

**CITY OF HANOVER
PLANNING COMMISSION MEETING
JUNE 25, 2018
7 PM
AGENDA**

CHAIR

STAN KOLASA

COUNCIL LIAISON

DOUG HAMMERSENG

BOARD MEMBERS

JIM SCENDEL

MICHAEL CHRISTENSON

MICHELLE ARMSTRONG

DEAN KUITUNEN

- 1. Call to Order and Pledge of Allegiance: 7:00 p.m.**
- 2. Approval of Agenda**
- 3. Approval of Minutes from May 23, 2018, Regular Meeting**
- 4. Citizen's Forum**
- 5. Public Hearing**
 - a. Final Plat for Crow River Heights West Fourth Addition**
- 6. Unfinished Business**
- 7. New Business**
- 8. Reports and Announcements**
 - a. Planning Commission Reports**
 - b. Liaison Report**
 - c. Staff Reports**

**CITY OF HANOVER
PLANNING COMMISSION MEETING
MAY 23, 2018
DRAFT MINUTES**

Call to Order/Pledge of Allegiance

Stan Kolasa called the May 23, 2018, Planning Commission Meeting to order at 7:00 pm. Members present were Stan Kolasa, Jim Schendel, Michelle Armstrong, Dean Kuitunen, and Mike Christenson. Also present Council Liaison Doug Hammerseng, City Planner Cindy Nash, City Engineer Justin Messner, and Administrative Assistant Amy Biren. Guests present: Zach Webber, Deb Krause, Adam Lange, Todd McLouth, Mark Kjolhaug, Dennis Backes, Clark Lee, Chuck Ylitalo, Alyssa Schulze, Darsi Miller, Janet McDaniel, Lauri DeZiel, Wallace DeZiel, Matt Lee, Karl Johnson and a few other residents.

Approval of Agenda

MOTION by Schendel to approve the agenda, seconded by Armstrong.

Motion carried unanimously.

Approval of Minutes from the March 26, 2018 Regular Meeting

MOTION by Schendel to approve the March 26, 2018, minutes, seconded by Armstrong.

Motion carried unanimously.

Citizen's Forum

None

Public Hearing

a. Environmental Assessment Worksheet (EAW) for Crow River Heights West Future Additions

Kolasa closed the Planning Commission meeting and opened the Public Hearing at 7:01 pm.

Nash reviewed how the EAW was published and that the review period for public comment was nearing an end, specifically closing on Wednesday, May 30, 2018. She presented a video for the Board and guests to watch that outlined what comprises an EAW and the steps taken by the responsible governmental unit. Video link: <https://www.youtube.com/watch?v=juiYV-tKfp0&feature=youtu.be>.

Nash then asked for public comment. As she had received two letters prior to the meeting, she read them for the record. The letters were from Robert Clyne and Shannon Chau, 538 Jandel Avenue NE, and Debra Krause, 579 Jandel Avenue NE. Copies of the letters are attached. She indicated that these letters also applied to the Preliminary Plat Public Hearing as well.

Darsi Miller, 578 Jandel Avenue NE, Hanover: Miller indicated she was concerned about the high-water level and the wetland that is adjacent to her property. She mentioned that in the spring, the water rises and worries that the development will impact the level of the water and possibly cause damage to property and homes. She is neighbors with the Krauses and also echoed their concern about losing the trees adjacent to her property, along with the privacy. Miller asked if there was a compelling reason to connect Jandel with the new development. She stated that she thought having a buffer zone would make the current neighborhood and the future development neighborhood more attractive. Miller also stated her concerns with construction traffic using the streets in Hanover Hills as a throughway to the construction site.

Chuck Ylitalo, 9715 10th Street NE, St. Michael: Ylitalo expressed concern with additional drainage coming through the area and his property and how the proposed homes would be at a higher elevation than his home. He also stated that the previous design (plat) seemed more desirable with less coving and more natural flow to the drainage.

Janet McDaniel, 9834 4th Street NE, Hanover: McDaniel stated that it doesn't take much to move water and then changes can happen. She gave the example of lots on 500-520 Kadler Avenue which have wetlands located on them and how the water drains from Hanover Hills to that area. Changes can affect trees and their lifespan. The developer knows what they are doing: building homes and making money. The City needs to make sure it protects its citizens.

Matt Lee, 9840 Jasmine Avenue NE, Hanover: What is the mitigation of the wetlands and could it please be explained. He also would like to know if the EAW would be revisited in the future.

Justin Messner, City Engineer: With the mitigation of the wetlands, he and staff met with Wright County Soil and Water Conservation District (WCSWCD). They were agreeable to eliminating some of the smaller, incidental wetlands. Outlot F will need some mitigation and the developer may purchase wetland credits at a rate of two (2) to one (1), essentially paying more than if they mitigate onsite.

Clark Lee, 525 Kadler Avenue, Hanover: Please clarify if the wetland is going to be mitigated onsite or not.

Todd McLouth, Loucks Engineering: The wetlands will be mitigated onsite.

Nash responded to M. Lee's question about further review of the EAW. Nash said that the EAW does cover the entire property and is reviewed once prior to preliminary plat approval. The parcel phases will be reviewed again in the future when the final plats are approved. There can be adjustments made at that time if needed.

A question was asked about the increase in traffic. Nash replied that there was a traffic study completed and is part of the EAW. The proposed plan is trying to keep some of the underlying streets and grading that is in place, but changes need to be made due to the wetlands and the desire for them to be in outlots. Since there was a wetland ordinance change since the previous plan, the number of lots being built has reduced to 159 units. The current plan will be less dense and therefore fewer cars. The traffic study did not highlight serious concerns about the added units impacting traffic.

Kolasa closed the Public Hearing and re-opened the Planning Commission meeting at 7:29 pm. Kolas went on to ask the Board members for questions and comments.

Armstrong stated that she, too, had concerns about the high water level in Outlot E. Messner said they looked specifically at the wetlands and the ponds in conjunction with grading in order to ensure that water flowed properly without having to pipe the area. Part of the process was to establish high water levels in each of the wetlands. He went on to say that Outlot F's wetland continues into the Hanover Hills area.

Miller asked if there will be more water flow with the grading. Messner stated that the grading will actually help the water continue through the area as it is supposed to flow. The high water level will also help in making sure wetlands drain correctly.

Armstrong asked for clarification on the emergency overflow and where the water will go to the basins. Messner replied that the overflow goes in the basin, but nothing from the streets would be directed into the basins. He also showed how the grading affects the flow.

Christenson wanted to know if the grading by 10th Street is going to as severe as it appears on the plan. Messner looked at the property on the map and said drainage should be maintained. McLouth said that the berm created (which appears as severe grading) will be used to keep the water from Ylitalo's property.

Nash was asked if a formal motion was needed for the EAW. She replied that the Planning Commission did not need to make a formal motion. After the public comment period closed, a narrative of the comments would be presented to the Council along with the EAW. At the June 5, 2018, Council meeting, it would be decided if an Environmental Impact Statement would be needed or if the EAW could stand alone.

b. Planned Unit Development and Preliminary Plat for Crow River Heights West Future Additions

Kolasa closed the Planning Commission meeting and opened the Public Hearing for the Planned Unit Development (PUD) and Preliminary Plat for Crow River Heights West Future Additions at 7:40 pm.

Nash reviewed the memo provided to the Board members. The developer attempted to utilize as much of the grade as possible that was already existing from the previous plat. The current plan meets the wetland setbacks which the previous one would not. The developer has eliminated the townhomes and all the units will be single family homes situated in a similar coving manner. The front yard setback will be a “build to” line in order to maintain the coving concept. The lot size was reduced from current standards with the main reason being the elimination of wetlands and stormwater ponds as being part of a parcel. All of the ponds and wetlands will be in outlots that are deeded to the City in order for maintenance to be performed. The width of the lots has also been reduced. The rear yard setback of some lots will be reduced in order to maintain the wetland setback. The developer did not request a reduction of the side yard setback as in the previous phase in 2017. Staff would like more discussion on Outlot F. Sidewalks will be constructed in this part of the development on one side of the street. Although the previous developments in this neighborhood do not have sidewalks, it is a standard currently and sidewalks will more than likely will be constructed when streets are reconstructed as part of the pavement management plan. Cardinal Circle Park was designed with the intent of being the park for the proposed development. The developer will still need to pay park dedication fees which can be used for amenities currently absent from the park.

M. Lee stated that it seems like another park would be needed with the amount of families and kids coming to the new development.

Nash reiterated that Cardinal Circle Park was meant to be the park for the entire neighborhood and is an adequately sized park for that size of neighborhood. Armstrong said that there is plenty of space in Cardinal Park to add amenities. Nash replied yes and stated that the City is in the process of updating the Comprehensive Plan and can bring this to the Park Board for further discussion. She went on to say that most cities tend not to put a small, or pocket, park in a neighborhood as it would be under used. She also added that staff would not recommend doing such a small park.

Karl Johnson, 9910 Jasmine Avenue NE, Hanover: He is concerned about the traffic and how drivers do not obey the stop signs or speed limits. He asked for speed bumps as he believes it is just a matter of time before a child is hit by a car. Messner replied that the City often gets requests for speed bumps, but that speed bumps cause further issues with liability and maintenance. He also said that Kadler Avenue is actually under-utilized compared to Kayla. Several residents disagreed with Messner. Messner explained that the traffic study was completed and it stated that the additional traffic from the development could be adequately handled with the existing streets. He went on to say that studies show that speed bumps actually increase speeds as drivers tend to speed up in between the speed bumps. Messner also said that residents can speak to their neighbors when they see speeding and get the message out that it is not acceptable in the neighborhood.

Adam Lange, 9970 Fourth Street NE, Hanover: He moved into the neighborhood about two years ago and he sees a lot of the cars using Kadler as a cut-through from CSAH 20 to Beebe Lake Road. Messner said that increased patrols of law enforcement would be able to help with that.

Ylitalo asked about the rear yard setback of the homes on the north side of the development abutting his property. McLouth replied that the rear yard setback is 30 feet and the lines Ylitalo is looking at are the drainage elevations. Nash said the only lots with reduced rear yard setbacks are those that abut a wetland.

C. Lee requested that the PUD and preliminary plat be tabled due to the fact that the WCSWCD has not met and approved the wetland delineation and mitigation. This decision would not be made until the July 9th meeting.

Kolasa replied that the Planning Commission can send it to Council and Council can table it. The Board's job was to gather information.

Messner also replied that the PUD and plat can be accepted contingent on the developer obtaining all the necessary permits prior to the final plat being approved. The developer also realizes that he continues at his own risk and has to accept the risk of redesigning the plat.

Nash replied as well with the analogy of the chicken and the egg. She said that typically, the PUD and plat come through the City first and that it is contingent on the developer getting the necessary permits.

C. Lee replied that wetlands cannot be filled for economic gain.

A guest asked where these wetlands were located and if they were the low spots in the pasture and field area of the parcel. Messner said that some of the wetlands are located in that area and that some of the wetlands were identified as incidental and caused by past grading. The WCSWCD will make the decision whether or not some of the wetlands are considered significant.

Alyssa Schulze, 10070 Fourth Street NE, Hanover: She is concerned with the heavy traffic and if Jandel is connected to the new development, that will create another cut-through street for drivers. She would rather have only one road with heavier traffic.

M. Lee commented that the previous development was not in conflict with the Comprehensive Plan and that the proposed development is. He thinks that this would be an opportunity for the developer to create different types of lots. He also said that traffic needs to be addressed.

Nash replied that a PUD is at the discretion of the City Council. It is a common practice for a PUD to meet concerns expressed by a city, as has the proposed plan with the wetlands and ponds being outlots instead of on a person's property.

M. Lee said that this plan looks like St. Michael's developments and that is why his family did not move to St. Michael.

Biren read letters from Kelly Baltzell, 795 Kadler Avenue, and Thomas Jones, 540 Kadler Avenue. These letters are attached.

Deb Krause, 579 Jandel Avenue, restated her request for a transition zone between the two neighborhoods saying that she will be closer to neighbors than she previously was before moving to Hanover.

Kolasa closed the Public Hearing and re-opened the Planning Commission meeting at 8:23 pm. He asked if the developer would like to present any information and if the Board members had questions.

Christenson asked what the City is doing to address the issue of law enforcement coverage. He was told that Council would need to address that question. Christenson added that the lot sizes are larger than the previous stage that was approved in 2017.

Kuitunen asked if the previous phases of Crow River Heights followed setbacks or was it a PUD. Nash replied that it was a PUD, but unfortunately, the PUDs in the past were not spelled out as they are currently. Also, the previous PUD would not have met the wetland setback requirements.

Schendel expressed concern to make sure the emergency overflows are certified upon completion and to make sure that lots are certified prior to occupancy. Messner said that is currently the practice.

Christenson asked if it would be reasonable to do this in phases rather than one large preliminary plat. Nash responded that the final plats will come in phases and the area being approved will be smaller. This preliminary plat will not be good for 10 years as the previously one was.

Armstrong asked about the red-lined plat maps that were included in Messner's memo to staff. Messner said that he did a review of the plat and identified problem areas for drainage. He asked for those areas to be corrected. He went on to say that often when preliminary plats are created in CAD, they are not finessed

so some issues may need to be identified. The final plats will address these issues and be given an extensive review prior to approval by Council. During each phase of the development process, a review is completed to ensure that changes have been made and standards are met.

Armstrong asked Backes how many phases will be rolled out. Backes said that the first phase of this plat will be an extension of Jordan Avenue of 26 or 36 homes depending on whether or not the cul de sac is included in the phase.

Hammerseng asked how many phases he was planning. Backes said that he would like to have five or six phases depending on the sales. He would like to do a phase each year.

Armstrong asked if the same builders would be selected. Backes replied at this time, he was planning on the same builders, but this phase will have more expensive homes with more varieties of styles.

C. Lee again stated that this was wasted time since the WCSWCD has not approved any mitigation. Mark Kjolhaug, Kjolhaug Environmental Services, stated that the next two phases will not have any wetland impact.

MOTION by Armstrong to forward the PUD for Crow River Heights West Future Additions with staff recommendations to Council for approval, seconded by Kuitunen.

Motion carried unanimously.

MOTION by Schendel to forward the Crow River Heights West Future Additions Preliminary Plat with staff recommendations and the items covered to Council for approval, seconded by Kuitunen.

Motion carried unanimously.

Unfinished Business

None

New Business

Site Plan for 11234 River Road Parking Lot

Messner showed the parking lot planned for the property located at 11234 River Road. He explained that the entrance and exit is combined and is wide enough to accommodate it should cars be entering and exiting at the same time.

Hammerseng asked if the ratio of regular parking spaces to handicapped spaces were adequate. Messner said that the two spaces indicated is fine for general parking.

Kolasa asked if after the parking lot was completed, would there be follow through with marking the street yellow and no parking signage. Messner said that is the plan. He went on to say that the pole would also be removed from the sidewalk and moved further into the property.

Christenson wondered if anyone had been in contact with the new owner of the property to the north. Messner said no, but that there was parking already in place on the north side of the property.

Kolasa left at 8:50 pm and Schendel took over conducting the meeting.

Hammerseng asked if something was being done with the stormwater from the parking lot. Messner said that a catch basin will be installed and it will drain into the existing stormwater system on River Road.

Christenson asked when this would be happening. Messner said that it would depend on who does the work and if quotes are needed.

MOTION by Christenson to forward the site plan for a parking lot at 11234 River Road to the Council for approval, seconded by Armstrong.

Motion carried unanimously.

Reports and Announcements

Christenson asked about the progress of the pavement project on River Road. Messner said that the project is going very well and slightly ahead of schedule. The contractor has a very aggressive schedule and would like all parts of the project done by June. River Road has been reclaimed and the final grade is almost complete. The paving is scheduled for next week. Armstrong asked about the new road being able to handle any construction equipment if the new development goes in. Messner said that new road was engineered for such heavier traffic, including the Industrial Park traffic and any mining traffic.

Hammerseng said that since staff has moved into the new Public Works facility, Council is starting to think about what should go in the old facility.

Messner added to his initial report that culvert replacement would be starting in Pheasant Run and on Ladyslipper.

Nash reported that she and Messner would start reviewing the Paxmar EAW in about two weeks and that the goal was to have the preliminary plat at the July Planning Commission Meeting.

Biren reported that the City Clean Up day went very well. There were 109 cars that came through. Staff is waiting for expenses before closing out the project.

Adjournment

MOTION by Kuitunen to adjourn, seconded by Christenson.

Motion carried unanimously.

Meeting adjourned at 9:04 pm.

ATTEST:

Amy L. Biren
Administrative Assistant

May 20, 2018

Ms. Cindy Nash, City Planner
Mr. Brian Hagen, City Administrator
City of Hanover
11250 5th St. NE
Hanover, MN 55341-0278

Re: Crow River Heights West Future Additions

Members of the Planning Commission;

We would like to comment for the May 23, 2018 Public Hearing record on the Backes Companies application regarding the Environmental Assessment Worksheet (EAW), Planned Unit Development (PUD), and Preliminary Plat review.

The platted area abuts our property located at 538 Jandel Ave NE, Hanover (Whitetail Preserve). We attach a photo with our lot outlined in blue and the Crow River Heights West area to the east.

In this phase, our area of interest is Outlot B, Wetland 11 of 41,815 sf. This wetland does not physically stop at the development lot lines, rather the actual wetland extends in to our lot. This wetland has seasonal flooding with high water that flows and extends to wetland areas along and in to our east lot line. This extended flow creates seasonal flooding. Per documents, it appears this Outlot B, Wetland 11 is planned to be unmitigated. However, as mentioned in the Wetland Delineation Report page 111, "the wetland has expanded since the time of the previous delineation into the adjacent graded area".

Our concern is knowing if no mitigation will be maintained, or if any mitigation and/or alterations are contemplated that affect this wetland and what protections will be in place during this phase, during home construction, and during homeowner lot work regarding landscaping or water management they may do.

As this Wetland 11 physically extends in to our lot, our interest and expectation is to not create any additional seasonal or non-seasonal high water to our property related to this development – whether through grading, drainage, water runoff, during site work, home construction, and/or homeowner landscaping and water management. This considers Chapter 20 - Zoning Ordinance and Chapter 30 - Subdivision Ordinance and/or other Chapters that may apply. If such conditions were to occur, we would expect mitigation be undertaken by the developer and/or the appropriate Crow River Heights West homeowner(s).

Thank you.
Sincerely,



Robert S. Clyne/Shannon Chau
CLYNE-CHAU LIVING TRUST
538 JANDEL AVE NE
HANOVER MN 55341-4059

MAY 21 2018



Outlet B,
Wetland 11

May 22, 2018

To: The Hanover Planning Commission,

I have lived at 579 Jandel Ave NE since September of 2000 and I have grave concerns about the current Crow River Heights West Third Addition preliminary plat proposed for the property directly north of mine.

When I moved to Hanover 18 years ago I purchased a large wooded lot along with all of my neighbors. I built my home here because I was looking for country living that provided a feeling of community but also allowed for some space and privacy. I was willing to give up the convenience of city water and sewer in order to enjoy the space and openness that the White Tail Preserve neighborhood provided.

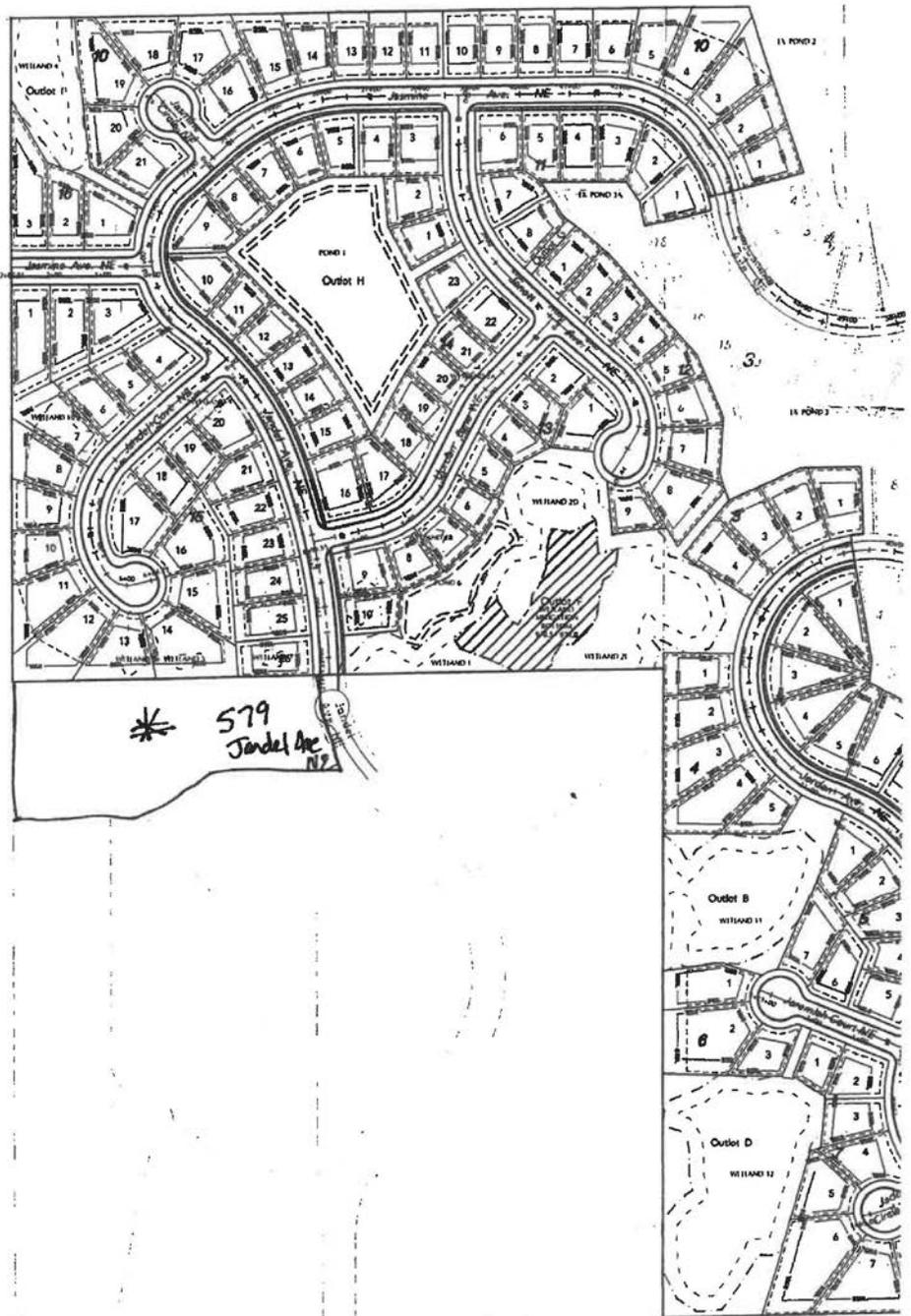
The current plat proposes high density homes to be built directly adjacent to my property. I also noted in the EAW there is a plan to reduce the 9.1 acres of beautiful mature woods north of my property to less than half an acre.

I respectfully request the planning commission consider adding a requirement for a transition zone between my property and the proposed development area 15. This would be consistent with the transition areas included in the plat around the properties of my White Tail Preserve neighbors. I love living in Hanover and I love my house and my property. I pay my taxes and I am a good citizen and steward of this community. Please consider making this change to this proposed plan that would impact my property and lifestyle so negatively.

Regards,



Debra L. Krause
579 Jandel Ave NE
Hanover, MN 55341
612.875.8707



1/2" = 1' 1/2" 1/4" = 1' 1/2" 1/8" = 1' 1/2" 1/16" = 1' 1/2" 1/32" = 1' 1/2" 1/64" = 1' 1/2"

Amy Biren

From: Cindy Nash <cnash@collaborative-planning.com>
Sent: Tuesday, May 15, 2018 1:58 PM
To: Kelly Baltzell; bhagen@ci.hanover.mn.us
Cc: Amy Biren
Subject: RE: Crow River Heights West Third Addition

Hi Kelly ---

I'm happy to pass along your comments to the Planning Commission. There is a network of sidewalks planned through this development.

Cindy Nash, AICP, EDFP
Collaborative Planning, LLC

Direct (763)473-0569
Cell (612)702-3845

PO Box 251, Medina, MN 55340

From: Kelly Baltzell <kelly@beyondindigo.com>
Sent: Tuesday, May 15, 2018 1:51 PM
To: Cindy Nash <cnash@collaborative-planning.com>; bhagen@ci.hanover.mn.us
Subject: Crow River Heights West Third Addition

Cindy and Brian,

I will not be able to attend the Public Hearing on Wednesday May 23rd. However, I would like to propose we have sidewalks in this division, places to throw away dog poop, and a dog park. Having lived in Hanover for 11 years now on Kadler Ave. N.E., a sidewalk would take pressure off the street for families/kids walking and cars. We have so many dogs, having a place for them to use versus the parks would be helpful as well. Please let me know how to have these considerations added to the agenda.

Thank you,

Kelly

KELLY BALTZELL, CEO
Beyond Indigo Marketing
kelly@beyondindigo.com
877.244.9322 x123

Thomas R. Jones
540 Kadler Ave. NE
Hanover, MN 55341

5/23/18

City of Hanover
Planning Commission and City Council
11250 5th Street NE
Hanover, MN 55341

Dear Planning Commission and City Council,

I am writing to you in regard to the planning commission meeting scheduled on Wednesday, May 23rd, 2018 to discuss a proposed development plan for Crow River Heights West. The overall site plan I am referring to is labeled C2-0. Because I am unable to attend this meeting in person, I respectfully ask you to accept this letter as my formal statement on the issue.

As I reviewed the aerial photo with the planned area shaded in red and the site plan, I have the following concerns. I ask the planning commission to review each of these items and consider my suggestions. I will also present these to the City Council on Tuesday, June 5th if they are still unresolved.

1. The shaded area on aerial view sets its boarder on the edge of our finished yards. This is not an accurate depiction of the lot lines for 540 Kadler Ave. My official property line goes well into the wetland and at some points even extends beyond it. This problem also seems to exist on the overall site plan as it relates to Wetland 6. I am property number three along Kadler Ave. Though the shape of my property on the plan is correct, I want to be sure that the developer is aware of the wetlands that are included in my plot. These appear very separate when outlining wetland 6 on the plan.
2. No lot or housing dimensions were provided with the plan in the mailer to residents. As such, it looks as though they are very small and do not match the current setbacks as described in our city ordinance for R1A properties. If as a PUD, this plan is not subject to these setbacks, I hereby request the planning commission recommend that the council require these standard ordinances as part of the plan. When the last phase was approved, the developer asked for an 8 foot side yard setback. When this was approved, a member of the council specifically said this was a one-time deal and they expected the standard setbacks in all directions to be followed next time. Please hold the developers to this. (80 foot minimum lot width, 30 foot front yard, 10 foot side yards, 30 foot rear setback, and the structure at least 30 feet from wetlands.)

City of Hanover

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3. If you look at the site plan, proposed lot numbers 3-7 which come off Jordan Ave NE and line Wetland 6 could not possibly be accurate with regard to where the space for Jordan Ave NE currently sits. The ridge where these homes are proposed is only 30-40 feet wide. As such, normal homes with any type of yard will not fit or meet the setbacks. Additionally, homes are required to be at least 30 feet from wetlands. This is impossible as the plan is currently laid out. Either the developer is planning to move Jordan Ave NE, or they are selling a plan that is not aligned with current wetland setback requirements and city ordinances. Either way, this seems to again assume they have control over areas of plots 3-6 on Kadler Ave NE that are not properly represented. I ask that you make them publish the proposed lot and dwelling dimensions prior to the June 5th council meeting.
4. There are currently no additional parks or play structures in this proposal. If they want to add 200 houses, they must make room and plan for an additional playground. The one on Kadler Circle is not enough nor should it have to absorb the use of 400+ additional children. As a resident, I expect developers to plan these areas just as they were during the first phase of Crow River Heights.
5. I am all for additional development. However, please consider working with the school district to see what they can accommodate and how fast. If Hanover is adding 350-400 additional homes between two new developments within the next 2 years, how is Hanover Elementary able to accommodate this influx? Let's make sure we know how this will be solved before granting permits.
6. To be sure all parties know where lot lines are located, I request that all current homeowners with properties which abut the proposed development area have their property lines professionally surveyed and marked prior to any digging or construction. This should not be paid for by the homeowners, but rather by the developer.
7. Finally, due to the massive construction traffic that will be coming in and out, I request that the city require this traffic only enter and exit from Beebe Lake Road. We do not want this traffic flowing through Crow River Heights or Hanover Hills. There are MANY children and families on these streets walking and riding bikes. That number of large trucks is an extreme safety hazard.

Sincerely,
Thomas R. Jones
Resident
661-342-9576-Cell

Collaborative Planning, LLC

MEMORANDUM

To: Brian Hagen, City Administrator

From: Cindy Nash, City Planner

Date: June 21, 2018

Subj: Planning Review Comments – Crow River Heights West 4th Addition
Final Plat and Plans dated May 24, 2018

I have reviewed the final plat and plans dated May 24, 2018 and have the following preliminary comments.

1. Engineering comments will be included within a separate memo.
2. A temporary cul-de-sac will be required at the end of Jordan Avenue NE. Easements acceptable to the City Attorney should be provided for the cul-de-sac, and a cash escrow in an amount to be determined by the City Engineer should be provided for future removal of the temporary cul-de sacs.
3. A foundation as-built for each home will be required as a condition of approval of the Planned Residential Development.
4. Signage approved by the City will need to be placed along lot lines or corners next to storm ponds or wetlands.
5. Deeds for conveyance of the outlots to the City shall be coordinated with final plat recording.
6. Sidewalks should be shown on one side of every street.
7. Trails should be constructed to connect Outlot A to the park (including across the City owned property at the eastern terminus of Outlot A). The trail adjacent to Lot 4, Block 3 that will be in an outlot with a future plat should also be constructed at this time.

cc: Justin Messner, WSB



Memorandum

To: *Cindy Nash – Hanover City Planner*

From: *Justin Messner, PE – Hanover City Engineer*

Cc: *Brian Hagen – Hanover City Administrator*
Todd McLouth, PE – Loucks, Inc.

Date: *June 11, 2018*

Re: *Crow River Heights West Future Additions Preliminary Plat Review*
Crow River Heights West 4th Addition Final Plat Review
WSB Project No. 011855-000

As requested, we have reviewed the revised Crow River Heights West future additions preliminary plat documents as prepared by Loucks, dated May 24, 2018, as well as Crow River Heights West 4th Addition Final Plat documents as prepared by Loucks, dated May 24, 2018 and we offer the following comments:

Stormwater Management

SWMP

1. Language noting that stormwater facilities will be public and maintained by the City should be added to the SWMP for future reference.

Plan Set

1. The City requires that the lowest floor opening elevation of any structure be at least two feet above the high water elevation. It appears this requirement is not being met around the existing wetlands onsite. The applicant should check all proposed structures and update the plans to meet the freeboard requirement.
2. Although the applicant has stated that the lowest opening of homes upstream from the EOFs are at least 1 foot above the EOF elevation at the backyard catch basins, the applicant still needs to model the backyard catch basins and EOFs and meet City freeboard requirements. As is, there is too large a risk to the adjacent proposed homes for flooding.
3. Drintile cleanouts should be called out on the Utility plans, or the symbol should be added to the legend.
4. Riprap should be added to FES 132.

HydroCAD Model and P8 Model

1. The lengths for the EOFs from Pond 6 should be revised in the HydroCAD model to be representative of what is shown on the grading plan (see attached).
2. The inputs for the HydroCAD model and for the P8 model should be consistent. Applicant should update the models so they are constant. The following inputs were found to be inconsistent between the two models:
 - a. Pond 1 bottom elevation
 - b. Pone 1 permanent pond volume
 - c. Pond 4 bottom area
 - d. Pond 6 bottom area
 - e. Pond 6 permanent pond volume

Applicant should check all inputs to ensure all inputs into the two models are consistent with one another.

Preliminary Plan Set

Watermain Comments

1. The storm sewer is closer than 10' to the watermain on Jordan Avenue at STA 25+50.

Storm Sewer Comments

2. Increase the easements for the lots adjacent to storm sewer crossings exceeding 10' depth to meet a 1' to 1' ratio including;
 - a. CBMH 141 to FES 142 (16'+ deep)

Grading Plan Comments

3. See attached red-lined plan sheets for locations of grading issues including those described below.
4. Many of the contours on the plan appear to be automatically generated and do not necessarily make logical sense with how they tie into existing contours and adjacent lots including;
 - a. Lots 4,5,19,20 Block 15
5. Several contours are shown directing drainage into house pads including
 - a. Lots 4,14,15,18,19 Block 3
 - b. Lots 5,6 Block 5
 - c. Lots 2,4,8 Block 7
 - d. Lot 6 Block 11
 - e. Lots 2,9 Block 13
 - f. Lot 6,16 Block 14
 - g. Lot 1,2,3,6,10,12,17,19,21,24 Block 15
6. Several drainage swales are shown running across private property without drainage and utility easements including;
 - a. Lots 3,8-10,14-18 Block 10
 - b. Lot 2,9 Block 13
 - c. Lots 4-14,22 Block 15
7. Proposed contours do not blend into existing contours in several areas including;
 - a. Lots 1-7 Block 11
 - b. Blocks 1,2,8,9,11,12

Miscellaneous Comments

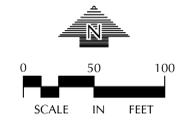
8. The cul de sac on the west end of Jasmine Avenue NE should follow the City's standard detail plate STR-05.

Final Plan Set (4th Addition)

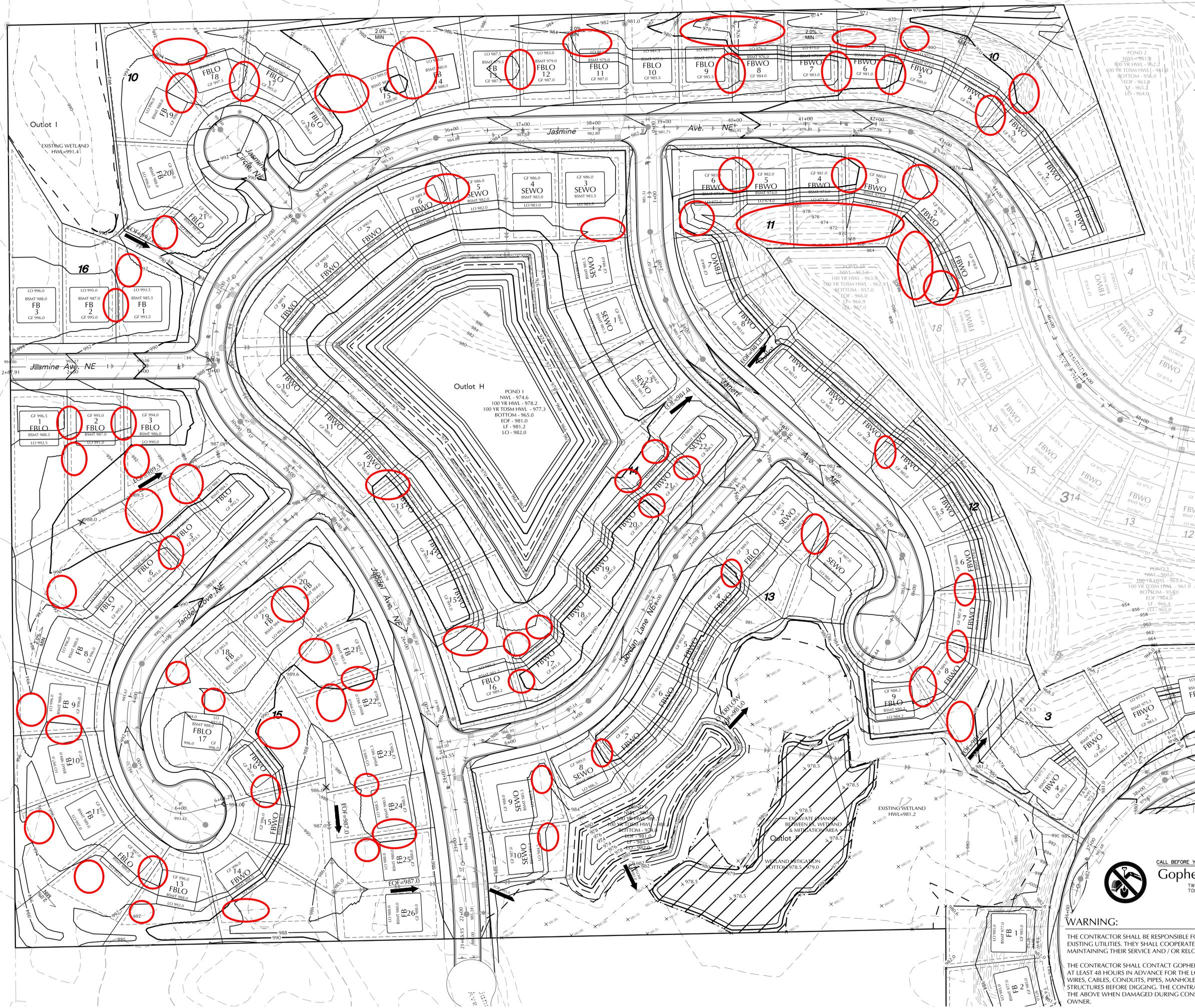
See Comments above

Storm Sewer Comments

1. Provide the rational worksheet for storm sewer design.



EXISTING	CIVIL LEGEND	PROPOSED
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOIL BORING	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
	WATER SERVICE	
	SANITARY SEWER	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
	SPOT ELEVATION	
	CONTOURS	
	SANITARY SEWER	
	STORM SEWER	
	WATERMAIN	
	FIREMAIN	
	DRIVEWAY	
	SILT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREE LINE	
	EASEMENT LINE	
	FENCE LINE	
	UNDERROAD TIE	
	UNDERGROUND GAS	
	OVERHEAD UTILITY	



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SUBMITTALS/REVISIONS	
04/20/18	CITY SUBMITTAL
05/24/18	CITY COMMENTS

PROFESSIONAL SIGNATURE
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 Professional Engineer under the laws of the State of Minnesota.

PRELIMINARY
Lic. No. 20383

QUALITY CONTROL	
Locks Project No.	16101A
Project Lead	TWM
Drawn By	ZHW
Checked By	TWM
Review Date	05/24/18

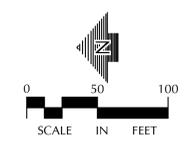
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C8-1, C8-2	DETAILS
LO-1, LO-3	TREE PRESERVATION
LO-4	TREE INVENTORY
L1-1, L1-2	LANDSCAPE PLANS
L2-1	LANDSCAPE DETAILS



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.
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	TREELINE	
	SETBACK LINE	
	FENCE LINE	
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	UNDERGROUND GAS	
	OVERHEAD UTILITY	

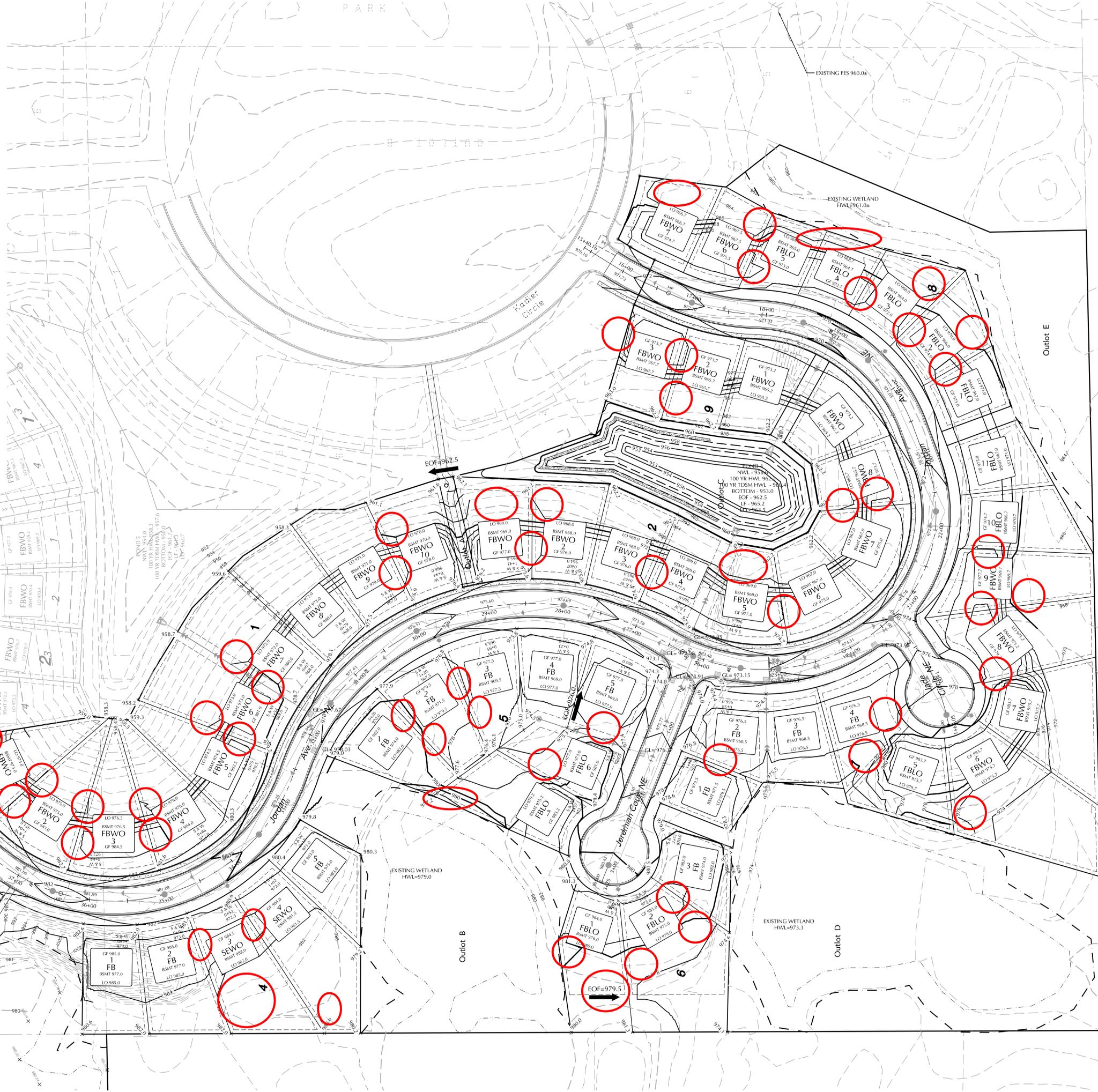


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CROW RIVER HEIGHTS WEST FUTURE ADD.
 HANOVER, MN

11415 ASHBURY CIRCLE N.
 CHAMPLIN, MN 55316
 PHONE: (612) 369-7750
 FAX: (612) 566-1525

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PLANNING
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SUBMITTAL REVISIONS

04/20/18	CITY SUBMITTAL
05/24/18	CITY COMMENTS

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Lic. No. 20383
 Date: 05/24/18

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P:\05_25_2018_11:54 AM W\2018\16101A\CADD\DATA\CADD\DWG\Sheet Final\C3-2 GRADING PLAN

Collaborative Planning, LLC

MEMORANDUM

TO: Honorable Mayor and Council

FROM: Cindy Nash, AICP, City Planner

DATE: June 25, 2018

SUBJECT: **Crow River Heights West 4th Addition** for Final Plat

APPLICANT: Backes Companies

LOCATION: Generally located west of Jordan Ave NE.

COMPREHENSIVE PLAN: Neighborhood Residential

Description of Request

The applicant is proposing to plat 36 single-family lots, outlots, and right of way. Preliminary plat approval previously existed for this property, but that preliminary plat expired in 2010. The previous developer had graded much of the property and established the building pads on most of the site. Roads were graded, but utilities were not installed.

A new Preliminary Plat was approved by the City on June 19, 2018, along with an early grading agreement.

The following items are included in the packet for review:

1. City Engineer Comment letter
2. City Planner Comment letter
3. Project Narrative
4. Final Plat and Plan Set

Item : Recommendation on Final Plat

The Final Plat is the plat that is recorded at the Wright County Records office. A development agreement is also prepared at the time the final plat is approved, which specifies the terms under which the development of the property proceeds. It is common that there are various conditions to final plat approval, which are addressed either prior to recording the plat or prior to allowing construction to commence.

Land Use

The proposed land use is 36 single-family lots, and outlots for stormwater ponding and trail connections.

Access, Roads, Guest Parking Pedestrian Circulation

Jordan Ave NE are both proposed to be extended. A temporary cul-de-sac and easement at the western end of Jordan Avenue NE will be required, along with a cash security to ensure removal of those temporary cul-de-sacs in the future.

A trail connection across Outlot A and across a connecting outlot that outlets onto Kadler Circle will be installed with this phase. A trail is also required in a future outlot adjacent to a side lot line of Lot 4, Block 3 which should be installed at this time so the future property owner is aware there will be a trail in this location.

Sidewalks are being constructed on one side of each street.

Utilities

Utilities are proposed to be installed within the rights of way.

Ponding is located in outlots that will be deeded to the City. In the past, much of the ponding has been included within the lots.

Wetlands

There are numerous wetlands on the site as shown on the site plans that have been delineated. There are no impacts to wetlands included in the grading associated with the grading agreement that was previously approved, or with this plat.

The Final Plat identifies a “Wet Land” in Outlot B. Please note that this “Wet Land” is not the same as a delineated wetland. State statute related to surveying requires that at the time that property is platted the surveyor must show any types of water on the plat (methodology is simply

wet foot = wet land). This does not mean that this is the same boundary as the delineated wetland, or that there will not be “wet” areas once development is complete (note that the location of stormwater ponds are not shown on the plat as “wet lands”).

Park Dedication

Park dedication is required for this plat and will be calculated at the time of execution of the developer’s agreement as a payment-in-lieu of land.

Landscaping

Sheets L1-1 through L2-1 contains the proposed landscaping plan. The landscaping plans identify 2 trees and 5 shrubs per lot. In addition, the specific plants called for on each lot could be selected by the homeowner.

Engineering

The development should comply with the requirements of the City Engineers memo.

Staff Recommendation on Preliminary

Staff recommends approving the Preliminary subject to the following conditions to be included in the resolution:

1. All comments contained within the memo from WSB dated June 11, 2018 and the memo from Collaborative Planning dated June 21, 2018 are incorporated herein (collectively referred to as the “Staff Memos”).
2. The Subject Property shall be constructed in substantial compliance with the Site Plans as revised to conform to the requirements of the Staff Memos.
3. No construction shall be permitted on the Subject Property until updated Site Plans addressing the comments of the Staff Memos and the conditions of this Resolution are provided for review and approval by the City Engineer and City Planner. Following approval by the City Engineer and City Planner, these plans shall collectively be known as the “Approved Construction Plans”.
4. If the updated Site Plans addressing the comments of the resolutions, Staff Memos, or outside agencies necessitate revisions to any of the lot lines or easements on the Subject Property, then the Final Plat shall be revised by the Developer and submitted for amended approval by the City Council. If an off-site easement is required to address a

comment, then a separate easement document shall be provided to the City for review and approval prior to release of the Final Plat for recording.

5. To the extent that there are differences or conflicts between the Approved Construction Plans and this resolution, the terms of this resolution shall be controlling.
6. The timing of the construction of the infrastructure improvements on the Subject Property will be subject to the conditions of a Developer's Agreement between the City and the Developer, and City staff is authorized to negotiate such Developers Agreement.
7. The approval of the Final Plat shall terminate if a Developer's Agreement has not been entered into between the City and Developer by _____, 2018.
8. The approval of the Final Plat shall terminate unless all conditions of this resolution are completed and the Final Plat is recorded no later than _____, 2018.
9. A title commitment shall be provided for the review of the City Attorney before the plat is released for recording.
10. Financial security in a form approved by the City Attorney and in an amount approved by the City Engineer must be provided by the Developer prior to release of the final plat for recording. The Developer's Agreement shall specify the amount of the financial security.
11. The Developer must reimburse the City for all costs incurred by the City and its consultants in relation to review of the proposed development plans as well as the preparation of the Developer's Agreement.
12. Any new utility lines installed to serve the Subject Property are required to be placed underground.
13. The Developer shall be responsible for securing necessary easements and for constructing all streets, utility, trail, stormwater, and other improvements shown on the Approved Construction Plans at their own expense. However, to the extent that such utilities are oversized at the request of the City, the City shall reimburse the Developer for the cost of the extra diameter of the pipe. All reimbursements by the City under this paragraph are subject to the submittal by the Developer of the engineer's estimate and other supporting information as requested by the City. The engineer's estimate will be reviewed by the City to verify that the costs requested for reimbursement are reasonable at the sole determination of the City, and the amount determined by the City to be eligible for reimbursement shall be included within the Developers Agreement.

14. The Developer shall be responsible for obtaining and complying with all necessary permits from the Wright County Soil and Water Conservation District, Minnesota Department of Health, DNR, MPCA, and any other governmental agencies prior to commencement of development activities on the site.
15. The Developer shall incorporate the standards and procedures of the Best Management Practices Handbook for site restoration and erosion control measures during the construction process.
16. The Developer must submit details on corrected building pads including compaction tests, limits of the pads and elevations of the excavations. The general soils report for the development must also be submitted to the City Engineer for review and approval prior to the issuance of building permits.
17. The Developer shall submit foundation and grading as-builts for each lot at the time required by city staff.
18. Park dedication, sanitary sewer trunk, water trunk, storm sewer trunk and storm warning siren fees shall be paid prior to release of the final plat for recording as per the City fee schedule in effect at the time of the execution of the Developer's Agreement.
19. The Developer shall survey all storm water holding ponds (if any are constructed) as required by the City. The Developer shall be responsible for storm sewer cleaning and holding pond dredging, as required, by the City prior to completion of the development of the Subject Property.
20. Additional conditions as determined necessary by the City Planner, City Engineer, and City Attorney as review of the project progresses and is completed.

PROJECT NARRATIVE

May 25, 2018

Ms. Cindy Nash, City Planner
Hanover Planning Commission
City of Hanover
11250 5th Street NE
Hanover, MN 55341

Re: Application for Final Plat
CROW RIVER HEIGHTS WEST 4th ADDITION

Dear Ms. Nash and Members of the Planning Commission:

Backes Development is pleased to submit this application for preliminary and final plat review and approval of CROW RIVER HEIGHTS WEST 4th ADDITION (CRHW4). This narrative is intended to generally describe the project and address specific development topics.

Development History

The original preliminary plat of Crow River Heights was approved by the City in 2000. It was approved as a PUD with an underlying R1A zoning. The PUD included a varied front setback and lot area. The 3rd addition was built in 2017. A new revised preliminary plat for the remaining site was submitted to the City in April, 2018 and is currently under review for approval. It is the intent of this submittal to follow the approval of the preliminary plat.

Location / Current Use

CRHW4 consists of 36 new lots on a southerly extension of Jordan Ave. The site is currently graded with house pads, street subcuts and partial ponding areas. The site is vacant and is not used for any agricultural use.

Proposed PUD

CRHW4 follows the current preliminary plat underlying zoning requirements for the R1A zone along with a PUD overlay to continue the original planning concept. The following PUD standards are requested:

Lot Area

R1A minimum lot area –	12,000 sf
PUD minimum lot area –	8,004 sf
PUD average lot area -	13,149 sf

Lot Width

R1A minimum width at the front setback-	80 ft
PUD minimum width at the front setback-	75 ft *
PUD average lot width at the front setback-	85 ft
PUD side yard setbacks-	10 ft

The minimum width of 75 feet includes a 55 foot wide house pad and 20 feet of side yard setback.

* The only exception to this is lot 1, block 6, where the width at the front setback is 71 feet. This lot is restricted to a 50 foot wide house.

Front Setback

R1A minimum front setback- 30 ft

PUD minimum front setback- 25-45 ft

The original preliminary plat showed a variable front setback based upon a 'coving' concept. The current preliminary plat applies the same concept. Therefore, CRHW4 has varied front setbacks.

Rear Setback

R1A minimum rear setback- 30 ft

PUD minimum rear setback- 10-30 ft

The majority of the lots conform to the 30 foot rear setback. There are several that require a reduced rear setback. The impetus for smaller rear setbacks are to allow for the Outlots to encompass the stormwater pond and to provide a 30 foot wetland buffer setback.

All of the lots have at least 10 feet from the back of the building pad to the rear setback line to provide space for a deck or patio.

Side Setback

R1A minimum side setback- 10 ft

PUD minimum rear setback- 10 ft

R1A minimum street side setback - 30 ft

PUD minimum street side setback- 25 ft

There are a couple of lots which have a side street setback of 25 feet. This is to provide adequate lot and house pad width.

The following table lists the lot information:

Block	Lot	Area (sf)	Width @ Front Setback	Front Setback	Rear Setback	Side Setback	Side Street Setback	House Pad Width	House Pad Depth
1	1	13,167	106	30	30	10	N/A	55	50
	2	13,232	107	30	30	10	N/A	55	50
	3	13,236	107	30	30	10	N/A	55	50
	4	13,459	104	30	30	10	N/A	55	50
	5	13,706	97	35	30	10	N/A	55	50
	6	16,530	76	35	30	10	N/A	55	50
	7	16,226	76	37	30	10	N/A	55	50
	8	15,525	77	40	30	10	N/A	55	50
	9	13,936	78	43	30	10	N/A	55	50
	10	12,385	78	41	30	10	N/A	55	50
2	1	11,965	79	30	30	10	N/A	55	50
	2	11,476	79	30	30	10	N/A	55	50
	3	11,071	79	30	30	10	N/A	55	50
	4	9,952	80	30	30	10	N/A	55	50
	5	11,784	113	30	30	10	N/A	55	50

3	1	12,134	79	45	30	10	N/A	55	50
	2	13,556	79	45	30	10	N/A	55	50
	3	14,838	79	45	30	10	N/A	55	50
	4	14,686	79	45	30	10	N/A	55	50
4	1	11,591	75	30	30	10	N/A	55	50
	2	13,480	75	30	30	10	N/A	55	50
	3	17,092	75	40	30	10	N/A	55	50
	4	19,716	75	40	30	10	N/A	55	50
	5	10,436	75	30	20	10	N/A	55	50
5	1	11,838	98	30	30	10	N/A	55	50
	2	12,023	93	30	30	10	N/A	55	50
	3	11,441	93	30	30	10	N/A	55	50
	4	10,175	93	30	20	10	N/A	55	50
	5	11,315	95	30	20	10	25	55	50
	6	10,838	86	25	30	10	N/A	55	50
	7	13,944	77	25	30	10	N/A	55	50
6	1	14,982	71	25	30	10	N/A	50	50
	2	23,736	77	25	30	10	N/A	55	50
	3	9,720	84	25	10	10	N/A	55	50
7	1	8,044	75	25	10	10	N/A	55	50
	2	10,111	91	30	10	10	25	55	50

Lot Orientation

All of the lots conform to the City's perpendicular orientation.

Wetlands

A wetland delineation was prepared by Kjolhaug Environmental. There are several wetlands within the proposed 4th or 5th additions. There are no impacts to any of these wetlands.

Intended Market

The anticipated sale prices of the homes are \$325,000 – 375,000, which serves a medium family household income market.

City Goals

If approved, the proposed project will proceed as a PUD housing development intent on accomplishing the following goals:

- Continue the previously approved plat in conformance with current regulations.
- Utilize existing infrastructure including graded house pads; water and sanitary sewer stubs and street extensions.
- Develop existing residential property to grow tax base.

Thank you for considering this development project. We look forward to your recommendations and approvals.

Dennis "Buck" Backes
Backes Development

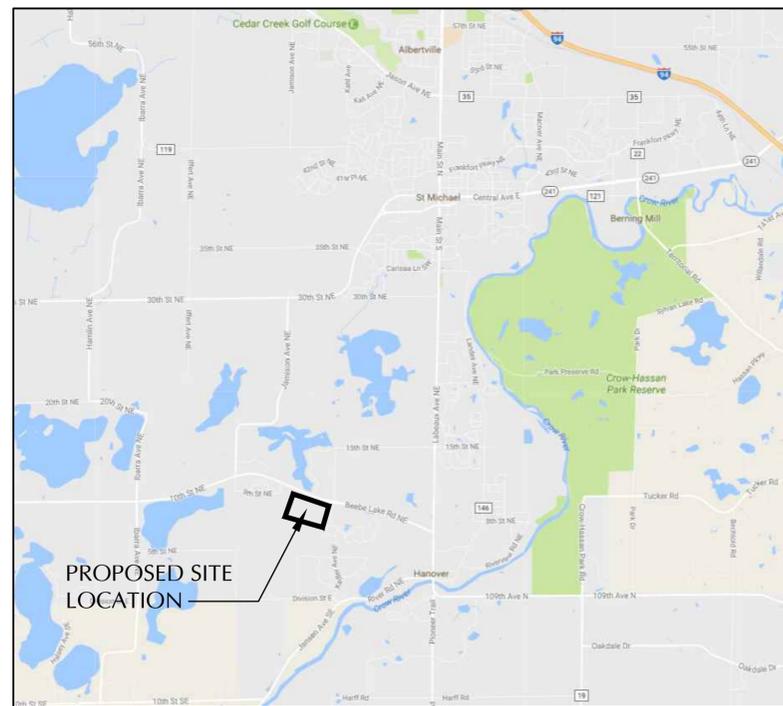
CROW RIVER HEIGHTS WEST

4TH ADDITION

HANOVER, MINNESOTA

PLANS FOR:
SITE GRADING, SANITARY SEWER, WATER MAIN,
STORM SEWER AND STREET CONSTRUCTION

VICINITY MAP



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DEVELOPER

BACKES DEVELOPMENT, LLC
11413 ASHBURY CIRCLE N.
CHAMPLIN, MN 55316

DENNIS BACKES
TEL: 612.369.7750
FAX: 612.566.1525

APPROVED

JUSTIN MESSNER, P.E.
HANOVER CITY ENGINEER

DATE:

CROW RIVER
HEIGHTS WEST
4TH ADDITION

HANOVER, MINNESOTA



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SUBMITTAL/REVISIONS

05/24/18 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

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 Professional Engineer under the laws of the State of Minnesota.

Justin Messner
Justin W. Messner - PE

License No. 20383
Date 05/24/18

QUALITY CONTROL

Loucks Project No. 16101B
Project Lead TWM
Drawn By ZHW
Checked By TWM
Review Date 05/24/18

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L2-1 LANDSCAPE DETAILS



CALL BEFORE YOU DIG!

Gopher State One Call

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

BENCHMARKS

TOP NUT HYDRANT AT END OF JASMINE CT
CUL-DE-SAC, Elevation = 975.48 feet (NGVD1929).

COVER SHEET

C0-1

SURVEY LEGEND

AS ASH	● CATCH BASIN	→ STORM SEWER
BA BASSWOOD	○ STORM MANHOLE	→ SANITARY SEWER
LO LOCUST	○ SANITARY MANHOLE	— WATERMAIN
MA MAPLE	◆ SANITARY CLEAN-OUT	— S SANITARY SEWER SERVICE
OA OAK	◇ HYDRANT	— W WATER SERVICE
PI PINE	⊗ GATE VALVE	— CULVERT
PO POPLAR	⊕ LIGHT POLE	— S — SLOPE EASEMENT
SP SPRUCE	⊖ UNDERGROUND CABLE TV	— CTV — UNDERGROUND CABLE TV
TR TREE (GEN)	⊕ SIGN	— ELE — UNDERGROUND ELECTRIC
TC TOP OF CURB	⊕ SPOT ELEVATION	— FO — UNDERGROUND FIBER OPTIC
TW TOP OF WALL	⊕ A/C UNIT	— GAS — UNDERGROUND GAS
THSD ELEV ○ THRESHOLD	⊕ ELECTRIC TRANSFORMER	— TEL — UNDERGROUND TELEPHONE
CONIFEROUS TREE	⊕ GAS METER	— X — CHAIN LINK FENCE
DECIDUOUS TREE	⊕ GAS VALVE	— □ — WOOD FENCE
	⊕ TELEPHONE MANHOLE	— — RETAINING WALL
	⊕ HAND HOLE	— — CONCRETE CURB
	⊕ FLAG POLE	— — CONCRETE
	⊕ GUARDPOST	— — CONTOUR
	⊕ POST INDICATOR VALVE	
	⊕ NO. PARKING STALLS	

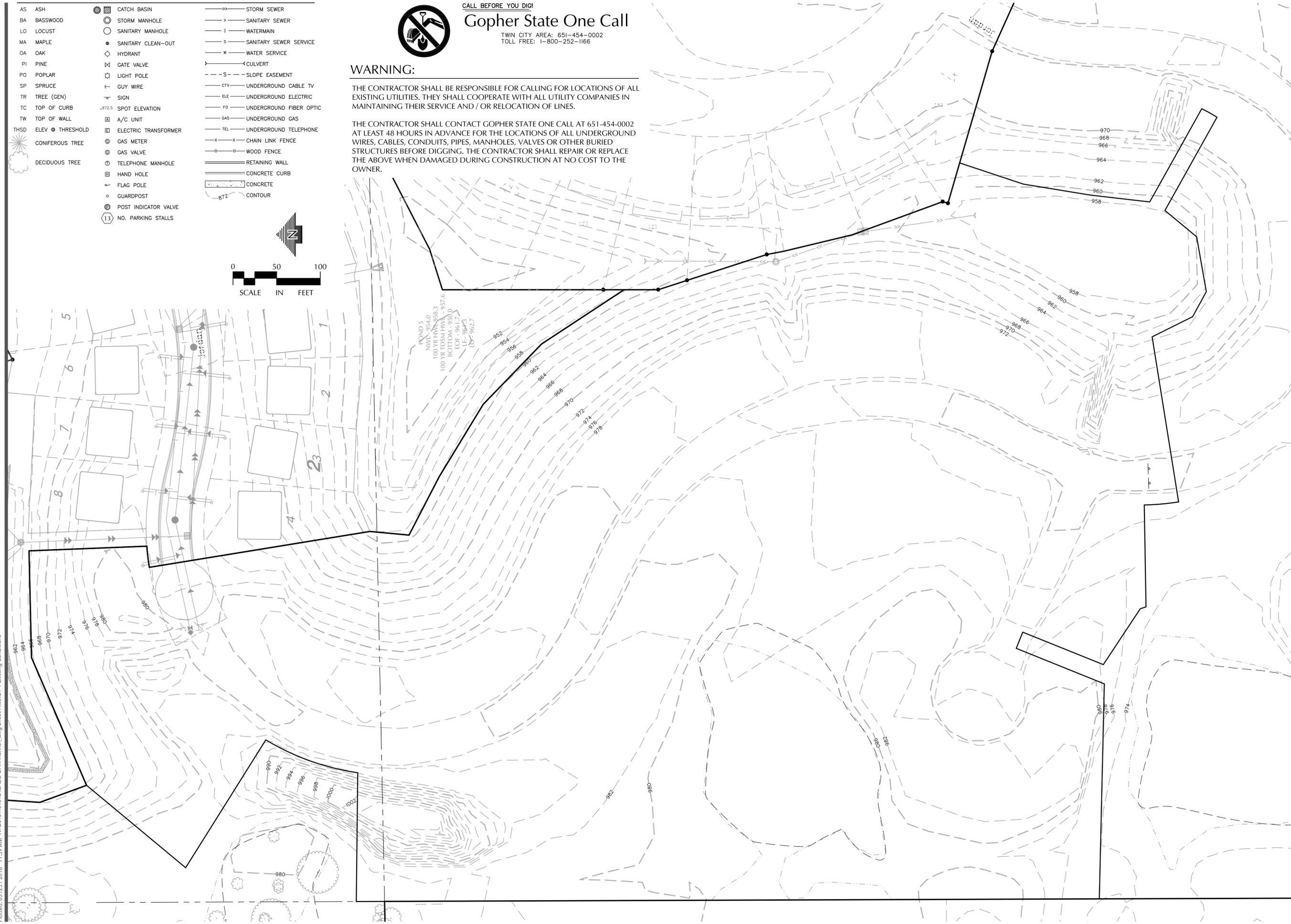
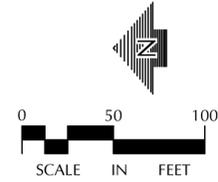


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 Date 05/24/18

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 Loucks Project No. 16101B
 Project Lead TWM
 Drawn By ZHW
 Checked By TWM
 Review Date 05/24/18

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C8-1 - C8-3	DETAILS
L1-1 - L1-2	LANDSCAPE PLANS
L2-1	LANDSCAPE DETAILS

EXISTING CONDITIONS
C1-1

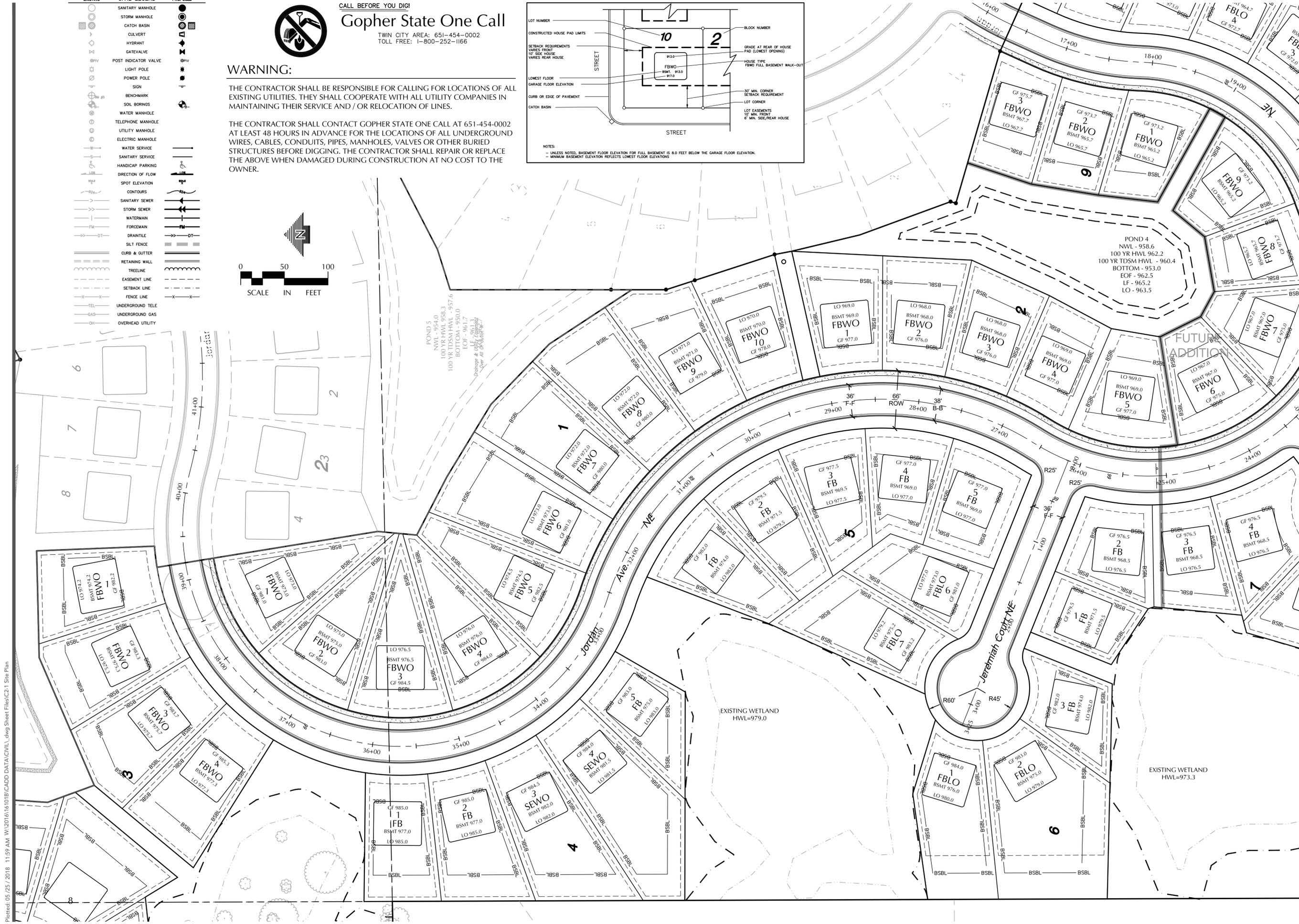
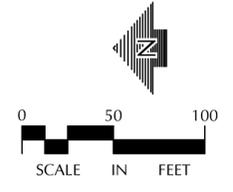
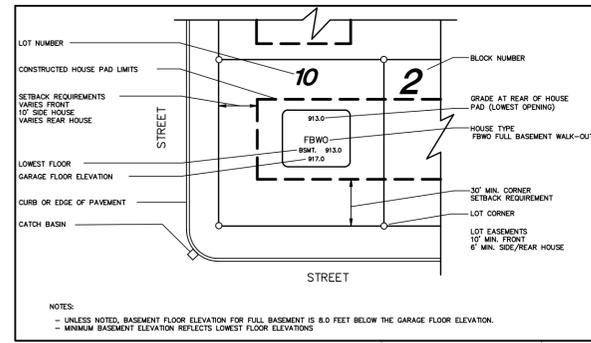
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EXISTING	CIVIL LEGEND	PROPOSED
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOIL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
	WATER SERVICE	
	SANITARY SERVICE	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
	SPOT ELEVATION	
	CONTOURS	
	SANITARY SEWER	
	STORM SEWER	
	WATERMAIN	
	FORCEMAIN	
	DRANTILE	
	SILT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREE LINE	
	EASEMENT LINE	
	SETBACK LINE	
	FENCE LINE	
	UNDERGROUND TELE	
	UNDERGROUND GAS	
	OVERHEAD UTILITY	



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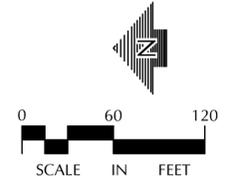
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C8-1 - C8-3	DETAILS
L1-1 - L1-2	LANDSCAPE PLANS
L2-1	LANDSCAPE DETAILS

SITE PLAN
C2-1

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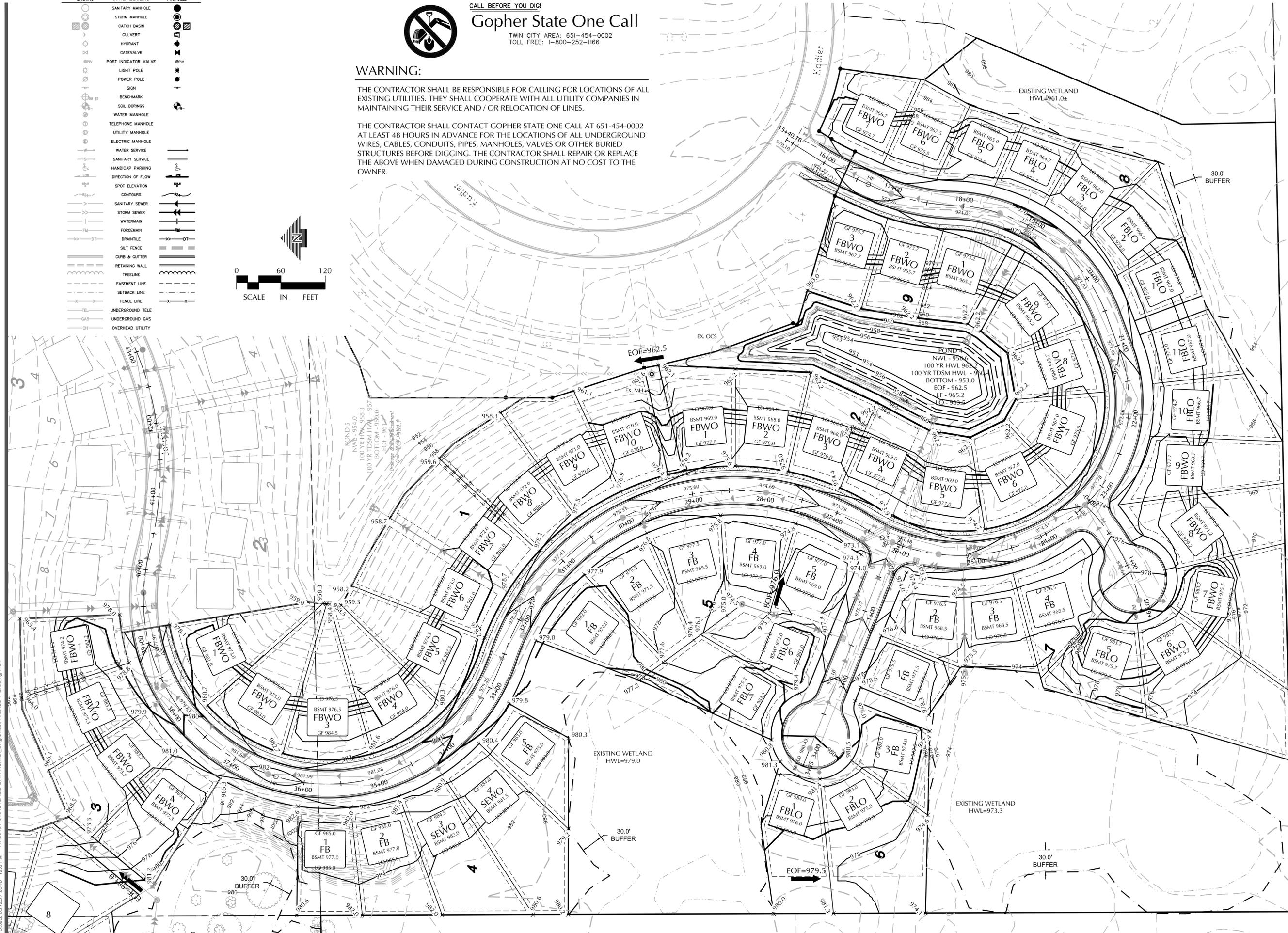
EXISTING	CIVIL LEGEND	PROPOSED
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	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOIL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
	WATER SERVICE	
	SANITARY SERVICE	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
	SPOT ELEVATION	
	CONTOURS	
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	FORCEMAIN	
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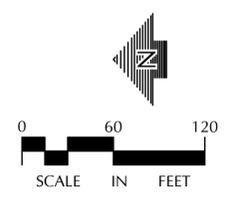
GRADING PLAN

C3-1

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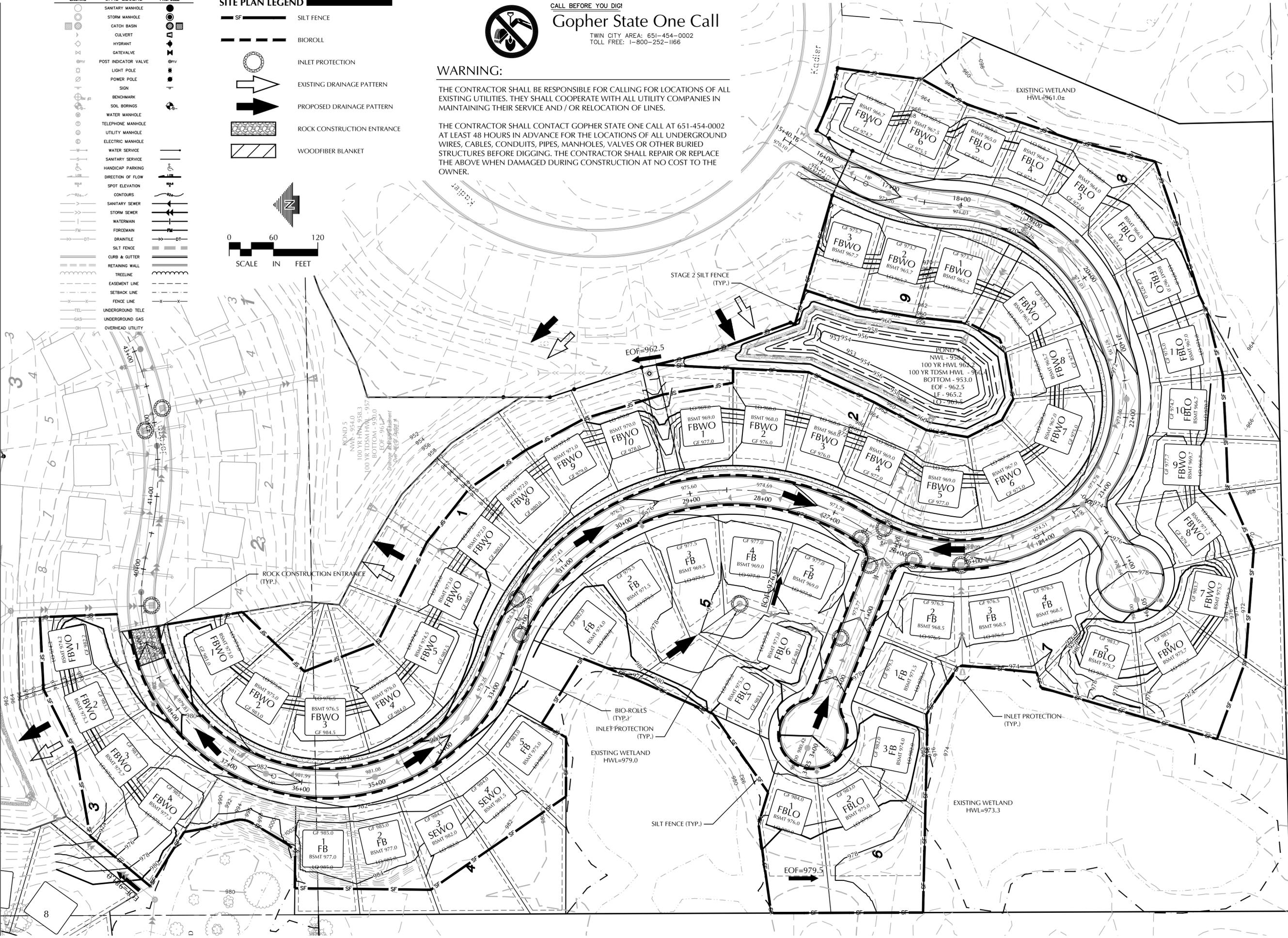
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	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOIL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
	WATER SERVICE	
	SANITARY SERVICE	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
	SPOT ELEVATION	
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	WATERMAIN	
	FORCEMAIN	
	DRANTILE	
	SILT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREE LINE	
	EASEMENT LINE	
	SETBACK LINE	
	FENCE LINE	
	UNDERGROUND TELE	
	UNDERGROUND GAS	
	OVERHEAD UTILITY	

SITE PLAN LEGEND	
	SILT FENCE
	BIOROLL
	INLET PROTECTION
	EXISTING DRAINAGE PATTERN
	PROPOSED DRAINAGE PATTERN
	ROCK CONSTRUCTION ENTRANCE
	WOODFIBER BLANKET



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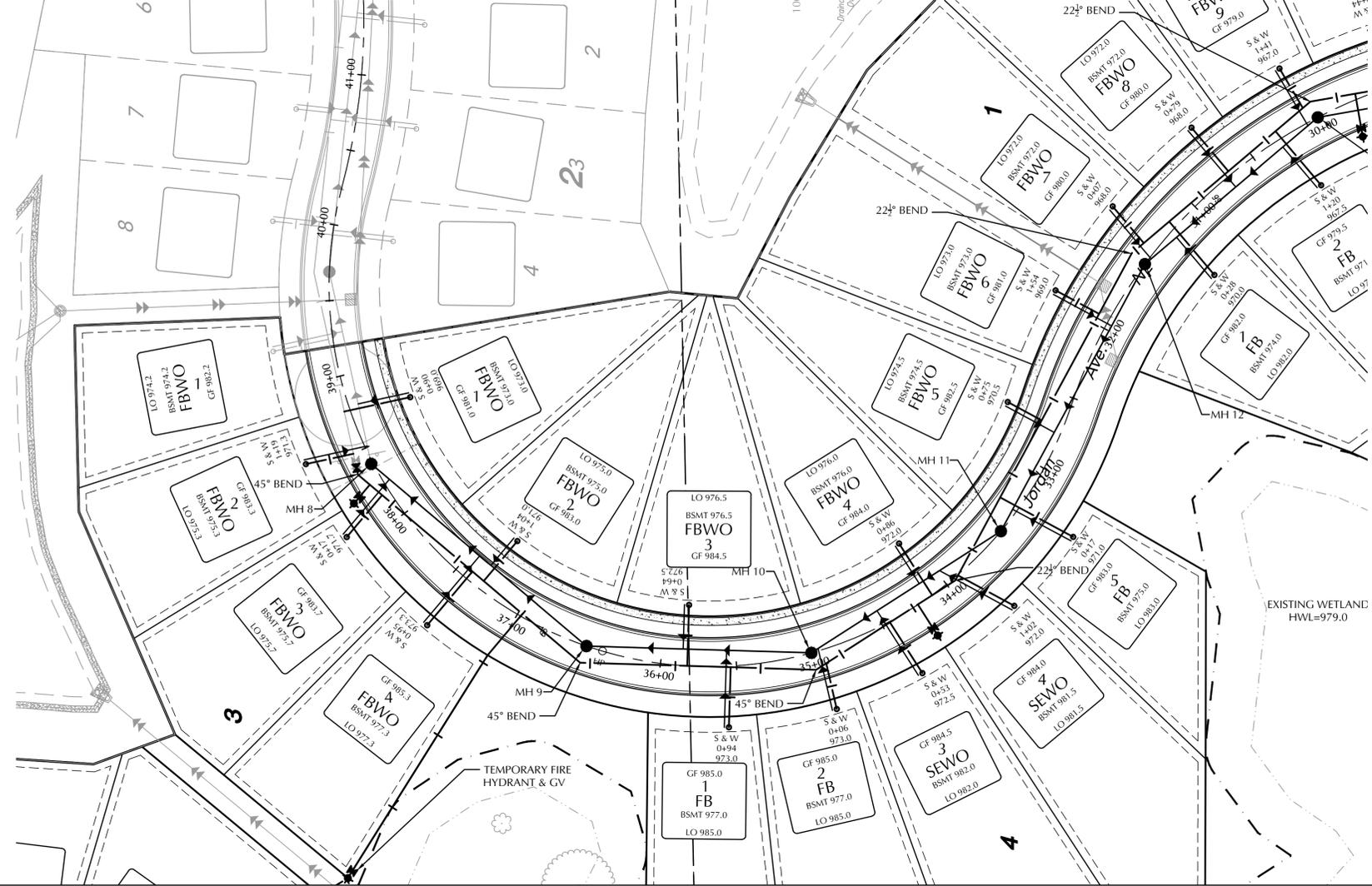
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L1-1 - L1-2	LANDSCAPE PLANS
L2-1	LANDSCAPE DETAILS

SWPPP PLAN
C3-2



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	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATEVALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
	WATER SERVICE	
	SANITARY SERVICE	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
	SPOT ELEVATION	
	CONTOURS	
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	STORM SEWER	
	WATERMAIN	
	FORCEMAIN	
	DRANTILE	
	SILT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREELINE	
	EASEMENT LINE	
	SETBACK LINE	
	FENCE LINE	
	UNDERGROUND TELE	
	UNDERGROUND GAS	
	OVERHEAD UTILITY	

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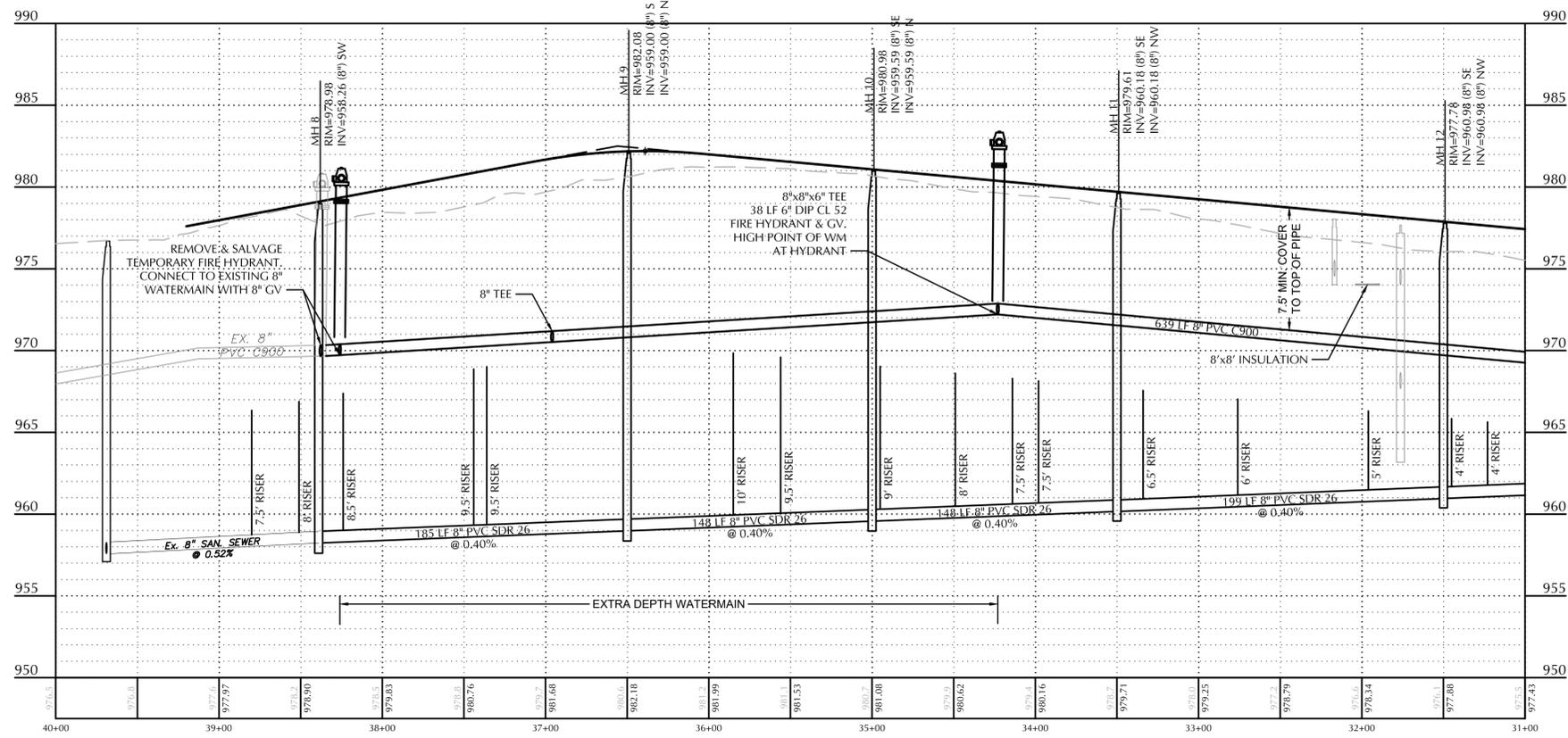
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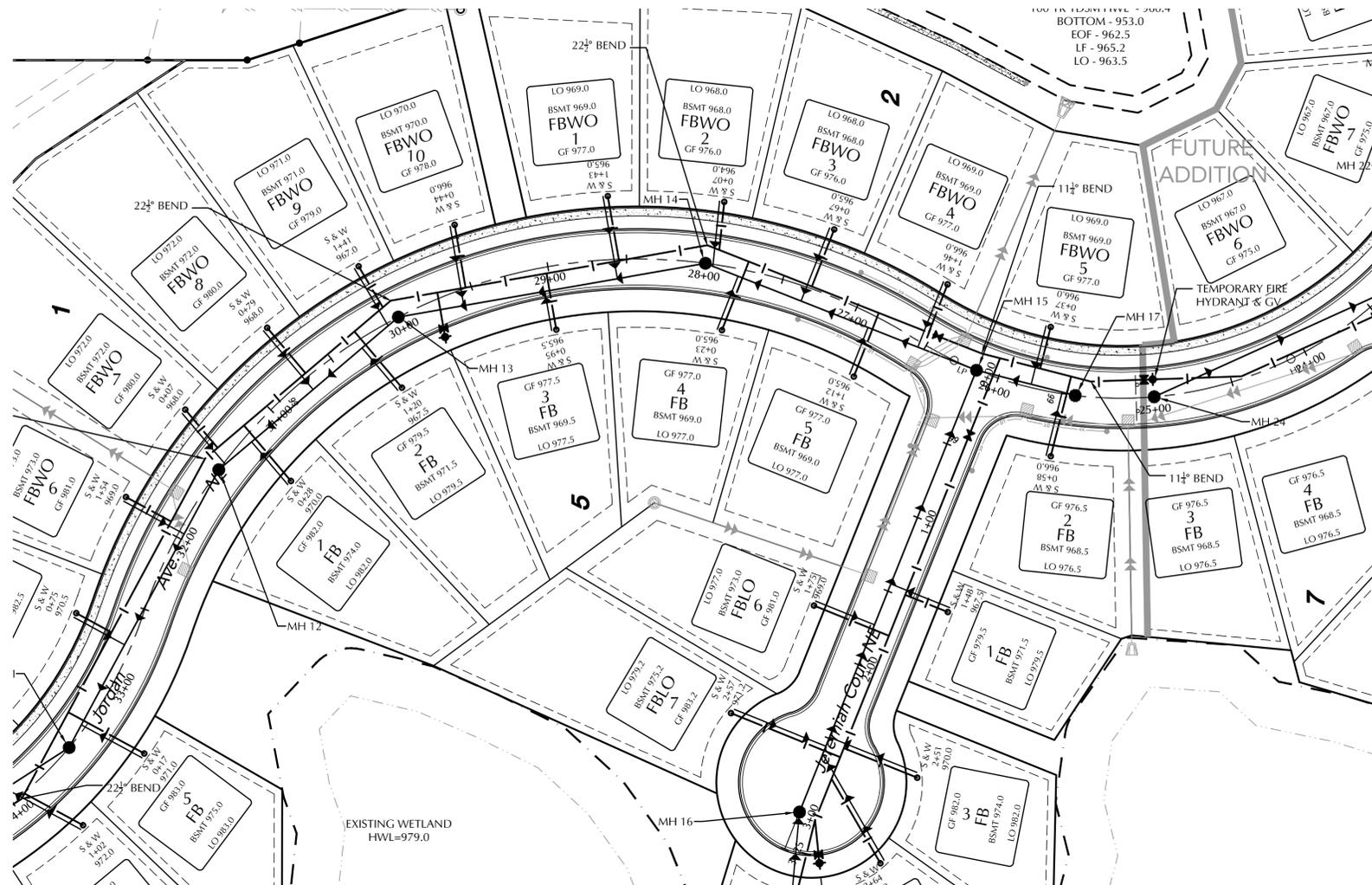
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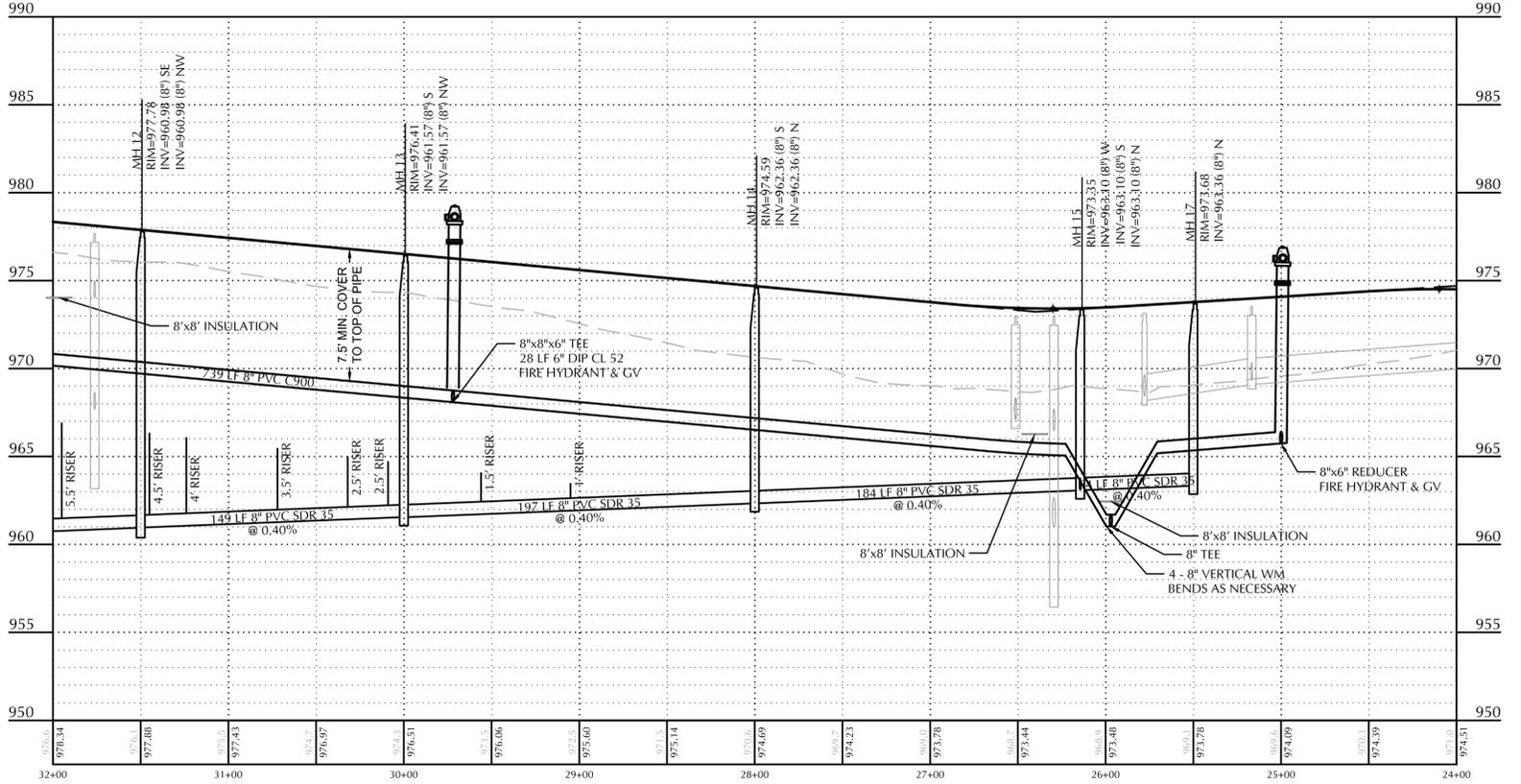
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L2-1	LANDSCAPE DETAILS

**JORDAN AVE
SANITARY
SEWER &
WATERMAIN
PROFILES
C4-1**



JORDAN AVENUE STA. 32+00 TO STA. 24+00



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	CULVERT	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
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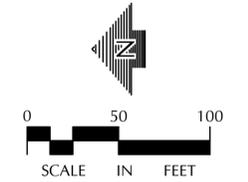
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05/24/18	CITY SUBMITTAL
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PROFESSIONAL SIGNATURE
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Todd W. McLouth - PE
License No. 20383
Date 05/24/18



QUALITY CONTROL

Loucks Project No.	16101B
Project Lead	TWM
Drawn By	ZHW
Checked By	TWM
Review Date	05/24/18

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C4-1 - C4-3	S&W PROFILES
C5-1 - C5-4	STREET & STORM SEWER PROFILES
C8-1 - C8-3	DETAILS
L1-1 - L1-2	LANDSCAPE PLANS
L2-1	LANDSCAPE DETAILS



Gopher State One Call
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TOLL FREE: 1-800-252-1166

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**JORDAN AVE
SANITARY
SEWER &
WATERMAIN
PROFILES
C4-2**

CROW RIVER HEIGHTS WEST 4TH ADDITION

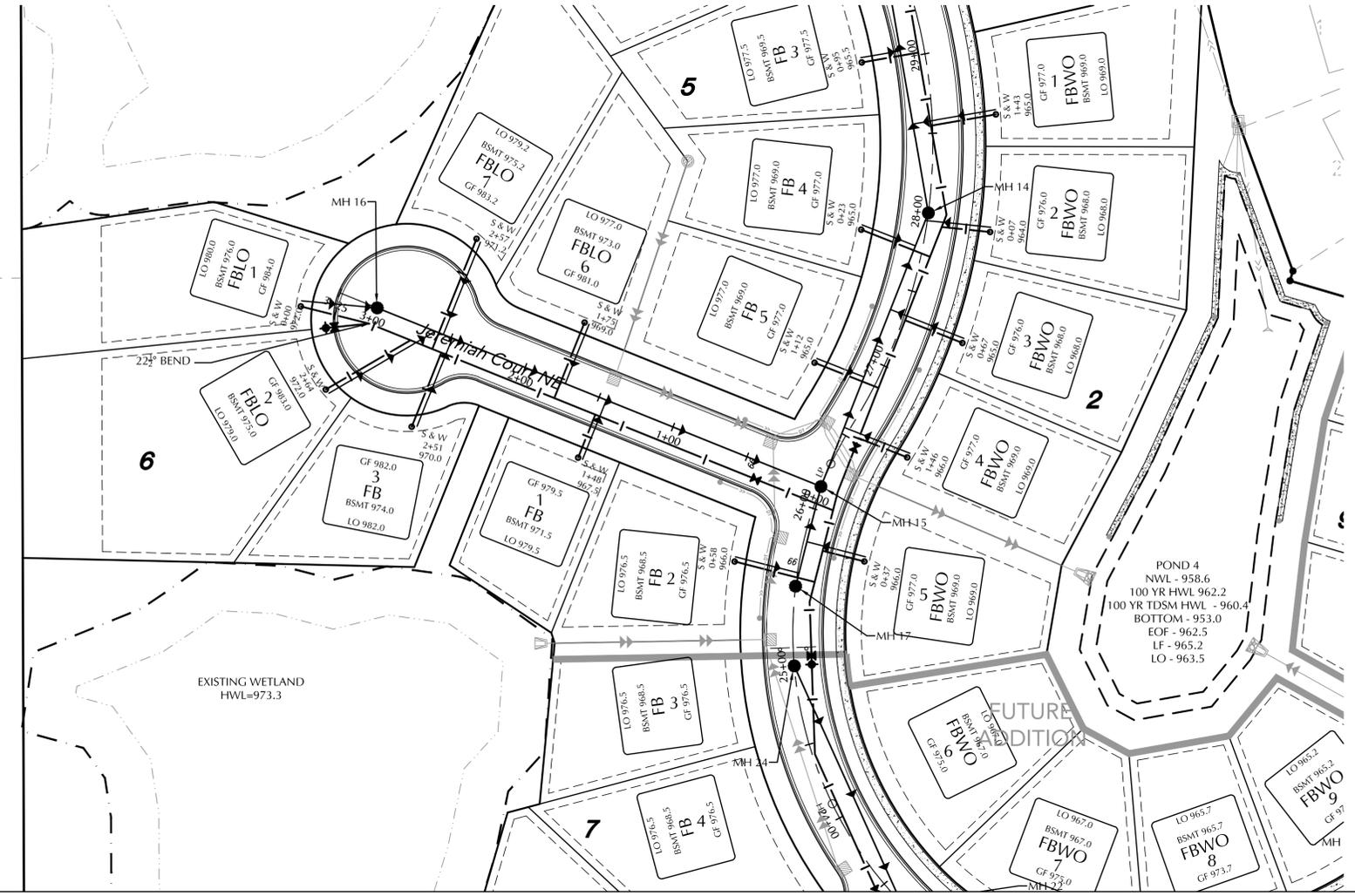
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 CHAMPLIN, MN 55318
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 Maple Grove, MN 55369
 763.424.5505
 www.loucksinc.com

EXISTING	CIVIL LEGEND	PROPOSED
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOL 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	
	FORCE MAIN	
	DRANTILE	
	SILT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREELINE	
	EASEMENT LINE	
	SETBACK LINE	
	FENCE LINE	
	UNDERGROUND TELE	
	UNDERGROUND GAS	
	OVERHEAD UTILITY	

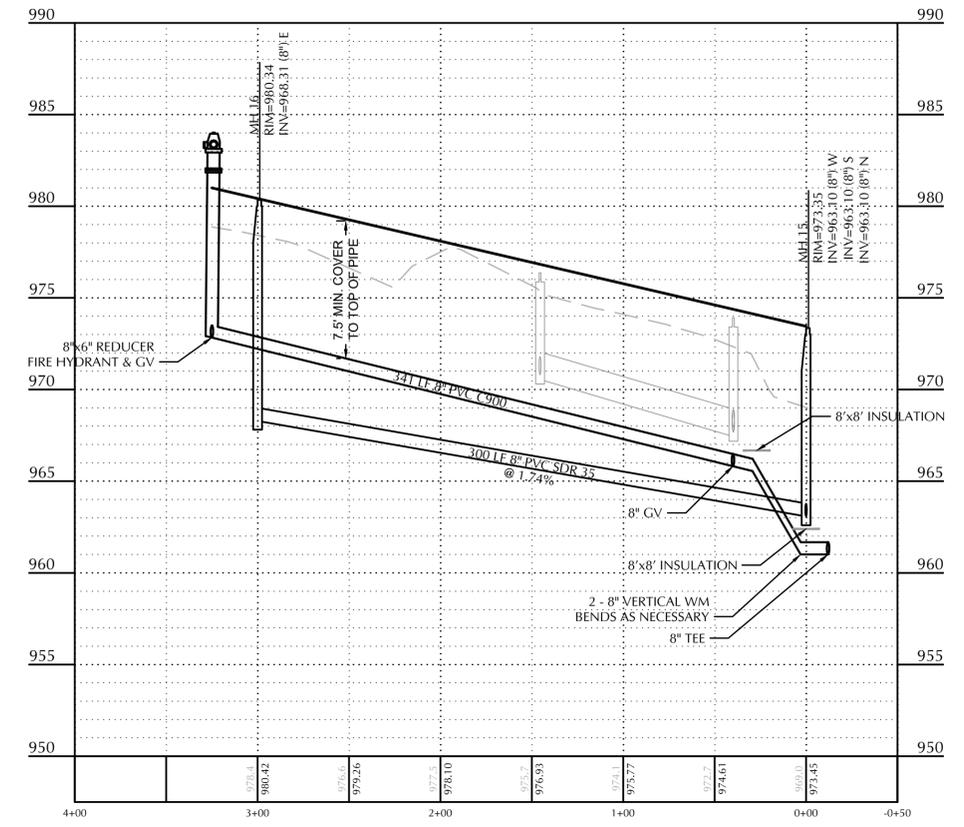


UTILITY NOTES

1. WATER SERVICES TO BE 1" TYPE "K" COPPER WITH CURB STOP BOX TERMINATING 7' INSIDE THE PROPERTY LINE. SERVICE LOCATIONS SHOWN ARE APPROXIMATE AND MAY BE RELOCATED IN THE FIELD BY ENGINEER.
2. SANITARY SEWER SERVICES TO BE 4" PVC SDR 26. TERMINATING 7' INSIDE THE PROPERTY LINE. VERIFY EXACT LOCATION IN FIELD PRIOR TO CONSTRUCTION.
3. 4" POLYSTYRENE INSULATION SHALL BE PLACED AT STORM SEWER CROSSINGS AS DIRECTED BY THE ENGINEER.
4. UTILITY SERVICE SHALL HAVE A MINIMUM 3' HORIZONTAL SEPARATION AND 1' VERTICAL SEPARATION (TYP.)
5. STATIONING FOR SERVICES REFERS TO DOWNSTREAM SANITARY MANHOLE.
6. SEE CITY OF HANOVER GENERAL SPECIFICATIONS AND DETAIL PLATES FOR STREET AND UTILITY CONSTRUCTION.

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05/24/18	CITY SUBMITTAL

JEREMIAH COURT



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 Todd W. McLouth - PE

License No. 20383
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QUALITY CONTROL

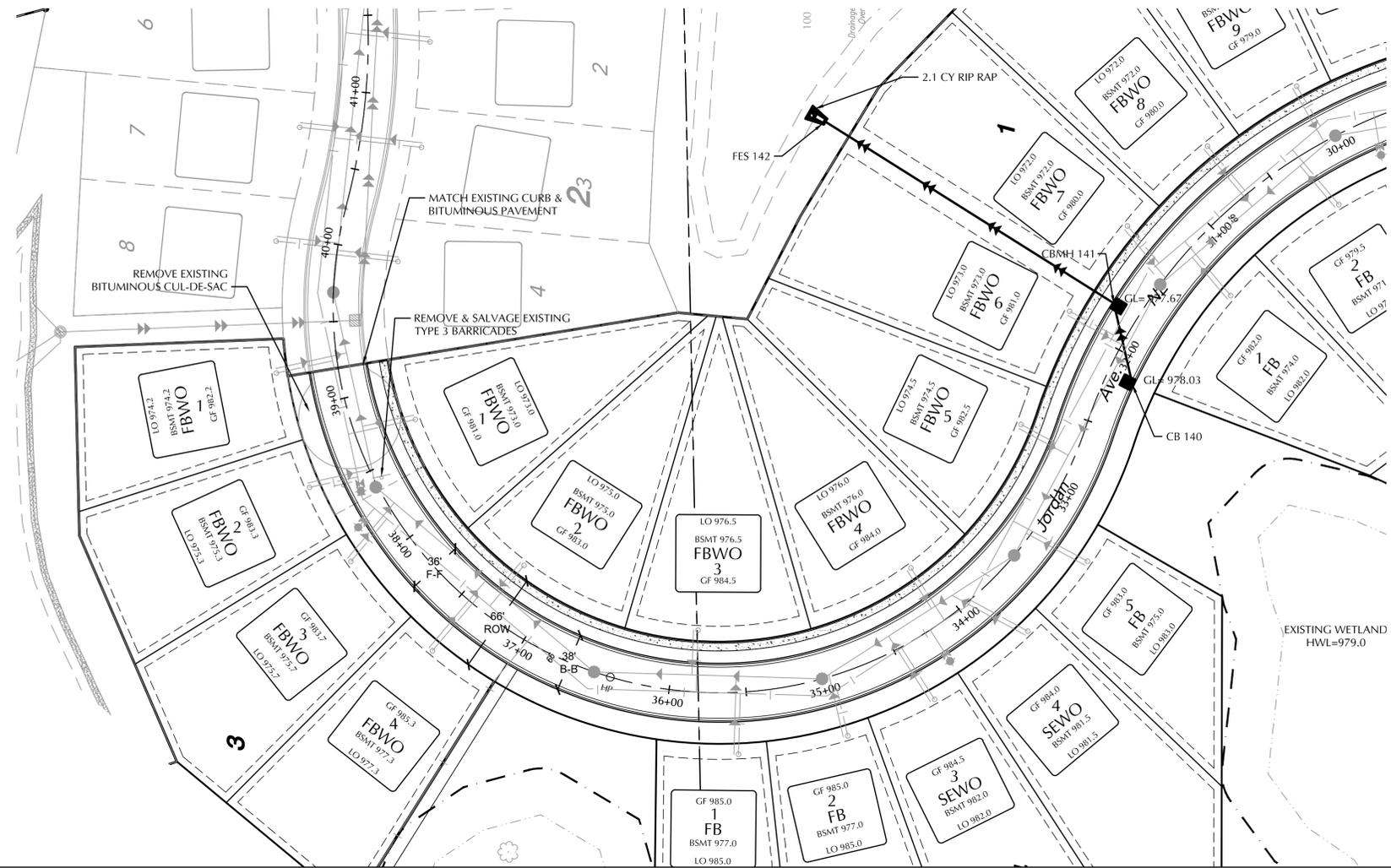
Loucks Project No. 16101B
 Project Lead TWM
 Drawn By ZHW
 Checked By TWM
 Review Date 05/24/18

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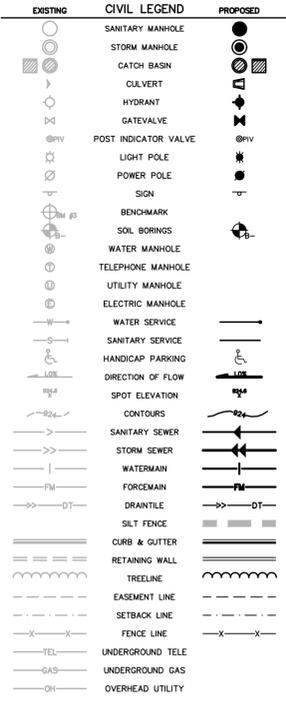
JEREMIAH CT SANITARY SEWER & WATERMAIN PROFILES

C4-3



STRUCTURE SCHEDULE		
STRUCTURE NUMBER	STRUCTURE SIZE	CASTING TYPE
CB 140	2'x3'	R-3067
CBMH 141	48"	R-3067
FES 142	12"	.

NOTE: PIPE LENGTHS SHOWN DO NOT INCLUDE APRONS



CROW RIVER HEIGHTS WEST 4TH ADDITION
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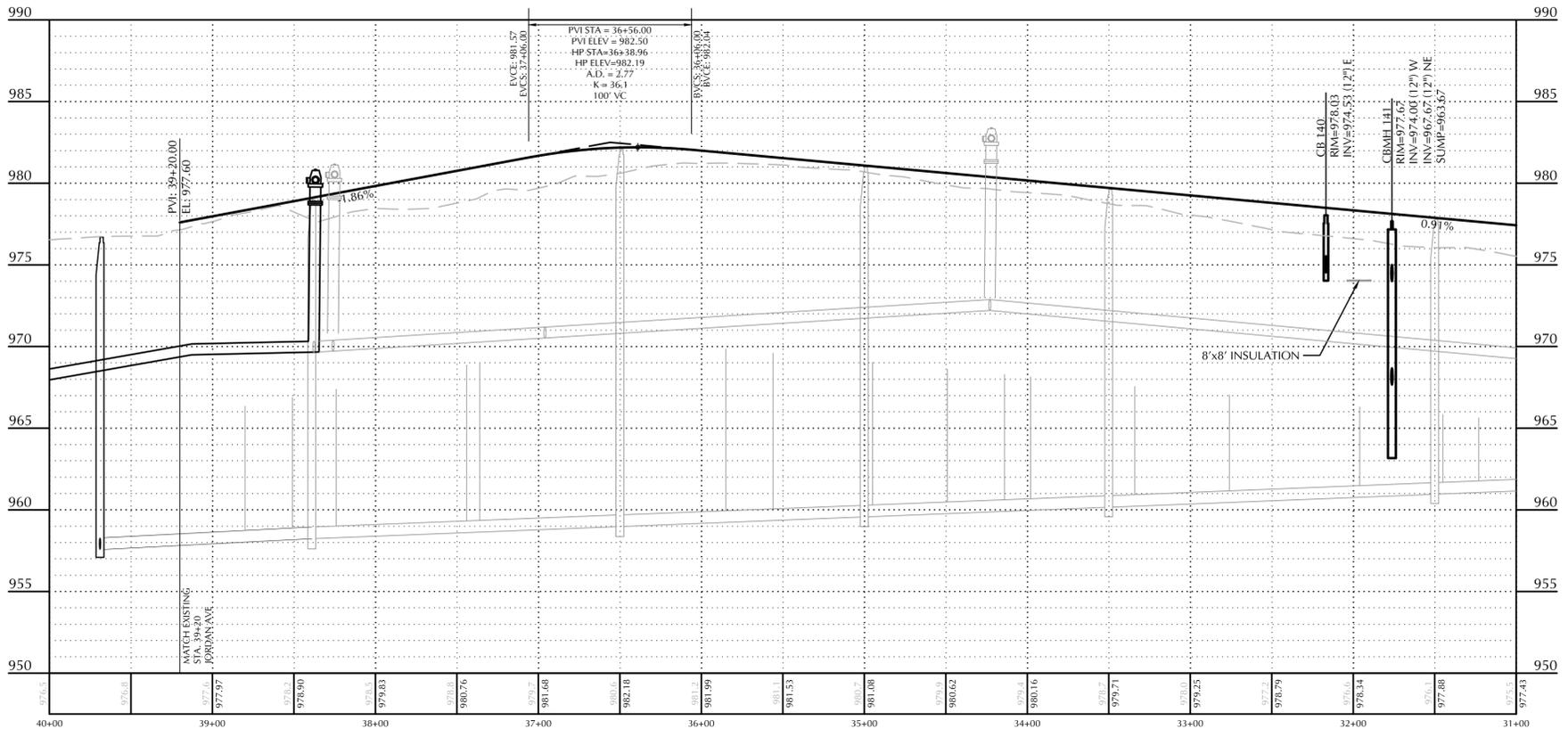
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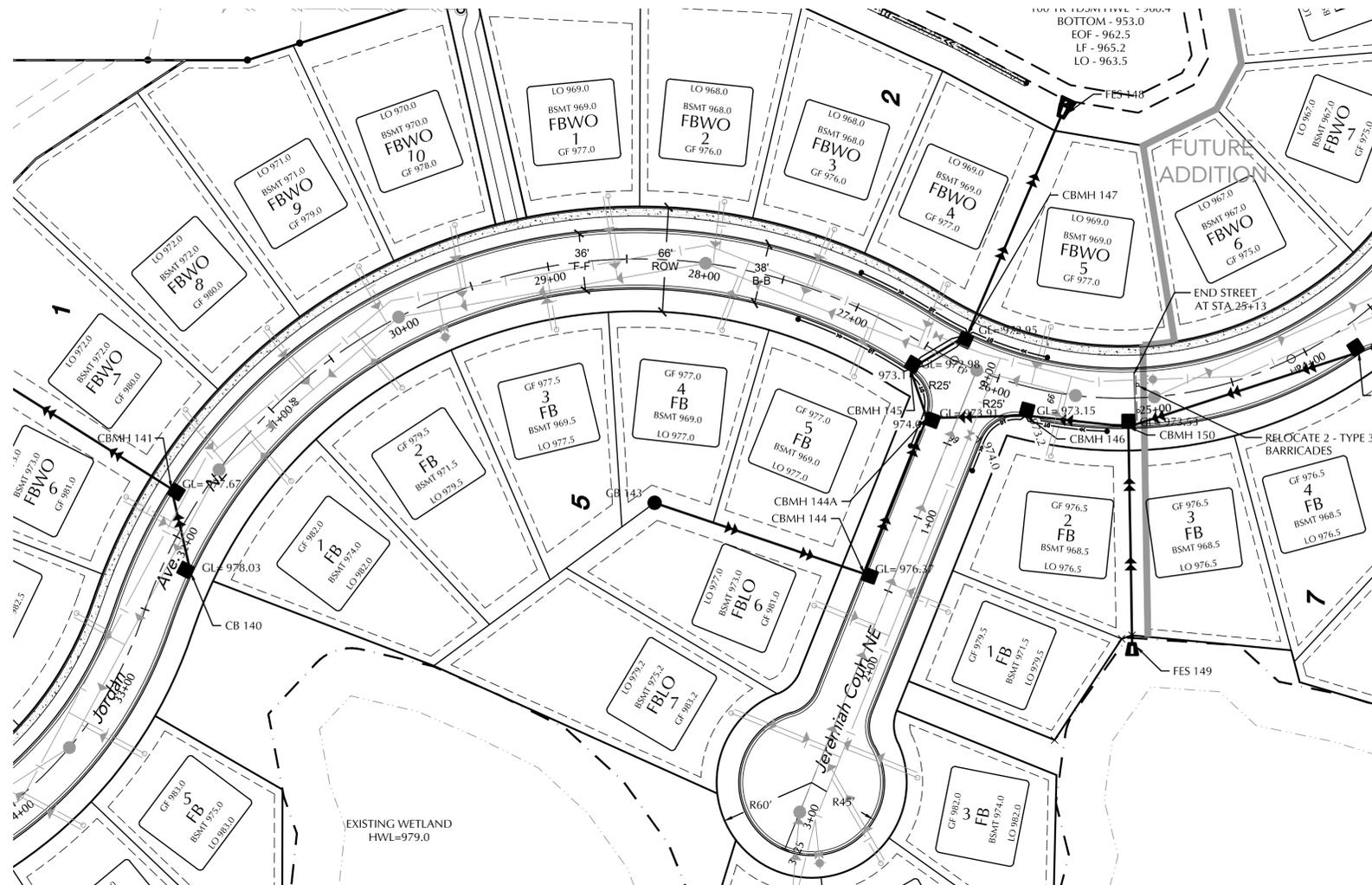
JORDAN AVE
STREET & STORM SEWER PROFILES
C5-1

JORDAN AVENUE STA. 40+00 TO STA. 31+00



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STRUCTURE SCHEDULE

STRUCTURE NUMBER	STRUCTURE SIZE	CASTING TYPE
CB 143	27"	R-4342
CBMH 144	48"	R-3067
CBMH 146	48"	R-3067
CBMH 150	48"	R-3067

NOTE: PIPE LENGTHS SHOWN DO NOT INCLUDE APRONS



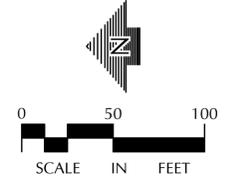
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	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
	WATER SERVICE	
	SANITARY SERVICE	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
	SPOT ELEVATION	
	CONTOURS	
	SANITARY SEWER	
	STORM SEWER	
	WATERMAIN	
	FOREMAN	
	DRANTILE	
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	SETBACK LINE	
	FENCE LINE	
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	UNDERGROUND GAS	
	OVERHEAD UTILITY	



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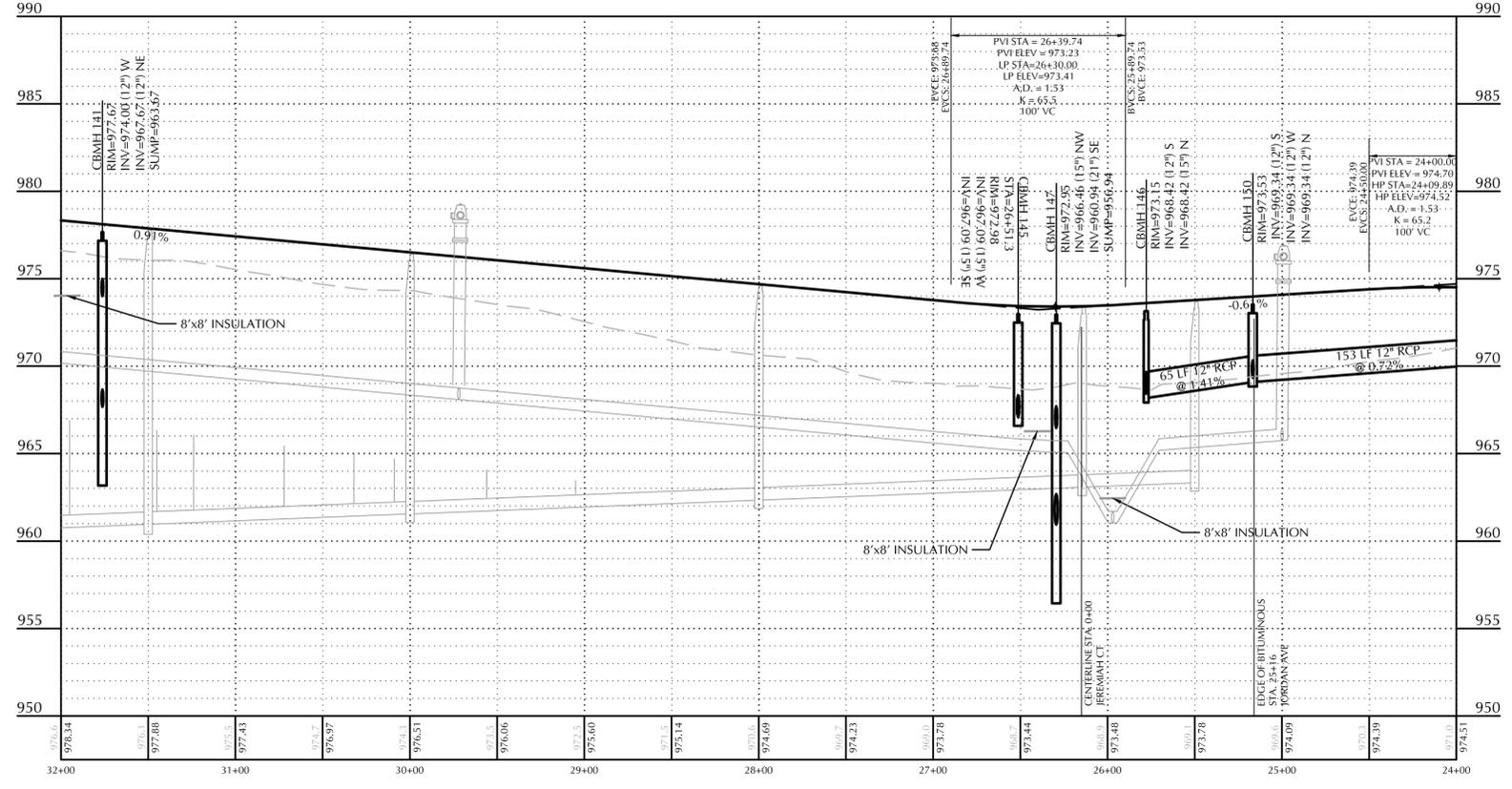
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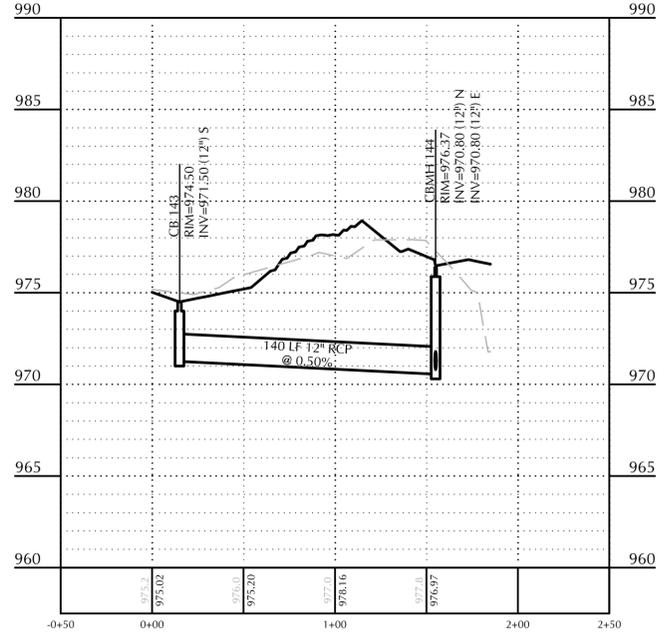
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05/24/18	CITY SUBMITTAL
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JORDAN AVENUE STA. 32+00 TO STA. 24+00



CB 143 TO CBMH 144



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Scott W. McLoughlin
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Locucks Project No. 16101B
 Project Lead TWM
 Drawn By ZHW
 Checked By TWM
 Review Date 05/24/18

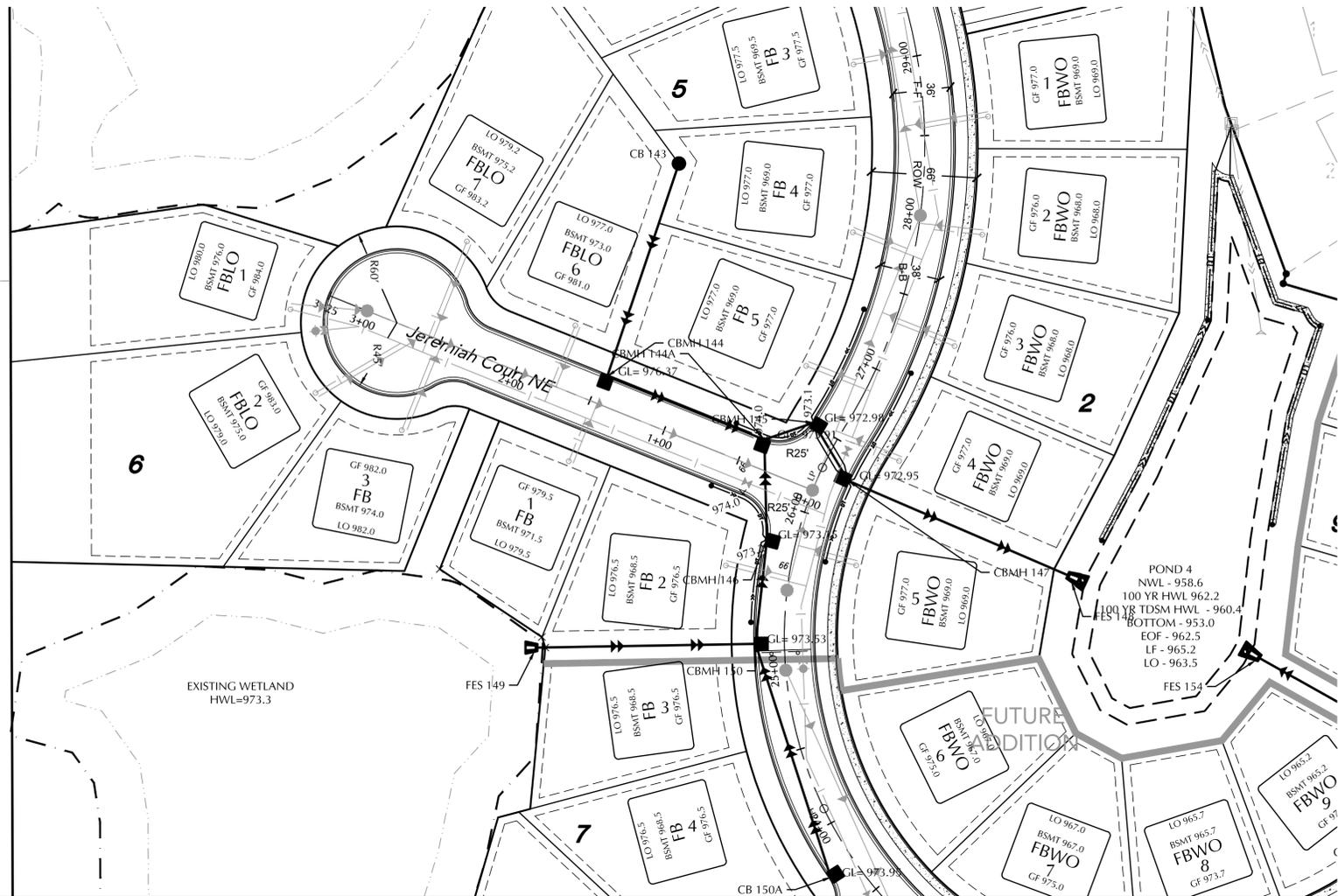
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C8-1 - C8-3	DETAILS
L1-1 - L1-2	LANDSCAPE PLANS
L2-1	LANDSCAPE DETAILS

JORDAN AVE

STREET & STORM SEWER PROFILES

C5-2



EXISTING	CIVIL LEGEND	PROPOSED
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
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	WATER SERVICE	
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	EASEMENT LINE	
	SETBACK LINE	
	FENCE LINE	
	UNDERGROUND TELE	
	UNDERGROUND GAS	
	OVERHEAD UTILITY	

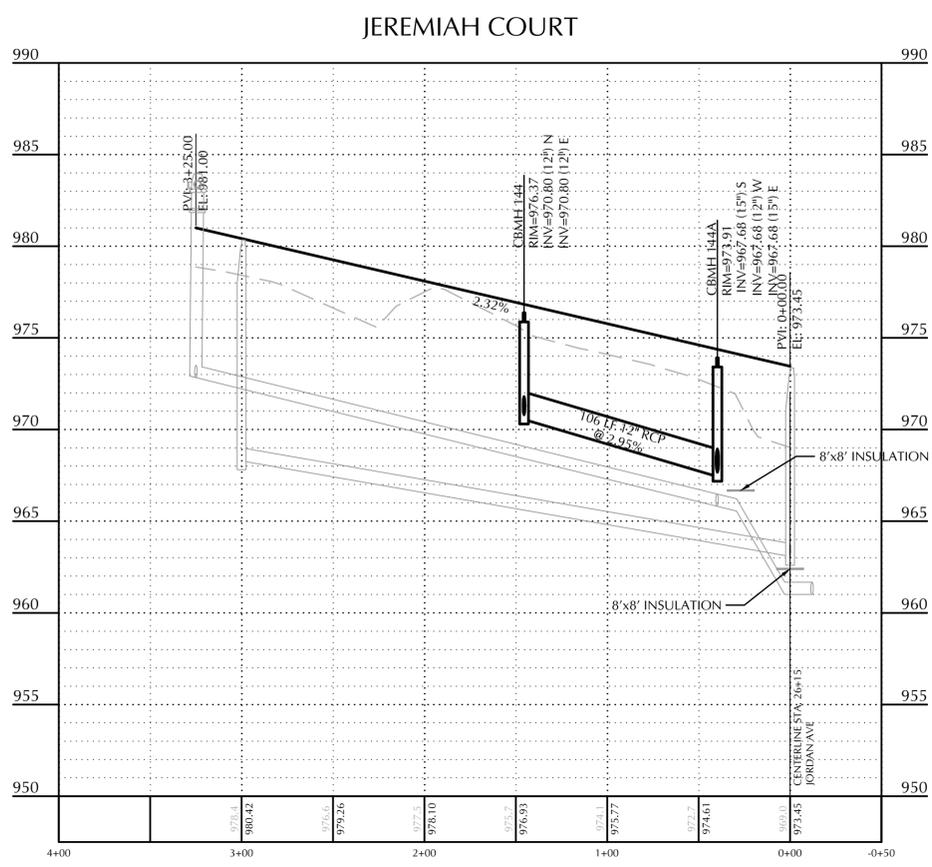
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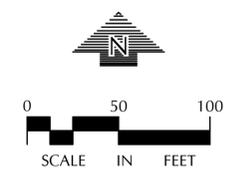
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SUBMITTAL/REVISIONS
05/24/18 CITY SUBMITTAL



STRUCTURE SCHEDULE		
STRUCTURE NUMBER	STRUCTURE SIZE	CASTING TYPE
CBMH 144A	48"	R-3067

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JEREMIAH CT
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C5-3

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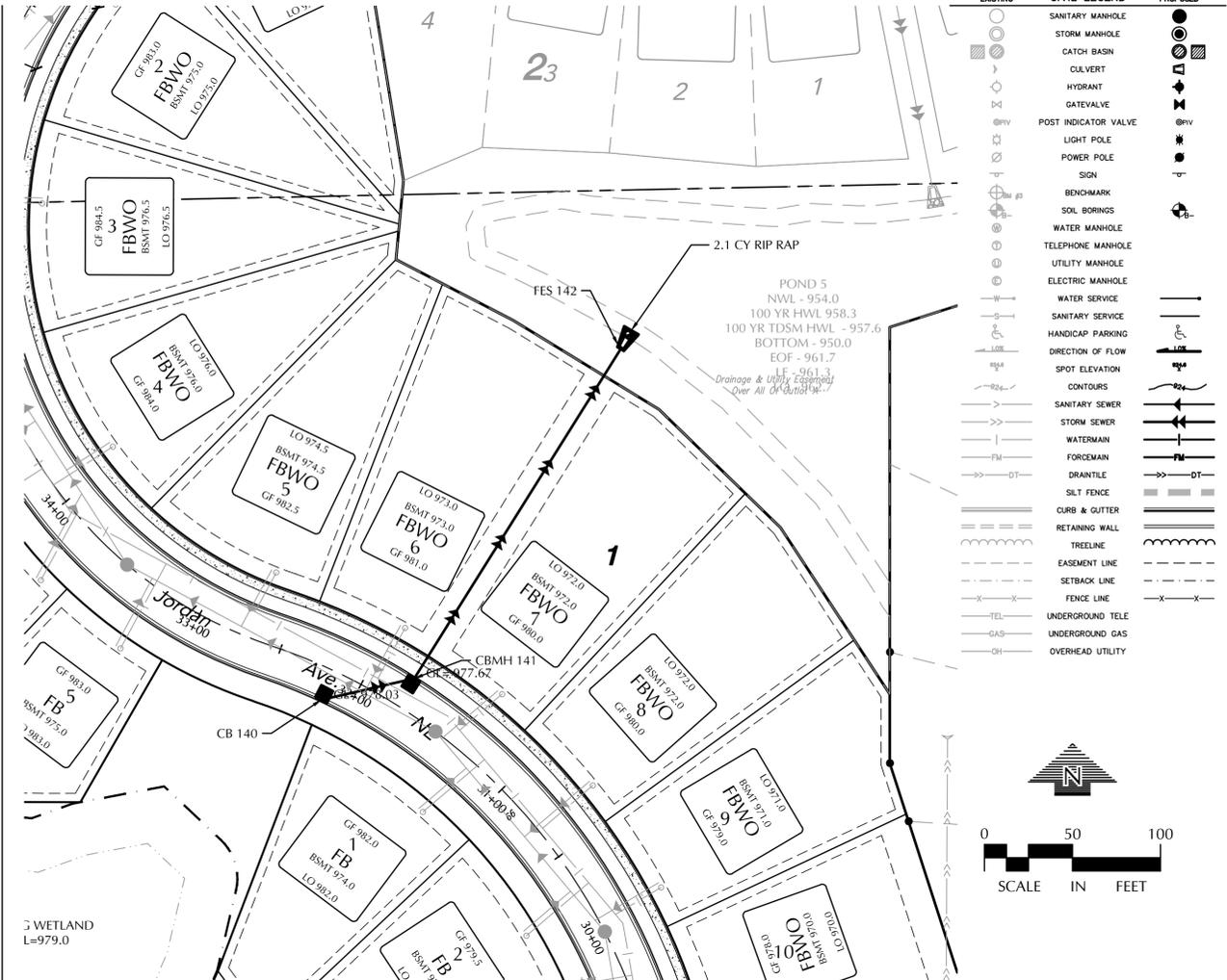
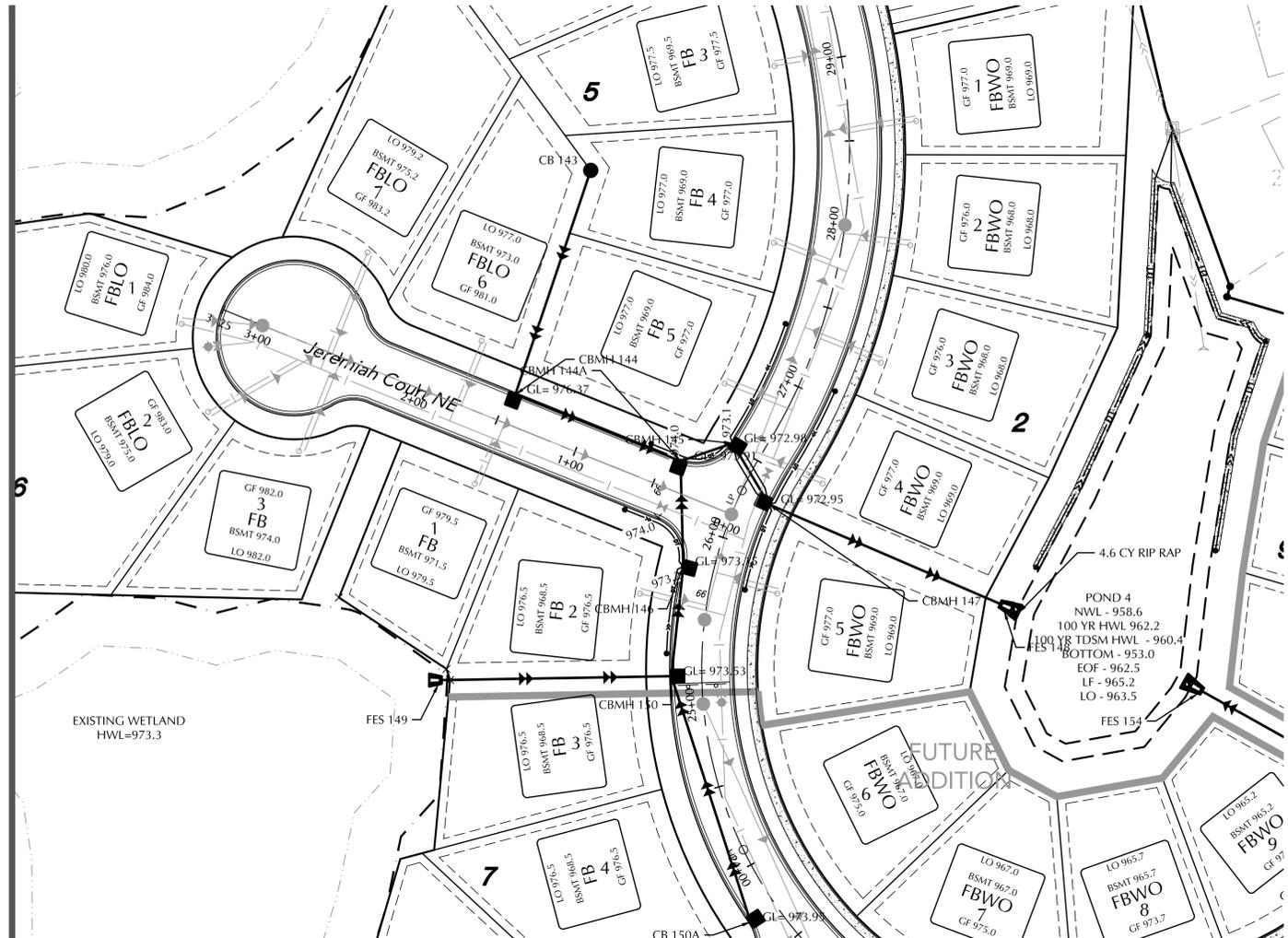
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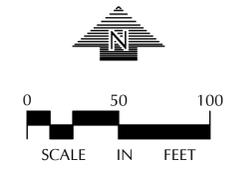
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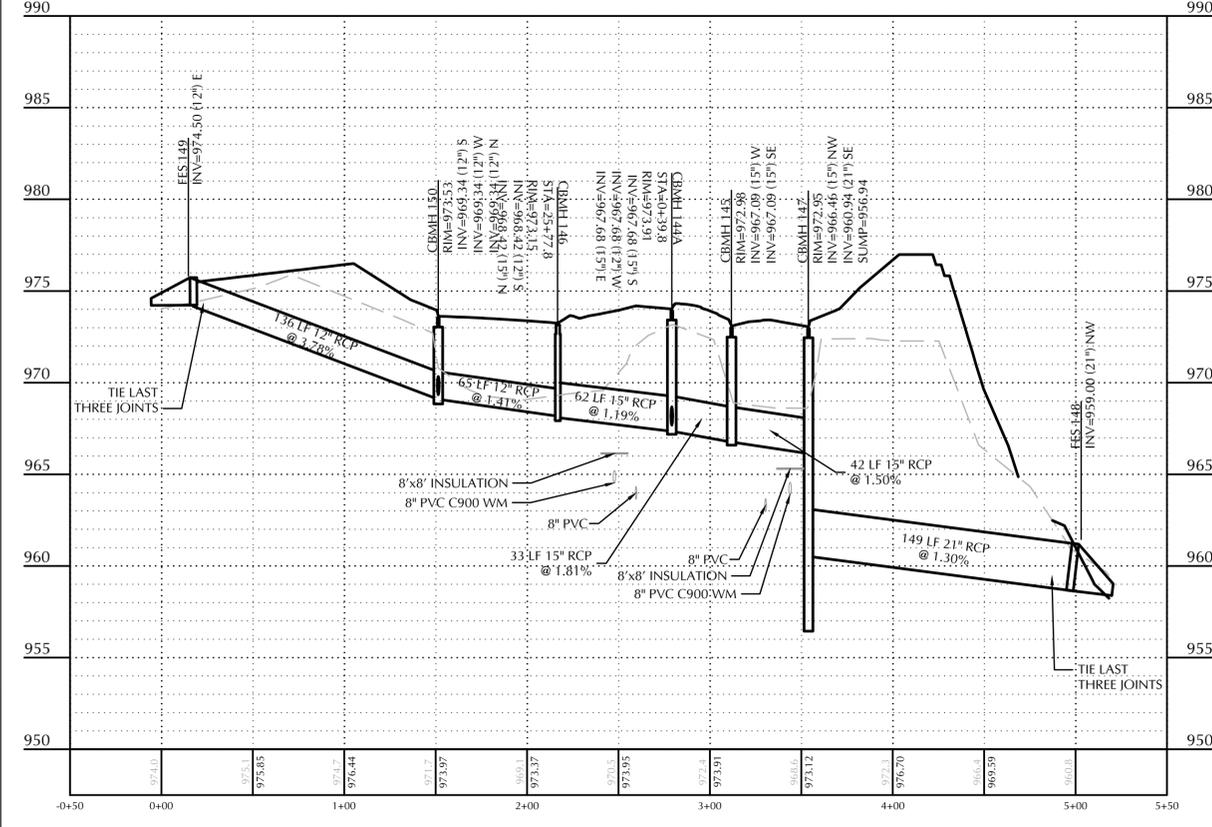
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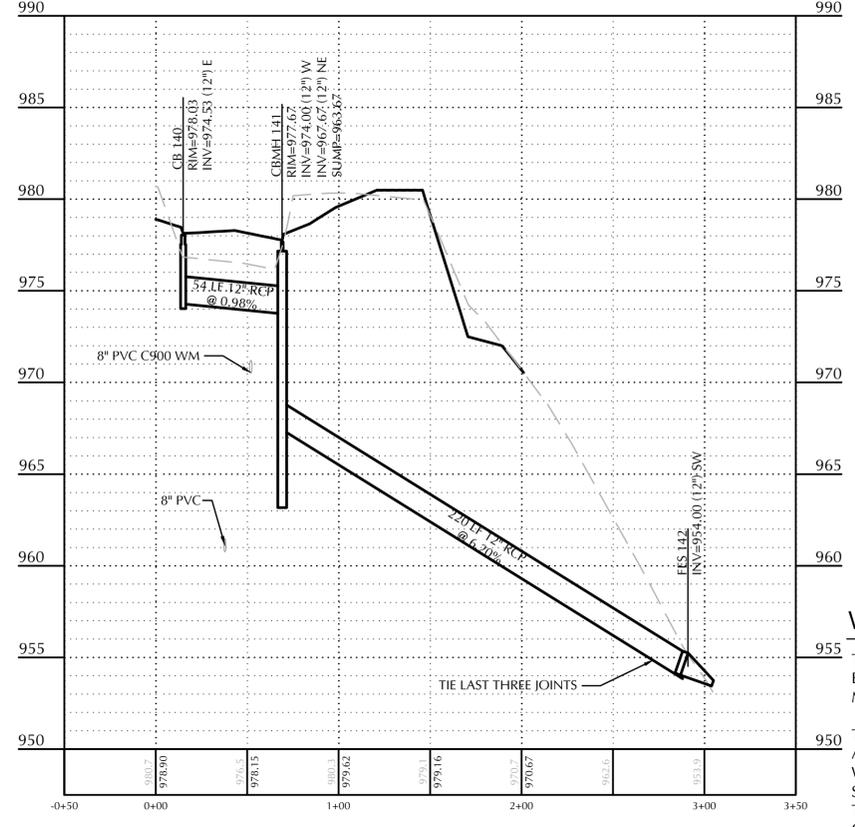
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	CULVERT	
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	GATE VALVE	
	POST INDICATOR VALVE	
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	POWER POLE	
	SIGN	
	BENCHMARK	
	SOL BORINGS	
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	FENCE LINE	
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	UNDERGROUND GAS	
	OVERHEAD UTILITY	



FES 149 TO FES 148



CB 140 TO FES 142



STRUCTURE SCHEDULE

STRUCTURE NUMBER	STRUCTURE SIZE	CASTING TYPE
CBMH 145	48"	R-3067
CBMH 147	48"	R-3067
FES 148	21"	.
FES 149	12"	.

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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 Professional Engineer under the laws of the State of Minnesota.

Scott W. McLouth
License No. 20383
Date 05/24/18

QUALITY CONTROL

Loucks Project No. 16101B
Project Lead TWM
Drawn By ZHW
Checked By TWM
Review Date 05/24/18

SHEET INDEX

C0-1	COVER SHEET
C1-1	EXISTING CONDITIONS
C2-1	SITE PLAN
C3-1	GRADING PLAN
C3-2 - C3-3	SWPPP PLAN & NOTES
C4-1 - C4-3	S&W PROFILES
C5-1 - C5-4	STREET & STORM SEWER PROFILES
C8-1 - C8-3	DETAILS
L1-1 - L1-2	LANDSCAPE PLANS
L2-1	LANDSCAPE DETAILS

STORM SEWER

STREET & STORM SEWER PROFILES

C5-4

Standard Manhole for Sanitary Sewer

Title: Standard Manhole for Sanitary Sewer
 Date: 01-16
 Plate No. SAN-01

Sanitary Sewer Main/Service Connection Detail

Title: Sanitary Sewer Main/Service Connection Detail
 Date: 01-16
 Plate No. SAN-05

PVC Pipe Bedding Detail

Title: PVC Pipe Bedding Detail
 Date: 01-16
 Plate No. SAN-06

Sewer Service Connections

Title: Sewer Service Connections
 Date: 01-16
 Plate No. SAN-10

Service Riser

Title: Service Riser
 Date: 01-16
 Plate No. SAN-11

Hydrant Detail

Title: Hydrant Detail
 Date: 01-16
 Plate No. WAT-01

Gate Valve and Box Installation

Title: Gate Valve and Box Installation
 Date: 01-16
 Plate No. WAT-02

Water Service Connections

Title: Water Service Connections
 Date: 01-16
 Plate No. WAT-04

Poured Concrete Thrust Blocking for Watermain

Title: Poured Concrete Thrust Blocking for Watermain
 Date: 01-16
 Plate No. WAT-05

Standard Catch Basin

Title: Standard Catch Basin
 Date: 03-18
 Plate No. STO-01

Standard Manhole for Storm Drain

Title: Standard Manhole for Storm Drain
 Date: 03-18
 Plate No. STO-02

Riprap Detail

Title: Riprap Detail
 Date: 01-16
 Plate No. STO-04

Grouted Riprap at Outlets

Title: Grouted Riprap at Outlets
 Date: 01-16
 Plate No. STO-05

RCP Pipe Bedding Detail

Title: RCP Pipe Bedding Detail
 Date: 01-16
 Plate No. STO-07

Catch Basin Manhole Type II

Title: Catch Basin Manhole Type II
 Date: 01-16
 Plate No. STO-10

CROW RIVER HEIGHTS WEST 4TH ADDITION
 HANOVER, MINNESOTA

BACKES COMPANIES
 11413 ASHBURY CIRCLE N.
 CHAMPLAIN, MN 55315
 PHONE: (612) 369-7750
 FAX: (612) 566-1525

LOUCKS
 PLANNING
 CIVIL ENGINEERING
 LAND SURVEYING
 LANDSCAPE ARCHITECTURE
 ENVIRONMENTAL

7200 Hemlock Lane, Suite 300
 Maple Grove, MN 55369
 763.424.5505
 www.loucksinc.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

05/24/18 CITY SUBMITTAL

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Tools W. McLoughlin - PE
 License No. 20383
 Date 05/24/18

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Loucks Project No. 16101B
 Project Lead TWMM
 Drawn By ZHW
 Checked By TWMM
 Review Date 05/24/18

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L1-1, L1-2	LANDSCAPE PLANS
L2-1	LANDSCAPE DETAILS

DETAILS
C8-1



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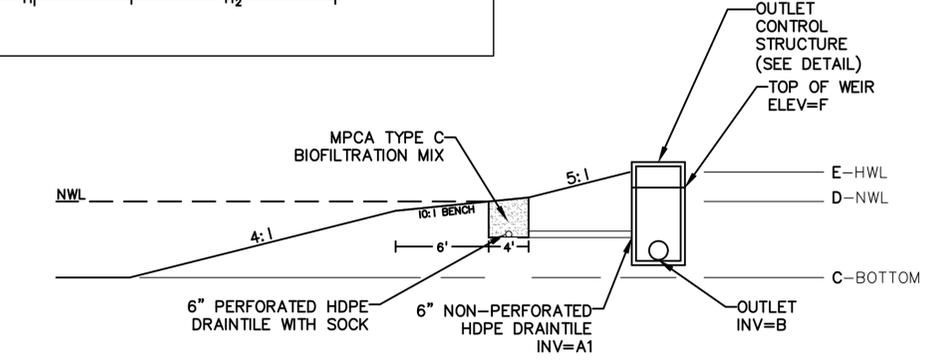
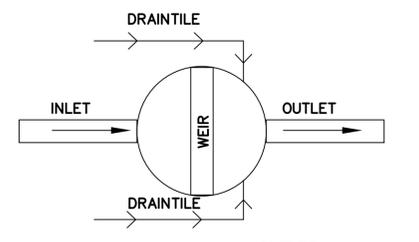
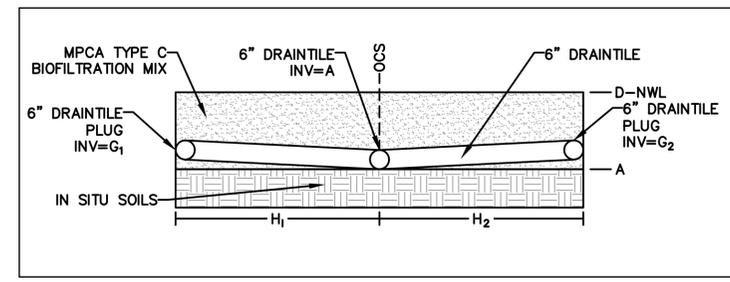
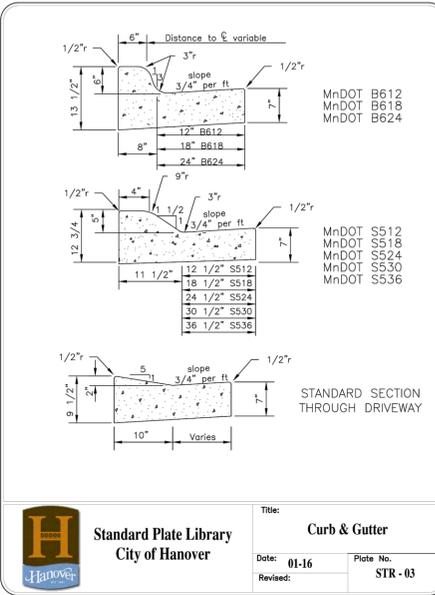
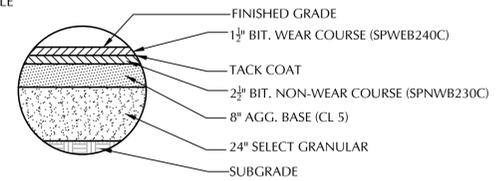
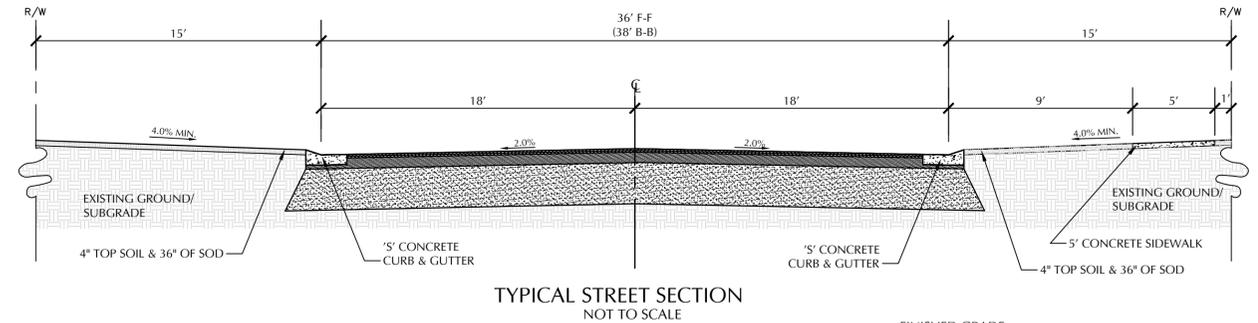
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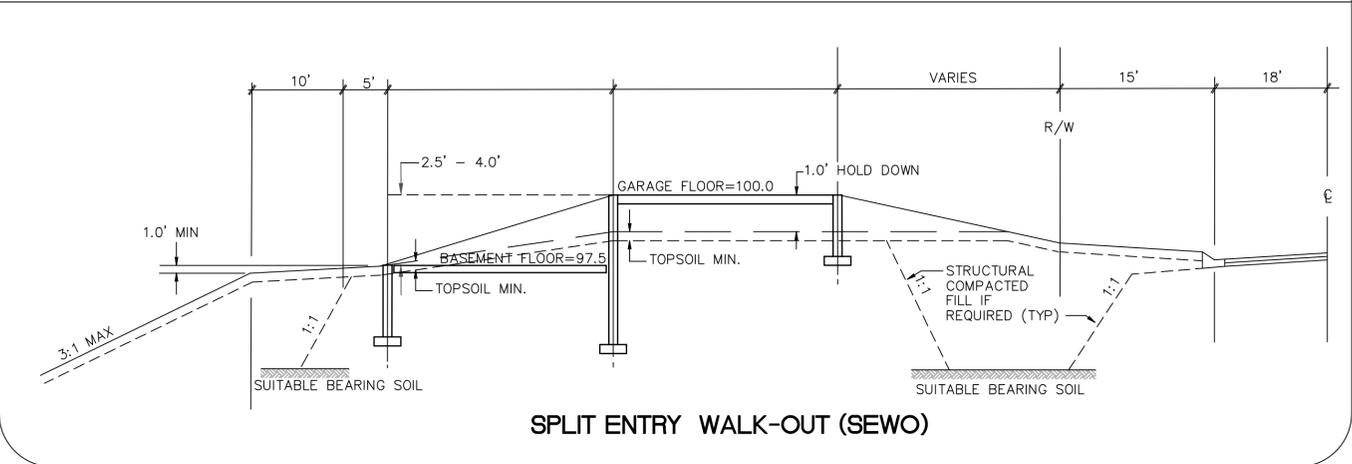
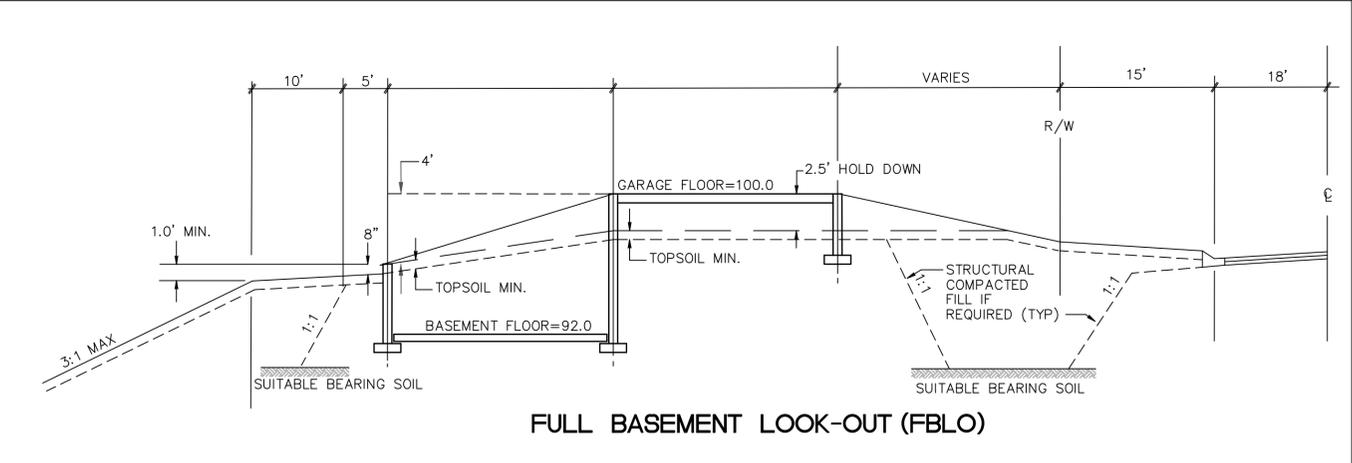
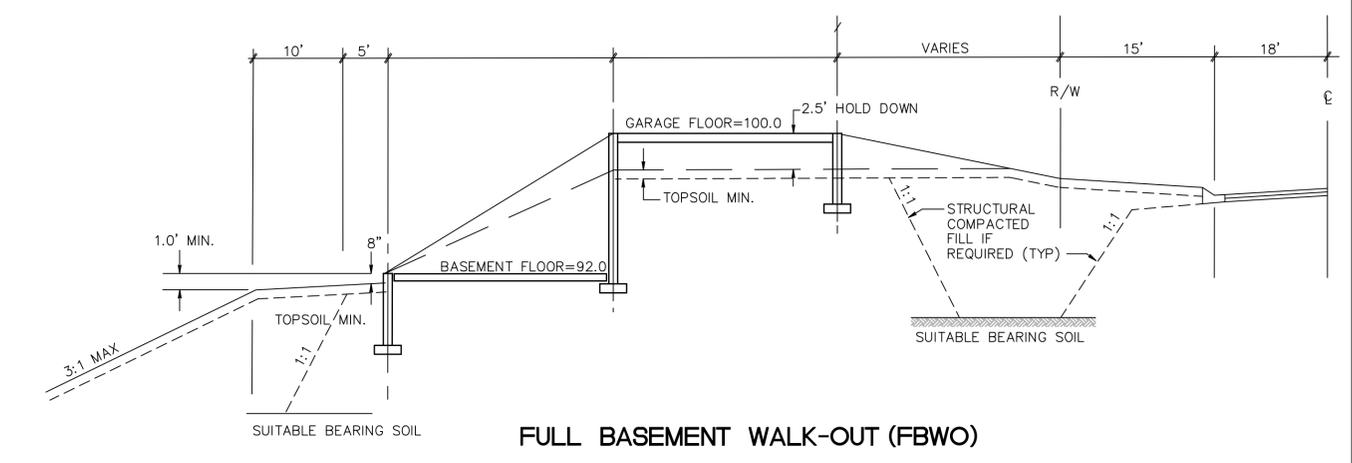
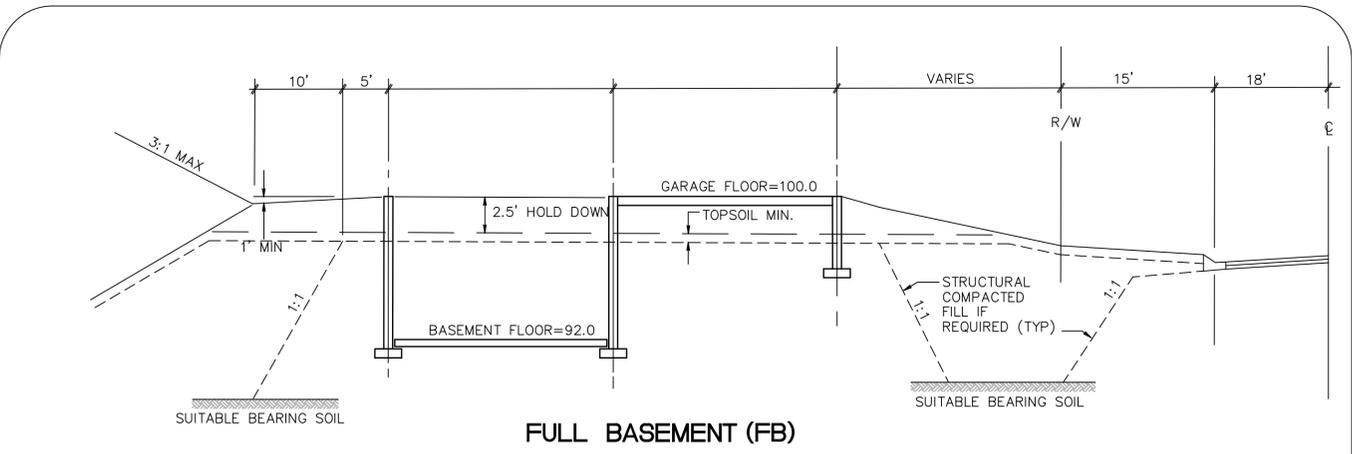
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L2-1	LANDSCAPE DETAILS



POND & FILTRATION BENCH ELEVATION TABLE

POND NO.	A	A1	B	C	D	E	F	G ₁	G ₂	H ₁	H ₂
POND 4	956.60	956.10	955.92	953.00	958.60	962.10	959.08	957.10	957.10	244	245



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CROW RIVER HEIGHTS WEST FOURTH ADDITION

KNOW ALL PERSONS BY THESE PRESENTS: That Backes Companies, Inc., a Minnesota corporation, fee owner, of the following described property situated in the County of Wright, State of Minnesota, to wit:

Those parts of the Northeast Quarter of the Northeast Quarter, the Northwest Quarter of the Northeast Quarter, and the Southeast Quarter of the Northeast Quarter of Section 34, Township 120 North, Range 24 West, Wright County, Minnesota, lying westerly, northerly, southwesterly, westerly, southwesterly and westerly of the following described line:

Commencing at the Northeast corner of said Northeast Quarter; thence westerly, on an assumed bearing of South 88 degrees 52 minutes 51 seconds West, along the north line of said Northeast Quarter, a distance of 1151.45 feet to the point of beginning of the line to be described; thence South 19 degrees 21 minutes 05 seconds East a distance of 346.94 feet; thence South 76 degree 05 minutes 34 seconds West a distance of 201.00 feet; thence southerly 25.96 feet along a non-tangential curve concave to the west, said curve has a radius of 217.00 feet, a central angle of 6 degrees 51 minutes 15 seconds, and a chord that bears South 13 degrees 00 minutes 43 seconds East; thence South 77 degrees 38 minutes 43 seconds West, not tangent to said curve a distance of 140.00 feet; thence North 13 degrees 42 minutes 04 seconds West a distance of 48.00 feet; thence North 36 degrees 05 minutes 51 seconds West a distance of 48.00 feet; thence South 89 degrees 10 minutes 28 seconds West a distance of 170.00 feet; thence South 33 degrees 52 minutes 00 seconds East a distance of 75.00 feet; thence South 50 degrees 45 minutes 56 seconds East a distance of 120.00 feet; thence South 42 degrees 40 minutes 13 seconds East a distance of 273.00 feet; thence South 22 degrees 37 minutes 55 seconds East a distance of 141.00 feet; thence South 3 degrees 41 minutes 31 seconds West a distance of 108.00 feet; thence South 20 degrees 00 minutes 33 seconds East a distance of 57.00 feet; thence North 66 degrees 36 minutes 33 seconds East a distance of 159.00 feet; thence North 88 degrees 41 minutes 47 seconds East a distance of 122.00 feet; thence South 2 degrees 15 minutes 44 seconds East a distance of 135.00 feet; thence westerly 24.34 feet along a non-tangential curve concave to the south, said curve has a radius of 283.00 feet, a central angle of 4 degrees 55 minutes 42 seconds, and a chord that bears South 83 degrees 14 minutes 55 seconds West; thence South 9 degrees 12 minutes 56 seconds East, not tangent to said curve a distance of 256.00 feet; thence South 5 degrees 22 minutes 02 seconds West a distance of 45.00 feet; thence South 62 degrees 36 minutes 22 seconds East a distance of 75.00 feet; thence South 58 degrees 38 minutes 19 seconds East a distance of 97.00 feet; thence South 45 degrees 51 minutes 28 seconds East a distance of 96.00 feet; thence South 33 degrees 17 minutes 50 seconds East a distance of 113.00 feet to the west line of Block 3, CROW RIVER HEIGHTS WEST FIRST ADDITION, Wright County, Minnesota; thence on a bearing of SOUTH, a distance of 39.13 feet to a corner of Lot 6, said Block 3; thence southeasterly, northeasterly, easterly, southerly and southeasterly, along the southwesterly boundary of said CROW RIVER HEIGHTS WEST FIRST ADDITION, a distance of 945.55 feet to the most southerly corner of Lot 1, Block 5, said CROW RIVER HEIGHTS WEST FIRST ADDITION, which corner is also on the west line of Block 4, CROW RIVER HEIGHTS EAST THIRD ADDITION, said Wright County; thence southwesterly and southerly, along the westerly line of said CROW RIVER HEIGHTS EAST THIRD ADDITION, and said line extended, a distance of 428.09 feet, to the south line of said Southeast Quarter of the Northeast Quarter and there terminating.

Has caused the same to be surveyed and platted as CROW RIVER HEIGHTS WEST FOURTH ADDITION, and does hereby dedicate to the public for public use the public ways and the drainage and utility easements as shown on this plat.

In witness whereof said Backes Companies, Inc., a Minnesota corporation, has caused these presents to be signed by Dennis Backes, its President this ____ day of _____, 201__.

BACKES COMPANIES, INC.

Dennis Backes, President

STATE OF MINNESOTA
COUNTY OF HENNEPIN

This instrument was acknowledged before me this ____ day of _____, 201__ by Dennis Backes, President of Backes Companies, Inc., a Minnesota corporation, on behalf of the corporation.

(Signature) (Printed Name)
Notary Public, Hennepin County, Minnesota
My Commission Expires January 31, 2020

SURVEYORS CERTIFICATION

I, Henry D. Nelson, 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 in 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 _____, 201__

Henry D. Nelson, Licensed Land Surveyor
Minnesota License No. 17255

STATE OF MINNESOTA
COUNTY OF HENNEPIN

The foregoing Surveyor's Certificate was acknowledged before me this ____ day of _____, 201__ by Henry D. Nelson, Land Surveyor, Minnesota License No. 17255.

(Signature) (Printed Name)
Notary Public, Hennepin County, Minnesota
My Commission Expires January 31, 2020

CITY COUNCIL, CITY OF HANOVER, MINNESOTA

This plat of CROW RIVER HEIGHTS WEST FOURTH ADDITION was approved and accepted by the City Council of the City of Hanover, Minnesota, at a regular meeting thereof held this ____ day of _____, 201__, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subd. 2.

By _____, Mayor By _____, City Clerk

WRIGHT COUNTY SURVEYOR

I hereby certify that in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat has been reviewed and approved this ____ day of _____, 201__.

Wright County Surveyor

WRIGHT COUNTY AUDITOR

Pursuant to Minnesota Statutes, Section 272.12, there are no delinquent taxes on the land hereinbefore described on this plat and transfer entered this ____ day of _____, 201__.

Wright County Auditor By: _____
Deputy

WRIGHT COUNTY TREASURER

Pursuant to Minnesota Statutes, Section 505.021, Subd. 9, taxes payable for the year 201__ on the land hereinbefore described have been paid this ____ day of _____, 201__.

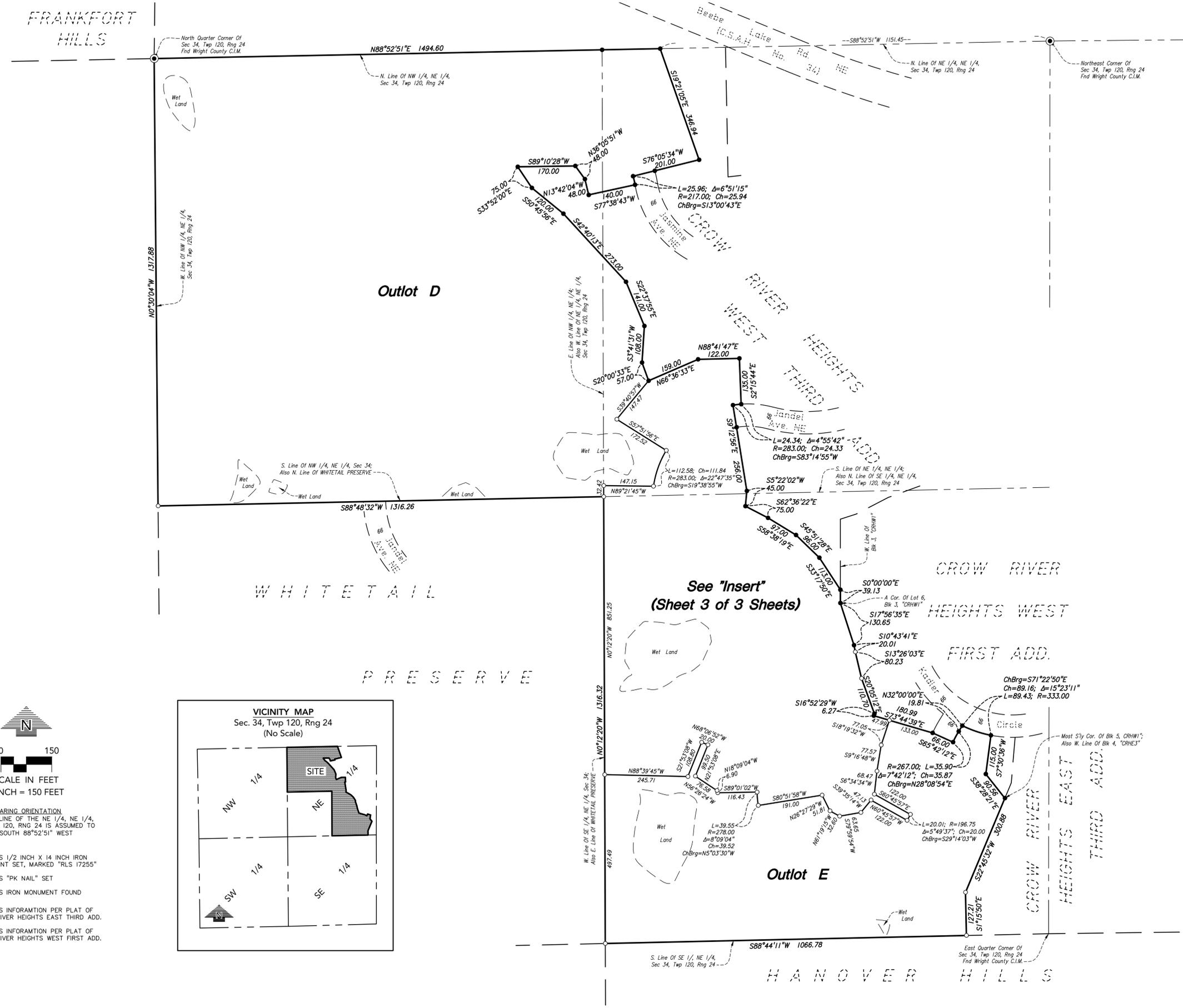
Wright County Treasurer By: _____
Deputy

WRIGHT COUNTY RECORDER

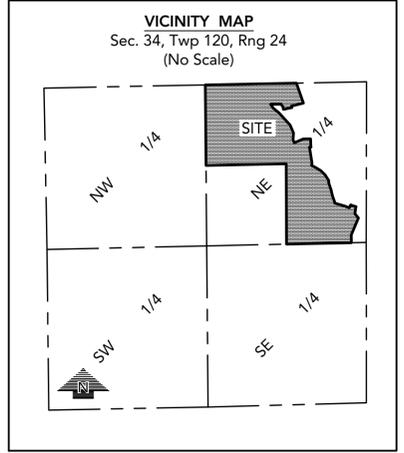
I hereby certify that this instrument was filed in the office of the County Recorder for record on this ____ day of _____, 201__, at ____ o'clock ____M., and was duly recorded in Cabinet No. _____, Sleeve _____, as Document No. _____.

Wright County Recorder

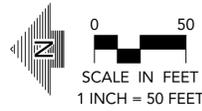
CROW RIVER HEIGHTS WEST FOURTH ADDITION




 0 150
 SCALE IN FEET
 1 INCH = 150 FEET
 BEARING ORIENTATION
 THE NORTH LINE OF THE NE 1/4, NE 1/4,
 SEC 34, TWP 120, RING 24 IS ASSUMED TO
 BEAR SOUTH 88°52'51" WEST
 ○ DENOTES 1/2 INCH X 1/4 INCH IRON
 MONUMENT SET, MARKED "RLS 17255"
 △ DENOTES "PK NAIL" SET
 ● DENOTES IRON MONUMENT FOUND
 "CRHE3" DENOTES INFORMATION PER PLAT OF
 CROW RIVER HEIGHTS EAST THIRD ADD.
 "CRHW1" DENOTES INFORMATION PER PLAT OF
 CROW RIVER HEIGHTS WEST FIRST ADD.



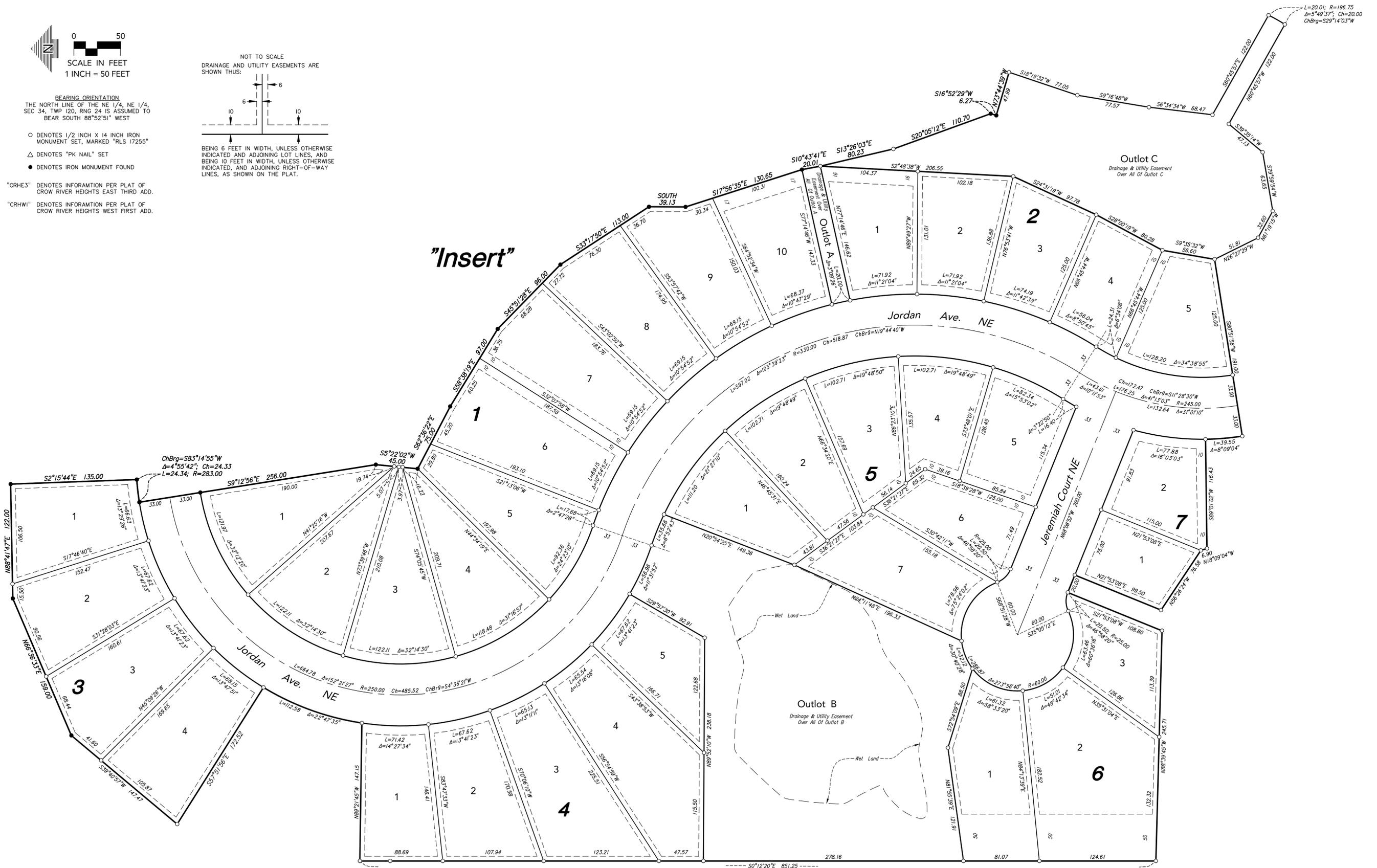
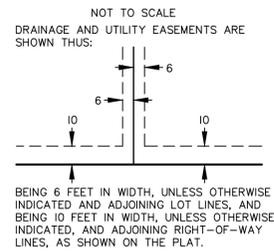
CROW RIVER HEIGHTS WEST FOURTH ADDITION



BEARING ORIENTATION
THE NORTH LINE OF THE NE 1/4, NE 1/4, SEC 34, TWP 120, RNG 24 IS ASSUMED TO BEAR SOUTH 88°52'51" WEST

- DENOTES 1/2 INCH X 1/4 INCH IRON MONUMENT SET, MARKED "RLS 17255"
- △ DENOTES "PK NAIL" SET
- DENOTES IRON MONUMENT FOUND

"CRHE3" DENOTES INFORMATION PER PLAT OF CROW RIVER HEIGHTS EAST THIRD ADD.
"CRHW1" DENOTES INFORMATION PER PLAT OF CROW RIVER HEIGHTS WEST FIRST ADD.



CROW RIVER HEIGHTS WEST 4TH ADDITION

HANOVER, MINNESOTA



11413 ASHBURY CIRCLE N.
CHAMPLIN, MN 55316
PHONE: (612) 369-7750
FAX: (612) 566-1525

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SUBMITTAL/REVISIONS

05/24/18 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

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 Landscape Architect under the laws of the State of Minnesota.

Greg Johnson
License No. Greg Johnson - LA 24610
Date 05/24/18

QUALITY CONTROL

Loucks Project No. 16101B
Project Lead TWMM
Drawn By GAJ
Checked By TWMM
Review Date 05/24/18

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LANDSCAPE PLAN

L1-1

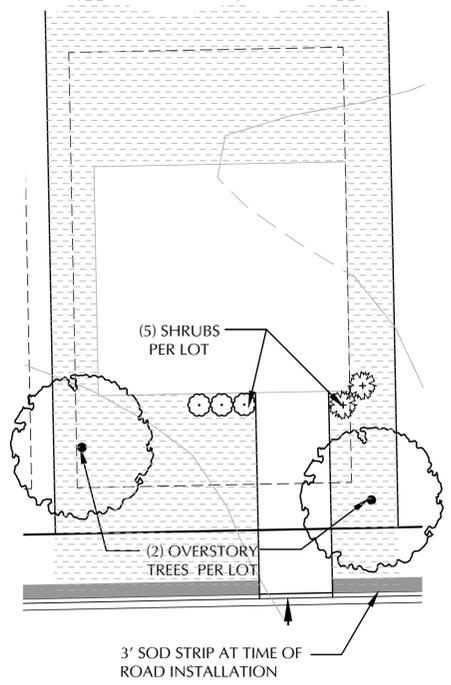
LANDSCAPE NOTES

1. POND SLOPE TREES AND 3' SOD STRIP ALONG CURBS WILL BE PLANTED AT TIME OF GRADING AND ROAD CONSTRUCTION.
2. LOT SODDING, TREES AND SHRUBS WILL BE PLANTED AT TIME OF BUILDING CONSTRUCTION
3. THERE ARE NO EXISTING TREES ON THE SITE, NO TREE RESTORATION IS REQUIRED.

PLANTING REQUIREMENTS - 4TH ADD		TOTAL REQ'D	TOTAL PROPOSED
POND SLOPE TREES - 12 TREES PER 1 ACRE	0.54 ACRE	7	7
LOT TREES - 2 PER LOT	59 LOTS	118	118
LOT SHRUBS - 5 PER LOT	59 LOTS	295	295

LANDSCAPE LEGEND

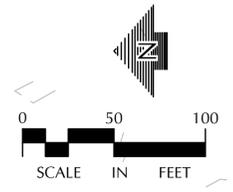
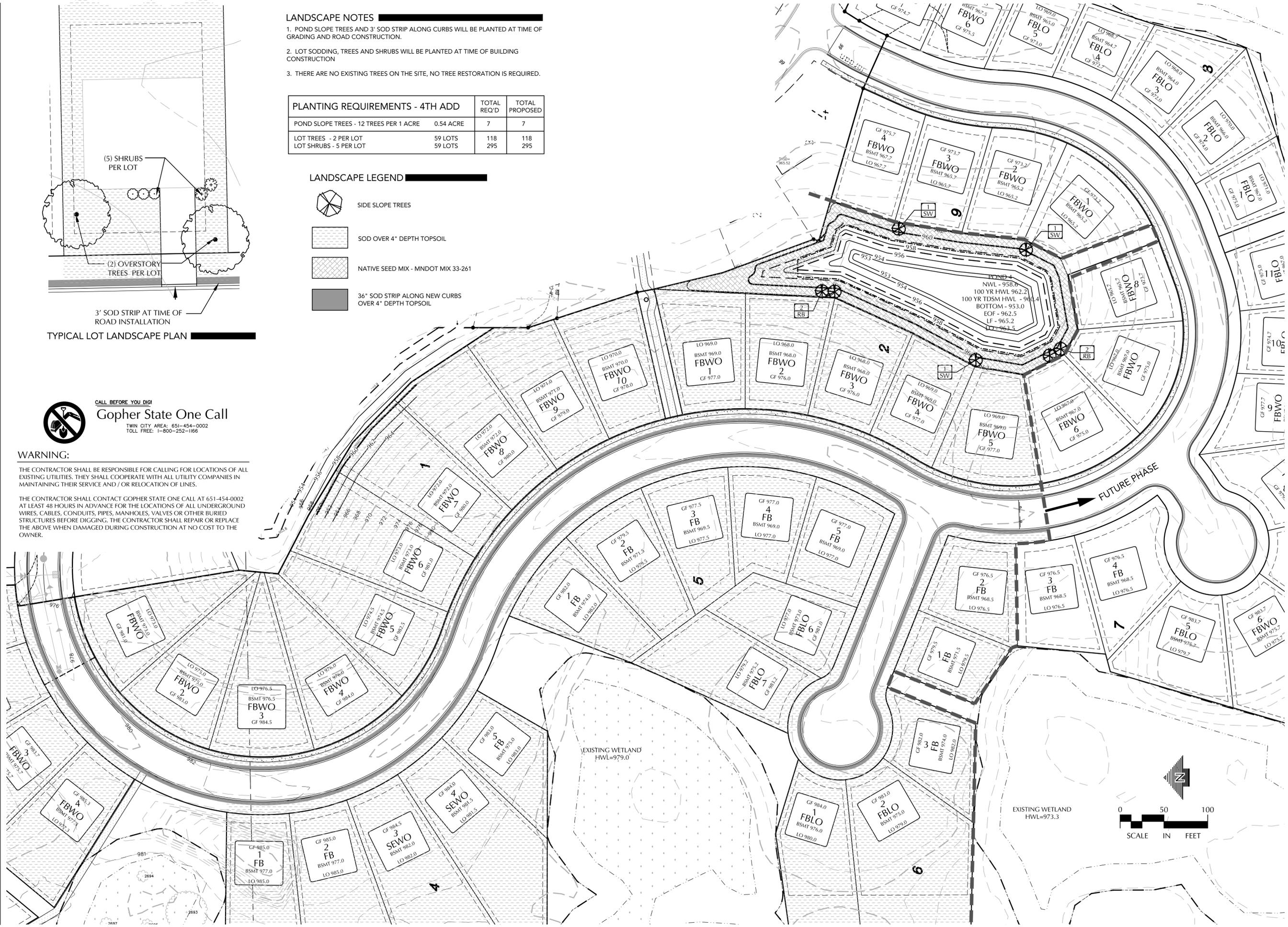
- SIDE SLOPE TREES
- SOD OVER 4" DEPTH TOPSOIL
- NATIVE SEED MIX - MNDOT MIX 33-261
- 36" SOD STRIP ALONG NEW CURBS OVER 4" DEPTH TOPSOIL



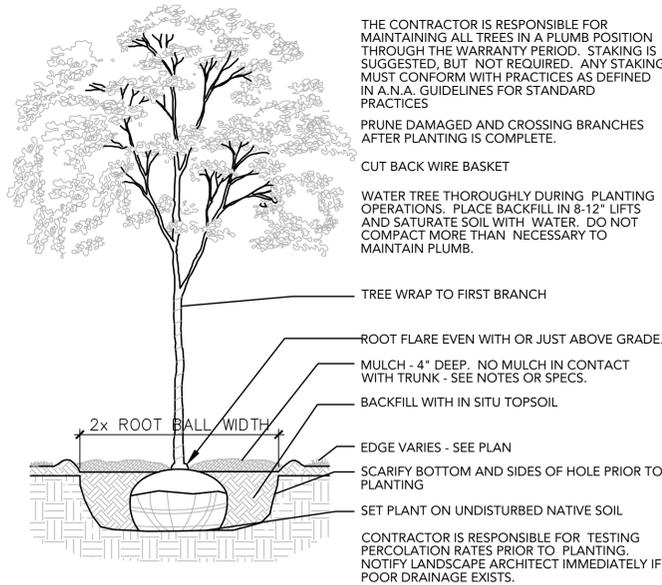
TYPICAL LOT LANDSCAPE PLAN

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

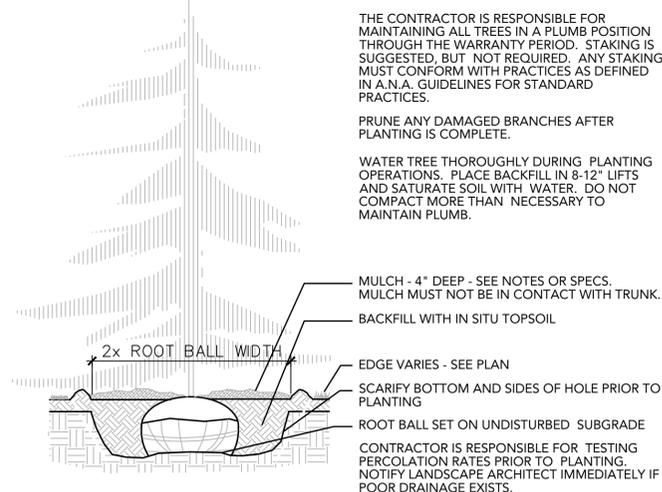
WARNING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.
THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE 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.



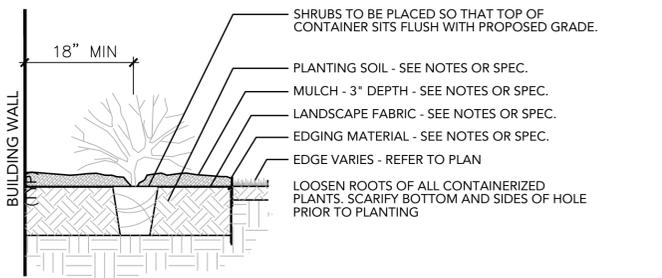
Plotted: 05/24/2018 2:50 PM W:\2016\16101B\CADD\DATA\LANDSCAPE.dwg Sheet Files\16101B.L1.L1.Landscape Plan



1 DECIDUOUS TREE PLANTING DETAIL
 SCALE: 1/2" = 1'-0"
 Deciduous Tree.DWG



2 CONIFEROUS TREE PLANTING DETAIL
 SCALE: 1/2" = 1'-0"
 Coniferous Tree.DWG



3 SHRUB PLANTING DETAIL
 SCALE: 3/4" = 1'-0"

PLANT LIST

KEY	QTY	COMMON NAME	SCIENTIFIC NAME	SIZE	COMMENTS
SIDE SLOPE TREES - 29 TOTAL					
RB	4	RIVER BIRCH	Betula nigra	2-1/2" CAL B.B.	H 40-50' W 30-40'
SW	3	SWAMP WHITE OAK	Quercus bicolor	2-1/2" CAL B.B.	H 50-60' W 40-50'

LOT PLANT MATERIAL NOTES:

IN ORDER TO ENCOURAGE SPECIES VARIETY AND TO PERMIT HOMEOWNERS TO SELECT THEIR OWN LANDSCAPING, THE CITY WILL NOT REQUIRE THE HOMEOWNERS TO SELECT PLANTS FROM A SPECIFIC PLANT LIST. THE FOLLOWING LIST IS A SUGGESTION OF THE TYPES OF PLANT MATERIAL THAT MAY BE SELECTED BY THE HOMEOWNER.

THE CITY REQUIRES THAT EACH LOT HAVE TWO TREES AND FIVE SHRUBS IN THE FRONT YARD AND THAT THE ENTIRE LOT BE SODDED.

	LOT TREES			
	IMPERIAL HONEYLOCUST	Gleditsia triacanthos inermis 'Impcole'	2-1/2" CAL B.B.	H 30-35' W 30-35'
	RED SUNSET MAPLE	Malus 'Prairie Rose'	2-1/2" CAL B.B.	H 45' W 35'
	NORTHERN PIN OAK	Quercus ellipsoidalis	2-1/2" CAL B.B.	H 40-50' W 30-35'
	GREENSPIRE LINDEN	Tilia cordata 'Greenspire'	2-1/2" CAL B.B.	H 40-50' W 30-35'
	AUSTRIAN PINE	Pinus nigra	8' B.B.	H 50-60' W 30-35'
	COLORADO BLUE SPRUCE	Picea pungens	8' B.B.	H 40-60' W 15-30'
	BLACK HILLS SPRUCE	Picea glauca densata	8' B.B.	H 30-40' W 20-30'
	CONIFEROUS SHRUBS			
	SEA GREEN JUNIPER	Juniperus chinensis 'Sea Green'	#5 CONT	H 4-6' W 3-5'
	SCANDIA JUNIPER	Juniperus sabina 'Scandia'	#5 CONT	H 18" W 3-5'
	TAUNTON YEW	Taunton x media 'Taunton'	#5 CONT	H 3' W 3-4'
	PRINCE OF WALES JUNIPER	Juniperus horizontalis 'Prince of Wales'	#5 CONT	H 6" W 5-6'
	DECIDUOUS SHRUBS			
	NEON FLASH SPIREA	Spirea japonica 'Neon Flash'	#5 CONT	H 3' W 3-5'
	TOR SPIREA	Spirea betulifolia 'Tor'	#5 CONT	H 3' W 3'
	LITTLE PRINCESS SPIREA	Spirea japonica 'Little Princess'	#5 CONT	H 2-3' W 3'
	DWARF EUROPEAN VIBURNUM	Viburnum opulus 'Nanum'	#5 CONT	H 24" W 2-3'
	AUTUMN MAGIC CHOKEBERRY	Aronia melanocarpa 'Autumn Magic'	#5 CONT	H 5-7' W 2-4'
	RED GNOME DOGWOOD	Cornus alba siberica 'Red Gnome'	#5 CONT	H 3-4' W 4-5'
	DWARF BUSH HONEYSUCKLE	Diervilla lonicera	#5 CONT	H 3-4' W 3'
	ALPINE CURRANT	Ribes alpinum	#5 CONT	H 3-5' W 5-6'

GENERAL NOTES

CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID. HE SHALL 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).

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 GRADING.

LANDSCAPE INSTALLATION

COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATION WITH OTHER CONTRACTORS WORKING ON SITE.

NATIVE SEED MIX SHALL BE INSTALLED PER MNDOT SPECS AT 35 LBS/ACRE. ALL SEEDED AREAS SHALL BE COVERED WITH MNDOT TYPE 1 MULCH IMMEDIATELY AFTER SEEDING.

WHERE SOD ABUTS HARD SURFACES, FINISHED GRADE OF SOD SHALL BE HELD 1" BELOW SURFACE ELEVATION OF HARD SURFACE.

SOD A 3' WIDE STRIP ALONG ALL NEW CURBS. SOD SHALL BE PLACED OVER 4" OF TOPSOIL AND SHALL HAVE STAGGERED JOINTS.

NO PLANTING WILL BE INSTALLED UNTIL COMPLETE GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.

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. BOULEVARD AND OVERSTORY TREES SHALL BEGIN BRANCHING NO LOWER THAN 5' ABOVE FINISHED GRADE.

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 TREES 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.

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.

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 DECIDUOUS PLANTING FROM THE FIRST FROST UNTIL NOVEMBER 15. PLANTING OUTSIDE THESE DATES IS NOT RECOMMENDED. ANY ADJUSTMENT MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.

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.

CROW RIVER HEIGHTS WEST 4TH ADDITION

HANOVER, MINNESOTA

BACKES COMPANIES
 11413 ASHBURY CIRCLE N.
 CHAMPLIN, MN 55316
 PHONE: (612) 369-7750
 FAX (612) 566-1525

LOUCKS
 PLANNING
 CIVIL ENGINEERING
 LAND SURVEYING
 LANDSCAPE ARCHITECTURE
 ENVIRONMENTAL

7200 Hemlock Lane, Suite 300
 Maple Grove, MN 55369
 763.424.5505
 www.loucksinc.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

05/24/18 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

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 Landscape Architect under the laws of the State of Minnesota.

Greg Johnson
 License No. 24610
 Date 05/24/18

QUALITY CONTROL

Loucks Project No. 16101B
 Project Lead TWM
 Drawn By GAJ
 Checked By TWM
 Review Date 05/24/18

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