traffic during the time periods.

As shown in Table 6, all movements and intersections operate at acceptable levels of service under the scenario with access on CSAH 101. Operations at the Hackamore Road/west access intersection improve during the Sunday 10-11 am and Sunday 12-1 pm time periods because a portion of traffic exits onto CSAH 101 instead of Hackamore Road.

Vehicle queue length impacts at the CSAH 101/Hackamore Road intersection were reviewed using the SimTraffic software. The queue length information was developed based on five runs of SimTraffic using detailed 15-minute volumes developed for each scenario. The SimTraffic simulations were carefully reviewed for all scenarios to determine if any vehicle queues on Hackamore Road would impede traffic operations at the Hackamore Road/east

access intersection. Based on the current site plan, this intersection is located approximately 600 feet west of CSAH 101.

Under all scenarios, the longest queue length was 329 feet on the eastbound approach at CSAH 101 during the Saturday 5-6 pm time period. All other eastbound queue lengths were shorter than 329 feet. Therefore, vehicle queues from the CSAH 101/Hackamore Road intersection are not expected to impact the proposed access locations on Hackamore Road.

2.7 FINDINGS

In order to accommodate the 2023 and 2030 traffic volumes presented in this report, we recommend implementation of the following improvements:

CSAH 101/Hackamore Road

- Construct left turn and right turn lanes on both the eastbound and westbound approaches
- Install updated traffic signal control

Hackamore Road/east development access

- Construct a westbound right turn lane and an eastbound left turn lane

CSAH 101/development access

- We recommend construction of this access on CSAH 101, in order to improve traffic operations at the Hackamore Road access locations.

Trail

- A trail is proposed from west boundary of Ravinia to CSAH 101 which is part of the overall Hackamore project.

Other recommendations:

- Recommended that Church staff develop a detailed Traffic and Parking Management Plan tailored for the proposed site to ensure efficient traffic and parking operations. The plan should include details on temporary traffic control at the access intersections, pedestrian accommodations, and parking accommodations.
- Ravinia has constructed temporary turnarounds and Larkspur and Lupine will be connected on the north loop road. For the remaining Goldenrod and 63rd Avenue connections, coordination is required for modification to permanent solutions meeting City standards with a design goal to minimize the necessary improvements. Easements may be required.

2.8 COST ESTIMATES

The cost estimates for the Hackamore project were determined using the plans developed by WSB, the engineering firm contracted by the two cities for the preliminary Hackamore design plans. Since Hackamore has several developments and small cul de sac access points, two options were created for discussion between the cities. Option 1 is a "Continuous Three Lane", where the middle of the road is dedicated to left turns (See Appendix B for preliminary layout). This provides straighter alignment for the complete length of Hackamore. Option 2 is "Standard Turn Lanes", where the taper and turn lane are designed for each access point, and some road widths are narrower if no turn lane or taper occurs.

The difference in road surface areas between Option 1 and Option 2 for this length of Hackamore road is minimal since the access points of Eagle Brook Church and CSAH 101

turn lanes are all within the length so a "Continuous Third Lane" is very similar to the "Standard Turn Lane" design.

Cost Basis

Cost estimating was done using a Corcoran data base of recently constructed paving projects. Bid results for the public turn lane projects have ranged from $80 per square yard to a more recent $106 per square yard cost for the pavement work. For this Hackamore estimate a bituminous, aggregate and select granular for a recent (2020) street project was also utilized resulting in a unit cost of $90 per SY (see Appendix B).

Construction estimates were from the Eagle Brook West Boundary and the CSAH 101 intersection and totals were increased by 25% for contingency, engineering, construction management, easements, etc.

Option 1 Continuous Three Lane

Total Square Yards = 10,600 = $954,000

Total Project Estimate = $1.2 M

Option 2 Standard Turn Lane Design

Total Square Yards = 10,240 = $921,600

Total Project Estimate = $1.15 M

Signal

For estimating purposes a cost of $250,00 can be used for new CSAH 101 signals. County and other cities participation will be pursued.

Right In / Right Out

The traffic analysis recommends a Right In / Right Out along CSAH 101 for the facility. The County will provide any design approval, however, for cost estimating purposes pavement quantity of 600 SY for "right in" and 400 SY improvement for the "right out" were used. County may require a center median to ensure the right in/right out movements, which triggers further road widening etc. Therefore, the cost estimate is:

Right in / Right Out-- CSAH 101

- Total Square Yards = 1,000 SY = $90,000
- Used a 2.0 "Multiplier" for site constraints, median, widening, and other unknowns.

Total Construction = $180,000
Total Estimate = $225,000

Trail Improvements

A trail along the north side was estimated using $33 / SY for the thinner section of a pavement estimate. Trail results are:

Eagle Brook West Boundary to CSAH 101

- Total Square Yards = 2,030 SY = $67,000
- Culvert extension, creek crossing, etc. = $50,000
- Assumes grading and subgrade preparation are done with the development

Total Trail Construction = $117,000
Total Trail Estimate = $150,000

3.0 Sewer and Water

3.1 BACKGROUND

The parcel has laterals available from Ravinia and the existing water model was executed for pressure and fire flow. Corcoran will eventually have a tower and booster station so the analysis was provided for both (No Tower and With Tower). Secondly, it is assumed the 2020 Trunk Water Main is installed and operating along CR 116 west of Ravinia which provides "looping" for the SE corner of Corcoran. Should the City project be delayed additional analysis on water modeling is needed.

3.2 SEWER

The church can be serviced by the laterals installed with Ravinia as follows:

- For "slab on grade" (no basement) construction, either Goldenrod (970.5) or Ravinia 11th (979.25)
- For a structure with a basement, the Goldenrod stub would be utilized.

Additional information is needed for the land north of the "North Loop", which may also require sewer service.

3.3 POTENTIAL UPSIZE OF WATER MAIN

Since the proposed land use changed and fire flows are above residential needs, the model was executed for 1) connecting to the existing 8-inch stubs and a second analysis 2) investigating the benefit achieved by increasing water main size to 12 inch. This would require replacing new 8-inch in Ravinia streets with 12-inch diameter pipe further back into the Ravinia system.

3.4 MODEL RESULTS

Table 7. Model Results for Water Main Increase and New Tower

	No Tower	No Tower	Future with Tower
Water Main	8" loop	12" loop	8" loop
Fire Flow	1,700 GPM	1,700 GPM	2,900 GPM
Pressure	44 PSI	44 PSI	69 PSI

3.5 SEWER AND WATER FINDINGS

- Sewer service is feasible through the Ravinia development.
- Water model analysis shows that the upsizing to 12-inch (and reconstructing new infrastructure) does not provide additional benefit.
- Looping will be occur between Lupine and Larkspur with the north loop road, and
- Depending on the final site plan layout, looping for the remaining two water stubs may be necessary in accordance with municipal system practices.

4.0 Drainage and Water Resources

4.1 STORMWATER MANAGEMENT

Stormwater is manageable for the site and will be subject to City stormwater guidelines, wetland regulations and Elm Creek Watershed approval.

- Site drainage is to the southeast and it can be estimated from other developments in the west metro with heavy soils, that 3% to 5% of the buildable parcel area would be utilized for stormwater management (outside wetland boundaries). This site has elevation "drop" which will allow for higher pond storage and result in the lower end of the range (3% of buildable area) for an estimate of pond footprint area.
- Drainage to southeast enters a culvert under Hackamore Road, then is channeled back under Hackamore Road from Medina near CR 101.
- FEMA LOMR (Letter of Map Revision) process is being conducted for Ravinia drainage to the west, therefore upstream floodplain elevation will be established with that process and is not foreseen to affect this building site.
- One unique site feature is a heavy duty plastic weir for a pond that drains onto the property. The weir was reviewed during Ravinia 11th EOF review and determined that access for improvements would occur during redevelopment of the residential property. Therefore, the City will coordinate the replacement with Lennar and Eagle Brook.

4.2 WETLANDS

Significant wetlands exist and the formal process will need to be followed. It can be noted that Corcoran is the LGU for the Wetland Conservation Act and obtained this authority in 2019.

4.3 FINDINGS

The stormwater shown on the concept plan will be modified during design and approval process.

- City stormwater guidelines will be utilized (see Attachment) that cover flood modeling and drainage items.
- An emergency overflow or diversion culvert conveying stormwater under church's main entrance may be required to protect Hackamore Road during extreme events.
- Replacement / modification of the plastic weir is required.
- Coordination with Hackamore project will be required, this site may provide combined benefit for treatment or wetland mitigation.
- Opportunity may exist for an enhanced water quality treatment project and City would assist with leveraging watershed or grant funds.
- FEMA LOMR process is underway for upstream Ravinia and may include Eagle Brook Church drainageway.

5.0 Financing

5.1 SUMMARY

Financing options of the infrastructure necessary for development and to mitigate impacts typically follow the approach of:

- On-site infrastructure is managed by the developer
- Updated (June) 2020 Trunk Line Area Charges for sewer and water (TLAC) will apply.
- Off-site projects are typically managed by the City (engineering, bidding and construction management) through a Letter of Credit and escrow process. Typically the LOC is posted for the entire project amount, and as bids are opened the construction amount is deposited in cash so the City can enter into a construction contract and the LOC is reduced.

The financial package will be further detailed and negotiated as the project moves forward and culminates with inclusion in the overall Developer Agreement with the overall preliminary plat approval, which is updated for each final plat phase of the development.

6.0 Conclusions and Recommendations

The following infrastructure improvements are feasible and necessary to manage the development. These improvements are consistent with similar requirements based on infrastructure analysis for other developments in Corcoran

Overall

This feasibility study was based on a concept plan shown on Figure 1. Construction plans will be reviewed and modified related to stormwater management, utility pipe sizes, adjacent property stubs, street connections, pipe inverts, etc.

Sewer and Water

- Sewer service is feasible through the Ravinia development.
- Water model analysis for the change in use show that the upsizing to 12-inch (and reconstructing new infrastructure) does not provide additional benefit, therefore the existing 8-inch pipes in Ravinia will be utilized.
- Looping will be required between Lupine and Larkspur and looping for the remaining two stubs will be at City discretion for municipal best practices and determined during approval process.

Transportation

The project impacts require improvements for traffic management as shown in this report and summarized below. Corcoran and Medina are beginning a joint project on Hackamore road improvements and Eagle Brook Church impacts will be included in the project.

CSAH 101/Hackamore Road

- Construct left turn and right turn lanes on both the eastbound and westbound approaches.
- Install updated traffic signal control.

Hackamore Road/east development access

- Construct a westbound right turn lane and an eastbound left turn lane.

CSAH 101/development access

- We recommend construction of this access on CSAH 101 in order to improve traffic operations at the Hackamore Road access locations.

Trail

- A trail is proposed from Ravinia to CSAH 101, which is part of the overall Hackamore project.

Traffic Management

- We recommend that Church staff develop a detailed Traffic and Parking Management Plan tailored for the proposed site to ensure efficient traffic and parking operations. The plan should include details on temporary traffic control at the access intersections, pedestrian accommodations, and parking accommodations.

Turnarounds

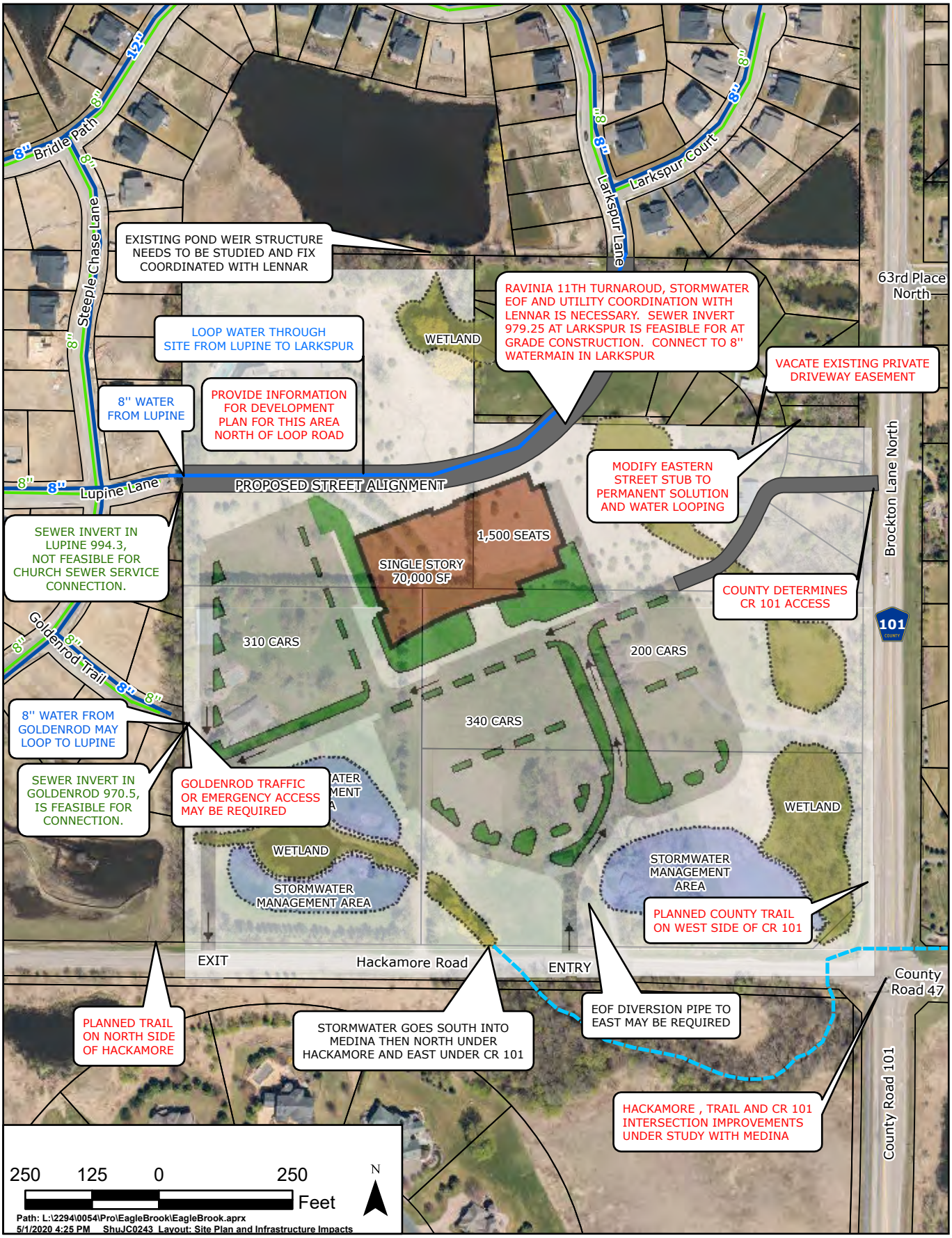
- Ravinia has constructed temporary turnarounds and Larkspur and Lupine will be connected on the north loop road. For the remaining Goldenrod and 63rd Avenue connections, coordination is required for modification to permanent solutions meeting City standards with a design goal to minimize the necessary improvements. Easements may be required.

Stormwater and Water Resources

- On site stormwater management is feasible.
- The Elm Creek Watershed Management Commission's development rules and standards will apply and City stormwater guidelines.
- City stormwater guidelines will also be utilized (see Attachment).
- Plastic weir on the north edge is required to be replaced as directed by City.
- An emergency overflow or diversion culvert conveying stormwater under church's main entrance may be required to protect Hackamore Road during extreme events.
- Coordination with Hackamore road improvement project will be required, this site may provide combined benefit for road treatment, wetlands or enhanced water quality project. Credits in the overall project would be provided.
- FEMA LOMR process is underway for upstream Ravinia and may include Eagle Brook Church drainageway.

Figures

1 Site Plan and Infrastructure Impacts



CITY OF CORCORAN	WENCK Responsive partner. Exceptional outcomes.	MAY 2020
Site Plan and Infrastructure Impacts		Figure 1

Appendix A

Traffic Volumes

Weekday A.M. Peak Hour Traffic Volumes without CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	13	143	28	139	44	21	12	134	162	100	467	27
2023 No-Build	13	147	29	143	45	22	12	138	167	103	481	28
2023 Build	13	147	29	143	47	22	17	138	167	103	481	33
2030 No-Build	20	222	43	154	63	23	16	148	179	110	516	39
2030 Build	20	222	43	154	65	23	21	148	179	110	516	44
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	17	48	34	58	10	14	1	96	44	48	485	8
2023 No-Build	18	49	35	60	10	14	1	99	45	49	500	8
2023 Build	18	50	35	60	10	14	1	99	49	52	500	8
2030 No-Build	25	71	73	64	43	73	58	208	49	88	595	18
2030 Build	25	72	73	64	43	73	58	208	53	91	595	18
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	8	190	-	-	86	12	-	-	-	-	-	-
2030 Build	8	285	-	-	118	12	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	198	-	-	86	-	-	-	-	0	-	0
2030 Build	-	293	-	-	118	-	-	-	-	0	-	0

Weekday P.M. Peak Hour Traffic Volumes without CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	27	106	14	119	93	67	42	490	150	34	211	10
2023 No-Build	28	109	14	123	96	69	43	505	155	35	217	10
2023 Build	33	111	19	123	96	69	43	505	155	35	217	10
2030 No-Build	40	155	20	131	161	74	72	541	166	38	233	17
2030 Build	45	157	25	131	161	74	72	541	166	38	233	17
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	22	25	19	37	24	51	25	566	94	21	132	14
2023 No-Build	23	26	20	38	25	53	26	583	97	22	136	14
2023 Build	23	26	20	42	26	56	26	583	97	22	136	14
2030 No-Build	30	46	56	41	59	114	85	727	104	58	205	24
2030 Build	30	46	56	45	60	117	85	727	104	58	205	24
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	0	163	-	-	149	0	-	-	-	-	-	-
2030 Build	0	227	-	-	250	0	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	151	-	-	149	-	-	-	-	12	-	8
2030 Build	-	215	-	-	250	-	-	-	-	12	-	8

Wednesday 6-7 P.M. Peak Hour Traffic Volumes without CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	26	104	14	117	91	66	41	480	147	33	207	10
2023 No-Build	27	107	14	121	94	68	42	495	151	34	213	10
2023 Build	77	129	70	121	120	68	107	495	151	34	213	69
2030 No-Build	34	134	18	129	130	73	58	530	162	36	229	14
2030 Build	84	156	74	129	156	73	123	530	162	36	229	73
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	22	25	19	36	24	50	25	555	92	21	129	14
2023 No-Build	23	26	20	37	25	52	26	572	95	22	133	14
2023 Build	23	35	20	75	33	78	26	572	140	53	133	14
2030 No-Build	27	37	39	40	43	84	57	664	102	41	172	20
2030 Build	27	46	39	78	51	110	57	664	147	72	172	20
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	85	276	-	-	146	150	-	-	-	-	-	-
2030 Build	85	314	-	-	202	150	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	233	-	-	146	-	-	-	-	128	-	72
2030 Build	-	271	-	-	202	-	-	-	-	128	-	72

Wednesday 9-10 P.M. Peak Hour Traffic Volumes without CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	7	41	7	43	23	15	9	103	51	22	112	6
2023 No-Build	7	42	7	44	24	15	9	106	53	23	115	6
2023 Build	66	68	72	44	46	15	65	106	53	23	115	56
2030 No-Build	9	49	9	47	31	17	13	114	56	24	124	8
2030 Build	68	75	74	47	53	17	69	114	56	24	124	58
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	7	12	9	16	6	11	4	109	23	12	102	4
2023 No-Build	7	12	9	16	9	11	4	112	24	12	105	4
2023 Build	7	20	9	61	15	42	4	112	62	38	105	4
2030 No-Build	9	15	14	18	10	18	10	130	25	17	119	5
2030 Build	9	23	14	63	19	49	10	130	63	43	119	5
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	72	207	-	-	39	128	-	-	-	-	-	-
2030 Build	72	216	-	-	51	128	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	129	-	-	39	-	-	-	-	150	-	85
2030 Build	-	138	-	-	51	-	-	-	-	150	-	85

Saturday 315-415 P.M. Peak Hour Traffic Volumes without CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	14	86	14	89	48	30	19	215	108	46	234	13
2023 No-Build	14	89	14	92	49	31	20	222	111	47	241	13
2023 Build	14	89	14	92	102	31	154	222	111	47	241	133
2030 No-Build	16	99	16	98	59	33	24	237	119	51	258	15
2030 Build	16	99	16	98	112	33	158	237	119	51	258	135
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	14	26	19	33	12	23	9	228	48	24	213	8
2023 No-Build	14	27	20	34	12	24	9	235	49	25	219	8
2023 Build	14	46	20	34	12	24	9	235	49	25	219	8
2030 No-Build	16	31	25	36	16	31	16	262	53	31	241	10
2030 Build	16	50	25	36	16	31	16	262	144	94	241	10
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	173	117	-	-	82	307	-	-	-	-	-	-
2030 Build	173	131	-	-	97	307	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	290	-	-	82	-	-	-	-	0	-	0
2030 Build	-	304	-	-	97	-	-	-	-	0	-	0

Saturday 5-6 P.M. Peak Hour Traffic Volumes without CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	14	86	14	89	48	30	19	215	108	46	234	13
2023 No-Build	14	89	14	92	49	31	20	222	111	47	241	13
2023 Build	134	142	148	92	96	31	140	222	111	47	241	120
2030 No-Build	16	99	16	98	59	33	24	237	119	51	258	15
2030 Build	136	152	150	98	106	33	144	237	119	51	258	122
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	14	26	19	33	12	23	9	228	48	24	213	8
2023 No-Build	14	27	20	34	12	24	9	235	49	25	219	8
2023 Build	14	44	20	125	31	87	9	235	131	81	219	8
2030 No-Build	16	31	25	36	16	31	16	262	53	31	241	10
2030 Build	16	48	25	127	35	95	16	262	135	87	241	10
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	155	424	-	-	82	274	-	-	-	-	-	-
2030 Build	155	438	-	-	97	274	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	272	-	-	82	-	-	-	-	307	-	173
2030 Build	-	286	-	-	97	-	-	-	-	307	-	173

Saturday 7-8 P.M. Peak Hour Traffic Volumes without CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	11	66	11	68	37	23	14	165	83	36	180	10
2023 No-Build	11	68	11	70	38	24	14	170	86	37	185	10
2023 Build	118	115	131	70	38	24	14	170	86	37	185	10
2030 No-Build	13	77	13	75	47	25	18	182	92	40	199	12
2030 Build	120	124	133	75	47	25	18	182	92	40	199	12
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	11	20	14	25	9	17	7	175	37	19	164	6
2023 No-Build	11	21	14	26	9	18	7	180	38	20	169	6
2023 Build	11	21	14	108	26	74	7	180	38	20	169	6
2030 No-Build	13	24	19	28	13	25	14	203	41	25	187	8
2030 Build	13	24	19	110	30	81	14	203	41	25	187	8
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	0	365	-	-	63	0	-	-	-	-	-	-
2030 Build	0	376	-	-	76	0	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	91	-	-	63	-	-	-	-	274	-	155
2030 Build	-	102	-	-	76	-	-	-	-	274	-	155

Sunday 815-915 A.M. Peak Hour Traffic Volumes without CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	5	29	5	30	16	10	6	72	36	15	78	4
2023 No-Build	5	30	5	31	16	10	6	74	37	15	80	4
2023 Build	5	30	5	31	92	10	198	74	37	15	80	176
2030 No-Build	7	36	7	33	24	11	10	80	40	17	86	5
2030 Build	7	36	7	33	100	11	202	80	40	17	86	177
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	5	9	6	11	4	8	3	76	16	8	71	3
2023 No-Build	5	9	6	11	4	8	3	78	16	8	73	3
2023 Build	5	36	6	11	4	8	3	78	146	97	73	3
2030 No-Build	7	12	11	12	7	15	9	94	18	13	84	4
2030 Build	7	39	11	12	7	15	9	94	148	102	84	4
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	246	40	-	-	27	440	-	-	-	-	-	-
2030 Build	246	48	-	-	38	440	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	286	-	-	27	-	-	-	-	0	-	0
2030 Build	-	294	-	-	38	-	-	-	-	0	-	0

Sunday 1000-1100 A.M. Peak Hour Traffic Volumes without CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	9	58	10	59	32	20	12	144	72	31	156	9
2023 No-Build	9	60	10	61	33	21	12	148	74	32	161	9
2023 Build	181	136	202	61	122	21	238	148	74	32	161	210
2030 No-Build	11	68	12	65	41	22	16	159	80	34	172	11
2030 Build	183	144	204	65	130	22	242	159	80	34	172	212
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	9	17	12	22	8	15	6	152	32	16	142	5
2023 No-Build	9	18	12	23	8	15	6	157	33	16	146	5
2023 Build	9	50	12	153	35	104	6	157	186	121	146	5
2030 No-Build	11	21	17	24	12	23	13	178	35	22	163	7
2030 Build	11	53	17	154	39	112	13	178	188	127	163	7
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	290	519	-	-	55	516	-	-	-	-	-	-
2030 Build	290	530	-	-	68	516	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	369	-	-	55	-	-	-	-	440	-	246
2030 Build	-	380	-	-	68	-	-	-	-	440	-	246

Sunday 1200-100 P.M. Peak Hour Traffic Volumes without CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	13	81	14	84	45	29	19	203	101	44	220	12
2023 No-Build	13	83	14	87	46	30	19	209	104	45	227	12
2023 Build	214	172	240	87	46	30	19	209	104	45	227	12
2030 No-Build	15	93	16	93	56	32	23	224	112	49	243	14
2030 Build	216	182	242	93	56	32	23	224	112	49	243	14
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	13	24	18	31	11	21	8	215	45	23	201	7
2023 No-Build	13	25	19	32	11	22	8	222	46	24	207	7
2023 Build	13	25	19	185	43	127	8	222	46	24	207	7
2030 No-Build	15	29	24	34	15	29	15	247	50	29	228	9
2030 Build	15	29	24	187	47	134	15	247	50	29	228	9
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	0	627	-	-	77	0	-	-	-	-	-	-
2030 Build	0	640	-	-	92	0	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	111	-	-	77	-	-	-	-	516	-	290
2030 Build	-	124	-	-	92	-	-	-	-	516	-	290

Weekday A.M. Peak Hour Traffic Volumes with CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	13	143	28	139	44	21	12	134	162	100	467	27
2023 No-Build	13	147	29	143	45	22	12	138	167	103	481	28
2023 Build	13	147	29	143	47	22	17	138	167	103	481	28
2030 No-Build	20	222	43	154	63	23	16	148	179	110	516	39
2030 Build	20	222	43	154	65	23	21	148	179	110	516	39
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	17	48	34	58	10	14	1	96	44	48	485	8
2023 No-Build	18	49	35	60	10	14	1	99	45	49	500	8
2023 Build	18	50	35	60	10	14	1	99	49	52	500	8
2030 No-Build	25	71	73	64	43	73	58	208	49	88	595	18
2030 Build	25	72	73	64	43	73	58	208	53	91	595	18
CSAH 101/ access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	-	-	0	-	-	-	-	173	-	-	612	5
2030 Build	-	-	0	-	-	-	-	192	-	-	665	5
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	8	190	-	-	86	7	-	-	-	-	-	-
2030 Build	8	285	-	-	118	7	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	198	-	-	86	-	-	-	-	0	-	0
2030 Build	-	293	-	-	118	-	-	-	-	0	-	0

Weekday P.M. Peak Hour Traffic Volumes with CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	27	106	14	119	93	67	42	490	150	34	211	10
2023 No-Build	28	109	14	123	96	69	43	505	155	35	217	10
2023 Build	32	110	15	123	96	69	43	505	155	37	221	10
2030 No-Build	40	155	20	131	161	74	72	541	166	38	233	17
2030 Build	44	156	21	131	161	74	72	541	166	40	237	17
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	22	25	19	37	24	51	25	566	94	21	132	14
2023 No-Build	23	26	20	38	25	53	26	583	97	22	136	14
2023 Build	23	26	20	42	26	56	26	583	97	22	136	14
2030 No-Build	30	46	56	41	59	114	85	727	104	58	205	24
2030 Build	30	46	56	45	60	117	85	727	104	58	205	24
CSAH 101/ access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	-	-	6	-	-	-	-	606	-	-	263	0
2030 Build	-	-	6	-	-	-	-	659	-	-	288	0
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	0	157	-	-	149	0	-	-	-	-	-	-
2030 Build	0	221	-	-	250	0	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	151	-	-	149	-	-	-	-	6	-	8
2030 Build	-	215	-	-	250	-	-	-	-	6	-	8

Wednesday 6-7 P.M. Peak Hour Traffic Volumes with CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	26	104	14	117	91	66	41	480	147	33	207	10
2023 No-Build	27	107	14	121	94	68	42	495	151	34	213	10
2023 Build	65	117	32	121	120	68	107	495	151	58	251	10
2030 No-Build	34	134	18	129	130	73	58	530	162	36	229	14
2030 Build	72	144	36	129	156	73	123	530	162	60	267	14
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	22	25	19	36	24	50	25	555	92	21	129	14
2023 No-Build	23	26	20	37	25	52	26	572	95	22	133	14
2023 Build	23	35	20	75	33	78	26	572	140	53	133	14
2030 No-Build	27	37	39	40	43	84	57	664	102	41	172	20
2030 Build	27	46	39	78	51	110	57	664	147	72	172	20
CSAH 101/ access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	-	-	62	-	-	-	-	627	-	-	258	59
2030 Build	-	-	62	-	-	-	-	675	-	-	279	59
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	85	214	-	-	146	91	-	-	-	-	-	-
2030 Build	85	252	-	-	202	91	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	233	-	-	146	-	-	-	-	66	-	72
2030 Build	-	271	-	-	202	-	-	-	-	66	-	72

Wednesday 9-10 P.M. Peak Hour Traffic Volumes with CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	7	41	7	43	23	15	9	103	51	22	112	6
2023 No-Build	7	42	7	44	24	15	9	106	53	23	115	6
2023 Build	52	54	27	44	46	15	65	106	53	51	160	6
2030 No-Build	9	49	9	47	31	17	13	114	56	24	124	8
2030 Build	54	61	29	47	53	17	69	114	56	52	469	8
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	7	12	9	16	6	11	4	109	23	12	102	4
2023 No-Build	7	12	9	16	9	11	4	112	24	12	105	4
2023 Build	7	20	9	61	15	42	4	112	62	38	105	4
2030 No-Build	9	15	14	18	10	18	10	130	25	17	119	5
2030 Build	9	23	14	63	19	49	10	130	63	43	119	5
CSAH 101/ access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	-	-	73	-	-	-	-	174	-	-	144	50
2030 Build	-	-	73	-	-	-	-	184	-	-	156	50
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	72	134	-	-	39	78	-	-	-	-	-	-
2030 Build	72	143	-	-	51	78	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	129	-	-	39	-	-	-	-	77	-	85
2030 Build	-	138	-	-	51	-	-	-	-	77	-	85

Saturday 315-415 P.M. Peak Hour Traffic Volumes with CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	14	86	14	89	48	30	19	215	108	46	234	13
2023 No-Build	14	89	14	92	49	31	20	222	111	47	241	13
2023 Build	14	89	14	92	102	31	154	222	111	47	241	13
2030 No-Build	16	99	16	98	59	33	24	237	119	51	258	15
2030 Build	16	99	16	98	112	33	158	237	119	51	258	15
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	14	26	19	33	12	23	9	228	48	24	213	8
2023 No-Build	14	27	20	34	12	24	9	235	49	25	219	8
2023 Build	14	46	20	34	12	24	9	235	49	25	219	8
2030 No-Build	16	31	25	36	16	31	16	262	53	31	241	10
2030 Build	16	50	25	36	16	31	16	262	144	94	241	10
CSAH 101/ access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	-	-	0	-	-	-	-	267	-	-	302	120
2030 Build	-	-	0	-	-	-	-	287	-	-	325	120
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	173	117	-	-	82	187	-	-	-	-	-	-
2030 Build	173	131	-	-	97	187	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	290	-	-	82	-	-	-	-	0	-	0
2030 Build	-	304	-	-	97	-	-	-	-	0	-	0

Saturday 5-6 P.M. Peak Hour Traffic Volumes with CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	14	86	14	89	48	30	19	215	108	46	234	13
2023 No-Build	14	89	14	92	49	31	20	222	111	47	241	13
2023 Build	105	113	57	92	96	31	140	222	111	105	332	13
2030 No-Build	16	99	16	98	59	33	24	237	119	51	258	15
2030 Build	107	123	59	98	106	33	144	237	119	109	349	15
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	14	26	19	33	12	23	9	228	48	24	213	8
2023 No-Build	14	27	20	34	12	24	9	235	49	25	219	8
2023 Build	14	44	20	125	31	87	9	235	131	81	219	8
2030 No-Build	16	31	25	36	16	31	16	262	53	31	241	10
2030 Build	16	48	25	127	35	95	16	262	135	87	241	10
CSAH 101/ access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	-	-	149	-	-	-	-	358	-	-	302	107
2030 Build	-	-	149	-	-	-	-	378	-	-	325	107
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	155	275	-	-	82	167	-	-	-	-	-	-
2030 Build	155	289	-	-	97	167	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	272	-	-	82	-	-	-	-	158	-	173
2030 Build	-	286	-	-	97	-	-	-	-	158	-	173

Saturday 7-8 P.M. Peak Hour Traffic Volumes with CSAH 101 Access

CSAH 101/ Hackamore	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 Existing	11	66	11	68	37	23	14	165	83	36	180	10
2023 No-Build	11	68	11	70	38	24	14	170	86	37	185	10
2023 Build	92	89	50	70	38	24	14	170	86	89	266	10
2030 No-Build	13	77	13	75	47	25	18	182	92	40	199	12
2030 Build	94	98	52	75	47	25	18	182	92	92	280	12
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	11	20	14	25	9	17	7	175	37	19	164	6
2023 No-Build	11	21	14	26	9	18	7	180	38	20	169	6
2023 Build	11	21	14	108	26	74	7	180	38	20	169	6
2030 No-Build	13	24	19	28	13	25	14	203	41	25	187	8
2030 Build	13	24	19	110	30	81	14	203	41	25	187	8
CSAH 101/ access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	-	-	133	-	-	-	-	286	-	-	233	0
2030 Build	-	-	133	-	-	-	-	302	-	-	251	0
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	0	232	-	-	63	0	-	-	-	-	-	-
2030 Build	0	243	-	-	75	0	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	91	-	-	63	-	-	-	-	141	-	155
2030 Build	-	102	-	-	76	-	-	-	-	141	-	155

Sunday 815-915 A.M. Peak Hour Traffic Volumes with CSAH 101 Access

CSAH 101/ Hackamore	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 Existing	5	29	5	30	16	10	6	72	36	15	78	4
2023 No-Build	5	30	5	31	16	10	6	74	37	15	80	4
2023 Build	5	30	5	31	92	10	198	74	37	15	80	4
2030 No-Build	7	36	7	33	24	11	10	80	40	17	86	5
2030 Build	7	36	7	33	100	11	202	80	40	17	86	5
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	5	9	6	11	4	8	3	76	16	8	71	3
2023 No-Build	5	9	6	11	4	8	3	78	16	8	73	3
2023 Build	5	36	6	11	4	8	3	78	146	97	73	3
2030 No-Build	7	12	11	12	7	15	9	94	18	13	84	4
2030 Build	7	39	11	12	7	15	9	94	148	102	84	4
CSAH 101/ access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	-	-	0	-	-	-	-	90	-	-	100	172
2030 Build	-	-	0	-	-	-	-	97	-	-	108	172
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	246	40	-	-	27	268	-	-	-	-	-	-
2030 Build	246	48	-	-	38	268	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	286	-	-	27	-	-	-	-	0	-	0
2030 Build	-	294	-	-	38	-	-	-	-	0	-	0

Sunday 1000-1100 A.M. Peak Hour Traffic Volumes with CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	9	58	10	59	32	20	12	144	72	31	156	9
2023 No-Build	9	60	10	61	33	21	12	148	74	32	161	9
2023 Build	139	95	72	61	122	21	238	148	74	115	291	9
2030 No-Build	11	68	12	65	41	22	16	159	80	34	172	11
2030 Build	141	103	74	65	130	22	242	159	80	117	302	11
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	9	17	12	22	8	15	6	152	32	16	142	5
2023 No-Build	9	18	12	23	8	15	6	157	33	16	146	5
2023 Build	9	50	12	153	35	104	6	157	186	121	146	5
2030 No-Build	11	21	17	24	12	23	13	178	35	22	163	7
2030 Build	11	53	17	154	39	112	13	178	188	127	163	7
CSAH 101/ access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	-	-	213	-	-	-	-	308	-	-	202	201
2030 Build	-	-	213	-	-	-	-	322	-	-	218	201
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	290	306	-	-	55	315	-	-	-	-	-	-
2030 Build	290	317	-	-	68	315	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	369	-	-	55	-	-	-	-	227	-	246
2030 Build	-	380	-	-	68	-	-	-	-	227	-	246

Sunday 1200-100 P.M. Peak Hour Traffic Volumes with CSAH 101 Access

CSAH 101/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	13	81	14	84	45	29	19	203	101	44	220	12
2023 No-Build	13	83	14	87	46	30	19	209	104	45	227	12
2023 Build	165	124	87	87	46	30	19	209	104	142	380	12
2030 No-Build	15	93	16	93	56	32	23	224	112	49	243	14
2030 Build	167	134	89	93	56	32	23	224	112	146	396	14
CR 116/ Hackamore	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2020 Existing	13	24	18	31	11	21	8	215	45	23	201	7
2023 No-Build	13	25	19	32	11	22	8	222	46	24	207	7
2023 Build	13	25	19	185	43	127	8	222	46	24	207	7
2030 No-Build	15	29	24	34	15	29	15	247	50	29	228	9
2030 Build	15	29	24	187	47	134	15	247	50	29	228	9
CSAH 101/ access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	-	-	250	-	-	-	-	404	-	-	284	-
2030 Build	-	-	250	-	-	-	-	424	-	-	306	-
Hackamore/ East access	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
2023 Build	0	377	-	-	77	0	-	-	-	-	-	-
2030 Build	0	390	-	-	92	0	-	-	-	-	-	-
Hackamore/ West access												
2023 Build	-	111	-	-	77	-	-	-	-	266	-	290
2030 Build	-	124	-	-	92	-	-	-	-	266	-	290

Appendix B

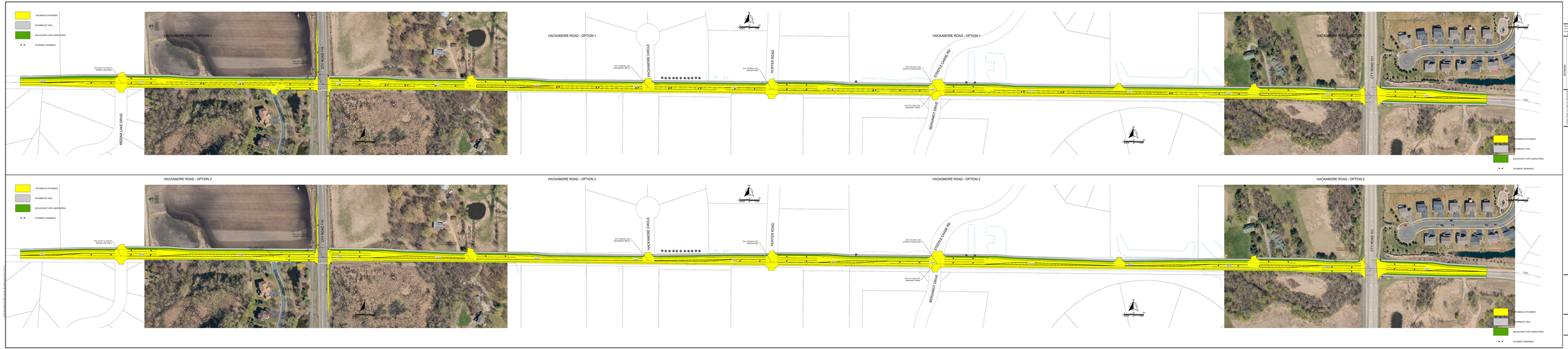
Preliminary Hackamore Design for Two Options

ROADWAY COSTS PER SQUARE YARD

	Depth (IN)	Conversion	Conversion Units	Unit	Qty / SY	Unit Price	Total Price / SY
Common Excavation	36.5	-	-	CU YD	1.01	$ 12.00	$ 12.17
Bituminous Pavement - Road	6.5	120	LB/SY-IN	TON	0.39	$ 70.00	$ 27.30
Aggregate Base - Road	12	115	LB/SY-IN	TON	0.69	$ 18.00	$ 12.42
Select Granular - Road	18	115	LB/SY-IN	TON	1.04	$ 18.00	$ 18.63
Geotextile - Road	-	-	-	SQ YD	1.00	$ 3.00	$ 3.00
Striping	-	-	-	LIN FT	1.00	$ 1.00	$ 1.00
						SUBTOTAL COST / SY	$ 75.00
						Mobilization, Traffic, Removals	$ 7.50
						Other	$ 7.50
						TOTAL COST / SY	$ 90.00

TRAIL COSTS PER SQUARE YARD

	Depth (IN)	Conversion	Conversion Units	Unit	Qty / SY	Unit Price	Total Price / SY
Common Excavation	9	-	-	CU YD	0.25	$ 12.00	$ 3.00
Bituminous Pavement - Trail	3	120	LB/SY-IN	TON	0.18	$ 90.00	$ 16.20
Aggregate Base - Trail	6	115	LB/SY-IN	TON	0.35	$ 20.00	$ 6.90
						SUBTOTAL COST / SY	**$ 27.00**
						Mobilization, Traffic, Removals	$ 2.70
						Other	$ 2.70
						TOTAL COST / SY	**$ 32.40**
						ROUNDED VALUE	**$ 33.00**



wsb

WSB PROJECT NO: 017091-000

DATE	SCALE
01/13/2023	NONE
DESIGNED	DRAWN
CHECKED	APPROVED

NO.	REVISION	DATE

HACKAMORE ROAD IMPROVEMENT PROJECT

PROJECT NO. 017-091-000
CITY OF CORCORAN

OPTION 1
AND
OPTION 2

Appendix C

Stormwater Modeling Guidelines

WENCK

Stormwater Guidelines for Development
March 2019

Issue

Cities changing from rural to urban development are challenged by the additional stormwater generated due to construction of impervious surfaces, along with the offsite infrastructure, or lack thereof, to manage effectively. To standardize the modeling and review process, the guidelines below were created for efficiency.

Note: A watershed approval is required per Elm Creek WMO rules, which also reviews flow rates, water quality and volume management.

Modeling

Watershed Information

- Provide an aerial photo of the development that includes the overall watershed and subwatershed boundaries
- Provide a summary of the acreage to each discharge point leaving the site. Any increase (or decrease) shall be identified.
- Show any floodplain adjacent to project or within the project
- Show downstream water bodies and flow paths
    - Downstream flow paths and water bodies typically need to have elevations, inverts, and condition identified.

Subwatersheds

A HydroCAD model (typically used) has inputs that can vary by user. To minimize resubmittals, review time and effort, the following data shall be utilized.

- Electronic model shall be submitted
- Hydrologic Soil Group (HSG) shall be lowered one category due to the mass grading and compaction of the soils. For example, an existing B soil, shall be modeled as a proposed C soil (unless it remains undisturbed)
- Wetlands, filtration basins, and ponds shall be modeled at CN of 98
- Identify peak rates for storm events and proposed shall be equal or less than existing rates.
    - Note: There are certain conditions where at City's discretion the off-site conditions require a reduction in flow rate from existing rates.
- SWMM (i.e. EPA-, XP-, or PC-) models can be submitted for review, however these increase review time.

Model Setup for Outlet Control Structures, NWLs and Infiltration

- The model's flow control structures (OCS, culverts, etc.) shall match the construction plan information. During the plan and model review both may be modified and revised
- Individual detail plates are required for each OCS, and individual plates shall have inverts identified
- A pond or wetland NWL (and model starting elevation) shall be set at the constructed outlet control elevation.
    - No live storage shall be utilized below the controlling OCS elevation.
    - No live storage shall be used for filtration shelves on ponds below controlling OCS elevation

- If a pond or wetland has an NWL (wet surface), infiltration shall not be used in flood routing.
- If a pond has filtration BMP causing drawdown below the NWL, this drawdown elevation shall not be used as the NWL for flood routing. (Filtration has a slower release time and during wet periods is not available as live storage).

Construction Plans

Catch Basins

- Street drainage shall be sufficient to manage the 10-year event
- Typical a CB inlet capacity is 2 to 2.5 CFS, and CBs shall be spaced accordingly
- Three inches (0.25 feet) of head on a CB will inundate a street centerline (2% slope).
- Spacing is 200 to 250 feet using longitudinal street dimensions of 40 feet from road centerline to half the house footprint (assumes rear half of house drains to rear yard). Dimensions equal 10,000 SF.
- CBs may be required on both sides of ped ramps to capture flows

Natural Drainage Features

- Waterbodies receiving urban drainage (wetlands, ditches, gullies) may need to have OCS installed, erosion protection, or reduced flow rates to allow the feature to function over the long term due to more consistent flows from increased impervious via development
- Offsite work may be necessary and City will assist with coordination, easements, etc.

HWLs and EOFs

- The freeboard requirements are:
    - Low Opening is a minimum of two feet above the HWL
    - Low Opening is a minimum of two feet above the EOF
- EOFs shall be accurately shown and as builts are required. The highest point shall be the EOF (for example top of curb) since this is the controlling elevation
    - In certain instances, channel calculations of the swale may be required to show the EOF has capacity to manage estimated flow
- Overland EOFs are preferred, however if a second pipe serves as an EOF then modeling will include a 100-year event using the second pipe (EOF) as the only outlet (primary outlet plugged).

Rear Yards

- Rear yards or swales less than 2% shall have draintile. Typically, every two to three lots will require rear yard CBs.

Sump Connections

- Houses adjoining a wetland or pond do not need individual sump connection
- Others will have access to rear yard stormsewer.

Offsite Impacts

Adjacent Parcels

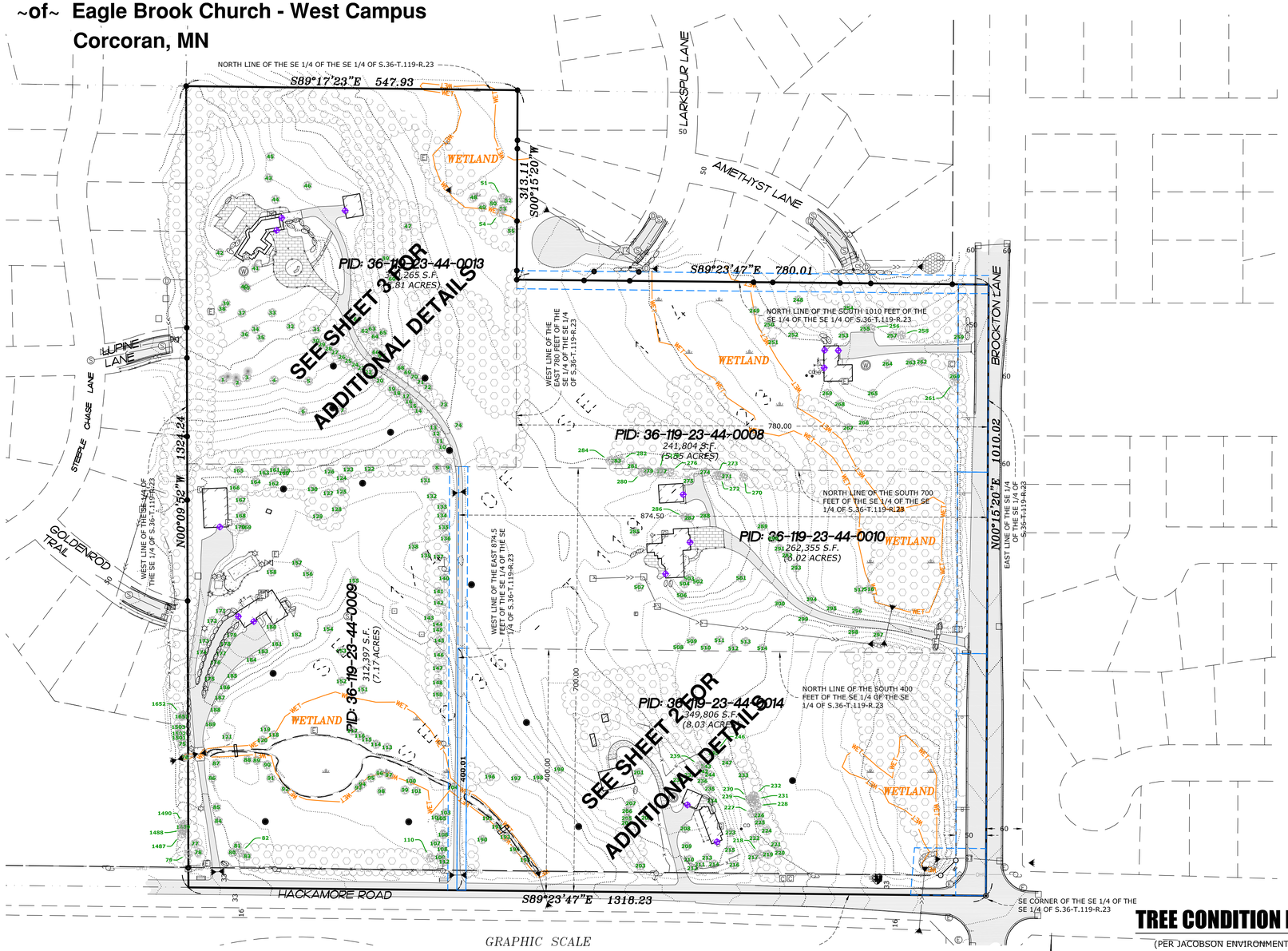
- City will review adjacent parcels (downstream and upstream) for impacts from volume, point discharge, etc. and may require off site improvements. City will assist in coordination of any off site work.
- Off site water quality improvement projects may be determined by the City for assistance with compliance with City's TMDL approach of implementing improvements upon development.
- FEMA modifications may be necessary due to development and implemented by City.

Responsive partner.
Exceptional outcomes.

CERTIFICATE OF SURVEY

~for~ EAGLE BROOK CHURCH
~of~ Eagle Brook Church - West Campus
Corcoran, MN

OVERALL PROJECT BUNDARY



GRAPHIC SCALE

100 0 50 100 200 400

1 INCH = 100FEET

DRAWN BY: CMB	JOB NO: 200191PP		DATE: 04/09/20
CHECK BY: JER	FIELD CREW: CB / JH		
1	04/24/20	ADDITIONAL TOPO	CMB
2	04/30/20	RECORD PLAN INFORMATION	CMB
3			
NO.	DATE	DESCRIPTION	BY

NOTES

- Field survey was completed by E.G. Rud and Sons, Inc. in March and April of 2020.
- Bearings shown are on Hennepin County datum.
- Curb shots are taken at the top and back of curb.
- Utilities are shown per record plans as provided by the city of Corcoran and per Gopher State One Tickets #200660636, #200660637, #200660638, #200660639, and #200660640.
- Tree inventory completed by Jacobson Environmental.
- Wetland delineation completed by Kjolhaug Environmental.

I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

JASON E. RUD

Date: 5/18/2020 License No. 41578

NORTH

TREE CONDITION KEY

(PER JACOBSON ENVIRONMENTAL)

1	Dead
2	Very Poor
3	Poor
4	Fair
5	Average
6	Good
7	Very Good
8	Excellent
9	Outstanding

TREE INVENTORY

(TAGGING/DATA FURNISHED BY JACOBSON ENVIRONMENTAL)

Tag	DBH	Condition	Species
1	8	6	White spruce
2	11	6	Blue spruce
3	9	6	White spruce
4	10	5	Freeman Maple
5	12	5	Silver maple
6	13	4	Silver maple
7	10	5	Silver maple
8	10	5	Freeman Maple
9	8	4	Apple
10	8	5	Red pine
11	11	5	Red pine
12	12	5	Red pine
13	8	1	Red pine
14	9	5	Red pine
15	8	5	Red pine
16	8	5	Red pine
17	12	5	Red pine
18	8	5	Red pine
19	8	5	Red pine
20	12	5	Red pine
21	9	5	Red pine
22	8	5	Red pine
23	9	5	Red pine
24	11	5	Red pine
25	10	5	Red pine
26	12	5	Red pine
27	10	5	Red pine
28	10	5	Red pine
29	10	5	Red pine
30	10	5	Red pine
31	8	5	Red pine
33	9	4	Freeman Maple
32	10	6	Freeman Maple
34	8	6	Blue spruce
35	12	6	White spruce
36	8	6	Blue spruce
37	10	1	Sugar maple
38	10	6	White spruce
39	10	5	Blue spruce
40	12	5	Green ash
41	8	5	Freeman Maple
42	11	5	Green ash
43	14	4	Silver maple
44	10	6	White spruce
45	10	4	Silver maple
46	11	5	White spruce
47	18	5	Cottonwood
48	31	5	Black willow
49	30	5	Black willow
50	18	5	Black willow
51	12	2	Black willow
52	12	2	Black willow
53	8	4	Box elder
54	11	4	Black willow
55	31	4	Black willow
59	20	5	Cottonwood
60	12	4	Cottonwood
61	8	5	Red pine
62	8	3	Red pine
63	8	5	Red pine
64	8	5	Red pine
65	8	5	White spruce
66	10	5	Red pine
67	10	5	Red pine
68	10	5	Red pine
69	9	5	Red pine
70	9	5	Red pine
71	8	5	Red pine
72	8	5	Red pine
73	9	5	Red pine
74	8	5	Red pine
1652	9	4	Bur oak
1651	8	5	Bur oak
1503	21	5	Bur oak
1502	10	5	Silver maple
1501	9	5	Silver maple
75	9	5	Bur oak
76	8	4	Black willow
1490	12	5	Silver maple
1489	13	5	Silver maple
1488	8	4	Silver maple
1487	8	4	Box elder
77	8	5	Red pine
78	12	5	Red pine
79	20	5	Silver maple
80	9	1	White spruce
81	8	5	Red pine
82	10	4	Red pine
83	9	5	Red pine
84	8	5	Apple
85	8	5	Apple
86	8	5	Apple
87	25	4	Silver maple
88	20	5	Silver maple
89	19	5	Silver maple
90	8	3	Paper birch
91	25	5	Silver maple
92	23	5	Cottonwood
93	8	5	River birch
94	8	5	River birch
95	8	5	River birch
96	8	5	River birch
97	9	5	River birch
98	8	2	Freeman Maple
99	10	5	White pine
100	8	4	Box elder
101	8	4	Scotch pine
102	8	5	River birch
103	8	4	River birch
104	10	4	Box elder
105	8	2	Red pine
106	10	2	Red pine
107	12	5	Scotch pine
108	11	5	Red pine
109	9	5	Red pine
110	11	6	Scotch pine
112	8	3	White spruce
113	8	5	River birch
114	8	5	River birch
115	8	5	River birch
116	8	5	River birch
117	8	5	River birch
118	8	5	River birch
119	9	2	Freeman Maple
120	8	5	River birch
121	22	5	Silver maple
122	8	5	Apple
123	12	4	Freeman Maple
124	13	4	Freeman Maple
125	12	5	River birch
126	8	5	White spruce
127	10	3	Blue spruce
128	10	2	Blue spruce
129	20	5	Silver maple
130	10	3	Scotch pine
131	9	2	Freeman Maple
132	8	2	Freeman Maple
133	8	2	White spruce
134	9	5	Blue spruce
135	11	5	Blue spruce
136	12	5	Blue spruce
137	9	5	Scotch pine
138	9	5	Freeman Maple
139	8	5	Green ash
140	12	5	Blue spruce
141	9	4	Red pine
142	11	5	Red pine
143	21	5	Silver maple
144	8	4	Blue spruce
149	9	4	Red pine
145	8	5	White spruce
146	10	4	Blue spruce
147	9	3	White spruce
148	9	5	Red pine
150	9	5	White spruce
151	8	5	Green ash
152	24	5	Silver maple
153	10	4	Freeman Maple
154	12	5	Scotch pine
155	22	5	Silver maple
156	18	4	Blue spruce
157	15	5	Silver maple
158	17	5	White spruce
159	10	5	Scotch pine
160	10	2	White spruce
161	9	4	Green ash
162	12	5	Freeman Maple
163	14	6	White pine
164	11	5	Sugar maple
165	19	5	White pine
166	10	4	White spruce
167	10	4	Blue spruce
168	11	5	White spruce
169	10	5	Scotch pine
170	8	4	White spruce
171	20	3	Silver maple
172	21	5	Silver maple
173	11	4	Silver maple
174	12	5	Silver maple
175	8	3	Red pine
176	12	5	Blue spruce
177	11	5	Blue spruce
178	11	5	Blue spruce
179	12	5	Blue spruce
180	8	5	River birch
181	8	5	Lilac
182	15	4	Sugar maple
183	8	4	Apple
184	8	5	Apple
185	9	5	Apple
186	9	5	Apple
187	8	5	Apple
188	9	5	Apple
189	8	5	Apple
190	21	3	Cottonwood
191	24	4	Weeping willow
192	25	4	Weeping willow
193	35	4	Weeping willow
194	8	4	Weeping willow
195	36	4	Weeping willow
196	8	4	Green ash
197	15	4	Green ash
198	13	2	Box elder
199	15	2	Green ash
201	10	5	Blue spruce
202	12	5	Blue spruce
203	12	4	Green ash
204	10	5	Blue spruce
205	10	5	Blue spruce
206	10	5	Blue spruce
207	12	5	Red pine
208	13	3	Green ash
209	13	4	Green ash
210	13	4	White spruce
211	8	4	White spruce
212	14	2	Norway spruce
213	14	4	Norway spruce
214	9	3	Black cherry
215	15	4	Norway spruce
216	14	4	White spruce
217	9	4	Paper birch
218	9	4	White spruce
219	10	5	Balsam Fir
220	15	4	Basswood
221	10	4	Green ash
222	10	4	Norway maple
223	14	5	Locust
224	18	5	Red pine
225	8	3	Red pine
226	12	5	Red pine
227	9	4	Red pine
228	8	4	Red pine
229	16	4	Red pine
230	10	5	Red pine
231	9	4	Red pine
232	14	4	Red pine
233	17	4	Green ash
234	16	5	Locust
235	14	5	Locust
236	12	4	White spruce
237	20	5	Blue spruce
238	22	5	White spruce
239	8	3	White spruce
242	8	4	White spruce
243	9	4	White spruce
244	10	4	White spruce
245	10	5	Paper birch
246	14	3	Paper birch
247	10	5	Locust
240	13	5	Box elder
241	10	4	Box elder
248	10	4	Sugar maple
249	9	4	Box elder
250	9	5	Balsam Fir
251	11	4	Green ash
252	13	4	Paper birch
253	12	5	Sugar maple
254	11	5	Siberian elm
255	10	4	Box elder
256	8	3	Box elder
257	8	3	Apple
258	14	4	Apple
259	18	4	Blue spruce
260	14	4	Norway maple
261	15	5	Red oak
262	12	5	Norway maple
263	15	5	Basswood
264	16	4	Basswood
265	26	6	Bur oak
266	9	1	Norway maple
267	17	4	Norway maple
268	14	5	Paper birch
269	10	5	White spruce
270	11	5	White pine
271	14	5	White pine
272	14	5	White pine
273	12	5	White pine
274	12	5	White spruce
275	11	5	Red oak
276	12	6	White pine
277	11	6	White pine
278	10	5	White pine
279	8	5	White spruce
280	14	6	White pine
281	8	5	White spruce
282	8	5	White spruce
283	8	5	White spruce
284	8	5	White spruce
285	11	5	Green ash
286	8	6	White cedar
287	8	6	White cedar
288	8	5	Apple
289	9	5	River birch
290	8	4	White spruce
291	10	5	River birch
292	10	4	Blue spruce
293	11	5	River birch
294	8	4	Freeman Maple
295	10	4	Freeman Maple
296	10	4	Freeman Maple
297	9	5	Freeman Maple
298	8	5	Freeman Maple
299	10	5	Sugar maple
300	11	5	Sugar maple
501	12	5	Sugar maple
502	12	5	Sugar maple
503	8	6	White cedar
504	8	6	White cedar
506	18	5	Green ash
507	14	5	Sugar maple
508	9	5	River birch
509	9	5	River birch
510	9	5	River birch
511	8	5	River birch
512	9	5	River birch
513	10	5	River birch
514	9	5	River birch
515	18	4	Green ash
516	12	3	Green ash
517	15	4	Box elder

E. G. RUD & SONS, INC.
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Professional Land Surveyors
6776 Lake Drive NE, Suite 110
Lino Lakes, MN 55014
Tel. (651) 361-8200 Fax (651) 361-8701
www.egrud.com

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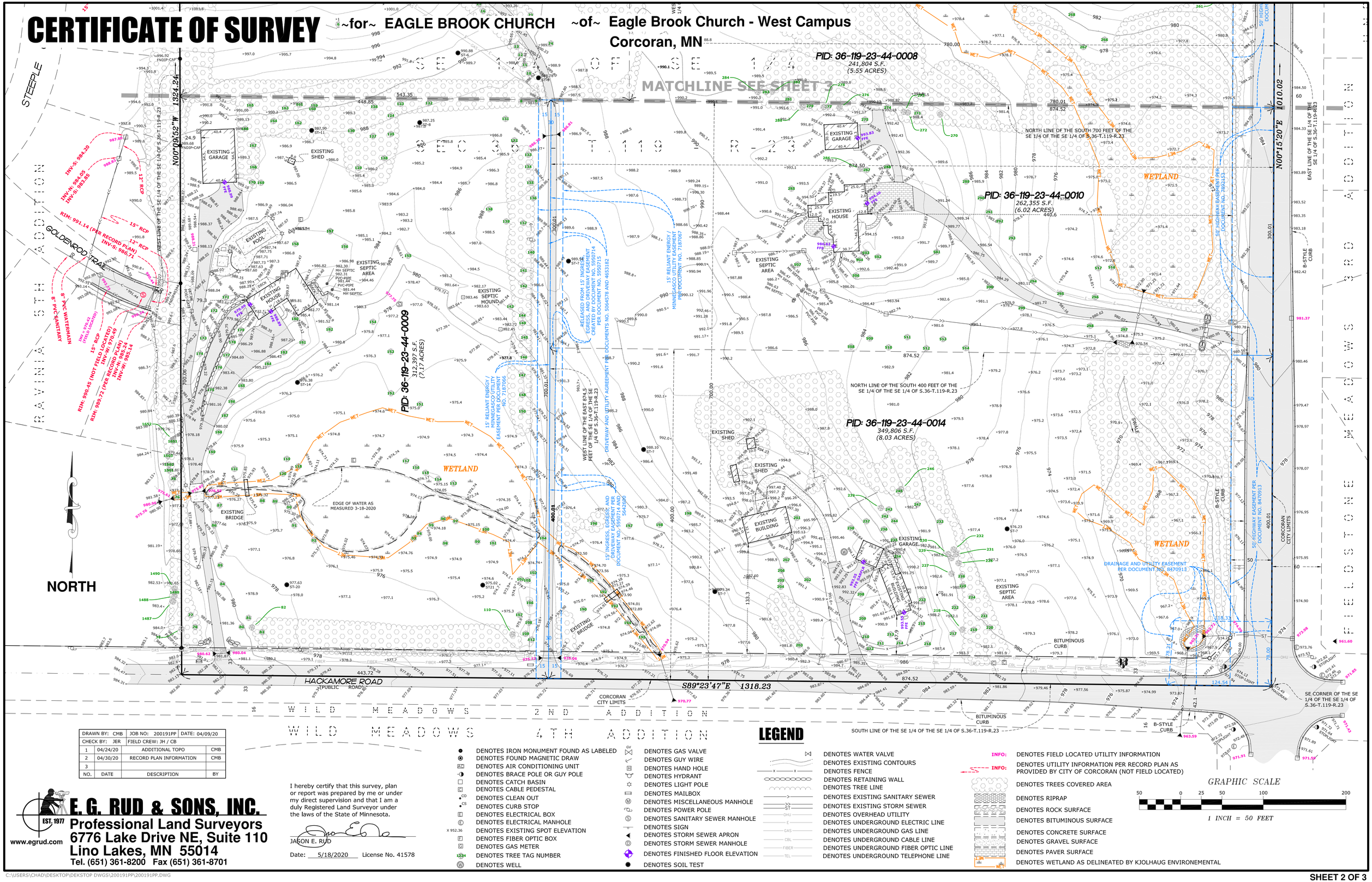
CERTIFICATE OF SURVEY

~for~ EAGLE BROOK CHURCH ~of~ Eagle Brook Church - West Campus
Corcoran, MN



DRAWN BY: CMB	JOB NO: 200191PP	DATE: 04/09/20	
CHECK BY: JER	FIELD CREW: JH / CB		
NO.	DATE	DESCRIPTION	BY
1	04/24/20	ADDITIONAL TOPO	CMB
2	04/30/20	RECORD PLAN INFORMATION	CMB
3			

LEGEND

- DENOTES IRON MONUMENT FOUND AS LABELED
- DENOTES FOUND MAGNETIC DRAW
- DENOTES AIR CONDITIONING UNIT
- DENOTES BRACE POLE OR GUY POLE
- DENOTES CATCH BASIN
- DENOTES CABLE PEDESTAL
- DENOTES CLEAN OUT
- DENOTES CURB STOP
- DENOTES ELECTRICAL BOX
- DENOTES ELECTRICAL MANHOLE
- DENOTES EXISTING SPOT ELEVATION
- DENOTES FIBER OPTIC BOX
- DENOTES GAS METER
- DENOTES TREE TAG NUMBER
- DENOTES WELL
- DENOTES GAS VALVE
- DENOTES GUY WIRE
- DENOTES HAND HOLE
- DENOTES HYDRANT
- DENOTES LIGHT POLE
- DENOTES MAILBOX
- DENOTES MISCELLANEOUS MANHOLE
- DENOTES POWER POLE
- DENOTES SANITARY SEWER MANHOLE
- DENOTES SIGN
- DENOTES STORM SEWER APRON
- DENOTES STORM SEWER MANHOLE
- DENOTES FINISHED FLOOR ELEVATION
- DENOTES SOIL TEST
- DENOTES WATER VALVE
- DENOTES EXISTING CONTOURS
- DENOTES FENCE
- DENOTES RETAINING WALL
- DENOTES TREE LINE
- DENOTES EXISTING SANITARY SEWER
- DENOTES EXISTING STORM SEWER
- DENOTES OVERHEAD UTILITY
- DENOTES UNDERGROUND ELECTRIC LINE
- DENOTES UNDERGROUND GAS LINE
- DENOTES UNDERGROUND CABLE LINE
- DENOTES UNDERGROUND FIBER OPTIC LINE
- DENOTES UNDERGROUND TELEPHONE LINE
- INFO: DENOTES FIELD LOCATED UTILITY INFORMATION
- INFO: DENOTES UTILITY INFORMATION PER RECORD PLAN AS PROVIDED BY CITY OF CORCORAN (NOT FIELD LOCATED)
- DENOTES TREES COVERED AREA
- DENOTES RIPRAP
- DENOTES ROCK SURFACE
- DENOTES BITUMINOUS SURFACE
- DENOTES CONCRETE SURFACE
- DENOTES GRAVEL SURFACE
- DENOTES PAVER SURFACE
- DENOTES WETLAND AS DELINEATED BY KJOLHAUG ENVIRONEMENTAL

I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

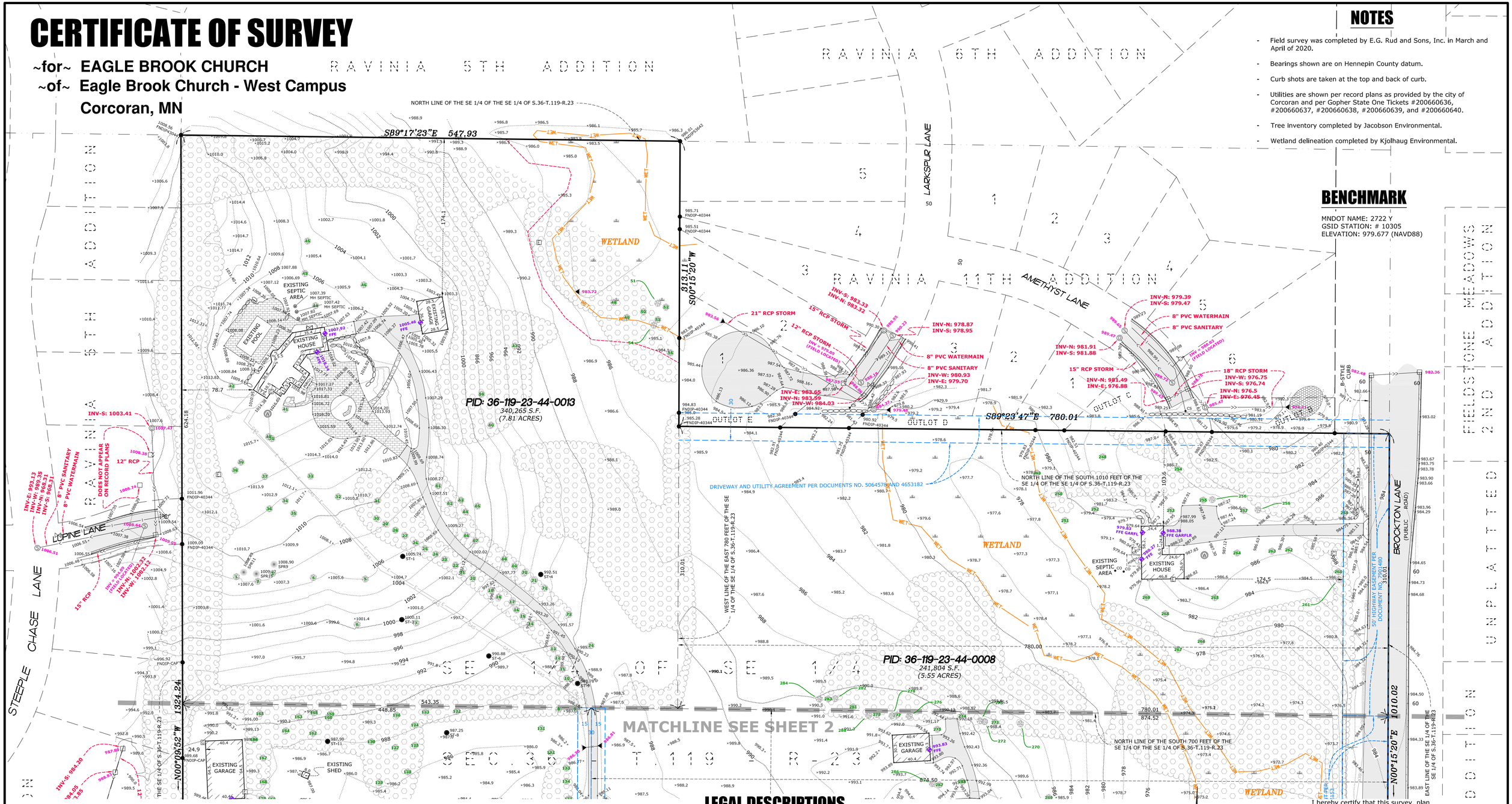
JASON E. RUD

Date: 5/18/2020 License No. 41578

E.G. RUD & SONS, INC.
EST. 1977
Professional Land Surveyors
6776 Lake Drive NE, Suite 110
Lino Lakes, MN 55014
Tel. (651) 361-8200 Fax (651) 361-8701
www.egrud.com

CERTIFICATE OF SURVEY

~for~ EAGLE BROOK CHURCH
~of~ Eagle Brook Church - West Campus
Corcoran, MN



NOTES

- Field survey was completed by E.G. Rud and Sons, Inc. in March and April of 2020.
- Bearings shown are on Hennepin County datum.
- Curb shots are taken at the top and back of curb.
- Utilities are shown per record plans as provided by the city of Corcoran and per Gopher State One Tickets #200660636, #200660637, #200660638, #200660639, and #200660640.
- Tree inventory completed by Jacobson Environmental.
- Wetland delineation completed by Kjolhaug Environmental.

BENCHMARK

MNDOT NAME: 2722 Y
GSID STATION: # 10305
ELEVATION: 979.677 (NAVD88)

LEGAL DESCRIPTIONS

(Per Title Commitments by Stewart Tittle Guaranty Company, as issuing agent for Commercial Partners Title, LLC)

19200 Hackamore Road (PID: 36-119-23-44-0014): The East 874.5 feet of the South 400 feet of the Southeast Quarter (SE 1/4) of the Southeast Quarter (SE 1/4) of Section 36, Township 119, Range 23, West of the 5th Principal Meridian according to the U.S. Government Survey thereof, Hennepin County, Minnesota.

19210 Hackamore Road (PID: 36-119-23-44-0013): That part of the Southeast Quarter of the Southeast Quarter (SE1/4 of SE1/4) of Section 36, Township 119 North, Range 23, West of the Fifth Principal Meridian, lying West of the East 780 feet thereof and which lies North of the South 700 feet thereof, according to the U.S. Government Survey thereof.

19220 Hackamore Road (PID: 36-119-23-44-0009): The South 700 feet of that part of the Southeast Quarter of the Southeast Quarter of Section 36, Township 119 North, Range 23, West of the 5th Principal Meridian, lying Westerly of the East 874.5 feet thereof, Hennepin County, Minnesota.

6235 County Road 101 (PID: 36-119-23-44-0010): The East 874.5 feet of the North 300 feet of the South 700 feet of the Southeast Quarter of the Southeast Quarter (SE1/4 of SE1/4) of Section 36, Township 119, Range 23, Hennepin County, Minnesota.

6301 County Road 101 (PID: 36-119-23-44-0008): The North 310.00 feet of the South 1010.00 feet of East 780.00 feet of Southeast Quarter of the Southeast Quarter of Section 36, Township 119, Range 23, Hennepin County, Minnesota.

DRAWN BY: CMB	JOB NO: 200191PP	DATE: 04/09/20	
CHECK BY: JER	FIELD CREW: CB / JH		
1	04/24/20	ADDITIONAL TOPO	CMB
2	04/30/20	RECORD PLAN INFORMATION	CMB
3			
NO.	DATE	DESCRIPTION	BY

E. G. RUD & SONS, INC.
EST. 1977
Professional Land Surveyors
6776 Lake Drive NE, Suite 110
Lino Lakes, MN 55014
Tel. (651) 361-8200 Fax (651) 361-8701
www.egrud.com

I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

JASON E. RUD
Date: 5/18/2020 License No. 41578

GRAPHIC SCALE
50 0 25 50 100 200
1 INCH = 50 FEET

NORTH

C:\USERS\CHAD\DESKTOP\DEKSTOP DWGS\200191PP\200191PP.DWG

EAGLE BROOK CHURCH

WEST METRO CAMPUS
19200 HACKAMORE ROAD
CORCORAN, MINNESOTA 55340

CONDITIONAL USE PERMIT ISSUE

MAY 19, 2020

PROJECT DIRECTORY

OWNER
EAGLE BROOK CHURCH
7015 20TH AVENUE
CENTERVILLE, MN 55038
T 651.429.9227

ARCHITECT
BWBR
380 ST. PETER STREET
SUITE 600
SAINT PAUL, MN 55102
T 651.222.3701

STRUCTURAL ENGINEER
ERICKSEN ROED AND ASSOCIATES
2550 UNIVERSITY AVENUE WEST STREET
SUITE 201
SAINT PAUL, MN 55114
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CIVIL ENGINEER
LOUCKS ASSOCIATES INC
7200 HEMLOCK LANE
SUITE 300
MAPLE GROVE, MN 55369
T 763.424.5505

LANDSCAPE ARCHITECT
LOUCKS ASSOCIATES INC
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SUITE 300
MAPLE GROVE, MN 55369
T 763.424.5505

CONTRACTOR
SHEEHY CONSTRUCTION COMPANY
360 WEST LARPENTEUR AVENUE
SAINT PAUL, MN 55113
T 651.488.6691
F 651.488.4992

DESIGN / BUILD MECHANICAL ENGINEER
MASTER MECHANICAL
1027 GEMINI ROAD
EAGAN, MN 55121
T 651.605.1600

DESIGN / BUILD ELECTRICAL ENGINEER
GEPHART ELECTRICAL
3550 LABORE ROAD
SAINT PAUL, MN 55110
T 651.484.4900
F 651.484.2248

LUA - FRONT END INDEX

NUMBER	SHEET NAME
100	TITLE SHEET
101.RF	FIRST LEVEL REFERENCE PLAN
PLAT01	PRE-PLAT-01
PLAT02	PRE-PLAT-02
PLAT03	PRE-PLAT-03
SURVEY01	TOPOGRAPHIC SURVEY-01
SURVEY02	TOPOGRAPHIC SURVEY-02
SURVEY03	TOPOGRAPHIC SURVEY-03

Sheet count: 8

LUA - ARCHITECTURAL INDEX

NUMBER	SHEET NAME
510	EXTERIOR ELEVATIONS

Sheet count: 1

LUA - SITEWORK INDEX

NUMBER	SHEET NAME
200.EX	EXISTING CONDITIONS
210.SD	DEMO PLAN
220.CS	SITE PLAN
230.CG	GRADING PLAN
231.SW	SWPPP
232.SW	SWPPP NOTES
240.CU	UTILITY PLAN - SANITARY & WATERMAIN
241.CU	UTILITY PLAN - STORM SEWER
242.CU	UTILITY PLAN - FOUNDATION DRAINTILE
250.CD	CIVIL DETAILS
251.CD	CIVIL DETAILS
252.CD	CIVIL DETAILS
260.LP	LANDSCAPE PLAN
270.LP	LANDSCAPE DETAILS
SITE01	SITE PHOTOMETRIC

Sheet count: 15

SHEET NUMBERING EXPLANATION

11/07/2019

BUILDING NUMBER | SHEET GROUPING | FLOOR LEVEL | ZONE NUMBER | PLAN TYPE

1 . 4 0 2 . 1 DE

1.402.1DE: BLDG 1, SECOND FLOOR, ZONE 1, DEMOLITION PLAN

BUILDING NUMBER | SHEET GROUPING | FLOOR LEVEL | ZONE NUMBER | PLAN TYPE | PLAN TYPE

1 . 7 0 1 . 1 DF

1.701.1DF: BLDG 1, FIRST FLOOR, ZONE 1, DEMO FIRE PROTECTION

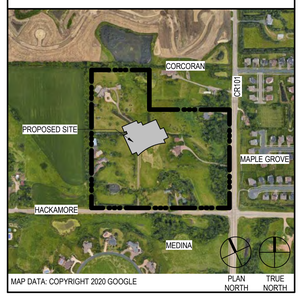
SHEET GROUPING PLAN

100		TITLE SHEET
	CO	CODE PLAN
	PH	PHASING PLAN
	RF	REFERENCE PLAN
200	AS	ARCHITECTURAL SITE PLAN
	CD	CIVIL DEMOLITION PLAN
	CG	CIVIL GRADING PLAN
	CU	CIVIL UTILITIES PLAN
	CP	CIVIL PAVING PLAN
	LP	LANDSCAPE PLAN

SHEET GROUPING PLAN

300		STRUCTURAL PLANS
	D	STRUCTURAL DEMO PLANS
400	DE	DEMOLITION PLAN
	DI	DIMENSION PLAN
	EX	EXTERIOR PLAN
	FL	FLOOR PLAN
	FN	FINISH PLAN
	FP	FLOOR PATTERN PLAN
	QU	EQUIPMENT PLAN
	RC	REFLECTED CEILING PLAN
	SY	(SYSTEMS) FURNITURE PLAN
500		EXTERIOR ARCHITECTURE
600		INTERIOR ARCHITECTURE
700	DF	DEMO FIRE PROTECTION
	DM	DEMO MED GAS
	DP	DEMO PLUMBING
	F	MECH FIRE PROTECTION
	M	MECH MED GAS
	P	MECH PLUMBING
800	DH	DEMO HVAC
	DP	DEMO PIPING
	H	MECH HVAC
	P	MECH PIPING
900	DL	DEMO ELEC LIGHTING
	DP	DEMO ELEC POWER
	DS	DEMO ELEC SYSTEMS
	L	ELEC LIGHTING
	P	ELEC POWER
	S	ELEC SYSTEMS

SITE LOCATION MAP



MAP DATA: COPYRIGHT 2020 GOOGLE — PLAN NORTH — TRUE NORTH

ABBREVIATIONS

	TERM
AC	AIR CONDITIONING
ACC	ACCESSIBLE
ACT	ACOUSTIC CEILING TILE
AD	ADDENDUM
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
AL	ALUMINUM
ALT	ALTERNATE
AMB	AMBULATORY
AP	ACCESS PANEL
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
AUX	AUXILIARY
AV	AUDIO VISUAL
AWP	ACOUSTIC WALL PANEL
BCMU	BURNISHED CONCRETE MASONRY UNIT
BLDG	BUILDING
BLKG	BLOCKING
BR	BRICK
BRG	BEARING
BUR	BUILT-UP ROOFING
CC	CUBICLE CURTAIN
CCTV	CLOSED CIRCUIT TELEVISION
CF	CUBIC FOOT
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CFM	CUBIC FEET PER MINUTE
CG	CORNER GUARD
CJT	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CM	CULTURED MARBLE
CMU	CONCRETE MASONRY UNIT
CO2	CARBON DIOXIDE
COMP	COMPUTER
CONC	CONCRETE
CONT	CONTINUOUS
CPT	CARPET
CPTB	CARPET BASE
CR	CRASH RAIL
CR	CARD READER
CT	CERAMIC TILE
CTB	CERAMIC TILE BASE
CY	CUBIC YARD
DEMO	DEMOLISH
DET	DETENTION
DF	DECORATIVE FILM
DG	DECORATIVE OR ART GLASS
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DWG	DRAWING
DWP	DECORATIVE WALL PANEL
EA	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJT	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC, ELECTRICAL
ELEV	ELEVATOR
ELF	ELASTOMERIC LIQUID FLOORING
EM	ENTRANCE MAT
EQ	EQUAL
EQPT	EQUIPMENT
EXG	EXISTING
EXT	EXTERIOR
FAB	FABRIC
FAF	FLUID-APPLIED FLOOR COATING
FAW	FLUID-APPLIED WALL COATING
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER ON BRACKET
FEC	FIRE EXTINGUISHER AND CABINET
FFE	FINISH FLOOR ELEVATION
FG	MONOLITHIC GLASS, FLAT GLAZING
FRP	FIBERGLASS REINFORCED PLASTIC
FRT	FIRE RETARDANT TREATED
FT	FOOT, FEET
GA	GAUGE
GALV	GALVANIZED
GCMU	GLAZED CONCRETE MASONRY UNIT
GF	GLAZING FILM
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GLUELAM	GLUED-LAMINATED
GMU	GLASS MASONRY UNIT
GPBD	GYPSUM BOARD
HDW	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HPNT	HIGH-PERFORMANCE PAINT
HR	HANDRAIL
HR	HOUR
ID	INSIDE DIAMETER
IG	INSULATED GLASS UNIT(S)
INS	INSULATION
INTB	INTEGRAL BASE
KBT	KEYBOARD TRAY
KD	KNOCKED-DOWN
LAV	LAVATORY
LB	POUNDS
LF	LINEAR FEET
LG	LAMINATED GLAZING
LVT	LUXURY VINYL TILE
MAX	MAXIMUM
MB	MARKER BOARD
MECH	MECHANICAL
MFR	MANUFACTURER
MG	MIRRORED GLASS
MIN	MINIMUM

ABBREVIATIONS

	TERM
MIN	MINUTE
MIR	MIRROR
MISC	MISCELLANEOUS
MLAM	METAL LAMINATE
MO	MASONRY OPENING
MP	ARCHITECTRUAL METAL PANEL
MTD	MOUNTED
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
No or #	NUMBER
NRC	NOISE REDUCTION COEFFICIENT
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
OPG	OPENING
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
PC	PRECAST CONCRETE
PD	PENCIL DRAWER
PG	PLASTIC GLAZING
PLAM	PLASTIC LAMINATE
PLF	POUNDS PER LINEAL FOOT
PNL	PANEL, PANELING
PNT	PAINT
PP	PUSH PLATE
PR	PROPOSAL REQUEST
PREP	PREPARATION
PROJ NO	PROJECT NUMBER
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PTD	PAPER TOWEL DISPENSER
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
PWC	PROTECTIVE WALL COVERING
PWD	PLYWOOD
QSM	QUARTZ SURFACE MATERIAL
QT	QUARRY TILE
QTB	QUARRY TILE BASE
QTY	QUANTITY
R	RADIUS
RB	RESILIENT BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REBAR	REINFORCING BAR
REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCED, REINFORCING
REQD	REQUIRED
REV	REVISED, REVISION
RF	RESILIENT FLOORING
RG	RADIATION SHIELDING GLASS
RINS	RIGID INSULATION
RM	ROOM
RO	ROUGH OPENING
RP	RESINOUS PANEL
SC	SHOWER CURTAIN
SCHED	SCHEDULE
SD	SOAP DISPENSER
SDF	STATIC DISSIPATIVE FLOORING
SF	SQUARE FEET
SIM	SIMILAR
SLR	SEALER
SLW	SLOTTED WALL
SNT	SEALANT
SPD	SANITARY PRODUCT DISPENSER
SPEC	SPECIFICATION
SPR	SANITARY PRODUCT RECEPTACLE
SQ	SQUARE
SSM	SOLID SURFACE MATERIAL
SSNT	SECURITY SEALANT
SST	STAINLESS STEEL
STC	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STN	STONE
STRUC	STRUCTURAL
TB	TACKBOARD
TBD	TO BE DETERMINED
TD	TISSUE DISPENSER
TEL	TELEPHONE
TEMP	TEMPERATURE
TEMP	TEMPORARY
TER	TERRAZZO
TERB	TERRAZZO BASE
TPH	TOILET PAPER HOLDER
TS	TRANSITION STRIP
TV	TELEVISION
TYP	TYPICAL
UC	UNDER CABINET / UNDER COUNTER
UNO	UNLESS NOTED OTHERWISE
UTIL	UTILITIES
UV	ULTRAVIOLET
VAC	VACUUM
VAR	VARIES
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VG	VISION CONTROL GLAZING
VIF	VERIFY IN FIELD
VOC	VOLATILE ORGANIC COMPOUND
WC	WALL COVERING
WC	WATER CLOSET
WD	WOOD
WDB	WOOD BASE
WG	WIRED GLASS
WP	WATERPROOFING
WT	WINDOW TREATMENT
WWF	WELDED WIRE FABRIC

GENERAL NOTES

07/11/2017

1. THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS AND LIMITS OF CONSTRUCTION WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY BE NECESSARY IN AREAS NOT SHOWN ON ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING ELECTRICAL, MECHANICAL, AND PLUMBING ALONG WITH OTHER SYSTEMS. THIS INCIDENTAL WORK SHALL BE PART OF THIS CONTRACT, AND ALL TRADES SHALL INSPECT THESE AREAS, ASCERTAIN WORK REQUIRED, AND DO THE WORK IN ACCORDANCE OF CONTRACT REQUIREMENTS AT NO ADDITIONAL COST.

2. CONTRACTORS SHALL VISIT THE SITE DURING BIDDING TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS. THE GENERAL CONTRACTOR SHALL LOCATE, INSPECT, AND FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO DEMOLITION AND CONSTRUCTION. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.

3. DO NOT SCALE DRAWINGS. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.

4. WHEREVER OPENINGS ARE CUT THROUGH FIRE RATED PARTITIONS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR FOR WHOM THE HOLE IS CUT TO PATCH AND REPAIR ANY OPENING TO MAINTAIN THE INTEGRITY OF THE FIRE RATING.

5. GENERAL CONTRACTOR TO CHECK MECHANICAL DRAWINGS FOR EXISTING PIPES AND DUCTS FURRED IN WALLS. VERIFY SIZE AND LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO PROCEEDING WITH REMODELING.

6. FIREPROOFING SHALL BE UNPIERCED. ANY SUBCONTRACTOR PENETRATING THE FIREPROOFING SHALL BE REQUIRED TO REPLACE FIREPROOFING TO THE ORIGINAL CONDITION AND FIRE RATING AT THE SUBCONTRACTOR'S EXPENSE.

7. EQUIPMENT UNIT DIMENSIONS ARE FOR PRODUCT DESCRIPTION ONLY, VERIFY SIZE WITH MANUFACTURER.

8. ALL DIMENSIONS PERTAINING TO MECHANICAL OR ELECTRICAL SERVICES OR EQUIPMENT SHALL BE VERIFIED WITH THE RESPECTIVE TRADE.

9. ALL CONTRACTORS THAT PENETRATE AND/OR DISTURB ANY AREAS AT EXISTING CONDITIONS SHALL PATCH AREA TO MATCH EXISTING ADJACENT AREA OR SURFACE AND PREPARE FOR SCHEDULED FINISH APPLICATION. COORDINATE WORK WITH GENERAL CONTRACTOR PRIOR TO PROCEEDING.

10. VERIFY HEIGHTS AND LOCATIONS OF ACCESS PANELS (AP) AND COORDINATE TYPES WITH TRADES WHICH REQUIRE THEM.

11. PROVIDE LINTELS AND FRAMING FOR GRILLES, LOUVERS, AND ROOF VENTS AS REQUIRED BY MECHANICAL CONTRACTOR, VERIFY SIZE AND LOCATION.

12. STRUCTURAL, MECHANICAL, AND ELECTRICAL ABBREVIATIONS AND SYMBOLS MAY DIFFER FROM ARCHITECTURAL. SEE RESPECTIVE SECTIONS AND/OR DRAWINGS FOR DEFINITIONS.

13. AT MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS, PROVIDE 3/4" FIRE RESISTANT TREATED PLYWOOD BACKING BEHIND ALL SURFACE MOUNTED FIXTURES AND EQUIPMENT UNLESS NOTED OTHERWISE.

14. HOUSEKEEPING PADS SHALL BE PROVIDED BY TRADES WHICH REQUIRE THEM. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR SIZES AND LOCATIONS.

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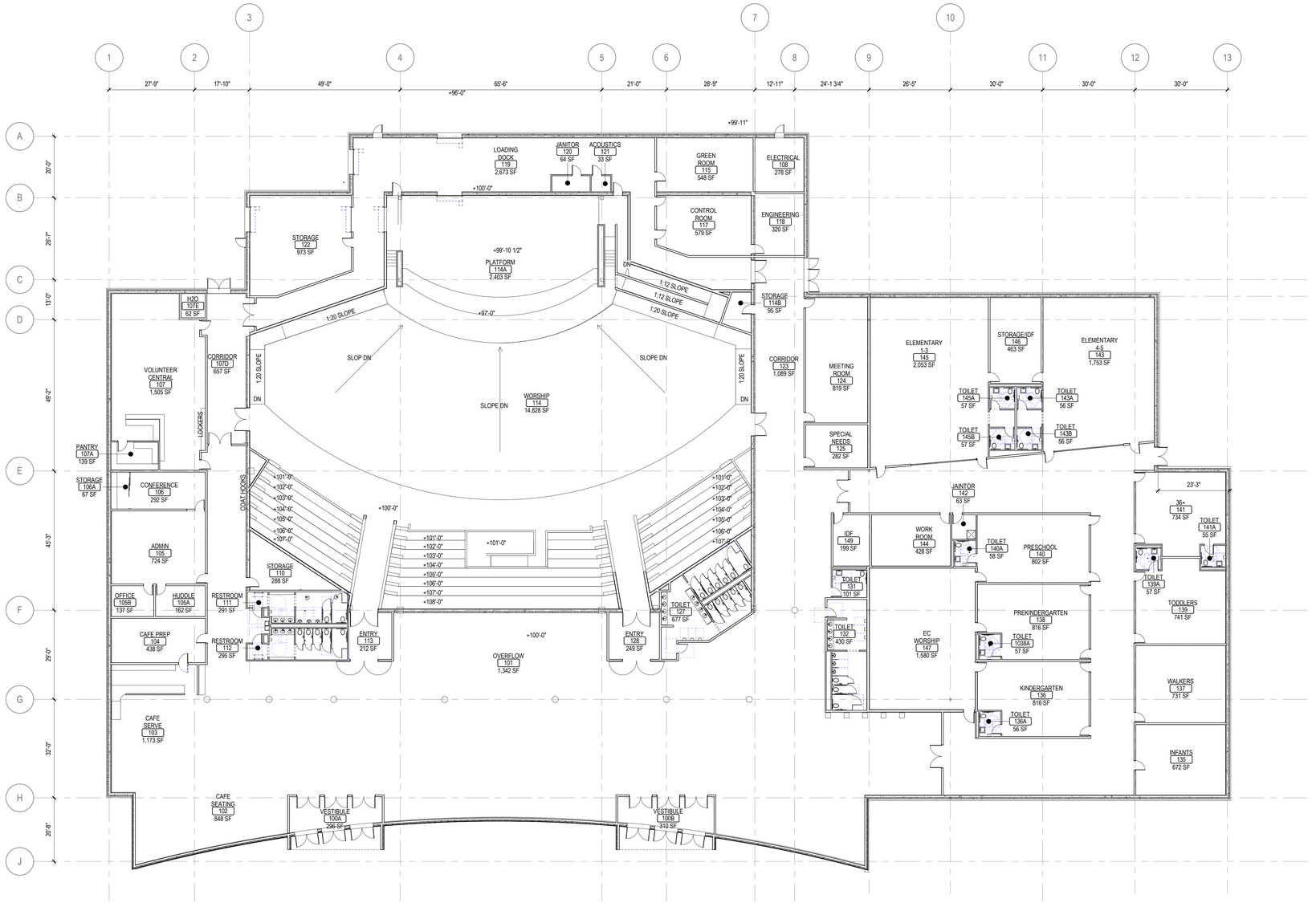

2H / 101.RF REFERENCE PLAN - FIRST LEVEL
1/16" = 1'-0"

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FIRST LEVEL REFERENCE PLAN

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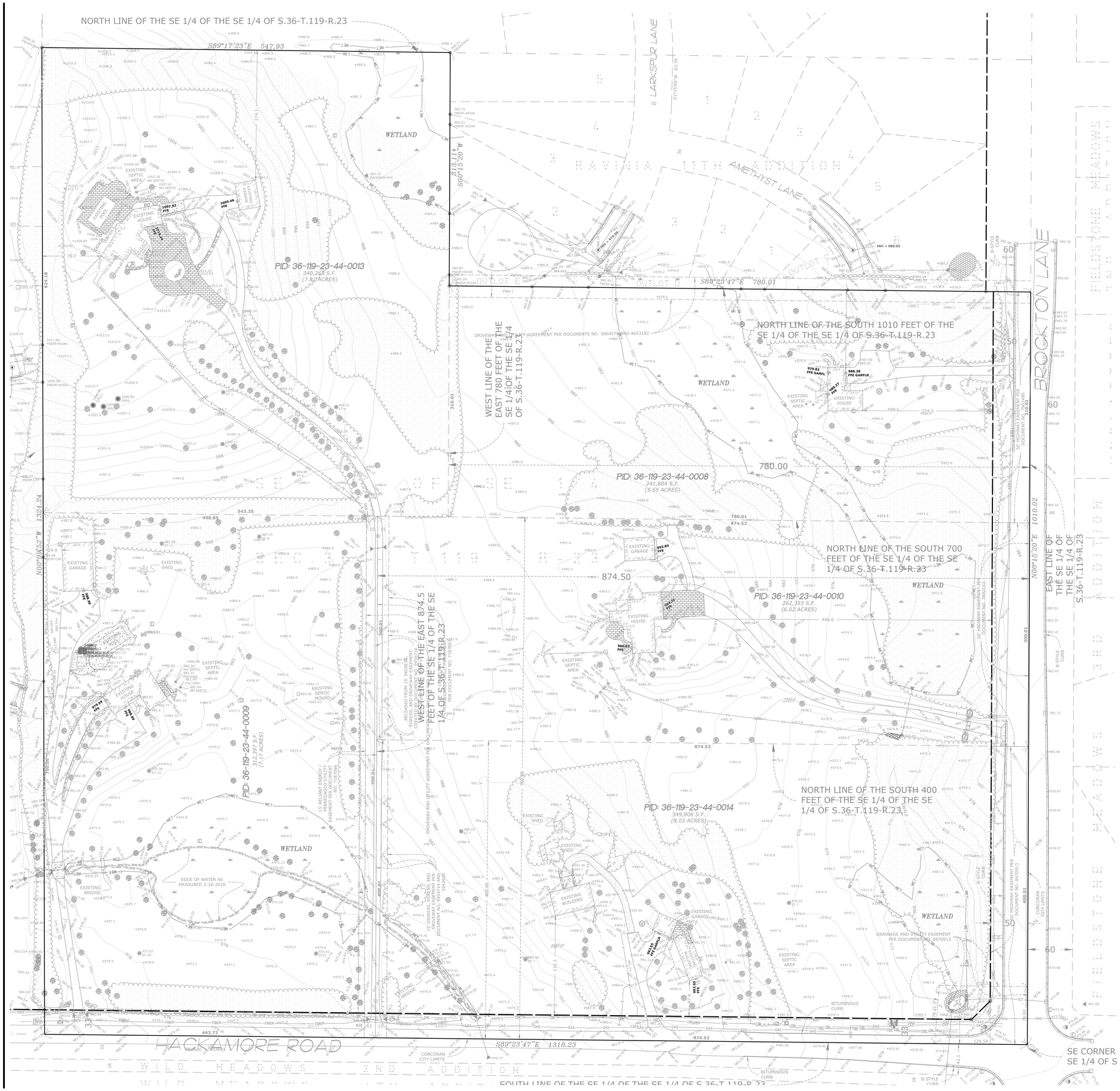

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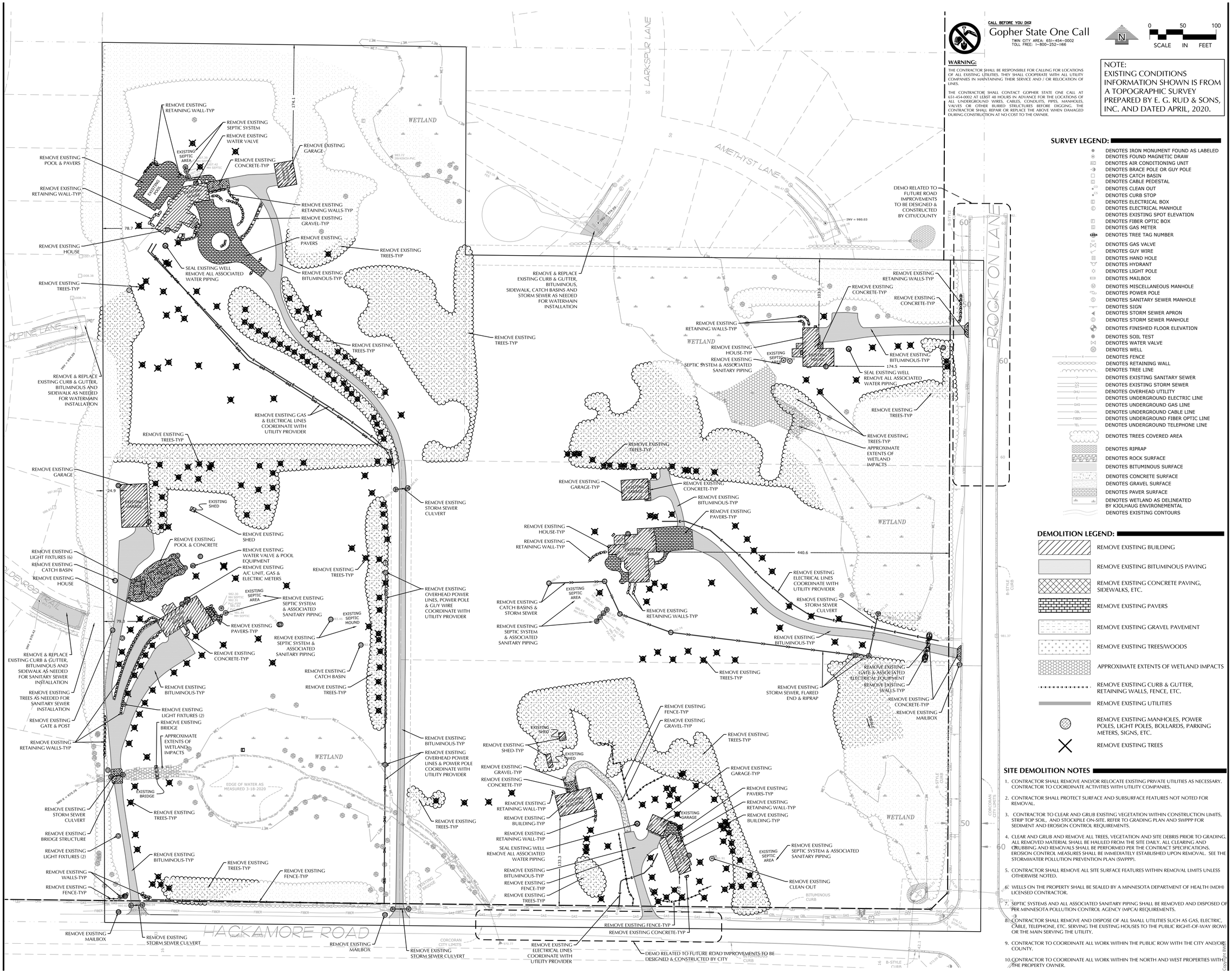

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DEMOLITION LEGEND:

- REMOVE EXISTING BUILDING
- REMOVE EXISTING BITUMINOUS PAVING
- REMOVE EXISTING CONCRETE PAVING, SIDEWALKS, ETC.
- REMOVE EXISTING PAVERS
- REMOVE EXISTING GRAVEL PAVEMENT
- REMOVE EXISTING TREES/WOODS
- APPROXIMATE EXTENTS OF WETLAND IMPACTS
- REMOVE EXISTING CURB & GUTTER, RETAINING WALLS, FENCE, ETC.
- REMOVE EXISTING UTILITIES
- REMOVE EXISTING MANHOLES, POWER POLES, LIGHT POLES, BOLLARDS, PARKING METERS, SIGNS, ETC.
- REMOVE EXISTING TREES

SITE DEMOLITION NOTES

1. CONTRACTOR SHALL REMOVE AND/OR RELOCATE EXISTING PRIVATE UTILITIES AS NECESSARY. CONTRACTOR TO COORDINATE ACTIVITIES WITH UTILITY COMPANIES.
2. CONTRACTOR SHALL PROTECT SURFACE AND SUBSURFACE FEATURES NOT NOTED FOR REMOVAL.
3. CONTRACTOR TO CLEAR AND GRUB EXISTING VEGETATION WITHIN CONSTRUCTION LIMITS, STRIP TOP SOIL, AND STOCKPILE ON-SITE. REFER TO GRADING PLAN AND SWPPP FOR SEDIMENT AND EROSION CONTROL REQUIREMENTS.
4. CLEAR AND GRUB AND REMOVE ALL TREES, VEGETATION AND SITE DEBRIS PRIOR TO GRADING. ALL REMOVED MATERIAL SHALL BE HAULED FROM THE SITE DAILY. ALL CLEARING AND GRUBBING AND REMOVALS SHALL BE PERFORMED PER THE CONTRACT SPECIFICATIONS. EROSION CONTROL MEASURES SHALL BE IMMEDIATELY ESTABLISHED UPON REMOVAL. SEE THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
5. CONTRACTOR SHALL REMOVE ALL SITE SURFACE FEATURES WITHIN REMOVAL LIMITS UNLESS OTHERWISE NOTED.
6. WELLS ON THE PROPERTY SHALL BE SEALED BY A MINNESOTA DEPARTMENT OF HEALTH (MDH) LICENSED CONTRACTOR.
7. SEPTIC SYSTEMS AND ALL ASSOCIATED SANITARY PIPING SHALL BE REMOVED AND DISPOSED OF PER MINNESOTA POLLUTION CONTROL AGENCY (MPCA) REQUIREMENTS.
8. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL SMALL UTILITIES SUCH AS GAS, ELECTRIC, CABLE, TELEPHONE, ETC. SERVING THE EXISTING HOUSES TO THE PUBLIC RIGHT-OF-WAY (ROW) OR THE MAIN SERVING THE UTILITY.
9. CONTRACTOR TO COORDINATE ALL WORK WITHIN THE PUBLIC ROW WITH THE CITY AND/OR COUNTY.
10. CONTRACTOR TO COORDINATE ALL WORK WITHIN THE NORTH AND WEST PROPERTIES WITH THE PROPERTY OWNER.

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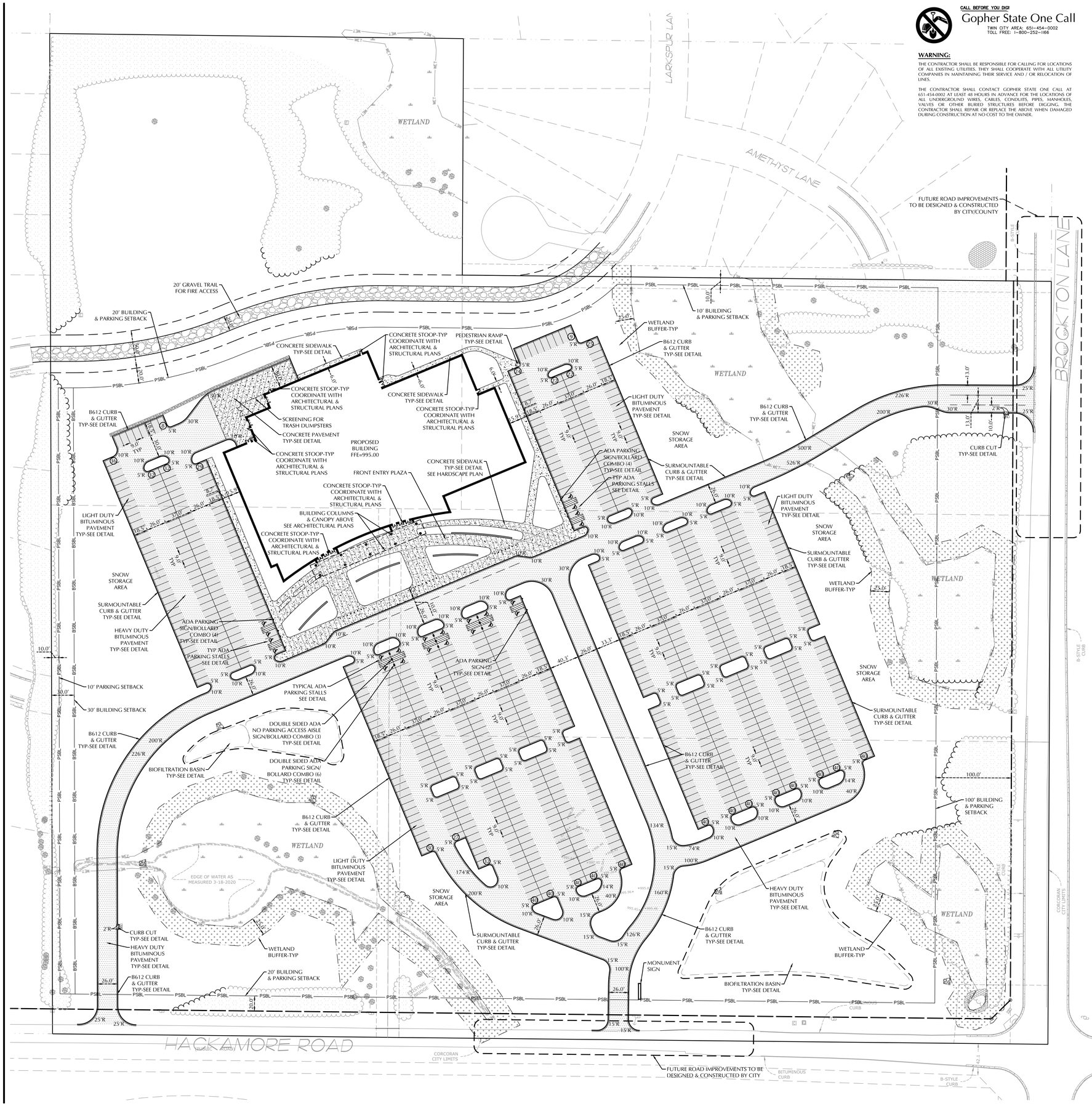
DEMOLITION PLAN

Sheet No.
210.SD



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SCALE IN FEET

PAVEMENT TYPES

- CONCRETE SIDEWALK
- CONCRETE PAVEMENT
- LIGHT DUTY BITUMINOUS PAVEMENT

NOTE:
SEE PAVEMENT SECTIONS ON GEOTECHNICAL ENGINEER'S REPORT FOR TYPE AND DEPTH INFORMATION.

CIVIL LEGEND

EXISTING		PROPOSED
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATEVALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOIL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
W	WATER SERVICE	
S	SANITARY SERVICE	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
	SPOT ELEVATION	
	CONTOURS	
	SANITARY SEWER	
	STORM SEWER	
	WATERMAIN	
FM	FORCEMAIN	FM
DT	DRAINTILE	DT
	SILT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREELINE	
	EASEMENT LINE	
	SETBACK LINE	
X	FENCE LINE	X
TEL	UNDERGROUND TELE	
GAS	UNDERGROUND GAS	
OH	OVERHEAD UTILITY	
FO	UNDERGROUND FIBER OPTIC	
ELE	UNDERGROUND ELECTRIC	
CTV	UNDERGROUND CABLE TV	
	PROPERTY LINE	
	CONIFEROUS TREE	
	DECIDUOUS TREE	
	PARKING COUNTS	23

SITE DATA

CURRENT ZONING: RSF-2
PROPOSED ZONING: RSF-2

PROPERTY AREA:	32.45 AC
DISTURBED AREA:	25.26 AC
EXISTING IMPERVIOUS AREA:	1.95 AC (6.0%)
PROPOSED IMPERVIOUS AREA:	10.68 AC (32.9%)

DEVELOPMENT AND DESIGN STANDARDS

YARD (BUILDING) SETBACKS:

FRONT (FROM 101)	100 FT MINIMUM
SIDE (FROM HACKAMORE)	20 FT MINIMUM
SIDE	10 FT MINIMUM
REAR	30 FT MINIMUM

OFF-STREET PARKING AND DESIGN STANDARD REQUIREMENTS

OFF-STREET PARKING SETBACKS:

FRONT (FROM 101)	100 FT MINIMUM
SIDE (FROM HACKAMORE)	20 FT MINIMUM
SIDE	10 FT MINIMUM
REAR	10 FT MINIMUM

MINIMUM PARKING LAYOUT DIMENSIONS (90 DEGREE PATTERN):

PARKING SPACE WIDTH	= 9 FT
PARKING SPACE LENGTH	= 18.5 FT
DRIVE LANE WIDTH	= 26 FT

OFF-STREET PARKING CALCULATIONS

PROPOSED CHURCH: XX,XXX SF @ X STALLS PER XXXX = XXX STALLS

TOTAL PARKING REQUIRED = XXX STALLS

TOTAL PARKING PROVIDED = 848 STALLS

ACCESSIBLE PARKING

PROPOSED ACCESSIBLE PARKING: 22 STALLS

REQUIRED ACCESSIBLE PARKING: 17 STALLS**

***REQUIRED MINIMUM NUMBER OF ACCESSIBLE SPACES FOR 501 TO 1000 STALLS (2% OF TOTAL STALLS PROVIDED)*

SITE NOTES

1. ALL PAVING, CONCRETE CURB, GUTTER AND SIDEWALK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN PER THE DETAIL SHEET(S) AND STATE/LOCAL JURISDICTION REQUIREMENTS.
2. ACCESSIBLE PARKING AND ACCESSIBLE ROUTES SHALL BE PROVIDED PER CURRENT ADA STANDARDS AND LOCAL/STATE REQUIREMENTS.
3. ALL CURB DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
4. ALL BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF WALL UNLESS OTHERWISE NOTED.
5. TYPICAL FULL SIZED PARKING STALL IS 9' X 18.5' UNLESS OTHERWISE NOTED.
6. ALL CURB RADII SHALL BE 5.0' UNLESS OTHERWISE NOTED.
7. BITUMINOUS IMPREGNATED FIBER BOARD TO BE PLACED AT FULL DEPTH OF CONCRETE ADJACENT TO EXISTING STRUCTURES AND BEHIND CURB ADJACENT TO DRIVEWAYS AND SIDEWALKS.
8. SEE SITE ELECTRICAL PLAN FOR SITE LIGHTING.

SIGNAGE AND STRIPING NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE SIGNAGE AND STRIPING AS SHOWN ON THIS PLAN.
2. CONTRACTOR SHALL PAINT ALL ACCESSIBLE STALLS, LOGOS AND CROSS HATCH LOADING AISLES WITH WHITE PAVEMENT MARKING PAINT, 4" IN WIDTH.
3. CONTRACTOR SHALL PAINT ANY/ALL DIRECTIONAL TRAFFIC ARROWS, AS SHOWN, IN WHITE PAINT.
4. ALL SIGNAGE SHALL INCLUDE POST, CONCRETE FOOTING AND STEEL CASING WHERE REQUIRED.
5. ALL SIGNAGE NOT PROTECTED BY CURB, LOCATED IN PARKING LOT OR OTHER PAVED AREAS TO BE PLACED IN STEEL CASING, FILLED WITH CONCRETE AND PAINTED YELLOW. REFER TO DETAIL.
6. ANY/ALL STOP SIGNS TO INCLUDE A 24" WIDE PAINTED STOP BAR IN WHITE PAINT, PLACED AT THE STOP SIGN LOCATION, A MINIMUM OF 4' FROM CROSSWALK IF APPLICABLE. ALL STOP BARS SHALL EXTEND FROM DIRECTIONAL TRANSITION BETWEEN LANES TO CURB.
7. ALL SIGNS TO BE PLACED 18" BEHIND BACK OF CURB UNLESS OTHERWISE NOTED.

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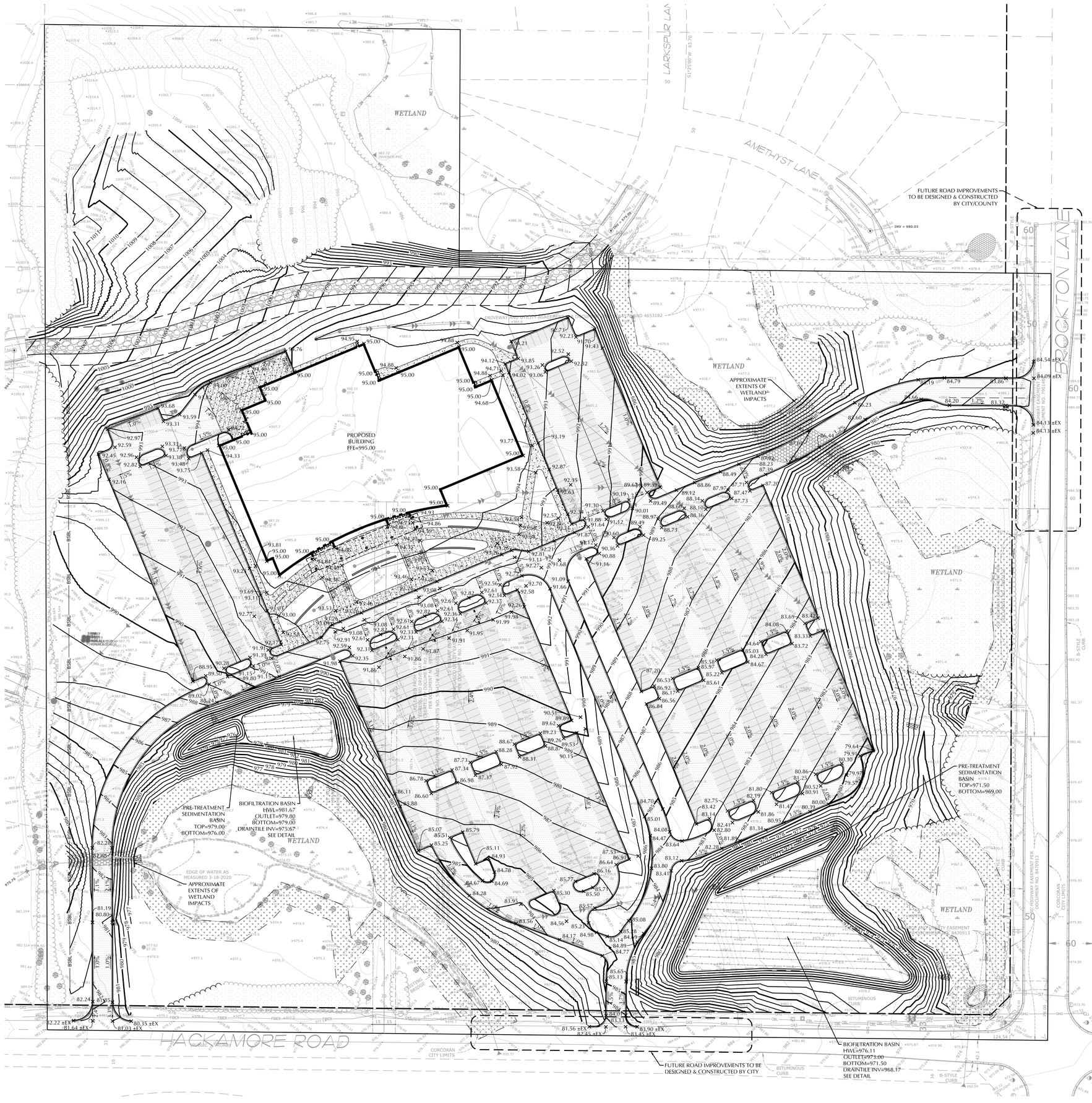
SITE PLAN

Sheet No.

220.CS



NOTE:
EXISTING CONDITIONS INFORMATION SHOWN IS FROM A TOPOGRAPHIC SURVEY PREPARED BY E. G. RUD & SONS, INC. AND DATED APRIL, 2020.

CIVIL LEGEND

EXISTING	PROPOSED
SANITARY MANHOLE	
STORM MANHOLE	
CATCH BASIN	
CULVERT	
HYDRANT	
GATEVALVE	
POST INDICATOR VALVE	
LIGHT POLE	
POWER POLE	
SIGN	
BENCHMARK	
SOIL BORINGS	
WATER MANHOLE	
TELEPHONE MANHOLE	
UTILITY MANHOLE	
ELECTRIC MANHOLE	
WATER SERVICE	
SANITARY SERVICE	
HANDICAP PARKING	
DIRECTION OF FLOW	
SPOT ELEVATION	
CONTOURS	
SANITARY SEWER	
STORM SEWER	
WATERMAIN	
FORCEMAIN	
DRAINTILE	
SILT FENCE	
CURB & GUTTER	
RETAINING WALL	
TREELINE	
EASEMENT LINE	
SETBACK LINE	
FENCE LINE	
UNDERGROUND TELE	
UNDERGROUND GAS	
OVERHEAD UTILITY	
UNDERGROUND FIBER OPTIC	
UNDERGROUND ELECTRIC	
UNDERGROUND CABLE TV	
PROPERTY LINE	
CONIFEROUS TREE	
DECIDUOUS TREE	
PARKING COUNTS	23

GRADING, DRAINAGE & EROSION CONTROL NOTES

1. SPOT ELEVATIONS REPRESENT FINISHED SURFACE GRADES, GUTTER/FLOW LINE, FACE OF BUILDING, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
2. CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.16 FEET. RIM ELEVATIONS SHOWN ON PLANS DO NOT REFLECT SUMPED ELEVATIONS.
3. GRADING OF THE INFILTRATION AREAS SHALL BE ACCOMPLISHED USING LOW-IMPACT EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF THE UNDERLYING SOILS. SMALL TRACKED DOZERS AND BOBCATS WITH RUNNER TRACKS ARE RECOMMENDED.
4. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE MINIMUM OF 4 INCHES OF TOP SOIL AND SEED/MULCH OR SOD. THESE AREAS SHALL BE WATERED/MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION IS ESTABLISHED.
5. FOR SITE RETAINING WALLS "TW" EQUALS SURFACE GRADE AT TOP FACE OF WALL (NOT TOP OF WALL), "GW" EQUALS SURFACE GRADE AT WALL GRADE TRANSITION, AND "BW" EQUALS SURFACE GRADE AT BOTTOM FACE OF WALL (NOT BOTTOM OF BURIED WALL COURSES).
6. REFER TO THE REPORT OF GEOTECHNICAL EXPLORATION AND REVIEW (REPORT NO. _____), DATED _____ AS PREPARED BY _____FOR AN EXISTING SUBSURFACE SITE CONDITION ANALYSIS AND CONSTRUCTION RECOMMENDATIONS.
7. STREETS MUST BE CLEANED AND SWEPT WHENEVER TRACKING OF SEDIMENTS OCCURS AND BEFORE SITES ARE LEFT IDLE FOR WEEKENDS AND HOLIDAYS. A REGULAR SWEEPING SCHEDULE MUST BE ESTABLISHED.
8. DUST MUST BE ADEQUATELY CONTROLLED.
9. SEE SWPPP FOR ADDITIONAL EROSION CONTROL NOTES AND REQUIREMENTS.
10. SEE UTILITY PLAN FOR WATER, STORM AND SANITARY SEWER INFORMATION.
11. SEE SITE PLAN FOR CURB AND BITUMINOUS TAPER LOCATIONS.

GRADING LEGEND:

APPROXIMATE EXTENTS OF WETLAND IMPACTS

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

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LOUCKS PROJECT NO. 19176A

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed/Registered Professional Engineer under the laws of the State of Minnesota

Name
Trevor D. Gray - PE
Date 05-19-2020 Lic./Reg. No. 53706

Issued For

Item	Date
SD ISSUE	04-29-2020
CUP ISSUE	05-19-2020

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Comm. No. 3.2019023.00
Drawn TDG/ZBM/MDC

Sheet Title
GRADING AND DRAINAGE PLAN

Sheet No.
230.CG

0 50 100
SCALE IN FEET

NOTE:
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CIVIL LEGEND

EXISTING		PROPOSED
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATEVALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOIL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
W	WATER SERVICE	
S	SANITARY SERVICE	
	HANDICAP PARKING	
1.5%	DIRECTION OF FLOW	1.5%
959.8	SPOT ELEVATION	959.8
992	CONTOURS	992
SAN	SANITARY SEWER	SAN
STM	STORM SEWER	STM
W	WATERMAIN	W
FM	FORCEMAIN	FM
DT	DRAINTILE	DT
SF	SILT FENCE	SF
	CURB & GUTTER	
	RETAINING WALL	
	TREELINE	
	EASEMENT LINE	
	SETBACK LINE	
X	FENCE LINE	X
TEL	UNDERGROUND TELE	
GAS	UNDERGROUND GAS	
OH	OVERHEAD UTILITY	
FO	UNDERGROUND FIBER OPTIC	
ELE	UNDERGROUND ELECTRIC	
CTV	UNDERGROUND CABLE TV	
	PROPERTY LINE	
	CONIFEROUS TREE	
	DECIDUOUS TREE	
	PARKING COUNTS	23

SWPPP LEGEND

SF	SILT FENCE
	BIO ROLLS
	INLET PROTECTION
	EXISTING DRAINAGE PATTERN
	PROPOSED DRAINAGE PATTERN
	EROSION CONTROL BLANKET

GRADING, DRAINAGE & EROSION CONTROL NOTES

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed/Registered Professional Engineer under the laws of the State of Minnesota

Name Trevor D. Gross - PE
Date 05-19-2020 Lic./Reg. No. 53706

Issued For

Item	Date
SD ISSUE	04-29-2020
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Sheet Title
STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Sheet No.
231.SW

SWPPP NOTES

1. THE NATURE OF THIS PROJECT WILL CONSIST OF CONSTRUCTING A PROPOSED BUILDING, PARKING LOT, SURFACE PAVEMENTS, BIOFILTRATION BASINS, AND UTILITIES.

2. THE INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES ARE AS FOLLOWS:

1. INSTALL VEHICLE TRACKING BMP (SPRING 2022)
2. INSTALL INLET PROTECTION (SPRING 2022)
3. INSTALL SILT FENCE AROUND SITE (SPRING 2022)
4. CLEAR AND GRUB SITE (SPRING 2022)
5. STRIP AND STOCKPILE TOPSOIL (SPRING 2022)
6. REMOVE PAVEMENTS AND UTILITIES (SPRING 2022)
7. ROUGH GRADE SITE (SPRING 2022)
8. IMPORT CLEAN FILL FOR REPLACEMENT AND BALANCE (SPRING 2022)
9. INSTALL UTILITIES (SPRING 2022)
10. INSTALL BUILDING FOUNDATIONS (SPRING 2022)
11. INSTALL CURB AND GUTTER (SUMMER 2022)
12. INSTALL PAVEMENTS AND WALKS (SUMMER 2022)
13. FINAL GRADE SITE (SUMMER 2022)
14. REMOVE ACCUMULATED SEDIMENT FROM STORMWATER SYSTEMS (FALL 2022)
15. SEED AND MULCH (FALL 2022)
16. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE SILT FENCE, INLET PROTECTION, AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.

3. SITE DATA:
   PROPERTY AREA / DISTURBED AREA: 32.45 AC / 25.26 AC
   PRE-CONSTRUCTION IMPERVIOUS AREA: 1.95 AC
   POST-CONSTRUCTION IMPERVIOUS AREA: 10.68 AC

   GENERAL SOIL TYPE: SEE PRELIMINARY GEOTECHNICAL SOIL BORINGS BY BRAUN INTERTEC
   HYDROLOGY INFORMATION: SEE HYDROLOGY REPORT PREPARED BY LOUCKS DATED MAY 19, 2020

4. EROSION AND SEDIMENT CONTROLS WERE DESIGNED TO EFFECTIVELY CONTROL STORMWATER RUNOFF WITHIN THE PROJECT AREAS. EROSION AND SEDIMENT CONTROL HAVE BEEN PROPOSED TO MINIMIZE CHANNEL EROSION AND SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS. FACTORS THAT WERE CONSIDERED INCLUDE PROPOSED IMPERVIOUS AREAS, SLOPE OF IMPERVIOUS SURFACES, STORMWATER INFRASTRUCTURE DISCHARGE POINTS, AND ANNUAL AVERAGE PRECIPITATION DATA FOR THE PROJECT AREA.

5. HENNEPIN COUNTY RECEIVES AN AVERAGE OF 32 INCHES OF PRECIPITATION PER YEAR. THE FOLLOWING HENNEPIN COUNTY 24-HOUR STORM EVENTS ARE BASED ON ATLAS 14 RAINFALL DATA:
   2-YR 2.86 INCHES
   10-YR 4.26 INCHES
   100-YR 7.32 INCHES

6. SEE "EXHIBIT:PROPOSED DRAINAGE AREAS" FOR SITE MAP WITH DRAINAGE AREA BOUNDARIES.

7. THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE IDENTIFIED WITH FLAGS, STAKES, SIGNS, SILT FENCE, ETC. BEFORE CONSTRUCTION BEGINS.

8. CONTRACTOR SHALL INSTALL RAIN GAUGE ON SITE.

9. NO DEWATERING IS EXPECTED TO OCCUR ON SITE. NO GROUNDWATER EXPECTED TO BE ENCOUNTERED DURING CONSTRUCTION. IF DEWATERING IS REQUIRED, REFER TO CITY REGULATIONS.

10. NO SOIL CONTAMINATION EXPECTED TO BE ENCOUNTERED DURING EXCAVATION.

11. ALL DISTURBED GROUND LEFT INACTIVE FOR FOURTEEN (14) OR MORE DAYS SHALL BE STABILIZED BY SEEDING OR SODDING (ONLY AVAILABLE PRIOR TO SEPTEMBER 15) OR BY MULCHING OR COVERING OR OTHER EQUIVALENT CONTROL MEASURE.

12. ON SLOPES 3:1 OR GREATER MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES, SLOPE LENGTHS CAN NOT BE GREATER THAN 75 FEET.
    DENOTES SLOPES GREATER THAN 3:1. ALL 3:1 SLOPES TO BE STABILIZED WITH EROSION CONTROL BLANKET

13. ALL STORM DRAINS AND INLETS MUST BE PROTECTED UNTIL ALL SOURCES OF POTENTIAL DISCHARGE ARE STABILIZED.

14. SOIL COMPACTION SHALL BE MINIMIZED DURING CONSTRUCTION.

15. TEMPORARY SOIL STOCKPILES MUST HAVE EFFECTIVE SEDIMENT CONTROL AND CAN NOT BE PLACED IN SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT AMOUNT OF SILT, CLAY, OR ORGANIC COMPOUNDS ARE EXEPMT EX: CLEAN AGGREGATE STOCK PILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES.

16. SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED ON ALL DOWNGRADIENT PERIMETERS AND UPGRADIENT OF ANY BUFFER ZONES.

17. SEDIMENT LADEN WATER MUST BE DISCHARGED TO A SEDIMENTATION BASIN WHENEVER POSSIBLE. IF NOT POSSIBLE, IT MUST BE TREATED WITH THE APPROPRIATE BMP'S.

18. SOLID WASTE MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

19. NO VEHICLE WASHING ALLOWED ON SITE.

20. NO ENGINE DEGREASING IS ALLOWED ON SITE.

21. THE OWNER IS RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT. THE OPERATOR IS RESPONSIBLE FOR COMPLIANCE WITH SECTIONS 3, 4, 6-22, 24 AND APPLICABLE REQUIREMENTS FOR CONSTRUCTION ACTIVITY IN SECTION 23.

22. TERMINATION OF COVERAGE-PERMITTEE(S) WISHING TO TERMINATE COVERAGE MUST SUBMIT A NOTICE OF TERMINATION (NOT) TO THE MPCA. ALL PERMITTEE(S) MUST SUBMIT A NOT WITHIN 30 DAYS AFTER THE FOLLOWING CONDITIONS HAVE BEEN MET:

   A. PERMIT TERMINATION CONDITIONS, PER NPDES PERMIT SECTION 13.1 HAVE BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE.
   A.A. PERMANENT UNIFORM PERENNIAL VEGETATIVE COVER MUST BE ESTABLISHED AT 70% DENSITY OF ITS EXPECTED FINAL GROWTH.
   A.B. THE PERMANENT STORMWATER TREATMENT SYSTEM IS CONSTRUCTED, MEETS ALL REQUIREMENTS, AND IS OPERATING AS DESIGNED.
   A.C. ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPS MUST BE REMOVED.
   A.D. CLEAN OUT SEDIMENT FROM CONVEYANCE SYSTEMS AND PERMANENT STORMWATER TREATMENT SYSTEMS (RETURN TO DESIGN CAPACITY).

23. INSPECTIONS
   A. INITIAL INSPECTION FOLLOWING SILT FENCE INSTALLATION BY CITY REPRESENTATIVE IS REQUIRED.
   B. EXPOSED SOIL AREAS: ONCE EVERY 7 DAYS AND WITHIN 24 HOURS FOLLOWING A 0.5" OVER 24 HOUR RAIN EVENT.
   C. STABILIZED AREAS: ONCE EVERY 30 DAYS
   D. FROZEN GROUND: AS SOON AS RUNOFF OCCURS OR PRIOR TO RESUMING CONSTRUCTION.
   E. INSPECTION AND MAINTENANCE RECORDS MUST BE RETAINED FOR 3 YEARS AFTER FILING OF THE NOTICE OF TERMINATION AND MUST INCLUDE: DATE AND TIME OF ACTION, NAME OF PERSON(S) CONDUCTING WORK, FINDING OF INSPECTIONS AND RECOMMENDATIONS FOR CORRECTIVE ACTION, DATE AND AMOUNT OF RAINFALL EVENTS GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD.
   F. OBSERVE ANY DISCHARGE OCCURRING ONSITE AND DOCUMENT CORRECTIVE ACTIONS TAKEN. DISCHARGE SHOULD BE DESCRIBED AND PHOTOGRAPHED.

24. MINIMUM MAINTENANCE
   A. ALL NONFUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY OR AS SOON AS FIELD CONDITIONS ALLOW.
   B. REPAIR, REPLACE, OR SUPPLEMENT ALL PERIMETER CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES ½ THE HEIGHT OF THE DEVICE.
   C. SEDIMENT BASINS DRAINED AND SEDIMENT REMOVED WHEN REACHES 1/2 STORAGE VOLUME.
   D. SEDIMENT REMOVED FROM SURFACE WATERS WITHIN (7)SEVEN CALENDAR DAYS OF DISCOVERY.
   E. CONSTRUCTION SITE EXITS INSPECTED, TRACKED SEDIMENT REMOVED WITHIN (1)ONE CALENDAR DAY.
   F. PROVIDE COPIES OF EROSION INSPECTION RESULTS TO CITY ENGINEER FOR ALL EVENTS GREATER THAN ½" IN 24 HOURS.

25. THE SWPPP, INCLUDING ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION ACTIVITY BY THE PERMITTEE(S) WHO HAVE OPERATIONAL CONTROL OF THE SITE.

26. OWNER MUST KEEP RECORDS OF ALL PERMITS REQUIRED FOR THE PROJECT, THE SWPPP, ALL INSPECTIONS AND MAINTENANCE, PERMANENT OPERATION AND MAINTENANCE AGREEMENTS, AND REQUIRED CALCULATIONS FOR TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS. THESE RECORDS MUST BE RETAINED FOR THREE YEARS AFTER FILING NPDES NOTICE OF TERMINATION.

27. SWPPP MUST BE AMENDED WHEN:
   A. THERE IS A CHANGE IN DESIGN, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON DISCHARGE
   B. INSPECTIONS INDICATE THAT THE SWPPP IS NOT EFFECTIVE AND DISCHARGE IS EXCEEDING WATER QUALITY STANDARDS.
   C. THE BMP'S IN THE SWPPP ARE NOT CONTROLLING POLLUTANTS IN DISCHARGES OR IS NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THE PERMIT.

28. CONCRETE WASHOUT AREA
   A. CONCRETE WASH-OUT SITES NOT ALLOWED ON SITE AND MUST BE CONTAINED ON TRUCKS.
   B. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY.

29. IN THE EVENT OF ENCOUNTERING A WELL OR SPRING DURING CONSTRUCTION CONTRACTOR TO CEASE CONSTRUCTION ACTIVITY AND NOTIFY ENGINEER.

30. PIPE OULTETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER.

31. FINAL STABILIZATION
   FINAL STABILIZATION REQUIRES THAT ALL SOIL DISTURBING ACVTIVITIES HAVE BEEN COMPLETED AND THAT DISTURBED AREAS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH 70% OF THE EXPECTED FINAL DENSITY, AND THAT ALL PERMANENT PAVEMENTS HAVE BEEN INSTALLED. ALL TEMPORARY BMP'S SHALL BE REMOVED, DITCHES STABILIZED, AND SEDIMENT SHALL BE REMOVED FROM PERMANENT CONVEYANCES AND SEDIMENTATION BASINS IN ORDER TO RETURN THE POND TO DESIGN CAPACITY.

32. RESPONSIBILITIES
   A. THE OWNER MUST IDENTIFY A PERSON WHO WILL OVERSEE THE SWPPP IMPLEMENTATION AND THE PERSON RESPONSIBLE FOR INSPECTION AND MAINTENANCE:
   CONTACT:
   COMPANY:
   PHONE:

   B. THE OWNER MUST IDENTIFY THE A PERSON WHO WILL BE RESPONSIBLE FOR LONG TERM OPERATIONS AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM:
   CONTACT:
   COMPANY:
   PHONE:

33. THE WATERSHED DISTRICT OR THE CITY MAY HAVE REQUIREMENTS FOR INSPECTIONS OR AS-BUILT DRAWINGS VERIFYING PROPER CONSTRUCTION OF THE BMPS.

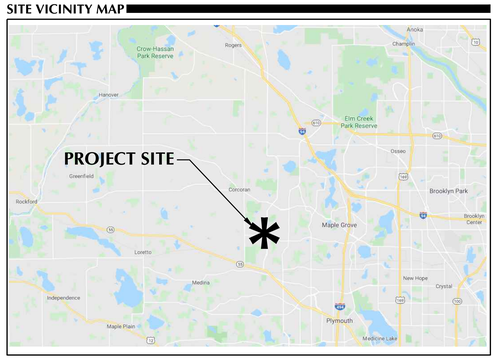
34. EROSION CONTROL DEVICES CANNOT BE REMOVED UNTIL THE WATERSHED DISTRICT HAS DETERMINED THE SITE HAS BEEN PERMANENTLY RESTABALIZED AND SHALL BE REMOVED WITHIN 30 DAYS THEREAFTER.

ESTIMATED QUANTITIES

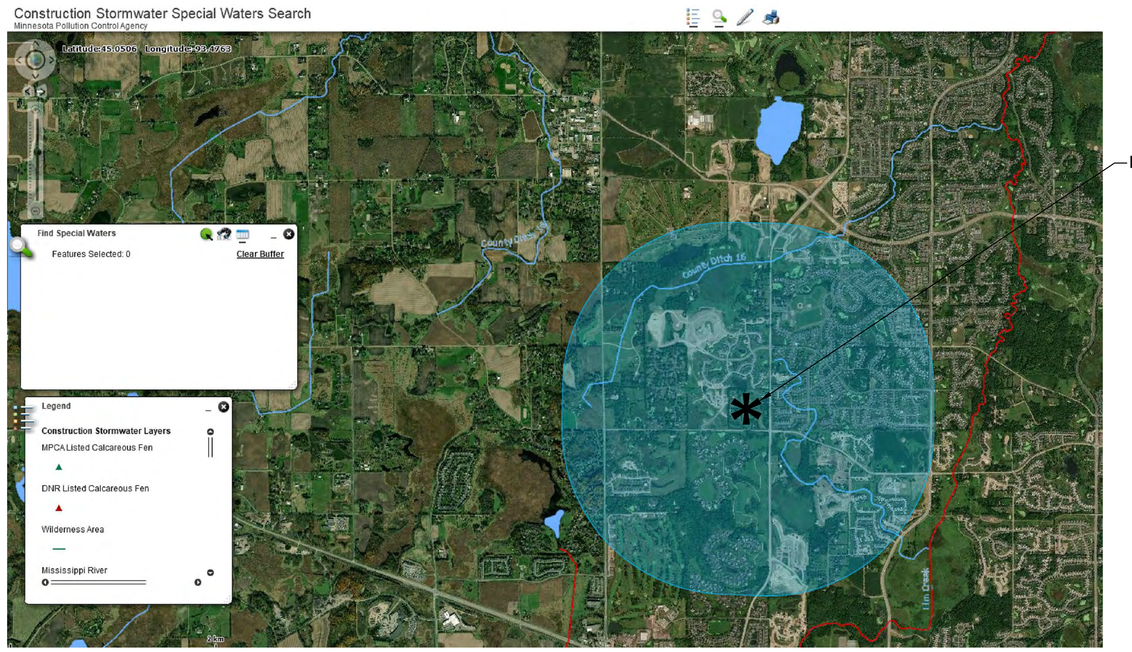
DESCRIPTION	UNIT	QUANTITY
TEMPORARY ROCK CONSTRUCTION ENTRANCE	EA	3
PREFABRICATED CONCRETE WASHOUT	EA	-
SILT FENCE (STANDARD)	LF	9,950
EROSION CONTROL BLANKET	SY	22,400
INLET PROTECTION	EA	32
BIO-ROLL	LF	-

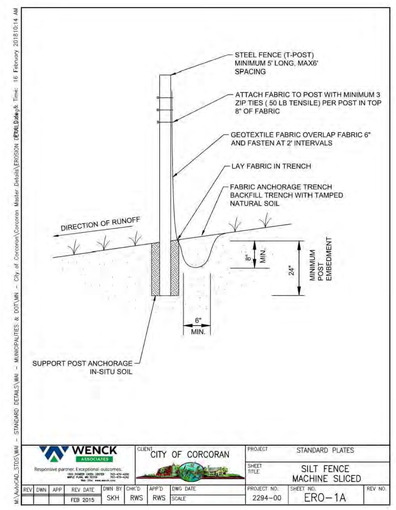
V:\Trevor\SWPPP (2020).PNG

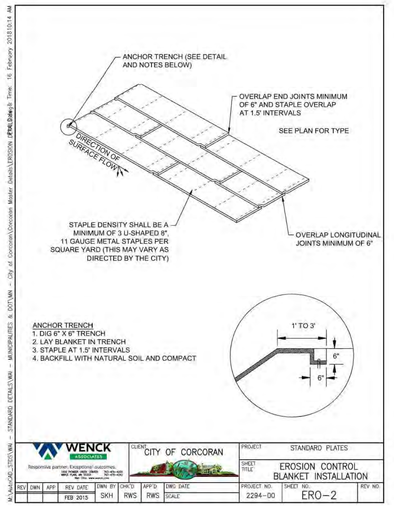
SITE VICINITY MAP

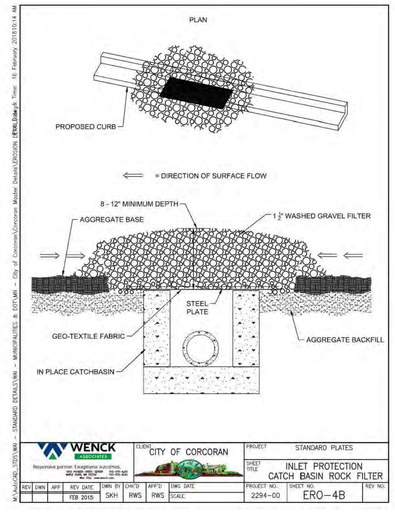


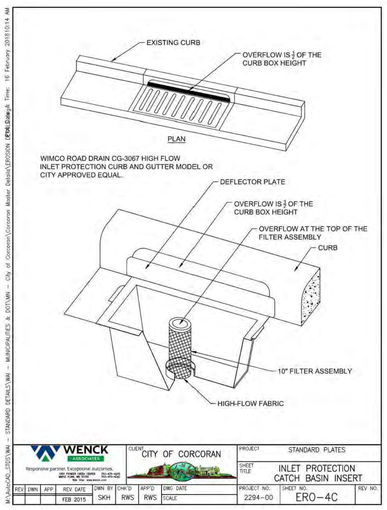
CONSTRUCTION STORMWATER SPECIAL WATERS SEARCH MAP

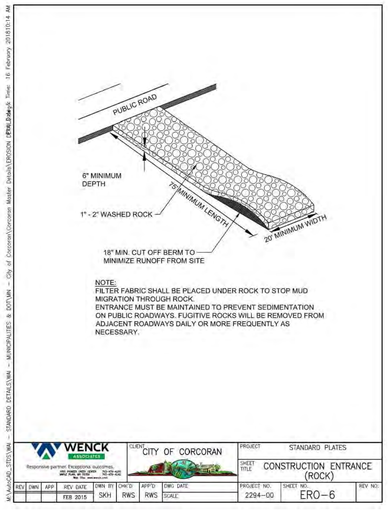


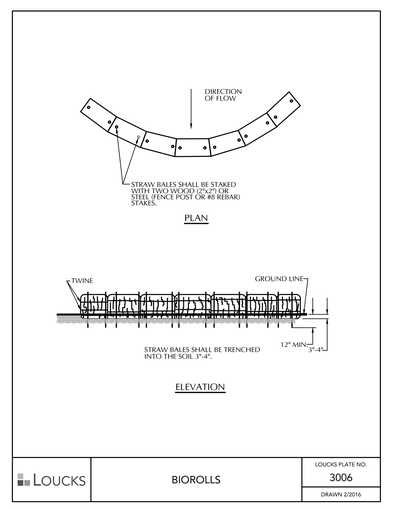












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Name
Trevor D. Grays - PE
Date 05-19-2020 Lic./Reg. No. 53706

Issued For

Item	Date
SD ISSUE	04-29-2020
CUP ISSUE	05-19-2020

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Sheet Title
SWPPP NOTES AND DETAILS

Sheet No.
232.SW

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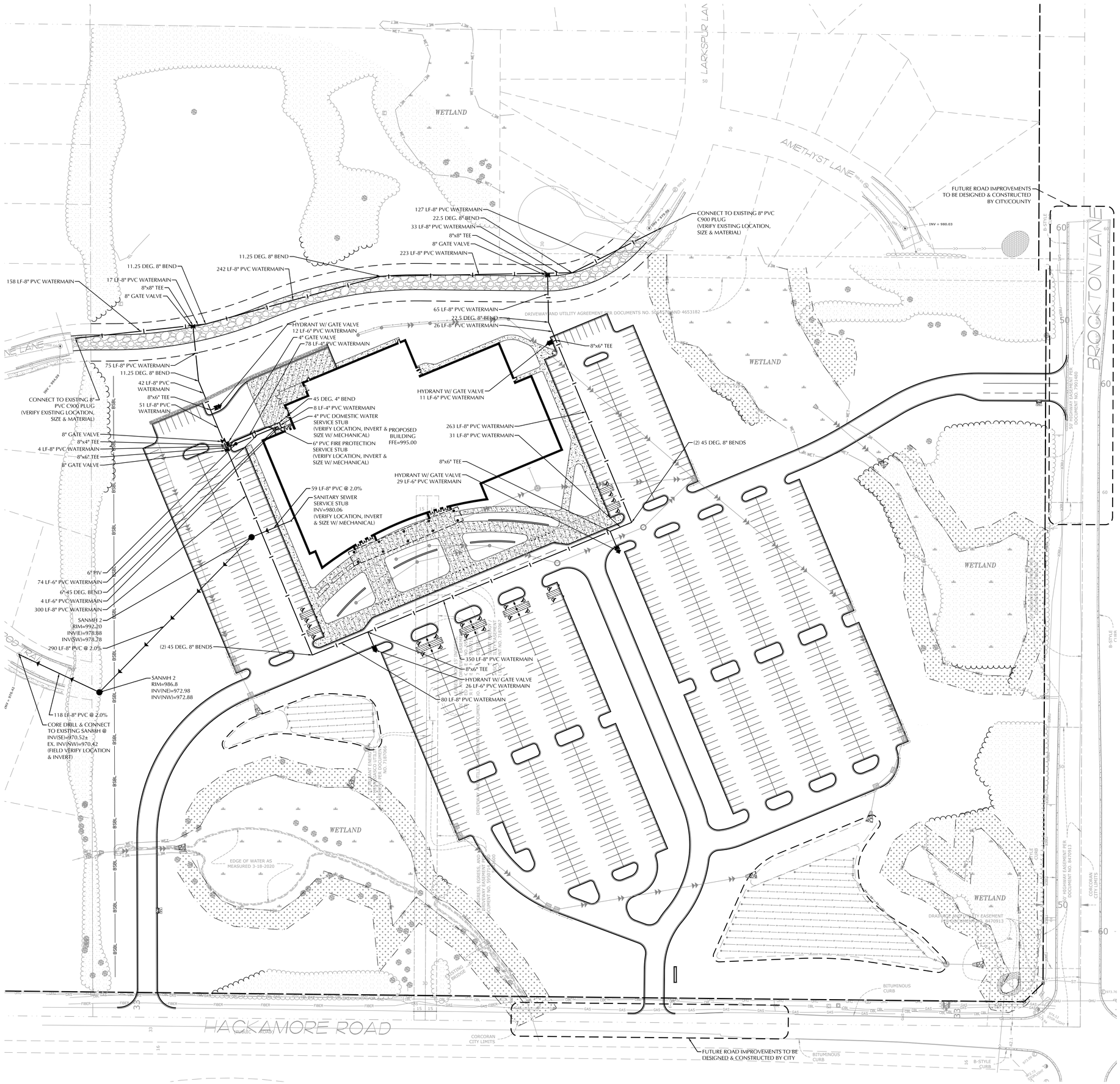

0 50 100
SCALE IN FEET

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CIVIL LEGEND

EXISTING		PROPOSED
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATEVALVE	
GPIV	POST INDICATOR VALVE	GPIV
	LIGHT POLE	
	POWER POLE	
	SIGN	
BM #3	BENCHMARK	
SB1	SOIL BORINGS	SB1
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
W	WATER SERVICE	
S	SANITARY SERVICE	
	HANDICAP PARKING	
STR	DIRECTION OF FLOW	STR
959.4	SPOT ELEVATION	959.4
959	CONTOURS	959
SAN	SANITARY SEWER	SAN
STM	STORM SEWER	STM
WM	WATERMAIN	WM
FM	FORCEMAIN	FM
DT	DRAINTILE	DT
	SILT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREELINE	
	EASEMENT LINE	
	SETBACK LINE	
X	FENCE LINE	X
TEL	UNDERGROUND TELE	
GAS	UNDERGROUND GAS	
OH	OVERHEAD UTILITY	
FO	UNDERGROUND FIBER OPTIC	
ELE	UNDERGROUND ELECTRIC	
CTV	UNDERGROUND CABLE TV	
	PROPERTY LINE	
	CONIFEROUS TREE	
	DECIDUOUS TREE	
23	PARKING COUNTS	23

UTILITY NOTES

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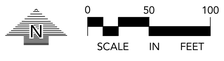
Sheet Title

UTILITY PLAN SANITARY SEWER & WATERMAIN

Sheet No.

240.CU



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	CULVERT	
	HYDRANT	
	GATEVALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOIL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
	WATER SERVICE	
	SANITARY SERVICE	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
	SPOT ELEVATION	
	CONTOURS	
	SANITARY SEWER	
	STORM SEWER	
	WATERMAIN	
	FORCEMAIN	
	DRAINTILE	
	SILT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREELINE	
	EASEMENT LINE	
	SETBACK LINE	
	FENCE LINE	
	UNDERGROUND TELE	
	UNDERGROUND GAS	
	OVERHEAD UTILITY	
	UNDERGROUND FIBER OPTIC	
	UNDERGROUND ELECTRIC	
	UNDERGROUND CABLE TV	
	PROPERTY LINE	
	CONIFEROUS TREE	
	DECIDUOUS TREE	
	PARKING COUNTS	

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Name
Trevor D. Gieyen - PE
Date 05-19-2020 Lic./Reg. No. 53706

Issued For

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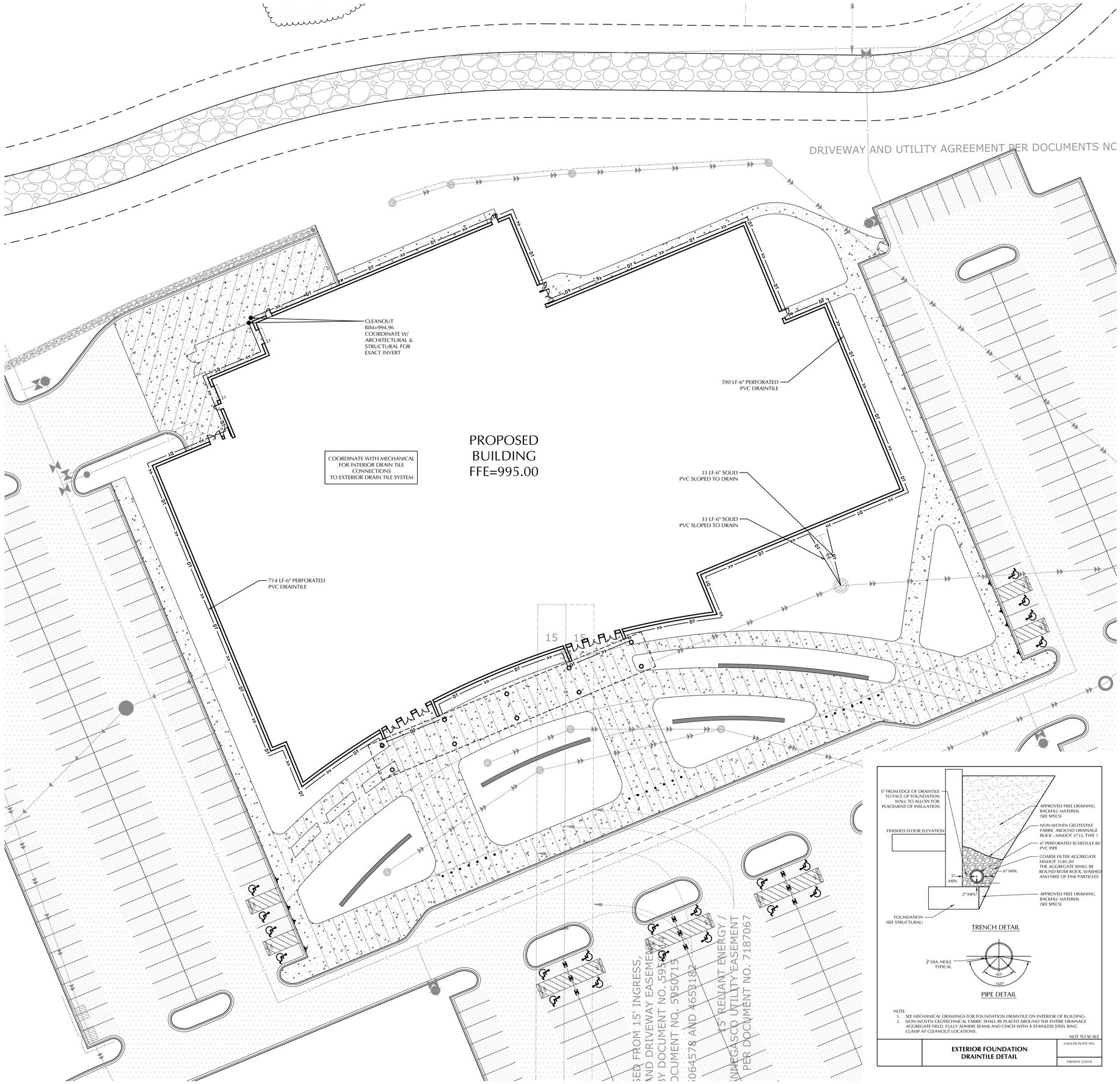
Sheet Title
UTILITY PLAN
STORM SEWER

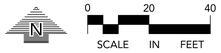
Sheet No.
241.CU



NOTE
1. SEE MECHANICAL DRAWINGS FOR FOUNDATION DRAINTILE ON INTERIOR OF BUILDING.
2. NON-WOVEN GEOTECHNICAL FABRIC SHALL BE PLACED AROUND THE ENTIRE DRAINAGE AGGREGATE FIELD. FULLY ADHERE SEAMS AND CINCH WITH A STAINLESS STEEL RING CLAMP AT CLEANOUT LOCATIONS.

NOT TO SCALE

	EXTERIOR FOUNDATION DRAINTILE DETAIL	LOUCKS PLATE NO.
		DRAWN 3/2018



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GV	POST INDICATOR VALVE	GV
	LIGHT POLE	
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	SIGN	
BM #1	BENCHMARK	
SB	SOIL BORINGS	SB
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
W	WATER SERVICE	
S	SANITARY SERVICE	
	HANDICAP PARKING	
1.5%	DIRECTION OF FLOW	1.5%
994	SPOT ELEVATION	994
994	CONTOURS	994
S	SANITARY SEWER	
ST	STORM SEWER	
W	WATERMAIN	
FM	FORCEMAIN	FM
DT	DRAINTILE	DT
	SILT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREELINE	
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Sheet Title

UTILITY PLAN FOUNDATION DRAINTILE

Sheet No.

242.CU

SIGN NAME	DESIGNATION	SIZE
STOP	R1-1	30"X30"
YIELD	R1-2	36"X36"X36"
SPEED	R2-1	24"X30"
LIMIT NO PARKING	N/A	12"X18"

NOTES: 1. DESIGN SHALL CONFORM TO THESE REQUIREMENTS EXCEPT AS OTHERWISE APPROVED BY THE CITY ENGINEER. 2. SIGN SHALL BE REFLECTORIZED AS PER MNDOT 3352.2A2B, STANDARD NO. 2.3. SIGN SHALL BE CONSTRUCTED OF ALUMINUM PER MNDOT 3352.2A1

INSTALLATION SHALL BE IN COMPLIANCE WITH THE LATEST REVISON OF THE MMUTCD

STOP

2" X 2" X 12 GAUGE SQUARE TELESPAR GALVANIZED SIGN POST (2.4 lbs/ft)

FINISHED GRADE

1" TO 2"

6" TO 8"

2 ½" X 2 ½" X 12 GAUGE SQUARE TELESPAR 4' LONG SIGN ANCHOR

2 ½" X 2 ½" X 18" X 12 GAUGE OMNI DIRECTIONAL SLEEVE WITH 4 BLADES

NOTE:
1. INSTALLATION SHALL BE IN COMPLIANCE WITH THE LATEST VERSION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. FOR STREETS WITH SPEED LIMIT GREATER THAN 30 MPH, A 0.7' SIGN WITH 0.5' LETTERS IS REQUIRED.
3. TYPICALLY INSTALLED AT SOUTHWEST CORNER OF INTERSECTION. ALL EQUALS MUST BE APPROVED BY CITY ENGINEER BEFORE INSTALLATION.
4. SIGN SHALL BE CONSTRUCTED OF ALUMINUM PER MNDOT 3352.2A1.
5. WHEN INSTALLED IN CONCRETE USE SURFACE MOUNTED ANCHOR BASE ⅜"x4" CONCRETE ANCHOR BOLTS KLEEN BREAK MODEL 425 OR APPROVED EQUAL. (SEE DETAIL GEN-3)

WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: REGULATORY SIGN

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			FEB 2015	SKH	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. GEN – 5 — REV NO.

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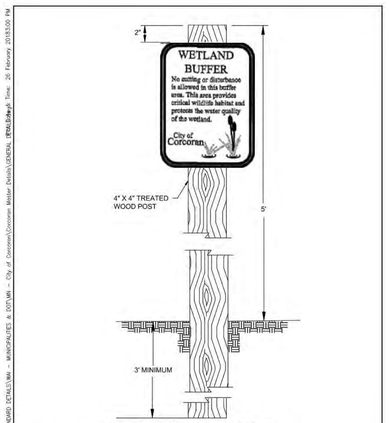

NOTE: ALL SIGNS SHALL BE OBTAINED AT CITY HALL

WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: WETLAND BUFFER SIGN

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			JAN 2018	SKH	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. GEN – 8 — REV NO.

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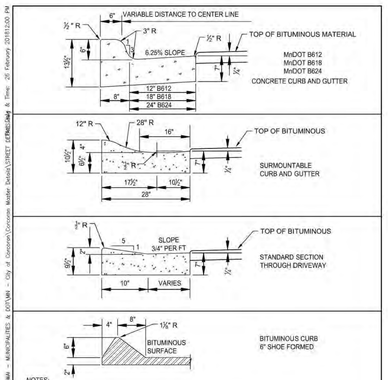

NOTES:
1. ONCE CURB AND GUTTER ARE INSTALLED, ENSURE EROSION CONTROL MEASURES ARE PROPERLY ESTABLISHED.
2. USE SUITABLE MATERIAL TO BACKFILL AREA BEHIND CURB.

WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: CURB AND GUTTER

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			JAN 2018	SKH	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. STR-5 — REV NO.

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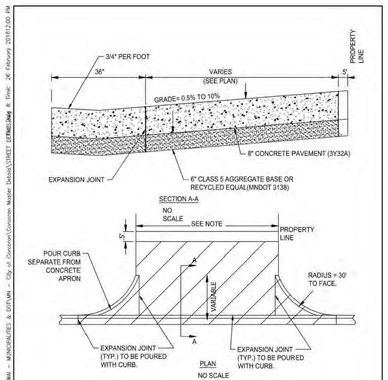

NOTE:
MAX COMMERCIAL DRIVEWAY WIDTH TO BE 32' AT RIGHT-OF-WAY.

WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: COMMERCIAL CONCRETE DRIVEWAY APRON

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			JAN 2018	SKH	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. STR-13 — REV NO.

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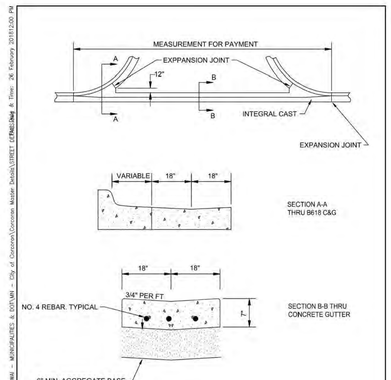

WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: CONCRETE VALLEY GUTTER

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			MAR 2018	SKH	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. STR-15 — REV NO.

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WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: SANITARY SEWER MANHOLE

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			FEB 2017	SKH	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. SAN–1 — REV NO.

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WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: STORM SEWER MANHOLE

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			FEB 2017	SKH	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. STO–1 — REV NO.

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WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: STORM SEWER JUNCTION MANHOLE

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			FEB 2017	SKH	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. STO–2 — REV NO.

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WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: CATCHBASIN MANHOLE

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			JAN 2018	NPW	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. STO–5 — REV NO.

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WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: CATCHBASIN MANHOLE WITH SUMP

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			JAN 2018	NPW	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. STO–6 — REV NO.

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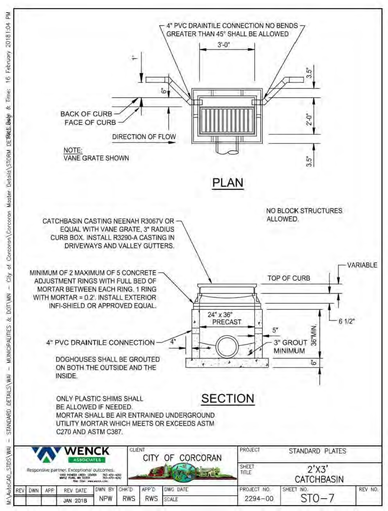

WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: 2'X3' CATCHBASIN

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			JAN 2018	NPW	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. STO–7 — REV NO.

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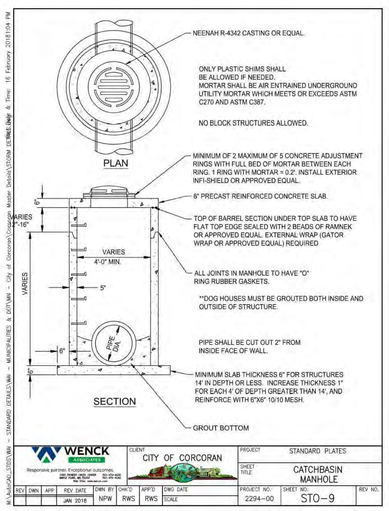

WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: CATCHBASIN MANHOLE

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			JAN 2018	NPW	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. STO–9 — REV NO.

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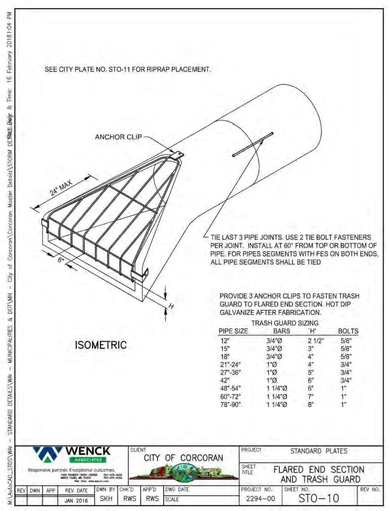

WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: FLARED END SECTION AND TRASH GUARD

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			JAN 2018	SKH	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. STO–10 — REV NO.

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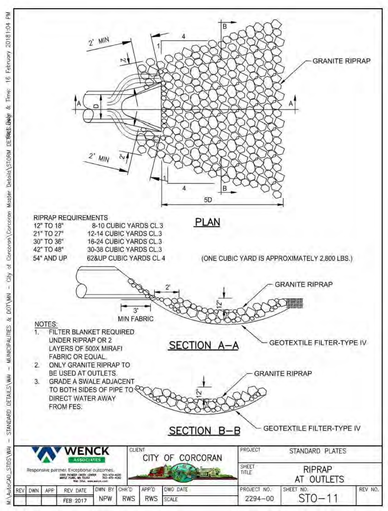

WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: RIPRAP AT OUTLETS

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			FEB 2017	NPW	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. STO–11 — REV NO.

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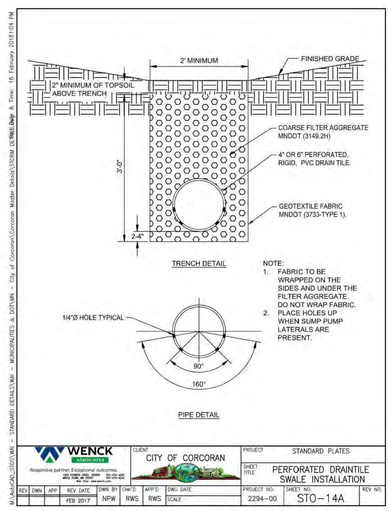

WENCK ASSOCIATES — Responsive partner. Exceptional outcomes. — CLIENT: CITY OF CORCORAN — PROJECT: STANDARD PLATES — SHEET TITLE: PERFORATED DRAINTILE SWALE INSTALLATION

REV	DWN	APP	REV DATE	DWN BY	CHK'D	APP'D	DWG DATE
			FEB 2017	NPW	RWS	RWS	SCALE

PROJECT NO. 2294-00 — SHEET NO. STO–14A — REV NO.

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed/Registered Professional Engineer under the laws of the State of Minnesota

Name
Trevor D. Gray - PE

Date 05-19-2020 Lic./Reg. No. 53706

Issued For

Item	Date
SD ISSUE	04-29-2020
CUP ISSUE	05-19-2020

NOT FOR CONSTRUCTION

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Sheet Title
CIVIL DETAILS

Sheet No.
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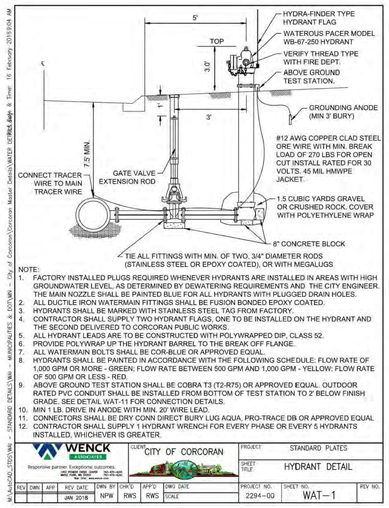
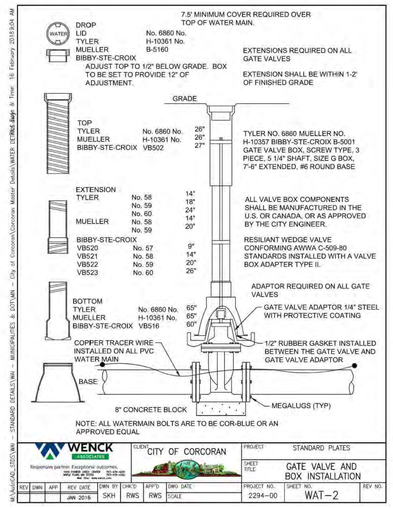


NOTE:
1. FACTORY INSTALLED PLUGS REQUIRED WHENEVER HYDRANTS ARE INSTALLED IN AREAS WITH HIGH GROUNDWATER LEVEL, AS DETERMINED BY DEWATERING REQUIREMENTS AND THE CITY ENGINEER. THE MAIN NOZZLE SHALL BE PAINTED BLUE FOR ALL HYDRANTS WITH PLUGGED DRAIN HOLES.
2. ALL DUCTILE IRON WATERMAIN FITTINGS SHALL BE FUSION BONDED EPOXY COATED.
3. HYDRANTS SHALL BE MARKED WITH STAINLESS STEEL TAG FROM FACTORY.
4. CONTRACTOR SHALL SUPPLY TWO HYDRANT FLAGS, ONE TO BE INSTALLED ON THE HYDRANT AND THE SECOND DELIVERED TO CORCORAN PUBLIC WORKS.
5. ALL HYDRANT LEADS ARE TO BE CONSTRUCTED WITH POLYWRAPPED DIP, CLASS 52.
6. PROVIDE POLYWRAP UP THE HYDRANT BARREL TO THE BREAK OFF FLANGE..
7. ALL WATERMAIN BOLTS SHALL BE COR-BLUE OR APPROVED EQUAL.
8. HYDRANTS SHALL BE PAINTED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: FLOW RATE OF 1,000 GPM OR MORE – GREEN; FLOW RATE BETWEEN 500 GPM AND 1,000 GPM - YELLOW; FLOW RATE OF 500 GPM OR LESS - RED.
9. ABOVE GROUND TEST STATION SHALL BE COBRA T3 (T2-R75) OR APPROVED EQUAL. OUTDOOR RATED PVC CONDUIT SHALL BE INSTALLED FROM BOTTOM OF TEST STATION TO 2' BELOW FINISH GRADE. SEE DETAIL WAT-11 FOR CONNECTION DETAILS.
10. MIN 1 LB. DRIVE IN ANODE WITH MIN. 20' WIRE LEAD.
11. CONNECTORS SHALL BE DRY CONN DIRECT BURY LUG AQUA. PRO-TRACE DB OR APPROVED EQUAL
12. CONTRACTOR SHALL SUPPLY 1 HYDRANT WRENCH FOR EVERY PHASE OR EVERY 5 HYDRANTS INSTALLED, WHICHEVER IS GREATER.

WENCK ASSOCIATES	CLIENT: CITY OF CORCORAN	PROJECT: STANDARD PLATES	SHEET TITLE: HYDRANT DETAIL
REV. DWN. APP. REV. DATE DWN BY CHK'D APP'D DWG DATE: JAN 2016 NPW RWS RWS	SCALE	PROJECT NO.: 2294-00	SHEET NO.: WAT–1 REV NO.



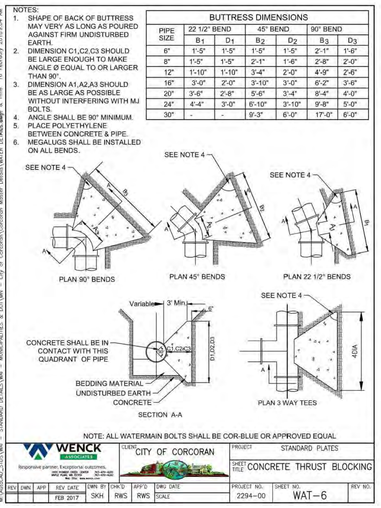
NOTE: ALL WATERMAIN BOLTS ARE TO BE COR-BLUE OR AN APPROVED EQUAL

WENCK ASSOCIATES	CLIENT: CITY OF CORCORAN	PROJECT: STANDARD PLATES	SHEET TITLE: GATE VALVE AND BOX INSTALLATION
REV. DWN. APP. REV. DATE DWN BY CHK'D APP'D DWG DATE: JAN 2016 SKH RWS RWS	SCALE	PROJECT NO.: 2294-00	SHEET NO.: WAT–2 REV NO.

NOTES:
1. SHAPE OF BACK OF BUTTRESS MAY VERY AS LONG AS POURED AGAINST FIRM UNDISTURBED EARTH.
2. DIMENSION C1,C2,C3 SHOULD BE LARGE ENOUGH TO MAKE ANGLE Ø EQUAL TO OR LARGER THAN 90°.
3. DIMENSION A1,A2,A3 SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH MJ BOLTS.
4. ANGLE SHALL BE 90° MINIMUM.
5. PLACE POLYETHYLENE BETWEEN CONCRETE & PIPE.
6. MEGALUGS SHALL BE INSTALLED ON ALL BENDS.

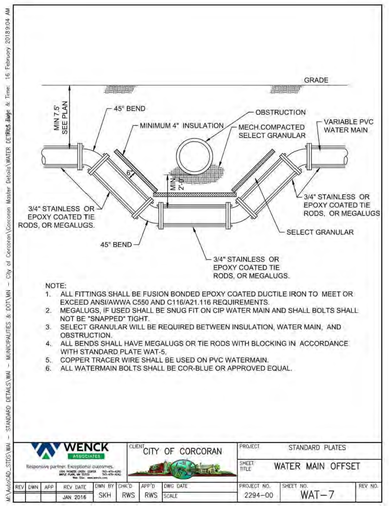
BUTTRESS DIMENSIONS

PIPE SIZE	22 1/2° BEND B1	D1	45° BEND B2	D2	90° BEND B3	D3
6"	1'-5"	1'-5"	1'-5"	1'-5"	2'-1"	1'-6"
8"	1'-5"	1'-5"	2'-1"	1'-6"	2'-8"	2'-0"
12"	1'-10"	1'-10"	3'-4"	2'-0"	4'-9"	2'-6"
16"	3'-0"	2'-0"	3'-10"	3'-0"	6'-2"	3'-6"
20"	3'-6"	2'-8"	5'-6"	3'-4"	8'-4"	4'-0"
24"	4'-4"	3'-0"	6'-10"	3'-10"	9'-8"	5'-0"
30"	-	-	9'-3"	6'-0"	17'-0"	6'-6"



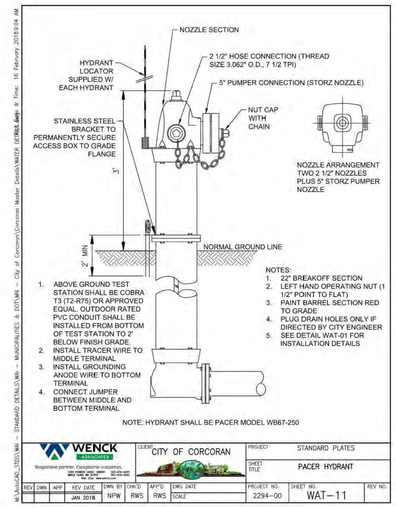
NOTE: ALL WATERMAIN BOLTS SHALL BE COR-BLUE OR APPROVED EQUAL

WENCK ASSOCIATES	CLIENT: CITY OF CORCORAN	PROJECT: STANDARD PLATES	SHEET TITLE: CONCRETE THRUST BLOCKING
REV. DWN. APP. REV. DATE DWN BY CHK'D APP'D DWG DATE: FEB 2017 SKH RWS RWS	SCALE	PROJECT NO.: 2294-00	SHEET NO.: WAT–6 REV NO.



NOTE:
1. ALL FITTINGS SHALL BE FUSION BONDED EPOXY COATED DUCTILE IRON TO MEET OR EXCEED ANSI/AWWA C550 AND C116/A21.116 REQUIREMENTS.
2. MEGALUGS, IF USED SHALL BE SNUG FIT ON CIP WATER MAIN AND SHALL BOLTS SHALL NOT BE "SNAPPED" TIGHT.
3. SELECT GRANULAR WILL BE REQUIRED BETWEEN INSULATION, WATER MAIN, AND OBSTRUCTION.
4. ALL BENDS SHALL HAVE MEGALUGS OR TIE RODS WITH BLOCKING IN ACCORDANCE WITH STANDARD PLATE WAT-5.
5. COPPER TRACER WIRE SHALL BE USED ON PVC WATERMAIN.
6. ALL WATERMAIN BOLTS SHALL BE COR-BLUE OR APPROVED EQUAL.

WENCK ASSOCIATES	CLIENT: CITY OF CORCORAN	PROJECT: STANDARD PLATES	SHEET TITLE: WATER MAIN OFFSET
REV. DWN. APP. REV. DATE DWN BY CHK'D APP'D DWG DATE: JAN 2016 SKH RWS RWS	SCALE	PROJECT NO.: 2294-00	SHEET NO.: WAT–7 REV NO.



NOTES:
1. ABOVE GROUND TEST STATION SHALL BE COBRA T3 (T2-R75) OR APPROVED EQUAL. OUTDOOR RATED PVC CONDUIT SHALL BE INSTALLED FROM BOTTOM OF TEST STATION TO 2' BELOW FINISH GRADE.
2. INSTALL TRACER WIRE TO MIDDLE TERMINAL
3. INSTALL GROUNDING ANODE WIRE TO BOTTOM TERMINAL
4. CONNECT JUMPER BETWEEN MIDDLE AND BOTTOM TERMINAL
1. 22" BREAKOFF SECTION
2. LEFT HAND OPERATING NUT (1 1/2" POINT TO FLAT)
3. PAINT BARREL SECTION RED TO GRADE
4. PLUG DRAIN HOLES ONLY IF DIRECTED BY CITY ENGINEER
5. SEE DETAIL WAT-01 FOR INSTALLATION DETAILS

NOTE: HYDRANT SHALL BE PACER MODEL WB67-250

WENCK ASSOCIATES	CLIENT: CITY OF CORCORAN	PROJECT: STANDARD PLATES	SHEET TITLE: PACER HYDRANT
REV. DWN. APP. REV. DATE DWN BY CHK'D APP'D DWG DATE: JAN 2016 NPW RWS RWS	SCALE	PROJECT NO.: 2294-00	SHEET NO.: WAT–11 REV NO.

NOTE:
1. ALL SDR-35 PVC SHALL BE USED TO A DEPTH NOT TO EXCEED 16'. SDR-26 PVC SHALL BE USED FOR DEPTHS GREATER THAN 16'. C-900 PVC SHALL BE USED FOR DEPTHS GREATER THAN 25'.

WENCK ASSOCIATES	CLIENT: CITY OF CORCORAN	PROJECT: STANDARD PLATES	SHEET TITLE: BEDDING METHODS FOR PVC
REV. DWN. APP. REV. DATE DWN BY CHK'D APP'D DWG DATE: JAN 2016 SKH RWS RWS	SCALE	PROJECT NO.: 2294-00	SHEET NO.: BED–1 REV NO.

WENCK ASSOCIATES	CLIENT: CITY OF CORCORAN	PROJECT: STANDARD PLATES	SHEET TITLE: BEDDING METHODS FOR RCP, CMP & DIP
REV. DWN. APP. REV. DATE DWN BY CHK'D APP'D DWG DATE: FEB 2017 NPW RWS RWS	SCALE	PROJECT NO.: 2294-00	SHEET NO.: BED–2 REV NO.

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.00%, AND IF THE APPROACHING WALK IS DIVERSE GRADE GREATER THAN 2%.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 10'-0" FROM THE BACK OF CURB, WITH 6'-0"FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY WHERE THE CURB RAMP IS NOT PERPENDICULAR TO THE CURB.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL RUNNING SLOPE IS GREATER THAN 5.00%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR,1/4" DEEP. VITRIAL JOINTS SHALL BE USED AT THE TOPS OF CONCRETE PLANES ADJACENT TO WALKABLE SURFACES, AND SHALL BE SPACED AT 5'-0" MAX. ON CENTER. JOINTS SHALL BE PLACED AT THE TOP AND BOTTOM SIDES OF A SLOPED WALKING SURFACE WHERE SLOPE CHANGES EXCEPT AS STATED IN (2) BELOW.

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE PROPERLY CONSTRUCTED,LANDINGS SHALL BE CAST SEPARATELY,= FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 8 AND THE ADA SPECIAL PROVISIONS – PRODUCTION OF WORK (ADA).

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

WHEN THE BOULEVARD IS 4' WIDE OR LESS, THE TOP OF CURB TAPER SHALL MATCH THE RAMP SLOPES TO REDUCE NEGATIVE BOULEVARD SLOPES FROM THE TOP BACK OF CURB TO THE PAR.

ALL RAMP TYPES SHOULD HAVE A MINIMUM 3'LONG RAMP LENGTH.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS.DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN.OF 24" IN THE PATH OF TRAVEL.DETECTABLE WARNINGS SHALL BE LOCATED SO THAT THE EDGE NEAREST THE STREET IS WITHIN 6" OF THE BACK. DETECTABLE WARNINGS SHOULD BE AT LEAST THAN THE MAINTRAL WIDTH, AND LENGTH OF RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN 30 FEET.

RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3" FROM THE BACK OF CURB.RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.

① MATCH FULL HEIGHT CURB.
② 4"MINIMUM DEPTH LANDING REQUIRED ACROSS TOP OF RAMP.
③ 3" HIGH CURB WHEN USING A 3'LONG RAMP,4" HIGH CURB WHEN USING A 4'LONG RAMP.
④ SEE SHEET 4 OF 6,TYPICAL SIDE TREATMENT OPTIONS,FOR DETAILS ON FLARES AND RETURNED CURBS,WHEN INITIAL LANDING IS AT FULL CURB HEIGHT.
⑤ DETECTABLE WARNINGS MAY BE PART OF THE 4'X 4' NON-LANDING AREA BUT IT IS NOT REQUIRED TO BE.SEE SHEET 4 OF 6,DETECTABLE WARNING DETAIL,FOR MORE DETAIL.
⑥ THE GRADE BREAK SHALL BE PERPENDICULAR TO THE BACK OF WALK, THIS WILL ENSURE THAT THE GRADE BREAK IS PERPENDICULAR TO THE DIRECTION OF TRAVEL.(TYPICAL FOR ALL)
⑦ WHEN ADJACENT TO GRADED DRAINAGE SHALL ALWAYS BE USED WHEN FEASIBLE.V GUTS, WHEN ADJACENT TO PARKING LOTS,CONCRETE OR BITUMINOUS TAPERED SHOULD BE USED.
⑧ A 2' MIN TOP RADIUS GRADE BREAK REQUIRED TO BE CONSTRUCTIBLE.
⑨ FAVC FULL WALK WIDTH.
⑩ DIAGONAL RAMPS SHALL ONLY BE USED WHEN ALL OTHER FEASIBLE OPTIONS HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT.IF SITE CONDITIONS WARRANT,LONGITUDINAL SLOPES UP TO 8.33 OR FLATTER ARE ALLOWED.
- ① INDICATES PEDESTRIAN RAMP = SLOPE SHALL BE BETWEEN 5.00% AND 8.33% IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.00%
- ② INDICATES PEDESTRIAN RAMP = SLOPE SHALL BE GREATER THAN 5.00 AND LESS THAN 5.00 IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.00%
- LANDING AREA = 4'-0" MIN. BY 4'-0" MIN.PREFERRED DIMENSIONS AND MAX 2.00 SLOPE IN ALL DIRECTIONS.LANDING SHALL BE FULL WIDTH OF INCOMING PAVE.
- x" CURB HEIGHT

REVISION: APPROVED JANUARY 23, 2017 — APPROVED: 1-23-2017 REVISED:

STANDARD PLAN S-297.250 | 1 OF 6 | PEDESTRIAN CURB RAMP DETAILS

STATE PROJ. NO. (T.H.) SHEET NO. OF SHEETS

TABLE 1: MIDS GRASS CHANNEL SOIL AMENDMENT MATRIX

Vegetation Type	In-Situ Soil Type A	B	C	D
MOWED TURF SWALE OR NATIVE GRASS SWALE	Place 6" Imported Topsoil** Mix topsoil into subsoil by loosening subsoil to a minimum depth of 12"	Loosen subsoil to a minimum depth of 12"	Place 6" imported filtration soil* on top of subgrade and mix into subsoil by loosening subsoil to a minimum depth of 12"	Place 6" imported filtration soil* on top of subgrade and mix into subsoil by loosening subsoil to a minimum depth of 12"

* Filtration soil is defined as 80% clean sand mixed with 20% organic compost by volume
** Topsoil shall be sandy loam, loamy sand, or loam texture per USDA textural triangle with less than 5% clay content

GENERAL NOTES - GRASS CHANNELS AND DRY SWALES:
1. INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE SWPPP, PROJECT PLANS, AND SPECIFICATIONS IN ORDER TO EFFECTIVELY REDUCE THE VOLUME AND VELOCITY OF RUNOFF AND REDUCE EROSION OF SURFACE SOIL AND TO CONTROL SEDIMENT TRANSPORT OFF SITE DURING THE CONSTRUCTION PERIOD.
2. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING THE DURATION OF THE PROJECT.
3. SEED MIX SHALL BE SELECTED BASED ON SITE CONDITIONS INCLUDING SOIL TYPE, MOISTURE CONDITIONS, FLOW CONDITIONS, SUN VS. SHADE CONDITIONS, AESTHETICS, AND MAINTENANCE REQUIREMENTS. MNDOT SPECIFICATION 3876 PROVIDES USEFUL CRITERIA FOR SELECTING APPROPRIATE SEED MIXTURES.
4. EROSION CONTROL BLANKET SHALL BE SELECTED IN ACCORDANCE WITH MNDOT SPECIFICATION 3885.1VR FOR THE SPECIFIC SITE CONDITIONS. THE MINIMUM RECOMMENDED EROSION CONTROL BLANKET IS CATEGORY 3, 2D. MORE PERMANENT EROSION CONTROL BLANKET MAY BE REQUIRED BASED ON SWALE GRADIENT, FLOW VELOCITY, AND FLOW DEPTH.
5. EROSION CONTROL BLANKETS INSTALLATION SHALL BE IN ACCORDANCE WITH MNDOT SPECIFICATION 3885 AND MANUFACTURERS RECOMMENDATIONS FOR ANCHORING, CHECK TRENCHES, AND EDGE AND END OVERLAPS.
6. AVOID COMPACTION OF ALL IN-SITU SOILS AND IMPORTED SOILS UNLESS DIRECTED OTHERWISE. DO NOT LOOSEN SUBSOIL UNDER CHECK DAMS.
7. IF POSSIBLE, RESTRICT FLOW OR DIVERT FLOW FROM SWALE UNTIL VEGETATION IS ESTABLISHED.

TYPICAL CONSTRUCTION SEQUENCING-GRASS CHANNEL:
1. EXCAVATE CHANNEL TO SUBGRADE ELEVATIONS PER THE PLAN.
2. CONSTRUCTION SEQUENCE VARIES DEPENDING ON IN-SITU SOIL TYPE. SEE TABLE 1 FOR PROPER SEQUENCE FOR LOOSENING SUBSOILS AND ADDING SOIL AMENDMENTS.
3. LOOSEN SOIL IN A MANNER THAT AVOIDS RECOMPACTION OF THE SOIL BY CONSTRUCTION TRAFFIC.
4. AFTER SOIL LOOSENING AND ADDITION OF SOIL AMENDMENTS THE SURFACE OF THE SWALE WILL BE ROUGH.
5. IF POSSIBLE, STABILIZE ALL UPSTREAM TRIBUTARY AREAS BEFORE COMPLETING FINISH GRADING OF SWALES. THIS WILL MINIMIZE THE DEPOSITION OF SEDIMENT IN THE FINISHED SWALE.
6. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL WILL NEED TO BE REMOVED FROM THE SWALE PRIOR TO INITIATING THE NEXT STEP IN THE SEQUENCE. SEDIMENT IN THE BOTTOM OF THE SWALE WILL ONLY BE ALLOWED IF IT HAS BEEN DESIGNED TO FACILITATE STORMWATER SEDIMENT THAT HAS BEEN WASHED INTO THE SWALE DURING THE EXCAVATION PROCESS CAN SEAL THE PERMEABLE MATERIAL SIGNIFICANTLY REDUCING THE INFILTRATION CAPACITY OF THE SOILS.
7. FINISH GRADE THE SWALE USING METHODS THAT AVOID RECOMPACTION OF LOOSENED SOIL. ACCEPTABLE METHODS INCLUDE HAND RAKING, SMOOTHING WITH A BACKHOE BUCKET FROM OUTSIDE THE LIMITS OF THE SWALE, AND/OR PULLING A DRAG BEHIND LOW GROUND PRESSURE EQUIPMENT SEE AN ATV.
8. SOW SEED AND PLACE EROSION CONTROL BLANKET AFTER FINISH GRADING AND BEFORE THE FIRST RAINFALL EVENT (WITHIN 24 HOURS IS PREFERRED). DEPOSITION OF SEDIMENT ON TOP OF THE EROSION CONTROL BLANKET SHALL BE REMOVED TO A DEPTH LESS THAN ONE INCH. SEDIMENT WASHING OFF SITE. SEDIMENT ON TOP OF THE EROSION CONTROL BLANKET SHALL BE REMOVED TO A DEPTH LESS THAN ONE INCH.
9. IF STEP 6 IS NOT COMPLETED BEFORE THE FIRST RAINFALL EVENT, REPAIR ALL AREAS OF EROSION CAUSED BY THE RAINFALL EVENT. REMOVE SEDIMENT FROM THE SWALE BEFORE SOWING SEED AND PLACING EROSION CONTROL BLANKET. EROSION REPAIR AND SEDIMENT REMOVAL SHALL BE COMPLETED WITHOUT COMPACTING THE SOIL (SEE STEP 5).

TYPICAL CONSTRUCTION SEQUENCING-DRY SWALES (SEE SHEET 2):
1. EXCAVATE CHANNEL TO SUBGRADE ELEVATIONS PER THE PLAN.
2. CONSTRUCT CHECK DAMS AT THE LOCATIONS AND TO THE ELVATIONS SHOWN ON THE PLANS.
3. CONSTRUCTION SEQUENCE VARIES DEPENDING ON IN-SITU SOIL TYPE. SEE TABLE 1 FOR PROPER SEQUENCE FOR LOOSENING SUBSOILS AND ADDING SOIL AMENDMENTS.
4. LOOSEN SOIL IN A MANNER THAT AVOIDS RECOMPACTION OF THE SOIL BY CONSTRUCTION TRAFFIC. DO NOT LOOSEN SOILS UNDER CHECK DAMS.
5. INSTALL UNDERDRAIN (IF SPECIFIED) AFTER LOOSENING SUBGRADE SOILS. CAREFULLY COVER UNDERDRAIN WITH SAND TO AVOID COMPACTION AND CLOGGING OF THE PIPE. USE LIGHT EQUIPMENT AND HAND PLACEMENT AS NECESSARY TO AVOID DAMAGING THE PIPE DURING SUBSEQUENT CONSTRUCTION ACTIVITIES.
6. STABILIZE ALL UPSTREAM TRIBUTARY AREAS BEFORE COMPLETING FINISH GRADING OF SWALES. THIS WILL MINIMIZE THE DEPOSITION OF SEDIMENT IN THE FINISHED SWALE.
7. FINISH GRADE THE SWALE USING METHODS THAT AVOID RECOMPACTION OF LOOSENED SOIL. ACCEPTABLE METHODS INCLUDE HAND RAKING, SMOOTHING WITH A BACKHOE BUCKET FROM OUTSIDE THE LIMITS OF THE SWALE, AND/OR PULLING A DRAG BEHIND LOW GROUND PRESSURE EQUIPMENT SEE AN ATV.
8. SOW SEED AND PLACE EROSION CONTROL BLANKET AFTER FINISH GRADING AND BEFORE THE FIRST RAINFALL EVENT (WITHIN 24 HOURS IS PREFERRED). DEPOSITION OF SEDIMENT ON TOP OF THE EROSION CONTROL BLANKET SHALL BE REMOVED TO A DEPTH LESS THAN ONE INCH. SEDIMENT WASHING OFF SITE. SEDIMENT ON TOP OF THE EROSION CONTROL BLANKET SHALL BE REMOVED TO A DEPTH LESS THAN ONE INCH.
9. IF STEP 6 IS NOT COMPLETED BEFORE THE FIRST RAINFALL EVENT, REPAIR ALL AREAS OF EROSION CAUSED BY THE RAINFALL EVENT. REMOVE SEDIMENT FROM THE SWALE BEFORE SOWING SEED AND PLACING EROSION CONTROL BLANKET. EROSION REPAIR AND SEDIMENT REMOVAL SHALL BE COMPLETED WITHOUT COMPACTING THE SOIL (SEE STEP 5).

TYPICAL GRASS CHANNEL SECTIONS AND DESIGN MATRIX

Sheet No. 1 of 2 Sheets

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Name: Trevor D. Gray - PE
Date 05-19-2020 Lic./Reg. No. 53706

Issued For

Item	Date
SD ISSUE	04-29-2020
CUP ISSUE	05-19-2020

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Sheet Title
CIVIL DETAILS

Sheet No.
251.CD

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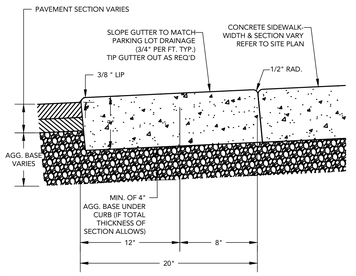
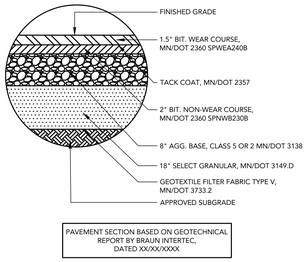


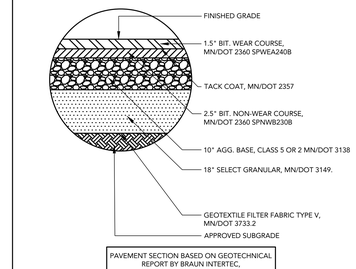
SPECIFICATION NOTES:
1. UPON COMPLETION, CURBING SHOULD BE SPRAYED WITH A MEMBRANE CURING COMPOUND PER MNDOT 3754.
2. EXPANSION JOINTS AT MAX. SPACING OF 200'.
3. CONSTRUCT IN ACCORDANCE WITH MNDOT 2531.

LOUCKS	FLAT CURB AND GUTTER (12")	LOUCKS PLATE NO. 2012
		DRAWN 2/2016



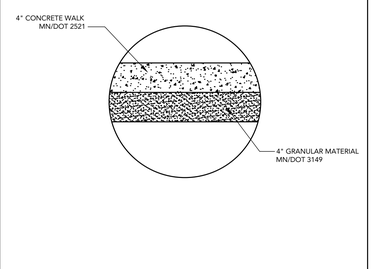
PAVEMENT SECTION BASED ON GEOTECHNICAL REPORT BY BRAUN INTERTEC, DATED XX/XX/XXXX

LOUCKS	STANDARD BITUMINOUS PAVEMENT SECTION	LOUCKS PLATE NO. 2031
		DRAWN 12/2016

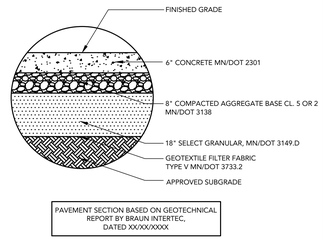


PAVEMENT SECTION BASED ON GEOTECHNICAL REPORT BY BRAUN INTERTEC, DATED XX/XX/XXXX

LOUCKS	HEAVY DUTY BITUMINOUS PAVEMENT SECTION	LOUCKS PLATE NO. 2032
		DRAWN 12/2016



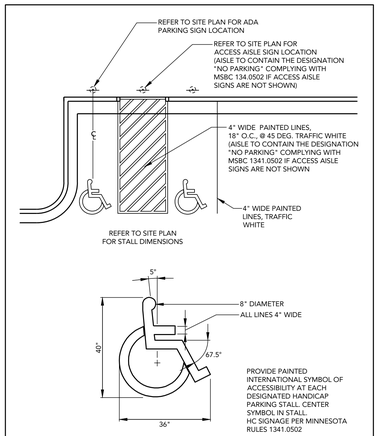
LOUCKS	CONCRETE SIDEWALK SECTION	LOUCKS PLATE NO. 2034
		DRAWN 12/2016



PAVEMENT SECTION BASED ON GEOTECHNICAL REPORT BY BRAUN INTERTEC, DATED XX/XX/XXXX

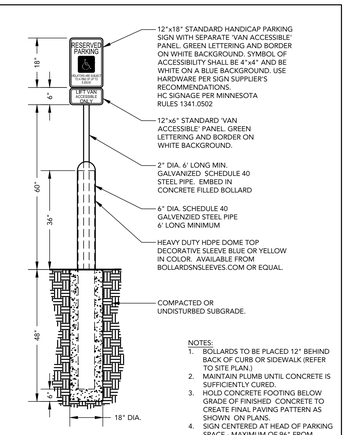
NOTES:
1. CONCRETE 6" THICK OR LESS SHALL BE REINFORCED WITH WELDED WIRE FABRIC OR REINFORCING BARS. CONCRETE 7" THICK OR GREATER SHALL BE REINFORCED PER GEOTECHNICAL RECOMMENDATIONS.
2. SAWED OR FORMED CONTROL JOINTS SHOULD BE INCLUDED FOR EACH 225 SQUARE FEET OF AREA OR LESS (15 FEET BY 15 FEET).
3. SAW CUTS SHOULD NOT CUT THROUGH THE WELDED WIRE FABRIC OR REINFORCING STEEL AND DOWELS SHOULD BE UTILIZED AT FORMED AND/OR COLD JOINTS.

LOUCKS	CONCRETE PAVEMENT SECTION	LOUCKS PLATE NO. 2033
		DRAWN 12/2016



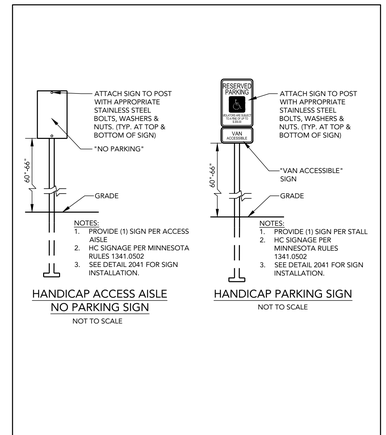
NOT TO SCALE

LOUCKS	TYPICAL ADA PARKING STALL STRIPING	LOUCKS PLATE NO. 2037
		DRAWN 03/2017



NOTES:
1. BOLLARDS TO BE PLACED 12" BEHIND BACK OF CURB OR SIDEWALK (REFER TO SITE PLAN.)
2. MAINTAIN PLUMB UNTIL CONCRETE IS SUFFICIENTLY CURED.
3. HOLD CONCRETE FOOTING BELOW GRADE OF FINISHED CONCRETE TO CREATE FINAL PAVING PATTERN AS SHOWN ON PLANS.
4. SIGN CENTERED AT HEAD OF PARKING SPACE - MAXIMUM OF 96" FROM HEAD OF PARKING SPACE.

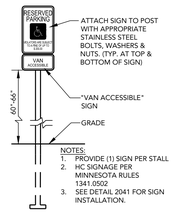
LOUCKS	ADA PARKING SIGN / BOLLARD COMBO LIFT VAN ACCESSIBLE ONLY	LOUCKS PLATE NO. 2038B
		DRAWN 02/2019



NOTES:
1. PROVIDE (1) SIGN PER ACCESS AISLE
2. HC SIGNAGE PER MINNESOTA RULES 1341.0502
3. SEE DETAIL 2041 FOR SIGN INSTALLATION.

HANDICAP ACCESS AISLE NO PARKING SIGN

NOT TO SCALE

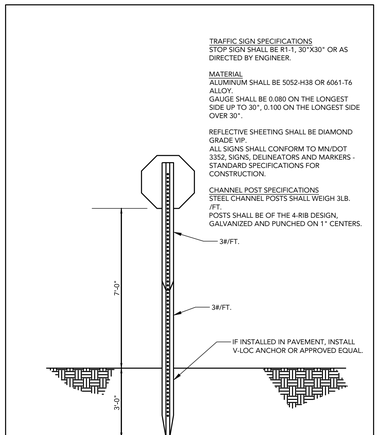


NOTES:
1. PROVIDE (1) SIGN PER STALL
2. HC SIGNAGE PER MINNESOTA RULES 1341.0502
3. SEE DETAIL 2041 FOR SIGN INSTALLATION.

HANDICAP PARKING SIGN

NOT TO SCALE

LOUCKS	TYPICAL ADA PARKING SIGN	LOUCKS PLATE NO.
		DRAWN 12/2016



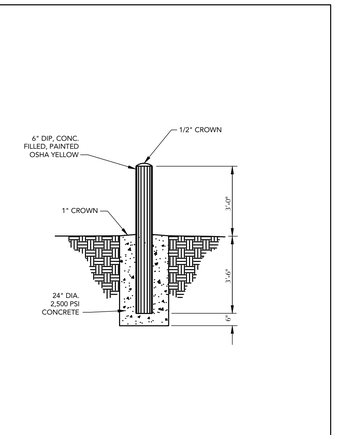
TRAFFIC SIGN SPECIFICATIONS
STOP SIGN SHALL BE R1-1, 30"X30" OR AS DIRECTED BY ENGINEER.

MATERIAL
ALUMINUM SHALL BE 5052-H38 OR 6061-T6 ALLOY.
GAUGE SHALL BE 0.080 ON THE LONGEST SIDE UP TO 30", 0.100 ON THE LONGEST SIDE OVER 30".

REFLECTIVE SHEETING SHALL BE DIAMOND GRADE VIP.
ALL SIGNS SHALL CONFORM TO MN/DOT 3352, SIGNS, DELINEATORS AND MARKERS - STANDARD SPECIFICATIONS FOR CONSTRUCTION.

CHANNEL POST SPECIFICATIONS
STEEL CHANNEL POSTS SHALL WEIGH 3LB. /FT.
POSTS SHALL BE OF THE 4-RIB DESIGN, GALVANIZED AND PUNCHED ON 1" CENTERS.

LOUCKS	TRAFFIC SIGN	LOUCKS PLATE NO. 2041
		DRAWN 12/2016



LOUCKS	BOLLARD	LOUCKS PLATE NO. 2039
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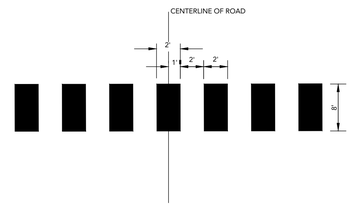
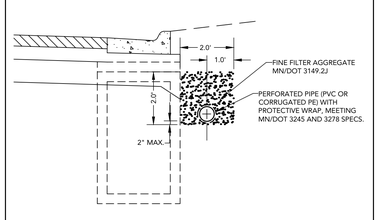
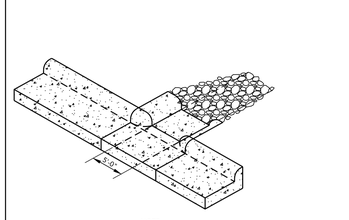


CROSSWALK BAR TO MEET CURRENT MMUTCD STANDARDS

LOUCKS	CROSSWALK BAR	LOUCKS PLATE NO. 2040
		DRAWN 12/2016



LOUCKS	PERFORATED DRAIN TILE PIPE	LOUCKS PLATE NO. 4314
		DRAWN 2/2016

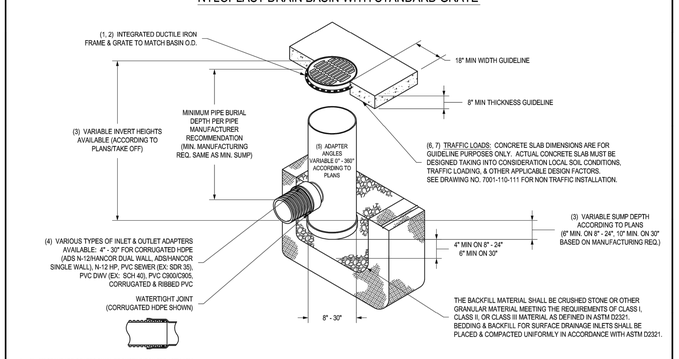


NOTE:
CURB CUT TO BE CONSTRUCTED AT LOCATIONS AS SHOWN ON SITE &/OR GRADING PLAN. COST OF CUT TO BE INCIDENTAL TO B6 DESIGN CONCRETE CURB & GUTTER.

CONCRETE CURB CUT

LOUCKS	CONCRETE CURB CUT SWALE	LOUCKS PLATE NO. 2022
		DRAWN 2/2016

NYLOPLAST DRAIN BASIN WITH STANDARD GRATE



1 - 8" - 30" STANDARD GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - 12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. 8" & 10" STANDARD GRATES FIT DIRECTLY ONTO DRAIN BASINS WITH THE USE OF A PVC BODY TOP. SEE DRAWING NO. 7001-110-045.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
6 - 12" - 30" STANDARD GRATES SHALL MEET H-20 LOAD RATING.
7 - 8" & 10" STANDARD GRATES ARE RATED FOR LIGHT DUTY APPLICATIONS ONLY; NO CONCRETE COLLAR NEEDED FOR LIGHT DUTY RATING.

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DATE	1-23-06		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	03-11-16		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

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TITLE: DRAIN BASIN WITH STANDARD GRATE QUICK SPEC INSTALLATION DETAIL

DWG NO. 7001-110-144 REV H

8001149/PLANS

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed/Registered Professional Engineer under the laws of the State of Minnesota

Name
Trevor D. Gray - PE
Date 05-19-2020 Lic./Reg. No. 53706

Issued For

Item	Date
SD ISSUE	04-29-2020
CUP ISSUE	05-19-2020

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Sheet Title
CIVIL DETAILS

Sheet No.
252.CD

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PLANT SCHEDULE					
DECIDUOUS TREES	QTY	COMMON NAME	BOTANICAL NAME	CONT	CAL
WB	4	WHITESPIRE BIRCH CLUMP	Betula papulifolia 'Whitespire Sr'	B & B	
SKH	11	SKYLINE HONEYLOCUST	Gleditsia triacanthos 'Skycole'	B & B	2.5"Cal
QB	18	SWAMP WHITE OAK	Quercus bicolor	B & B	2.5"Cal
RO	10	RED OAK	Quercus rubra	B & B	2.5"Cal
AE	27	ACCOLADE ELM	Ulmus 'Morton'	B & B	2.5"Cal
EVERGREEN TREES	QTY	COMMON NAME	BOTANICAL NAME	CONT	CAL
BB	11	BLACK HILLS SPRUCE FULL FORM	Picea glauca 'Densata'	B & B	
WHP	20	WHITE PINE FULL FORM	Pinus strobus	B & B	8' HGT
ORNAMENTAL TREES	QTY	COMMON NAME	BOTANICAL NAME	CONT	CAL
ABS	6	AUTUMN BRILLIANCE SERVICEBERRY	Amelanchier x grandiflora 'Autumn Brilliance'	B & B	2.5"Cal
SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	CONT	SIZE AT PLANTING
DG	33	GLOSSY BLACK CHOKEBERRY	Aronia melanocarpa elata	5 gal	24" HGT
AH	30	ANNABELLE HYDRANGEA	Hydrangea arborescens 'Annabelle'	5 gal	24" HGT
GF	114	GRO-LOW FRAGRANT SUMAC	Rhus aromatica 'Gro-Low'	5 gal	24" SPRD
CONIFEROUS SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	CONT	SIZE AT PLANTING
SG	56	SEA GREEN JUNIPER	Juniperus chinensis 'Sea Green'	5 gal	18" SPRD
GROUND COVERS	COMMON NAME	BOTANICAL NAME	CONT	FIELD2	SPACING
	STONE MULCH GRAY TRAP ROCK 2" OVER FABRIC		None		
	DECORATIVE STONE BED HAND PLACED DALTON LIMESTONE SIZE - 8"-15" DIAMETER OVER FABRIC		None		
	PLANT BED		seed		
	STORMWATER NATIVE SEED MIX STORMWATER SOUTH & WEST SEED MIX - BWSR SEED MIX #33-261. APPLY PER MNDOT MANUAL RECOMMENDATIONS		seed		
	NATIVE SEED MIX DRY PRAIRIE SEED MIX - BWSR SEED MIX #35-621. APPLY PER MNDOT MANUAL RECOMMENDATIONS		seed		
	TURF SOD		sod		

0 50 100
SCALE IN FEET

NOTE:
EXISTING CONDITIONS INFORMATION SHOWN IS FROM A TOPOGRAPHIC SURVEY PREPARED BY E. G. RUD & SONS, INC. AND DATED APRIL, 2020.

LANDSCAPE REQUIREMENTS:

1 TREE PER 1,000 SF. OF BUILDING AREA
(71,000 SF. / 1,000 SF. = 71 TREES)
OR
1 TREE PER 50 LF. OF SITE PERIMETER
(4,370 LF. / 50 LF. = 87 TREES)

1 SHRUBS PER 300 SF. OF BUILDING AREA
(271,000 SF. / 300 SF. = 237 SHRUBS)
OR
1 SHRUBS PER 30 LF. OF SITE PERIMETER
(4,370 LF. / 30 LF. = 146 SHRUBS)

REQUIRED TREES:	87
PROVIDED TREES:	87
REQUIRED SHRUBS:	237
PROVIDED SHRUBS:	237

GENERAL NOTES:

CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID. INSPECT SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS RELATING TO THE NATURE AND SCOPE OF WORK.

VERIFY LAYOUT AND ANY DIMENSIONS SHOWN AND BRING TO THE ATTENTION OF THE LANDSCAPE ARCHITECT ANY DISCREPANCIES WHICH MAY COMPROMISE THE DESIGN AND/OR INTENT OF THE PROJECT'S LAYOUT.

ASSURE COMPLIANCE WITH ALL APPLICABLE CODES AND REGULATIONS GOVERNING THE WORK OR MATERIALS SUPPLIED.

CONTRACTOR SHALL PROTECT ALL EXISTING ROADS, CURBS/GUTTERS, TRAILS, TREES, LAWNS AND SITE ELEMENTS DURING PLANTING OPERATIONS. ANY DAMAGE TO SAME SHALL BE REPAIRED AT NO COST TO THE OWNER.

CONTRACTOR SHALL VERIFY ALIGNMENT AND LOCATION OF ALL UNDERGROUND AND ABOVE GRADE UTILITIES AND PROVIDE THE NECESSARY PROTECTION FOR SAME BEFORE CONSTRUCTION / MATERIAL INSTALLATION BEGINS (MINIMUM 10' - 0" CLEARANCE).

ALL UNDERGROUND UTILITIES SHALL BE LAID SO THAT TRENCHES DO NOT CUT THROUGH ROOT SYSTEMS OF ANY EXISTING TREES TO REMAIN.

EXISTING CONTOURS, TRAILS, VEGETATION, CURB/GUTTER AND OTHER EXISTING ELEMENTS BASED UPON INFORMATION SUPPLIED TO LANDSCAPE ARCHITECT BY OTHERS. CONTRACTOR SHALL VERIFY ANY AND ALL DISCREPANCIES PRIOR TO CONSTRUCTION AND NOTIFY LANDSCAPE ARCHITECT OF SAME.

THE ALIGNMENT AND GRADES OF THE PROPOSED WALKS, TRAILS AND/OR ROADWAYS ARE SUBJECT TO FIELD ADJUSTMENT REQUIRED TO CONFORM TO LOCALIZED TOPOGRAPHIC CONDITIONS AND TO MINIMIZE TREE REMOVAL AND GRADING. ANY CHANGE IN ALIGNMENT MUST BE APPROVED BY LANDSCAPE ARCHITECT.

REFER TO SHEET L101 - LANDSCAPE DETAILS FOR LANDSCAPE DETAILS, LANDSCAPE NOTES AND OTHER ITEMS RELATED TO THE LANDSCAPE PLAN.

REFER TO SHEET L200 - TREE PRESERVATION PLAN FOR EXISTING TREES TO BE REMOVED, TREE INVENTORY LIST, AND DETAILS FOR THE PRESERVATION OF EXISTING TREES TO BE SAVED.

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

WARNING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

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WEST METRO CAMPUS

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Saint Paul, MN 55102
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Name
Nathan Elkott - LA
Date 05-19-2020 Lic./Reg. No. 52050

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Sheet Title
LANDSCAPE PLAN

Sheet No.
260.LP

LANDSCAPE INSTALLATION: [redacted]

COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATION WITH OTHER CONTRACTORS WORKING ON SITE.

NO PLANTING WILL BE INSTALLED UNTIL COMPLETE GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.

WHERE SOD/SEED ABUTS PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC.

SEED ALL AREAS DISTURBED DUE TO GRADING OTHER THAN THOSE AREAS NOTED TO RECEIVE SOD. SEED SHALL BE INSTALLED AND MULCHED AS PER MNDOT SPECS.

SOD ALL DESIGNATED AREAS DISTURBED DUE TO GRADING. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, THE SOD SHALL BE STAKED TO THE GROUND.

ALL PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERYMEN. UNLESS NOTED OTHERWISE, ALL SHRUBS SHALL HAVE AT LEAST 5 CANES AT THE SPECIFIED MINIMUM SHRUB HEIGHT OR WIDTH. ORNAMENTAL TREES SHALL HAVE NO V CROTCHES AND SHALL BEGIN BRANCHING NO LOWER THAN 3' ABOVE ROOT BALL, STREET AND BOULEVARD TREES SHALL BEGIN BRANCHING NO LOWER THAN 5' ABOVE FINISHED GRADE.

ANY CONIFERROUS TREE PREVIOUSLY PRUNED FOR CHRISTMAS TREE SALES SHALL NOT BE USED. ALL CONIFEROUS TREES SHALL BE FULL FORM, NATURAL TO THE SPECIES, WITHOUT PRUNING.

PLAN TAKES PRECEDENCE OVER PLANT SCHEDULE IF DISCREPANCIES IN QUANTITIES EXIST. SPECIFICATIONS TAKE PRECEDENCE OVER NOTES.

NO PLANT MATERIAL SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL IS REQUESTED OF THE LANDSCAPE ARCHITECT BY THE LANDSCAPE CONTRACTOR PRIOR TO THE SUBMISSION OF A BID AND/OR QUOTATION.

ALL PROPOSED PLANTS SHALL BE LOCATED AND STAKED AS SHOWN ON PLAN. ADJUSTMENTS IN LOCATION OF PROPOSED PLANT MATERIALS MAY BE NEEDED IN FIELD. SHOULD AN ADJUSTMENT BE ADVISED, THE LANDSCAPE ARCHITECT MUST BE NOTIFIED.

ALL PLANT MATERIALS SHALL BE FERTILIZED UPON INSTALLATION WITH A 27-3-3 SLOW RELEASE FERTILIZER MIXED IN WITH THE PLANTING SOIL PER THE MANUFACTURER'S INSTRUCTIONS. PLANTS MAY BE TREATED FOR SUMMER AND FALL INSTALLATION WITH AN APPLICATION OF GRANULAR 27-3-3 AT 6 OZ PER 2.5" CALIPER PER TREE AND 3 OZ PER SHRUB WITH AN ADDITIONAL APPLICATION OF 27-3-3 THE FOLLOWING SPRING IN THE TREE SAUCER.

ALL PLANTING AREAS RECEIVING GROUND COVER, PERENNIALS, ANNUALS, AND/OR VINES SHALL RECEIVE A MINIMUM OF 12" DEPTH OF PLANTING SOIL CONSISTING OF AT LEAST 45 PARTS TOPSOIL, 45 PARTS PEAT OR MANURE AND 10 PARTS SAND.

ALL PLANTS TO BE INSTALLED AS PER PLANTING DETAILS. REMOVE ALL FLAGGING AND LABELS FROM PLANTS.

WRAPPING MATERIAL SHALL BE CORRUGATED PVC PIPING 1" GREATER IN CALIPER THAN THE TREE BEING PROTECTED OR QUALITY, HEAVY, WATERPROOF CREPE PAPER MANUFACTURED FOR THIS PURPOSE. WRAP ALL DECIDUOUS TREES PLANTED IN THE FALL PRIOR TO 12-1 AND REMOVE ALL WRAPPING AFTER 5-1.

BLACK METAL EDGER TO BE USED TO CONTAIN SHRUBS, PERENNIALS, AND ANNUALS WHERE BED MEETS SOD/SEED UNLESS NOTED OTHERWISE.

ALL ANNUAL AND PERENNIAL PLANTING BEDS TO RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH WITH NO WEED BARRIER.

ALL SHRUB BED MASSINGS TO RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH AND FIBER MAT WEED BARRIER.

ALL TREES TO RECEIVE 4" DEEP SHREDDED HARDWOOD MULCH WITH NO MULCH IN DIRECT CONTACT WITH TREE TRUNK.

SPREAD GRANULAR PRE EMERGENT HERBICIDE (PREEN OR EQUAL) PER MANUFACTURER'S RECOMMENDATIONS UNDER ALL MULCHED AREAS.

MAINTENANCE STRIPS TO HAVE METAL EDGER AND ROCK COBBLE MULCH AS SPECIFIED/INDICATED ON DRAWING OR IN SPECIFICATION.

IF THE LANDSCAPE CONTRACTOR IS CONCERNED OR PERCEIVES ANY DEFICIENCIES IN THE PLANT SELECTIONS, SOIL CONDITIONS OR ANY OTHER SITE CONDITION WHICH MIGHT NEGATIVELY AFFECT PLANT ESTABLISHMENT, SURVIVAL OR GUARANTEE, HE MUST BRING THESE DEFICIENCIES TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO PROCUREMENT AND/OR INSTALLATION.

CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR THE OWNER ACCEPTANCE INSPECTION OF ALL LANDSCAPE AND SITE IMPROVEMENTS.

CONTRACTOR IS RESPONSIBLE FOR ON-GOING MAINTENANCE OF ALL NEWLY INSTALLED MATERIALS UNTIL TIME OF OWNER ACCEPTANCE. ANY ACTS OF VANDALISM OR DAMAGE WHICH MAY OCCUR PRIOR TO OWNER ACCEPTANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL PROVIDE THE OWNER WITH A MAINTENANCE PROGRAM INCLUDING, BUT NOT NECESSARILY LIMITED TO, PRUNING, FERTILIZATION AND DISEASE/PEST CONTROL.

CONTRACTOR SHALL GUARANTEE NEW PLANT MATERIAL THROUGH ONE CALENDAR YEAR FROM THE DATE OF OWNER ACCEPTANCE.

WARRANTY (ONE FULL GROWING SEASON) FOR LANDSCAPE MATERIALS SHALL BEGIN ON THE DATE OF ACCEPTANCE BY THE LANDSCAPE ARCHITECT AFTER THE COMPLETION OF PLANTING OF ALL LANDSCAPE MATERIALS. NO PARTIAL ACCEPTANCE WILL BE CONSIDERED.

UNLESS NOTED OTHERWISE THE APPROPRIATE DATES FOR SPRING PLANT MATERIAL INSTALLATION AND SEED/SOD PLACEMENT IS FROM THE TIME GROUND HAS THAWED TO JUNE 15.

FALL SODDING IS GENERALLY ACCEPTABLE FROM AUGUST 15 - NOVEMBER 1. FALL SEEDING FROM AUGUST 15 - SEPTEMBER 15; DORMANT SEEDING IN THE FALL SHALL NOT OCCUR PRIOR TO NOVEMBER 1. FALL CONIFEROUS PLANTING MAY OCCUR FROM AUGUST 15 - OCTOBER 1 AND DECIDUOUS PLANTING FROM THE FIRST FROST UNTIL NOVEMBER 15. PLANTING OUTISIDE THESE DATES IS NOT RECOMMENDED. ANY ADJUSTMENT MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.

PROTECT ALL EXISTING OAKS ON SITE SCHEDULED TO REMAIN. IF EXISTING OAKS ARE DAMAGED IN ANY MANNER, ABOVE OR BELOW GROUND IN THE ROOT SYSTEM, AN ASPHALTIC TREE PRUNING PAINT SHOULD BE APPLIED IMMEDIATELY AFTER WOUNDING. OAKS ARE NOT TO BE PRUNED, REMOVED OR TRANSPLANTED BETWEEN APRIL 15 AND JULY 1. NOTIFY LANDSCAPE ARCHITECT IF THESE DATES ARE UNAVOIDABLE.

LANDSCAPE CONTRACTOR SHALL ESTABLISH TO HIS SATISFACTION THAT SOIL AND COMPACTION CONDITIONS ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AT AND AROUND THE BUILDING SITE.

IRRIGATION NOTES: [redacted]

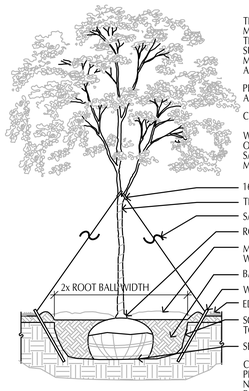
VERIFY EXISTING/PROPOSED IRRIGATION SYSTEM LAYOUT AND CONFIRM COMPLETE LIMITS OF IRRIGATION PRIOR TO SUPPLYING SHOP DRAWINGS.

LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN IRRIGATION LAYOUT PLAN AND SPECIFICATION AS A PART OF THE SCOPE OF WORK WHEN BIDDING. THESE SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ORDER AND/OR INSTALLATION. IT SHALL BE THE LANDSCAPE CONTRACTORS RESPONSIBILITY TO INSURE THAT ALL SODDED/SEEDED AND PLANTED AREAS ARE IRRIGATED PROPERLY, INCLUDING THOSE AREAS DIRECTLY AROUND AND ABUTTING BUILDING FOUNDATION.

THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER WITH AN IRRIGATION SCHEDULE APPROPRIATE TO THE PROJECT SITE CONDITIONS AND TO PLANT MATERIAL GROWTH REQUIREMENTS.

IRRIGATION SYSTEM IS NOT TO SPRINKLE ACROSS PAVEMENT. THE SYSTEM SHALL INCORPORATE A RAIN SENSOR INTO IRRIGATION SYSTEM.

PLANTINGS OUTSIDE THE LIMITS OF IRRIGATION ARE TO BE WATERED REGULARLY UNTIL PLANTING/SOD/SEED HAS BEEN ESTABLISHED.



THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TREES IN A PLUMB POSITION THROUGH THE WARRANTY PERIOD. STAKING IS SUGGESTED, BUT NOT REQUIRED. ANY STAKING MUST CONFORM WITH PRACTICES AS DEFINED IN A.N.A. GUIDELINES FOR STANDARD PRACTICES

PRUNE DAMAGED AND CROSSING BRANCHES AFTER PLANTING IS COMPLETE.

CUT BACK WIRE BASKET

WATER TREE THOROUGHLY DURING PLANTING OPERATIONS. PLACE BACKFILL IN 8-12" LIFTS AND SATURATE SOIL WITH WATER. DO NOT COMPACT MORE THAN NECESSARY TO MAINTAIN PLUMB.

16"x2" POLYPROPYLENE OR POLYETHYLENE STRAP

TREE WRAP TO FIRST BRANCH

SAFETY FLAGGING - ONE PER WIRE

ROOT FLARE EVEN WITH OR JUST ABOVE GRADE.

MULCH - 4" DEEP. NO MULCH IN CONTACT WITH TRUNK - SEE NOTES OR SPECS.

BACKFILL WITH IN SITU TOPSOIL

WOOD STAKE (OPTIONAL)

EDGE VARIES - SEE PLAN

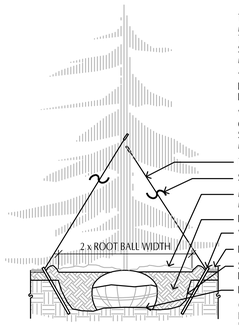
SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING

SET PLANT ON UNDISTURBED NATIVE SOIL

CONTRACTOR IS RESPONSIBLE FOR TESTING PERCOLATION RATES PRIOR TO PLANTING. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF POOR DRAINAGE EXISTS.

1 / 270.0LD — DECIDUOUS TREE PLANTING DETAIL

SCALE: 1/2" = 1'-0" — Deciduous Tree.DWG



THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TREES IN A PLUMB POSITION THROUGH THE WARRANTY PERIOD. STAKING IS SUGGESTED, BUT NOT REQUIRED. ANY STAKING MUST CONFORM WITH PRACTICES AS DEFINED IN A.N.A. GUIDELINES FOR STANDARD PRACTICES.

PRUNE ANY DAMAGED BRANCHES AFTER PLANTING IS COMPLETE.

WATER TREE THOROUGHLY DURING PLANTING OPERATIONS. PLACE BACKFILL IN 8-12" LIFTS AND SATURATE SOIL WITH WATER. DO NOT COMPACT MORE THAN NECESSARY TO MAINTAIN PLUMB.

16"x2" POLYPROPYLENE OR POLYETHYLENE STRAP

SAFETY FLAGGING - ONE PER WIRE

MULCH - 4" DEEP - SEE NOTES OR SPECS. MULCH MUST NOT BE IN CONTACT WITH TRUNK.

BACKFILL WITH IN SITU TOPSOIL

WOOD STAKE (OPTIONAL)

EDGE VARIES - SEE PLAN

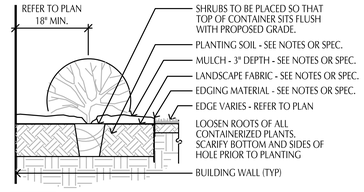
SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING

ROOT BALL SET ON UNDISTURBED SUBGRADE

CONTRACTOR IS RESPONSIBLE FOR TESTING PERCOLATION RATES PRIOR TO PLANTING. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF POOR DRAINAGE EXISTS.

2 / 270.0LD — CONIFEROUS TREE PLANTING DETAIL

SCALE: 1/2" = 1'-0" — Coniferous Tree.DWG



SHRUBS TO BE PLACED SO THAT TOP OF CONTAINER SITS FLUSH WITH PROPOSED GRADE.

PLANTING SOIL - SEE NOTES OR SPEC.

MULCH - 3" DEPTH - SEE NOTES OR SPEC.

LANDSCAPE FABRIC - SEE NOTES OR SPEC.

EDGING MATERIAL - SEE NOTES OR SPEC.

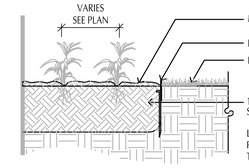
EDGE VARIES - REFER TO PLAN

LOOSEN ROOTS OF ALL CONTAINERIZED PLANTS. SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING

BUILDING WALL (TYP)

3 / 270.0LD — SHRUB PLANTING DETAIL

SCALE: 3/4" = 1'-0"



MULCH - 3" MIN. DEPTH - SEE NOTES OR SPECS.

EDGER - SEE NOTES OR SPECS.

EDGE VARIES - SEE PLAN

12" DEPTH (MIN). LOAM PLANTING SOIL - SEE NOTES OR SPECS.

LOOSEN ROOTS OF PLANT MATERIAL PRIOR TO PLANTING

4 / 270.0LD — PERENNIAL PLANTING

SCALE: 3/4" = 1'-0" — Perennial.Dwg

EAGLE BROOK CHURCH
WEST METRO CAMPUS

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Saint Paul, MN 55102
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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed/Registered Landscape Architect under the laws of the State of Minnesota

Name: Nathan Elliott - LA

Date 05-19-2020 Lic./Reg. No. 52050

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Sheet Title

LANDSCAPE DETAILS

Sheet No.

270.LD

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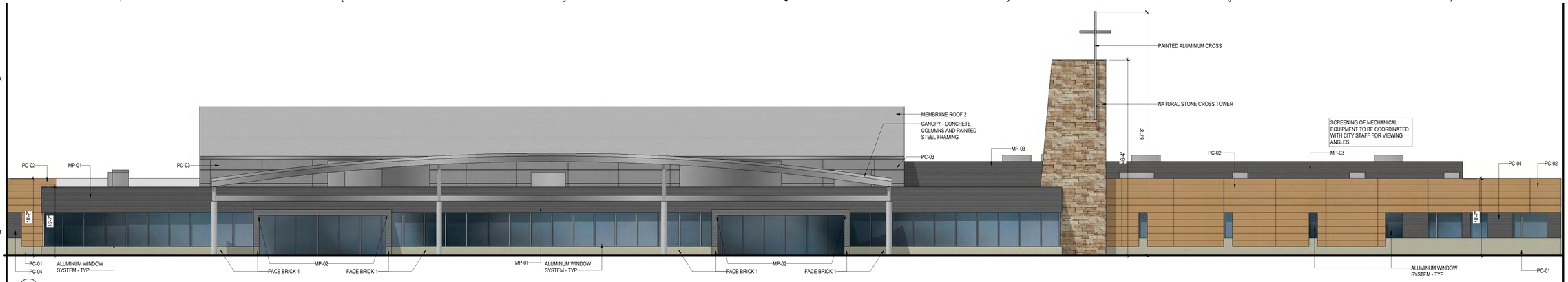
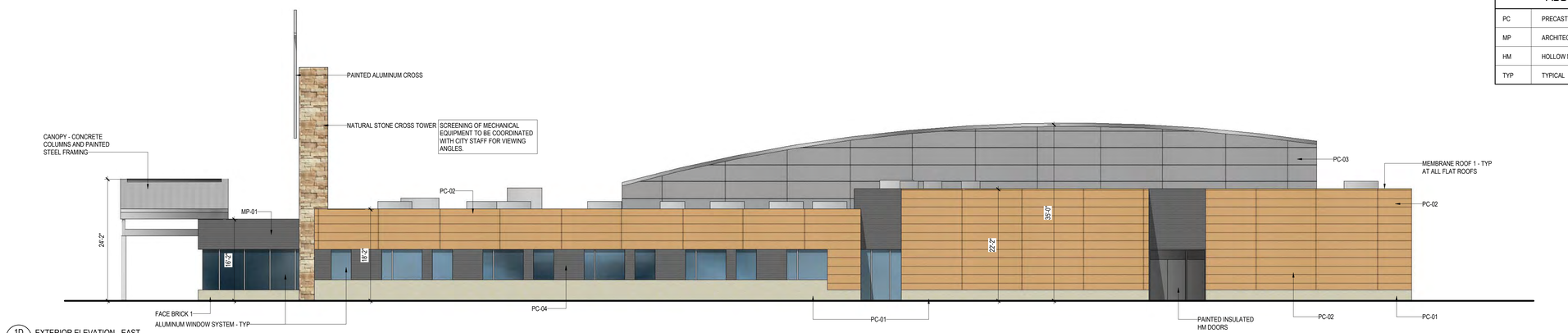
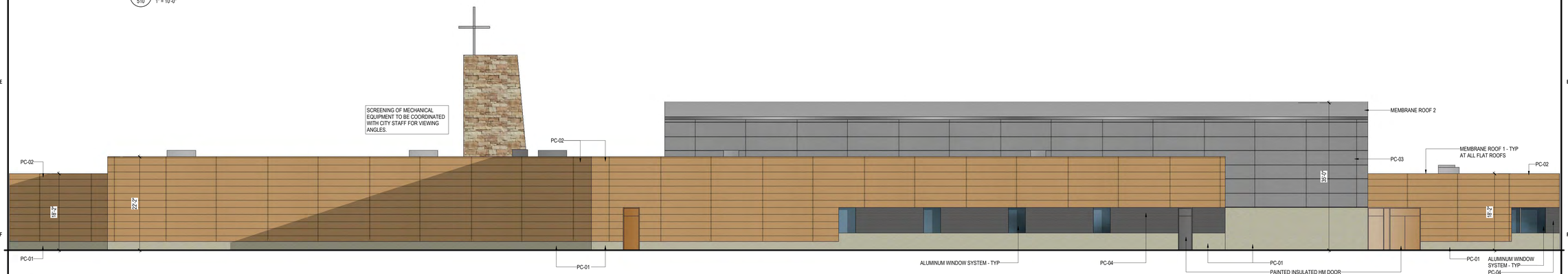


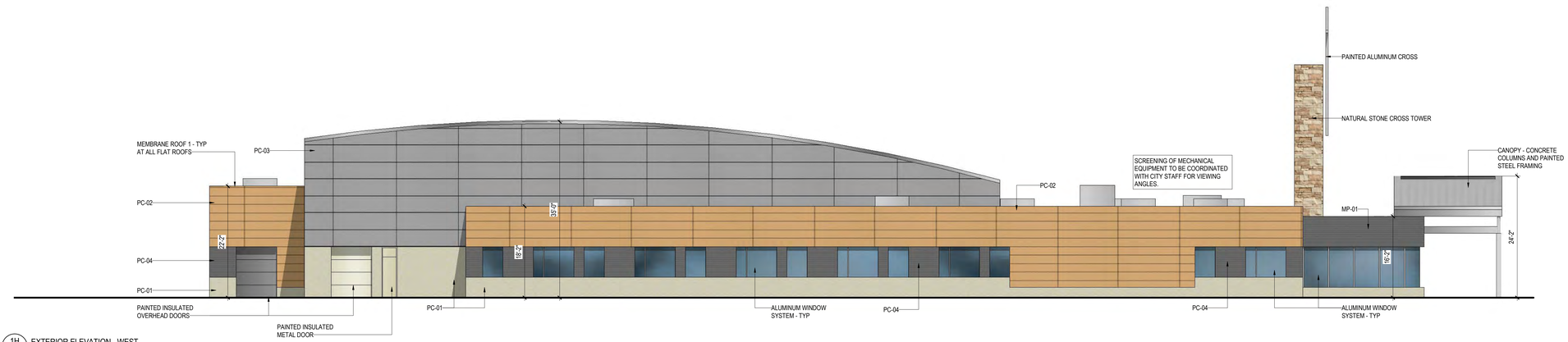
1B 510 EXTERIOR ELEVATION - SOUTH
1" = 10'-0"



1D 510 EXTERIOR ELEVATION - EAST
1" = 10'-0"



1F 510 EXTERIOR ELEVATION - NORTH
1" = 10'-0"



1H 510 EXTERIOR ELEVATION - WEST
1" = 10'-0"

ABBREVIATIONS

PC	PRECAST CONCRETE
MP	ARCHITECTURAL METAL PANEL
HM	HOLLOW METAL
TYP	TYPICAL

EAGLE BROOK CHURCH
WEST METRO CAMPUS

BWBR

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Name

Date Lic./Reg. No.

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Keyplan

Comm. No. **3.2019149.00** Drawn **ARS**

Sheet Title
EXTERIOR ELEVATIONS

Sheet No.
510

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PRELIMINARY PLAT

~of~ EAGLE BROOK CHURCH FIRST ADDITION

FOR: Eagle Brook Church
7105 20th Avenue
Centerville, MN 55038

EXISTING LEGAL DESCRIPTIONS

PER TITLE COMMITMENT FOR 6301 COUNTY ROAD 101 (PID: 36-119-23-44-0008), PREPARED BY COMMERCIAL PARTNERS TITLE, LLC, AS ISSUING AGENT FOR STEWART TITLE GUARANTY COMPANY, ISSUING AGENT FILE NO. 56969 — The North 310.00 feet of the South 1010.00 feet of East 780.00 feet of Southeast Quarter of the Southeast Quarter of Section 36, Township 119, Range 23, Hennepin County, Minnesota.

PER TITLE COMMITMENT FOR 19200 HACKAMORE ROAD (PID: 36-119-23-44-0014), PREPARED BY COMMERCIAL PARTNERS TITLE, LLC, AS ISSUING AGENT FOR STEWART TITLE GUARANTY COMPANY, ISSUING AGENT FILE NO. 56970 — The East 874.5 feet of the South 400 feet of the Southeast Quarter (SE 1/4) of the Southeast Quarter (SE 1/4) of Section 36, Township 119, Range 23, West of the 5th Principal Meridian according to the U.S. Government Survey thereof, Hennepin County, Minnesota.

PER TITLE COMMITMENT FOR 19220 HACKAMORE ROAD (PID: 36-119-23-44-0009), PREPARED BY COMMERCIAL PARTNERS TITLE, LLC, AS ISSUING AGENT FOR STEWART TITLE GUARANTY COMPANY, ISSUING AGENT FILE NO. 56971 — The South 700 feet of that part of the Southeast Quarter of the Southeast Quarter of Section 36, Township 119 North, Range 23, West of the 5th Principal Meridian, lying Westerly of the East 874.5 feet thereof, Hennepin County, Minnesota.

PER TITLE COMMITMENT FOR 19210 HACKAMORE ROAD (PID: 36-119-23-44-0013), PREPARED BY COMMERCIAL PARTNERS TITLE, LLC, AS ISSUING AGENT FOR STEWART TITLE GUARANTY COMPANY, ISSUING AGENT FILE NO. 56980 — That part of the Southeast Quarter of the Southeast Quarter (SE1/4 of SE1/4) of Section 36, Township 119 North, Range 23, West of the Fifth Principal Meridian, lying West of the East 780 feet thereof and which lies North of the South 700 feet thereof, according to the U.S. Government Survey thereof.

PER TITLE COMMITMENT FOR 6235 COUNTY ROAD 101 (PID: 36-119-23-44-0010), PREPARED BY COMMERCIAL PARTNERS TITLE, LLC, AS ISSUING AGENT FOR STEWART TITLE GUARANTY COMPANY, ISSUING AGENT FILE NO. 56981 — The East 874.5 feet of the North 300 feet of the South 700 feet of the Southeast Quarter of the Southeast Quarter (SE1/4 of SE1/4) of Section 36, Township 119, Range 23, Hennepin County, Minnesota.

EXISTING ZONING INFORMATION

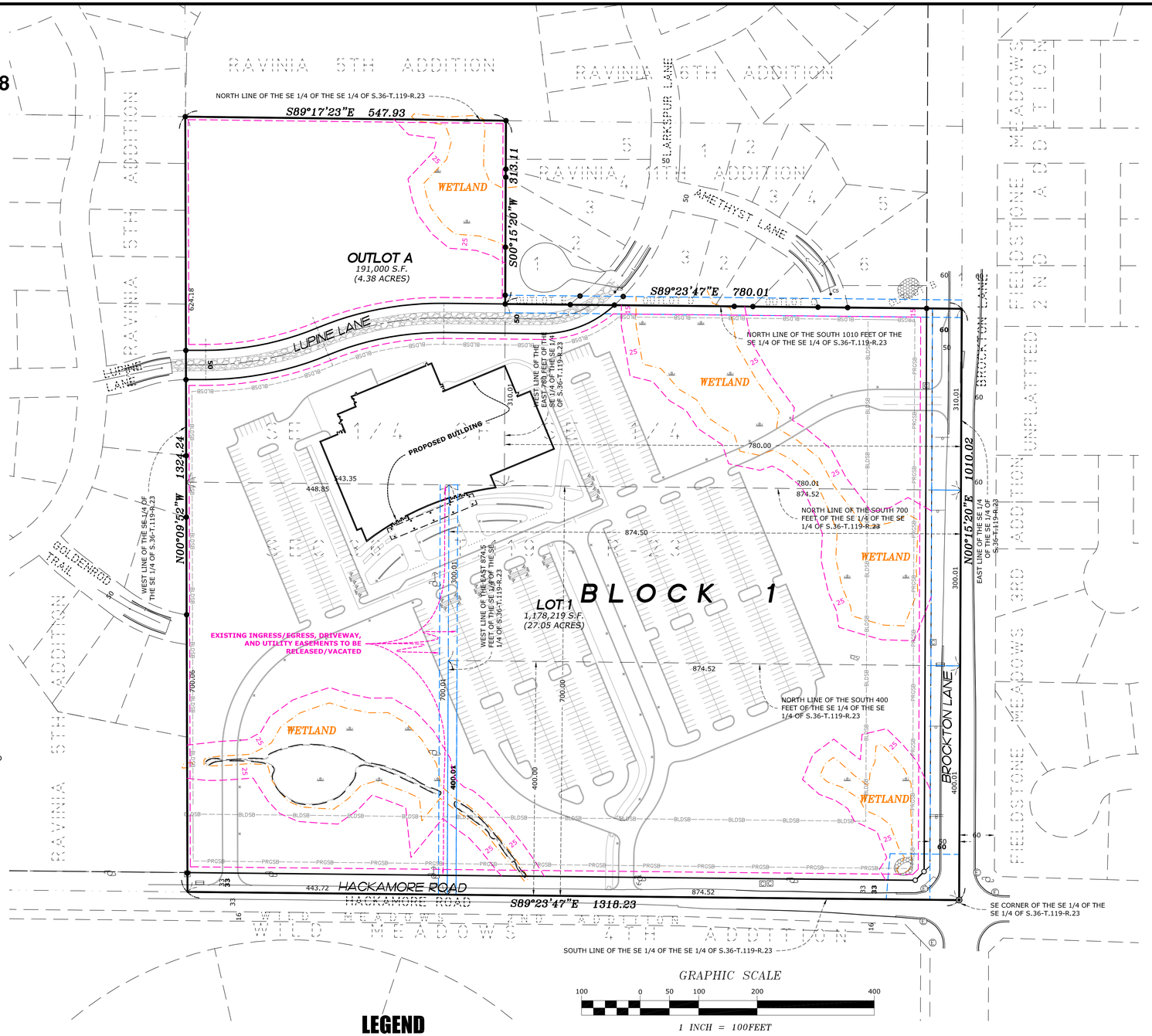
A zoning endorsement letter was not furnished to the surveyor. A search of the City of Corcoran's web site indicates that the surveyed premises shown on this survey are all currently zoned RSF-2 (Single Family Residential 2 District). Under the applicable zoning regulations, the current setbacks are:

Building:
- Front (major roadways) = 100 feet
- Front (all other streets) = 20 feet
- Side (house) = 10 feet
- Side (garage) = 5 feet
- Rear = 30 feet

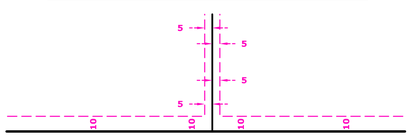
For additional information contact the Planning and Zoning Department at the City of Corcoran at (763)-400-7033.

NOTES

- Field survey was completed by E.G. Rud and Sons, Inc. in March and April of 2020.
- Bearings shown are on Hennepin County datum.
- Addresses and PID's of the surveyed premises:
  - 6301 County Road 101 (PID: 36-119-23-44-0008)
  - 19200 Hackamore Road (PID: 36-119-23-44-0014)
  - 19220 Hackamore Road (PID: 36-119-23-44-0009)
  - 19210 Hackamore Road (PID: 36-119-23-44-0013)
  - 6235 County Road 101 (PID: 36-119-23-44-0010)
- Surveyed premises shown on this survey map is in Flood Zone X (Areas determined to be outside the 0.2% annual chance floodplain.), according to Flood Insurance Rate Map Community No. 270155 Panel No. 0159 Suffix F by the Federal Emergency Management Agency, effective date November 4, 2016.
- Location of utilities existing on or serving the surveyed property determined by:
  - Observed evidence collected pursuant to Section 5.E.iv.
  - Markings requested by E.G. Rud and Sons per Gopher State One Call Ticket No.'s 200660636, 200660637, 200660638, 200660639, and 200660640.
  - Record drawings provided by the City of Corcoran's engineering department.
- Excavations were not made during the process of this survey to locate underground utilities and/or structures. The location of underground utilities and/or structures may vary from locations shown hereon and additional underground utilities and/or structures may be encountered. Contact Gopher State One Call Notification Center at (651) 454-0002 for verification of utility type and field location, prior to excavation.
- Proposed site plan is shown per Site plan prepared by BWBR.



STANDARD EASEMENT DETAIL



DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:

BEING 10 FEET IN WIDTH AND ADJOINING RIGHT-OF-WAY LINES, AND BEING 5 FEET IN WIDTH AND ADJOINING LOT LINES, UNLESS OTHERWISE NOTED AS SHOWN ON THIS PLAT.

(1:50 SCALE)

NORTH

BENCHMARK

MNDOT NAME: 2722 Y
GSID STATION: # 10305
ELEVATION: 979.677 (NAVD88)

LEGEND

- DENOTES IRON MONUMENT FOUND AS LABELED
- DENOTES IRON MONUMENT SET, MARKED RLS# 41578
- DENOTES FOUND MAGNETIC DRAW
- DENOTES AIR CONDITIONING UNIT
- DENOTES BRACE POLE OR GUY POLE
- DENOTES CATCH BASIN
- DENOTES CABLE PEDESTAL
- DENOTES CLEAN OUT
- DENOTES CURB STOP
- DENOTES ELECTRICAL BOX
- DENOTES ELECTRICAL MANHOLE
- x 952.36 DENOTES EXISTING SPOT ELEVATION
- DENOTES FIBER OPTIC BOX
- DENOTES GAS METER
- DENOTES WELL
- DENOTES WATER VALVE
- DENOTES GAS VALVE
- DENOTES GUY WIRE
- DENOTES HAND HOLE
- DENOTES HYDRANT
- DENOTES LIGHT POLE
- DENOTES MAILBOX
- DENOTES MISCELLANEOUS MANHOLE
- DENOTES POWER POLE
- DENOTES SANITARY SEWER MANHOLE
- DENOTES SIGN
- DENOTES STORM SEWER APRON
- DENOTES STORM SEWER MANHOLE
- DENOTES FENCE
- DENOTES RETAINING WALL
- DENOTES TREE LINE
- DENOTES EXISTING SANITARY SEWER
- DENOTES EXISTING STORM SEWER
- DENOTES OVERHEAD UTILITY
- DENOTES UNDERGROUND ELECTRIC LINE
- DENOTES UNDERGROUND GAS LINE
- DENOTES UNDERGROUND CABLE LINE
- DENOTES UNDERGROUND FIBER OPTIC LINE
- DENOTES UNDERGROUND TELEPHONE LINE
- DENOTES PROPOSED EASEMENT
- DENOTES EXISTING EASEMENT
- DENOTES BUILDING SETBACK LINE
- DENOTES PARKING SETBACK LINE

PIN No. 17-119-22-14-0008
Owner: City of X
Address: Unassigned

- DENOTES TREES COVERED AREA
- DENOTES RIPRAP
- DENOTES ROCK SURFACE
- DENOTES BITUMINOUS SURFACE
- DENOTES CONCRETE SURFACE
- DENOTES GRAVEL SURFACE
- DENOTES PAVER SURFACE
- DENOTES WETLAND AS DELINEATED BY KJOLHAUG ENVIRONEMENTAL
- DENOTES ADJACENT PARCEL OWNER INFORMATION (PER HENNEPIN COUNTY TAX INFORMATION)

E. G. RUD & SONS, INC.
EST. 1977
Professional Land Surveyors
6776 Lake Drive NE, Suite 110
Lino Lakes, MN 55014
Tel. (651) 361-8200 Fax (651) 361-8701
www.egrud.com

I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

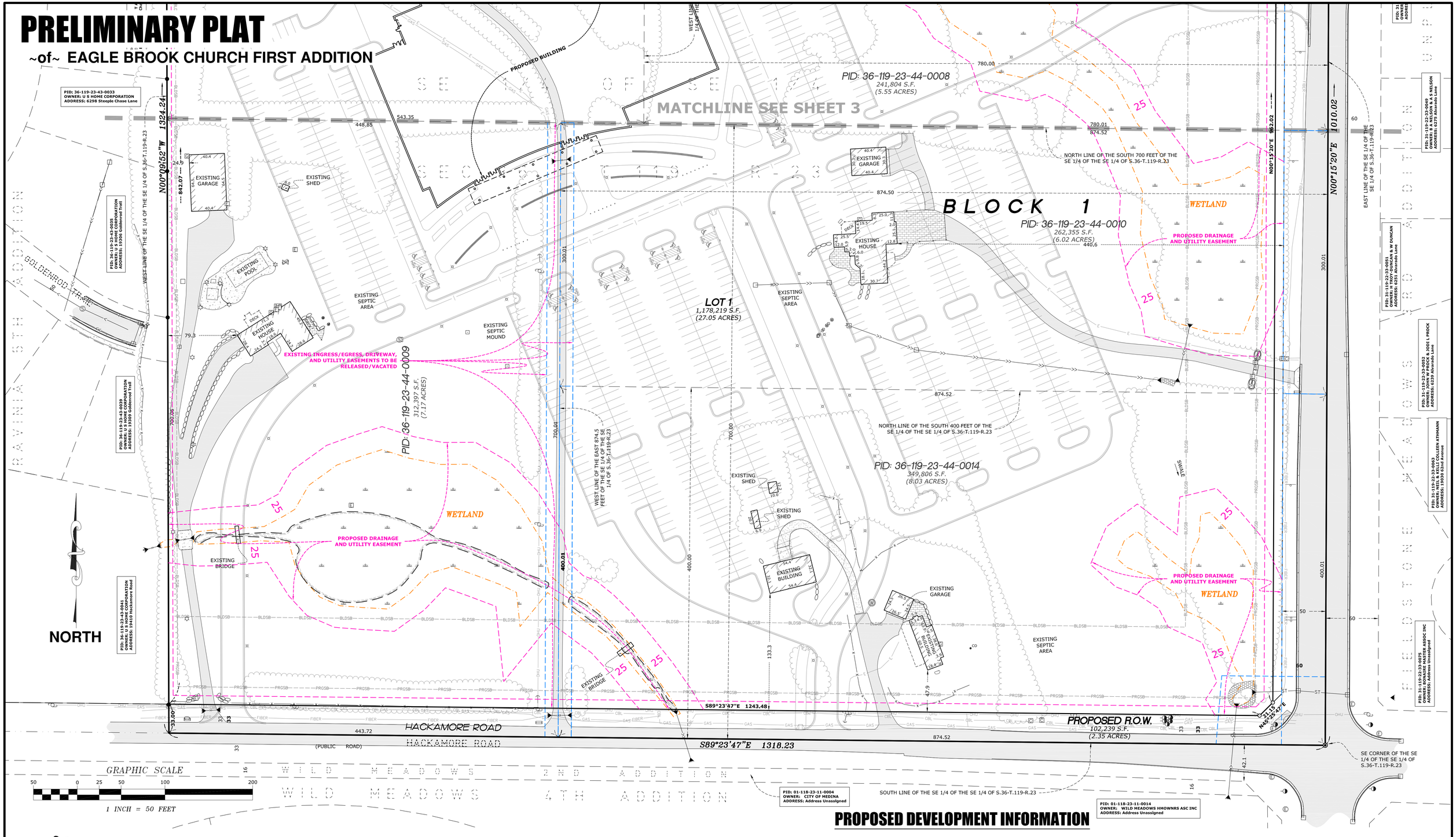
JASON E. RUD
Date: 5/18/2020 License No. 41578

DRAWN BY: CMB	JOB NO: 200191PP	DATE: 04/09/20
CHECK BY: JER	FIELD CREW: JH / CB	

NO.	DATE	DESCRIPTION	BY
1			
2			
3			

PRELIMINARY PLAT

~of~ EAGLE BROOK CHURCH FIRST ADDITION



PROPOSED DEVELOPMENT INFORMATION

NAME	AREA	PROPOSED LEGAL DESCRIPTION
Outlot A	191,000 sq. ft. (4.38± acres)	Outlot A, EAGLE BROOK CHURCH FIRST ADDITION, Hennepin County, Minnesota.
Lot 1, Block 1	1,178,219 sq. ft. (27.05± acres)	Lot 1, Block 1, EAGLE BROOK CHURCH FIRST ADDITION, Hennepin County, Minnesota.
Lupine Lane right-of-way	35,170 sq. ft. (0.81± acres)	N/A
Hackamore Road and Brockton Lane right-of-way	102,239 sq. ft. (2.35± acres)	N/A

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Lino Lakes, MN 55014
Tel. (651) 361-8200 Fax (651) 361-8701
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BENCHMARK

MNDOT NAME: 2722 Y
GSID STATION: # 10305
ELEVATION: 979.677 (NAVD88)

I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

JASON E. RUD

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NO.	DATE	DESCRIPTION	BY
1			
2			
3			

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PRELIMINARY PLAT

~of~ EAGLE BROOK CHURCH FIRST ADDITION

RAVINIA 5TH ADDITION

RAVINIA 6TH ADDITION

RAVINIA 11TH ADDITION

MEADOWS 2ND ADDITION

PID: 36-119-23-42-0054
OWNER: XI CHEN
ADDRESS: 6394 Steeple Chase Lane

PID: 36-119-23-41-0082
OWNER: RAVINIA NEIGHBORHOOD ASCN
ADDRESS: Address Unassigned

PID: 36-119-23-43-0027
OWNER: U S HOME CORPORATION
ADDRESS: 6382 Steeple Chase Lane

PID: 36-119-23-43-0028
OWNER: U S HOME CORPORATION
ADDRESS: 6370 Steeple Chase Lane

PID: 36-119-23-43-0029
OWNER: P NALLA & S BANDARU
ADDRESS: 6358 Steeple Chase Lane

PID: 36-119-23-43-0030
OWNER: A S MATHUR & P MATHUR
ADDRESS: 6346 Steeple Chase Lane

PID: 36-119-23-43-0033
OWNER: U S HOME CORPORATION
ADDRESS: 6298 Steeple Chase Lane

PID: 36-119-23-43-0032
OWNER: A CHECKETTS & T A CHECKETTS
ADDRESS: 6310 Steeple Chase Lane

PID: 36-119-23-43-0035
OWNER: U S HOME CORPORATION
ADDRESS: 19306 Goldenrod Trail

PIN No. 36-119-23-44-0028
Owner: U S Home Corporation
Address: Unassigned

PIN No. 36-119-23-44-0027
Owner: U S Home Corporation
Address: 6381 Larkspur Lane

PIN No. 36-119-23-44-0026
Owner: U S Home Corporation
Address: 6394 Larkspur Lane

PIN No. 36-119-23-44-0025
Owner: U S Home Corporation
Address: 6357 Larkspur Lane

PIN No. 36-119-23-44-0024
Owner: U S Home Corporation
Address: 6345 Larkspur Lane

PIN No. 36-119-23-44-0033
Owner: U S Home Corporation
Address: Unassigned

PIN No. 36-119-23-44-0032
Owner: U S Home Corporation
Address: Unassigned

PIN No. 36-119-23-44-0022
Owner: U S Home Corporation
Address: 19151 63rd Ave N

PIN No. 36-119-23-44-0023
Owner: U S Home Corporation
Address: 19125 63rd Ave N

PIN No. 36-119-23-44-0021
Owner: U S Home Corporation
Address: 19075 63rd Ave N

PIN No. 36-119-23-44-0031
Owner: U S Home Corporation
Address: Unassigned

PIN No. 36-119-23-44-0030
Owner: U S Home Corporation
Address: Unassigned

PID: 31-119-23-44-0020
OWNER: U S Home Corporation
Address: 19100 63rd Ave N

PID: 31-119-23-23-0012
OWNER: MARK J. LUCAS
ADDRESS: 6325 Alvarado Lane

PID: 31-119-23-23-0013
OWNER: NATHAN PAUL & ANGELA PAUL
ADDRESS: 6350 Alvarado Lane

PID: 31-119-22-33-0002
OWNER: OLGA FENIN & SERGEY FENIN
ADDRESS: 6224 Brockton Lane

PID: 31-119-22-33-0049
OWNER: JOSHUA J & KATIE A NELSON
ADDRESS: 6275 Alvarado Lane

PID: 31-119-23-23-0050
OWNER: ANDREW J & J HAWKINSON
ADDRESS: 6263 Alvarado Lane

PID: 31-119-23-23-0051
OWNER: JOHN A & M DUNCAN
ADDRESS: 6251 Alvarado Lane

NORTH LINE OF THE SE 1/4 OF THE SE 1/4 OF S.36-T.119-R.23

S89°17'23"E 547.93

S00°15'20"W 313.11

399.17

174.1

624.18

78.7

OUTLOT A
191,000 S.F.
(4.38 ACRES)

PID: 36-119-23-44-0013
340,265 S.F.
(7.81 ACRES)

WETLAND

PROPOSED DRAINAGE AND UTILITY EASEMENT

EXISTING SEPTIC AREA

EXISTING POOL

EXISTING HOUSE

EXISTING GARAGE

OUTLOT E

OUTLOT D

S89°23'47"E 780.01

146.58

40.09

533.34

N89°23'53"W 104.52

PROPOSED R.O.W.
35,170 S.F.
(0.81 ACRES)

N89°23'53"W 166.70

Δ=23°09'21" 222.28 R=550.00

Δ=43°45'34" R=180.00 137.47

S89°50'08"W 33.76

LUPINE LANE

Δ=22°23'21" 195.38 R=500.00

Δ=23°09'21" 202.07 R=500.00

Δ=22°23'21" 214.92 R=550.00

S89°50'08"W 33.76

LARKSPUR LANE

AMETHYST LANE

BROCKTON LANE (PUBLIC ROAD)

NORTH LINE OF THE SOUTH 1010 FEET OF THE SE 1/4 OF THE SE 1/4 OF S.36-T.119-R.23

WEST LINE OF THE EAST 780 FEET OF THE SE 1/4 OF THE SE 1/4 OF S.36-T.119-R.23

310.01

103.6

174.5

PROPOSED BUILDING

780.00

PID: 36-119-23-44-0008
241,804 S.F.
(5.55 ACRES)

780.01

874.52

NORTH LINE OF THE SOUTH 700 FEET OF THE SE 1/4 OF THE SE 1/4 OF S.36-T.119-R.23

EAST LINE OF THE SE 1/4 OF THE SE 1/4 OF S.36-T.119-R.23

N00°15'20"E 862.02

N00°15'20"E 1010.02

MATCHLINE SEE SHEET 2

543.35

448.85

N00°15'20"W 1324.24

WEST LINE OF THE SE 1/4 OF THE SE 1/4 OF S.36-T.119-R.23

842.07

24.9

EXISTING GARAGE

EXISTING SHED

EXISTING POOL

874.50

BLOCK 1

PID: 36-119-23-44-0010
262,355 S.F.
(6.02 ACRES)

440.6

EXISTING HOUSE

EXISTING GARAGE

EXISTING SEPTIC AREA

LOT 1

DENBROOK TRAIL

300.01

310.01

GRAPHIC SCALE

50 0 25 50 100 200

1 INCH = 50 FEET

I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minesota.

JASON E. RUD

Date: 5/18/2020 License No. 41578

E. G. RUD & SONS, INC.
EST. 1977
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NO.	DATE	DESCRIPTION	BY
1			
2			
3			

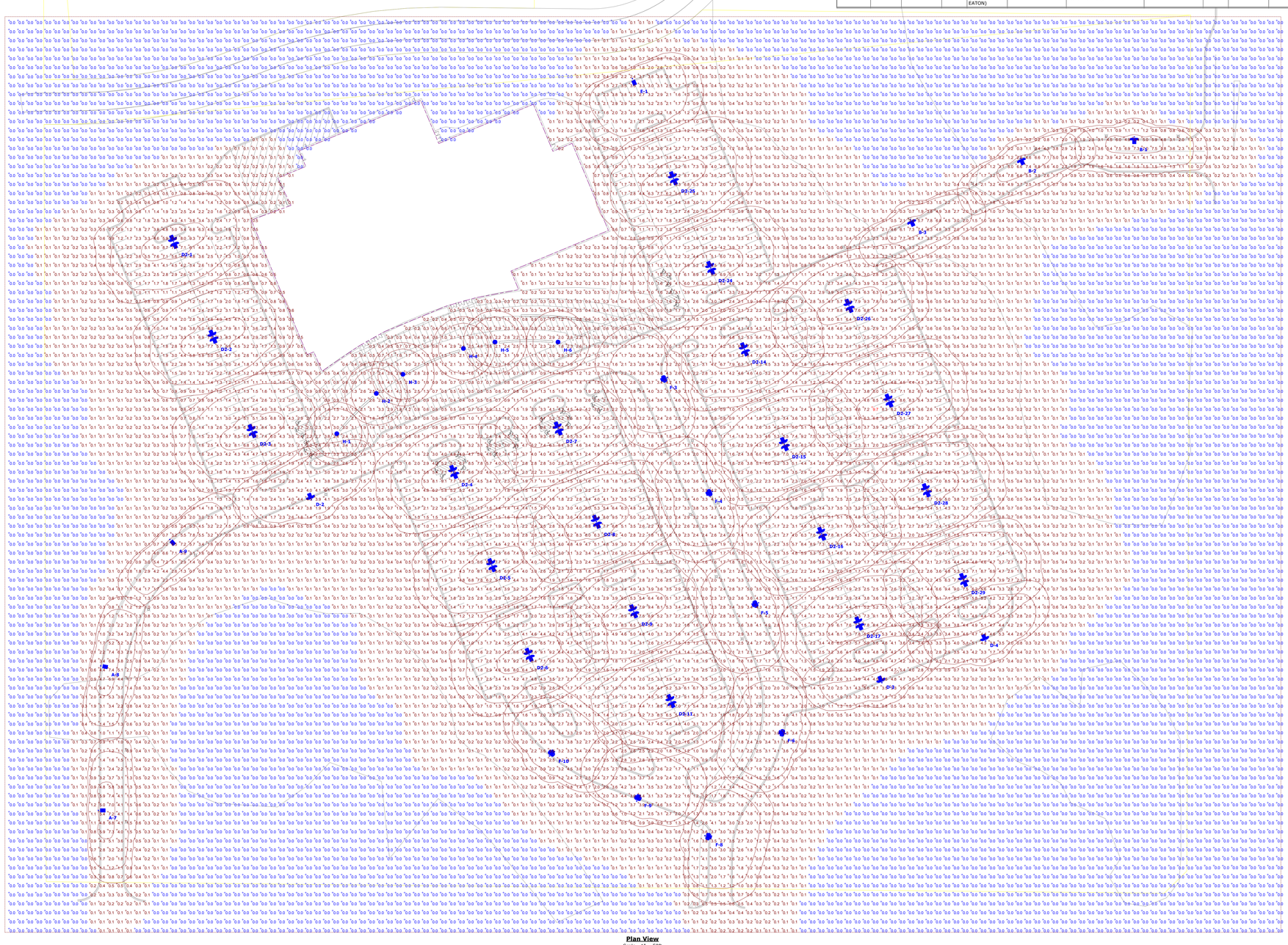
C:\USERS\CHAD\DESKTOP\DEKSTOP DWGS\200191PP\200191PP - PRE PLAT.DWG

Schedule

Symbol	Label	Image	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens per Lamp	Lumen Multiplier	LLF	Wattage	Efficiency	Distribution	Polar Plot	Notes
	A		3	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-XL-C75-D-UNV-T2-BZ-HSS	PREVAIL XL AREA AND ROADWAY LUMINAIRE (4) 70 CRI, 4000K LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD, BRONZE PAINTED FINISH		4	PRV-XL-C75-D-UNV-T2-BZ-HSS.ies	6045	1	0.9	176	100%		Max: 1752lcd	
	B		3	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-XL-C75-D-UNV-T2-BZ	PREVAIL XL AREA AND ROADWAY LUMINAIRE (4) 70 CRI, 4000K LEDS AND TYPE II OPTICS, BRONZE PAINTED FINISH		4	PRV-XL-C75-D-UNV-T2-BZ.ies	6566	1	0.9	176	100%		Max: 1762lcd	
	C		0	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-XL-C75-D-UNV-T3-BZ-HSS	PREVAIL XL AREA AND ROADWAY LUMINAIRE (4) 70 CRI, 4000K LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD, BRONZE PAINTED FINISH		4	PRV-XL-C75-D-UNV-T3-BZ-HSS.ies	5938	1	0.9	176	100%		Max: 1703lcd	
	D		3	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-XL-C75-D-UNV-T3-BZ	PREVAIL XL AREA AND ROADWAY LUMINAIRE (4) 70 CRI, 4000K LEDS AND TYPE III OPTICS, BRONZE PAINTED FINISH		4	PRV-XL-C75-D-UNV-T3-BZ.ies	6530	1	0.9	176	100%		Max: 1712lcd	
	D2		20	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-XL-C75-D-UNV-T3-BZ	PREVAIL XL AREA AND ROADWAY LUMINAIRE (4) 70 CRI, 4000K LEDS AND TYPE III OPTICS, BRONZE PAINTED FINISH		4	PRV-XL-C75-D-UNV-T3-BZ.ies	6530	1	0.9	352	100%		Max: 1712lcd	
	E		1	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-XL-C75-D-UNV-T4-BZ-HSS	PREVAIL XL AREA AND ROADWAY LUMINAIRE (4) 70 CRI, 4000K LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD, BRONZE PAINTED FINISH		4	PRV-XL-C75-D-UNV-T4-BZ-HSS.ies	5920	1	0.9	176	100%		Max: 1453lcd	
	F		7	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-XL-C75-D-UNV-T4-BZ	PREVAIL XL AREA AND ROADWAY LUMINAIRE (4) 70 CRI, 4000K LEDS AND TYPE IV OPTICS, BRONZE PAINTED FINISH		4	PRV-XL-C75-D-UNV-T4-BZ.ies	6526	1	0.9	176	100%		Max: 1498lcd	
	G		0	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	PRV-XL-C75-D-UNV-T5-BZ	PREVAIL XL AREA AND ROADWAY LUMINAIRE (4) 70 CRI, 4000K LEDS AND TYPE V OPTICS, BRONZE PAINTED FINISH		4	PRV-XL-C75-D-UNV-T5-BZ.ies	7033	1	0.9	176	100%		Max: 1039lcd	
	H		6	COOPER LIGHTING SOLUTIONS - INVUE (FORMERLY EATON)	ARB-B3-LED-D1-T5	ARBOR OUTDOOR ARCHITECTURAL POST TOP 70 CRI, 4000K LEDS AND TYPE V OPTIC, GRAPHITE METALLIC PAINTED FINISH		2	ARB-B3-LED-D1-T5.ies	4256	1	0.9	86	100%		Max: 2704cd	

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	1.0 fc	9.7 fc	0.0 fc	N/A	N/A



Plan View
Scale - 1" = 50ft

ESTD. 1977 Gephart ELECTRIC

EAGLE BROOK CHURCH
WEST METRO CAMPUS

Designer
JD
Date
5/18/2020
Scale
1"=50'-0"
Drawing No.

Summary

From: Erica Dovenberg
To: Brad Martens
Subject: Re: May 28 Council Meeting Open Forum – Public Comment Opportunity
Date: Thursday, May 28, 2020 10:10:57 AM

Brad,

Thank you very much for your prompt reply. Since learning of the proposed development, my fellow neighbors and I have been in communication with a number of local residents, all of whom live within direct line of sight of the proposed development. This includes residents of Corcoran, Maple Grove, Medina and Hamel. We are all universally opposed to the development, and we urge the Counsel to work with Eagle Brook to identify a more suitable location for its new facility.

The development plan includes features far more appropriate for a commercial or industrial zone versus an area slated for low density residential. Specifically, we understand that the plan includes:

1) Over 830 parking spots. This would be the largest parking lot in Corcoran, and includes nearly 20% more parking spots than the Target complex at highway 55 and 101.
2) A building edifice covering over 70,000 square feet. This is roughly 10% larger than the Plymouth Cub Foods and more than twice the size of the Medina Entertainment Center.
3) The requirement for a significant traffic pattern adjustment.

We understand that some people have suggested that the local residents would prefer to see the Eagle Brook development as opposed to additional residential units. This couldn't be further from the truth. The proposed project is not a good fit for the area (it's much more akin to a strip mall or big box retailer), and we would much rather see additional residential development instead. Most of us live in the area for the rural feel, and most of us checked the local zoning before purchasing our homes. We never would have imagined a building the size of Cub Foods in our back yards.

In addition, we want to note that RLUPA does not grant "carte blanche" to religious institutions to build wherever they wish. This is especially true when decisions are made in a non-discriminatory manner and where the church cannot claim a "substantial burden." These are technical legal issues, but to be clear, nobody is objecting to a church being placed at 101 and Hackamore. Rather, we are objecting to a 70,000 square foot building and an 830 car parking lot being placed at 101 and Hackamore, and the associated disruptions, quality of life reduction and property value diminution that goes with it.

Erica and Bob Dovenberg

Sent from my iPad

On May 27, 2020, at 2:53 PM, Brad Martens <bmartens@ci.corcoran.mn.us> wrote:

> Hi Erica,

Thanks for reaching out in advance of the meeting and sharing your thoughts. I can use the email you sent as your comments and send it on to the Planning Commission and Council, or you can draft something different if you want and send to me. An address would be appreciated for the record. Please let me know ASAP as we're pulling together the packet for the Planning Commission next week by noon tomorrow. Council will review this at the June 25th meeting so there is more time for that packet.

I will say that the City Council has very little discretion for this type of an application. Federal legislation in the Religious Land Use Protection Act (RLUPA) limits our ability to say no to religious facilities. Churches are an allowed use in all residential districts as long as they meet our guidelines such as setbacks, height, stormwater, etc. This application would require significant improvements to the Hackamore Rd/CR 101 intersection at their expense to manage traffic and the City would work with the church to provide adequate traffic management before and after their services (Police directing traffic) planned for Saturday evening and Sunday morning (two each I believe).

Thanks again for reaching out. Once I hear back from you I'll add the information accordingly.

Sincerely,

Brad Martens
City Administrator
City of Corcoran
763-400-7030
www.ci.corcoran.mn.us

-----Original Message-----
From: erica <erica@dovenberg.com>
Sent: Wednesday, May 27, 2020 2:35 PM
To: Brad Martens <bmartens@ci.corcoran.mn.us>; erica <erica@dovenberg.com>
Subject: Re: May 28 Council Meeting Open Forum – Public Comment Opportunity

Hello,

I have a question I would like submitted for the May 28, 2020 city council meeting.

I understand the council is considering a proposed development at the corner of 101 and Hackamore. The proposed development includes, among other things, a 70,000 square foot building and parking for approximately 830 cars. I, along with numerous other residents of Corcoran, Maple Grove, Medina and Hamel are strongly opposed. What is the most effective method/venue for us to express our concern and opposition?

Thank you for your consideration.

Erica Dovenberg

LOTS 1 THRU 9:
SINGLE FAMILY RESIDENTIAL

0 50 100
SCALE IN FEET

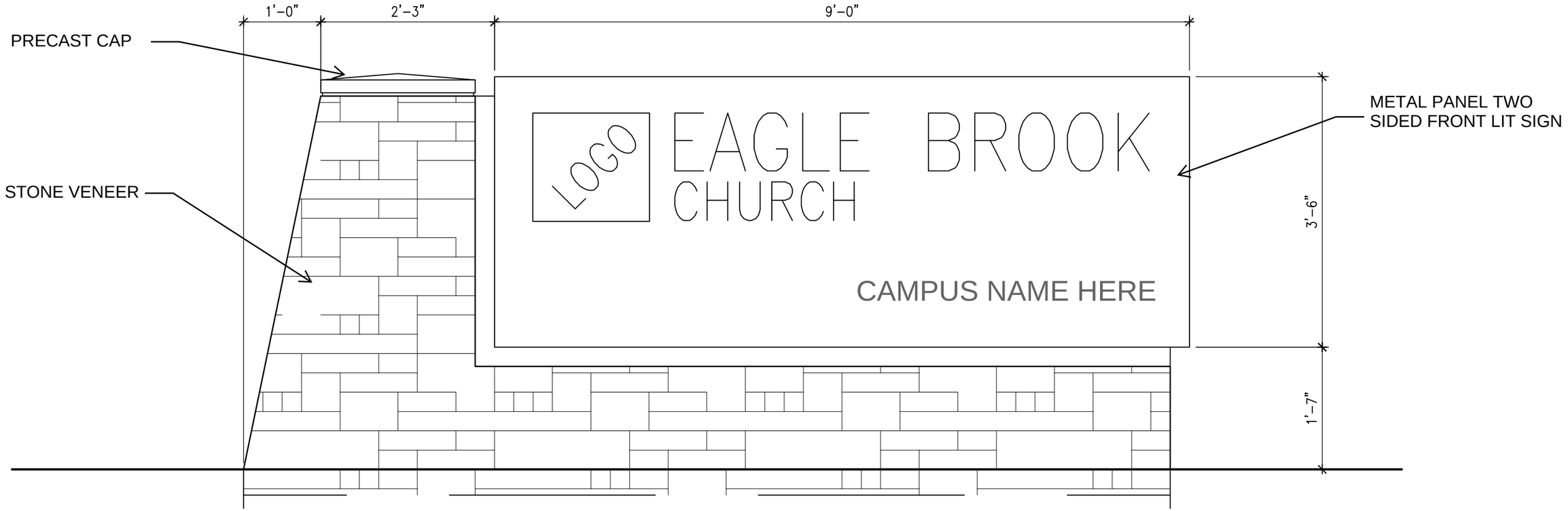
WETLAND

CUL-DE-SAC

PAVED ROAD

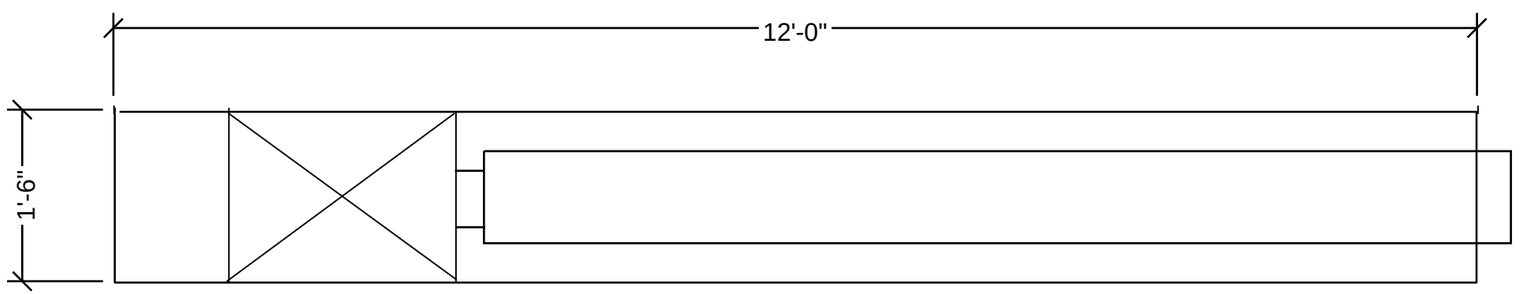
20' BUILDING
& PARKING SETBACK

PSBL



ELEVATION - MONUMENT SIGN

3/4" = 1'–0"



PLAN - MONUMENT SIGN

3/4" = 1'–0"

From:	Annika Hanson
To:	Brad Martens; Ron Thomas; Tom Anderson; Jonathan Bottema; Alan Schultz
Cc:	Dan Hanson
Subject:	EBC proposed development: VOTE NO
Date:	Thursday, June 18, 2020 3:16:05 PM

Dear Mayor and Councilors:

I am writing to you due to concern about the proposed Eagle Brook megachurch site at 101 and Hackamore Road. I do not want this proposed development to be approved, nor do my fellow residents of the Ravinia community that would back up to the megachurch site. The scale of this facility is far too large for this area and being that we are predominantly home sites for individual families, a megachurch makes absolutely no sense in that proposed location what-so-ever. Some of the council member's assumptions in the Hometown Source article DO NOT reflect the desires of our neighborhood or adjoining communities either:

- "Mayor Ron Thomas said he sees the church campus as a "pretty good fit" for the southeast corner of Corcoran."
- "City Councilor Brian Dejewski called the project a nice entrance to the city. Neighbors might be happy that a bunch of homes would not be located there."

Have any of you spent any time in our neighborhoods talking to residents? If you have, you would know why people wanted to move to this area and you would understand why a megachurch hacking apart our community is completely out of place. We moved here for good neighborhoods (people who want to be CONNECTED not divided), parks and trails, good schools and all-around good planning behaviors from the city and land developers. I think most of the planning to-date has been exceptional in Corcoran and I've really enjoyed being a resident here for the last 14 months. To that end, putting a ridiculously giant building/campus right in the middle of four suburban residential areas is completely out of place for anyone living in these communities and will destroy the feeling of "neighborhood" as well as our property values.

Had the MegaChurch been built years ago and THEN the city planned/approved hundreds of homesites around that area, at least anyone moving in would be able to accept and agree to that set up. And if they don't, they can build or buy and live somewhere else. That is not the case for anyone living in this area now, including the adjoining communities in Wild Meadows (Medina), Bonaire, the recent SE corner development by Hanson Builders and nearby Maple Grove neighborhoods. You have now negatively impacted four different suburban communities, thousands of residents and nearby homesites with this proposed plan. While some residents (like us) are part of newer developments others have been established for almost 20 years.

From a Corcoran residential standpoint, we don't need a designated "entrance" to the city and "welcoming" residents with a church is not what I would consider welcoming by any means. Corcoran has a beautiful essence of simplicity, peacefulness and calm via planful nature preserves and the appropriate scaling of residential expansion. I feel relaxed everyday living here. The essence of the area will drastically and negatively change with this industrial-sized park-like development of the mega church with expansive parking lots, lighting and a maintenance plan that will include year-round destructive noise pollution not to mention traffic congestion unseen in this area.

The proposed 70,000 square foot building is as big as four Office Depot stores together, as big as two Best Buy stores together, and a little bigger than the size of the Plymouth Cub Foods. The 850-space parking lot that is proposed to be in the backyards of me and my neighbors is the largest in the city and bigger than the one at the Target complex in Medina. This plan has much more in common with a big-box commercial development than with the conventional notion of a church, but generating much denser traffic. You would not build a Best Buy on this corner to "welcome" people to Corcoran. Why would you consider a MegaChurch to be suitable or acceptable?

Even comparing it to nearby churches, the Lord of Life building on 101 a few miles north is around half the size of the proposed Eagle Brook facility, and the Saint Thomas the Apostle church in the business district of Corcoran is less than 6,000 square feet. The closest church building of this size is Holy Name of Jesus in Wayzata, but it also includes a preschool - 6th grade school facility. However, Holy Name only has 550 parking spaces (35% less) and is in a rural zone where parking is ~200 feet away from any neighboring homes. Further, Eagle Brook is still apparently growing, and may need to become even bigger over time.

I have had the opportunity to speak with several nearby residents who either border the proposed site or live in other parts of the Ravinia development, as well as residents of adjoining neighborhoods in Wild Meadows and Bonaire. We have concerns about traffic, noise, public safety, lack of privacy, and loss of home values due to this development. The surges of traffic into and out of the area due to service start times are unlike any other land use in the area. This is an unacceptable outcome to all of us.

This is at a scale too large for a low density residential area with hundreds of already established residents and hundreds of millions of dollars in property values that could be negatively impacted. We have bought homes expecting residential traffic and further low density residential development. Instead, this plan would give us large, sharply defined surges of people into and out of the area before and after service times at a church the size of a shopping mall.

This megachurch building should go to a site that is less developed or the scale of the building reduced to match the low density zoning in this area. Corcoran's land mass footprint is the equivalent to Maple Grove or Plymouth as you promote on your website – with a fraction of the population and development. I cannot imagine this is THE only location to offer to this megachurch. The church site should be closer to an area that has already established itself with commercial properties like entertainment, retail, gas stations, etc. A megachurch inside of a community of homes is like putting a large, agitated Grizzly bear inside of a soft-side kiddie pool. It's going to look and feel ridiculous. It is not welcoming to anyone.

I thank you in advance for your consideration of these concerns and am grateful for the opportunity to participate in the future consideration of this proposal as the zoning ordinance provides.

Sincerely,
Annika Hanson
Ravinia neighborhood, Corcoran Resident

From: Schammel, Chelsey
To: Ron Thomas; Brad Martens
Subject: Concerned neighbor - new development proposal
Date: Thursday, June 18, 2020 2:08:43 PM

Hello!

I am writing to you in regards to the recent proposal from Eagle Brooke Church to plan development on 101 and hwy 116. As with several other neighbors, I am beyond concerned with what this could bring to the area in terms of traffic and unsafe communities. It has been such a pleasure to be a member of the Corcoran community and to see it grow with the families and kids and see what the future holds for us together. But bringing something the size of Eagle Brooke to that specific area would not create the safe space and community that we all moved here for. The addition to North Wood elementary on 101 has been fantastic, but have you ever tried to take a left out of the school neighborhood and back on to 101 in the morning? The line is always 10+ cars deep and BEYOND dangerous. Since day 1, my fear has been that it will not be until there is a major accident with one of our community's children involved that there will be change to that intersection. (this is a whole other conversation!!) Now imagine adding on the proposed development to the already high traffic area. One could argue that the timing of church services would not align with school start/finish- but I would argue back that with a campus that size my assumption is that they will have events all hours of the day.

I could go on with more reasons on why I do not feel this would be the best decision to move forward with, but I think it really comes down to what you want to community of Corcoran to look like and represent. Safety and happiness of your current population should be #1- and you would be severely harming both of these with this expansion. I am 100% for a growing community, as long as it makes sense to goals and serving those around.

Thank you for taking the time to read my email. I am happy to connect at any time to have a discussion further.

Chelsey Schammel | Optum
Brand Manager, Brand and Corporate Marketing

11000 Optum Circle, Eden Prairie, MN 55344
+1 612.237.4966
chelsey.schammel@optum.com
www.optum.com

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From:	CH Cox
To:	Brad Martens; Ron Thomas; Jonathan Bottema; Brian Dejewski; Tom Anderson
Subject:	Proposed Megachurch HWY 101 & Hackamore Road
Date:	Thursday, June 18, 2020 9:04:32 AM

Dear Mayor and Councilors,

We are writing to you due to concern about the proposed EagleBrooke megachurch site at HWY 101 and Hackamore Road. We are supportive of the idea of a church in this location, but the scale of this facility is far too large for this area.

We are very concerned about the plan to build a megachurch campus at this site. While we understand the low density zoning of the area makes it possible for the city to grant a permit to build a place of worship, the scale of the building is not on par with a common person's understanding of a place of worship.

The proposed 70,000 square foot building is as big as 4 Office Depot stores, 2 Best Buy stores, and slightly larger than the Plymouth Cub Foods. The 850 space parking lots that are proposed to be in very close proximity of the backyards of us and our neighbors is the largest in the city and bigger than the one at the Target complex in Medina. For all intents and purposes this plan has much more in common with a big-box commercial development than with the conventional notion of a church, but will negatively generate much denser traffic.

Even comparing it to nearby churches, the Lord of Life building on HWY 101 a few miles north is around half the size of the proposed EagleBrooke facility, and the Saint Thomas the Apostle church in the business district of Corcoran is less than 6,000 square feet. The closest church building of this size is Holy Name of Jesus in Wayzata, but it also includes a preschool - 6th grade school facility. However, Holy Name only has 550 parking spaces (35% less) and is in a rural zone where parking is ~200 feet away from any neighboring homes. Further, EagleBrooke is still apparently growing, and may need to expand even more over time.

I have had the opportunity to speak with several nearby residents who either border the proposed site or live in other parts of the Ravinia development, as well as residents of adjoining neighborhoods in Wild Meadows and Bonaire. We all have concerns about increased traffic, noise, public safety, lack of privacy, and loss of home values due to this development. The surges of traffic into and out of the area due to service start times are unlike any other land use in the area.

This footprint is far too large for a low density residential area with hundreds of already established residents and hundreds of millions of dollars in property values that would be negatively impacted. We have bought homes with the expectation of only residential traffic and further low density residential development. Instead, this plan would give us large, sharply defined surges of people into and out of the area before and after service times at a church the size of a shopping mall. To reiterate again, we have no issue with this being a church however the magnitude of the building and the traffic patterns it will create are our primary and the utmost concern.

This megachurch proposal should be repositioned to a site that is less developed or the scale of the building reduced to match the low density zoning in this area. We thank you in advance for your consideration of these concerns and are grateful for the opportunity to participate in the future consideration of this proposal as the zoning ordinance provides.

Sincerely,

Clayton & Heather Cox
Concerned Local Residents

From:	Gary Hahn
To:	Ron Thomas; Tom Anderson; Jonathan Bottema; Brian Dejewski; Alan Schultz; Brad Martens
Subject:	Eagle Brook Mega Church
Date:	Thursday, June 18, 2020 10:31:08 AM

Dear Mayor and Councilors,

We are writing to you due to concern about the proposed Eagle Brook megachurch site at HWY 101 and Hackamore Road. We are very concerned about the plan to build a megachurch campus at this site. While we understand the low-density zoning of the area makes it possible for the city to grant a permit to build a place of worship, the 2040 plan for Corcoran has this whole corner set up for residential development. A megachurch absolutely does not fall into that category.

The proposed 70,000 square foot building is bigger than the Target Medina complex, this is unbelievable for this area. The amount of traffic that will flow in and out is a huge cause for concern. There is a church in Plymouth on the corner of Vicksburg Ln and Old Rockford Road (Plymouth Covenant Church) that has to have a fleet of police officers to enforce traffic all day on Sundays because of how much of a cluster the area is. This proposed church is much larger, with a massive congregation, and both 101 and Hackamore are only 2-lane roads. This will bring 101 and Hackamore to a dead standstill on what should be quiet Sunday mornings in a great residential neighborhood, as well as during the Wednesday and Saturday services. This is exactly the opposite of what the 2040 plan for Corcoran states. This is NOT preserving the rural nature of Corcoran. This is NOT why we built what we planned to be our forever home in this town.

We live in Ravinia, on Larkspur lane, just a stone's throw from the proposed site. We have been conversing with neighbors, and adjacent neighborhoods and developments, and they all share our concerns. We all have concerns about increased traffic, noise, public safety, lack of privacy, and loss of home values due to this development. The surges of traffic into and out of the area due to service start times are unlike any other land use in the area.

This footprint is far too large for a low-density residential area with hundreds of already established residents and hundreds of millions of dollars in property values that would be negatively impacted. We have bought homes with the expectation of only residential traffic and further low-density residential development. Instead, this plan would give us large, sharply defined surges of people into and out of the area before and after service times at a church the size of a shopping mall. To reiterate again, we have no issue with this being a church however the magnitude of the building and the traffic patterns it will create are our primary and the utmost concern.

This megachurch proposal should be repositioned to a site that is less developed or the scale of the building reduced to match the low density zoning in this area. We thank you in advance for your consideration of these concerns and are grateful for the opportunity to participate in the future consideration of this proposal as the zoning ordinance provides.

Sincerely,

Gerard and Amber Hahn
Concerned Local Residents

612-280-8940

From:	Jeremy Nichols
To:	Tom Anderson; Ron Thomas; Jonathan Bottema; Brian Dejewski; Alan Schultz; Brad Martens
Subject:	Proposed Eagle Brook Megachurch in Ravinia
Date:	Thursday, June 18, 2020 12:20:57 PM
Attachments:	RLUIPA legal analysis.pdf

Dear Mayor & Councilors,

I am writing to you out of concern for the proposed Eaglebrook megachurch site at 101 and Hackamore Road. I am okay with the idea of a church in this location, but the scale of this facility is far too large for this area.

I live in Corcoran at 6334 Steeple Chase Lane, and my lot directly adjoins the parcel that is proposed to be made into a megachurch. I purchased my home in September 2019 with the hope and expectation of many years of property appreciation, further low density residential development, and pleasant and private use of my yard and home.

I am very concerned about the plan to build a megachurch campus at this site. While I understand the low density zoning of the area makes it possible for the city to grant a permit to build a place of worship, the scale of the building is not on par with a common person's understanding of a place of worship.

The proposed 70,000 square foot building is about the size of the Plymouth Cub Foods, as big as 2 Best Buy stores together, and as big as 4 Office Depot stores together. The 850 space parking lot that is proposed to be in the backyards of me and my neighbors is the largest in the city and bigger than the one at the Target complex in Medina. For all intents and purposes this plan has much more in common with a big-box commercial development than with any conventional notion of a church.

Even comparing it to nearby churches, the Lord of Life building on 101 a few miles north is around half the size of the proposed Eaglebrook facility, and the Saint Thomas the Apostle church in the business district of Corcoran is less than 6,000 square feet. The closest building of this size is Holy Name of Jesus in Wayzata, which includes a preschool - 6th grade school facility and is slightly larger than what Eaglebrook is proposing. But, Holy Name only has 550 parking spaces and is in a rural zone where parking is ~200 feet away from any neighboring properties.

Since I learned of this project on June 12th, I have had the opportunity to speak with several nearby residents who either border the proposed site or live in other parts of the Ravinia development, as well as residents of adjoining neighborhoods. We all have concerns about traffic, noise, lack of privacy, and loss of home values due to this development.

I am grateful that this proposal has not yet been formally presented before the planning

commission and that there is still time to perform the diligent review required in city ordinances for conditional use permits. I am grateful for ready access to the town councilors so that the concerns of the residents can be fully considered and our interests considered and protected appropriately by the requirements of the Conditional Use Permit (CUP) process as defined in Corcoran ordinances, and I look forward to that process proceeding. Given that we have not yet reached the required public hearing stage, I look forward to residents' ability to meaningfully affect the outcome.

I would like the council and planning commission to consider several points as the process moves forward:

1.) Several legal decisions, including some in Minnesota, show that the RLUIPA does not give churches an automatic approval of any request they seek. I have attached highlights from this decision and some analysis based on the Corcoran zoning ordinances.

Several cases establish that towns can refuse to allow to churches to use specific parcels/zones of land as long as it is protecting legitimate government interests, such as public safety and property values, both of which are a serious concern in this instance. Please consider this case in St. Michael from 2016, where the US 8th Circuit found St. Michael, MN was not in violation of RLUIPA when it refused to permit a church to operate from a movie theater in defense of local traffic flow and public safety concerns, which are legitimate government interests.

https://casetext.com/case/riverside-church-v-city-of-st-michael-6?utm_source=Iterable&utm_medium=email&utm_campaign=prospecting-emails&resultsNav=false

2.) The CUP ordinance states that:
"The purpose of a conditional use permit is to authorize and regulate uses which may be beneficial in a specific instance to the general welfare of the community, yet **ensure that such uses are not detrimental to surrounding property,** and are consistent with the stated purpose of the zoning district in which such uses are located regarding conditions of operation, location, arrangement, and construction."

3.) Residents in the surrounding area (me and people I have spoken to) are concerned about a multi acre parking lot being installed adjacent to our property due to noise, lot lights, headlights, views not commensurate with a low density residential zone, the noise from snow removal and many other factors that impact our ability to use and enjoy our property. We believe the use of the land in this way is clearly detrimental to surrounding property, including in ways the CUP ordinance requires the council to consider, such as:

"The conditional use will not be injurious to the use and enjoyment of other property in

the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood."

4.) Residents in Ravinia and surrounding neighborhoods are very concerned about the traffic impact due to numerous services at times when we want to use our homes and enjoy local travel. The exchange of 1700 cars (850x2) during service changeover times, which are currently 5x per week (including Wednesdays) and may be 6x per week, is very burdensome to neighbors of the site, especially compared with the low density residential zoning in the area.

5.) There are other areas in the district which would not be harmed by this development, unlike the current proposed location. Being close to the commercial district, for instance, could help with local development goals and improve nearby businesses due to church traffic and improve commercial property values. These alternative sites should be preferred by the city to protect the interests of existing residents.

To ensure that residents' needs are appropriately considered, I respectfully ask for the following:

a. For any public hearing where this matter is reviewed, please ensure there is an accommodation for in person attendance for those interested. This will prevent people from being unable to make their views and questions known due to technical issues.

b. The City of Corcoran to conduct an independent study to determine the impact that the proposed development would have on property values and marketability immediately adjacent to the proposed site like mine. (Independent meaning using a firm that does not have an established relationship with any interested parties, such as the existing owners of the land, the church, adjacent developers, etc.). The onus should be on the town to establish objective evidence that the development will not substantially diminish bordering and nearby property values before giving a conditional use permit.

c. Conduct a traffic study. The study should specifically account for the lower level of traffic due to Covid 19 that has been in place since March 2020 vs. when things will be "back to normal". Current church attendance and regular area traffic is lower than will be typical over the next 10+ years. This is important to ensure that the proposed development is safe and the impact is accurately known before the permit is approved. If valid data is not available, the study and any approval should be conducted after the pandemic is over and current and accurate data can be collected.

d. Please have some or all of the City Council come to the properties impacted by this megachurch proposal prior to the July 23 City Council meeting. This can all be done safely with social distancing and we are happy to meet with you. We think it's important

for you to see firsthand the property as it is today and the large, negative impact the proposed megachurch will have on our homes and neighborhood. I have attached a photo showing how our lots are situated.

I thank you in advance for your consideration of these concerns and am grateful for the opportunity to participate in the future consideration of this proposal as the zoning ordinance provides. I would welcome the chance to meet with you and the city council at my home to show you the impact the proposal would have for me and my neighbors who will border the proposed parking lot.

Sincerely,
Jeremy Nichols
612-501-3684

Mathur Family
Mega Church Site
Nichols Family
Chacketts Family

From: Sarah Carufel
To: Brad Martens
Subject: Fwd: Concerns regarding Eagle Brook Church Location
Date: Thursday, June 18, 2020 10:19:52 AM

---------- Forwarded message ---------
From: **Sarah Carufel** <sarahcarufel@gmail.com>
Date: Thu, Jun 18, 2020 at 10:15 AM
Subject: Concerns regarding Eagle Brook Church Location
To: <rthomas@ci.corcoran.mn.us>, <tanderson@ci.corcoran.mn.us>, <jbottema@ci.corcoran.mn.us>, <bdejewski@ci.corcoran.mn.us>, <aschultz@ci.corcoran.mn.us>, <bmartins@ci.corcoran.mn.us>
Cc: Hubby <mattcarufel@gmail.com>

Dear Mayor and Councilors-

As a resident of Ravinia, I am writing to you due to concern about the proposed Eagle Brook megachurch site at 101 and Hackamore Road. I am excited about the prospect of Eagle Brook coming to Corcoran, but am concerned about the scale of this church for this specific location.

I am very concerned about the plan to build a megachurch campus at this site. While I understand the low density zoning of the area makes it possible for the city to grant a permit to build a place of worship, the scale of the building is not on par with a common person's understanding of a place of worship.

The proposed 70,000 square foot building is as big as 4 Office Depot stores together, as big as 2 Best Buy stores together, and a little bigger than the size of the Plymouth Cub Foods. The 850 space parking lot that is proposed to be in the backyards of me and my neighbors is the largest in the city and bigger than the one at the Target complex in Medina. For all intents and purposes this plan has much more in common with a big-box commercial development than with the conventional notion of a church, but generating much denser traffic.

Even comparing it to nearby churches, the Lord of Life building on 101 a few miles north is around half the size of the proposed Eagle Brook facility, and the Saint Thomas the Apostle church in the business district of Corcoran is less than 6,000 square feet. The closest church building of this size is Holy Name of Jesus in Wayzata, but it also includes a preschool - 6th grade school facility. However, Holy Name only has 550 parking spaces (35% less) and is in a rural zone where parking is ~200 feet away from any neighboring homes. Further, Eagle Brook is still apparently growing, and may need to become even bigger over time.

I have had the opportunity to speak with several nearby residents who either border the proposed site or live in other parts of the Ravinia development, as well as residents of adjoining neighborhoods in Wild Meadows and Bonaire. We have concerns about traffic, noise, public safety, lack of privacy, and loss of home values due to this development. The surges of traffic into and out of the area due to service start times are unlike any other land use in the area.

This is at a scale too large for a low density residential area with hundreds of already established residents and hundreds of millions of dollars in property values that could be

negatively impacted. We have bought homes expecting residential traffic and further low density residential development. Instead, this plan would give us large, sharply defined surges of people into and out of the area before and after service times at a church the size of a shopping mall. (This has nothing to do with the building being a church, just the size of the building and the traffic patterns it will create.)

This megachurch building should go to a site that is less developed or the scale of the building reduced to match the low density zoning in this area. I thank you in advance for your consideration of these concerns and am grateful for the opportunity to participate in the future consideration of this proposal as the zoning ordinance provides.

Sincerely,
Sarah

From:	Ryan.Anderson
To:	Ron Thomas; Tom Anderson; Jonathan Bottema; Brian Dejewski; Alan Schultz; Brad Martens
Subject:	Proposed Megachurch at 101 and Hackamore
Date:	Thursday, June 18, 2020 12:54:39 PM

Dear Mayor and Councilors,

I am writing to you due to concern about the proposed Eagle Brook megachurch site at 101 and Hackamore Road. Our new home is currently under construction within the Ravinia development, with a Sept '20 closing date. We will pull out of our contract if this proposal moves forward as-is.

I am very concerned about the plan to build a megachurch campus at this site. While I understand the low density zoning of the area makes it possible for the city to grant a permit to build a place of worship, the scale of the building is not on par with a common person's understanding of a place of worship.

The proposed 70,000 square foot building is as big as 4 Office Depot stores together, as big as 2 Best Buy stores together, and a little bigger than the size of the Plymouth Cub Foods. The 850 space parking lot that is proposed to be in the backyards of me and my neighbors is the largest in the city and bigger than the one at the Target complex in Medina. For all intents and purposes this plan has much more in common with a big-box commercial development than with the conventional notion of a church, but generating much denser traffic.

Even comparing it to nearby churches, the Lord of Life building on 101 a few miles north is around half the size of the proposed Eagle Brook facility, and the Saint Thomas the Apostle church in the business district of Corcoran is less than 6,000 square feet. The closest church building of this size is Holy Name of Jesus in Wayzata, but it also includes a preschool - 6th grade school facility. However, Holy Name only has 550 parking spaces (35% less) and is in a rural zone where parking is ~200 feet away from any neighboring homes. Further, Eagle Brook is still apparently growing, and may need to become even bigger over time.

I have had the opportunity to speak with several nearby residents who either border the proposed site or live in other parts of the Ravinia development, as well as residents of adjoining neighborhoods in Wild Meadows and Bonaire. We have concerns about traffic, noise, public safety, lack of privacy, and loss of home values due to this development. The surges of traffic into and out of the area due to service start times are unlike any other land use in the area.

This is at a scale too large for a low density residential area with hundreds of already established residents and hundreds of millions of dollars in property values that could be negatively impacted. We have bought homes expecting residential traffic and further low density residential development. Instead, this plan would give us large, sharply defined surges of people into and out of the area before and after service times at a church the size of a shopping mall. (This has nothing to do with the building being a church, just the size of the building and the traffic patterns it will create.)

This megachurch building should go to a site that is less developed or the scale of the building

reduced to match the low density zoning in this area. I thank you in advance for your consideration of these concerns and am grateful for the opportunity to participate in the future consideration of this proposal as the zoning ordinance provides.

Sincerely,

Ryan Anderson | Director Merch Buying | D9/84 Outdoor Living | ⊙ Target | 612.761.0167

From:	Payal Mathur
To:	Ron Thomas; Jonathan Bottema; Brian Dejewski; Alan Schultz; Brad Martens; Tom Anderson
Cc:	Amit Mathur
Subject:	Proposed Eagle Brook Megachurch in Ravinia
Date:	Friday, June 19, 2020 12:27:10 AM

Dear Mayor and Councilors,

I am writing to you due to concern about the proposed Eagle Brook megachurch site at 101 and Hackamore Road. I am okay with the idea of a church in this location, but the scale of this facility is far too large for this area.

I am very concerned about the plan to build a megachurch campus at this site. While I understand the low density zoning of the area makes it possible for the city to grant a permit to build a place of worship, the scale of the building is not on par with a common person's understanding of a place of worship.

The proposed 70,000 square foot building is as big as 4 Office Depot stores together, as big as 2 Best Buy stores together, and a little bigger than the size of the Plymouth Cub Foods. The 850 space parking lot that is proposed to be in the backyards of me and my neighbors is the largest in the city and bigger than the one at the Target complex in Medina. For all intents and purposes this plan has much more in common with a big-box commercial development than with the conventional notion of a church, but generating much denser traffic.

Even comparing it to nearby churches, the Lord of Life building on 101 a few miles north is around half the size of the proposed Eagle Brook facility, and the Saint Thomas the Apostle church in the business district of Corcoran is less than 6,000 square feet. The closest church building of this size is Holy Name of Jesus in Wayzata, but it also includes a preschool - 6th grade school facility. However, Holy Name only has 550 parking spaces (35% less) and is in a rural zone where parking is ~200 feet away from any neighboring homes. Further, Eagle Brook is still apparently growing, and may need to become even bigger over time.

I have had the opportunity to speak with several nearby residents who either border the proposed site or live in other parts of the Ravinia development, as well as residents of adjoining neighborhoods in Wild Meadows and Bonaire. We have concerns about traffic, noise, public safety, lack of privacy, and loss of home values due to this development. The surges of traffic into and out of the area due to service start times are unlike any other land use in the area.

This is at a scale too large for a low density residential area with hundreds of already established residents and hundreds of millions of dollars in property values that could be negatively impacted. We have bought homes expecting residential traffic and further low density residential development. Instead, this plan would give us large, sharply defined surges of people into and out of the area before and after service times at a church the size of a shopping mall. (This has nothing to do with the building being a church, just the size of the building and the traffic patterns it will create.)

This megachurch building should go to a site that is less developed or the scale of the building reduced to match the low density zoning in this area. I thank you in advance for your consideration of these concerns and am grateful for the opportunity to participate in the future consideration of this proposal as the zoning ordinance provides.

Sincerely,
Payal Mathur

612-940-0142

>

>

From:	Erin Cirioli
To:	Ron Thomas; Brad Martens; Tom Anderson; Alan Schultz; Brian Dejewski
Subject:	Proposed Megachurch at 101 and Hackamore
Date:	Friday, June 19, 2020 10:40:20 PM

Dear Mayor and Councilors,

I am writing to you due to concern about the proposed Eagle Brook megachurch site at 101 and Hackamore Road. I am concerned that the scale of this facility is far too large for this area.

I am very concerned about the plan to build a megachurch campus at this site. While I understand the low density zoning of the area makes it possible for the city to grant a permit to build a place of worship, the scale of the building is not on par with a common person's understanding of a place of worship.

The proposed 70,000 square foot building is as big as 4 Office Depot stores together, as big as 2 Best Buy stores together, and a little bigger than the size of the Plymouth Cub Foods. The 850 space parking lot that is proposed to be in the backyards of me and my neighbors is the largest in the city and bigger than the one at the Target complex in Medina. For all intents and purposes this plan has much more in common with a big-box commercial development than with the conventional notion of a church, but generating much denser traffic.

Even comparing it to nearby churches, the Lord of Life building on 101 a few miles north is around half the size of the proposed Eagle Brook facility, and the Saint Thomas the Apostle church in the business district of Corcoran is less than 6,000 square feet. The closest church building of this size is Holy Name of Jesus in Wayzata, but it also includes a preschool - 6th grade school facility. However, Holy Name only has 550 parking spaces (35% less) and is in a rural zone where parking is ~200 feet away from any neighboring homes. Further, Eagle Brook is still apparently growing, and may need to become even bigger over time.

I have had the opportunity to speak with several nearby residents who either border the proposed site or live in other parts of the Ravinia development, as well as residents of adjoining neighborhoods in Wild Meadows and Bonaire. We have concerns about traffic, noise, public safety, lack of privacy, and loss of home values due to this development. The surges of traffic into and out of the area due to service start times are unlike any other land use in the area.

This is at a scale too large for a low density residential area with hundreds of already established residents and hundreds of millions of dollars in property values that could be negatively impacted. We have bought homes expecting residential traffic and further low density residential development. Instead, this plan would give us large, sharply defined surges of people into and out of the area before and after service times at a church the size of a shopping mall. (This has nothing to do with the building being a church, just the size of the building and the traffic patterns it will create.)

This megachurch building should go to a site that is less developed or the scale of the building reduced to match the low density zoning in this area. I thank you in advance for your consideration of these concerns and am grateful for the opportunity to participate in the future consideration of this proposal as the zoning ordinance provides.

Sincerely,
Erin Cirioli McKee
Corcoran Resident and Homeowner

From: THOMAS MCKEE
To: Brad Martens
Subject: Eagle Brook Proposed Site
Date: Friday, June 19, 2020 11:01:34 PM

Administrator Martens,

I am writing to express my serious concern over the proposed Eagle Brook megachurch on Hackamore and 101. As a recent new resident of Corcoran, my wife and I are beyond concerned about the negative impact this would have on our community in countless ways. Most notably, the increased noise, privacy, and massive increase in traffic around our neighborhoods would not only diminish our quality of life significantly, but would also completely devastate the property values of every single Corcoran resident - particularly those in the developments like Ravinia that would be neighboring the complex and massive parking lot.

It is my understanding that the City of Corcoran has not done an independent traffic study to look into the impact that this would have on our community. I strongly urge you to conduct an independent traffic study, as well as a property value assessment for all of the surrounding properties before considering the location of this 70,000 sq foot building with a 850 car parking lot. I am confident that once you do you will see that a complex of this size is not the right fit for our community, and will negatively impact all residents. Moreover, I believe that the city should consider a number of other locations that are a better fit for the community.

Thank you,

Tom McKee
A very concerned Corcoran resident and homeowner

Thanks,

Tom McKee

From:	Navnit Narayan
To:	Brad Martens; Ron Thomas; Tom Anderson; Jonathan Bottema; Brian Dejewski; Alan Schultz
Subject:	Proposed Development for 101 and 47 intersection
Date:	Sunday, June 21, 2020 11:54:05 PM

Dear Mayor and Councilors,

I am writing to you due to concern about the proposed Eagle Brook megachurch site at 101 and Hackamore Road. I am okay with the idea of a church in this location, but the scale of this facility is far too large for this area.

I am very concerned about the plan to build a megachurch campus at this site. While I understand the low density zoning of the area makes it possible for the city to grant a permit to build a place of worship, the scale of the building is not on par with a common person's understanding of a place of worship.

The proposed 70,000 square foot building is as big as 4 Office Depot stores together, as big as 2 Best Buy stores together, and a little bigger than the size of the Plymouth Cub Foods. The 850 space parking lot that is proposed to be in the backyards of me and my neighbors is the largest in the city and bigger than the one at the Target complex in Medina. For all intents and purposes this plan has much more in common with a big-box commercial development than with the conventional notion of a church, but generating much denser traffic.

Even comparing it to nearby churches, the Lord of Life building on 101 a few miles north is around half the size of the proposed Eagle Brook facility, and the Saint Thomas the Apostle church in the business district of Corcoran is less than 6,000 square feet. The closest church building of this size is Holy Name of Jesus in Wayzata, but it also includes a preschool - 6th grade school facility. However, Holy Name only has 550 parking spaces (35% less) and is in a rural zone where parking is ~200 feet away from any neighboring homes. Further, Eagle Brook is still apparently growing, and may need to become even bigger over time.

I have had the opportunity to speak with several nearby residents who either border the proposed site or live in other parts of the Ravinia development, as well as residents of adjoining neighborhoods in Wild Meadows and Bonaire. We have concerns about traffic, noise, public safety, lack of privacy, and loss of home values due to this development. The surges of traffic into and out of the area due to service start times are unlike any other land use in the area.

This is at a scale too large for a low density residential area with hundreds of already established residents and hundreds of millions of dollars in property values that could be negatively impacted. We have bought homes expecting residential traffic and further low density residential development. Instead, this plan would give us large, sharply defined surges of people into and out of the area before and after service times at a church the size of a shopping mall. (This has nothing to do with the building being a church, just the size of the building and the traffic patterns it will create.)

This megachurch building should go to a site that is less developed or the scale of the building reduced to match the low density zoning in this area. I thank you in advance for your consideration of these concerns and am grateful for the opportunity to participate in the future consideration of this proposal as the zoning ordinance provides.

Sincerely,
Nav Narayan
6672 carriage way
Corcoran, MN 55340

"Time has a wonderful way of showing us what really matters! "

From:	Blaine Schneider
To:	Ron Thomas; Tom Anderson; Jonathan Bottema; Brian Dejewski; Alan Schultz; Brad Martens
Cc:	Katie Kaysen
Subject:	Corcoran Megachurch Concerns
Date:	Monday, June 22, 2020 3:01:09 PM

Dear Mayor, Councilors, and City Administrator,

Like many of our neighbors, we are writing to you due to concern about the proposed EagleBrooke megachurch site at HWY 101 and Hackamore Road. Although we would have no issue with a standard sized church at this location, the scale of this facility is far too large for this area. While we understand the low density zoning of the area makes it possible for the city to grant a permit to build a place of worship, the scale of the building is very concerning.

The proposed 70,000 square foot building is as big as 4 Office Depot stores, 2 Best Buy stores, and slightly larger than the Plymouth Cub Foods. The 850 space parking lots that are proposed to be in very close proximity to the backyards of us and our neighbors is the largest in the city and bigger than the one at the Target complex in Medina. For all intents and purposes this plan has much more in common with a big-box commercial development than with the conventional notion of a church and will negatively generate much denser traffic, not just during the 4 (currently) scheduled weekly worships but also throughout the week (construction, employees, maintenance, etc.) and holidays.

Even comparing it to nearby churches, the Lord of Life building on HWY 101 a few miles north is around half the size of the proposed EagleBrooke facility, and the Saint Thomas the Apostle church in the business district of Corcoran is less than 6,000 square feet. The closest church building of this size is Holy Name of Jesus in Wayzata, but it also includes a preschool - 6th grade school facility. However, Holy Name only has 550 parking spaces (35% less) and is in a rural zone where parking is ~200 feet away from any neighboring homes. Further, EagleBrooke is still apparently growing, and may need to expand even more over time.

Like my neighbors, we all have concerns about increased traffic, noise, public safety, lack of privacy, and loss of home values due to this development. The surges of traffic into and out of the area due to service start times are unlike any other land use in the area and may impact our ability to enter and exit our community.

This footprint is far too large for a low density residential area with hundreds of already established residents and hundreds of millions of dollars in property values that would be negatively impacted. We have bought homes with the expectation of only residential traffic and further low density residential development. Instead, this plan would give us large, sharply defined surges of people into and out of the area before and after service times at a church the size of a shopping mall. To reiterate again, we have no issue with this being a church however the magnitude of the building and the traffic patterns it will create are our primary and the utmost concern.

This megachurch proposal should be repositioned to a site that is less developed, has larger roads to accommodate the increase in traffic, or the scale of the building and parking lot should be reduced to match the low density zoning in this area. Although we are also disappointed with the scheduled city council meeting date of July 2nd (when many neighbors will be out of town on vacation and will therefore be unable to voice their concerns during the

meeting), we thank you in advance for your consideration of these concerns and are grateful for the opportunity to participate in the future consideration of this proposal as the zoning ordinance provides.

Sincerely,

Blaine Schneider and Katelyn Kaysen
Concerned Local Residents

From:	Ryan Konrath
To:	Ron Thomas; Tom Anderson; Jonathan Bottema; Brian Dejewski; Alan Schultz
Cc:	Brad Martens
Subject:	Eagle Brook Church Planned Development - Corcoran
Date:	Monday, June 22, 2020 11:40:27 AM
Attachments:	image001.png image002.png

Dear Mayor and Councilors,

I am writing to you due to concern about the proposed Eagle Brook megachurch site at 101 and Hackamore Road.

I am very concerned about the plan to build a megachurch campus at this site. While I understand the low density zoning of the area makes it possible for the city to grant a permit to build a place of worship, the scale of the building is not on par with a common person's understanding of a place of worship.

The proposed 70,000 square foot building is as big as 4 Office Depot stores together, as big as 2 Best Buy stores together, and a little bigger than the size of the Plymouth Cub Foods. The 850 space parking lot that is proposed to be in the backyards of me and my neighbors is the largest in the city and bigger than the one at the Target complex in Medina. For all intents and purposes this plan has much more in common with a big-box commercial development than with the conventional notion of a church, but generating much denser traffic.

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I have had the opportunity to speak with many nearby residents who either border the proposed site or live in other parts of the Ravinia development, as well as residents of adjoining neighborhoods in Wild Meadows and Bonaire. We have concerns about traffic, noise, public safety, lack of privacy, and loss of home values due to this development. The surges of traffic into and out of the area due to service start times are unlike any other land use in the area.

This is at a scale too large for a low density residential area with hundreds of already established residents and hundreds of millions of dollars in property values that could be negatively impacted. We have bought homes expecting residential traffic and further low density residential development. Instead, this plan would give us large, sharply defined surges of people into and out of the area before and after service times at a church the size of a shopping mall. (This has nothing to do with the building being a church, just the size of the building and the traffic patterns it will create.)

This megachurch building should go to a site that is less developed or the scale of the

building reduced to match the low density zoning in this area. I thank you in advance for your consideration of these concerns and am grateful for the opportunity to participate in the future consideration of this proposal as the zoning ordinance provides.

Sincerely,

Ryan

Ryan Konrath
Director of Business Development
Aviation Insurance Broker
Comm - AMEL/ASEL-CFI/I-MEI/CSIP
Direct: 952-641-3152 **mobile:** 651-253-3844

Wings Insurance
Flying Cloud Airport, 14871 Pioneer Trail, Eden Prairie, MN 55347
tel: 952-942-8800 **fax:** 952-942-8700 **web:** www.wingsinsurance.aero

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Agenda Item: 6.d.

LANDFORM
From Site to Finish

105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401

Tel: 612-252-9070
www.landform.net

TO: Corcoran Planning Commission

FROM: T.J. Hofer through Kendra Lindahl, Landform

DATE: June 24, 2020 for the July 2, 2020 Planning Commission Meeting

RE: Final PUD Development Plan for "Bellwether 5nd Addition" (Outlot A, Bellwether 4nd Addition) (city file no. 20-024)

REVIEW DEADLINE: September 16, 2020

1. Application Request

Pulte Homes of Minnesota, LLC (applicant) has submitted a request for approval of a Final Plat and Final PUD plan application for "Bellwether 5th Addition", a residential development of 46 new single-family homes and one outlot on 18.43 acres of property.

Only the Final PUD Development Plan is reviewed by the Planning Commission. The Planning Commission recommendation will be forwarded to the City Council.

2. Parks Commission

On June 18, 2020 the Parks Commission reviewed the application. The Parks Commission recommended a reduction in the amount of land to be taken as park dedication, an extension of the trail along Jack Pine Lane to constructed now and pedestrian ramps to be added at each of the cul-de-sacs to access the trail on the opposite side of the street.

The Parks Commission voted 6-0 to recommend approval with the changes noted above and those changes have been included in the draft resolution.

3. Context

Background

On June 28, 2018 the City approved rezoning the property to Planned Unit Development (PUD), a preliminary plat and a preliminary PUD plan. The approvals were subject to several conditions which the developer is working to address.

On October 11, 2018 the City approved the Final Plat and Final PUD Development plan for the first phase of Bellwether which included 78 single family homes and six outlots.

On April 25, 2019 the City approved the Final Plat for Bellwether 2nd Addition and the Final PUD for the 2nd and 3rd phases

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On October 26, 2019 the City approved the Final Plat for Bellwether 3rd Addition. The plat for the 3rd Addition cannot be recorded until the street and utility improvements on the realigned Stieg Road are completed, but some grading work in the 3rd Addition was required to facilitate these improvements.

On March 26, 2020 the City approved the Final Plat and Final PUD for the 4th phase. A grading plan was approved as part of the 4th phase that allowed for work to be done on Outlot A, Bellwether 4th Addition in order to help balance the site. Outlot A is now being proposed as Bellwether 5th Addition.

This is the fifth of six planned phases.

4. Analysis of Request

Staff has reviewed the application for consistency with Comprehensive Plan, Zoning Ordinance, Subdivision Ordinance and City Code requirements, as well as City policies. The City Engineer's comments are incorporated into this staff report, the detailed comments are included in the attached engineering memo and the approval conditions require compliance with the memo.

A. Level of City Discretion in Decision-Making

The City's discretion in approving a final PUD is limited to whether the proposed plan is in substantial conformance with the preliminary PUD development plan. If it meets these standards, the City must approve the final PUD development plan.

The City's discretion in approving a final plat is limited to whether the proposed plat meets the standards outlined in the City's subdivision and zoning ordinance. If it meets these standards, the City must approve the final plat.

B. Consistency with Ordinance Standards

<u>Final PUD Development Plan</u>

Staff has reviewed the application for consistency with the approved preliminary plans, as well as City policies. Staff finds that the final PUD development plan is generally consistent with the approved preliminary plans.

The applicant has submitted a plan for the fifth phase of the proposed development which includes 46 new single-family homes and one outlot. All the homes proposed in this development will be single-family homes constructed for active adults. The Bellwether (formerly Encore) development is part of the Del Webb development brand, which is an age-restricted community that provides a wide range of property management services and recreational amenities to its residents. The properties are managed by a homeowner's association that provides yard and snow maintenance and are restricted by covenants that require at least one person in the household to be 55 or older. No children are allowed to live in the community. The community is served by a recreational community center.

Lot Size and Setbacks

The applicant is showing lot sizes and setbacks that are generally consistent with the preliminary plat and preliminary PUD development plan, which allowed 50- and 60-foot wide lots (measured at the setback). The final plat is consistent with those approvals.

The site plan should be revised to show a minimum 22-foot driveways for all garages that do not overlap into sidewalks, drives or streets. Additionally, the applicant should revise plans to provide details of the driveway prior to usance of building permit that demonstrate compliance with the approved PUD standards, as required in Condition 17 of Resolution 2018-48.

Architecture

The applicant has three widths of homes (34-foot, 45-foot, and 50-foot wide homes) that have the option of being finished with five different architectural styles (Prairie, Heartland, Craftsman, Northern Craftsman, and Euro Country). All homes in this phase will be the 45- or 50-foot wide homes. The 45-foot wide homes have four floor plan options and up to five different exterior elevations. The 50-foot wide homes have four floor plan options and up to five different exterior elevations. Architectural exhibits and elevations have previously been approved to comply with Condition 21 of Resolution 2018-48. All homes in this phase must comply with these architectural requirements.

Homeowners Association

A homeowner's association (HOA) will maintain all common ownership areas of the development, including the open space areas, development signage and cul-de-sac/island plantings.

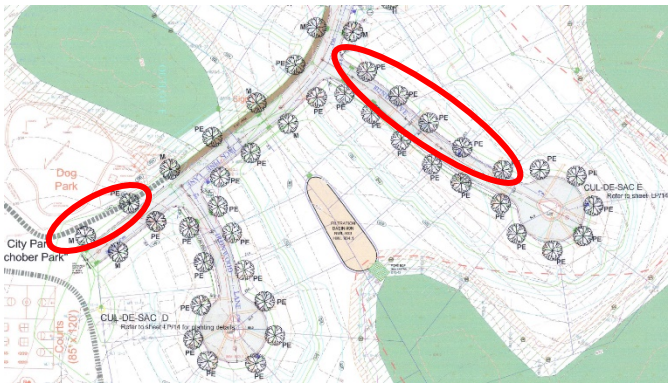
Condition 22 of Resolution 2018-48 requires that a draft of the HOA documents be submitted for City review and approval with the final plat application for all phases. Staff has included a condition that final approval of the PUD development plan and final plat are contingent on the applicant providing amended copies of the Declaration of Covenants and Homeowners Association Documents to the City for review and approval prior to release of the final plat for recording.

Landscaping

The applicant has provided a final tree preservation plan that conforms to the preliminary development plan.

Section 1060.070 of the Zoning Ordinance requires one overstory tree for each single-family home and a variety of landscaping along the perimeter of the site, along the streets, within the private park and adjacent to wetlands. The plan shows overstory trees along each of the public streets in the right-of-way. The even spacing and location of the trees creates a desirable tree canopy along the roads. At the time of preliminary PUD approval trees were required to be in the property owner's yard. Policy now allows for trees in the right-of-way for the 80-foot and the 60-foot rights-of-way (where there is room for the public infrastructure and the trees) but will require that trees be placed outside of the right-of-way in the 50-foot rights-of-way. These trees outside of the right-of-way must be planted prior to issuance of a certificate of occupancy for the adjacent home.

Plans show trees located in the 50-foot right-of-way along the southeast side of Jack Pine Lane near where it terminates by the future park and along the northside of 102nd Avenue between the intersection with Jack Pine Lane and the cul-de-sac at the terminus of 102nd Avenue. Staff has included that these be moved out of the right-of-way as a condition of approval.



Mail Delivery

Centralized mailbox locations should be shown on the landscape plans. The US Postal Service must approve the location of mailboxes. The applicant will need to provide proof of the approved location to the City.

Signage

Original approvals granted approval for signage at the main entrance and the secondary entrance off Stieg Road. No signs are proposed for this addition.

Streets

The street layout and design are consistent with preliminary approvals. Condition 29 of Resolution 2018-48 notes that the HOA is required to maintain all common lots, cul-de-sac landscaping, and ponds. Staff notes that the developer is required to maintain all common areas including boulevard plantings and will be required to enter into a maintenance agreement with the City.

Street names provided generally comply with the City's approved Street Map.

Section 945.020, Subd. 19 requires temporary cul-de-sacs or hammerhead turnarounds until future connections are constructed. A temporary cul-de-sac as detailed in the Engineer's Memo is required at the western terminus of 102nd Place. A temporary turnaround will not be required at the western terminus of Jack Pine Lane, as Ironwood Court can function as a turnaround.

All other roads comply with City standards. Staff is including a condition that the applicant provide temporary easement exhibits for the turnaround on 102nd Place. They will be required to file this easement at Hennepin County.

The applicant shall also be required to install barricades and signage to indicate a future road connection, consistent with Section 945.010, Subd.19.

The applicant will be required to comply with the conditions in the City Engineer's memo dated June 22, 2020.

Utilities

Municipal sewer and water are available to serve the site. The applicant will be required to comply with the conditions in the City Engineer's memo dated June 22, 2020.

Wetlands

The final plans shows several wetlands. The wetland buffers and buffer setbacks provided are consistent with the preliminary plat.

Section 1050.010, Subd. 7 requires that monuments be installed at each lot line where it crosses a wetland buffer, and where needed to indicate the contour of the buffer, with a maximum spacing of 200 feet of wetland edge. Plans generally comply with this requirement, but plans should be revised to show the additional missing wetland monuments. City staff will provide the applicant an exhibit to show where additional monuments are needed based on the Code. Staff has include a condition that the applicant revise the plans to show the correct placement for wetland monuments.

The applicant shall be required to comply with any additional buffer requirements identified by ECWMC. The City and ECWMC have different wetland buffer and setback requirements. The applicant must show compliance with the most restrictive standard. The City does not allow trails in the wetland buffer, so the trail behind Lots 22-24 must be shifted out of the buffer and will likely require a trail easement.

The applicant has indicated that multiple wetlands will be filled. The applicant will have to comply with the Minnesota Wetland Conservation Act and details in the City Engineer's memo dated June 22, 2020.

Floodplain

The plans show that there are lots located within a 100-year flood plain (Zone A on the FEMA Floodplain map), which is represented as a dashed red line on the plans. Areas within Zone A that do not have a delineated floodway are classified as being in the General Floodplain District. Section 1050.030 of the Zoning Ordinance provides standards for properties within the Floodplain. The applicant will need to work with City staff to apply for a FEMA map change on any future phases with structures in the flood plain that require fill or mitigation.

Storm Water Management

Stormwater management will be managed on site and the engineer's memo includes conditions to ensure compliance with local, watershed and State standards. A stormwater maintenance agreement must be prepared for each pond, submitted for review and approval by staff and will be required to be recorded with the final plat.

The developer has provided 10-foot drainage and utility easements along the front and rear lot lines and five-foot drainage and utility easements along the side lot lines for the single-family lots. This is consistent with the engineering design standards.

The applicant will be required to comply with the conditions in the City Engineer's memo dated June 22, 2020.

Grading

The site was previously approved for grading along with the 4th Addition.

The applicant will be required to comply with the conditions in the City Engineer's memo dated February 24, 2020.

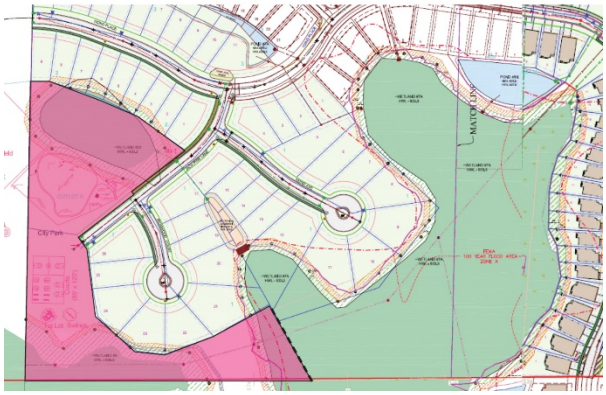
Lighting

The applicant has submitted a lighting plan that shows lighting locations. The lights generally are located on the sidewalk side of the street except along Jack Pine Lane between the intersection with 102nd Place and the western terminus of the street. Staff has included a condition that the applicant continue to work with staff to finalize streetlight locations.

This phase will include the same lighting fixtures used in the previous phase which conform to City lighting requirements. Staff has included a condition that lighting complies with the lighting requirements of Section 1060.040 of the Zoning Ordinance and are generally located on the sidewalk side of the street.

Parks, Trails and Open Space

In this addition, the land in the southwest portion of the site is to be dedicated as park land along with off-road trails in easements.



The original proposal submitted by the applicant showed part of "Outlot A, Bellwether 5th Addition," dedicated to meet park dedication purposes. The applicant is currently proposing to dedicate all of what is to be platted as Outlot A. This area is 4.84 acres, but much of it is wetland area. As part of the 1st addition the City took the southern portion of this wetland as park dedication. The Parks Commission recommended taking only the smaller, contiguous portion to the west.

On- and off-road trails are proposed for this phase of the PUD final development plan; however, only off-road trail areas shown in the Comprehensive Plan count toward park dedication requirements. Off-road trails run through the southwest of the 5th Addition and connect the new neighborhood park with the community park to the south and the future expansion of the park to the west when that parcel develops. The off-road trail is part of an option for the future Three Rivers Park District (TRPD) Diamond Lake Regional Trail corridor that had not yet been defined when the PUD was approved in 2018. The City and TRPD both require a 20-foot trail easement, but the TRPD asks for a 10-foot wide trail and the City requires an 8-foot wide trail. Staff asks that the developer work with the City to try to increase the trail width to 10-feet in this phase to be consistent with the TRPD standards.

The applicant is showing parts of the proposed off-road trail located in the wetland buffer for Wetland #6. Staff has included a condition for the plans be revised as trails are not allowed within the wetland

buffer. Complying with this requirement may require a trail easement on the adjacent lots (Lots 22-24). The applicant should revise the submitted plans to show the proposed trail connection on each sheet, not just the Storm Sewer and Landscape Plans.

The Parks Commission recommended extending the trail off of Ironwood to extend to be perpendicular with the sidewalk along Ironwood Court. Additionally, pedestrian ramps across from each of the cul-de-sacs should be added to access the trail on the opposite side of the road should discuss the alignment of the trail to connect to the south. Trails beyond this loop would be constructed when the park is developed in the future.

The applicant is showing uses for the park area as “Tot Lot Swings,” “Courts” and “Dog Park.” The park will be developed and designed by the City when the adjacent parcel to the west develops. The final design may not include the items shown on Pulte’s concept.

Additional park dedication will be considered as future phases are proposed. To calculate the total contribution to park dedication for each phase of development, a park and trail easement exhibit with gross and net acreage calculations will be required from the developer.

Final Plat

The applicant is requesting approval of a final PUD development plan for 46 single-family residential home lots and one outlot.

If the phase is approved, it would bring the total number of platted lots to 277 out of 398 total lots. The applicant will be providing final PUD plans and final plats for additional phases of the development in the future.

Only the City Council reviews the final plat. The Planning Commission will not provide a recommendation on the Final Plat.

Development Phasing

The developer plans to develop this project in five to six phases. The developer began work in the fall of 2018 and expects completion of the development by 2024. Timing will be contingent upon extension of public infrastructure. The phasing plan may be modified at each stage to better correspond with public improvements.

Conclusion

Staff finds that the proposed plan is generally consistent with the Comprehensive Plan, Zoning Ordinance, Subdivision Ordinance, and preliminary PUD approvals. The staff report noted the outstanding issues that must be addressed and staff has included conditions in the attached resolution to address these issues.

5. Recommendation

Recommend approval of the draft resolution approving the final PUD development plan for Bellwether 5th Addition.

Attachments

1. Draft Resolution approving the final PUD development plan
2. Location Map
3. Engineer's Memo dated June 22, 2020
4. Applicant's narrative dated January 21, 2020
5. Final PUD Development Plans and exhibits dated May 19, 2020
6. Final Plat Dated January 22, 2020.

City of Corcoran *July XX, 2020*
County of Hennepin
State of Minnesota

RESOLUTION NO. 2020-XX

Motion By:
Seconded By:

APPROVING FINAL PLANNED UNIT DEVELOPMENT (PUD) PLAN FOR "BELLWETHER 5nd ADDITION" FOR PULTE HOMES OF MINNESOTA LLC (OUTLOT A, BELLWETHER 4nd ADDITION) (CITY FILE 20-024)

WHEREAS, Pulte Homes of Minnesota LLC ("the applicant") has requested approval of a final PUD (planned unit development) plan for "Bellwether 5nd Addition" for 46 new residential lots one outlot in the fifth phase of a multi-phase residential development on 18.43 acres of property legally described as:

Outlot A, Bellwether 4nd Addition

WHEREAS, the Planning Commission has reviewed the plan at a public meeting and recommends approval, and;

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF CORCORAN, MINNESOTA, that it should and hereby does approve the request for a final PUD development plan, subject to the following conditions:

1. A final PUD plan is approved to allow the creation of 46 lots for new single-family homes and one outlot in accordance with the application materials and plans received by the City on May 19, 2020 except as amended by this resolution.

2. Approval is contingent upon City Council approval of the final plat and development contract.

3. The development shall be subject to all conditions of the "Encore" preliminary PUD development plan approval and all amendments.

4. The development is subject to Elm Creek Watershed Management Commission review and approval.

5. The applicant shall comply with all conditions in the City Engineer's memo dated June 22, 2020.

6. Park dedication is based on the development of the entire Bellwether site approved under the preliminary PUD and shall be the equivalent of 21.98 acres. Park dedication in this phase shall be as follows:

    a. Park dedication shall be the western portion of Outlot A, as recommended by the Parks and Trails Commission.
    b. The trail easement shall be 20-feet wide.
    c. The City requires 8-foot wide paved trails; however, Three Rivers Park District has recently identified this off-road trail as part of the possible Diamond Lake Regional

Trail loop. The developer should work with the City to try to increase the trail width in this phase to 10 feet wide per the TRPD standards.

d. Plans will be revised to show the trail along Jack Pine Lane to terminate perpendicular to the sidewalk on Ironwood Court.
e. Plans will be revised to move the off-road trails outside of the wetland buffers. This may require a trail easement over Lots 22, 23 and 24.
f. The developer grade the off-road trail behind Lots 22, 23 and 24 as part of this phase.
g. Plans will be revised to show pedestrian cutouts along Jack Pine Lane at the intersection of Ironwood Court and 102nd Avenue.

7. Plans will be revised to show trees located within the right-of-way of streets with a 50-ft. right-of-way outside of the right-of-way.

8. Any request to inspect the required landscaping in order to reduce financial guarantees must be accompanied by recertification/verification of field inspection by the project landscape architect. A letter signed by the project landscape architect verifying plantings have been corrected and is in compliance with the plans and specifications will suffice.

9. All permanent wetland buffer monument signs must be erected along the wetland buffer line as required by Section 1050.010, Subd. 7 of the Zoning Ordinance.
   a. Additional wetland buffer signs are required on Wetland #6, #7 and #25. The revised plan must be submitted for City review and approval.
   b. Wetland signs shall be purchased from the City.
   c. The final locations must be inspected and approved by City staff.
   d. Monuments and signs shall be installed prior to approval of the building permit.

10. The development shall comply with the City's requirements regarding fire access, fire protection and fire flow calculations, the location of fire hydrants, fire department connections and fire lane signage.

11. Final copies of the amended Declaration of Covenants and Homeowners Association Documents shall be submitted for review and approval.

12. Details of the driveways as required in Condition 17 of Resolution 2018-48 shall be submitted for staff review and approval.

13. Plans shall be revised as follows:
    a. Show minimum 22-foot driveways in all lots.
    b. A temporary cul-de-sac is required at the western terminus of 102nd Place. Plans should be revised to reflect City engineering standards for Private Development Turnarounds.

14. Lighting should comply with the lighting requirements of Section 1060.040 of the Zoning Ordinance and generally be located on the sidewalk side of the street.
    a. The applicant should work with staff to finalize street light locations.

RESOLUTION NO. 2020-XX

15. The plans show centralized mailbox locations. These mailbox locations shall be approved by the US Postal Service and proof of the approved locations shall be provided to the City, prior to issuance of building permits.

16. Drainage and utility easements must be provided over all wetlands, wetland buffers and ponds.

17. The developer shall work with City staff to apply for a FEMA map change for the areas that require fill or mitigation.

18. The following documents must be approved by the City Attorney and recorded at Hennepin County:
    a. Stormwater Maintenance Agreement
    b. Temporary Turnaround Easements
    c. Maintenance and Encroachment agreements for landscaping in the public right-of-way.

19. The applicant shall provide proof of recording the final plat and related documents at Hennepin County.

20. The applicant shall provide the approved preliminary and final plan drawings to the City in an electronic (AutoCAD) format.

VOTING AYE	**VOTING NAY**
☐ **Thomas, Ron**	☐ **Thomas, Ron**
☐ **Bottema, Jon**	☐ **Bottema, Jon**
☐ **Dejewski, Brian**	☐ **Dejewski, Brian**
☐ **Anderson, Thomas**	☐ **Anderson, Thomas**
☐ **Schultz, Alan**	☐ **Schultz, Alan**

Whereupon, said Resolution is hereby declared adopted on this XX day of July 2020.

_____
Ron Thomas - Mayor

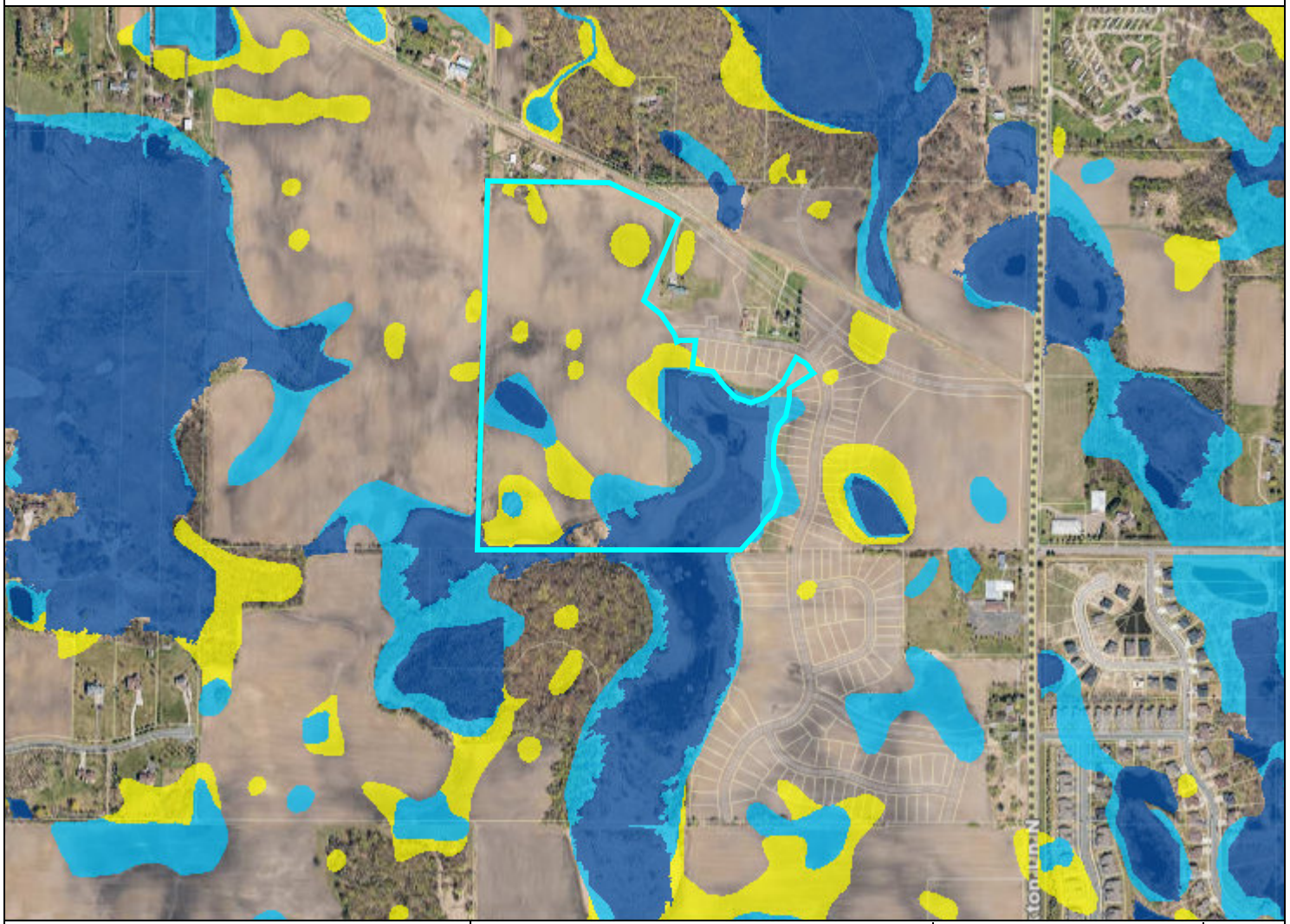
ATTEST:

City Seal

_____
Jessica Beise – City Clerk/Administrative Services Coordinator

Hennepin County Natural Resources Map

Date: 6/11/2020



Legend

Wetlands

- Potential Wetland - HCWI
- Probable Wetland - HCWI
- Probable Wetland - NWI

PID: 0111923430011
Address: 52 ADDRESS PENDING, CORCORAN
Owner Name: J R & M S MARTIN TRUST
Acres: 45.51

Comments:

1 inch = 800 feet

N

This data (i) is furnished 'AS IS' with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is notsuitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this data.

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Technical Memo

WENCK
Responsive partner.
Exceptional outcomes.

To: Kevin Mattson, PE, Director of Public Works

From: Kent Torve, P.E. City Engineer
Nicholas Wyers
Rowdy Schmidt

Date: June 22nd, 2020

Subject: Bellwether 5th Addition – Plan Review

Pulte Homes submitted plans for the Bellwether 5th Addition for City of Corcoran Review. Plans Dated May 19th, 2020 have been received May 22nd, 2020. The following comments are regarding the plans submitted and should be considered and addressed. Please provide written responses to the comments.

The following comments are a result of the first review. Additional reviews to be expected as the project moves forward.

1.0 Transportation

1.1 Temporary cul-de-sac with a curbed perimeter, complete storm sewer improvements and appropriate easements are required on 102nd Place. Cul-de-sac shall be placed in a location that is constructible with the corresponding slopes at the end of 102nd Place. Easements for the cul-de-sac shall be roadway easements which can be vacated with the future extension of the roadway.

1.2 Ironwood Court will be used as a "T" turnaround for Jack Pine Lane instead of requiring a stub street cul-de-sac.

1.3 The No Parking signs on 102nd Place should be moved to the non-sidewalk side of the roadway.

2.0 Trails

2.1 Trail extension along Jack Pine Lane will be required through the intersection of Ironwood Court. Install a pedestrian ramp on Jack Pine Lane at Ironwood Court.

2.2 Install pedestrian ramp on Jack Pine Lane at 102nd Avenue.

2.3 The trail along Jack Pine Lane shall be 10' and placed adjacent to the curb. Easements may be required if trail encroaches into side yards.

2.4 Trail to be graded with City Park grading plan. Future trail extension to the south to be graded with this phase of work. Soils beneath the trail section shall be suitable for future trail extension and no wasting of unsuitable soils will be allowed within this footprint. Test pits will be coordinated in field.

3.0 Water

3.1 Watermain at end of 102nd Place shall be stopped at a location short of the properly line which provides frost protection for utility based on sloping to existing grades. Remove valve at western end of 102nd Place.

3.2 Watermain highpoint is at STA 4+00 on Jack Pine Lane. Either install hydrant at this location or lower the watermain to eliminate high point.

3.3 Hydrant spacing to be reviewed by Public Safety (for example, 102nd Place looks to have excessive distance).

3.4 Watermain on Jack Pine Lane shall be extended to the western property line though the park for future looping. A temporary hydrant should be installed at the end of the main.

3.5 A valve should be added on the south leg of the watermain tee at Jack Pine Lane and 102nd Ave.

3.6 Valve prior to City Park shall be moved closer to the Ironwood Court intersection.

4.0 Storm Sewer, Grading and Stormwater

The development's approval required (in lieu of a stormwater utility fee) the identification and feasibility for a water resources improvement funded by Pulte since the City has TMDL and other regulatory requirements. A project has been identified involving the future Bellwether phase which drains to the northwest towards CR 116. This project will be presented to developer in the last quarter of 2020.

Storm Sewer

4.1 Draintile cleanouts adjacent to one another on Jack Pine Lane at Sta 4+00 on 102nd Ave should be connected to one another.

4.2 Revised grading plan for City Park has been provided. Modify storm sewer system at end of Jack Pine Lane to extend into Outlot A and drain necessary low areas. Verify that pipe sizes will be sufficient for runoff.

4.3 Add sumps to structure F3 and F5.

4.4 Filtration #9 will be modified (see stormwater memo) and the City recommends changing Filtration Basin #9 to a NURP pond with a filtration bench to minimize resident complaints and maintenance. Needs to comply with WMO requirements.

4.4.1 Provide drain tile capacity calculations for Filtration Basin #N9. It appears that additional drain tiles may be necessary.

4.4.2 Filtration Basin #9N outlet appears to be at a 931.2 based on existing surface shots. This elevation does not appear to allow for the basin to be constructible as the top of basin must be higher than indicated on the plans to allow drainage.

4.4.3 Pond modification hall revise the basin to show profiles which would allow the system to operate with adequate pipe slope and filter media sections.

4.5 Provide an OCS on Filtration Basin #9N.

4.6 A 15' maintenance access within a drainage and utility easement is required to access the OCS. Access location and grade to be reviewed Public Works.

4.7 Provide additional storm sewer on 102nd Place west of Jack Pine Lane.

4.8 Placement of storm structures F21 and F22 appear infeasible with temporary grading shown. Provide revised plan for drainage in this area which collects all runoff and does not impact adjacent property.

4.9 Eliminate 1.7' drop in F11, revise grade to have continuous grade from F17-F3.

4.10 Forebay required for filtration basin. Forebay should be sized for a volume of 10% of the water quality treatment runoff volume.

4.11 An outlet structure should be installed at the discharge of the filtration basin.

Grading

4.12 Revised contours and grading plan will be provided for early grading that was requested by developer for Phase 4.

4.13 Contractor to pothole soils beneath the future trail areas within the City Park to verify materials are adequate for trail construction.

Stormwater Modeling

See attached Wetland 25 stormwater memo.

4.14 Provide NWL of wetlands.

4.15 Wetland 7 and Wetland 7A have differing HWLs and should be consistent or justified.

5.0 Erosion Control

5.1 City of Corcoran is an MS4 city and site visits to be conducted weekly

5.2 Compliance with developer's (owner) MS4 permit will be monitored.

6.0 General

6.1 Indicate how Lots 1 of Block 3 and Lot 9 of Block 2 will be buildable. Considerations shall be made for access, sloping onto existing parcel and maintaining drainage within the site.

6.2 2020 detail plates to be incorporated in plan set

6.3 Street lighting plan to be reviewed by City Staff

6.4 Revise wetland buffer signs to be installed at angle points and property lines. Some of signs are not shown on wetland buffer.

7.0 Plat

7.1 Provide drainage and utility easement over all of Outlot A.

7.2 Review Lot 11 of Block 3 and Lot 20 of Block 1 to remove the misshaped portions and cover with a more continuous easement.

7.3 Ensure drainage and utility easement in Lots 22, 23, and 24 Block 1 cover the HWL of the adjacent wetland.

7.4 Ensure drainage and utility easements on Lots 21 and 22 of Block 1 fully cover drainage swale through the lots.

7.5 The side yard easement for Lot 1 Block 3 should be 14' per review comments and responses provided during the 4th Addition.

7.6 Easements shall be provided for all future trails shown on the plan as part of the regional trail plan. This includes but is not limited to Lots 22, 23 and 24 Block 1.

WENCK
Responsive partner.
Exceptional outcomes.

Attachment A

Technical Memo

WENCK
Responsive partner.
Exceptional outcomes.

To: Kevin Mattson, PE, Public Works Director

From: Danielle Tourtillott, EIT
Kent Torve, PE

Date: June 22, 2020

Subject: Wetland 25 NWL

Background and Pre-Development Flow Path

The purpose of this memorandum is to review the proposed outlet elevation and therefore Normal Water Level (NWL) of Wet 25 in Phase 5 of the Bellwether Development. Under existing conditions, Wet 25 discharged overland (west) towards the large Wet 4 complex (Attachment A).

The delineated edge is shown as 930/931 and for proposed conditions, the developer's analysis assumes the delineated edge / NWL remains at 930.0, however this assumption relies on natural infiltration and/or evaporation, which is unlikely in heavy soils within a wetland surrounded by urban development.

Current Plans Outlet and Wetland Impact

Current plans have the pipe to CBMH F3 set at 932.2 which is approximately two feet above the existing edge of 930 +/- and will create a future NWL of 932.2, which has following impacts:

- This is considered a wetland impact,
- Reduces flood storage, and therefore
- Affects the model's rate control for offsite flow to the west.
    - Existing conditions show the 100-year flow from Wetland 25 to Wetland 4 is 8.6 CFS. Proposed conditions need to match this discharge rate.

Model and Plan Modifications

A summary of modifications include:

- Establish the piped outlet from Wet 25 at 930.7 (existing delineated edge)
- Direct pipe discharge to Wet #7 (bypass Pond 9N)
- Show NWL and HWL on grading plan.

Additional Information

- Show EOF spot elevation at west property boundary for Wet 25
- Document pre-development (existing) HWL is higher or equal to post development HWL.
- Document that the post development rates across adjacent development are equal or less than pre-development.

WENCK
Responsive partner.
Exceptional outcomes.

Attachment A

Figure 1

Stieg Rd
Fletcher Ln
116
Wet 4
933.0
Wet 25
N
1000 ft
Google Earth
© 2020 Google

"Bellwether 5th Addition"

APPLICATION FOR:
PUD Final Development Plan, Final Plat 5th Addition

CORCORAN, MINNESOTA
May 19, 2020

Introduction

Pulte Homes of Minnesota, LLC ("Pulte") is pleased to be submitting this application.

In previous years we submitted and received approval for the Preliminary Plat,1st Addition, 2nd Addition, 3rd Addition, and 4th Additions of Bellwether. We are now submitting the continuation of Bellwether as the 5th Addition.

Pulte will act as both developer of the property and builder of the homes within Bellwether. The primary contact for Pulte is:

Chad Onsgard, Director of Development
7500 Flying Cloud Drive, Suite 670
Eden Prairie, MN 55344
952-229-0723
Chad.Onsgard@pultegroup.com

Property Legal Description

Outlot A, Bellwether 4th Addition.

Bellwether 4th Addition Final Plat & Final PUD Plan

The final plat for the 5th Addition is consistent with the approved preliminary plat.

We Build Consumer Inspired Homes and Communities to Make Lives Better

Scope & Boundary

Outlot A, Bellwether 4th Addition will be platted into 46 lots and 1 Outlot. Utilities and streets will be extended from the 4th addition, which will also include trails and sidewalks to the future park.

Park Dedication

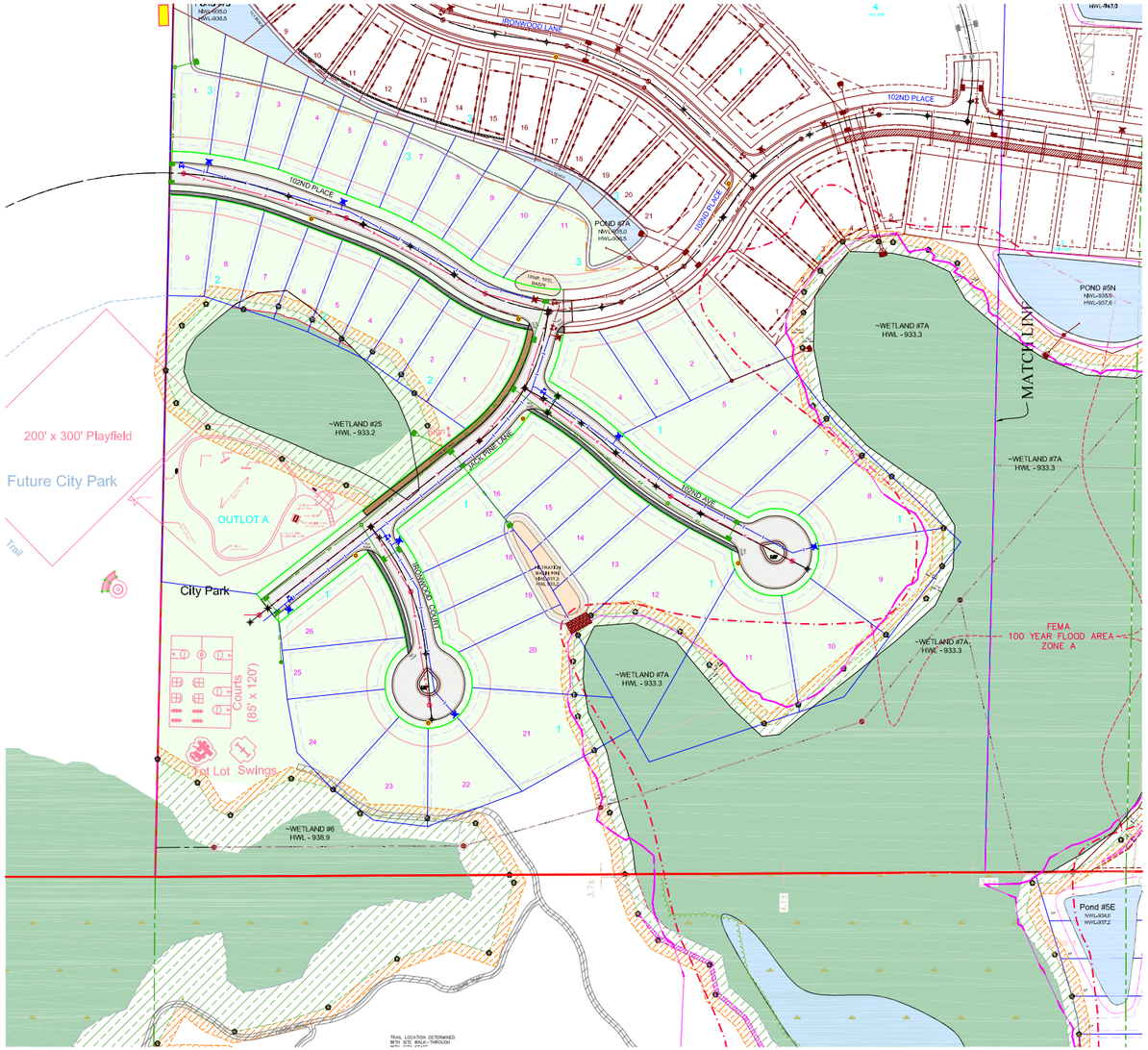
The Park Dedication was satisfied as part of the 1st Addition plat, which includes the park Outlot as part of this application.

Right-of-Way Dedication

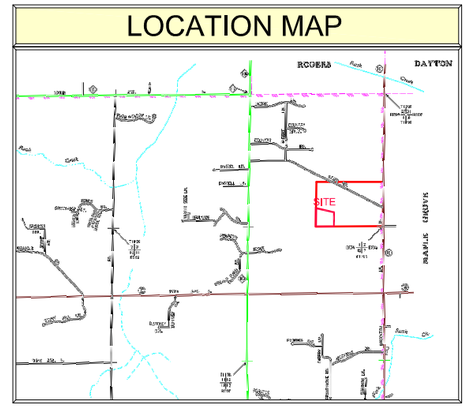
Required Right of Way will be dedicated along public streets as well as required drainage and utility easements for drainage areas and ponding.

The Homes

The homes and architecture will be consistent with Preliminary Plat and previous approvals.



LOCATION MAP



SHEET INDEX TABLE

SHEET	Description
1	Title Sheet
2-5	Final Street Plan
6	Pedestrian Ramp Details
7-10	Final Sanitary Sewer & Watermain Plan
11-13	Final Storm Sewer Plan
14-16	Final Grading Plan
17	Final Erosion Control Plan
18-23	Construction Details

PREPARED BY

ENGINEER
SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY
WAYZATA, MINNESOTA 55391

PHONE: (952) 476-6000
FAX: (952) 476-0104

CONTACT : ROBERT S. MOLSTAD, P.E.
EMAIL: MOLSTAD@SATHRE.COM

PREPARED FOR

DEVELOPER
PULTE HOMES OF MINNESOTA
7500 FLYING CLOUD DRIVE
SUITE 670
EDEN PRAIRIE, MN 55344

CONTACT:
CHAD ONSGARD
PHONE: (952) 229-0723
EMAIL:CHAD.ONSGARD@PULTEGROUP.COM

DESIGN DATA

LOT COUNT (5TH ADDITION) - 46 LOTS

44FT, 50FT & 60FT LOTS X +/-125FT DEEP

FYSB - 25 FT (50 FT & 66 FT ROWS)
FYSB - 20 FT (60 FT ROW)
SYSB - 5 FT / 5FT
CRNR - 20 FT
RYSB - 25 FT EXT / 20 FT (OTHERS)

60 FT ROW (32 FT B-B)
50 FT ROW (28 FT B-B)
66 FT ROW COLLECTOR (36 FT B-B)

5 FT WALKS / 8 FT TRAILS

NORTH

100 50 0 50 100 200
SCALE IN FEET

EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.

DRAWING NAME	NO.	BY	DATE	REVISIONS
TI - BW 5TH				
DRAWN BY				
MJV				
CHECKED BY				
RSM				
DATE				
05/19/20				

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I HEREBY CERTIFY THAT THIS PLAN OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Robert S. Molstad

ROBERT S. MOLSTAD, P.E.
Date: 05/19/20 Lic. No. 26428

ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
--

CORCORAN, MINNESOTA

TITLE SHEET

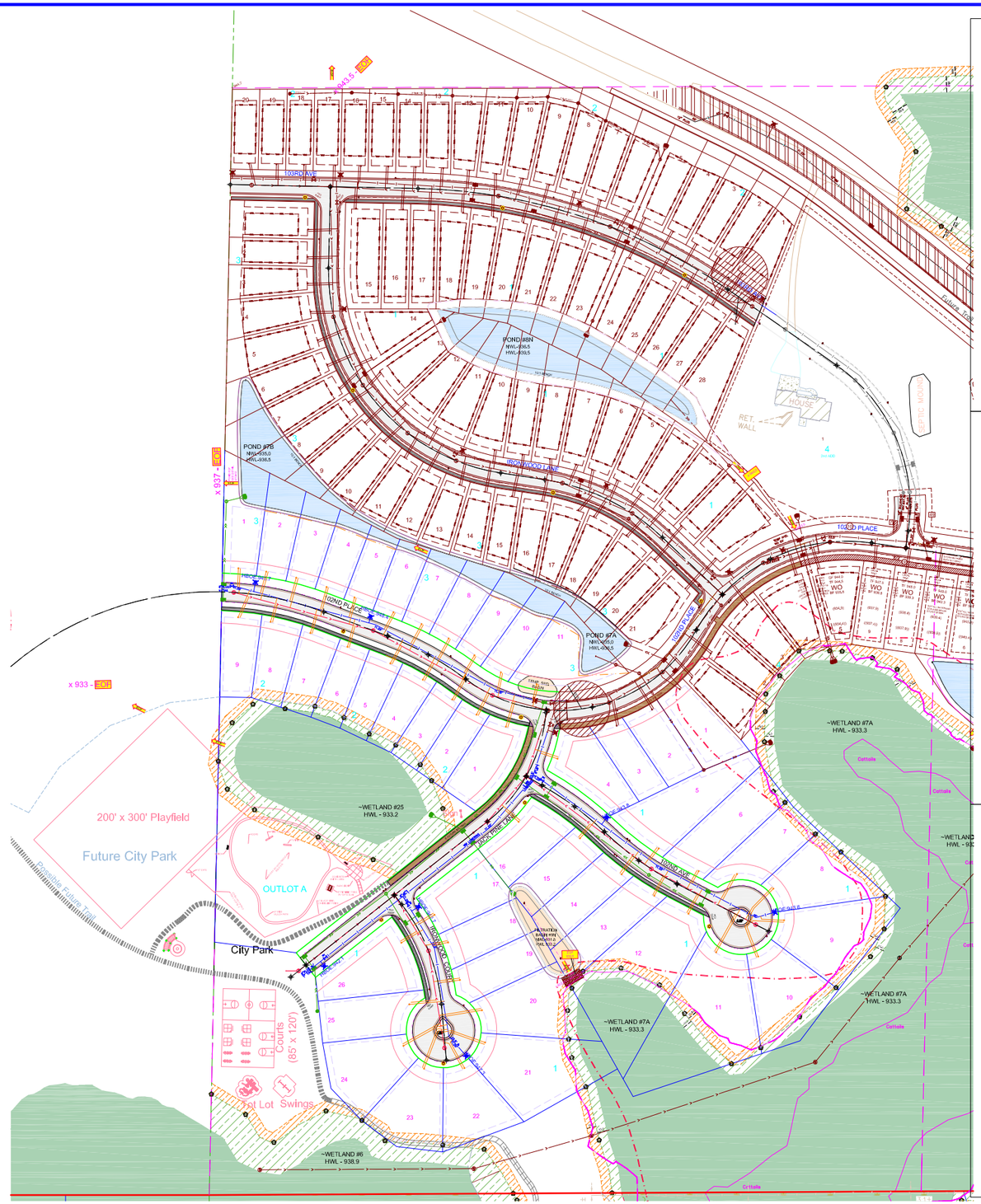
BELLWETHER 5TH ADDITION

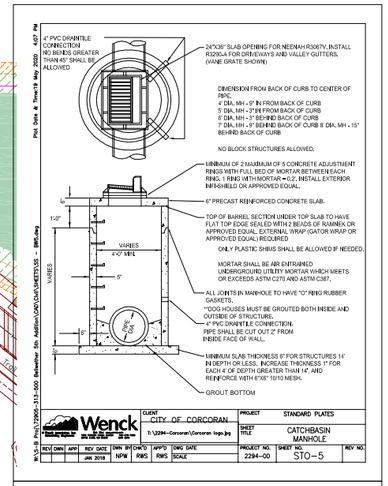
PULTE HOMES OF MINNESOTA, LLC

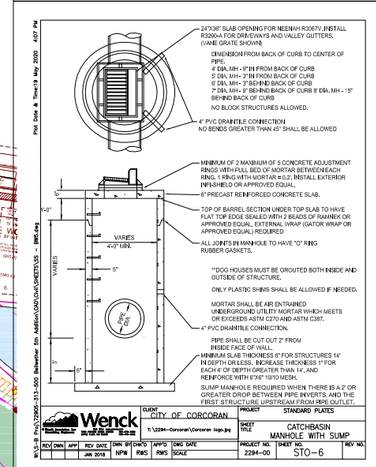
FILE NO.
72905-313

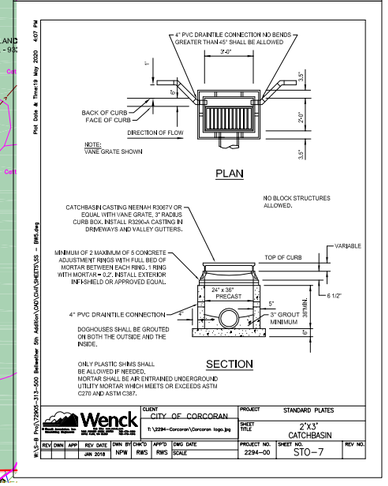
1
23

BELLWETHER 5TH 72905-313



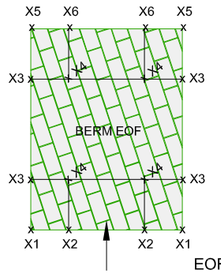






NOTES

1. 4" DRAINTILE SHALL BE INSTALLED AT THE LOWPOINT CATCH BASINS 250' MIN. (STD) IN EACH DIRECTION & 150' IN THE UPHILL DIRECTION FOR ON SLOPE CATCH BASINS.
2. 6" PERFORATED DRAINTILE SHALL BE INSTALLED THROUGH THE INFILTRATION/FILTRATION AREAS AS SHOWN ON THE PLANS. SEE THE "TYPICAL DETAIL - INFILTRATION/FILTRATION AREA" ON GRADING PLAN, SHEET 14 FOR INSTALLATION PURPOSES.
3. 6" PERFORATED REAR YARD DRAINTILE NOT WITH THE INFILTRATION/FILTRATION AREAS SHALL COMPLY TO CITY DETAIL ST0-14.
4. TIE THE LAST 6 PIPE JOINTS TO FLARED END SECTIONS (TYPICAL).
5. TRASH GUARDS SHALL BE PLACED ON ALL FLARED END SECTIONS.
6. TIE ALL JOINTS ON STORM SEWER BETWEEN APRONS AND OC STRUCTURES AND ALL CULVERT APRONS.
7. WIMCO'S OR APPROVED EQUAL TO BE INSTALLED AT ALL STORM INLETS. SEE CITY DETAILS ERO-4A, ERO-4C, AND ERO-4D.
8. GRANULAR MATERIAL SHALL BE PLACED UNDER STORM SEWER PIPE OR STRUCTURES THAT ARE LESS THAN 48" BELOW FINISHED GRADE AND EXTEND TO AT LEAST 48" BELOW FINISHED GRADE.
9. RIP-RAP FOR STORM SEWER SHALL BE CONSTRUCTED USING GRANITE ROCK,1' DIAMETER OR LARGER AND SHALL BE HAND PLACED.
10. ALL ADJUSTING RINGS TO BE CONCRETE.
11. ALL STORM STRUCTURES SHALL BE PRECAST OR POURED IN PLACE. NO BLOCK STRUCTURES ALLOWED.
12. INSTALLATION OF CLASS 3 RIP-RAP WITH FABRIC BETWEEN PONDS 7A & 7B SHALL BE SLOPED TO CREATE CHANNEL TO DIRECT WATER AWAY FROM REAR YARDS.



EOF DETAIL
(ELEVATIONS TO TOP OF BERM)

	EOF #1		
X1	933.1		
X2	931.5		
X3	933.5		
X4	932.0		
X5	932.0		
X6	931.8		

STRUCTURE TABLE

STRUCTURE NAME	TYPE	DIAMETER	RIM	BUILD	INV	CASTING	NOTES
F2	CBMH	48"	939.7	8.0'	931.7	R-3067	
F3	CBMH	84"	939.8	8.0'	931.8	R-3067	
F5	STMH	48"	942.7	9.2'	933.5	R-1642	
F6	CBMH	48"	940.9	6.8'	934.1	R-3067	
F7	CBMH	48"	940.9	6.5'	934.4	R-3067	
F8	CB	27"	939.0	4.0'	935.0	R-4342	
F9	CBMH	48"	941.6	4.6'	937.0	R-3067	
F10	CB	2'x3'	941.6	4.0'	937.6	R-3067	
F11	CBMH	48"	941.5	5.8'	935.7	R-3067	
F12	CBMH	48"	940.9	5.0'	935.9	R-3067	
F13	STMH	48"	943.0	6.4'	936.6	R-1642	
F14	CBMH	48"	941.6	4.6'	937.0	R-3067	
F15	CB	2'x3'	941.6	4.0'	937.6	R-3067	
F16	CB	2'x3'	940.9	4.0'	936.9	R-3067	
F17	CBMH	48"	943.4	4.3'	939.1	R-3067	
F18	CB	2'x3'	944.4	4.0'	940.4	R-3067	
F20	STMH	48"	937.9	2.8'	935.1	R-1642	
F21	CBMH	48"	945.4	4.6'	940.8	R-3067	
F22	CB	2'x3'	945.4	4.0'	941.4	R-3067	

FES TABLE

Structure Name	TYPE	SIZE (IN.)	INV	C.Y. RIP RAP
F1	FES	24	931.5	13
F4	FES	24	930.5	13
F19	FES	15	935.0	9

NORTH

100 50 0 50 100 200
SCALE IN FEET

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DRAWING NAME	NO.	BY	DATE	REVISIONS
SS - BW 5TH				
DRAWN BY				
MJV				
CHECKED BY				
RSM				
DATE				
05/19/20				

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Robert S. Molstad

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Date: 05/19/20 Lic. No. 26428

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
--

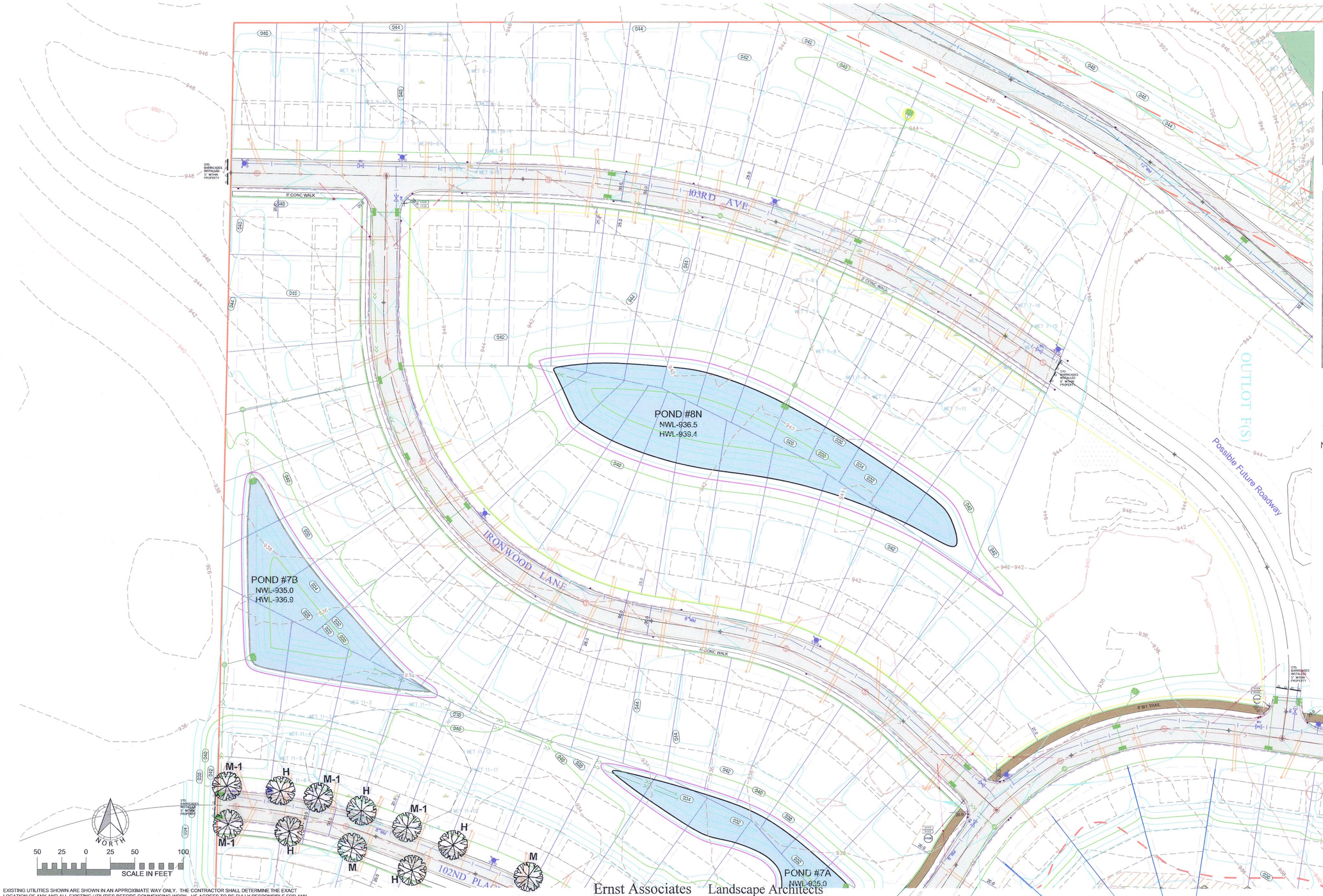
CORCORAN, MINNESOTA

STORM SEWER PLAN
BELLWETHER 5TH ADDITION
PULTE HOMES OF MINNESOTA, LLC

FILE NO.
72905-313

11
23

BELLWETHER 4TH 72905-313



SUGGESTED PLANT LIST

MINIMUM CALIPER FOR STREET TREES - 2 ½" CAL. BB

KEY	COMMON		BOTANICAL	
H	HACKBERRY		Celtis occidentalis	5
M	MAPLE	*	Variety Availability	2
M-1	SUGAR MAPLE	**	Variety Availability	4

ALTERNATE TREE SPECIES

*	AUTUMN BLAZE	Acer x Freemanii 'Jeffersred'
	EMERALD LUSTRE	Acer platanoides 'Pond'
	GREEN MOUNTAIN	Acer saccharum 'Green Mountain'
	NORTHWOOD	Acer rubrum 'Northwood'
	SIENNA GLEN	Acer x freemanii 'Sienna'
**	GREEN MOUNTAIN	Acer saccharum 'Green Mountain'
	AUTUMN BLAZE	Acer x Freemanii 'Jeffersred'
***	RED OAK	Quercus rubra
	NORTHERN PIN OAK (Light soils only)	Quercus ellipsoidalis
****	SCOTCH PINE	Pinus sylvestria
	PONDEROSA PINE	Pinus ponderosa
	(12' HT. BB OR MACHINE-TRIMMED 3' ABOVE GRADE)	
*****	SCOTCH PINE	Pinus sylvestria
	NORWAY PINE	Pinus vesinosa
******	COLORADO SPRUCE	Picea pungens
	BLACK HILLS SPRUCE	Picea glauca densata

Shade **TOTAL NUMBER REQUIRED.....11**

TOTAL NUMBER SHOWN.....11

Notes:

1. Some trees have been placed non-typical to avoid encroachments with existing and proposed utilities.
2. Final tree varieties and selection will be based on species availability at time of final plat.
3. In areas with sidewalks and a minimum 6' wide boulevard, plant trees 3' back of curb.
4. In areas with sidewalks and a boulevard less than 6' wide, plant trees 3' back of sidewalks.
5. In areas with no sidewalks and 60' or larger ROW's, plant trees 3' back of curb. No trees allowed in ROW's 50' or less.
6. All lots to be sodded with irrigation.

EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.

DRAWING NAME	NO.	BY	DATE	REVISIONS
S - SHEETS				
DRAWN BY				
ERJ				
CHECKED BY				
RSM				
DATE				
04/17/18				

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I HEREBY CERTIFY THAT THIS PLAN OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

GENE F. ERNST, PLA.
Date: 7.16.18 Lic. No. 12297

Ernst Associates Landscape Architects
1949 Woodstone Lane Victoria, MN 55386 (952) 283-1415

REVISION 1/23/19 5/19/20

ENGINEERS SURVEYORS DESIGNERS PLANNERS
SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

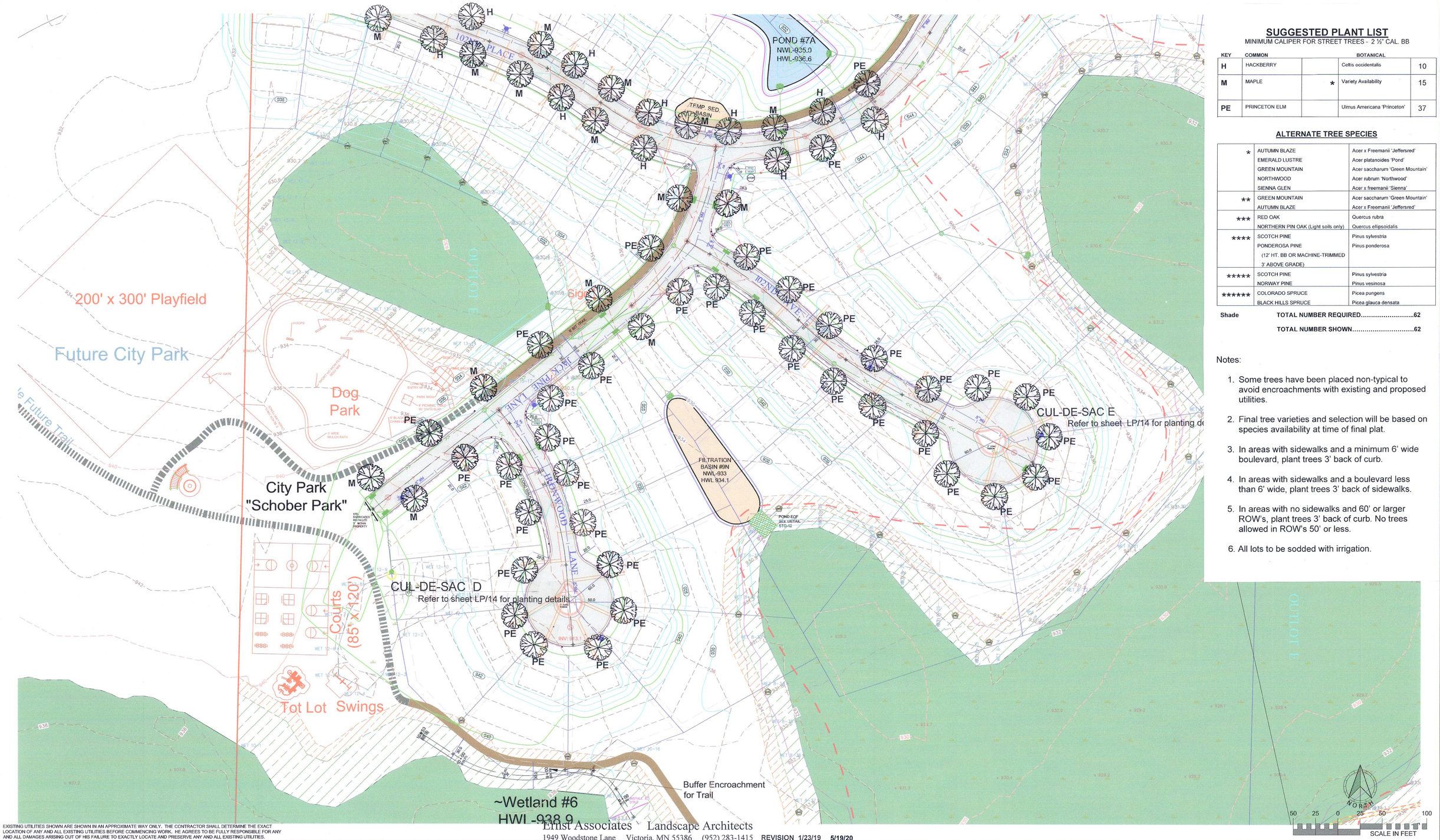
CITY PROJECT NO.

CORCORAN, MINNESOTA

STREET TREE
LANDSCAPE PLAN - S
BELLWETHER 5 TH ADDITION
PULTE HOMES OF MINNESOTA, LLC

FILE NO.
72905-313

LP 1



SUGGESTED PLANT LIST

MINIMUM CALIPER FOR STREET TREES - 2 ½" CAL. BB

KEY	COMMON		BOTANICAL	
H	HACKBERRY		Celtis occidentalis	10
M	MAPLE	*	Variety Availability	15
PE	PRINCETON ELM		Ulmus Americana 'Princeton'	37

ALTERNATE TREE SPECIES

*	AUTUMN BLAZE	Acer x Freemanii 'Jeffersred'
	EMERALD LUSTRE	Acer platanoides 'Pond'
	GREEN MOUNTAIN	Acer saccharum 'Green Mountain'
	NORTHWOOD	Acer rubrum 'Northwood'
	SIENNA GLEN	Acer x freemanii 'Sienna'
**	GREEN MOUNTAIN	Acer saccharum 'Green Mountain'
	AUTUMN BLAZE	Acer x Freemanii 'Jeffersred'
***	RED OAK	Quercus rubra
	NORTHERN PIN OAK (Light soils only)	Quercus ellipsoidalis
****	SCOTCH PINE	Pinus sylvestria
	PONDEROSA PINE (12' HT. BB OR MACHINE-TRIMMED 3' ABOVE GRADE)	Pinus ponderosa
*****	SCOTCH PINE	Pinus sylvestria
	NORWAY PINE	Pinus vesinosa
******	COLORADO SPRUCE	Picea pungens
	BLACK HILLS SPRUCE	Picea glauca densata

Shade TOTAL NUMBER REQUIRED.....62

TOTAL NUMBER SHOWN.....62

Notes:

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4. In areas with sidewalks and a boulevard less than 6' wide, plant trees 3' back of sidewalks.
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Ernst Associates Landscape Architects
1949 Woodstone Lane Victoria, MN 55386 (952) 283-1415 REVISION 1/23/19 5/19/20

DRAWING NAME	NO.	BY	DATE	REVISIONS
S - SHEETS				
DRAWN BY				
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Gene F. Ernst

GENE F. ERNST, PLA.
Date: 7.16.18 Lic. No. 12297

ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.

CORCORAN, MINNESOTA

STREET TREE
LANDSCAPE PLAN - S
BELLWETHER 5 TH ADDITION

PULTE HOMES OF MINNESOTA, LLC

FILE NO.
72905-313

LP 2

72905-313 ENCORE

BELLWETHER 5TH ADDITION

C.R. DOC. NO._____

KNOW ALL PERSONS BY THESE PRESENTS: That Pulte Homes of Minnesota, LLC, a Minnesota limited liability company, owner of the following described property situated in the State of Minnesota, County of Hennepin, to wit:

OUTLOT A, BELLWETHER 4TH ADDITION.

Has caused the same to be surveyed and platted as BELLWETHER 5TH ADDITION and does hereby dedicate to the public for public use the public ways and the easements for drainage and utility purposes as created by this plat.

In witness whereof said Pulte Homes of Minnesota, LLC, a Minnesota limited liability company, has caused these presents to be signed by its proper officer this _____ day of _____, 2020.

Pulte Homes of Minnesota, LLC

_____
Jamie Tharp, Chief Manager

STATE OF MINNESOTA, COUNTY OF _____

This instrument was acknowledged before me this _____ day of _____, 2020, by Jamie Tharp, Chief Manager of Pulte Homes of Minnesota, LLC, a Minnesota limited liability company, on behalf of the company.

_____ _____ My Commission Expires:_____
Notary Public, _____ County, Minnesota Notary Printed Name

SURVEYOR CERTIFICATE

I Jared J. Averbeck do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on this plat have been or will be correctly set within one year; that all water boundaries and wet lands, as defined by Minnesota Statutes, Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled on this plat; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____, 2020.

_____
Jared J. Averbeck, Licensed Land Surveyor
Minnesota License No. 53642

STATE OF MINNESOTA, COUNTY OF HENNEPIN

This instrument was acknowledged before me this _____ day of _____, 2020, by Jared J. Averbeck.

_____ _____ My Commission Expires:_____
Notary Public, Hennepin County, Minnesota Notary Printed Name

CITY COUNCIL, CITY OF CORCORAN, MINNESOTA

This plat of BELLWETHER 5TH ADDITION was approved and accepted by the City Council of the City of Corcoran, Minnesota at a regular meeting thereof held this _____ day of _____, 2020, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subd. 2.

City Council, City of Corcoran, Minnesota

By:_____, Mayor By:_____, Clerk

RESIDENT AND REAL ESTATE SERVICES,
Hennepin County, Minnesota

I hereby certify that taxes payable in _____and prior years have been paid for land described on this plat, dated this _____ day of_____, 2020.

Mark V. Chapin, County Auditor

By: _____, Deputy

SURVEY DIVISION
Hennepin County, Minnesota

Pursuant to Minnesota Statutes Section 383B.565 (1969), this plat has been approved this _____ day of _____, 2020.

Chris F. Mavis, County Surveyor

By: _____

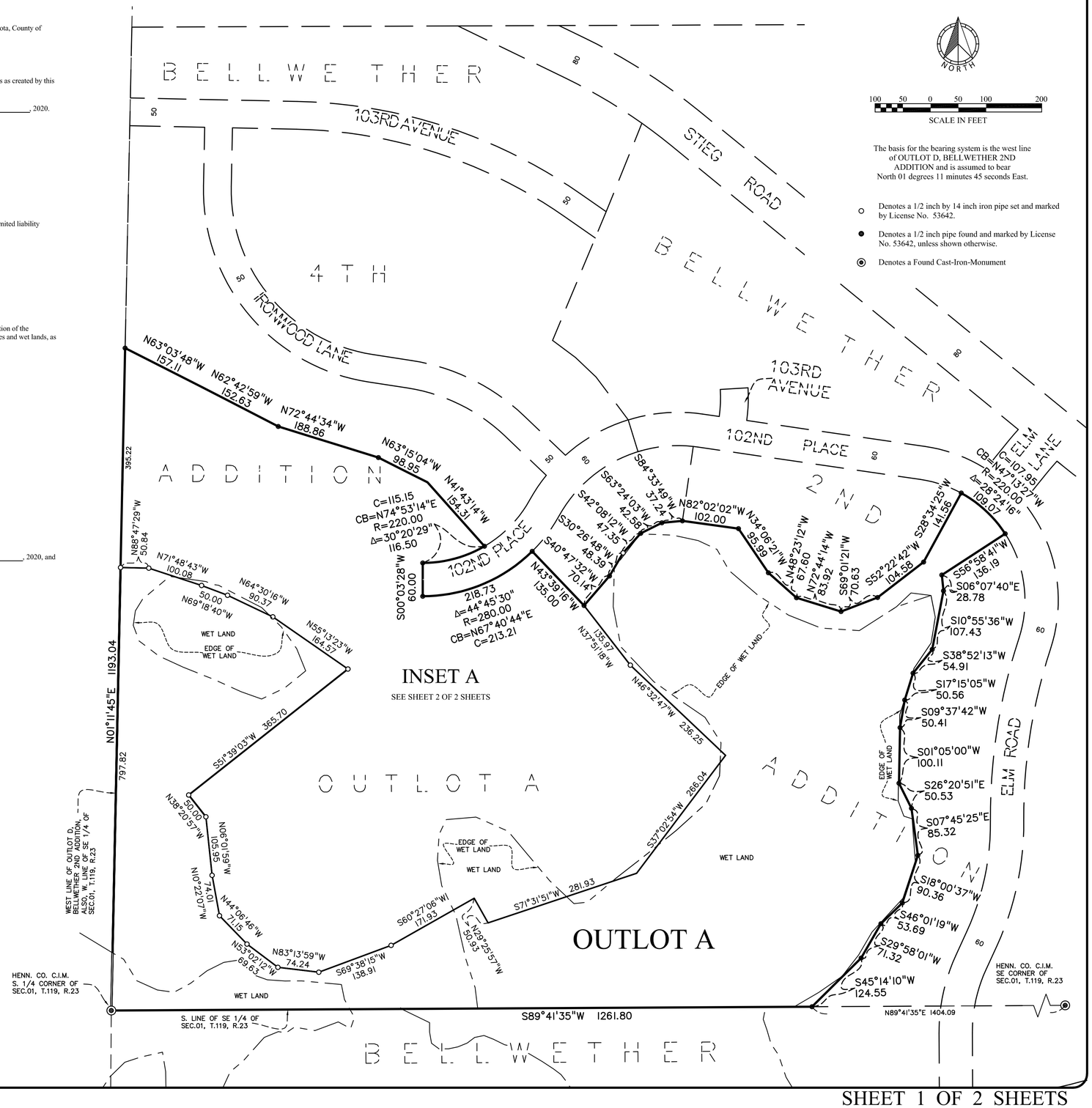
COUNTY RECORDER
Hennepin County, Minnesota

I hereby certify that the within plat of BELLWETHER 5TH ADDITION was recorded in this office this_____ day of _____, 2020, at _____o'clock ____M.

Martin McCormick, County Recorder

By:_____, Deputy

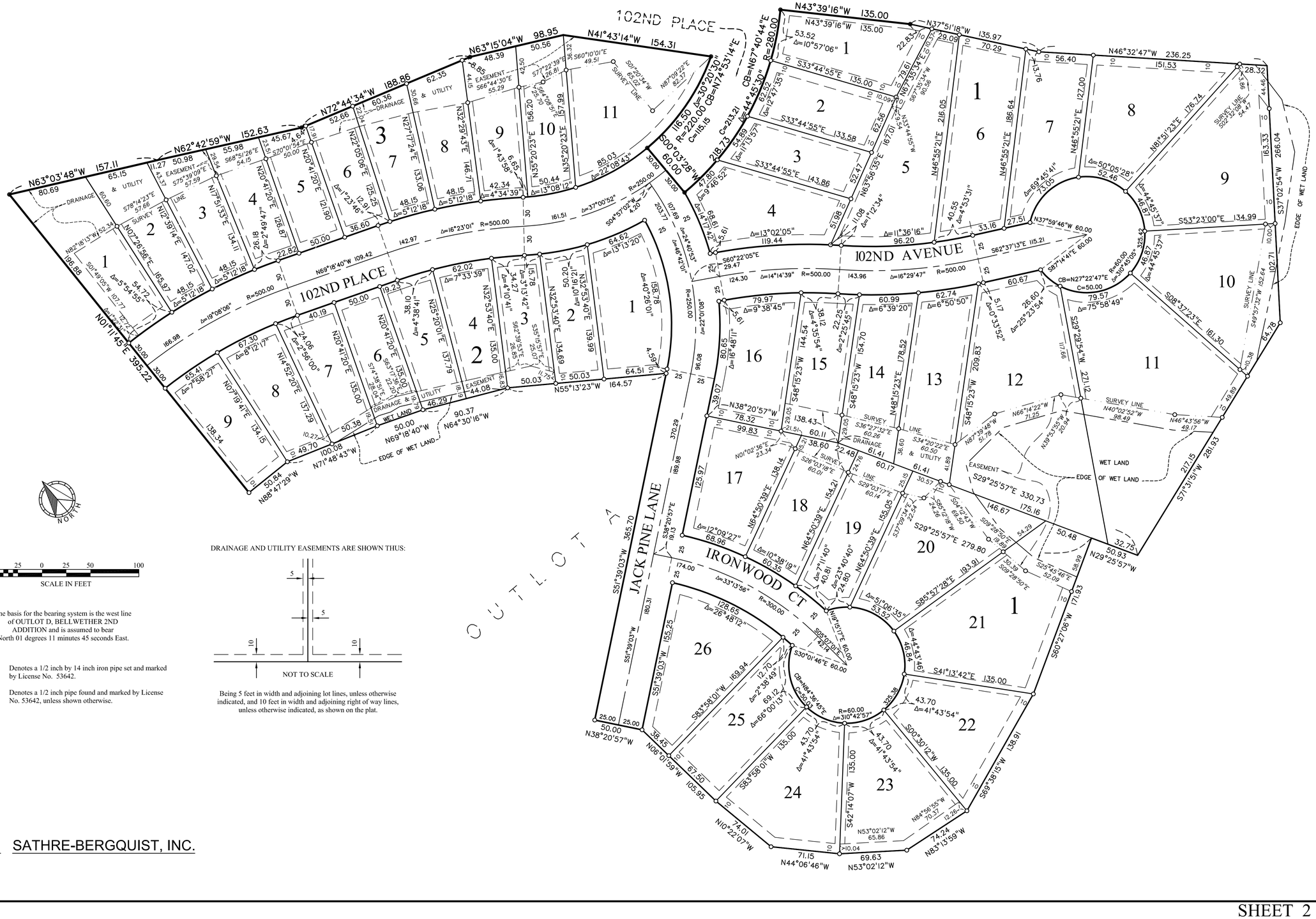
SATHRE-BERGQUIST, INC.



BELLWETHER 5TH ADDITION

INSET A

C.R. DOC. NO._____


102ND PLACE
102ND AVENUE
102ND PLACE
IRONWOOD CT
JACK PINE LANE
OUTLOT A
EDGE OF WET LAND
WET LAND
SURVEY LINE
EASEMENT
DRAINAGE & UTILITY
N01°11'45"E 395.22
N63°03'48"W 157.11
N72°44'34"W 188.86
N63°15'04"W 98.95
N41°43'14"W 154.31
N43°39'16"W 135.00
N37°51'18"W 135.97
N46°32'47"W 236.25
N62°42'59"W 152.63
N69°18'40"W 109.42
N55°13'23"W 164.57
N64°30'16"W 90.37
N71°48'43"W 100.08
N88°47'23"W 50.84
S60°03'26"W 60.00
S04°57'09"W 4.20
S60°22'05"E 29.47
S62°37'13"E 115.21
S37°02'54"W 266.04
S53°23'00"E 134.99
S08°37'23"E 161.30
S29°25'57"E 279.80
S85°57'28"E 193.91
S60°27'06"W 171.93
S51°39'03"W 365.70
N38°20'57"W 78.32
N06°01'59"W 105.95
N10°22'07"W 74.01
N44°06'46"W 71.15
N53°02'12"W 69.63
N83°13'59"W 74.24
S69°38'15"W 138.91
S00°30'12"W 135.00
S41°13'42"E 135.00
S30°01'46"E 60.00
N37°59'46"W 60.00
S87°14'41"E 60.00
N46°55'21"E 186.64
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N46°55'21"E 127.00
N81°53'23"E 176.74
S29°25'57"E 330.73
N29°25'57"W 50.93
N68°56'35"E 157.01
N63°56'35"E 52.47
S33°44'55"E 135.00
S33°44'55"E 133.58
S33°44'55"E 143.86
N35°20'23"E 156.20
N35°20'23"E 50.44
N22°29'43"E 146.71
N27°17'24"E 133.06
N22°55'06"E 125.25
N20°41'20"E 121.90
N20°41'20"E 126.87
N71°53'33"E 134.11
N72°39'14"E 147.02
N07°26'56"E 165.67
N82°18'13"W 52.34
S01°49'05"W 107.77
S87°22'39"E 26.81
S60°10'01"E 49.51
S07°02'34"W 82.47
N87°09'22"E 82.47
S70°01'54"E 50.00
S78°14'23"E 57.66
S75°39'09"E 57.99
N43°39'16"W 135.00
N37°51'18"W 135.97
N67°55'34"E 80.56
S87°55'34"W 80.56
N63°55'34"E 80.56
S67°08'51"E 25.70
S57

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MEMORANDUM

DATE	June 15, 2020
TO	Brad Martens
CC	City Council, Planning Commission, Parks & Trails Commission
FROM	Kendra Lindahl, City Planner
RE	Active Corcoran Planning Applications

Projects/Comments in blue italics are new
Project marked with an * have moved from active to approved

The following is a summary of project status for current, active projects:

1. **Corcoran Self Storage PUD Amendment (city file no. 20-009).** The applicant is requesting an amendment to the phasing plan for the project. Staff is currently reviewing the application for completeness, but it appears that the request may be administratively approved. *The application is incomplete pending additional information from the applicant.*

2. **Corcoran Crossroads Administrative Permit *and Variances* at 7625 County Road 116 (city file 20-014).** The new owner of Corcoran Crossroads has applied for an administrative permit for expansion of the existing legal, non-conforming canopy structure *and sign variances*. Staff will review the application and if it complies with the ordinance, it may be administratively approved. *The application for the variances is scheduled for the July 2nd meeting and City Council will review on July 23rd.*

3. **Karineimi Addition Preliminary Plat at 6780 Rolling Hills Road and 6855 Willow Drive (PID 33-119-23-22-0004 and 33-119-23-21-0001) (City file 20-0016).** The applicant has submitted a preliminary plat to create four lots from the newly created Lot 1, Block 1, Rolling Hills Acres and the adjacent 40 acres to the east. The 40-acre parcel have four development rights which will be used for the subdivision. *The application reviewed at a public hearing at the Planning Commission on June 4th and City action is expected on June 25th*.

4. **Comprehensive Plan Amendment, Rezoning, Preliminary Plat and Preliminary PUD Development Plan for "Tavera" at the property at the northwest corner of Hackamore Road and County Road 116 (PID 35-119-23-44-0001, 35-119-23-11-0001, 35-119-23-12-0002, 35-119-23-41-0001 and 35-119-23-43-0001) (City File 20-017).** The applicant has submitted an application for development of 549 homes on the 273.57-acre site. The Council reviewed an EAW and Concept plan for the site earlier this year. The project includes a mix of single-family, villa, twinhome and townhome units. *The phasing plan shows development in 8 phases. The application was reviewed by the Parks and Trails Commission review on May 21st and a public hearing was held at the Planning Commission on June 4th. City Council action is expected on June 25th.*

5. **Conditional Use Permit and Variance for the Tom Spanier property located at 10580 Cain Road (PID 02-119-23-23-004) (city file no. 20-019) (City File 20-019).** The applicant has requested approval of a conditional use permit and variance for an accessory building. This project was reviewed and approved in 2015 and was never built. The approvals expired after one year on November 23, 2016. The applicant is now ready to move forward with the project and is requesting approval again with no changes. *The application was reviewed at a public hearing at the Planning Commission on June 4th and City Council action is expected on June 25th.*

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6. **Sign Variance for the Marathon/Tom Thumb at 9350 County Road (PID 07-119-23-43-0004) (City File 20-020).** The applicant has submitted a variance application to allow the number of and square footage of freestanding and wall signage to exceed what is allowed by ordinance. *The application is scheduled for review at the Planning Commission on July 2nd and City Council action on July 23rd.*

7. ***Encroachment agreement on 70th Avenue to provide access to PID 26-119-23-33-0001 (city file 20-021).*** *The property owner is planning to construct a new home on this vacant parcel. The existing 70th Avenue right-of-way extends to the property line but the road improvements stop short. The property owner will need an encroachment agreement to build a private driveway from the existing cul de sac over the unimproved right-of-way to the property line. Once the request is complete, it would be scheduled for Council approval.*

8. ***Site Plan, Conditional Use Permit and Variance for Nelson International at 10409 CR 101 (PID 01-119-23-41-0001) (city file no. 20-022).*** *The Council reviewed a concept plan for this site in January. The project is a new 35,000 sq. ft. building for truck sales and service. The application is currently incomplete as the City completes feasibility studies for the planned infrastructure. The items will be scheduled for Planning Commission and Council review once it is complete. This item is tentatively planned for the August meetings.*

9. ***Eagle Brook Church Site Plan, Conditional Use Permit and Preliminary Plat for the Property located at 7015 20th Avenue (PID 36-119-23-44-0008, 36-119-23-44-0010, 36-119-23-44-0009, 36-119-23-44-0013, 36-119-23-44-0014) (city file no. 20-023).*** *The applicant is requesting approval to combine the existing parcels into one lot for a 70,000 square foot church and one outlot for future development. The application is scheduled for a public hearing at the July 2nd Planning Commission meeting and City Council action on July 23rd.*

10. ***Final PUD Development Plan, Final Plat and Easement Vacation for "Bellwether 5th Addition" (Outlot A, Bellwether 4th Addition) (city file no. 20-024)****. Pulte Homes of Minnesota, LLC has submitted a request for approval of a Final Plat and Final PUD plan application for "Bellwether 5th Addition", a residential development of 46 new single-family homes and one outlot on 18.43 acres of property. The application includes vacation of the existing drainage and utility easement over the outlot. The application is scheduled for Parks and Trails Commission review on June 18th, Planning Commission review on July 2nd and Council action on July 23rd.*

Also, there are several projects that have been approved, but are still not filed and closed out:

1. **Corcoran Business Park (City file 06-005**). The City Council granted a one-year extension to the final plat approval, which expired on April 12, 2011. Staff has spoken to the applicant and is still working to close out this project. Staff has spoken to the applicant and will schedule a meeting when more information is available on the Loretto sewer project.

2. **Hope Ministries Conditional Use Permit for Cemetery and Vacation of Drainage & Utility Easement at 19951 Oswald Farm Road (City file 12-002).** Hope Ministries submitted a request for a conditional use permit to allow a cemetery west of the existing church. The application was approved by the City Council on March 22nd and site work had begun. The letter of credit for site improvements has been released, but we are holding the escrow pending completion of the approved landscaping. The applicant has indicated that they are considering a site plan amendment application to modify the approved plans. Staff met again with Pastor Brian Lother in July 2017 to discuss the outstanding issues and future expansion plans on the property.

3. **Sawgrass Preliminary Plat, Preliminary PUD Development Plan and Rezoning for Schendel property at 20400 County Road 10 (City file 14-027).** The City Council approved the request on December 11, 2014 and granted the applicant 2 years to apply for the final plat and final PUD development plan. Peachtree Partners did not buy the property, but a different developer could still proceed with the approved plan. Several extensions have been approved. The landowner is requesting another extension to the preliminary plat approval, which was previously granted extensions that expire in February. M/I Homes is proposing to take over the project with a few amendments to the proposed plan. Council reviewed the request at the February 27th meeting.

4. **Commercial Door Addition at 7670 Commerce Street (City file 15-010).** The City received an application for approval of a building addition, which required a conditional use permit, interim use permit, variance and site plan approval. The project was reviewed at a public hearing at the June 4th Planning Commission meeting and was approved by the City Council on June 25th. The required landscaping will be finalized and constructed after the downtown infrastructure project is completed. The City will release the remaining escrow when the planting is completed. Staff is working with the landowner to complete the outstanding items.

5. **Comlink Midwest Site Plan, CUP, Variance and Rezoning at 23405 CR 10 (City file 19-011).** The request is to allow construction of a contractor's yard in the Rural Commercial (CR) district over 3-5 years. Phase 1 is for the 20,000 square foot Utility Construction building. This item was reviewed at a public hearing at the July 9th Planning Commission and Council approved on July 25th meeting. The approval included changes to the building architecture were approved by the Council at the August 22nd meeting. *The applicant has indicated that they have found a site in a different city and will be restoring this site and closing out the file.*

6. **Wessel Property PUD Sketch Plan and EAW for 22020 Hackamore Road (PID 35-119-23-43-0001, 35-119-23-44-0001, 35-119-23-11-0001 and 35-119-23-12-0002) (City File 19-018).** The sketch plan was reviewed by the Council on September 26th and staff was directed to begin the Environmental Assessment Worksheet. The EAW was acted on by the Council in January 2020.

7. **Savoie Minor Subdivision at 21801 Homestead Trail (City file 19-021).** This two-lot subdivision is was approved by the Council on October 24th. The council had previously approved this subdivision, but the applicant let it expire and an extension was approved. The subdivision was approved on October 24, 2019.

8. **Sketch Plan for "Nelson International" at 10409 County Road 101 (city file 19-023).** The applicant submitted a sketch plan for an approximately 33,000-sq. ft. truck sales/repair operation. The Council reviewed this item on January 23rd.

9. ***Park Dedication Ordinance Update (city file no. 20-004).** The park dedication fees are based on the comprehensive plan. The 2040 Comprehensive Plan was adopted in November and included some changes that require us to reevaluate our park dedication fee formula and make some minor edits to the ordinance. *The Parks Commission will review on May 21st, the Planning Commission held a public hearing on June 4th and City Council approved on June 11th*.

10. **Annual Ordinance Codification (city file no. 20-005).** Staff prepares and annual codification to incorporate all of the previous year's ordinance amendments into the City Code. The new PDF of the Code is now complete and available at City Hall and online.

11. **Request for Variance, Preliminary and Final Plat for St. Jane Chantel cemetery (PID 21-119-23-33-0004) (city file no. 20-001).** Gene Kissner is requesting approval of a Preliminary Plat, Final Plat and Variance to subdivide the 3.76-acre St. Jane Chantel parcel owned by Church of St. Thomas the Apostle. The portion north of County Road 50 contains the cemetery and will be retained by the church and Kissners will purchase the portion south of County Road 50. The Planning Commission held a public hearing on March 5th and recommended approval. Council approved the request on March 26th.

12. **Bellwether 4th Final Plat and Final PUD (city file no.20-002).** Pulte Homes of Minnesota, LLC (applicant) has submitted a request for approval of a Final Plat and Final PUD plan application for "Bellwether 4th Addition", a residential development of 74 new single-family homes and one outlot on 45.49 acres of property. The Planning Commission reviewed on March 5th and recommended approval. Council approved the request on March 26th.

13. **Zoning Map Changes (city file no. 20-003).** Minnesota statues require cities to update their zoning map to bring it into compliance with the comprehensive plan within 9 months of adoption. The 2040 Comprehensive Plan was adopted in November and these map amendments will ensure consistency. The Planning Commission held a public hearing on March 5th and recommended approval. Council approved the request on March 26th.

14. **Tessmer Topo/Wetland Waiver (PID 07-119-23-21-0002) (city file no.20-007).** The applicant is requesting a waiver of the topography and wetland delineation requirements for this parcel. This parcel will be platted with the property to the west for a small division, but no development is proposed for this parcel. Council approved the request on March 26th.

15. **Vollrath request for Ag Preserve designation and initiate expiration for 42.09 acres of land south of County Road 50 (PID 29-119-23-24-0001) (City File 20-010).** The Council approved the request on March 26th.

16. ***Paulsen Farms OSP Preliminary Plat (09-119-23-34-0001) (city file no. 20-011).** The applicant has submitted an Open Space & Preservation Plat for the 88 acres on County Road 30. The plat would include 20 lots and preservation of 47 acres of open space. Staff is currently reviewing this application for completeness. *The Planning Commission held a public hearing on May 7th, Parks and Trails Commission reviewed on May 21st and City Council approved on May 28th.*

17. **M/I Homes Concept Plan for a modification of the approvals for "Sawgrass" on the 103-acre parcel at 20400 County Road 10 (PID 23-119-23-42-0003) (City file no. 20-012).** The Council approved an extension to the 2014 preliminary approvals so that the applicant could proceed with a final plat, final PUD development and PUD amendment. This concept plan is to outline the PUD amendments required for the new plan and ensure Council support before submitting a formal submittal. *The Council was expected to review this item at their April 23rd meeting, but the applicant has withdrawn the application and will proceed with a formal final plat and final PUD application..*

18. **Eagle Brook Church Concept Plan at the NW quadrant of Hackamore Road and County Road 101 (city file 20-013).** Eagle Brook Church has submitted a concept plan for a new church on this site. The City Engineer is completing a feasibility study. The Council reviewed the plan at the April 23rd meeting.

19. ***Laura Gibson has requested approval of a Special Home Occupation License at 7105 County Rd 19 (PID 30-119-23-31-0001) (city file 20-015).** The applicant is requesting an Administrative Permit for a Special Home Occupation License to operate a hair salon business. There will be no employees and up to 28 clients per week. Staff has reviewed and sent notices of intent to surrounding property owners. *The application has been administratively approved.*

20. ***Tabor Request for Metropolitan Agricultural Preserve Initiation of Expiration for 42.09 acres of land at 19450 Gleason Road (PID 36-119-23-12-0001) (City file 20-018).** The landowner is requesting expiration of the Agricultural Preserve designation effective immediately as allowed under the 2019 changes to Minnesota Statute. *This item was approved at the May 28th Council meeting.*

CITY OF CORCORAN
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MEMO

Meeting Date: July 2, 2020 Planning

To: Commission

From: Brad Martens, City Administrator

Re: City Council Report

The Planning Commission last met on June 4, 2020. The following is a recap of some of the items discussed at City Council meetings since that time. A full recap can be found by reviewing the approved City Council minutes on the website

June 11, 2020 Council Meeting

- Park Dedication Fee Update
  - Approved the Ordinance amendments as presented
- Awarding the Sale of General Obligation Bonds – Series 2020A
  - Awarded the sale of general obligation bonds series 2020A
- Hackamore Road Improvements – 30% Design Review
  - Approved street design layout Option 2 with one amendment and authorized WSB to proceed with the completion of a 75% design
- 2020 Fee Schedule Amendments
  - Approved the Ordinance amending the 2020 Fee Schedule
- Pandemic Response Update
  - Staff provided an overview of the continued response to the pandemic

June 25, 2020 Council Meeting

- Preliminary Plat for Kariniemi Addition
  - Approved the preliminary plat as presented
- Comprehensive Plan Amendment, Rezoning, Preliminary Plat and Preliminary PUD

- Development Plan for Tavera
    - Approved the items with a few minor amendments for the 549-unit development at the northwest corner of CR 116 and Hackamore Road
- Hackamore Road Improvement Project Update
    - Staff provided an update on the project planning following Medina's review; staff will continue towards 75% design
- COVID-19 Preparedness Plan
    - Adopted the preparedness plan as presented
- Councilmember Resignation; Declaration of a Vacancy
    - Accepted the resignation; declared a Council vacancy
    - Thanked Councilmember Dejewski for his service
    - Appointed Brian Lother to the City Council effective July 1, 2020 to serve the remaining term through December 31, 2020
- Pandemic Response Update
    - Staff provided an update on the City's pandemic response

Attachments:
None