



NORTH BRANCH

—Minnesota—

**PLANNING COMMISSION
REGULAR AGENDA
TUESDAY, MAY 6, 2025 @ 6:30 PM
CITY HALL, 6408 ELM STREET, NORTH
BRANCH, MN 55056**

Open
Chair

Gary Shaefer
Commissioner

Open
Commissioner

Patrick Meacham
Commissioner

Steve Cich
Commissioner

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE
3. ROLL CALL
4. AGENDA APPROVAL
 - a. Approve Agenda ACTION
5. CONSENT AGENDA
 - a. Approval of April 1, 2025 Planning Commission Minutes ACTION
6. PUBLIC HEARINGS
 - a. Public Hearing to consider a conditional use permit to allow for multiple principal buildings on one parcel for the Main Street Apartments ACTION
 - b. Public Hearing to Consider Requests for a preliminary plat for Cedar Ridge Community and a zoning text amendment to clarify single family homes a permitted use in the R-3 Zoning District ACTION
7. REPORTS
 - a. Comprehensive Plan Update INFO
8. NEXT MEETING - June 3, 2025 - 6:30 PM
 - a. Upcoming Agenda Items INFO
9. ADJOURNMENT

PLANNING COMMISSION

REGULAR MEETING MINUTES

TUESDAY, APRIL 1, 2024 @ 6:30 PM

City Hall, 6408 Elm St., North Branch, MN 55056

Members present:

Open Chair, Gary Schaefer, Patrick Meacham, Steve Cich, Ross Otto, Nate Ehalt

Council Member Robert Canada and City Staff

Members absent:

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. OATH OF OFFICE

a. Oath of Office - Ross Otto

Sondrol administered the oath of office to Otto

4. ROLL CALL

Members present: Ehalt, Otto, Meacham, Schaefer, Cich, City Council Liaison Canada, along with City Staff and members of the public.

5. AGENDA APPROVAL

a. Member Nate Ehalt motions to approve the agenda, seconded by Member Cich.

All aye, motion approved unanimously.

Meacham noted that the public hearing items 9a, 9b and 9c had been moved to the May 6, 2025 meeting.

6. PUBLIC COMMENT

Kelly Eydgah, expressed that only a handful of residents received notification for the proposed Cedar Ridge development on the east side of Falcon Avenue and that she felt that the entire Wildridge neighborhood should be notified.

Sondrol noted that the city follows state statute for all public hearing notices and notifies all properties within 350 feet of the proposed development. He added that the legal notice is also published in the local newspaper and place on the city's website.

7. CONSENT AGENDA

none

8. PUBLIC HEARINGS

- a. Public Hearing to Consider Vacation of Drainage & Utility Easement within Sunrise Bluff 3rd Addition
 - i. Nathan Sondrol reviews the easement request for the commission and public comment and takes questions.
 1. The public hearing opens at 6:42PM. Jim Swenson asks if the city needs to put in sewer and water and is concerned about taxpayers paying for it.
 - ii. The public hearing closes at 6:43PM. Sondrol explains and takes questions and comments.
 - iii. Member Ehalt motions to approve the resolution vacating the drainage & utility easement as dedicated and described in exhibit A and attachment exhibit B, seconded by Cich. All aye, motion carried unanimously.
- b. Public Hearing to consider a conditional use permit to allow for multiple principal buildings at the wastewater treatment facility at 6793 Ash Street
 - i. Nathan Sondrol explains the conditional use permit and takes questions from the commission. Shawn Williams, from public works, answers questions.

- ii. At 6:57 the regular meeting closes and the public hearing opens. At 6:58 the public hearing closes.
- iii. The Commission asks a question to staff. Member Schaefer makes a motion to approve the resolution with conditions, seconded by Member Otto. All aye, motion passes unanimously.

9. NEXT MEETING - MAY 6, 2025 - 6:30PM

- a. Public Hearing to consider a zoning text amendment and preliminary plat for the Cedar Ridge Community
 - i. Sondrol reviews the R3 district zoning code conflict with the commission.
- b. Public Hearing to consider a preliminary plat for Westside Commons 3rd addition
 - i. Sondrol explains what needs to be addressed before the public hearing.
- c. Public Hearing to consider a Conditional Use Permit to allow for more than one principle building on the same parcel for the Main St Apartments.
- d. Other Potential Items
 - i. City Council comprehensive update with inconsistencies, design standards and new city planner.

10. ADJOURNMENT

- a. At 7:09PM Cich motions to adjourn the meeting, seconded by Otto. All aye, motion passed unanimously.

Kevin Schieber, Mayor

ATTEST:

Mathew Hill, City Administrator



Prepared By: Kim Lindquist, Director, Community Planning & Econ. Dev, Nathan Sondrol, Community Development Director

Presenter: Nathan Sondrol, Community Development Director

Date: 04/29/2025

Board & Commission: Planning Commission

Subject: Public Hearing to consider a conditional use permit to allow for multiple principal buildings on one parcel for the Main Street Apartments

Applicants Request

1. Conditional Use Permit approval for multiple principle buildings on one parcel for the Main Street Apartments

Overview / Background

The 2.4 acre site is located along Main Street and is zoned and guided for the Central Business District. The site is rectangular in shape and is bordered on all four sides by public roads. Hwy 95 or Main Street is to the south and is the most visible side of the site given the traffic volumes on the street. The proposal is for a multi-family apartment project housed in four buildings with 8-units in each. The site plan has four buildings located in the four corners of the site with parking located in the central portion of the site. The application is for a conditional use permit to allow more than one principal structure on the site.

The site is relatively flat which creates some difficulty when installing new sanitary sewer and storm sewer. The high point is in the west central at 886' with the low points along the eastern property line. The building elevations present a 2-story rectangular building with 15% stone and the remainder metal siding. The landscape plan illustrates 32 trees along the perimeter of the site, equating to one tree per unit.

Attachments

Issue(s) to Consider

1. Land Use and Zoning
2. Development Overview
3. Conditional Use Permit

Analysis of Issue(s)

1. Land Use & Zoning

The property is zoned CBD, Central Business District and guided for LUCBD, which is Land Use Central Business District. The zoning ordinance permits apartments and also permits multi-family housing in the 7-16 units per acre density range. The proposed density of the site is 13.3 acres based upon 32 units on a 2.4 acre parcel.

The CBD zoning and comprehensive plan designation look for mixed use or commercial development, this site is more removed from the heart of the downtown area and is bordered primarily by single family residential development. There is some commercial development to the west, a funeral home which looks residential in character and a lower density office building to the south, which houses several smaller tenants. The office building is also residential in character, being one story with a pitched roof.

As noted, the comprehensive plan indicates that “new residential development should be part of a mixed use plan with a balance of housing and commercial uses within a single building or complex.” The Plan goes on to state that replacing single family homes with mixed use structures and redeveloping existing commercial buildings will help support a healthy business environment and allow more people to be able to walk to their destinations. The concept of mixed use is attractive since it brings both the commercial cities want and new residential, increasing the market for commercial uses. While it is understood that the City would like additional commercial mixes within the Downtown area, the location of this site is less downtown and more located within a mixed-use area, with more residential than commercial development. Because the site is deeper than just the frontage along Main Street, a residential use is more consistent with the immediately adjacent development pattern. There is residential development on all four sides of the site, with two non-residential buildings directly adjacent to the west and one across Main to the south.

Further, the economy and financial investors are less supportive of mixed use than previously. Lending institutions do not like the mix, and therefore the City may be in a better position to attract horizontal mixed use than vertical mixed use. Further, the traditional mixed use; three story buildings with commercial on the lower level and residential on the two higher floors, will mean that the project would be significantly larger in scale and height than the surrounding neighborhood development. It is reasonable to desire some commercial to continue to build out the downtown, although more cities are also focusing on bringing in more dense residential

development to create additional markets for the downtown businesses, especially daytime customers.

It is understood that the comprehensive plan indicates a preference for mixed use, but the zoning ordinance permits apartments and multi-family at the density proposed by the project as permitted uses.

2. Development Overview

General Plan

The 2.4 rectangular site is currently vacant and is zoned and guided for Central Business Districts uses. The proposal is for four apartment buildings with 8 units in each. The project includes surface parking and access drives from the west and east. Stormwater ponding is located in the northeast and southeast. Utilities are available to the site and the developer will connect all four buildings to the municipal system.

The site is relatively flat which creates some difficulty when installing new sanitary sewer and storm sewer. The high point is in the west central at 886' with the low points along the eastern property line. The building elevations present a building with predominately metal vertical siding which is much more residential in character than anticipated by the exterior materials requirements for the CBD zoning. Similarly, the landscape plan provides for 32 trees the minimum expected for a site this open and highly visible to all four adjacent properties.

Dimensional Standards

The developer appears to be meeting the CBD dimensional standards found in the Dimensional & Design Standards Table.

Use	Ordinance Requirement (CBD)	Site Plan
Front-yard setback North	0 ft	8 ft
Front-yard setback South	0 ft	56 ft
Front-yard setback East	0 ft	48 ft
Front-yard setback West	0 ft	48 ft
Lot Width – corner lot – E to W	25 ft	301 ft
Lot Depth - minimum – N to S	100 ft	350 ft

Minimum Lot Size - sq ft	2,500 sq ft	104,544 sq ft
Building height - in ft	50 ft	
Impervious surface - maximum	NA	54.7%
Parking Setback	5 ft	22 ft
Parking Spaces- Minimum spaces	64	88

Parking

The zoning ordinance requires 2 parking spaces per unit for a total of 64 parking stalls. Parking and access aisles must be setback at least 5' from all property lines. The individual accesses to the site must be under 40' in width.

Design Elements (Façade Materials)

The ordinance requires building elevations with type and color of building materials, typical floor plans, dimensions of all structures and location of exterior buildings and equipment. The site is located in Zone 1 which requires that "Structures must provide a cohesive architectural appearance reflecting its functional purpose and must be composed of at least 65% Class I materials and not more than 35% Class II materials. Class 1 materials consist of brick, natural stone, glass curtain wall, copper or other comparable materials. Class II includes concrete block, precast concrete panels, masonry stucco, fiber-cement exterior siding, EFIS, smooth and scored block, and other similar materials.

The applicant has provided building elevations which depict 14.4% of the building is doors and windows, 15% is stone and the remainder is siding. Shake shingle side is under the roofline with the majority of the building being vertical metal siding. It appears the stone wainscoting is approximately 3' and also highlights the center of the north and south elevations, surrounding the main entrance when appropriate. The sides of the buildings, the east and west, do not have any additional stone besides the wainscoting. It is unclear if the percentages listed above are for the front elevations only as the sides of the structures have a significant amount of vertical metal siding.

In some instances, there could be some recognition other project attributes which would allow some reduction in the exterior materials requirements. However, in this instance the landscape plan and the site design do not provide any reason to vary from the current materials standards. As noted previously, this is a high visibility site both due to its location and lack of topography and the city is interested in having a project that sets the tone for future development and redevelopment in the downtown area. The lower quality building materials vary greatly from the ordinance criteria, and staff does not support the plan as proposed.

Landscape & Tree Preservation Plan

The tree preservation plan show the site contains 8 existing trees with 1 planned for removal. The site is a highly visible site in the downtown area and significant landscaping is desired for the site.

From a landscape perspective, the ordinance generally requires 1 tree per unit for multi-family development, which is what is proposed on the plan. The CBD district is not held to that standard necessarily; and given the sites high visibility and lack of natural vegetation, staff is recommending additional landscaping above what is proposed by the applicant. The plan illustrates 32 overstory trees along the perimeter of the site, with 12 on the south side meaning a spacing of approximately 25'. The west side would be similar to the north side having 6 trees and the east having 3 due to the location of the drainage ponds. Based upon the notes on the landscape plan they all appear to be either red oak or white maples. The applicant should provide more vegetation over the entire site. There are no trees between buildings and nothing closer to any of the four structures. They do not show any landscaping around the buildings or a seed mix specifically for the drainage areas which could be vegetated more attractively than the present condition. This plan reflects the minimum expectation for plantings on the site and additional work is needed to elevate the site plan to be consistent with the goals of the comprehensive plan for the downtown.

Utilities

The project has all public utilities available to the site and the project density can be accommodated by the existing systems and capacities. Because the site lacks elevation there has been a lot of discussion about getting the proper grades on the pipes for operational reasons. The applicant has addressed those issues.

The site will meet stormwater requirements in part through installation of two infiltration basins in the northeast and southeast. These may also provide some opportunity of differing landscaping on the site.

Signage

The plans do not depict any signage for the site. The applicant shall obtain a permit prior to installation of any signage.

Parks, Trails and Open Space

The Parks, Trails and Open Space Commission will review this at their May 5, 2025 meeting and their recommendation will be provided at the meeting.

3. Conditional Use Permit

Section 66-932 Building Restrictions requires a conditional use permit in the CBD District to permit more than one principal structure on a site. The proposed use of multi-family apartments on the site, located within four different buildings, prompts the need for approval of a conditional use permit. There are ten findings of fact the City must find to consider when granting a conditional use permit. The City Council is not limited to these 10:

1. Relationship to the city's comprehensive plan;
2. The geographical area involved;
3. The character of the surrounding area;
4. The availability and design capacities of existing or proposed utilities;

5. Whether such a request will tend to or actually depreciate the surrounding area;
6. Whether the request will place an undue financial burden on the city;
7. Whether the request will impair an adequate supply of light and air to adjacent property;
8. Whether the request will unreasonably increase the congestion in the public right-of-way;
9. Whether the request will increase the danger of fire or endanger the public safety;
10. Whether the request is consistent with the spirit and intent of this division.

There are 13 conditions of approval that may be considered when approving a conditional use permit. The City Council is not limited to these 13 standards which are found in the ordinance:

1. The land area and setback requirements of the property containing such a use or activity shall be the minimum established for the district;
2. When abutting a residential use in a residential district, the property shall be screened and landscaped in compliance with section 66-970 et seq.;
3. Where applicable, all city, state and federal laws, regulations and ordinances shall be complied with and all necessary permits secured;
4. All signs shall be in compliance with section 66-821 et seq. and shall not adversely impact adjoining or surrounding residential uses;
5. Adequate off-street parking and loading shall be provided in accordance with section 66-848 et seq. Such parking and loading shall be screened and landscaped from abutting residential uses in compliance with section 66-970 et seq.;
6. The proposed water, sewer and other utilities shall be capable of accommodating the proposed use;
7. The street serving the use or activity is of sufficient design to accommodate the proposed use or activity, and such use or activity shall not generate such additional traffic to create a nuisance or hazard to existing traffic or to surrounding land uses;
8. All access roads, driveways, parking areas, and outside storage, service, or sales areas shall be surfaced or grassed to control dust and drainage;
9. All open and outdoor storage, sales and service areas shall be screened from view from the public streets and from abutting residential uses or districts;
10. All lighting shall be designed as to have no direct source of light visible from adjacent residential areas or from the public streets;
11. The use or activity shall be properly drained to control surface water runoff;
12. The architectural appearance and functional plan of the building and site shall not be so dissimilar to the existing buildings or area as to cause impairment in property values or constitute a blighting influence;
13. Where structures combine residential and nonresidential uses, such uses shall be separated and provided with individual outside access, and the uses shall not conflict in any manner.

Staff Recommendation

1. Staff has identified 2 issues which should be addressed by the applicant prior to granting any approvals. Staff is recommending the application be continued to permit the applicant time to

address the following issues:

1. The applicant revise the landscaping plan to provide significantly more vegetation on the site, along the infiltration basins, and around the buildings.
2. The applicant revise the building elevations to meet the city performance standards for exterior materials. That includes all four buildings and all four elevations.

Planning Commission Action

After the public hearing and discussion, the Planning Commission could take one of the following actions:

1. Recommend approval with the conditions and findings of fact.
2. Recommend denial with findings of fact.
3. Table the request to the next Planning Commission meeting and provide direction to Staff and the applicant as to the additional information needed.

Attachments

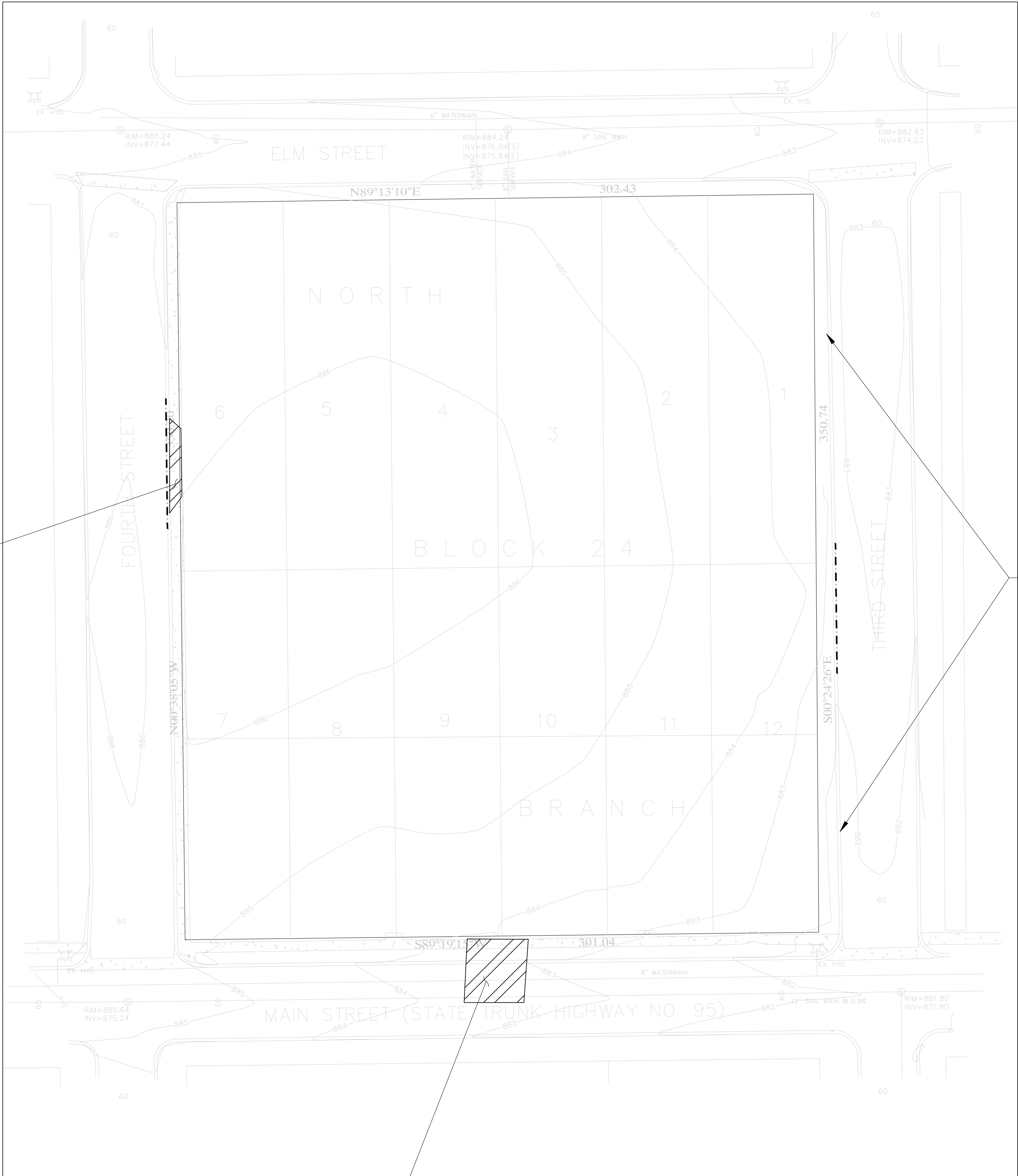
1. Main Street Townhomes Civil Plans
2. Building Color Renderings

Voting Requirements:

Voting Options **Simple Majority**

LEGEND

- CURB REMOVAL
- PAVEMENT OR SIDEWALK REMOVAL



REMOVE WALK FOR NEW ENTRANCE

REPLACE ENTIRE LENGTH OF
DEPRESSED CURB ALONG
EAST CURBLINE WITH B618
(CONFIRM THIS MATCHES
EXISTING),
EXCEPT IN LOCATION OF
NEW ENTRANCE.

REMOVE AND REPLACE WALK AND PAVEMENT
FOR UTILITY CONNECTIONS

JOB NO. 24-02

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

KRISTLE L. BLOCH

4-29-2025

DATE

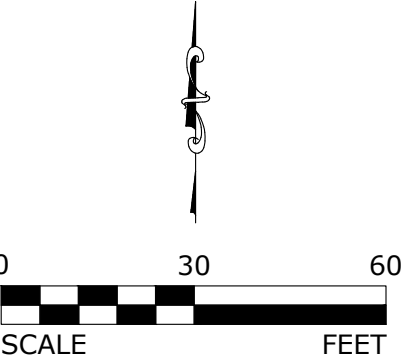
49893

LIC. NO.

MAIN STREET APARTMENTS
OWNER: TOMMY FOSTER
1275 WEST 4TH ST, RUSH CITY, MN

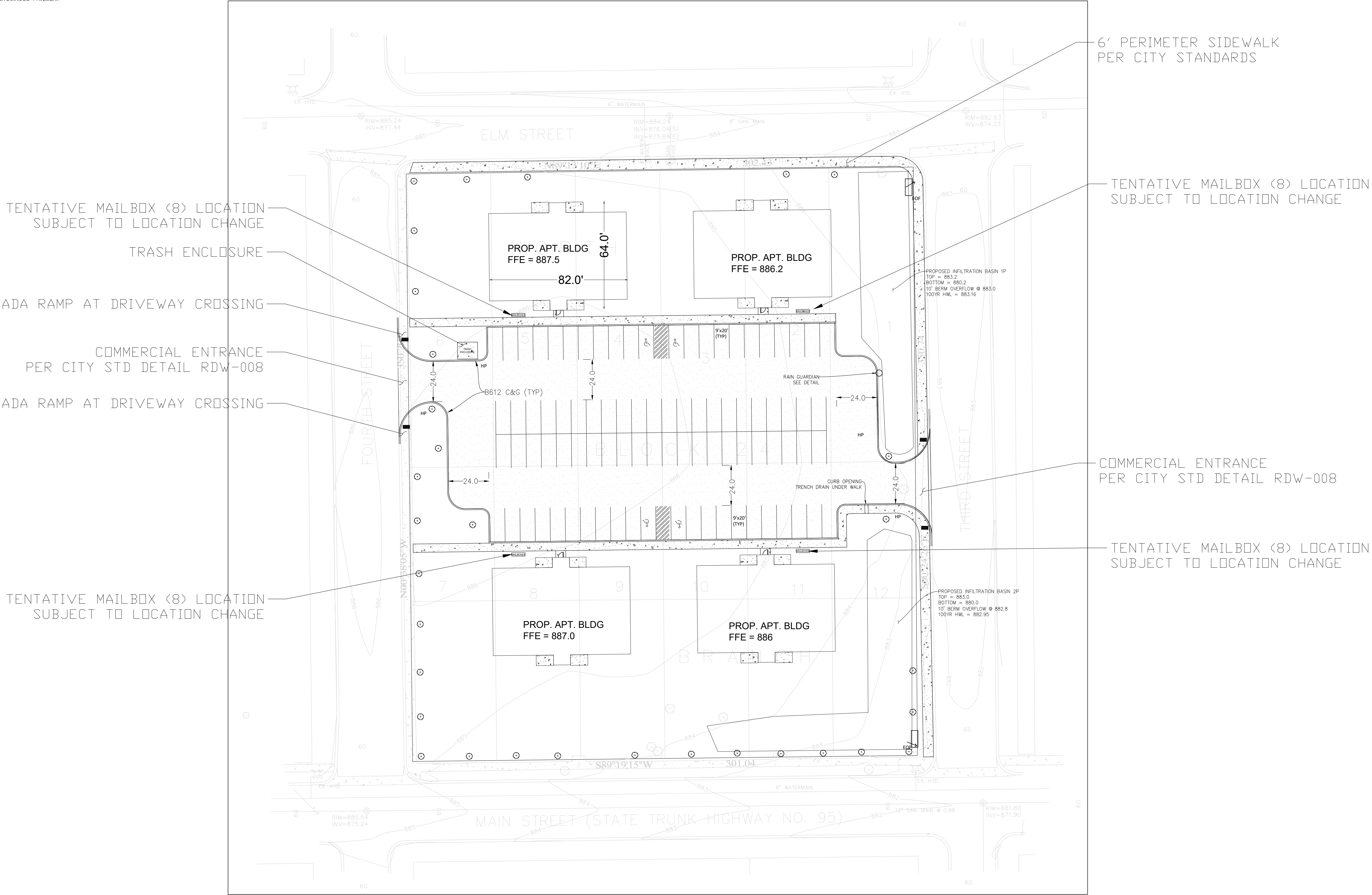
EXISTING CONDITIONS
AND REMOVALS PLAN

REVISIONS	NO.		DATE	BY	DESCRIPTION

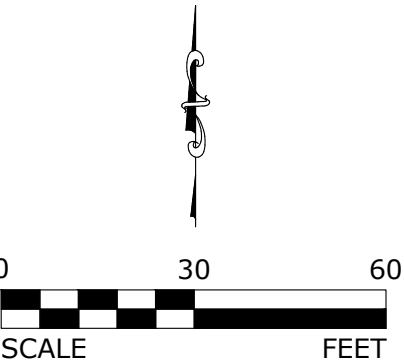


LEGEND

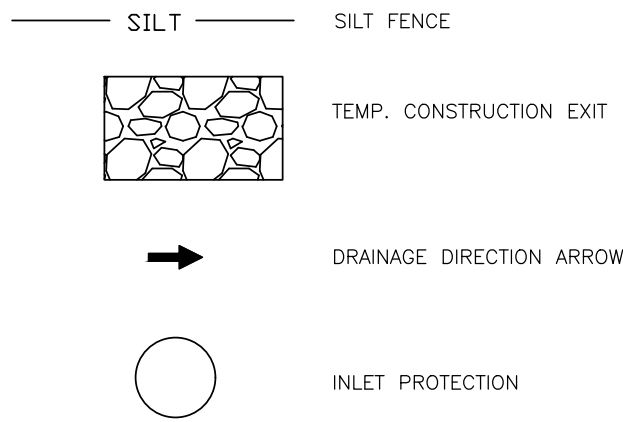
- PROPOSED B618 CURB AND GUTTER
- PROPOSED BITUMINOUS PAVEMENT



REVISIONS	NO.	DATE	BY	DESCRIPTION



LEGEND

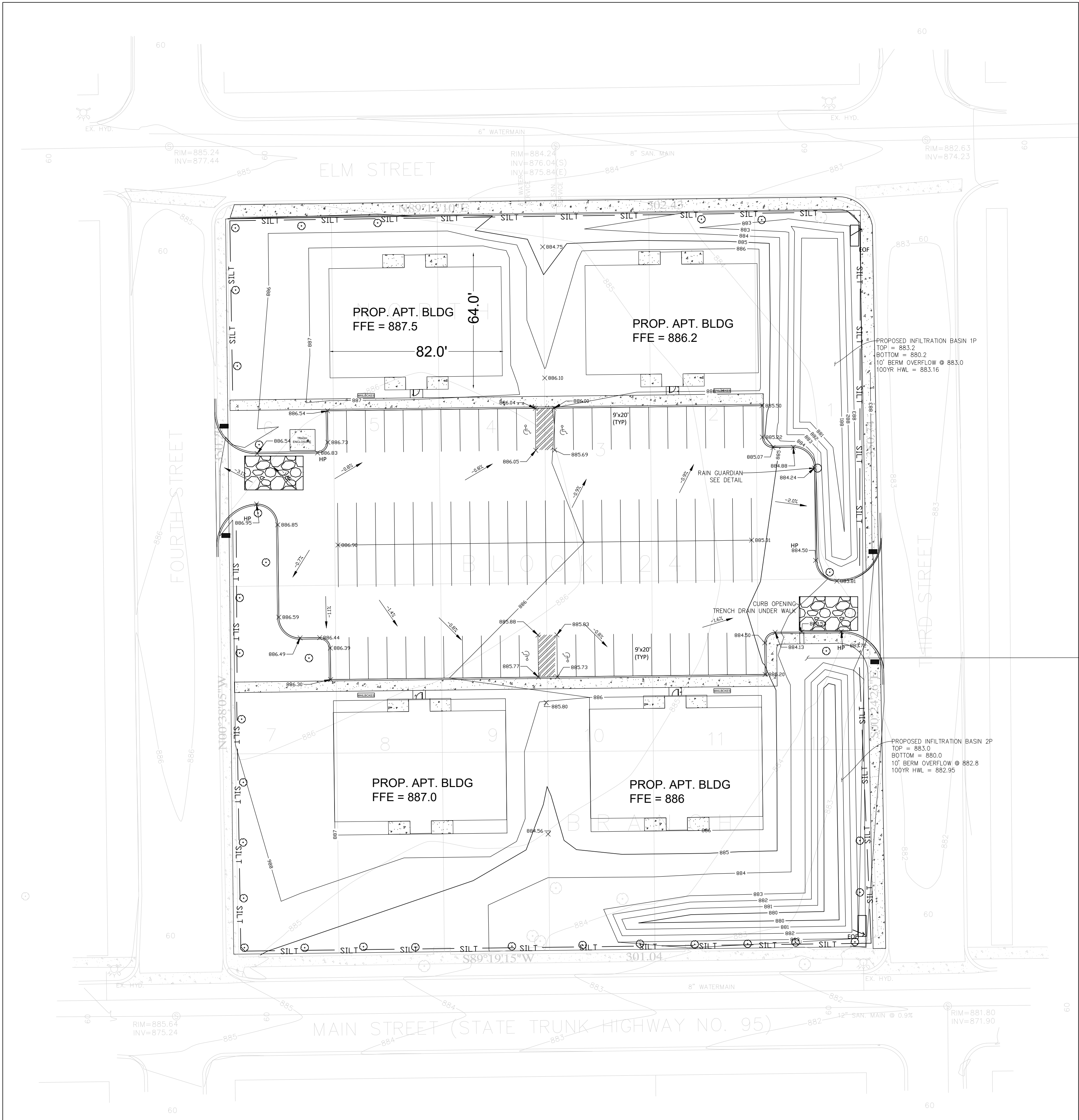


SITE GRADING NOTES:

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY THE FIELD LOCATION OF ALL PUBLIC AND PRIVATE UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT (651) 454-0002.
2. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
3. EXISTING GRADE CONTOUR INTERVALS SHOWN AT 2 FOOT INTERVALS (TOPOGRAPHIC/SURVEY SHOT-BASED SURFACE).
4. PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS.
5. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
6. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED/GRAVEL AREAS.
7. TOPOGRAPHIC INFORMATION TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS, IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT TO THE OWNER FOR REVIEW.
8. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
9. ALL PROPOSED SPOT ELEVATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.

EROSION CONTROL NOTES:

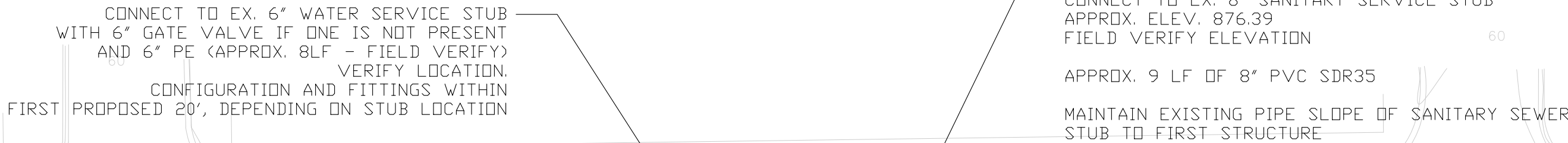
1. ALL DISTURBED AREAS TO BE SEEDED AND MULCHED. 4IN MIN TOPSOIL, EXCEPT IN RIGHT OF WAY. RIGHT OF WAY TO BE SODDED.
2. MULCH TYPE 1 (DISK ANCHORED) IN DISTURBED AREAS
3. SEED MNDOT TYPE 35-221, AT A RATE OF 36.5 LB/AC
4. ALL SLOPES STEEPER THAN 4:1, SHALL BE RESTORED WITH SEED AND PROTECTED WITH EROSION CONTROL BLANKET PER MNDOT SPEC. 3885.1 OR SODDED AND STAKED.
5. SILT FENCE AROUND ENTIRE PERIMETER/PROPERTY LINE. MAY NEED TO USE EC LOGS IN LIEU OF SILT FENCE FOR MOBILITY IN AREAS WHERE THE BMPS WILL BE MOVED (NEAR PROPOSED SIDEWALKS)



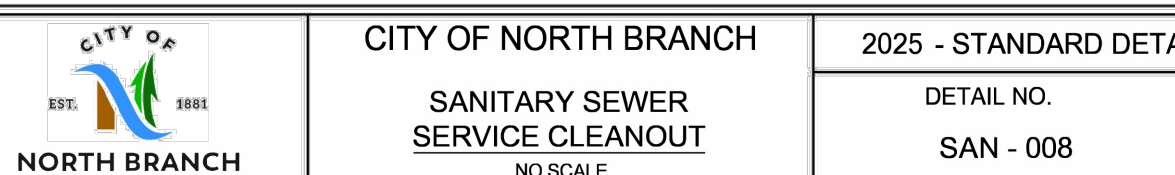
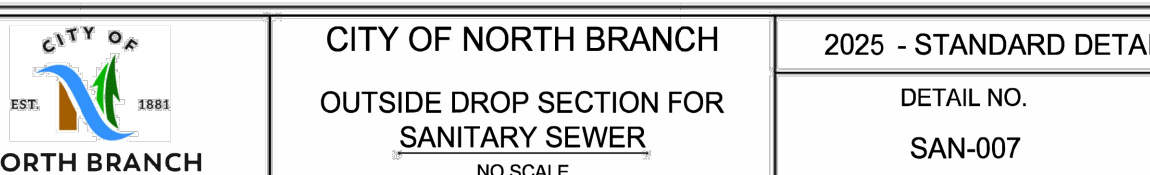
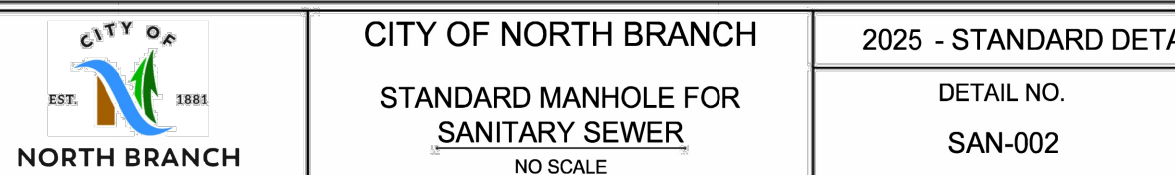
UTILITY PLAN

A horizontal scale bar with alternating black and white segments. It is marked with '0' at the left end, '30' in the middle, and '60' at the right end. Below the bar, the word 'SCALE' is on the left and 'FEET' is on the right.

SHEET C5 SHEETS 11

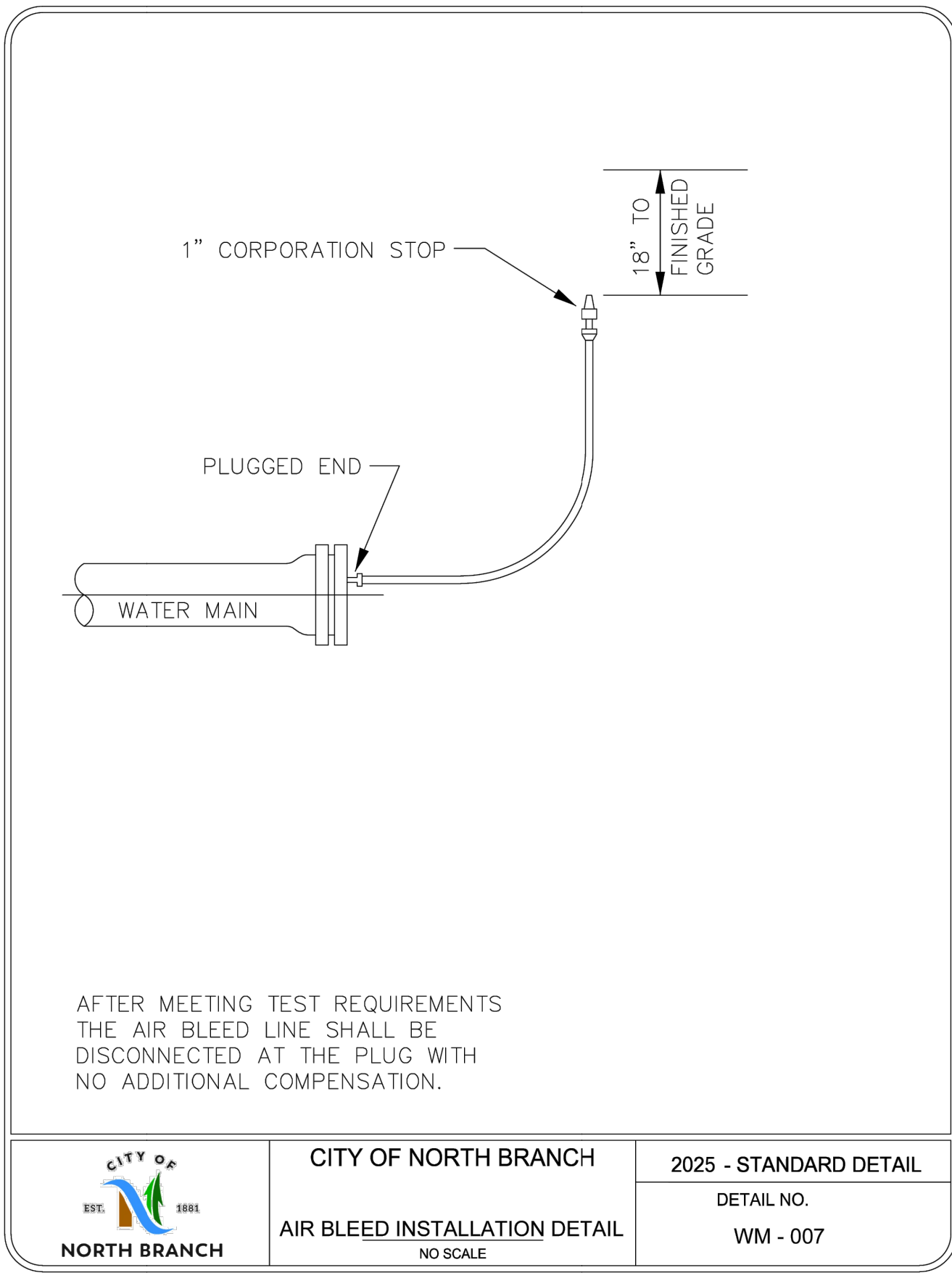
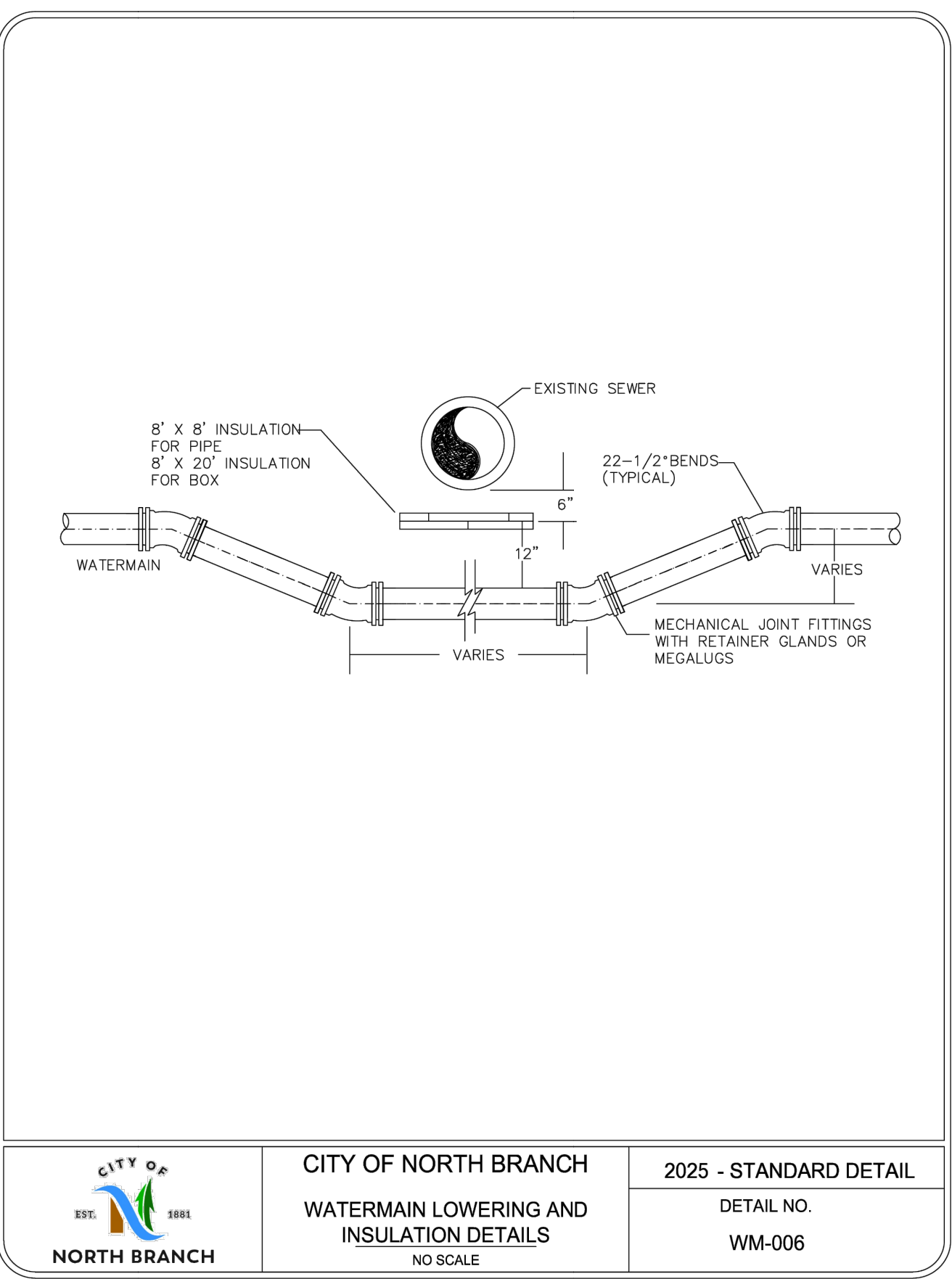
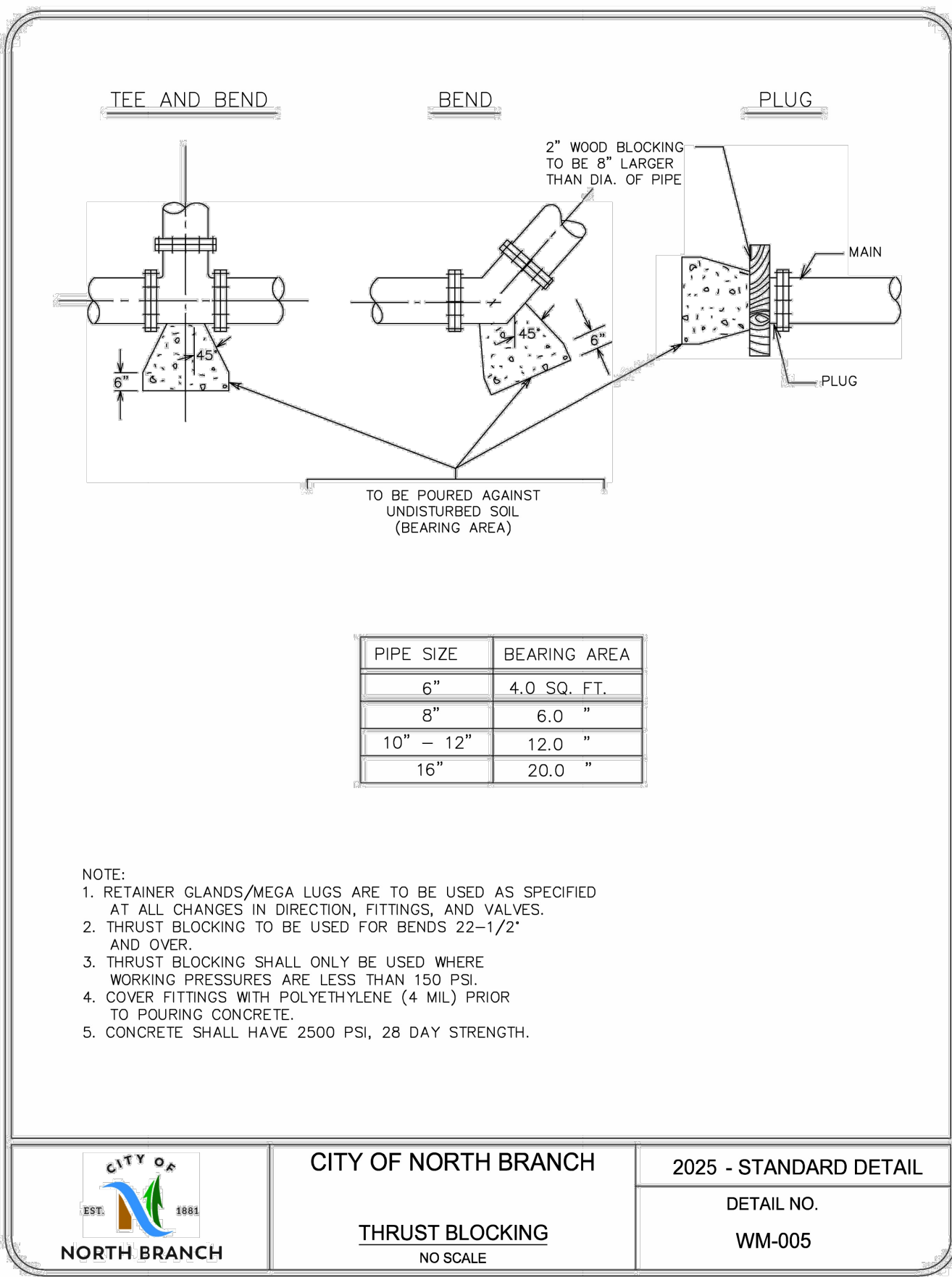
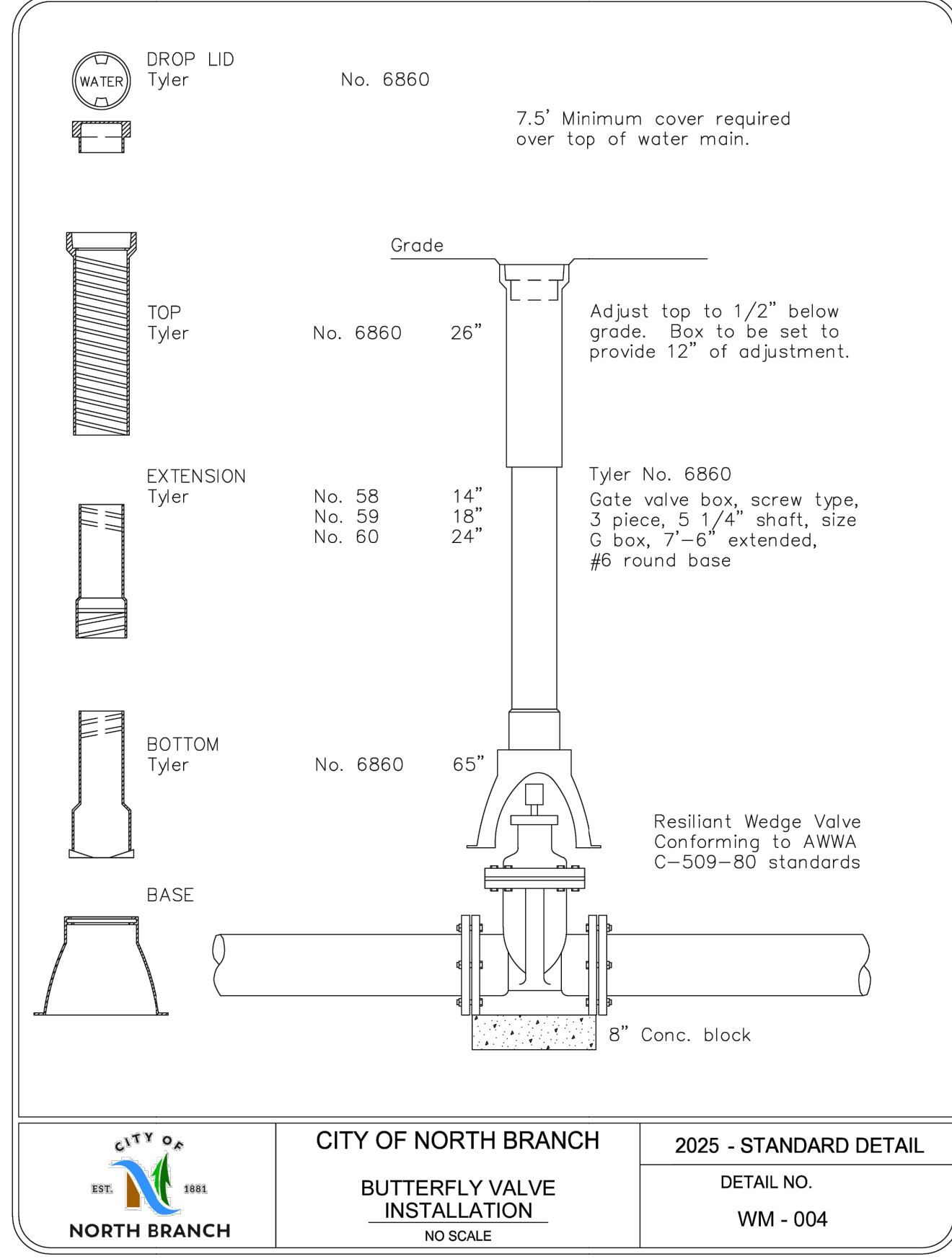
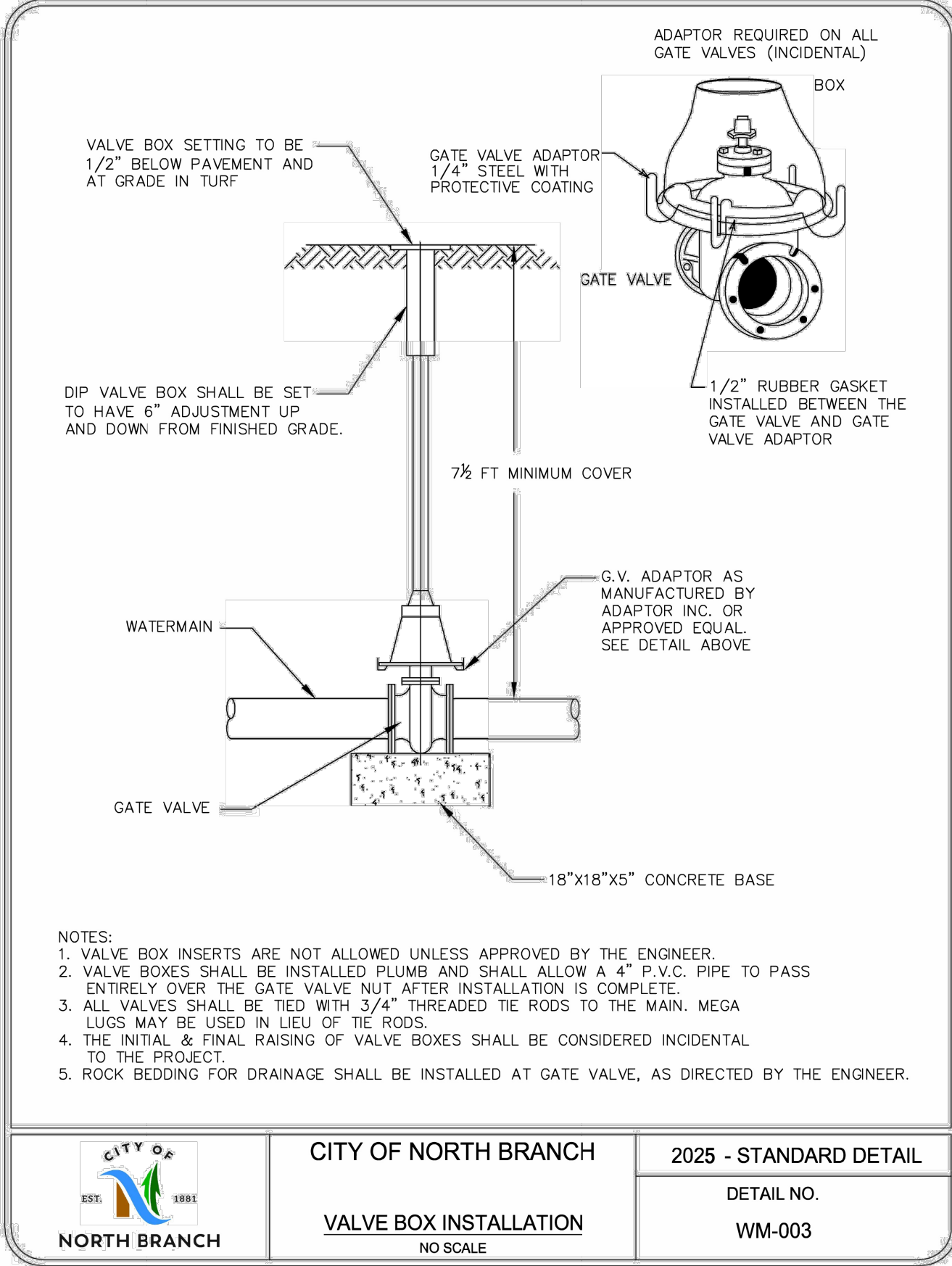
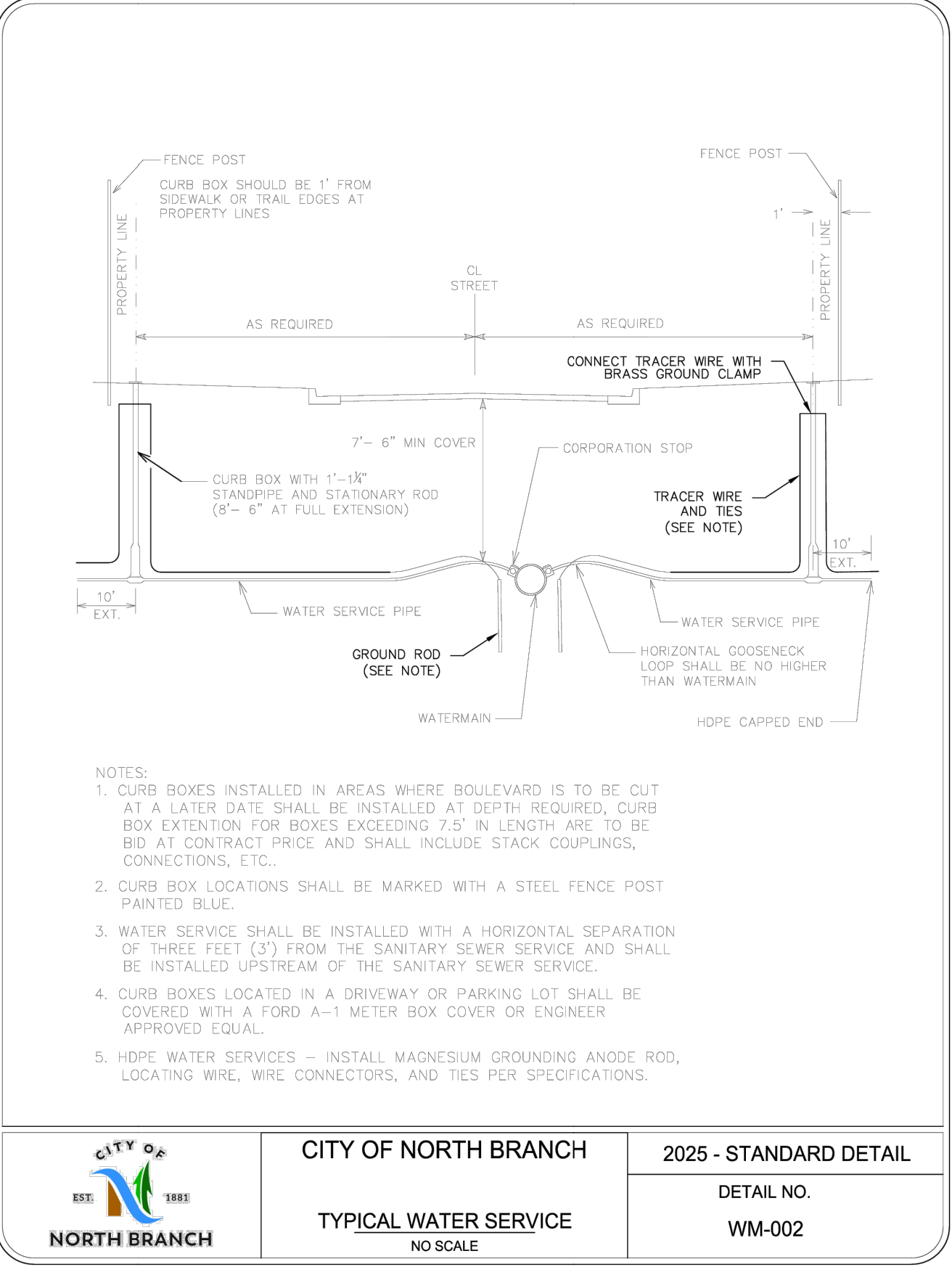
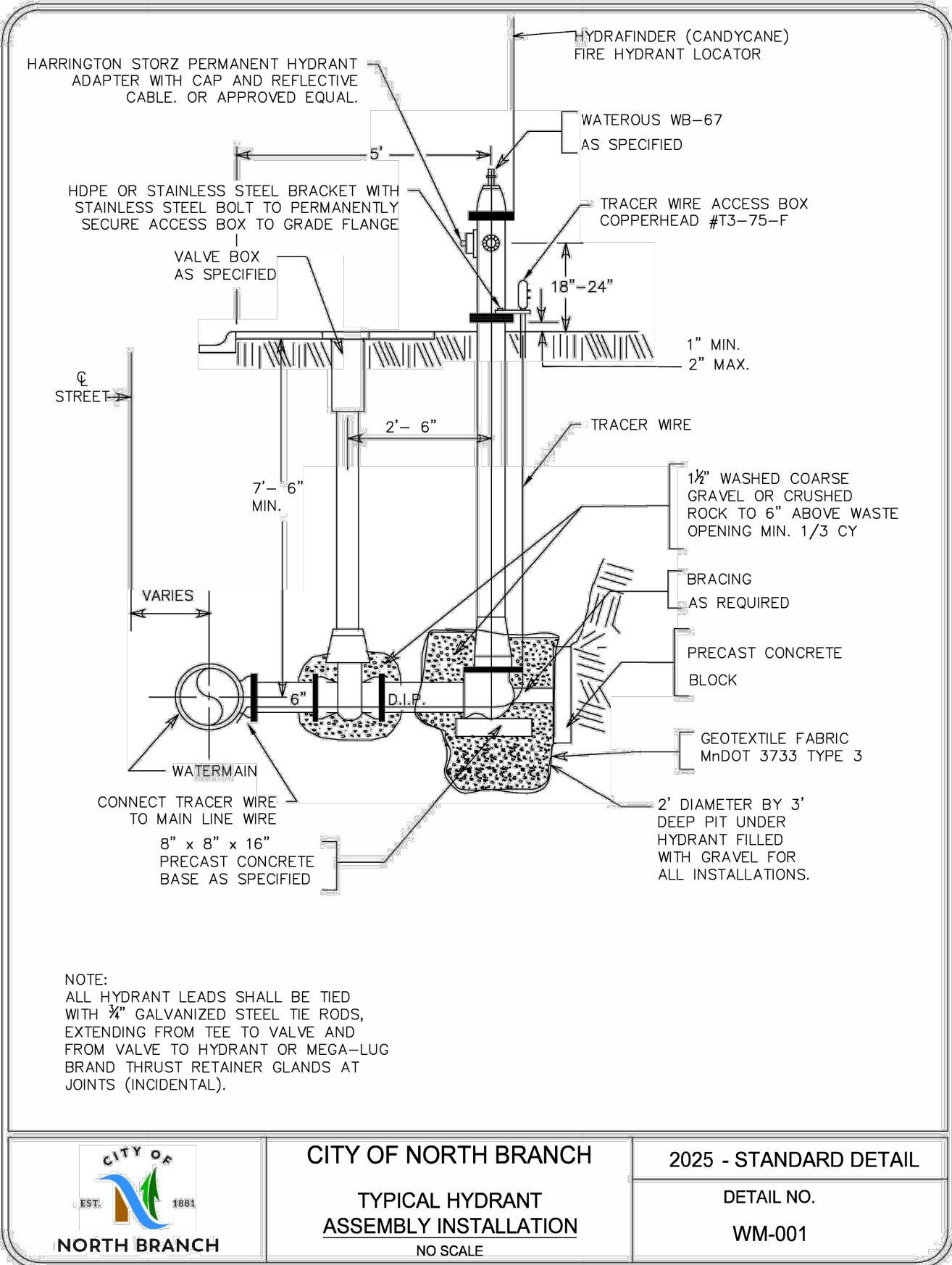


- UTILITY NOTES:
1. ALL EXISTING UTILITIES MUST BE FIELD VERIFIED (SEE GSOC NOTE BELOW). CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION OF ALL UTILITIES.
2. CONTRACTOR TO CONTACT ENGINEER IMMEDIATELY IF THERE ARE EXISTING DISCREPANCIES OR VARIATIONS FROM THE PLAN
3. PROPOSED SANITARY SERVICE (MAIN RUN) IS 8" PVC SDR 35. SIDE RUNS TO BUILDING ARE 6" PVC SDR26.
4. PROPOSED WATER SERVICE (MAIN RUN) IS 6" C900 PVC. ALL FITTINGS FOR C900 TO BE DIP.
5. ALL UTILITIES AND PLUMBING TO BE COMPLETED PER CITY CODE AND 2015 MINNESOTA PLUMBING CODE.
6. CONTRACTOR SHALL COORDINATE ALL WORK WITH PUBLIC AND PRIVATE UTILITY COMPANIES.
7. UTILITIES ON PLAN ARE SHOWN WITHIN 5' OF THE BUILDINGS. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR FINAL CONNECTION TO BUILDING LINES. COORDINATE WITH ARCHITECTURAL AND MECHANICAL PLANS ACCORDINGLY.
8. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT Gopher State ONE CALL FOR UTILITY LOCATIONS AT LEAST 48 HOURS PRIOR TO CONSTRUCTION OR EXCAVATION.
9. CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES DAMAGED DURING CONSTRUCTION.
10. MECHANICALLY RESTRAINED JOINTS AT WATERMAIN PIPE BENDS PER CODE.
11. MINIMUM OF 7 FEET OF COVER IS REQUIRED OVER ALL WATERMAIN AND WATER SERVICES, UNLESS OTHERWISE NOTED. NO MORE THAN 10" MAX WITH APPROVAL FROM CITY WATER DEPARTMENT. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN MINIMUM OF 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. WATERMAIN AT EXTRA DEPTH IS INCIDENTAL. INSULATE AT CROSSINGS WITH 18" OR LESS VERTICAL CLEARANCE.
12. MINIMUM OF 10 FEET CLEAR HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION IS REQUIRED FOR ALL MAJOR UTILITIES.
13. SANITARY MANHOLES ARE TYPE 3 MANHOLES PER CITY STANDARD PLAT. CASTING AND WATERPROOFING PER CITY STANDARDS.
14. ALL CONSTRUCTION TO BE PER LATEST CITY OF NORTH BRANCH STANDARD DETAILS AND SPECIFICATIONS.
15. CONTRACTOR TO OBTAIN ALL UTILITY CONNECTION PERMITS FROM THE CITY OF NORTH BRANCH PUBLIC WORKS DEPARTMENT PRIOR TO BEGINNING CONSTRUCTION.



 CITY OF NORTH BRANCH	CITY OF NORTH BRANCH	2025 - STANDARD DETAIL
	GO, NO GO 5% DEFLECTION TESTING MANDREL FOR FLEXIBLE SEWER PIPE	DETAIL NO. SAN - 009

[illegible]



STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

PROJECT DESCRIPTION:

The existing site is a total of 2.4 acres, which will be regraded as part of this current project. Runoff from this site is routed to proposed infiltration ponds.
Grading, infiltration, and paving will be installed as part of this project along with building construction.

SWPPP IMPLEMENTATION

The Project Engineer and the Contractor are responsible for implementation of the SWPPP and the installation, inspection, and maintenance of the erosion prevention and sediment control BMPs before and during construction. The Contractor will have an Erosion Control Supervisor who is responsible for coordinating the erosion prevention and sediment control BMPs.

PROJECT CONTACT IMPLEMENTATION/MAINTENANCE:

Erosion and Sediment Control, BMP Inspection Performed By:
Individual contact TBD
Erosion Works
Elk River, MN
763-262-7458

Long Term Pond Maintenance Provided By:
Bigfork Valley Log Cabins, LLC

TIMING OF BMP INSTALLATION

The erosion prevention and sediment control BMPs shall be installed as necessary to minimize erosion from disturbed surfaces and capture sediment on site.

1. Erosion and sediment control BMPs must be installed prior to the start of construction.
2. Where applicable, disturbed areas will immediately be temporarily stabilized prior to permanent turf establishment whenever construction ceases for 7 days, with special consideration of areas within 200 feet continuous positive slope of a surface water.
3. Temporary or permanent energy dissipation shall be placed at pipe outlets within 24 hours after connection to a surface water.
4. Temporary stabilization of stockpiles must be initiated immediately to limit soil erosion whenever any construction activity has permanently ceased on any portion of the site and will not resume for a period exceeding 7 calendar days.
5. Planned slopes of 1:3 (V:H) or steeper and greater than 75 ft. in length will be temporarily or permanently stabilized in increments not to exceed 75 ft., prior to constructing or disturbing a new increment.
6. BMPs must remain in place until final stabilization is achieved and permit NOT has been submitted to the MPCA.
7. The normal wetted perimeter of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts around the site, must be stabilized within 200 lineal feet from the property edge, or from the point of discharge into any surface water. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a surface water.

CALCULATIONS:

Total Area of Grading = 2.4 Ac
Total Existing Impervious = 0 Square Feet
Total New Impervious = 51250 Square Feet

$$\text{WATER QUALITY VOLUME} = (1'')(1'/12'')(51250 \text{ SF}) = 4271 \text{ CF}$$

SOIL TYPES:

Majority A Soils (Web Soil Survey)

EROSION CONTROL QUANTITIES:

EROSION CONTROL QUANTITIES		
	UNIT	QUANTITY
SILT FENCE	EACH	1300
TEMP. CONSTRUCTION EXIT	EACH	1
SEED	ACRE	2.40
MULCH	TON	5

APPLICATION RATES:
SEED TYPE 25-151 @ 120 LB/AC
MULCH TYPE 1 @ 2 TON/AC

CONSTRUCTION SEQUENCE:

Construction to begin spring 2025. Silt fence around where specified and Rock entrances to be installed before any of the following scheduled events take place. Existing structures shall also be protected from sediment from the start of construction.

1. Grading
2. Install Utilities
3. Building Construction
4. Infiltration basin(s) constructed
5. Landscaping and Turf Restoration

Construction completion expected Fall 2025. All temporary erosion control measures will be removed and disposed of according to MPCA requirements. Final stabilization will be established.

If construction is not completed before winter, stockpiles and any slopes must be stabilized with appropriate BMPs (mulch, seed, erosion control blanket) as applicable to avoid erosion in the following spring season.

See NPDES CWS Permit Part 11 for inspection frequency adjustments throughout the course of scheduled construction.

IMPAIRED AND SPECIAL WATERS

The Sunrise River is within one mile of discharge point, and has impairments for the following: Fecal Coliform, Fishes Bioassessments, Mercury in Fish Tissue.

KARST AREA PROTECTION:

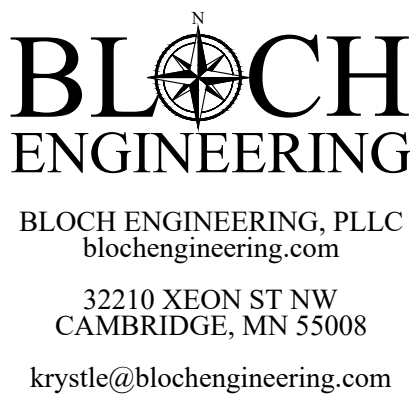
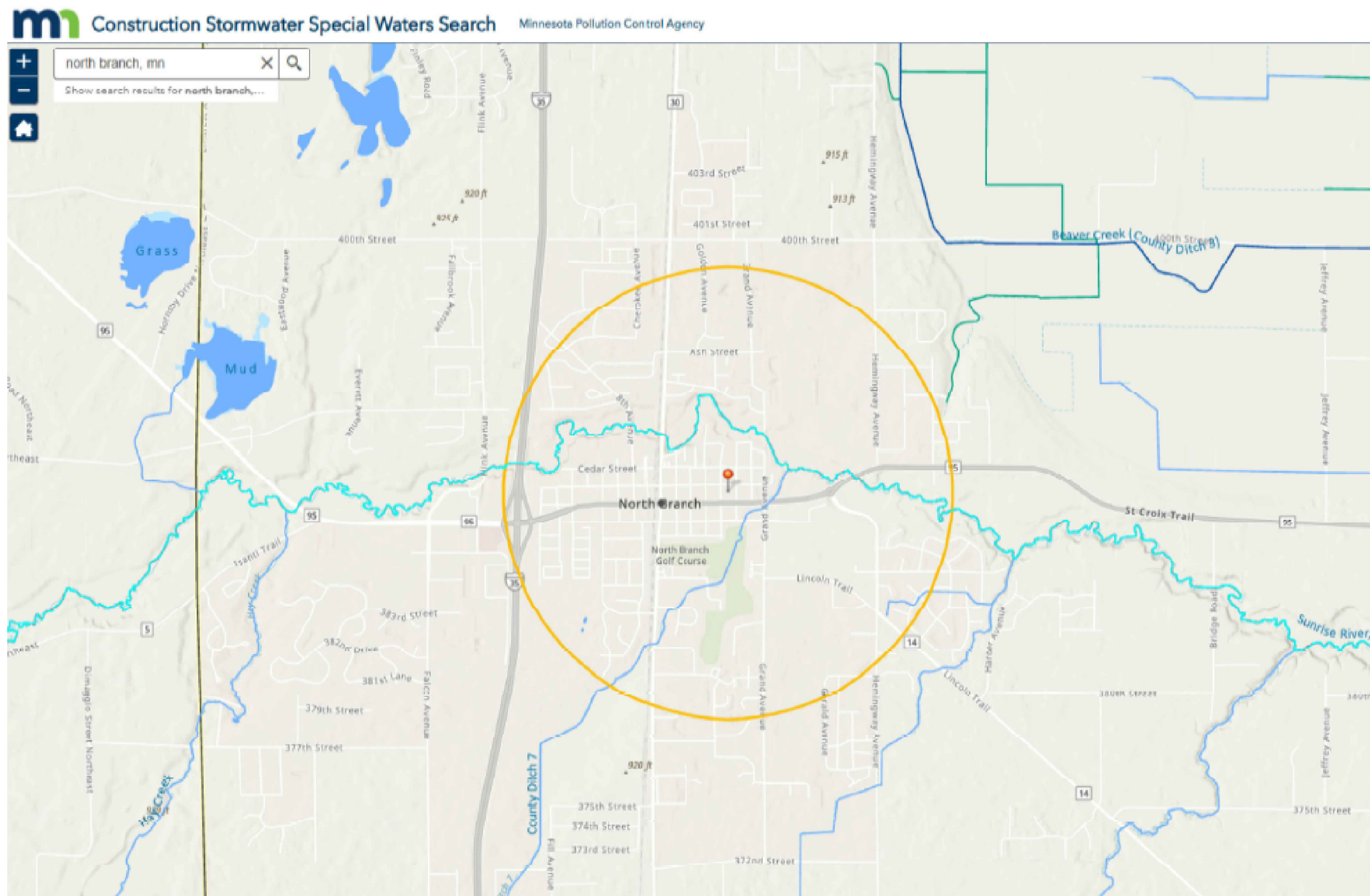
This area is not considered Karst area.

CALCAREOUS FENS:

No calcareous Fen sites exist on this project.

MITIGATION DUE TO REVIEWS:

There are no stormwater mitigation measures proposed as part of environmental, endangered species, archaeological or other required local, state or federal reviews conducted for the project.



JOB NO. 24-02

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 KRYSTLE L. BLOCH 4-29-2025 49893

MAIN STREET APARTMENTS

OWNER: TOMMY FOSTER

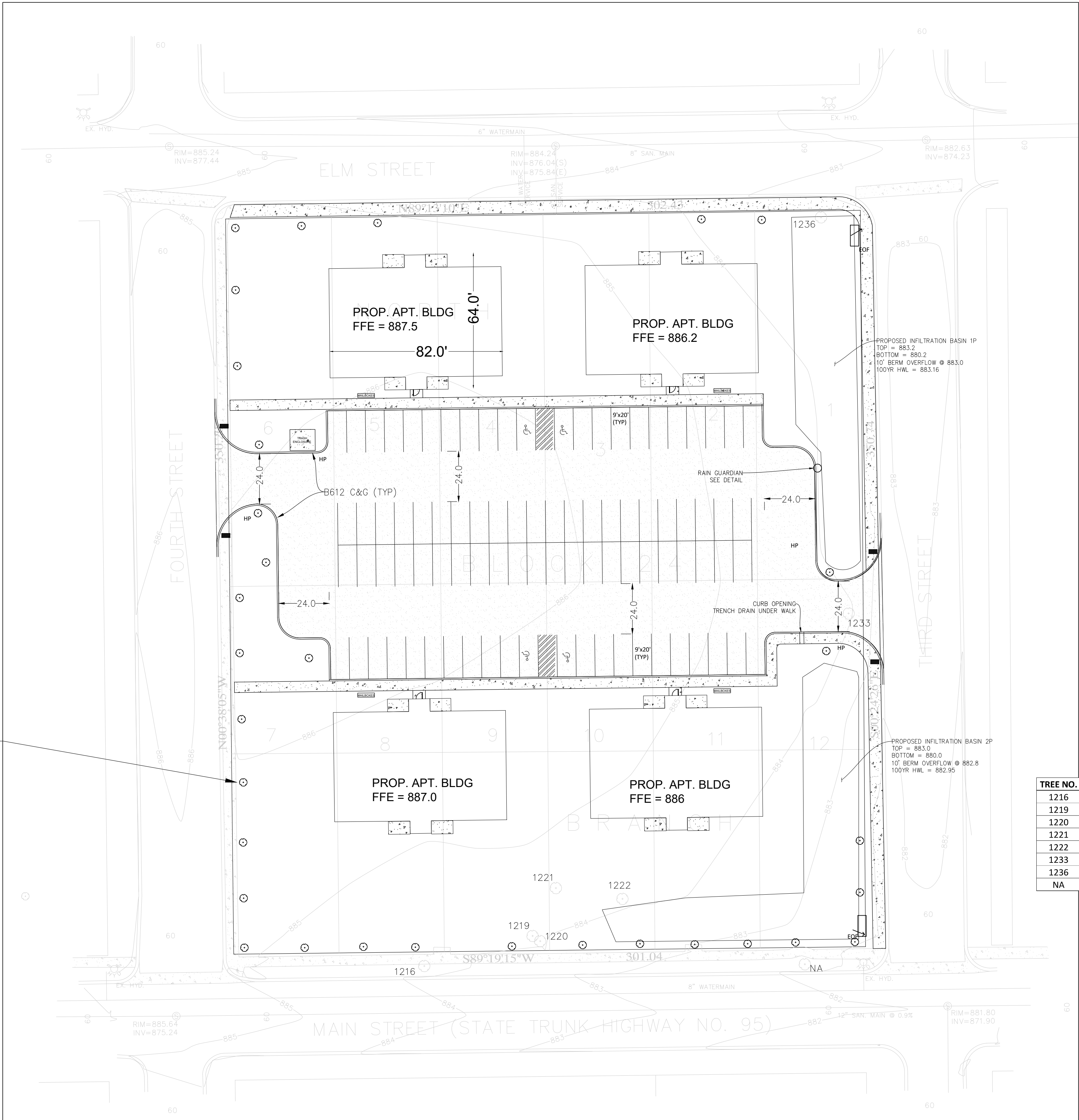
1275 WEST 4TH ST, RUSH CITY, MN

STORMWATER POLLUTION PREV. PLAN
SWPPP

[illegible]

LEGEND

- PROPOSED B618 CURB AND GUTTER
- PROPOSED BITUMINOUS PAVEMENT



PROPOSED OVERSTORY TREE (TYP.)

- EROSION CONTROL NOTES:
1. ALL DISTURBED AREAS TO BE SEEDED AND MULCHED. 4IN MIN TOPSOIL, EXCEPT IN RIGHT OF WAY. RIGHT OF WAY TO BE SODDED.
 2. MULCH TYPE 1 (DISK ANCHORED) IN DISTURBED AREAS
 3. SEED MNDOT TYPE 35-221, AT A RATE OF 36.5 LB/AC
 4. ALL SLOPES STEEPER THAN 4:1, SHALL BE RESTORED WITH SEED AND PROTECTED WITH EROSION CONTROL BLANKET PER MNDOT SPEC. 3885.1 OR SODDED AND STAKED.

- TREE PLANTING NOTES
1. TREE LOCATION SUBJECT TO CHANGE TO AVOID UTILITY CONFLICT.
 2. ALTERNATE RED OAK AND WHITE MAPLE TREES OR SIMILAR SPECIES. VERIFY SPECIES WITH CITY.

MINIMUM SIZE OF PLANTINGS
OVERSTORY DECIDUOUS: 2" CALIPER
CONIFEROUS: 6FT IN HEIGHT
ORNAMENTAL TREES: 1.5" CALIPER

PLANTING NUMBER REQUIREMENTS:

TOTAL BUILDING UNITS = 32
TOTAL TREE REQUIREMENT = ONE OVERSTORY TREE PER UNIT
= 32 TREES

TREE NO.	TYPE	DIA. (IN)	KEEP/REMOVE	NOTES
1216	ASH	16	KEEP	IN MAIN ST ROW
1219	OAK	15	KEEP	
1220	OAK	17	KEEP	
1221	OAK	29	KEEP	
1222	OAK	22	KEEP	PROTECT ROOTS IN INFIL. POND EXCAVATION
1233	OAK	22	REMOVE	DEAD
1236	OAK	25	KEEP	PROTECT ROOTS IN INFIL. POND EXCAVATION
NA	OAK?	?	KEEP	IN MAIN ST ROW - SIDEWALK BUILT AROUND IT

JOB NO. 24-02

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PRELIMINARY

KRISTLE L. BLOCH

4-29-2025

49893

DATE

LIC. NO.

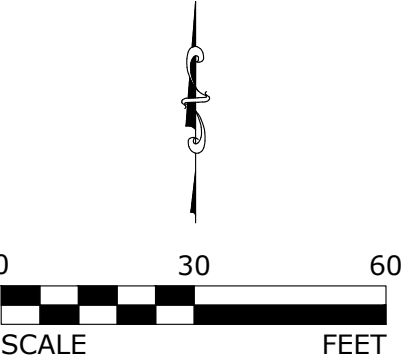
MAIN STREET APARTMENTS

OWNER: TOMMY FOSTER

1275 WEST 4TH ST, RUSH CITY, MN

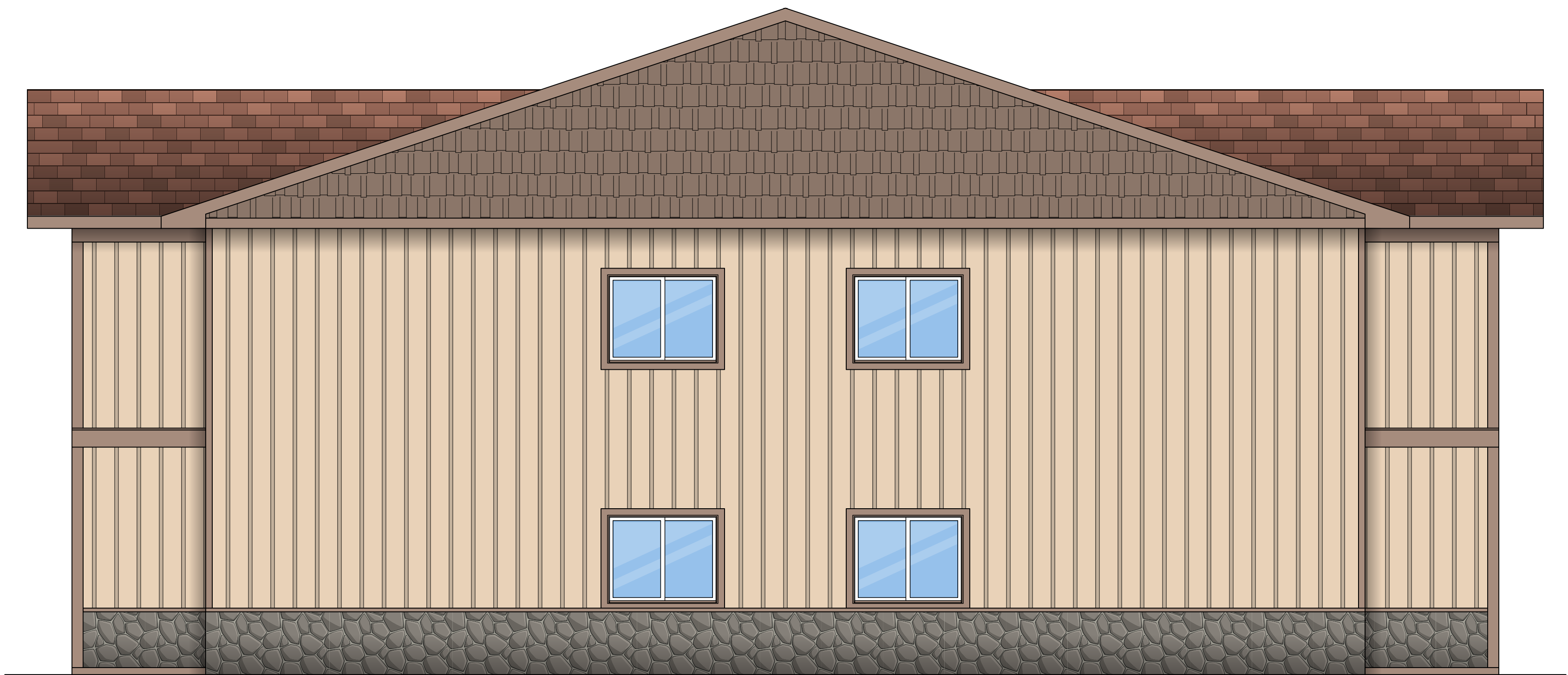
LANDSCAPE AND
TREE PRESERVATION PLAN

REVISIONS	NO.	DATE	BY	DESCRIPTION





FRONT ELEVATION
SCALE: 1/4" = 1' (1/2 SCALE ON 11X17)



SIDE ELEVATIONS
SCALE: 1/4" = 1' (1/2 SCALE ON 11X17)

DISCLAIMER:
THESE PLANS ARE FOR
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DRAFTING MAKES NO
WARRANTIES THAT ARE
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THESE PLANS ARE COMPLETE
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RESPONSIBILITY FOR
CONSTRUCTION REST WITH
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USER OF THESE PLANS.

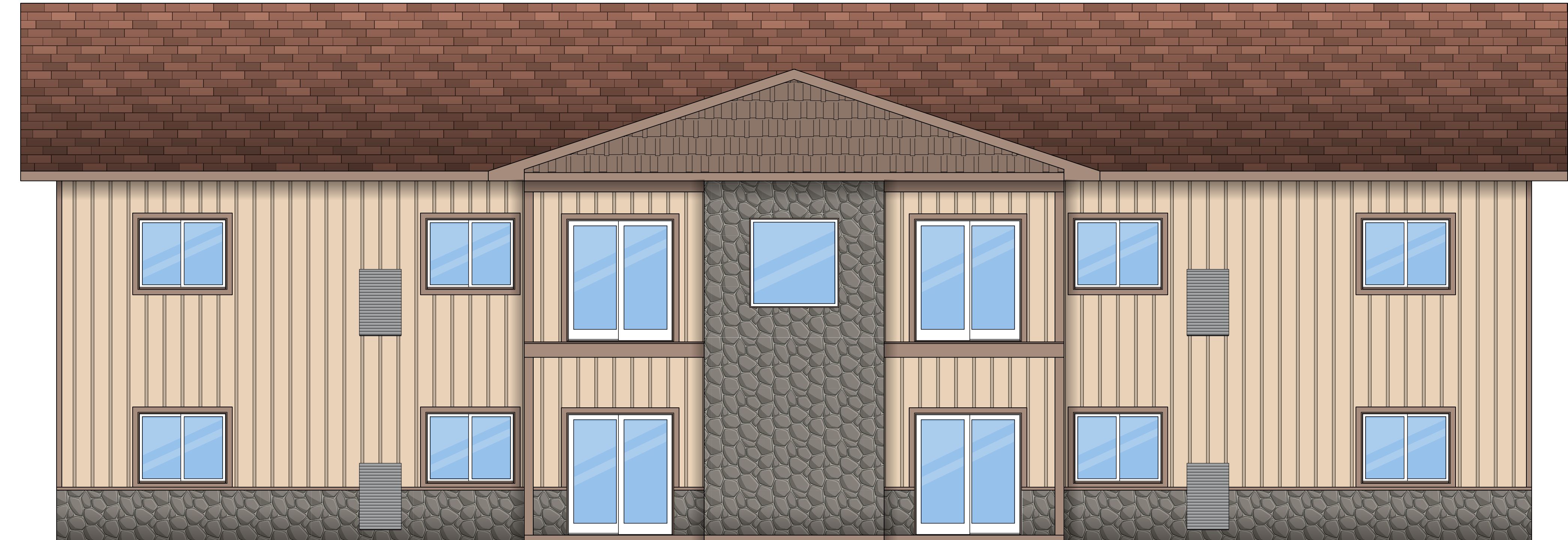
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IN ANY WAY, WITHOUT
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FROM EME DRAFTING.

DRAFTING

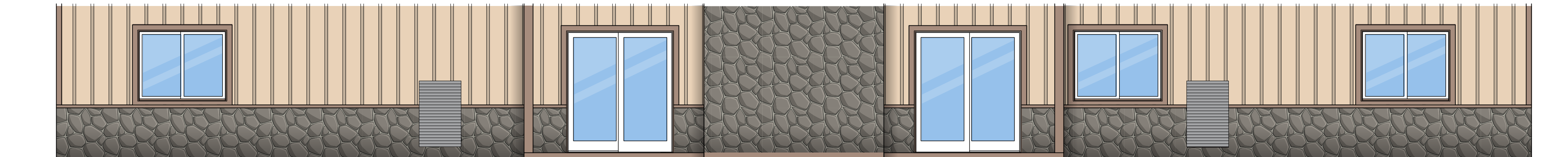
E.M.E. DRAFTING
ERIC EGERT
900 MAPLE AVE. E.
MORA, MN 55051

8 UNIT
NORTH BRANCH, MN 55056

FILE NAME:	8 UNIT
DRAWN BY:	EME
DATE:	4/7/25
REVISED:	----
REVISED:	----
REVISED:	----
REVISED:	----
REVISED:	----
REVISED:	----
ELEVATION	A1.1



REAR ELEVATION
SCALE: 1/4" = 1' (1/2 SCALE ON 11X17)



REAR ELEV @ H.C. UNIT
SCALE: 1/4" = 1' (1/2 SCALE ON 11X17)



REAR ELEV @ STREET
SCALE: 1/4" = 1' (1/2 SCALE ON 11X17)

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DRAFTING

E.M.E. DRAFTING
ERIC EGERT
900 MAPLE AVE. E.
MORA, MN 55051

8 UNIT
NORTH BRANCH, MN 55056

FILE NAME:	8 UNIT
DRAWN BY:	EME
DATE:	4/7/25
REVISED:	----
REVISED:	----
REVISED:	----
REVISED:	----
REVISED:	----

ELEVATION 2
A1.2



Prepared By: Nathan Sondrol, Community Development Director

Presenter: Nathan Sondrol, Community Development Director

Date: 04/29/2025

Board & Commission: Planning Commission

Subject: Public Hearing to Consider Requests for a preliminary plat for Cedar Ridge Community and a zoning text amendment to clarify single family homes a permitted use in the R-3 Zoning District

Applicants Request

1. Text Amendment for Section 66-6, Zoning Districts-Use Table; R3 Dwelling, Single-Family change to permitted use.
2. Preliminary plat approval for Cedar Ridge Community

Overview / Background

There are two parts to this application, one being a zoning text amendment and the other a preliminary plat review. The text amendment is being processed to address the ambiguity in the current ordinance relating to R3 uses. The land use table specifically omits single family dwellings from the R3 zoning district, while the Dimensional and Design Standards Table specifically includes small detached single family lot dimensional requirements. The Commission and Council should determine if single family is an appropriate use in the R3 zoning district given that the district is a high density residential district and single family, typically a low density use, may not be appropriate. As currently provided, the dimensional standards for the R3 are not traditional standards and permit small lots of 50' in width and a minimum lot size of 6500 square feet.

The 62 acre parcel is being subdivided to create 75 small lot single family home sites, 3 lots for future apartment development (167 units in total), and 7 outlots which will be for future commercial development or stormwater ponding depending upon the location of the parcel.

At present the applicant is proposing construction of the single family homes with necessary infrastructure. Phase I also includes some apartment buildings however, little information is

available for that portion of the project. To the east, Outlots E and F will be replatted for commercial development. There is no information available about lot layout or future users. The main access into the site is through the extension of 381st Lane which will provide access to all apartments and the commercial lots as well as single family units. The other western access is 382nd Drive turning into Falk Avenue which winds through the project providing access to individual lots and functioning like a neighborhood collector road. Two cul de sacs, Fallcrest Court and Farnham Court, also provide access for individual single family lots. Tanger Drive right of way is being provided; running along the eastern edge of the site to provide a southward road extension which will function as a frontage road for the commercial along I-35. There is a curve in the road in the north, to bypass an existing wetland.

There are a variety of issues associated with the project which are enumerated in the information below. One of the main concerns of staff is the areas not being developed as single family. It is unclear what the final product will be on these sites and if the platted properties can adequately accommodate needed parking and building area while meeting setbacks, open space and other performance standards.

Attachments

Issue(s) to Consider

1. Zoning Ordinance Text Amendment
2. Land Use and Zoning
3. Development Plan
4. Plat Standards

Analysis of Issue(s)

1. Zoning Ordinance Text Amendment

The Commission and Council are being asked to amend the zoning ordinance to address an inconsistency between the various sections of the Code. In the zoning Districts Use Table Section 6-66, under the Dwelling, Single Family row there is nothing listed in the R3 zoning district, meaning it is not permitted. The Dimensional & Design Standards Table provides regulations for R-3 detached single family, implying this use is permitted by ordinance. To accommodate the higher density uses of the R-3 zoning, the table allows for small lot single family, whereas the lot width is a minimum of 50 feet and the lot depth is 100 feet and the minimum lot size is 6,500 square feet, a little over half the size of R-1 single family lots.

Staff is looking for direction from the Commission and Council on this question. If it is

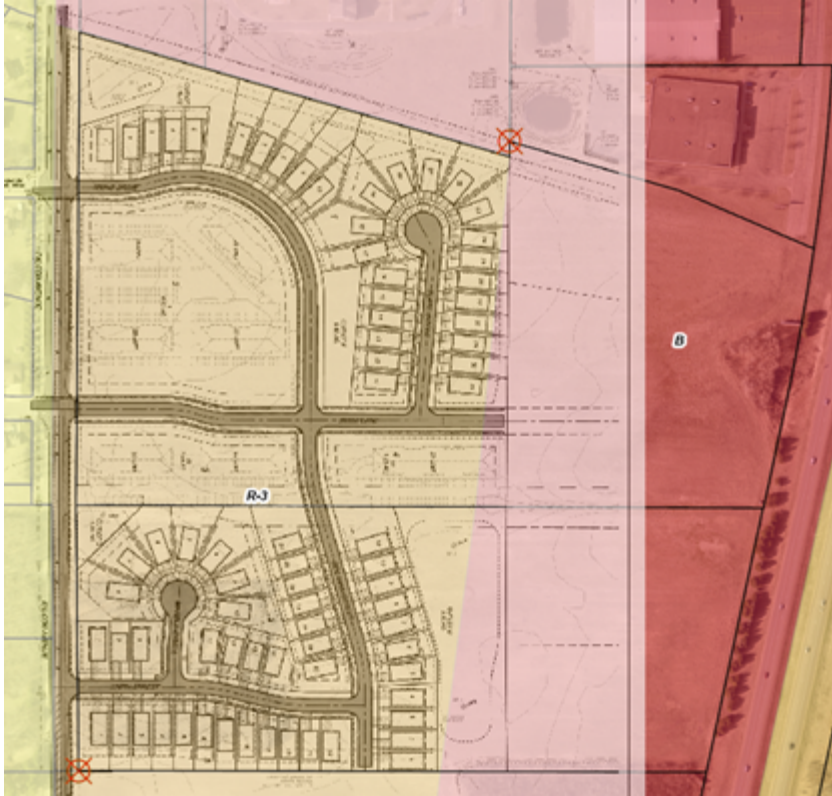
determined that the R-3 should not allow single family detached lots as one of the unit types, the project could not be approved. If the Commission and Council determine that the R-3 zoning district is an appropriate location for small lot single family, the project could continue to move forward, pending successfully addressing all project issues.

In the recent past, the City Council has expressed some concern about small lot single family development, particularly when achieved through a PUD. Use of the R-3 to permit some small lot development may allow higher density, without requiring only apartments. Further, this may be a solution to direct future developers to the R-3 district for smaller lots rather than granting modifications to detached single family lots in the R-1 or R-2 zoning districts.

2. Land Use & Zoning

The adopted Comprehensive Plan designates the site into two different land uses. The eastern section of the site is designated LUB-Business with the western section designed LUR-3 High Density Residential. The High Density Residential designation is for development of over 6 dwelling units per acre. In order to achieve the required density, the property must combine the proposed single family development with a higher density product, like the anticipated apartment buildings.

The zoning map is similar in the split of the two land uses with Business in the east, along I-35 and R-3 High Density Residential in the west. The map defines a line between the two uses although it is unclear if the exact location of the land use split must define the change between residential and commercial uses. Below is an overlay of the zoning map on the site. It shows that a portion of the commercial zoning overlaps the single family on the north and also includes portions of the drainage pond needed for the residential development.



Generally, staff wants to ensure that the amount of land available for commercial is reasonably sized and has dimensional attributes that can accommodate future commercial development without the need of variance. For that reason, staff had requested, and not received, a concept plan which could illustrate a reasonably size non-residential use on the approximate 21 acres designated for commercial development.

3. Development Overview

General Plan

The project is comprised of three different land uses. There is the 75 detached single family development located within the R3 zoned area. Many of the lots are located in the western portion of the site with some adjacent to Falcon Avenue, a busy Major Collector road. There is ponding in the northwest also adjacent to Falcon Avenue providing some separation from the traffic, and there is additional pond in the southern single family neighborhood also against the road. It appears that the building pad sites are at a similar elevation to Falcon Avenue meaning there is little ability to create a berm for buffering. The lots immediately adjacent to Falcon Avenue do have larger setbacks, increasing the separation between the road and the building footprint. The landscape plans illustrate more trees along Falcon Avenue providing some screening and it is recommended substantially more plantings be added. For example, Lot 1 Block 5 has 4 trees which equates to 1 tree every 43' along the side of the lot.

The second land use type is multi-family apartments. The applicant illustrates a total of 167

apartment dwelling units within seven different buildings. There are two located south and west of Falk Avenue and 381st Lane and one 30 unit building east of Falk Avenue. There are an additional four buildings located in the space between Falcon Avenue and the ring road of 382nd Drive. Aside from the building outline and parking lots the applicant has not provided any information about the apartment buildings or landscaping. Any approval for this project would not include formal approval of the apartments and additional applications will be required in the future. However, residents should expect multi-family development in these area. The density for this apartment portion of the project is 16.2 units/acre (167 units/10.3 acres). The total density for the residential portion of the site is 6.29 units/acre, slightly over the “6 and above” density standard.

The third land use is designated for business and commercial uses, consistent with other uses anticipated along I-35, a high traffic and visibility corridor. Aside from the dedication of the Tanger Road right of way and the recognition that 381st Lane will provide access into the commercial area there is little known. The site is a commercial area comprised of outlots E and F which total approximately 21 acres. The calculation has not been updated since the dedication of right of way on the plat and the applicant should correct the lot area table.

Parking

City Code §125-86 requires a minimum of two (2) parking spaces per dwelling unit, each of which are enclosed in attached garages. The single family units will meet this requirement.

For the apartment buildings there is surface parking provided. The total number of outdoor stalls provided are 348, which is slightly over 2 stalls per dwelling unit. Additionally, there will be underground parking although it is unclear the number of stalls available. The ordinance requires 2 free parking stalls per apartment unit. Final parking numbers will need to be provided as part of any site plan review for the apartments.

Design Elements (Façade Materials)

The applicant has not provided any information regarding the single family detached housing nor architectural information for the apartment buildings.

Landscape & Tree Preservation Plan

The applicant has provided a tree preservation plan which depicts the area of existing vegetation, located in the south, adjacent to Falcon Avenue, along the southern lot line on the commercial property. The plans indicate all but 1% of the total 4.17 treed acres are being removed. The only area preserved is along the southern border of the site, adjacent to a ponding area. The ordinance permits up to 50% tree removal for development and therefore the applicant is required to provide 182 new trees. The applicants proposal includes installation of 139 new trees within the residential areas of the site, generally on the perimeter of development. Staff would have preferred the applicant make a more concerted effort to maintain some of the existing trees. This is an attractive section of the site and new development could benefit from maintaining some of the existing vegetation.

Landscaping for the residential project requires a minimum of one tree per dwelling unit.

Therefore 242 trees are required on the site along with the 182 replacement trees due to the removal of most site vegetation. In total the developer should be installing 424 new trees. The landscape plan show a total of 139 trees on the entire residential portion of the property which is unacceptable. The plans have little landscaping around any of the apartment buildings and additional plantings should occur along Falcon Avenue. Plantings should also be added around some of the ponding areas and there is the opportunity to create a landscape buffer between the residential portion of the site and the future commercial development. A revised landscape plan would be a condition of approval.

Project Phasing

The applicant has provided a phasing plan which indicates that Phase I includes 381st Lane and land to the north. This would mean that 31 single family homes would be in the first phase along with the 97 apartment units in 4 buildings. The ponding area in Outlot D will also be constructed. As noted above, there is not enough information to grant approvals of the apartment portion of the project and therefore additional city review will be needed to implement the first phase. The second phase would result in the remaining 44 single family units and 70 apartment units in 3 buildings. There is no phasing attributable to the commercial sites.

Access

All roadways through the Development are public streets, which are designed to standard street widths and rights of way, per the City's engineering and design standards. There are no required or proposed parking restrictions on the City streets at this time.

As noted, the primary access to the site is from 381st Lane, which will also provide access from the west to the new commercial area. This means that the roadway will have more traffic than would be anticipated for a typical residential street. The presence of the apartments, and the commercial, along with several of the single family lots, makes this road function more like a major collector. In discussions with the City Engineer, the proposed sizing and configuration of the road should serve anticipated traffic. If the traffic continues to increase, the city could prohibit parking along the road. Future residents should understand that this road will be extended into the adjoining commercial area. A sign noting the future extension should be placed at the end of the roadway. A cul de sac turnaround is required as part of that road construction.

The placement of the four roads into the site are based somewhat on existing conditions. The two northern roads, 381st Lane and 382nd Drive each form a 4-way intersection with the two existing roads across Falcon Avenue. The most southern road is not aligned with any existing road. In the east, Tanger Drive is set to the property line, and the proposal extends the road southward, consistent with the City's Transportation Plan. The road will act as a frontage road for the commercial businesses fronting along I-35. As presently proposed the horizontal curve proposed does not appear to meet State Aid standards and will need to be modified. Staff recognizes that the curve in the road is to address the existing wetlands, but Tanger Drive will be on the State Aid system and will need to meet State and City design criteria. Wetland impacts may be necessary to meet the design standards, recognizing the current terminus of the road in the north. The County, and the City concurs, that turn lanes are required at the entrances to the site. These should be shown on the final plans and approved by Chisago County and the City.

Of final note is the extension of Falk Ave along the southern border of the site. The plan shows the roadway pavement stopping short of the property line. The pavement should be extended to the lot line, and a temporary cul de sac be installed which will impact the buildability of the most southern lots.

-
Trails and Sidewalks

Sidewalks are proposed on both sides of 381st Lane and on one side of the ring road through the project and along both of the cul de sacs. There will also be a trail installed along Falcon Avenue at the applicants expense. The County noted that the pedestrian crossings at Falcon Avenue are not shown.

-
Wetlands

There was a previous wetland delineation done on the site which showed wetlands in the east, which would be impacted by the extension of Tanger Drive. A recent Delineation Report from 2024, found that the northern wetland continues to remain and is approximately 1.25 acres. The other previously designated wetlands did not meet all three characteristics of wetlands and have been removed from the wetland survey.

Utilities and Site Grading

The applicant has been working with the City Engineer on site utilities and grading. The Engineer has indicated most of the comments have been addressed although final plans have not been submitted. Final plans would occur during the final plat review process.

-
Signage

The applicant has not provided any signage information for the subdivision. Any future signage must comply with the ordinance and the applicant will need to obtain a sign permit.

Parks, Trails and Open Space

The Parks, Trails and Open Space Commission will review this at their May 5, 2025 meeting and their recommendation will be provided at the meeting.

4. Plat Standards

The developer appears to be meeting the R-3 detached single family dimensional standards found in the Dimensional & Design Standards Table. The applicant should provide information about each of the lot widths, and lot depths. No variances were requested, and it is not anticipated that any would be granted for the project, either for individual lots or for future construction.

	Lot		Area/sf	Setbacks			Rear/ft	Height/ft	Min. Bldg. size
	Width/ft	Depth/ft		Front/fs	Side/ft	Rear corner/ft			
R3	50	100	6,500	30	6	15	30	35	800 sq ft

Staff Recommendation

1. Staff requests the Planning Commission provide direction regarding the zoning ordinance language relating to single family development in the R3 zoning district.

2. Staff has identified several issues which should be addressed by the applicant prior to granting any approvals. Staff is recommending the application be continued to permit the applicant time to address the following issues:
 1. Modify the landscape plan to significantly increase the plantings, including trees, shrubs, and grasses.
 2. Provide information regarding the apartment project including building elevations, and detailed site plan information to ensure future development can comply with ordinance performance standards.
 3. The applicant revise the Tanger Drive alignment to meet State Aid roadway design standards.
 4. The applicant update lot information to, including lot width and depth of each single family lot and final parcel size of outlots E and F.
 5. The applicant provide a cul de sac at the end of Obsidian Street and adjust the preliminary plat accordingly.
 6. There are outstanding engineering items that have not been fully addressed from the City Engineers memo.

Planning Commission Action

After the public hearing and discussion, the Planning Commission could take one of the following actions:

1. Recommend approval with the conditions and findings of fact.
2. Recommend denial with findings of fact.
3. Table the request to the next Planning Commission meeting and provide direction to Staff and the applicant as to the additional information needed.

Attachments

1. Preliminary Plat Dated 04-24-2025
2. Civil Plans Dated 04-24-2025

Voting Requirements:

Voting Options Simple Majority

Preliminary Plat of CEDAR RIDGE COMMUNITY

CITY OF NORTH BRANCH
CHISAGO COUNTY, MN

SOILS CHART

Map symbol & soil name	Hydrologic group	Water table depth (in)
676B: Kost loamy fine sand, 1 to 6 percent slopes	A	>80
328B: Sartell fine sand, 1 to 6 percent slopes	A	>80
161: Isanti loamy fine sand	A/D	>80
162: Lino loamy fine sand	A/D	12

* Data from USDA Web Soil Survey

SOIL BORING LOG Matthew J. Blesi - MPCA Cert. No. C4952

Soil Boring #	Elevation	Mottling	Elev. of Mottled Soil
Soil Boring 1	1065.2	None to 156"	N/A
Soil Boring 2	1064.5	None to 111"	N/A
Soil Boring 3	1065.2	None to 150"	N/A
Soil Boring 4	1064.5	None to 128"	N/A

Proposed Plat Description:

Outlot C and Outlot D, NORTH BRANCH MEADOWS, Chisago County, Minnesota.

Survey Notes:

- This survey was performed without the benefit of an updated title report. No additional search for restrictions or easements was made by the surveyor. We reserve the right to update this survey upon receipt of updated title documentation. Reference Title Commitment No. MN22255 dated 12-14-21.
- Portions of woods edge and field edge were digitized from Autodesk Civil 3D 2020 online aerial imagery and are for reference purposes only.
- Utilities shown per Gopher State One Call Ticket No. 220530468 and 250220710. Not all utilities may have been located. Multiple tickets failed to result in the East Central Energy transmission line being marked.
- Contours were created using GPS RTK methods (NAVD 88).
- Subject property is NOT part of a shoreland district or within a flood plain district as mapped by FEMA.
- Topography and site improvements were collected 3/7/22.
- Wetlands were previously delineated by Midwest Natural Resources, Inc. in 2018 for the plat of NORTH BRANCH MEADOWS and are shown hereon. A more recent delineation was completed by Bogart, Pederson & Associates, Inc. on 10/17/24.
- There is an existing underground electric transmission line currently owned by East Central Energy that follows the general path of the overhead power line along the common line of Outlots C and D of NORTH BRANCH MEADOWS. The overhead power lines are owned by Southern Municipal Power Agency. The power lines existed on the date of the plat recording, but no easement was dedicated. We have tried to contact the Southern Minnesota Municipal Power Agency for a partial release, but have not received a response.
- East Central Energy's underground transmission line may be impacted by the proposed infiltration basin and may need to be consulted with East Central Energy.

I hereby certify that a boundary survey has been completed for the preliminary plat of CEDAR RIDGE COMMUNITY, Chisago County, Minnesota.

Craig A. Wensmann

Signed:

Craig A. Wensmann

Date: 1/14/25 Lic. No. 47466

LINE	BEARING	DISTANCE
LI	S76°35'28"E	78.76

CURVE	RADIUS	DISTANCE	DELTA
CI	500.00	41.37	4°44'26"

LOT AREAS											
Block	Lot	Total Lot Area (S.F.)	Block	Lot	Total Lot Area (S.F.)	Block	Lot	Total Lot Area (S.F.)	Block	Lot	Total Lot Area (S.F.)
I	1	12,833	I	20	21,507	3	7	14,022	4	4	8,567
I	2	9,038	I	21	14,351	3	8	17,095	4	5	9,042
I	3	7,998	I	22	16,415	3	9	13,794	4	6	8,960
I	4	7,436	I	23	13,515	3	10	14,502	4	7	7,910
I	5	7,916	I	24	8,249	3	11	10,950	4	8	7,538
I	6	14,965	I	25	7,891	3	12	7,374	4	9	7,538
I	7	14,622	I	26	8,071	3	13	6,760	4	10	7,539
I	8	16,240	I	27	8,289	3	14	9,331	4	11	17,825
I	9	17,979	I	28	8,507	3	15	12,660	4	12	80,409
I	10	12,094	I	29	8,726	3	16	6,956	5	1	13,646
I	11	12,775	I	30	8,944	3	17	6,760	5	2	9,100
I	12	7,384	I	31	14,124	3	18	6,760	5	3	9,100
I	13	7,384	2	1	262,045	3	19	6,760	5	4	9,100
I	14	7,384	3	1	10,104	3	20	6,760	5	5	9,098
I	15	7,384	3	2	6,760	3	21	15,980	5	6	8,986
I	16	9,122	3	3	10,188	3	22	106,428	5	7	8,583
I	17	12,242	3	4	22,714	4	1	7,540	5	8	7,966
I	18	18,519	3	5	13,274	4	2	7,540	5	9	7,348
I	19	14,682	3	6	14,011	4	3	7,540	5	10	6,926
Outlot E	925,504		Outlot C	13,319		Outlot A	60,907		5	11	6,769
			Outlot D	131,699		Outlot B	27,216		5	12	10,010

Bearings are based on the plat of NORTH BRANCH MEADOWS

- Denotes found iron monument
- ⊗ Denotes ½ inch by 14 inch iron monument with a plastic plug stamped R.L.S. 47466 to be set within one year of platting date
- ◆ Denotes found rebar
- ⊙ Denotes found metal disk
- Denotes set ½ inch by 14 inch iron monument with a plastic plug stamped R.L.S. 47466
- △ Denotes found large nail

REFERENCE BENCHMARK:
MNDOT Geodetic Monument "DANY"
Elevation = 897.37 feet (NAVD 88)

PLAT BENCHMARK:
Top nut hydrant in the NW quad of Falcon Ave. and 382nd Drive
Elevation = 915.28 feet (NAVD 88)

OWNER:
Carroll Holdings, LLC
33098 Marmion St. NE
Cambridge MN, 55008

DEVELOPER:
Cedar Ridge Community LLC
12222 313th Avenue,
Priceton, MN 55371
(763) 360-1453

SURVEYORS & ENGINEERS:
Bogart, Pederson & Associates, Inc.
13076 First Street
Becker, MN 55308-9322
763-262-8822

TOTAL AREA: 62.03% Acres

EXISTING ZONING:
R-3 High Density Residential
B - Business

PROPOSED ZONING:
R-3 High Density Residential (Residential Lots)
B - Business (Outlots)

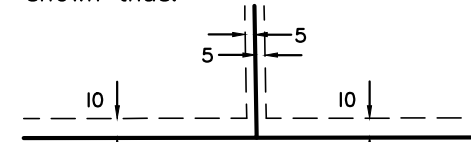
MINIMUMS:

100' Depth
50' Width
6,500 S.F. lot size

DENOTES BUILDING SETBACKS:

Detached Single Family Lots
30' Front
6' Side (Interior)
30' Rear (Interior)
15' Rear (Corner)
30' Front (Corner)
20' Wetland

Drainage and Utility Easements are shown thus:



N.T.S.
Being 10 feet in width and adjoining right-of-way lines and rear lot lines, also being 5 feet in width and adjoining lot lines, unless otherwise indicated, as shown on plat.

DATE: 1/10/25
FIELD DATE: March, 7th 2022
BK/PG: 13.1/pg. 1
DRAWN BY: CK
CHECKED BY: CAW/DJJ
DWG FILE: 22-0030.02 Prelim
FILE NO: 22-0030.02

REVISIONS:
3/31/25: City Comments
4/24/25: City Comments

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

Craig Wensmann

Signed:

Craig A. Wensmann

Date: 1/14/25 Lic. No. 47466

BOGART, PEDERSON & ASSOCIATES, INC.
LAND SURVEYING
CIVIL ENGINEERING
MAPPING
13076 FIRST STREET, BECKER, MN 55308-9322
TEL: 763-262-8822 FAX: 763-262-8844

PRELIMINARY PLAT
for
CEDAR RIDGE COMMUNITY
Cedar Ridge Community LLC
City of North Branch
Chisago County, MN

BOGART, PEDERSON & ASSOCIATES, INC.

Preliminary Plat of CEDAR RIDGE COMMUNITY

CITY OF NORTH BRANCH
CHISAGO COUNTY, MN

Bearings are based on the plat of NORTH
BRANCH MEADOWS

- Denotes found iron monument
- ⊗ Denotes 1/2 inch by 1/4 inch iron monument with a plastic plug stamped R.L.S. 47466 to be set within one year of platting date
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(763) 360-1453

SURVEYORS & ENGINEERS:
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13076 First Street
Becker, MN 55308-9322
763-262-8822

TOTAL AREA: 62.03% Acres

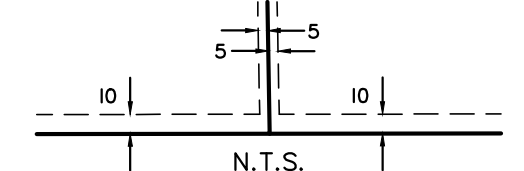
EXISTING ZONING:
R-3 High Density Residential
B - Business

PROPOSED ZONING:
R-3 High Density Residential (Residential Lots)
B - Business (Outlots)

MINIMUMS:
100' Depth
50' Width
6,500 S.F. lot size

DENOTES BUILDING SETBACKS:
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DATE: 1/10/25
FIELD DATE: March, 7th 2022
BK/PG: 13.1/pg. 1
DRAWN BY: CK
CHECKED BY: CAW/DJJ
DWG FILE: 22-0030.02 Prelim
FILE NO: 22-0030.02

REVISIONS:
3/31/25: City Comments
4/24/25: City Comments

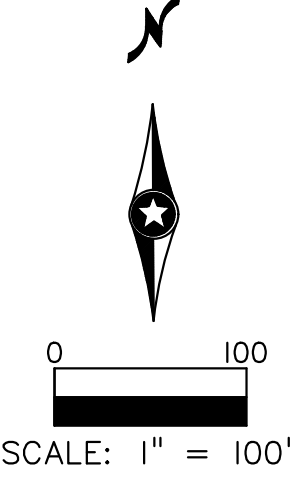
I hereby certify that this survey, plan, or
report was prepared by me or under my
direct supervision and that I am a duly
Licensed Land Surveyor under the laws
of the State of Minnesota.

Signed: *Craig A. Wensmann*
Craig A. Wensmann
Date: 1/14/25 Lic. No. 47466

**BOGART, PEDERSON
& ASSOCIATES, INC.**
LAND SURVEYING
CIVIL ENGINEERING
13076 FIRST STREET, BECKER, MN 55308-9322
TEL: 763-262-8822 FAX: 763-262-8844

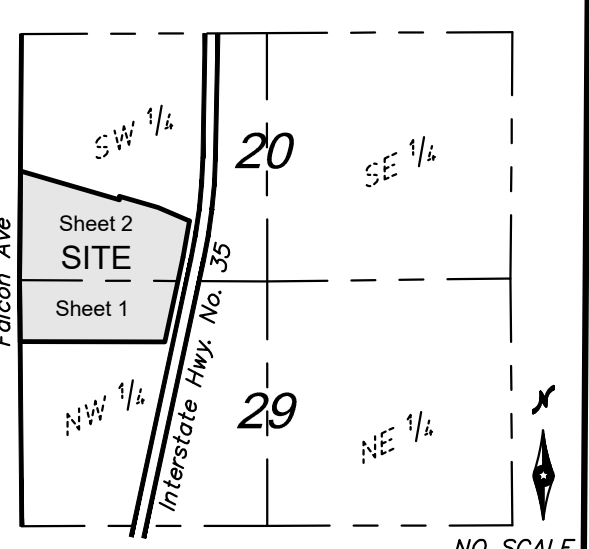
PRELIMINARY PLAT
for
CEDAR RIDGE COMMUNITY
Cedar Ridge Community LLC
City of North Branch
Chisago County, MN

BOGART, PEDERSON & ASSOCIATES, INC.



SCALE: 1" = 100'

VICINITY MAP
Sec. 20 & 29, Twp. 35, Rng. 21
Chisago County, MN



- LEGEND:**
- | | | |
|------------------------------|---------------------------------------|---|
| ■ Denotes catch basin | ▲ Denotes flared end section | --- Denotes easement |
| ⊗ Denotes electrical cabinet | ▬ Denotes proposed wetland interior | --- Denotes right of way |
| ⊗ Denotes mailbox | ▬ Denotes soils classification type | --- Denotes major contour |
| ⊗ Denotes gas service | LS 40361 Denotes Thomas Balluf, LS | --- Denotes minor contour |
| ⊗ Denotes gas marker | LS 13115 Denotes Terrance Johnson, LS | --- Denotes sanitary sewer |
| ⊗ Denotes manhole | LS 14945 Denotes Robert Stransky, LS | --- Denotes storm sewer |
| ⊗ Denotes manhole | | --- Denotes waterline |
| ⊗ Denotes manhole | | --- Denotes existing adjoiners |
| ⊗ Denotes manhole | | --- Denotes building setback line |
| ⊗ Denotes manhole | | --- Denotes field edge |
| ⊗ Denotes manhole | | --- Denotes soil type boundary |
| ⊗ Denotes manhole | | --- Denotes delineated wetland per NORTH BRANCH MEADOWS |
| ⊗ Denotes manhole | | --- Denotes proposed wetland edge |
| ⊗ Denotes manhole | | --- Denotes underground electric |
| ⊗ Denotes manhole | | --- Denotes underground electric |
| ⊗ Denotes manhole | | --- Denotes tree line |

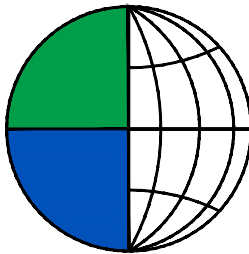
CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
FALCON AVE N
CITY OF NORTH BRANCH, CHISAGO COUNTY, MN
APRIL, 2025
PRELIMINARY PLANS

Sheet List Table	
Sheet Number	Sheet Title
C0	Cover
C1.1	Existing Conditions
C1.2	Tree Preservation & Removals
C2.0	Overall Site Plan
C2.1	North Site Plan
C2.2	South Site Plan
C2.3	Future Development
C3.1	North Grading Plan
C3.2	South Grading Plan
C4.1	North Utility Plan
C4.2	South Utility Plan
C5.1	382nd & Falk Ave (Street & Storm)
C5.2	Falk Ave (Street & Storm)
C5.3	381st Lane (Street & Storm)
C5.4	Farnham Ct (Street & Storm)
C5.5	379th Street (Street & Storm)
C5.6	Fallcrest Ct (Street & Storm)
C6.1	382nd & Falk Ave (Sani. & Water)
C6.2	Falk Ave (Sani. & Water)
C6.3	381st Lane (Sani. & Water)
C6.4	Farnham Ct (Sani. & Water)
C6.5	379th Street (Sani. & Water)
C6.6	Fallcrest Ct (Sani. & Water)
C6.7	Falcon Avenue N (Water)
C6.8	Service Information
C7.1	Turn Lane Plan
C7.2	Traffic Control Plan (Turn Lane)
C7.3	Traffic Control Plan (Detour)
C8.1	North Erosion Control Plan
C8.2	South Erosion Control Plan
C8.3	SWPPP Narrative
C9.1	Details
C9.2	Details
C9.3	Details
C9.4	Details
C9.5	Details
C10.1	North Landscape Plan
C10.2	South Landscape Plan

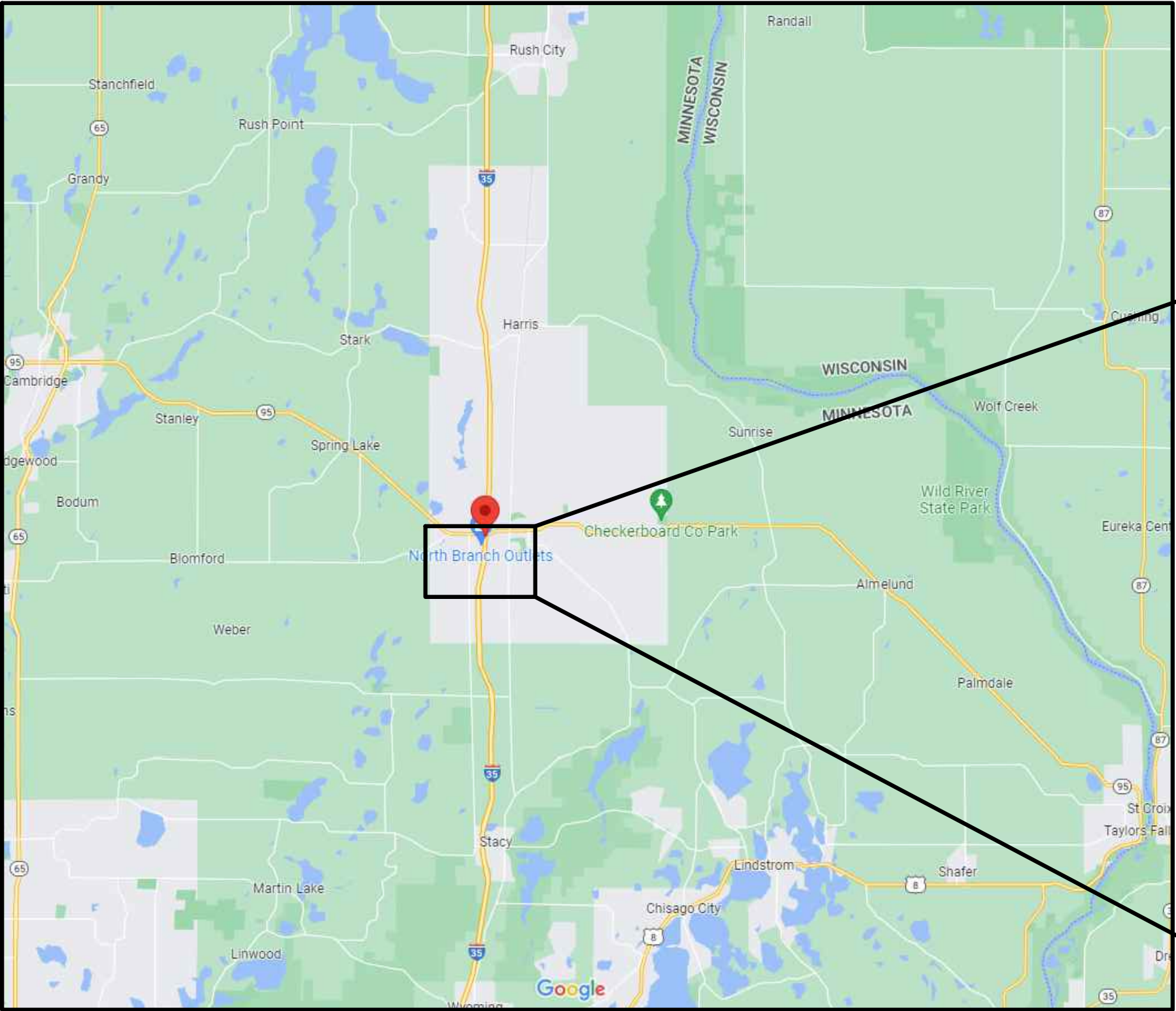
REV NO.	DATE	DESCRIPTION
1	04/01/2025	REVISION PER CITY REVIEW
2	04/24/2025	REVISION PER CITY REVIEW

PRIVATE UTILITIES SHOWN ARE QUALITY LEVEL D.
QUALITY LEVEL D PROVIDES THE MOST BASIC LEVEL OF INFORMATION. IT INVOLVES
COLLECTING DATA FROM EXISTING UTILITY RECORDS. RECORDS MAY INCLUDE AS-BUILT
DRAWINGS, DISTRIBUTION AND SERVICES MAPS, EXISTING GEOGRAPHIC INFORMATION
SYSTEM DATABASES, CONSTRUCTION PLANS, ETC.

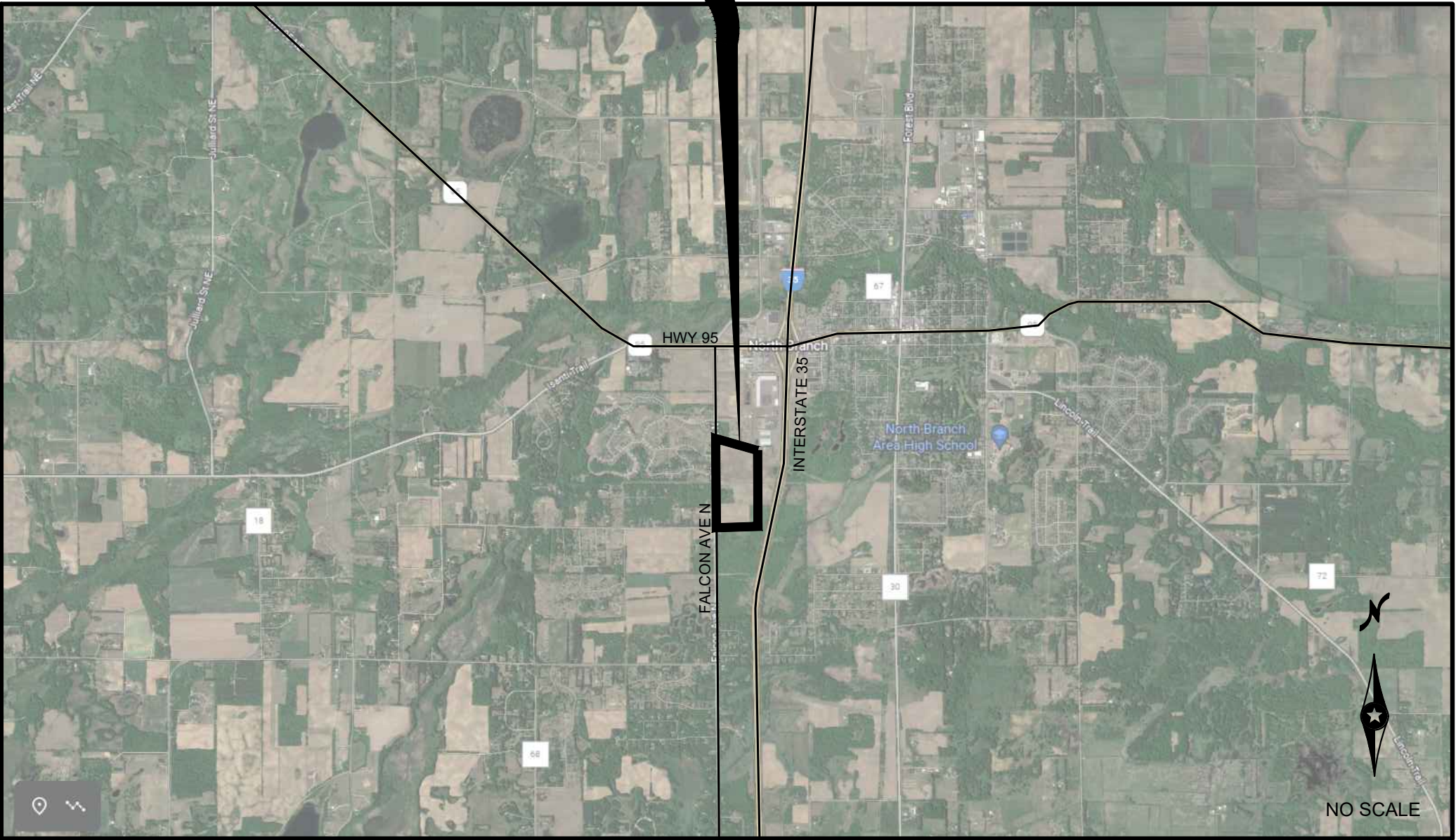
CIVIL & SURVEY PLANS PREPARED BY:



**Bogart, Pederson
& Associates, Inc.**
CIVIL ENGINEERING
LAND SURVEYING
ENVIRONMENTAL SERVICES
Traditional Values • Creative Solutions



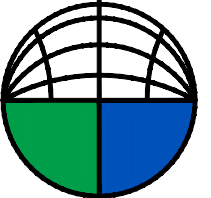
CHISAGO COUNTY, MINNESOTA



VICINITY MAP



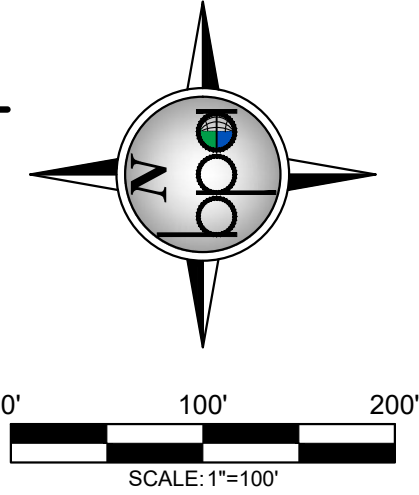
CALL 48 HOURS BEFORE DIGGING:
GOPHER STATE ONE CALL
TWIN CITY AREA 651-454-0002
MINNESOTA TOLL FREE 1-800-252-1166

SHEET NO.	C1.1	EXISTING CONDITIONS	CEDAR RIDGE COMMUNITY LLC CEDAR RIDGE COMMUNITY City of North Branch, Chicago County, MN	 BOGART, PEDERSON & ASSOCIATES, INC. LAND SURVEYING ENVIRONMENTAL SERVICES 13076 FIRST STREET BECKER, MN 55509-9322 TEL: 763-262-8822 FAX: 763-262-8844	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. NOT FOR CONSTRUCTION Signed: Christopher J. Dahn Date: _____ Lic. No. 58628	DATE: 04/24/2025 DESIGN BY: MJM DRAWN BY: MJM CHECKED BY: CJD DWG FILE: 22-0330.00 FILE NO.:	REV NO.	DATE	DESCRIPTION
							1	04/01/2025	REVISION PER CITY REVIEW
							2	04/24/2025	REVISION PER CITY REVIEW



LEGEND:

- REMOVE PAVEMENT SECTION (AS INDICATED).
- REMOVE EXISTING TREES (AS INDICATED)
- REMOVE FEATURE (AS INDICATED)
- SALVAGE (AS INDICATED)
- SAW-CUT



DEMOLITION GENERAL NOTES:

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM OR COORDINATE ALL UTILITY CONNECTIONS AND RELOCATIONS FROM EXISTING UTILITY LOCATIONS TO THE PROPOSED BUILDING, AS WELL AS TO ALL ON-SITE AMENITIES. THESE CONNECTIONS INCLUDE BUT ARE NOT LIMITED TO WATER, SANITARY SEWER, UNDERGROUND GAS, ETC.
- THE CONNECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH STATE AND LOCAL STANDARD SPECIFICATIONS FOR CONSTRUCTION. UTILITY CONNECTIONS (UNDERGROUND GAS, WATERMAIN, AND STORM SEWER) MAY REQUIRE A PERMIT FROM THE CITY.
- THE CONTRACTOR SHALL VERIFY THE ELEVATIONS AT PROPOSED CONNECTIONS TO EXISTING UTILITIES PRIOR TO ANY DEMOLITION.
- CONTRACTOR SHALL COORDINATE WITH THE CITY OF NORTH BRANCH FOR ALL UTILITY DISCONNECTIONS, SERVICE TERMINATIONS AND REMOVALS. CONTRACTOR SHALL COORDINATE UTILITY DISCONNECTIONS AND RELOCATIONS WITH THE UTILITY PROVIDERS PRIOR TO THE START OF CONSTRUCTION. ALL SERVICE CONNECTIONS/DISCONNECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH STATE AND LOCAL STANDARD SPECIFICATIONS FOR CONSTRUCTION. CONTRACTOR SHALL OBTAIN ALL NECESSARY STATE AND LOCAL PERMITS NECESSARY FOR UTILITY CONSTRUCTION AND WORK WITHIN ADJACENT RIGHT-OF-WAYS.
- IF DEWATERING IS REQUIRED FOR THIS PROJECT, THE PUMP DISCHARGE SHALL BE TREATED PRIOR TO BEING DISCHARGED OFF-SITE OR INTO A SURFACE WATER. THE DISCHARGE SHALL BE VISUALLY CHECKED TO ENSURE THAT IT IS VISIBLY CLEAN WATER.
- CONTRACTOR SHALL PROTECT UTILITIES, STRUCTURES AND TREES (NOTED AND NOT NOTED) TO REMAIN AND SHALL BE RESPONSIBLE TO REPAIR DAMAGES TO ANY FEATURES TO REMAIN.
- TREES 6" AND LARGER AND OTHER NOTABLE VEGETATION WERE IDENTIFIED AND LOCATED DURING THE COURSE OF THE SURVEY. CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS OF THE PROJECT AREA AND REMOVE ALL TREES NOT DESIGNATED TO BE SAVED AND PROTECTED. ALL TREES, DEBRIS, ROOTS, BOULDERS AND TOPSOIL SHALL BE REMOVED FROM THE SITE.

TREE PRESERVATION NOTES:

- TREE REMOVAL AREA: 4.17 ACRES
- TREE PRESERVATION AREA: 0.04 ACRES
- TREE PRESERVATION %: 1%
- 50% OF TREE REMOVAL AREA: 2.08 ACRES
- ASSUMPTIONS FOR REPLACEMENT: 500 S.F. OF COVERAGE PER TREE
- 2.08 ACRES / 500 S.F. 182 TREES TO BE REPLACED

DATE: 04/24/2025		REV NO. 1	DATE 04/01/2025	DESCRIPTION REVISION PER CITY REVIEW
DESIGN BY: NJM		2	04/24/2025	REVISION PER CITY REVIEW
DRAWN BY: NJM				
CHECKED BY: CJD				
DWG FILE: DEMOLITION				
FILE NO.: 22-0030.00				

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.

NOT FOR CONSTRUCTION

Signed: Christopher J. Dahn
Date: 5/8/28

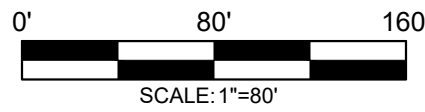
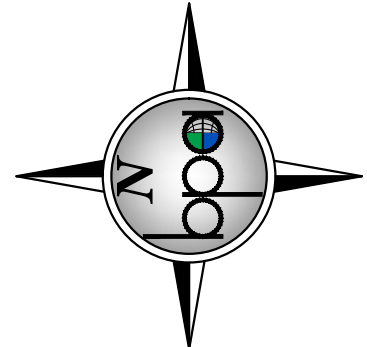
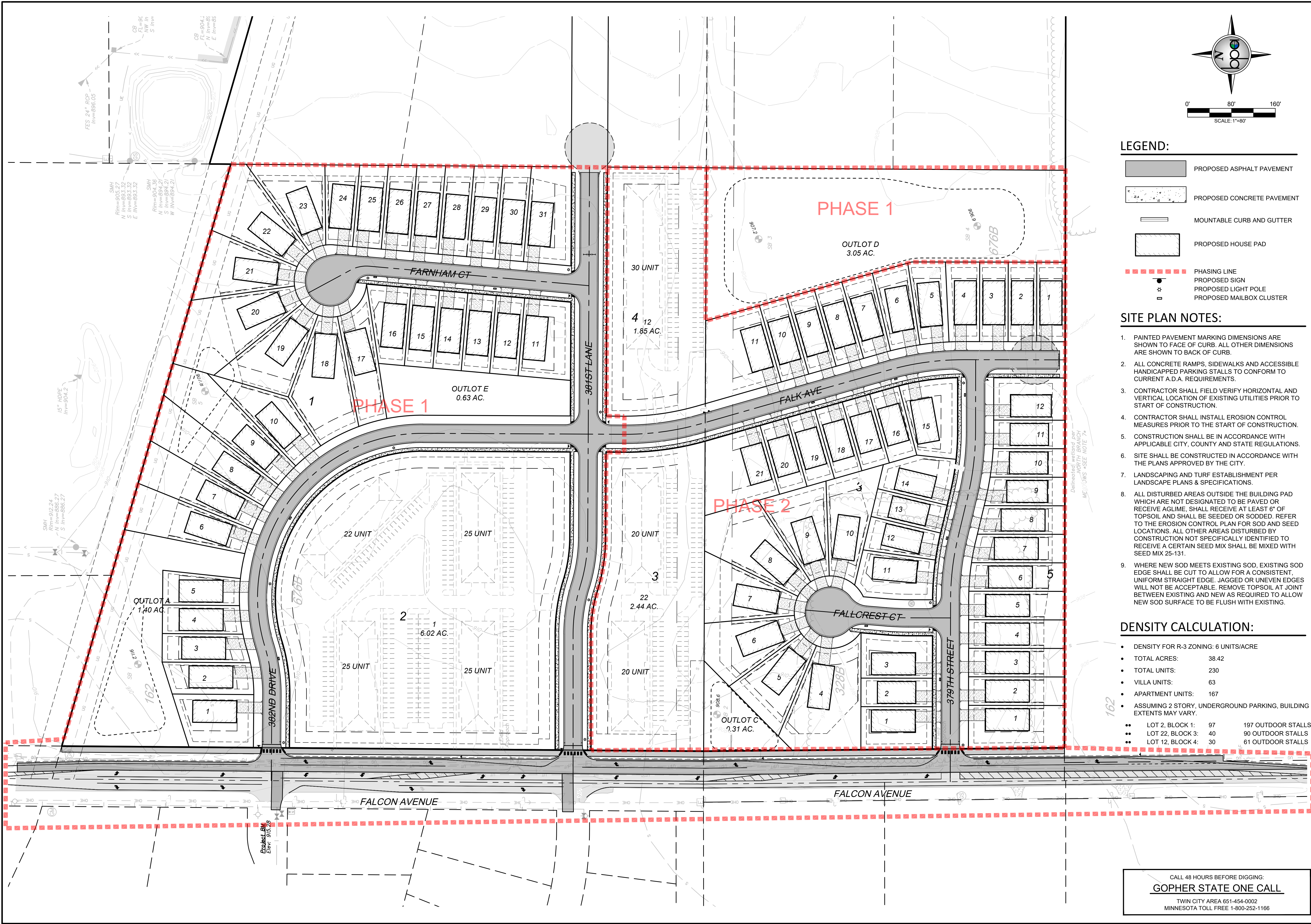
BOGART, PEDERSON & ASSOCIATES, INC.
LAND SURVEYING
ENGINEERING
ENVIRONMENTAL SERVICES
13076 FIRST STREET, BECKER, MN 55509-9322
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

TREE PRESERVATION & REMOVALS

SHEET NO. C1.2

CALL 48 HOURS BEFORE DIGGING:
GOPHER STATE ONE CALL
TWIN CITY AREA 651-454-0002
MINNESOTA TOLL FREE 1-800-252-1166



LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- MOUNTABLE CURB AND GUTTER
- PROPOSED HOUSE PAD
- PHASING LINE
- PROPOSED SIGN
- PROPOSED LIGHT POLE
- PROPOSED MAILBOX CLUSTER

SITE PLAN NOTES:

- PAINTED PAVEMENT MARKING DIMENSIONS ARE SHOWN TO FACE OF CURB. ALL OTHER DIMENSIONS ARE SHOWN TO BACK OF CURB.
- ALL CONCRETE RAMPS, SIDEWALKS AND ACCESSIBLE HANDICAPPED PARKING STALLS TO CONFORM TO CURRENT A.D.A. REQUIREMENTS.
- CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE CITY, COUNTY AND STATE REGULATIONS.
- SITE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS APPROVED BY THE CITY.
- LANDSCAPING AND TURF ESTABLISHMENT PER LANDSCAPE PLANS & SPECIFICATIONS.
- ALL DISTURBED AREAS OUTSIDE THE BUILDING PAD WHICH ARE NOT DESIGNATED TO BE PAVED OR RECEIVE AGLIME, SHALL RECEIVE AT LEAST 6" OF TOPSOIL AND SHALL BE SEEDED OR SODDED. REFER TO THE EROSION CONTROL PLAN FOR SOD AND SEED LOCATIONS. ALL OTHER AREAS DISTURBED BY CONSTRUCTION NOT SPECIFICALLY IDENTIFIED TO RECEIVE A CERTAIN SEED MIX SHALL BE MIXED WITH SEED MIX 25-131.
- WHERE NEW SOD MEETS EXISTING SOD, EXISTING SOD EDGE SHALL BE CUT TO ALLOW FOR A CONSISTENT, UNIFORM STRAIGHT EDGE. JAGGED OR UNEVEN EDGES WILL NOT BE ACCEPTABLE. REMOVE TOPSOIL AT JOINT BETWEEN EXISTING AND NEW AS REQUIRED TO ALLOW NEW SOD SURFACE TO BE FLUSH WITH EXISTING.

DENSITY CALCULATION:

- DENSITY FOR R-3 ZONING: 6 UNITS/ACRE
 - TOTAL ACRES: 38.42
 - TOTAL UNITS: 230
 - VILLA UNITS: 63
 - APARTMENT UNITS: 167
 - ASSUMING 2 STORY, UNDERGROUND PARKING, BUILDING EXTENTS MAY VARY.
- | | | |
|---------------------|----|--------------------|
| •• LOT 2, BLOCK 1: | 97 | 197 OUTDOOR STALLS |
| •• LOT 22, BLOCK 3: | 40 | 90 OUTDOOR STALLS |
| •• LOT 12, BLOCK 4: | 30 | 61 OUTDOOR STALLS |

CALL 48 HOURS BEFORE DIGGING:
GOPHER STATE ONE CALL
TWIN CITY AREA 651-454-0002
MINNESOTA TOLL FREE 1-800-252-1166

DATE:	04/24/2025	DESIGN BY:	MJM	REVISION PER CITY REVIEW	
DESIGN BY:	MJM	DRAWN BY:	MJM	REVISION PER CITY REVIEW	
CHECKED BY:	CJD	DWG FILE:	SITE BASE		
FILE NO.:	22-0303.00				

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.

NOT FOR CONSTRUCTION

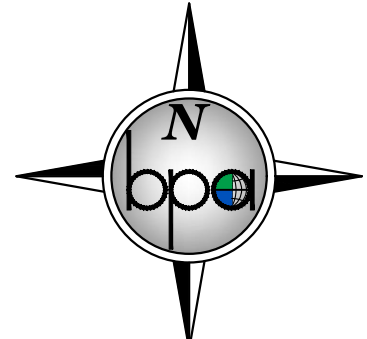
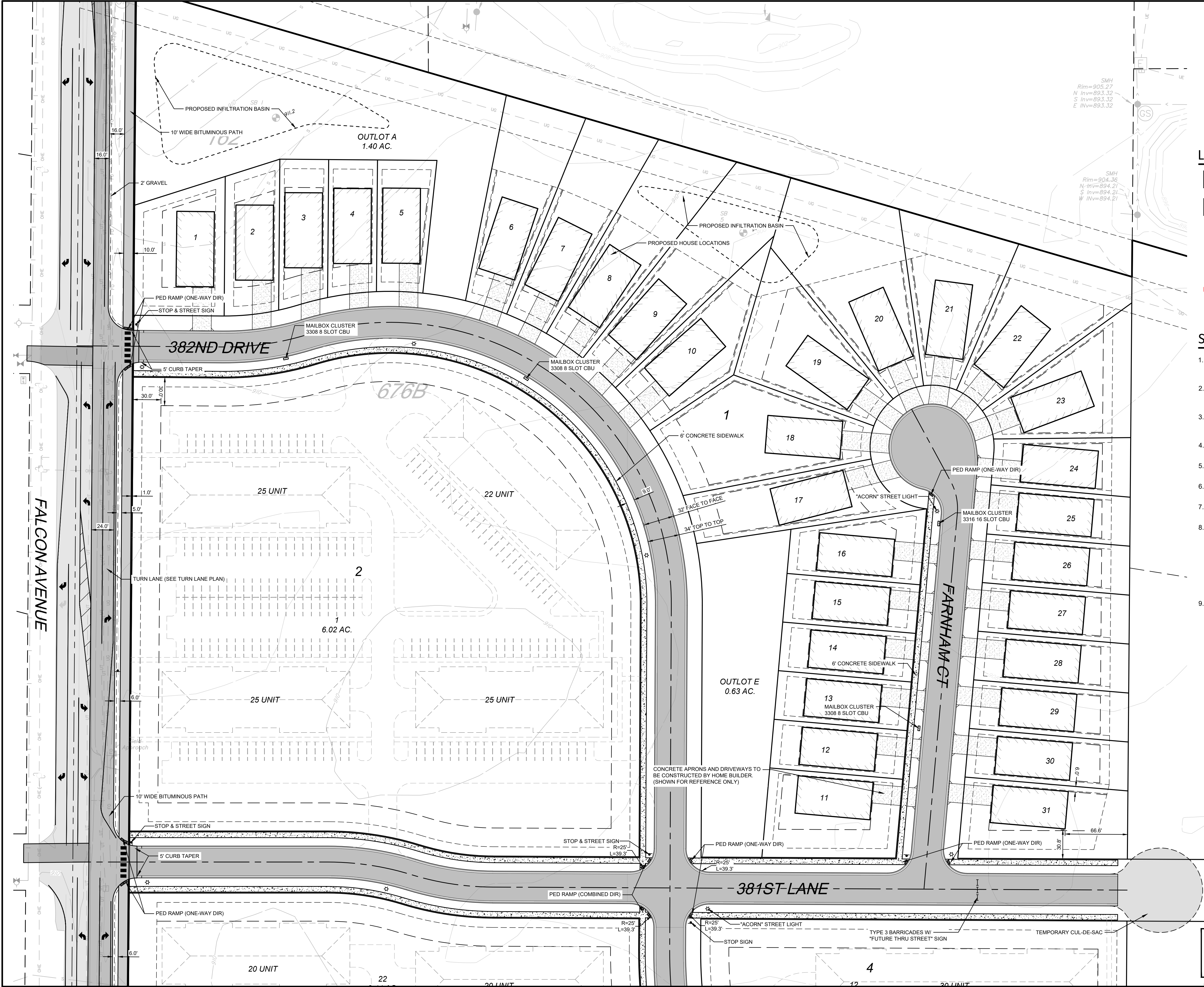
Signed: Christopher J. Dahm
Date: 4/24/2025
Lic. No. 58628

BOGART, PEDERSON & ASSOCIATES, INC.
LAND SURVEYING
ENVIRONMENTAL SERVICES
13076 FIRST STREET, BECKER, MN 55009-8922
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

OVERALL SITE PLAN

SHEET NO. **C2.0**



LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- MOUNTABLE CURB AND GUTTER
- PROPOSED HOUSE PAD
- PHASING LINE
- PROPOSED SIGN
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- PROPOSED MAILBOX CLUSTER

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CALL 48 HOURS BEFORE DIGGING:
GOPHER STATE ONE CALL
TWIN CITY AREA 651-454-0002
MINNESOTA TOLL FREE 1-800-252-1166

DATE: 04/24/2025		DESCRIPTION
DESIGN BY: MJM	04/01/2025	REVISION PER CITY REVIEW
DRAWN BY: MJM	04/24/2025	REVISION PER CITY REVIEW
CHECKED BY: CJD		
DWG FILE: SITE BASE		
FILE NO.: 22-0030.00		

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NOT FOR CONSTRUCTION

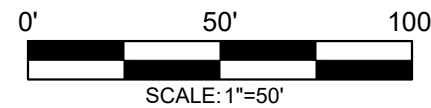
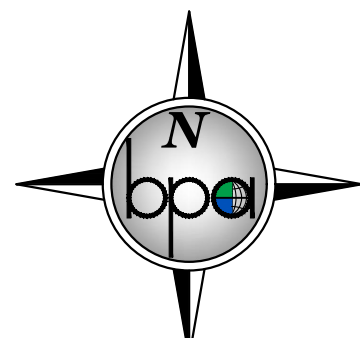
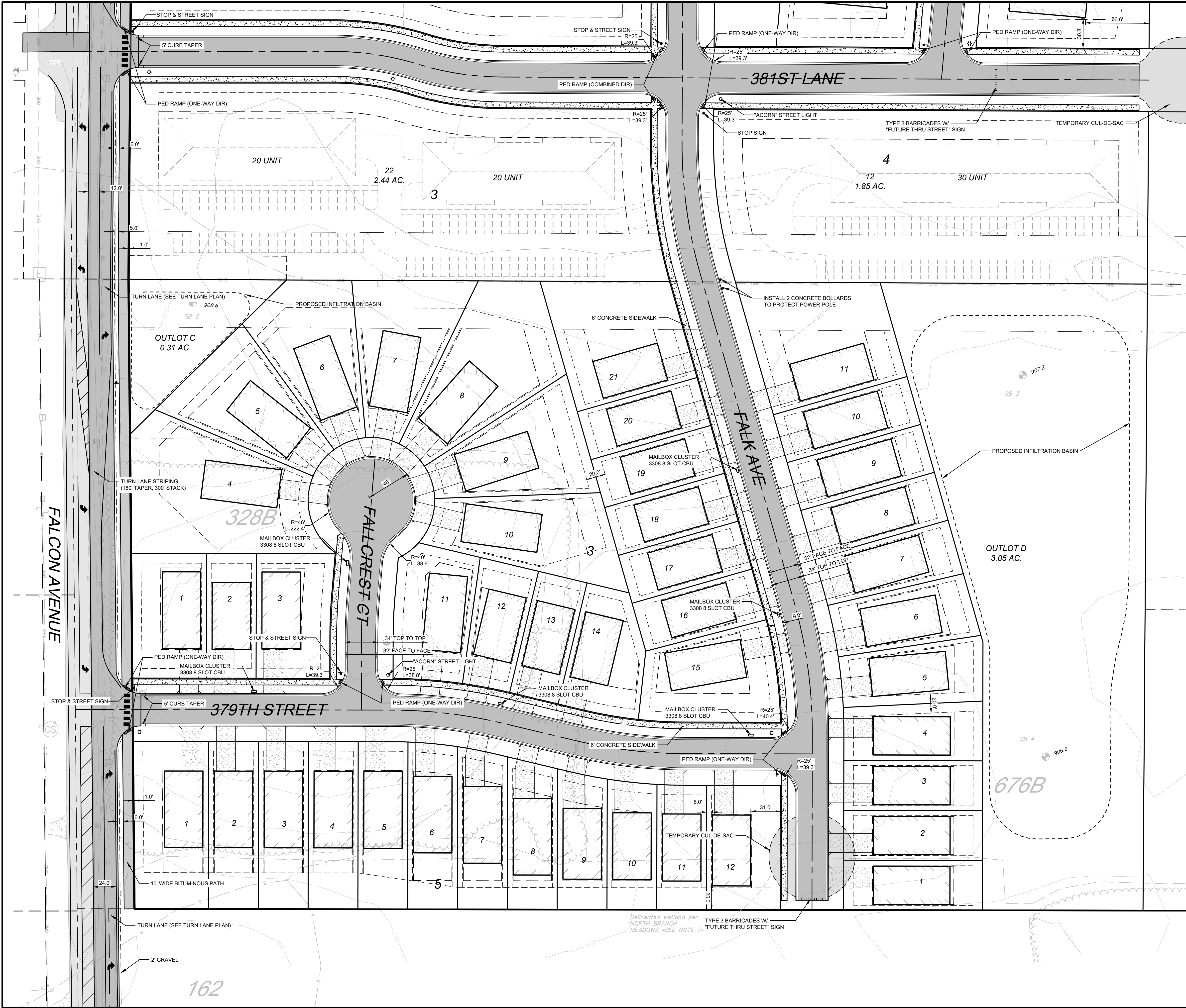
Signed: Christopher J. Dahm Date: 5/8/28
Lic. No. 58628

BOGART, PEDERSON & ASSOCIATES, INC.
LAND SURVEYING
ENGINEERING
ENVIRONMENTAL SERVICES
13076 FIRST STREET, BECKER, MN 55009-9322
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

NORTH SITE PLAN

SHEET NO. **C2.1**



LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- MOUNTABLE CURB AND GUTTER
- PROPOSED HOUSE PAD
- PHASING LINE
- PROPOSED SIGN
- PROPOSED LIGHT POLE
- PROPOSED MAILBOX CLUSTER

SITE PLAN NOTES:

- PAINTED PAVEMENT MARKING DIMENSIONS ARE SHOWN TO FACE OF CURB. ALL OTHER DIMENSIONS ARE SHOWN TO BACK OF CURB.
- ALL CONCRETE RAMPS, SIDEWALKS AND ACCESSIBLE HANDICAPPED PARKING STALLS TO CONFORM TO CURRENT A.D.A. REQUIREMENTS.
- CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE CITY, COUNTY AND STATE REGULATIONS.
- SITE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS APPROVED BY THE CITY.
- LANDSCAPING AND TURF ESTABLISHMENT PER LANDSCAPE PLANS & SPECIFICATIONS.
- ALL DISTURBED AREAS OUTSIDE THE BUILDING PAD WHICH ARE NOT DESIGNATED TO BE PAVED OR RECEIVE AGLIME, SHALL RECEIVE AT LEAST 6" OF TOPSOIL AND SHALL BE SEEDED OR SODDED. REFER TO THE EROSION CONTROL PLAN FOR SOD AND SEED LOCATIONS. ALL OTHER AREAS DISTURBED BY CONSTRUCTION NOT SPECIFICALLY IDENTIFIED TO RECEIVE A CERTAIN SEED MIX SHALL BE MIXED WITH SEED MIX 25-131.
- WHERE NEW SOD MEETS EXISTING SOD, EXISTING SOD EDGE SHALL BE CUT TO ALLOW FOR A CONSISTENT, UNIFORM STRAIGHT EDGE. JAGGED OR UNEVEN EDGES WILL NOT BE ACCEPTABLE. REMOVE TOPSOIL AT JOINT BETWEEN EXISTING AND NEW AS REQUIRED TO ALLOW NEW SOD SURFACE TO BE FLUSH WITH EXISTING.

CALL 48 HOURS BEFORE DIGGING:
GOPHER STATE ONE CALL
TWIN CITY AREA 651-454-0002
MINNESOTA TOLL FREE 1-800-252-1166

DATE: 04/24/2025		DESCRIPTION
DESIGN BY: MJM	04/01/2025	REVISION PER CITY REVIEW
DRAWN BY: MJM	04/24/2025	REVISION PER CITY REVIEW
CHECKED BY: CJD		
DWG FILE: SITE BASE		
FILE NO: 22-0030.00		

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.

NOT FOR CONSTRUCTION

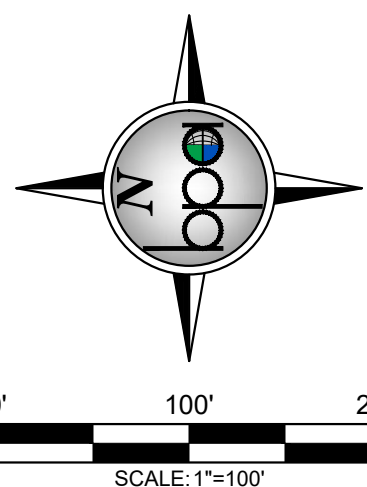
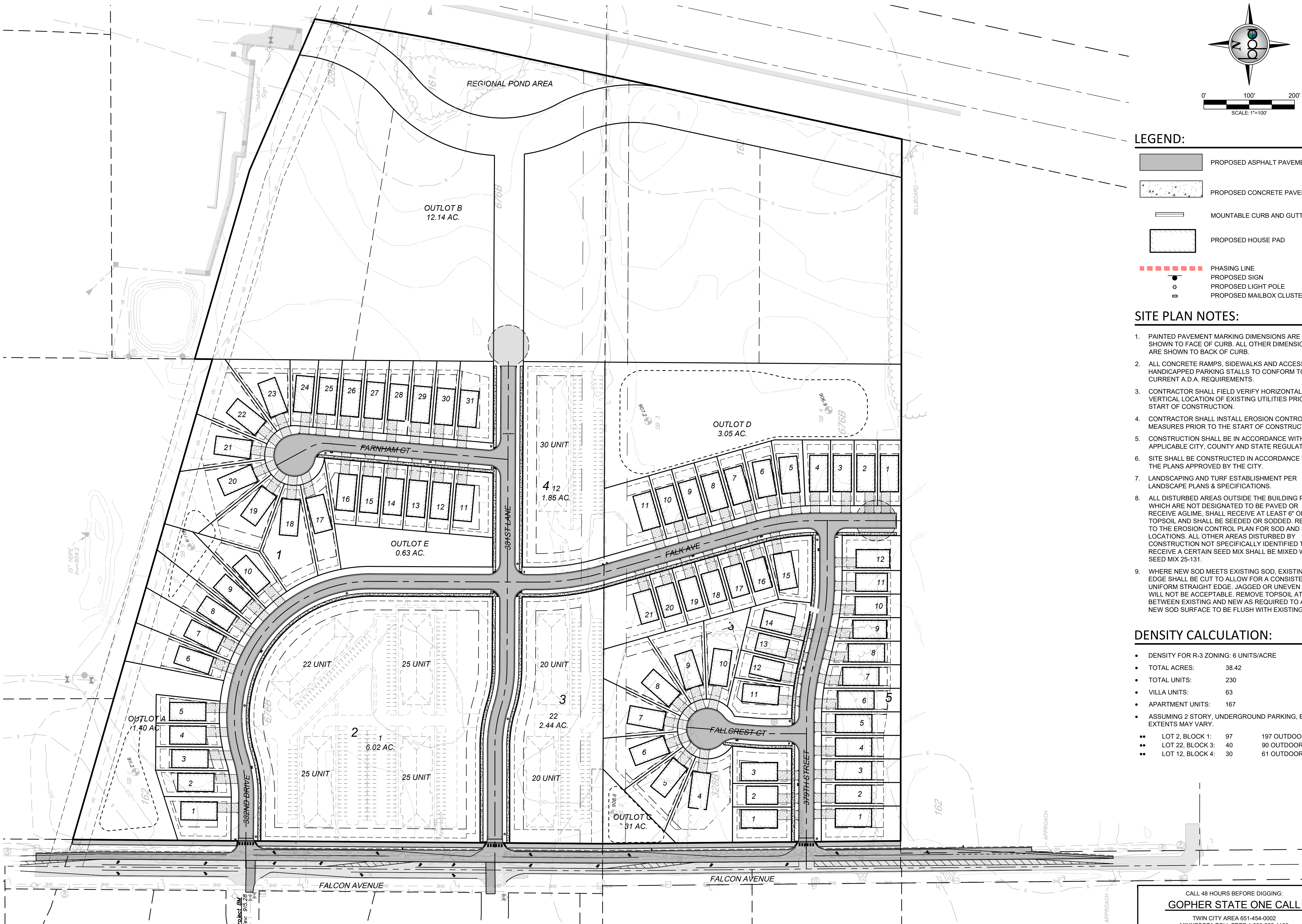
Signed: Christopher J. Dahm
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Lic. No. 58628

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LAND SURVEYING
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13076 FIRST STREET, BECKER, MN 55508-9222
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CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

SOUTH SITE PLAN

SHEET NO. **C2.2**



LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- MOUNTABLE CURB AND GUTTER
- PROPOSED HOUSE PAD
- PHASING LINE
- PROPOSED SIGN
- PROPOSED LIGHT POLE
- PROPOSED MAILBOX CLUSTER

SITE PLAN NOTES:

- PAINTED PAVEMENT MARKING DIMENSIONS ARE SHOWN TO FACE OF CURB. ALL OTHER DIMENSIONS ARE SHOWN TO BACK OF CURB.
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- ALL DISTURBED AREAS OUTSIDE THE BUILDING PAD WHICH ARE NOT DESIGNATED TO BE PAVED OR RECEIVE AGLIME, SHALL RECEIVE AT LEAST 6" OF TOPSOIL AND SHALL BE SEEDED OR SODDED. REFER TO THE EROSION CONTROL PLAN FOR SOD AND SEED LOCATIONS. ALL OTHER AREAS DISTURBED BY CONSTRUCTION NOT SPECIFICALLY IDENTIFIED TO RECEIVE A CERTAIN SEED MIX SHALL BE MIXED WITH SEED MIX 25-131.
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DENSITY CALCULATION:

- DENSITY FOR R-3 ZONING: 6 UNITS/ACRE
 - TOTAL ACRES: 38.42
 - TOTAL UNITS: 230
 - VILLA UNITS: 63
 - APARTMENT UNITS: 167
 - ASSUMING 2 STORY, UNDERGROUND PARKING, BUILDING EXTENTS MAY VARY.
- | | | |
|------------------|----|--------------------|
| LOT 2, BLOCK 1: | 97 | 197 OUTDOOR STALLS |
| LOT 22, BLOCK 3: | 40 | 90 OUTDOOR STALLS |
| LOT 12, BLOCK 4: | 30 | 61 OUTDOOR STALLS |

CALL 48 HOURS BEFORE DIGGING:
GOPHER STATE ONE CALL
TWIN CITY AREA 651-454-0002
MINNESOTA TOLL FREE 1-800-252-1166

DATE:	04/24/2025	DESIGN BY:	NJM	REVISION PER CITY REVIEW	
DESIGN BY:	NJM	DRAWN BY:	NJM	CHECKED BY:	CJD
DWG FILE:	SITE BASE	FILE NO.:	22-03030.00		

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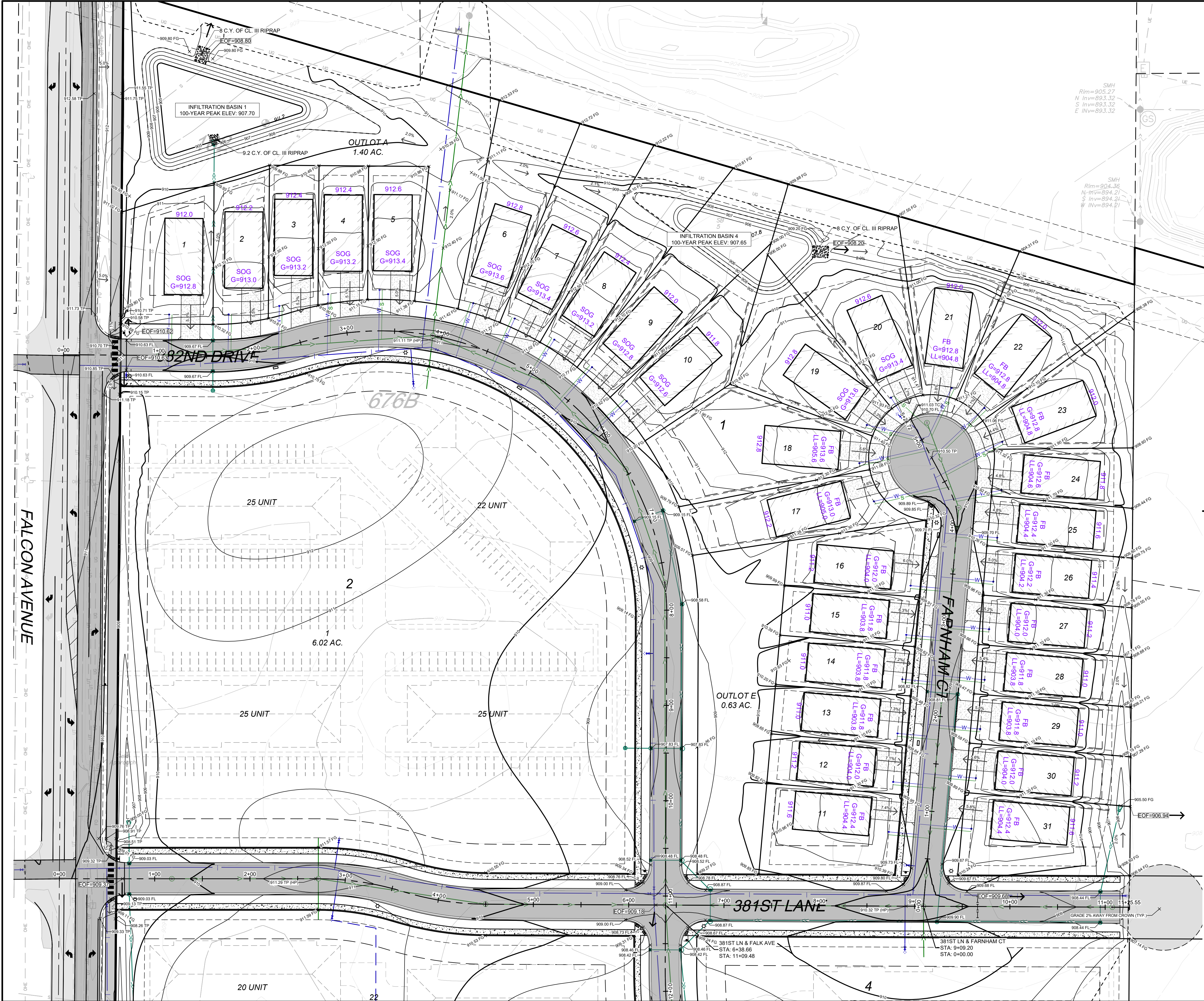
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CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

FUTURE DEVELOPMENT

SHEET NO. **C2.3**



×
×
×
×
×
×

FB
G=913.0
LL=905.0
911.5

-HOUSE TYPE
-GARAGE ELEVATION
-LOWER LEVEL ELEVATION

FB: FULL BASEMENT
SOG: SLAB ON GRADE

-BACKYARD ELEVATION

GRADING GENERAL NOTES:

1. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS IN THE FIELD REPRESENTED WITHIN THE PLANS AS SHOWN AND ALERT THE ENGINEER BEFORE BEGINNING THE PROJECT AND BEGINNING CONSTRUCTION.
2. CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES WHICH MAY AFFECT THIS WORK AND NOTIFY THE OWNER OF ANY CHANGES. CONTACT LOCAL UTILITY COMPANIES FOR EXACT LOCATIONS PRIOR TO BIDDING THE PROJECT AND COMMENCING WORK.
3. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT SILT AND DEBRIS RUN-OFF DURING GRADING OPERATIONS (I.E. SILT FENCE, STRAW BALES, ETC.).
4. CONTRACTOR SHALL VERIFY CRITICAL ELEVATIONS TO ENSURE CONFORMANCE WITH GRADING PLAN, PARTICULARLY WITH EXISTING STRUCTURES AND/OR PAVEMENTS TO REMAIN. MEET EXISTING GRADES ALONG STREETS, PROPERTY LINES, AND DRIVEWAY ENTRANCES. RESTORE ALL PAVEMENTS THAT REMAIN TO THEIR ORIGINAL IF NOT BETTER CONDITION. NOTIFY OWNER OF ANY CONFLICTS PRIOR TO BIDDING THE PROJECT.
5. TURF ESTABLISHMENT AREAS SHALL RECEIVE MINIMUM OF 4" DEPTH AS MEASURED IN PLACE OF TOPSOIL. TOPSOIL SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. ALL GRADED SLOPES GREATER THAN OR EQUAL TO 5:1 SHALL BE HYDROSEDED, EROSION CONTROL BLANKETED, OR MULCHED TO HELP STABILIZE THE SLOPES BY GENERAL CONTRACTOR.
6. PROPOSED SPOT ELEVATIONS ARE TO THE TOP OF CURB UNLESS NOTED OTHERWISE. ELEVATION OF FLOW LINE IS 6" BELOW TOP OF CURB UNLESS OTHERWISE SHOWN.
7. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING QUANTITIES OF CUT, FILL AND WASTE MATERIALS TO BE HANDLED, AND FOR AMOUNT OF GRADING TO BE DONE IN ORDER TO COMPLETELY PERFORM ALL WORK INDICATED ON THE DRAWINGS. IMPORT SUITABLE MATERIAL AND EXPORT UNSUITABLE / EXCESS / WASTE MATERIAL AS REQUIRED. ALL COSTS ASSOCIATED WITH IMPORTING AND EXPORTING MATERIALS SHALL BE INCIDENTAL TO THE CONTRACT.
8. IT IS INTENDED THAT EARTHWORK (CUT VS. FILL) WILL NOT BALANCE ON SITE. THE CONTRACTOR SHALL SUBMIT THE QUANTITY OF MATERIAL AND AMOUNT OF ANTICIPATED GRADE ADJUSTMENT FOR REVIEW BY THE ENGINEER A MINIMUM OF FOUR WEEKS PRIOR TO MAKING ADJUSTMENTS. ALL GRADE ADJUSTMENTS MUST BE APPROVED BY THE ENGINEER. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR WORK ASSOCIATED WITH GRADING ADJUSTMENTS, INCLUDING, BUT NOT LIMITED TO, EARTHWORK OPERATIONS, STORM SEWER PIPING AND STRUCTURE ADJUSTMENTS. CONSTRUCTION SURVEYING FOR ADJUSTING FEATURE LOCATIONS ACCORDINGLY, SILT FENCE, ETC.
9. FAILURE OF TURF DEVELOPMENT, IN THE EVENT THE CONTRACTOR FAILS TO PROVIDE AN ACCEPTABLE TURF, THE CONTRACTOR SHALL RE-SEED OR RE-SOD ALL APPLICABLE AREAS, AT NO ADDITIONAL COST TO THE OWNER, TO THE SATISFACTION OF THE ENGINEER.
10. ANY MANHOLE, CATCH BASIN, STORM SEWER, SANITARY SEWER, DRAINILE, OR OTHER POTENTIAL SOURCE FOR CONTAMINATION SHALL BE INSTALLED AT LEAST 10 FEET HORIZONTALLY FROM ANY WATERMAIN PER MINNESOTA PLUMBING CODE. THIS ISOLATION DISTANCE SHALL BE MEASURED FROM THE OUTER EDGE OF THE PIPE TO THE OUTER EDGE OF THE CONTAMINATION SOURCE (OUTER EDGE OF STRUCTURES OR PIPING OR SIMILAR).
11. CONTRACTOR SHALL MAINTAIN DRAINAGE FROM EXISTING BUILDING AT ALL TIMES. PROVIDE TEMPORARY STORM SEWER INCLUDING, BUT NOT LIMITED TO, CATCH BASINS, MANHOLES, PIPING, ETC.) AS REQUIRED. EXISTING STORM SEWER SHALL NOT BE REMOVED UNTIL TEMPORARY OR PERMANENT STORM SEWER IS INSTALLED AND FUNCTIONAL. COORDINATE ALL REMOVALS WITH APPROPRIATE TRADES (SITE UTILITY CONTRACTOR, MECHANICAL CONTRACTOR, ETC.) AS REQUIRED.
12. ALL GRADING AND CONSTRUCTION IN THE SMALL UTILITY EASEMENTS WILL NEED TO BE APPROVED AND COORDINATED WITH THE UTILITY PROVIDER.

DATE:	04/24/2025	DESIGN BY:	NJM	DRAWN BY:	NJM	CHECKED BY:	CJD	DWG FILE:	GRADING	FILE NO.:	22-0030.00
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.											
NOT FOR CONSTRUCTION											
Signed: Christopher J. Dahn Lic. No. 58628											
Date: _____											

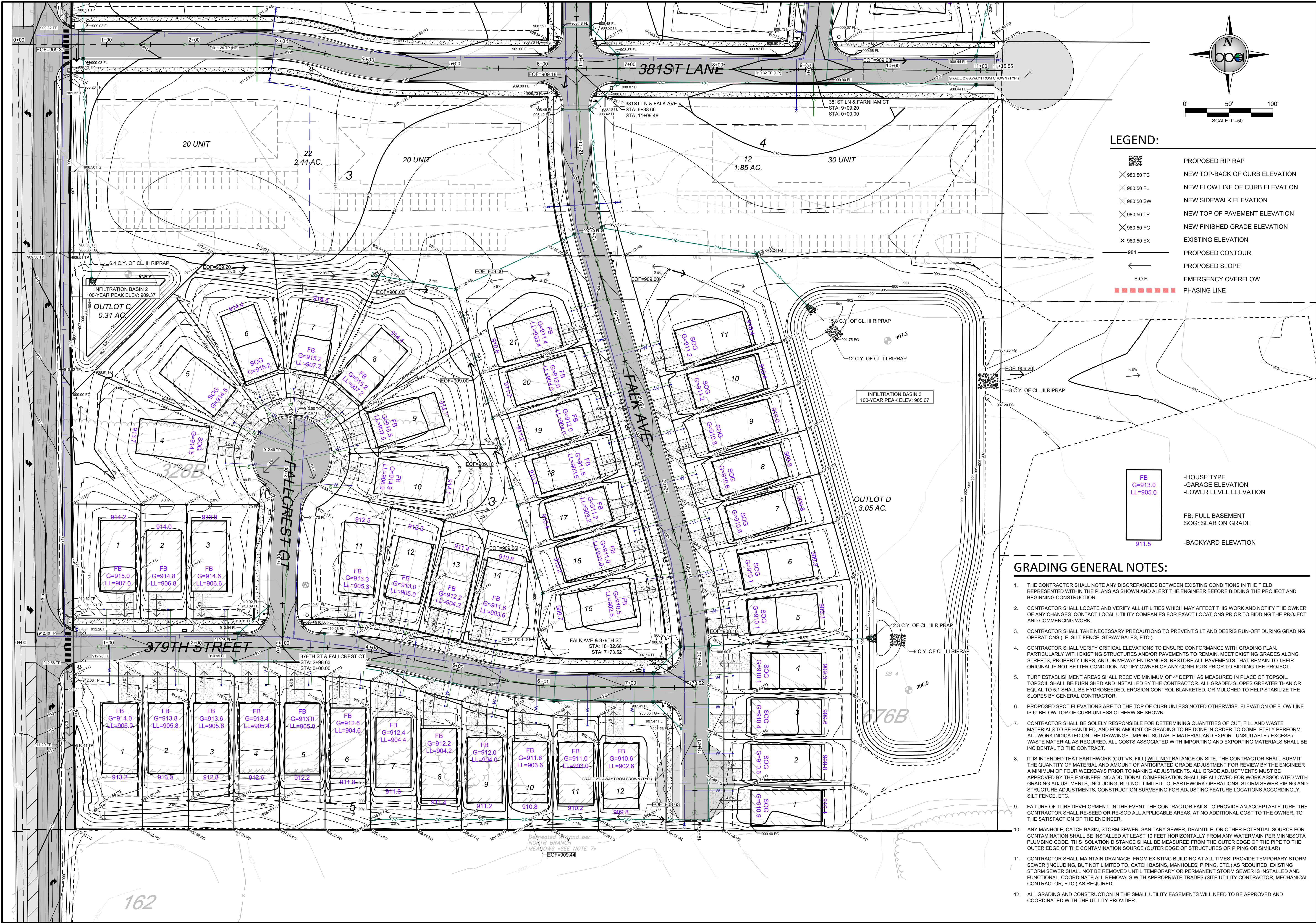
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TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chisago County, MN

SHEET NO.

C3.1

NORTH GRADING PLAN



DATE:	DESIGN BY:	DRAWN BY:	CHECKED BY:	DWG FILE:	FILE NO.:
04/24/2025	NJM	NJM	NJM	GRADING	22-0030.00
04/01/2025					
04/24/2025					

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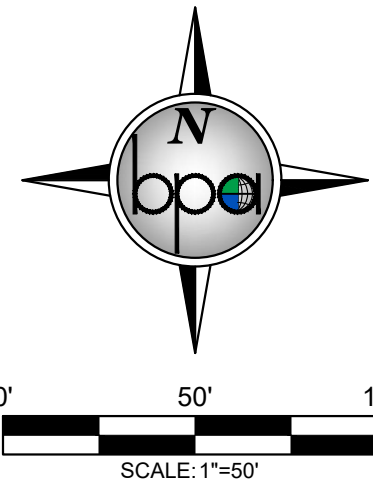
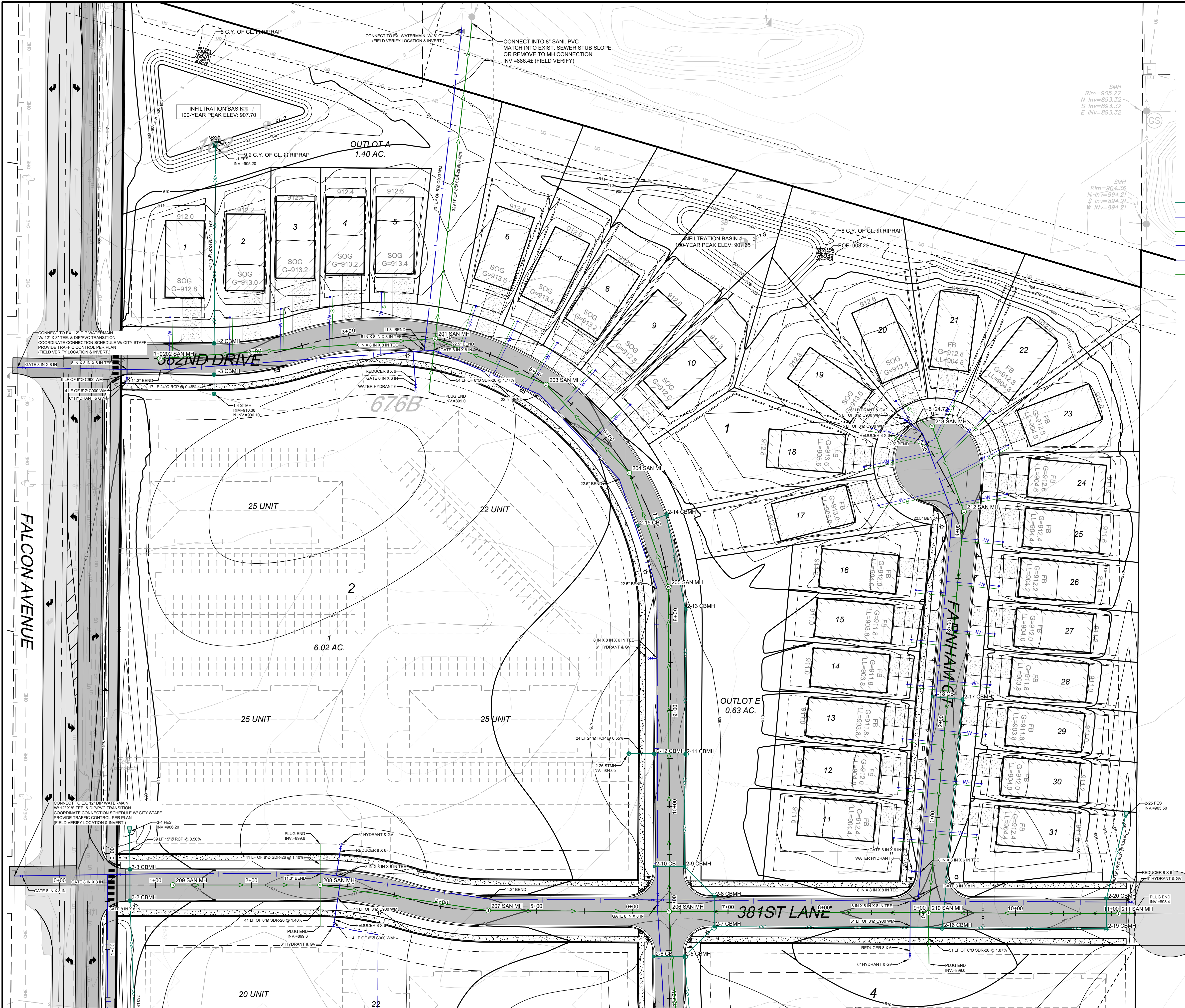
Signed: Christopher J. Dahm
Date: 4/24/2025
Lic. No. 58628

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CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

SOUTH GRADING PLAN

SHEET NO. **C3.2**



LEGEND:

- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED FITTING
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
- PROPOSED SANITARY MANHOLE
- PROPOSED FLARED END SECTON
- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED GATE VALVE & BOX
- PROPOSED HYDRANT
- PROPOSED CLEANOUT
- PROPOSED RIP RAP
- PHASING LINE

UTILITY GENERAL NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL UTILITY RELOCATIONS.
- CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES WHICH MAY AFFECT THIS WORK AND NOTIFY OWNER OF ANY CHANGES. CONTACT LOCAL UTILITY COMPANIES FOR EXACT LOCATIONS PRIOR TO BIDDING THE PROJECT AND COMMENCING WORK.
- CONTRACTOR SHALL VERIFY CRITICAL ELEVATIONS TO ENSURE CONFORMANCE WITH GRADING PLAN AND EXISTING UTILITIES. PARTICULARLY WITH EXISTING STRUCTURES AND/OR PAVEMENTS TO REMAIN.
- THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AS EXISTING IN THE FIELD AND AS REPRESENTED WITHIN THE PLANS AS SHOWN AND ALERT THE ENGINEER BEFORE BIDDING THE PROJECT AND BEGINNING CONSTRUCTION.
- WATER LINE TO MINIMUM 8.0 FEET DEPTH.
- VERIFY INVERT ELEVATIONS OF EXISTING SANITARY LINE AT POINT OF CONNECTION WITH NEW SANITARY LINE PRIOR TO INSTALLING ANY NEW UTILITIES.
- ALL CROSSING ELEVATIONS OF NEW UTILITIES & SIZES OF THE EXISTING UTILITIES ARE BASED ON ASSUMED ELEVATIONS AND SIZES PROVIDED BY THE SURVEY.
- ALL SANITARY SERVICE PIPE AND FITTINGS WILL BE SCHDULE 40.
- ALL STORM SEWER SHALL BE PVC SCHEDULE 40 WHEN LESS THAN 8" IN DIAMETER. ALL RCP STORM SEWER SHALL BE CLASS V PIPE UNLESS OTHERWISE NOTED. ALL HDPE STORM SEWER SHALL BE DUAL WALL HIGH PERFORMANCE POLYPROPYLENE PIPE AND SHALL CONFORM TO AASHTO M330.
- ALL WATER LINES 4" OR GREATER SHALL CONFORM TO AWWA C900 OR GRADE PE-3408 OR GRADE PE4710 PIPE AND SHALL BE RATED FOR 200 PSI. ALL WATER LINES LESS THAN 4" SHALL CONFORM TO AWWA C901 SDR 7 (HDPE WATER LINE) OR TYPE K COPPER PIPE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING TWO CONSECUTIVE PASSING BACTERIOLOGICAL TESTS FROM THE PROPOSED WATER SERVICE.
- THE APPLICANT SHALL BE RESPONSIBLE FOR REPLACING ANY CONCRETE PAVEMENT WHICH IS DAMAGED OR REMOVED AS A RESULT OF THE PROPOSED WATER, SANITARY, STORM SEWER SERVICE INSTALLATION.
- IF DEWATERING IS REQUIRED FOR THIS PROJECT, THE PUMP DISCHARGE SHALL BE TREATED PRIOR TO BEING DISCHARGED OFF-SITE OR INTO A SURFACE WATER. THE DISCHARGE SHALL BE VISUALLY CHECKED TO ENSURE THAT IT IS VISIBLY CLEAN WATER. NO DEWATERING IS EXPECTED FOR THIS SITE DUE TO SANDY SOIL CONDITIONS.
- ALL EXISTING CASTINGS FOR SANITARY SEWER AND STORM STRUCTURES WITHIN PROPOSED WORK AREAS THAT ARE WITHIN THE CITY RIGHT OF WAY WILL BE REPLACED WITH TYPE A OR TYPE E CASTINGS AS SHOWN ON APPLICABLE CITY STD. PLATE STRT-14. ALL ADJUSTING RINGS WILL BE REPLACED WITH HDPE ADJUSTING RINGS.
- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLAN FOR PAVEMENT REMOVAL, UTILITY INSTALLATION, AND REPLACEMENT AS NEEDED.
- SANITARY SERVICE RISER PIPE SHALL BE OUTSIDE OF THE ROAD RIGHT OF WAY. RISERS SHALL BE PLACED ON THE PROPERTY LINE IF REQUIRED. SEE DETAIL SAN-001.

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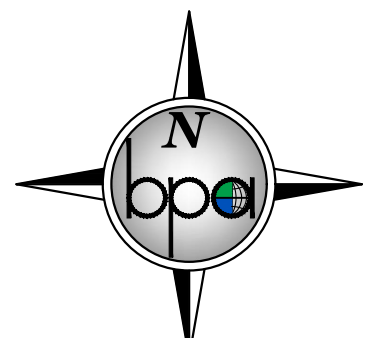
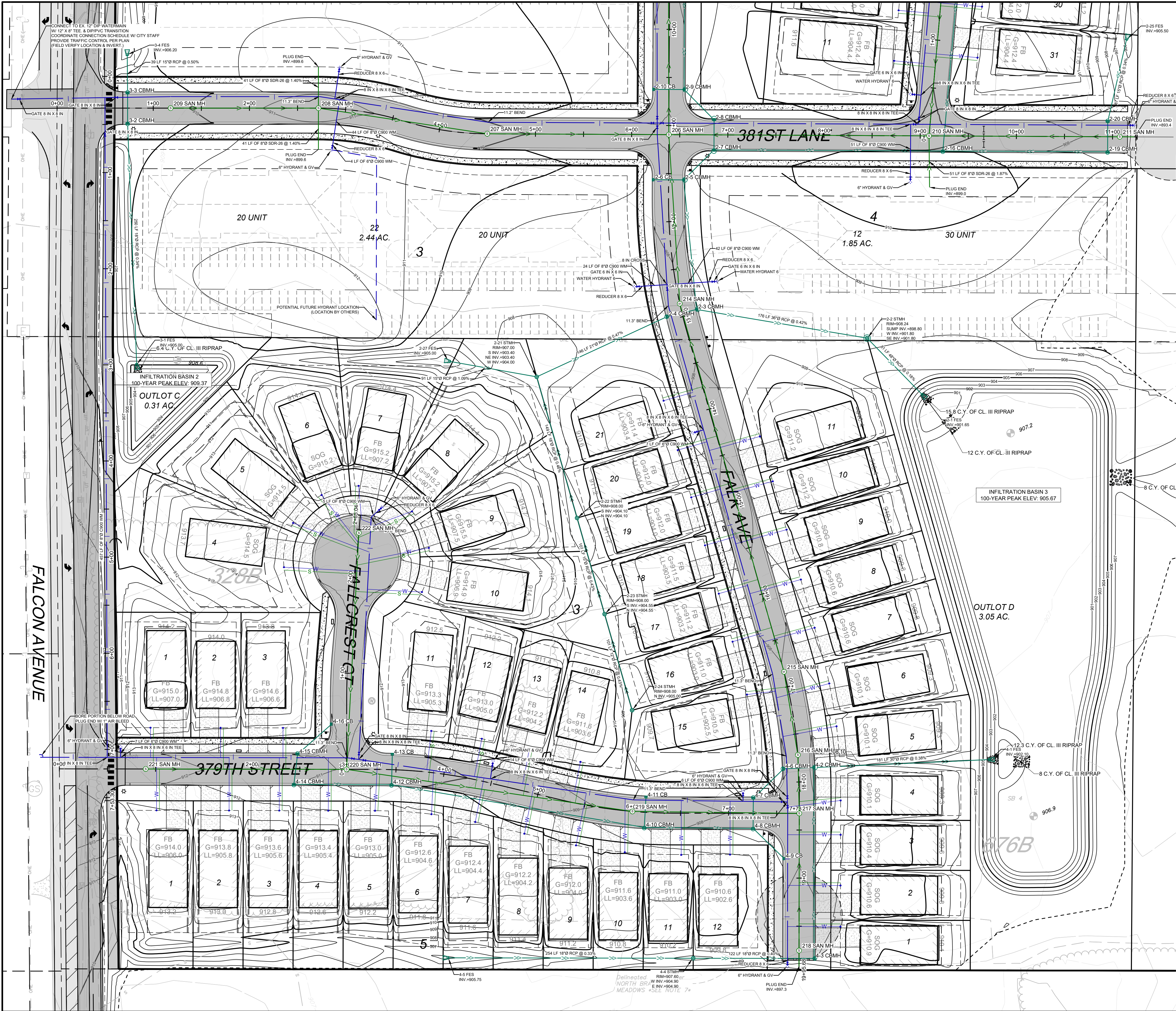
DATE:	04/24/2025
DESIGN BY:	NJM
DRAWN BY:	NJM
CHECKED BY:	CJD
DWG FILE:	UTILITY
FILE NO.:	22-0300.00

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Signed: Christopher J. Dahm	File No. 58628
Date:	

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13076 FIRST STREET, BECKER, MN 55009-9322	TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC	CEDAR RIDGE COMMUNITY
City of North Branch, Chisago County, MN	
NORTH UTILITY PLAN	

SHEET NO.	C4.1
-----------	------



LEGEND:

- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED FITTING
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
- PROPOSED SANITARY MANHOLE
- PROPOSED FLARED END SECTION
- PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED GATE VALVE & BOX
- PROPOSED HYDRANT
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- WATER LINE TO MINIMUM 8.0 FEET DEPTH.
- VERIFY INVERT ELEVATIONS OF EXISTING SANITARY LINE AT POINT OF CONNECTION WITH NEW SANITARY LINE PRIOR TO INSTALLING ANY NEW UTILITIES.
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CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

SOUTH UTILITY PLAN

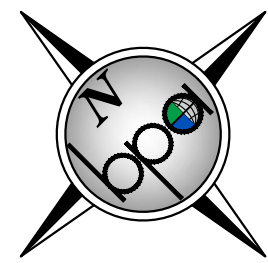
SHEET NO.

C4.2

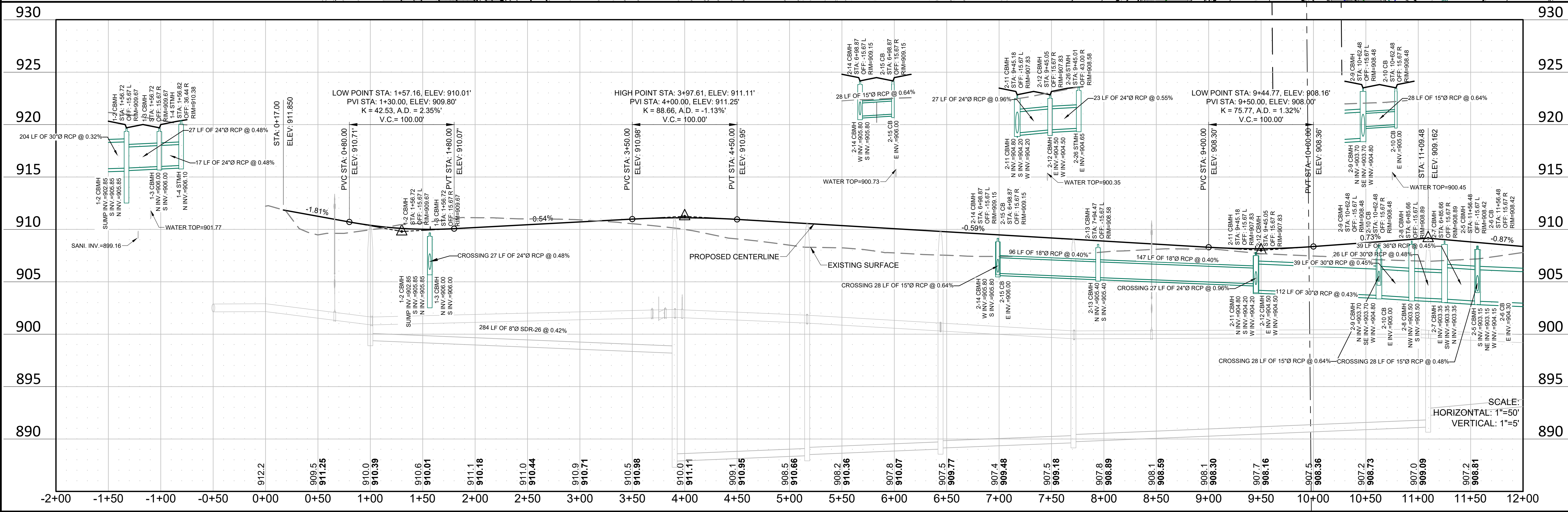
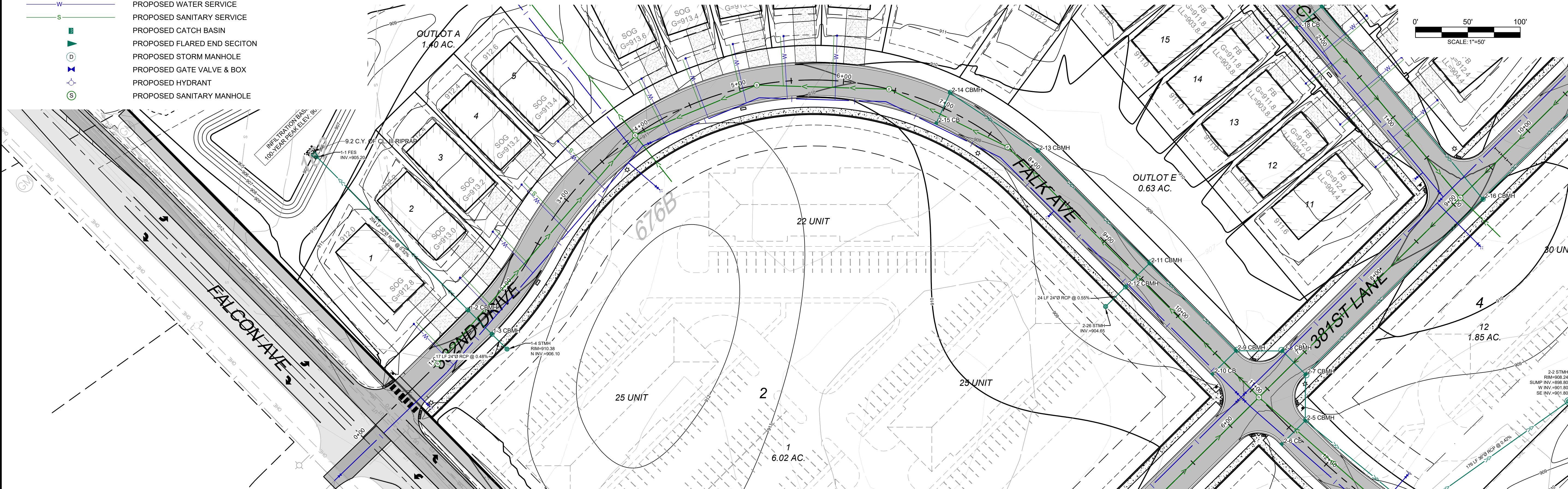
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LEGEND:

- PROPOSED RIP RAP
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
- PROPOSED CATCH BASIN
- PROPOSED FLARED END SECITON
- PROPOSED STORM MANHOLE
- PROPOSED GATE VALVE & BOX
- PROPOSED HYDRANT
- PROPOSED SANITARY MANHOLE



0' 50' 100'
SCALE: 1"=50'



REV NO.	DATE	DESCRIPTION
1	04/01/2025	REVISION PER CITY REVIEW
2	04/24/2025	REVISION PER CITY REVIEW

DATE:	DESIGN BY:	DRAWN BY:	CHECKED BY:	DWG FILE:	FILE NO.:
04/24/2025	NJM	NJM	NJM	GRADING	22-0030.00

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.

NOT FOR CONSTRUCTION

Signed: Christopher J. Dahn
Date: 4/24/2025
Lic. No. 58628

BOGART, PEDERSON & ASSOCIATES, INC.
LAND SURVEYING & ENGINEERING
13076 FIRST STREET, BECKER, MN 55009-9322
TEL: 763-262-8822 FAX: 763-262-8844

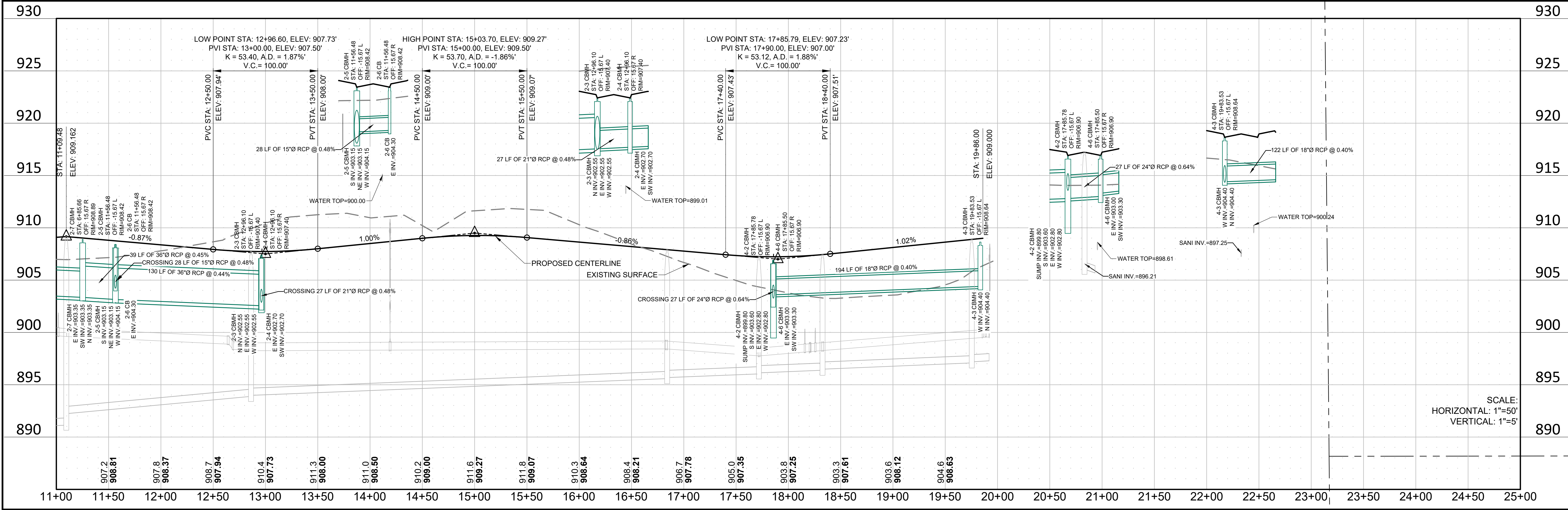
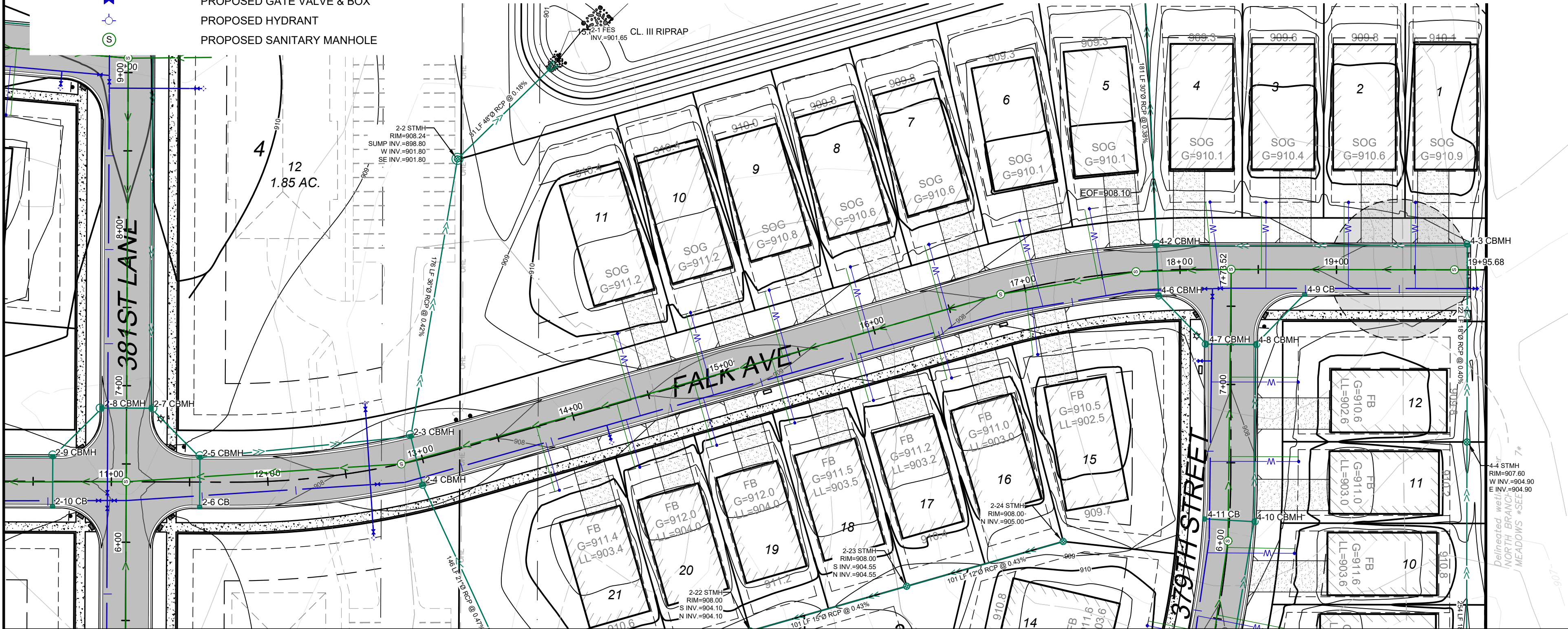
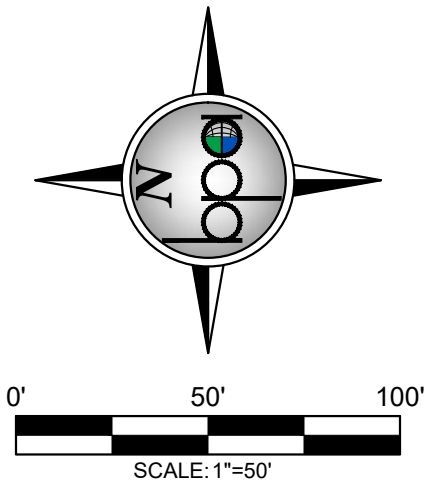
CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

382ND & FALK AVE (STREET & STORM)

SHEET NO.
C5.1

LEGEND:

- PROPOSED RIP RAP
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
- PROPOSED CATCH BASIN
- PROPOSED FLARED END SECITON
- PROPOSED STORM MANHOLE
- PROPOSED GATE VALVE & BOX
- PROPOSED HYDRANT
- PROPOSED SANITARY MANHOLE



REV NO.	DATE	DESCRIPTION
1	04/01/2025	DESIGN BY: NJM
2	04/24/2025	DRAWN BY: NJM
		CHECKED BY: CJD
		DWG FILE: GRADING
		FILE NO.: 22-0030.00

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NOT FOR CONSTRUCTION

Signed: Christopher J. Dahn Lic. No. 58628

Date: 22-0030.00

BOGART, PEDERSON & ASSOCIATES, INC.

LAND SURVEYING
ENGINEERING
ENVIRONMENTAL SERVICES

13076 FIRST STREET BECKER, MN 55009-9922
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

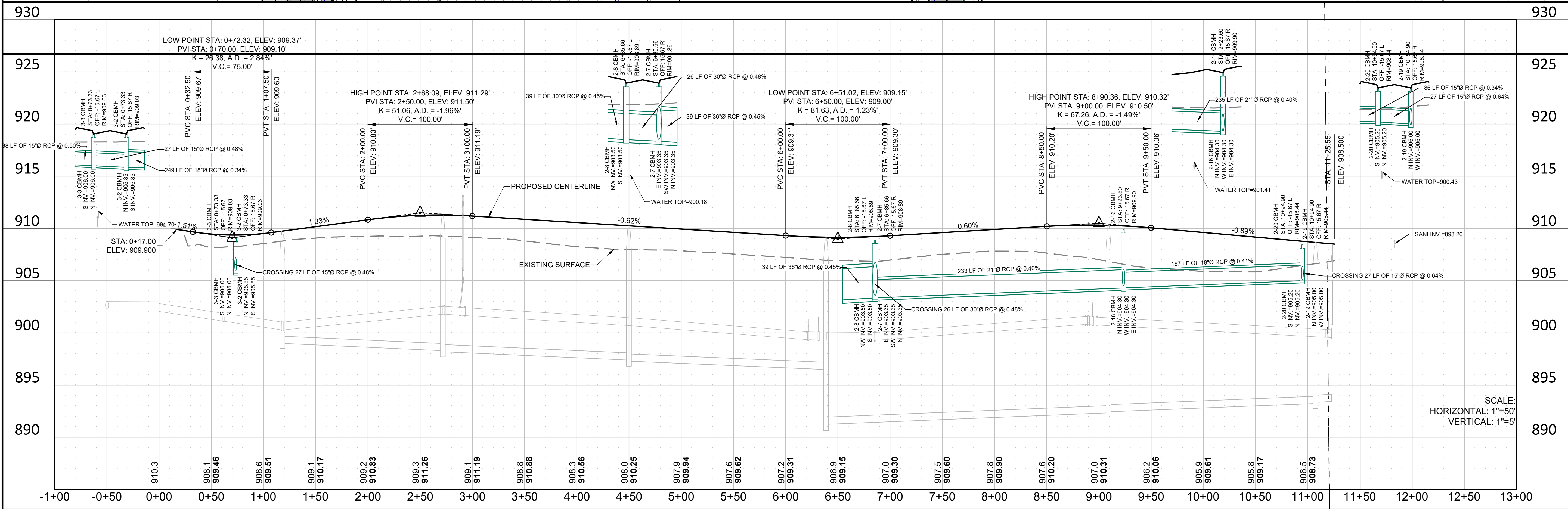
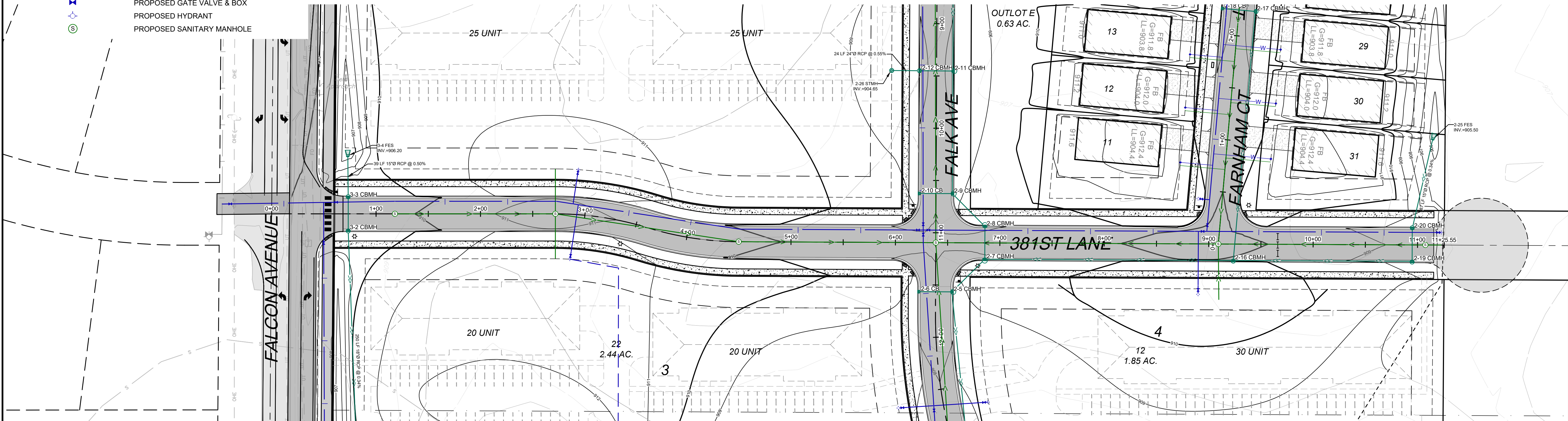
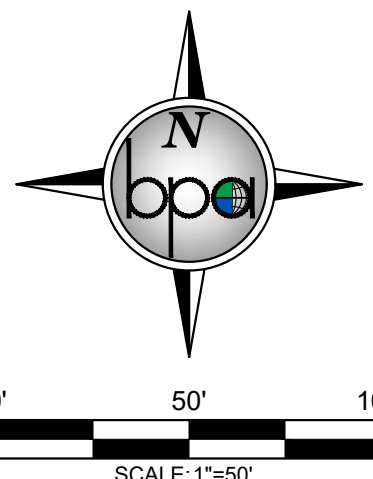
FALK AVE (STREET & STORM)

SHEET NO. **C5.2**

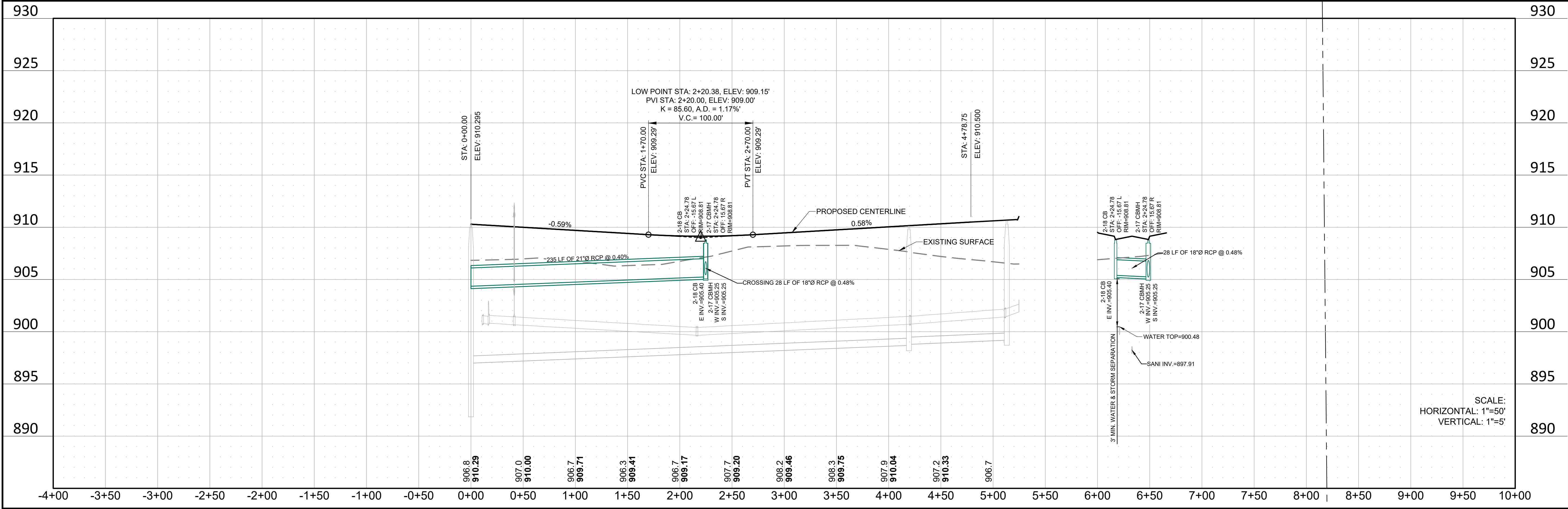
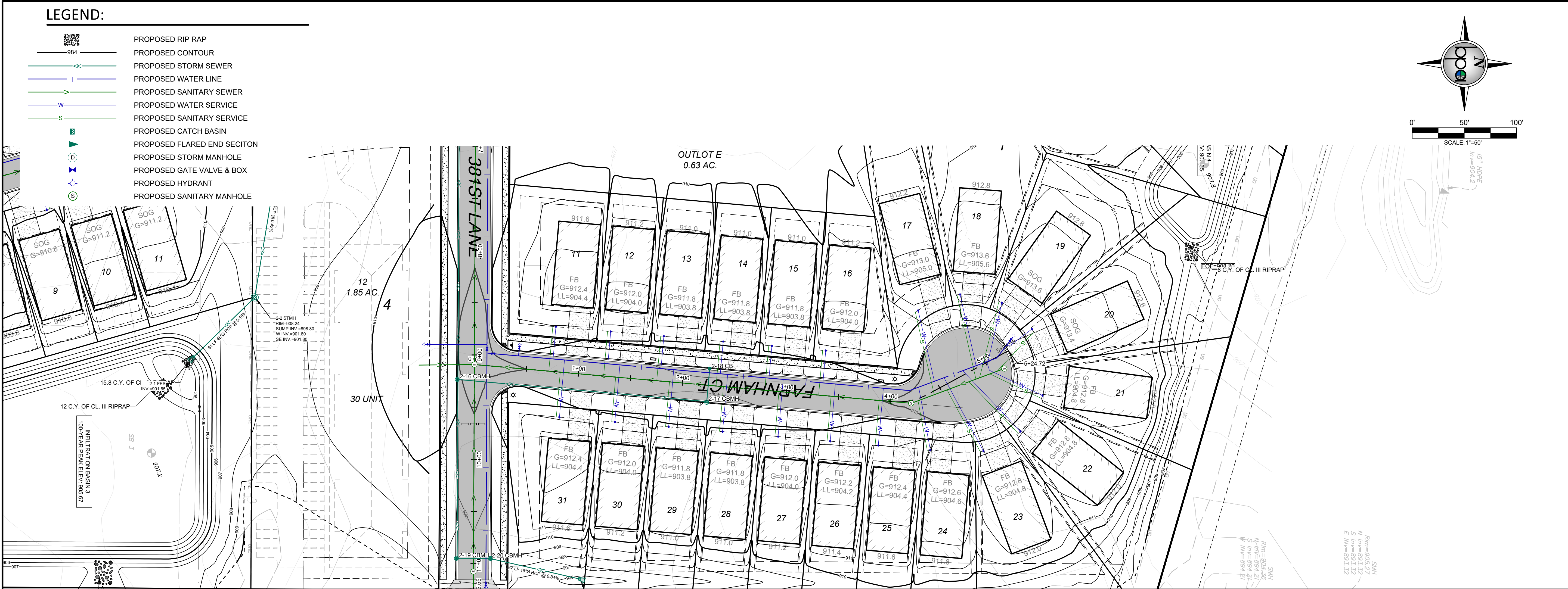
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LEGEND:

- PROPOSED RIP RAP
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
- PROPOSED CATCH BASIN
- PROPOSED FLARED END SECITON
- PROPOSED STORM MANHOLE
- PROPOSED GATE VALVE & BOX
- PROPOSED HYDRANT
- PROPOSED SANITARY MANHOLE



DATE: 04/24/2025	DESIGN BY: NJM	DRAWN BY: NJM	CHECKED BY: CJD	DWG FILE: 22-0030.00	FILE NO: 22-0030.00
REV NO. 1	DATE 04/01/2025	DESCRIPTION REVISION PER CITY REVIEW	REV NO. 2	DATE 04/24/2025	DESCRIPTION REVISION PER CITY REVIEW
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.					
NOT FOR CONSTRUCTION					
Signed: Christopher J. Dahn					
Date: _____ Lic. No. 58628					
BOGART, PEDERSON & ASSOCIATES, INC.					
LAND SURVEYING ENGINEERING ENVIRONMENTAL SERVICES 13076 FIRST STREET, BECKER, MN 55009-9322 TEL: 763-262-8822 FAX: 763-262-8844					
CEDAR RIDGE COMMUNITY LLC CEDAR RIDGE COMMUNITY City of North Branch, Chicago County, MN					
381ST LANE (STREET & STORM)					
SHEET NO. C5.3					



REV NO.	DATE	DESCRIPTION
1	04/01/2025	REVISION PER CITY REVIEW
2	04/24/2025	REVISION PER CITY REVIEW

DATE: 04/24/2025
DESIGN BY: MJM
DRAWN BY: MJM
CHECKED BY: CJD
DWG FILE: GRADING
FILE NO.: 22-0030.00

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NOT FOR CONSTRUCTION

Signed: Christopher J. Dahn
Date: 58628
Lic. No.

BOGART, PEDERSON & ASSOCIATES, INC.
LAND SURVEYING
ENGINEERING
ENVIRONMENTAL SERVICES
13076 FIRST STREET BECKER, MN 55005-0922
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

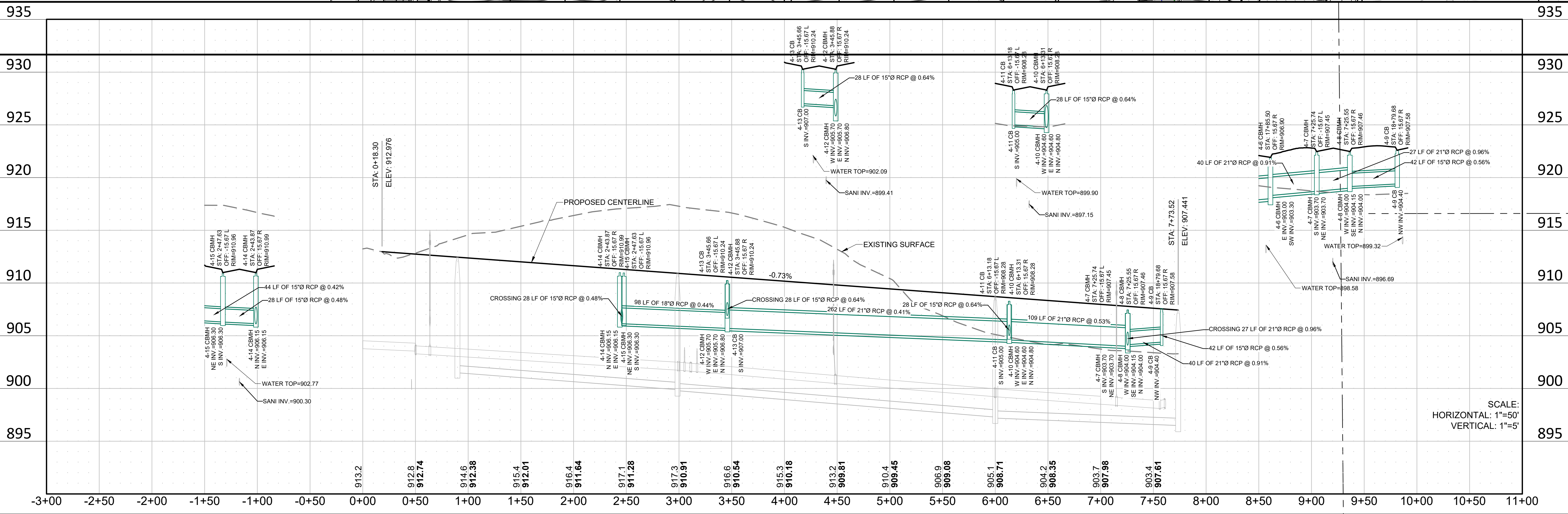
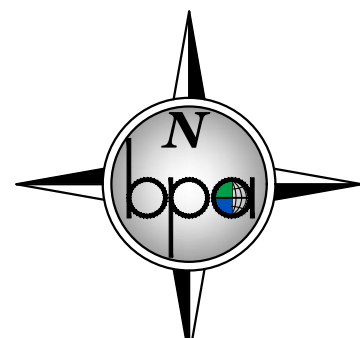
FARNHAM CT (STREET & STORM)

SHEET NO.

C5.4

LEGEND:

- PROPOSED RIP RAP
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
- PROPOSED CATCH BASIN
- PROPOSED FLARED END SECITON
- PROPOSED STORM MANHOLE
- PROPOSED GATE VALVE & BOX
- PROPOSED HYDRANT
- PROPOSED SANITARY MANHOLE



DATE: 04/24/2025

DESIGN BY: MJM

DRAWN BY: MJM

CHECKED BY: CJD

DWG FILE: 22-0300.00

FILE NO:

REV NO. 1

DATE 04/01/2025

DESCRIPTION REVISION PER CITY REVIEW

REV NO. 2

DATE 04/24/2025

DESCRIPTION REVISION PER CITY REVIEW

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NOT FOR CONSTRUCTION

Signed: Christopher J. Dahn

Date: 58628

Lic. No.

BOGART, PEDERSON & ASSOCIATES, INC.

LAND SURVEYING & ENGINEERING

13076 FIRST STREET, BECKER, MN 55009-9322

TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC

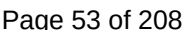
CEDAR RIDGE COMMUNITY

City of North Branch, Chicago County, MN

SHEET NO.

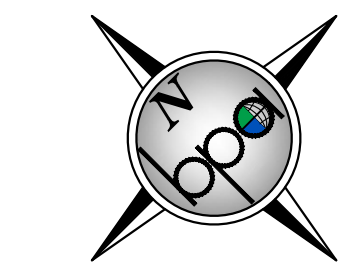
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Page 52 of 208

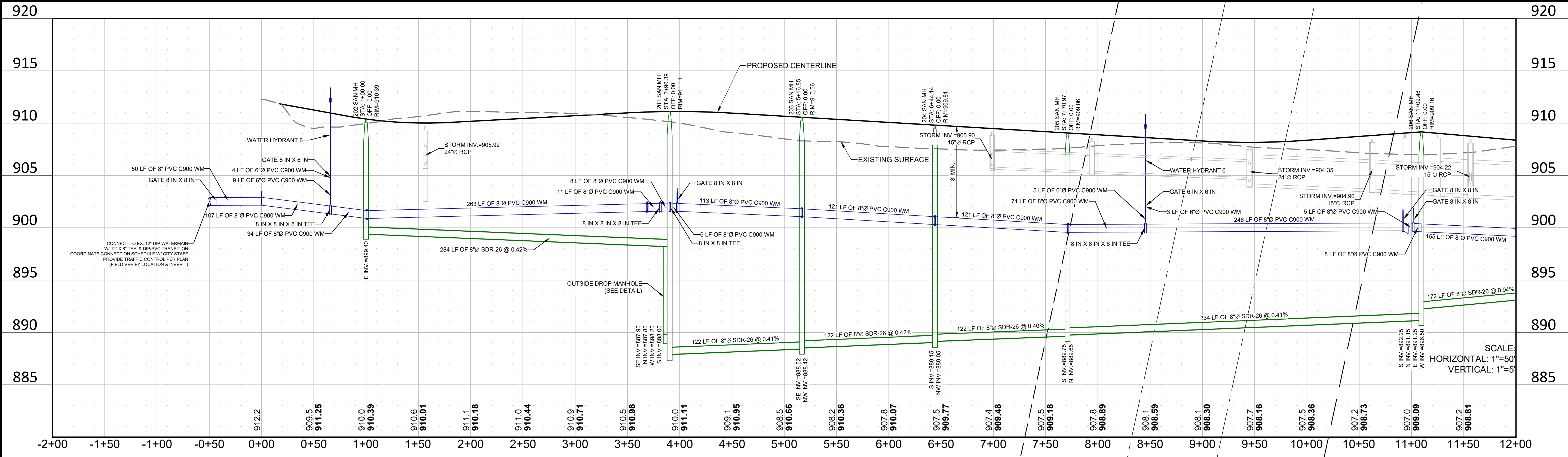
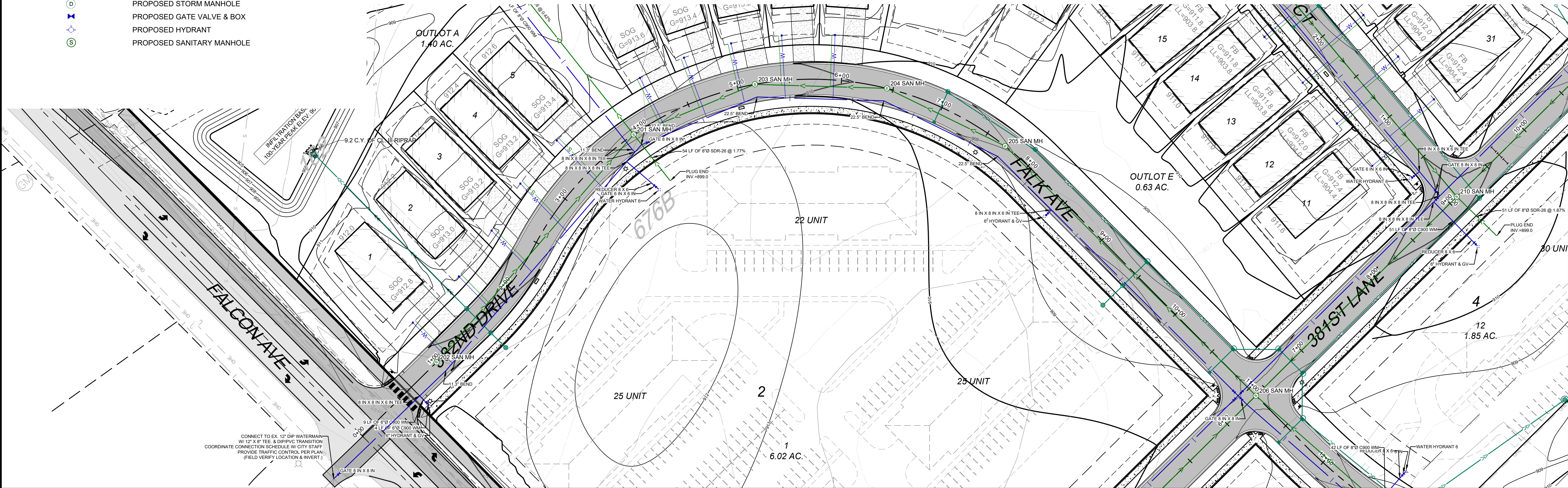


LEGEND:

- PROPOSED RIP RAP
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
- PROPOSED CATCH BASIN
- PROPOSED FLARED END SECITON
- PROPOSED STORM MANHOLE
- PROPOSED GATE VALVE & BOX
- PROPOSED HYDRANT
- PROPOSED SANITARY MANHOLE



0' 50' 100'
SCALE: 1"=50'



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NOT FOR CONSTRUCTION

Signed: Christopher J. Dahn
Date: 58628
Lic. No.

BOGART, PEDERSON & ASSOCIATES, INC.
LAND SURVEYING
ENGINEERING
ENVIRONMENTAL SERVICES
13076 FIRST STREET, BECKER, MN 55009-9322
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

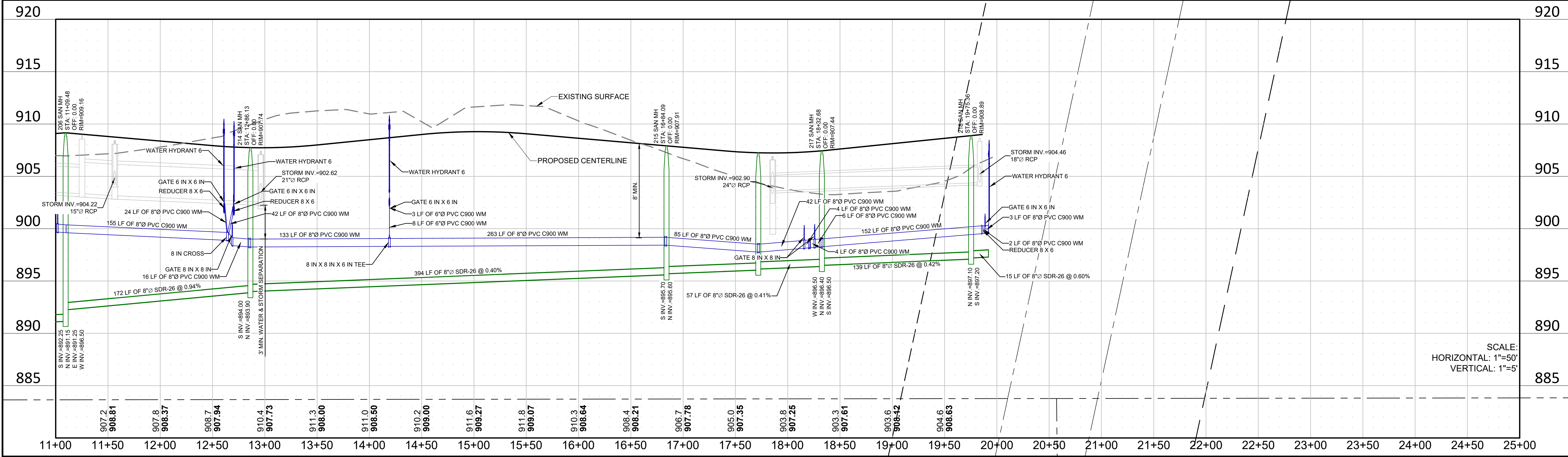
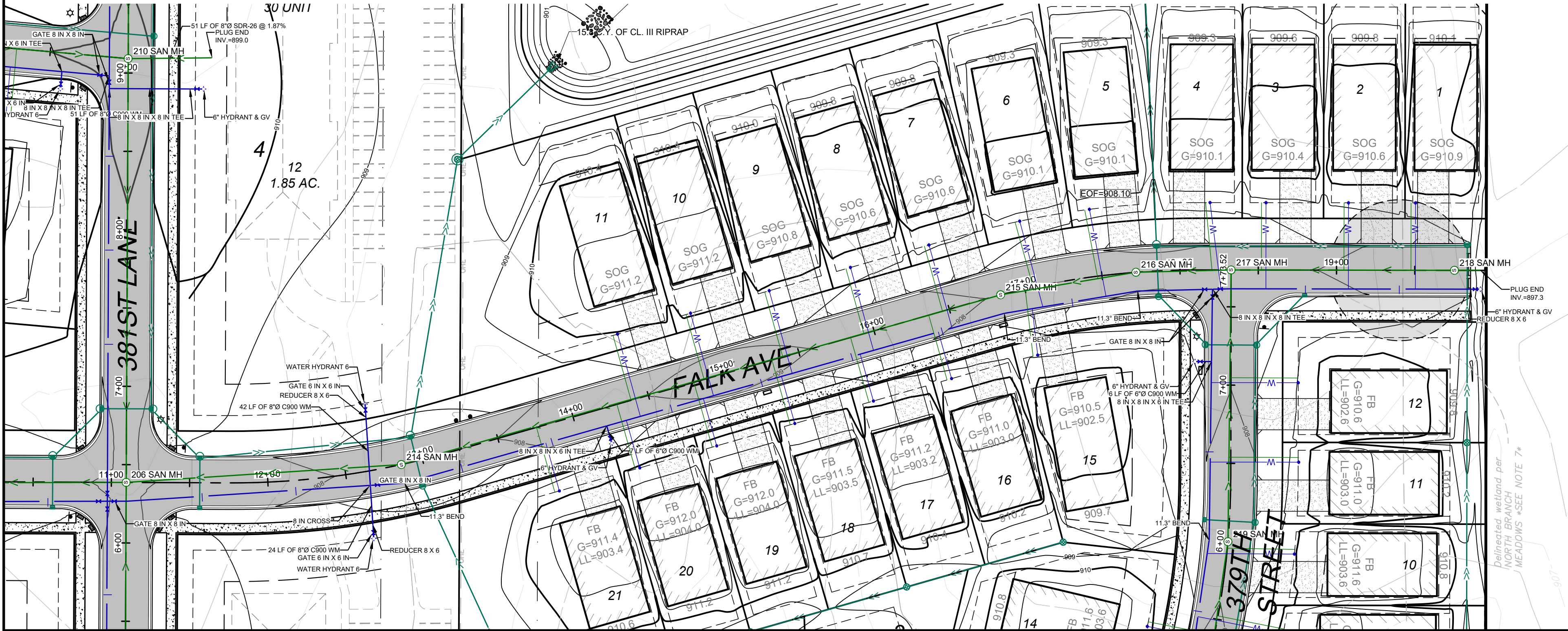
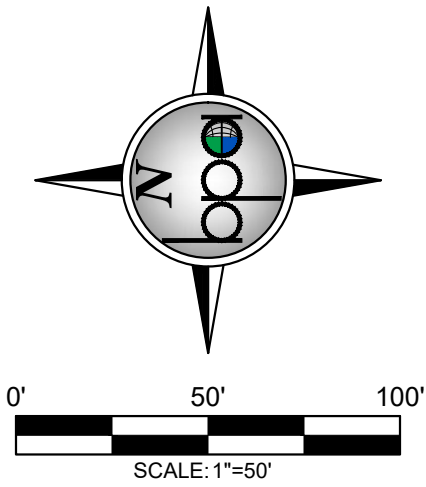
382ND & FALK AVE (SANI. & WATER)

SHEET NO.

C6.1

LEGEND:

- PROPOSED RIP RAP
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED WATER SERVICE
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04/24/2025	NJM	NJM	CJD	GRADING	22-0030.00

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NOT FOR CONSTRUCTION

Signed: Christopher J. Dahn
Date: 5/8/28
Lic. No. 58628

BOGART, PEDERSON & ASSOCIATES, INC.
LAND SURVEYING
ENGINEERING
ENVIRONMENTAL SERVICES
13076 FIRST STREET, BECKER, MN 55005-9322
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

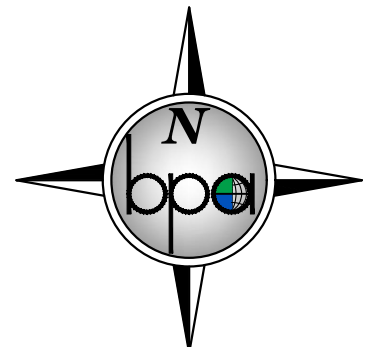
FALK AVE (SANI. & WATER)

SHEET NO. **C6.2**

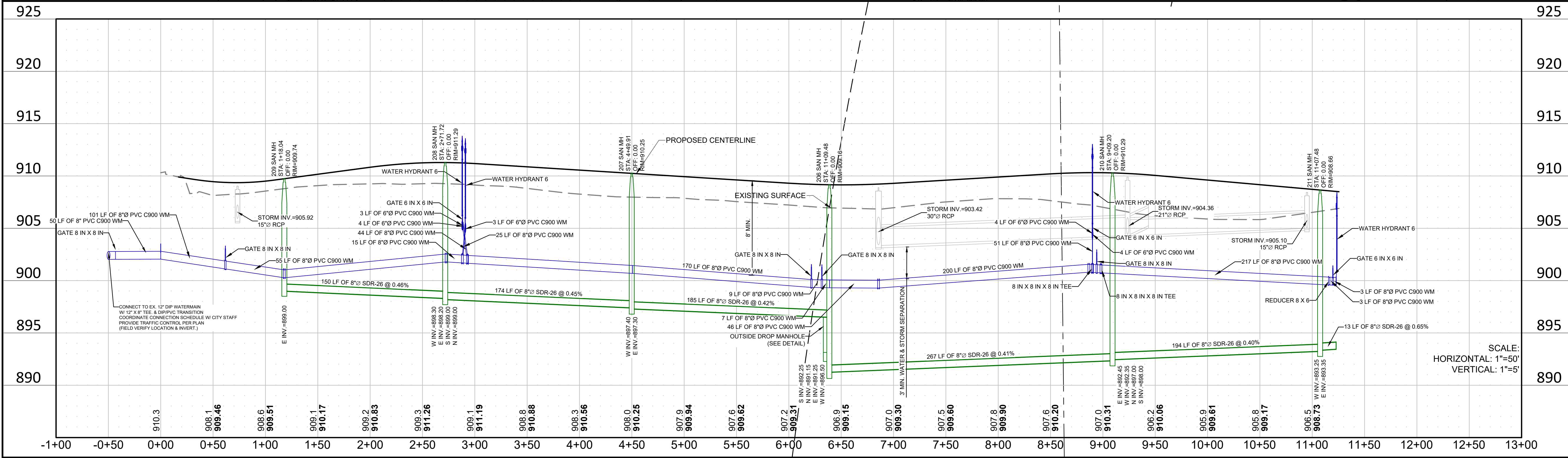
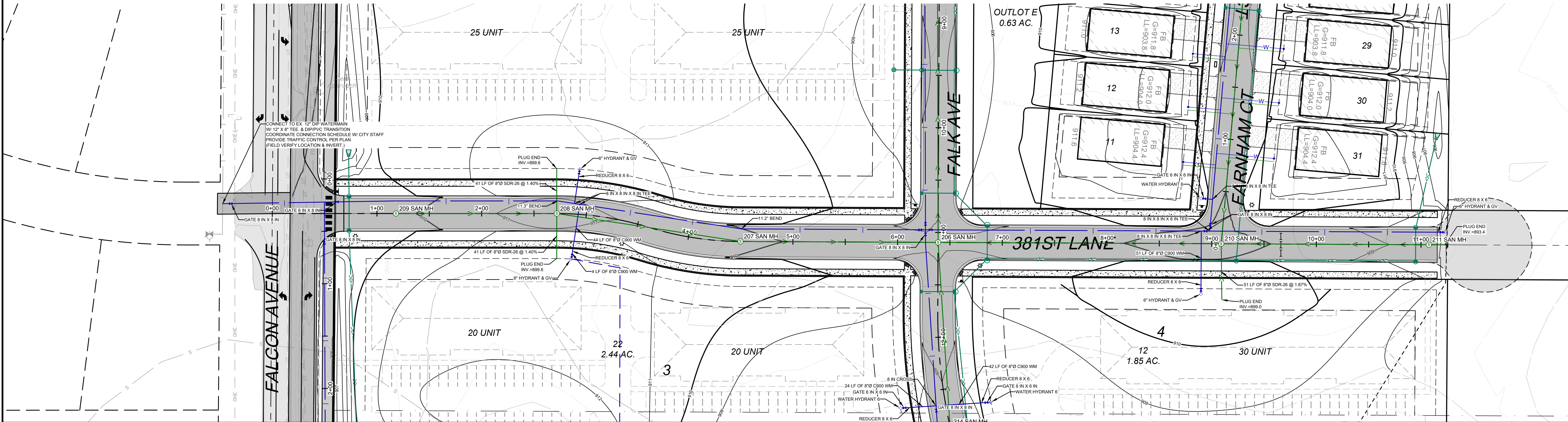
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LEGEND:

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- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
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- PROPOSED GATE VALVE & BOX
- PROPOSED HYDRANT
- PROPOSED SANITARY MANHOLE



0' 50' 100'
SCALE: 1"=50'



DATE: 04/24/2025		REV NO. 1	DATE 04/01/2025	DESCRIPTION REVISION PER CITY REVIEW
DESIGN BY: NJM		2	04/24/2025	REVISION PER CITY REVIEW
DRAWN BY: NJM				
CHECKED BY: CJD				
DWG FILE: GRADING				
FILE NO.: 22-0030.00				

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Signed: Christopher J. Dahn
Date: _____ Lic. No. 58628

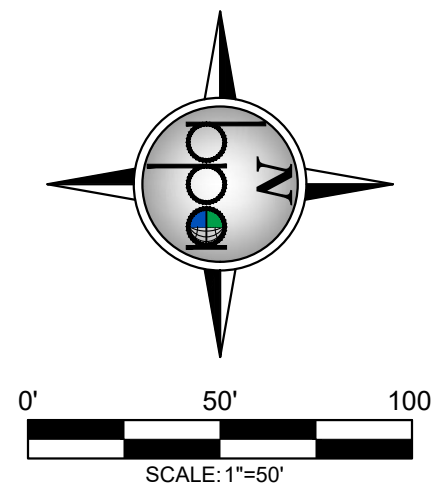
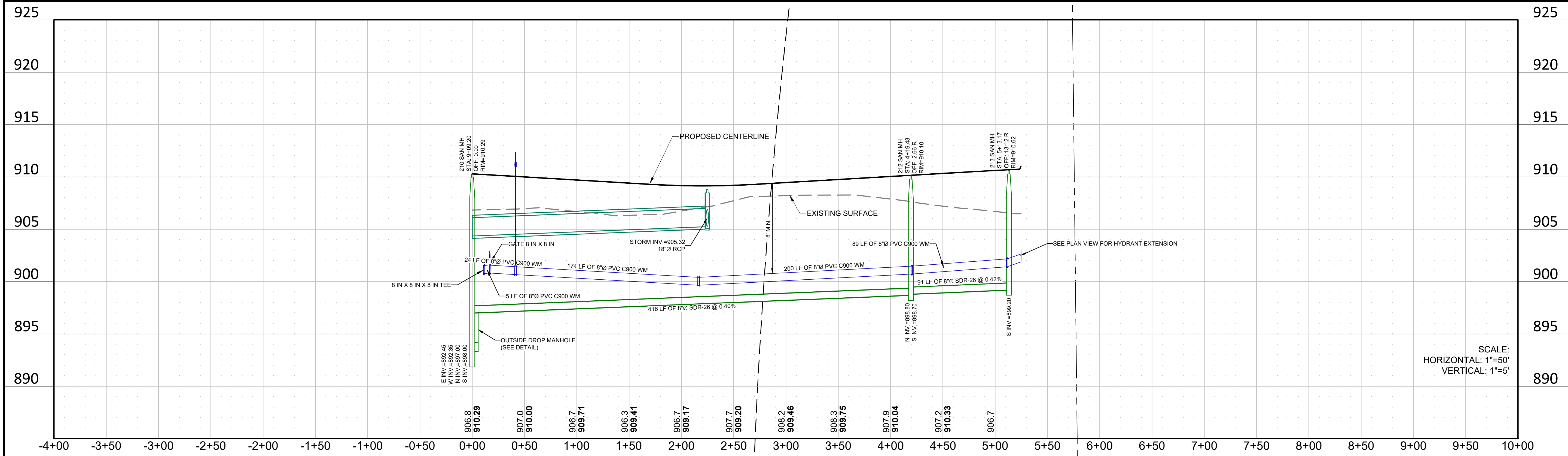
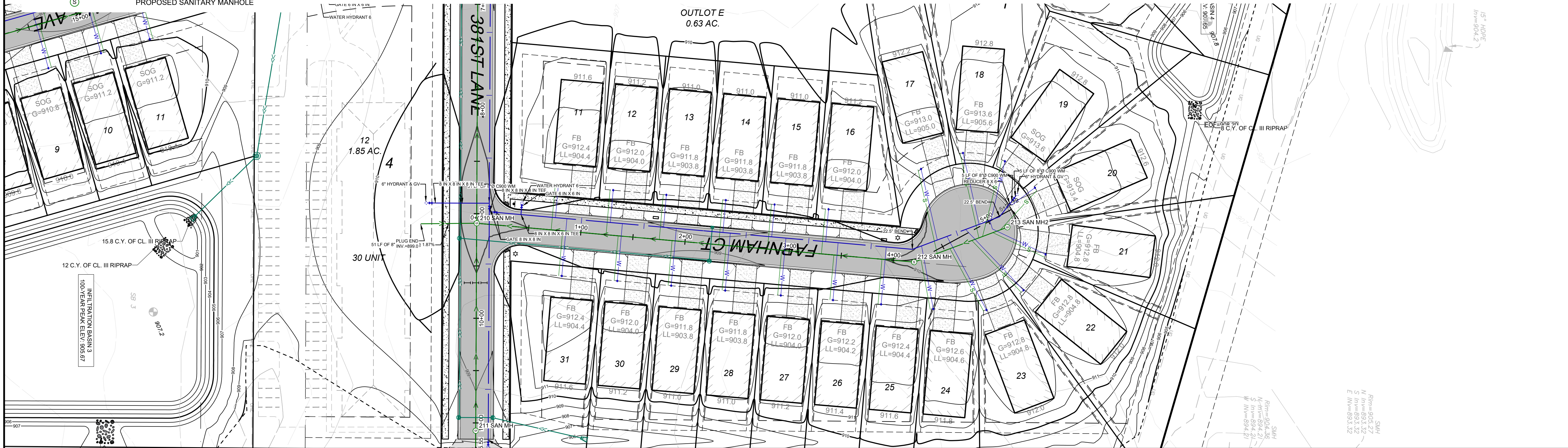
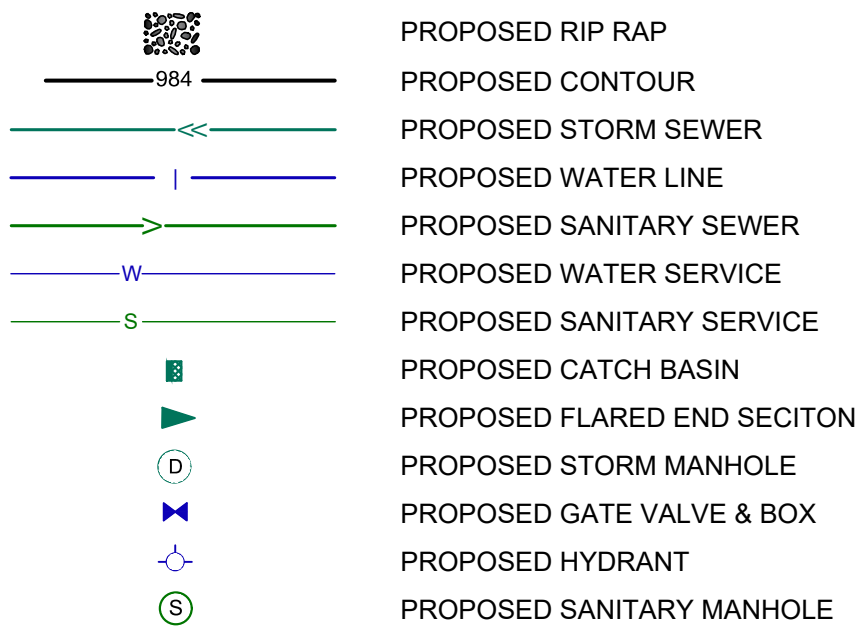
BOGART, PEDERSON & ASSOCIATES, INC.
LAND SURVEYING
ENVIRONMENTAL SERVICES
13076 FIRST STREET, BECKER, MN 55009-9322
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

381ST LANE (SANI. & WATER)

SHEET NO. **C6.3**

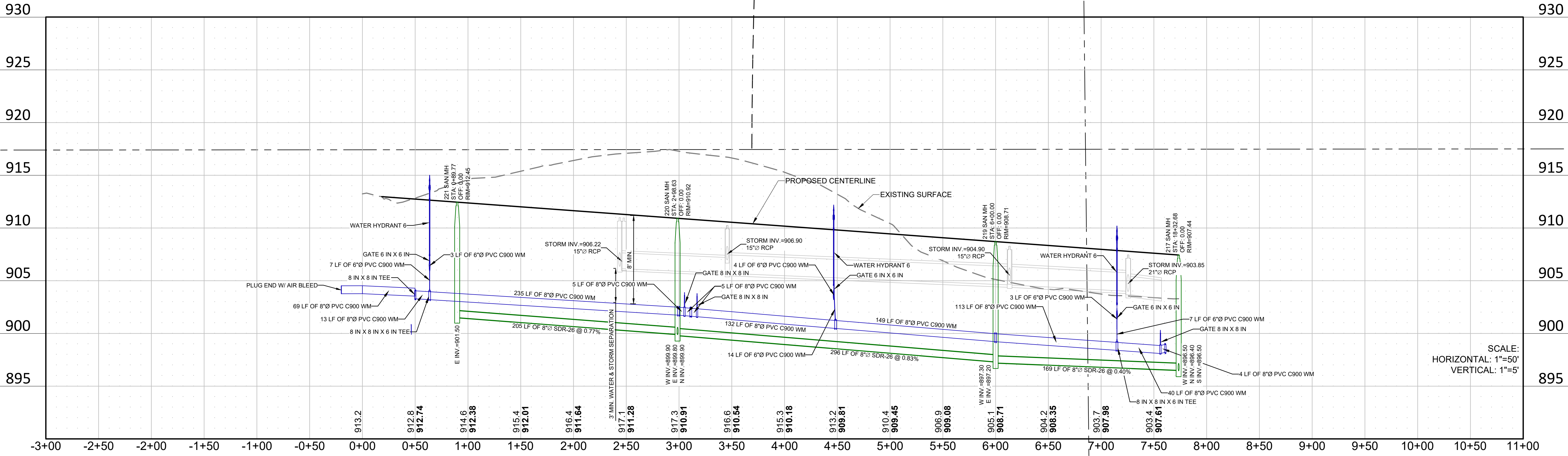
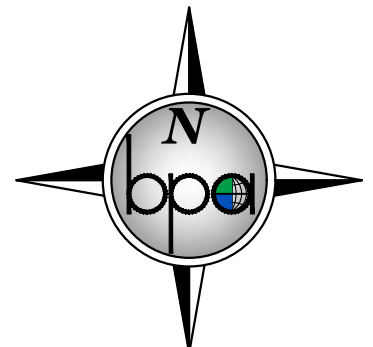
LEGEND:



SHEET NO.	CEDAR RIDGE COMMUNITY LLC CEDAR RIDGE COMMUNITY	 BOGART, PEDERSON & ASSOCIATES, INC. LAND SURVEYING CIVIL ENGINEERING ENVIRONMENTAL SERVICES 13076 FIRST STREET, BECKER, MN 55308-9322 TEL: 763-262-8822 FAX: 763-262-8844	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.		DATE: 04/24/2025	REV NO. 1	DESCRIPTION
	City of North Branch, Chisago County, MN		DESIGN BY: MJM	04/01/2025	REVISION PER CITY REVIEW		
C6.4	FARNHAM CT (SANI. & WATER)		DRAWN BY: MJM	04/24/2025		2	REVISION PER CITY REVIEW
			CHECKED BY: CJD				
			DWG FILE: GRADING				
			FILE NO.: 22-0030.00				
			NOT FOR CONSTRUCTION				
			Signed: Christopher J. Dahn				
			Date: _____ Lic. No. 58628				

LEGEND:

- PROPOSED RIP RAP
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
- PROPOSED CATCH BASIN
- PROPOSED FLARED END SECITON
- PROPOSED STORM MANHOLE
- PROPOSED GATE VALVE & BOX
- PROPOSED HYDRANT
- PROPOSED SANITARY MANHOLE



DATE: 04/24/2025
DESIGN BY: NJM
DRAWN BY: NJM
CHECKED BY: CJD
DWG FILE: 22-0030.00
FILE NO.: 22-0030.00

DESCRIPTION
REVISION PER CITY REVIEW
REVISION PER CITY REVIEW

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Date: 58628
Lic. No.

BOGART, PEDERSON & ASSOCIATES, INC.

LAND SURVEYING
ENGINEERING
ENVIRONMENTAL SERVICES
13076 FIRST STREET, BECKER, MN 55509-9222
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

379TH STREET (SANI. & WATER)

SHEET NO.

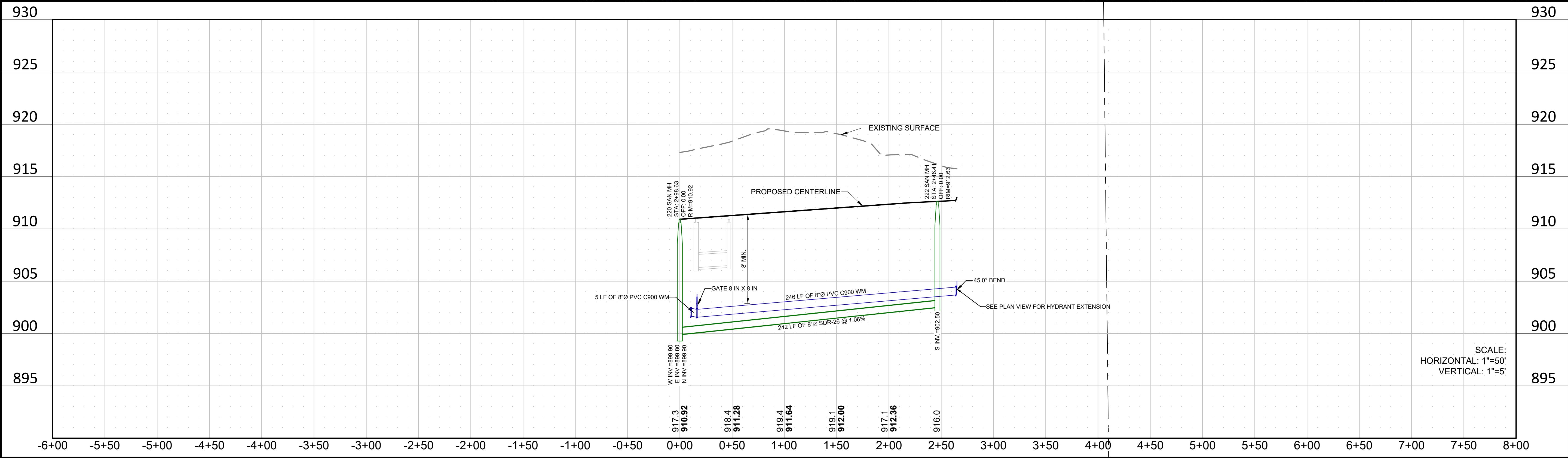
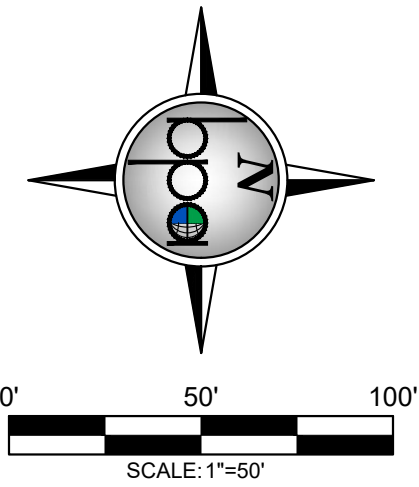
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Page 58 of 208

LEGEND:

- PROPOSED RIP RAP
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
- PROPOSED CATCH BASIN
- PROPOSED FLARED END SECITON
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- PROPOSED GATE VALVE & BOX
- PROPOSED HYDRANT
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DATE:	04/24/2025
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DRAWN BY:	NJM
CHECKED BY:	CJD
DWG FILE:	GRADING
FILE NO.:	22-0300.00

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NOT FOR CONSTRUCTION

Signed: Christopher J. Dahn Lic. No. 58628

Date: _____

BOGART, PEDERSON & ASSOCIATES, INC.

LAND SURVEYING
ENGINEERING
ENVIRONMENTAL SERVICES

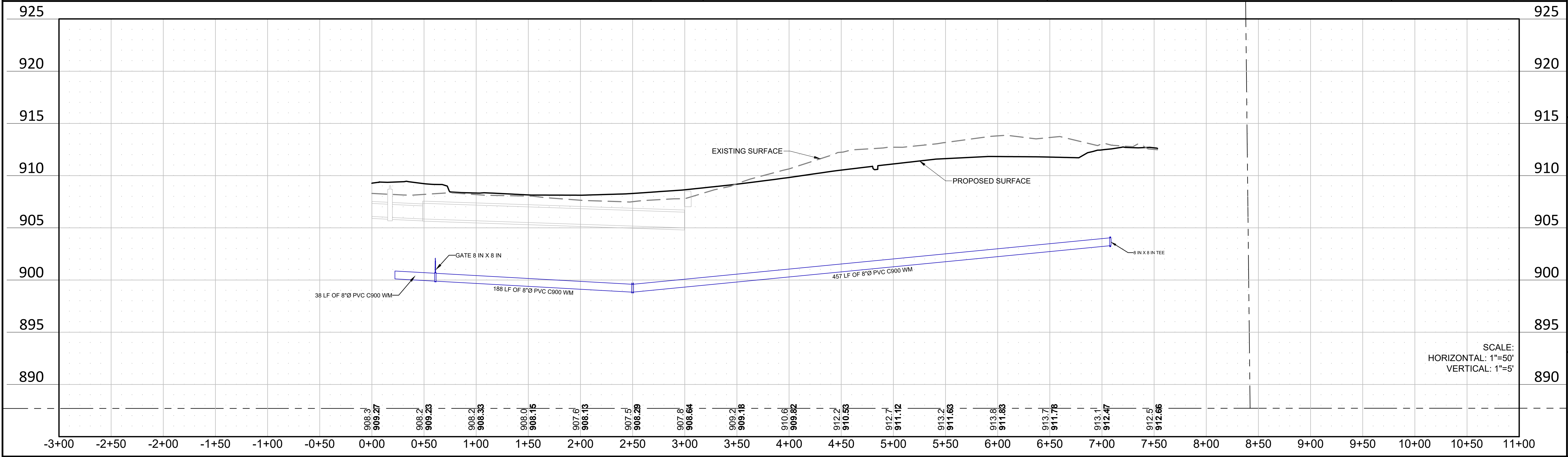
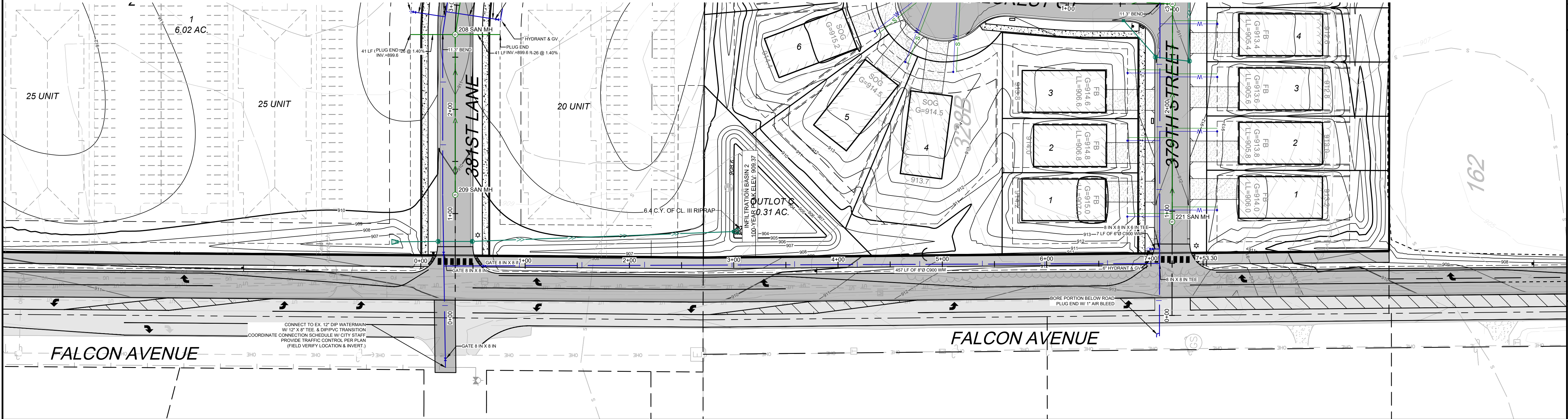
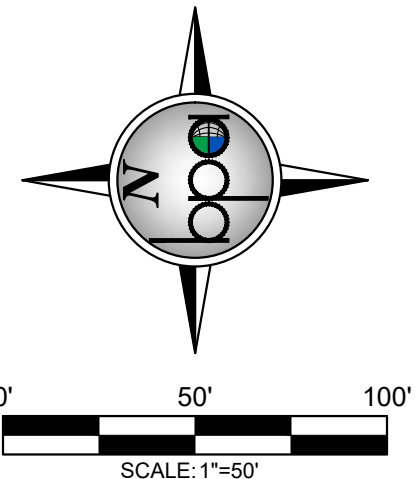
13076 FIRST STREET, BECKER, MN 55509-9322
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC	Cedar Ridge Community City of North Branch, Chicago County, MN
FALLCREST CT (SANI. & WATER)	

SHEET NO.	C6.6
-----------	------

LEGEND:

- PROPOSED RIP RAP
- PROPOSED CONTOUR
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
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- PROPOSED HYDRANT
- PROPOSED SANITARY MANHOLE



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	DESIGN BY:	NJM
	DRAWN BY:	NJM
	CHECKED BY:	CJD
BOGART, PEDERSON & ASSOCIATES, INC. LAND SURVEYING ENGINEERING ENVIRONMENTAL SERVICES 13076 FIRST STREET, BECKER, MN 55508-9322 TEL: 763-262-8822 FAX: 763-262-8844	REV NO.	1
	DATE	04/01/2025
	DESCRIPTION	REVISION PER CITY REVIEW
	FILE NO.	22-0030.00
SHEET NO. C6.7		

CEDAR RIDGE COMMUNITY SERVICE INFORMATION												
Lot Design			Elevation Information		Sanitary Service							
Block	Lot	House Type	Basement	Street	Wye Sta.	Dist. From Down MH	Main Inv.	Length	Riser Height	End Inv.	Basement to End Inv.	Diam. & Mat.
1	1	SOG	912.8	382ND DRIVE	1+13.2	272	899.34	42.0	2	902.85	9.95	4" PVC SDR-26
1	2	SOG	913.0	382ND DRIVE	1+76.0	209	899.08	37.5	3	903.50	9.50	4" PVC SDR-26
1	3	SOG	913.2	382nd DRIVE	2+29.7	156	898.86	42.6	3	903.38	9.82	4" PVC SDR-26
1	4	SOG	913.2	382nd DRIVE	2+80.7	105	898.65	51.2	3	903.34	9.86	4" PVC SDR-26
1	5	SOG	913.4	382nd DRIVE	3+36.3	51	898.42	51.8	3	903.13	10.27	4" PVC SDR-26
1	6	SOG	913.6	382nd DRIVE	4+17.3	29	888.01	47.5	14	903.63	9.97	4" PVC SDR-26
1	7	SOG	913.4	382nd DRIVE	4+59.0	71	888.19	49.6	14	903.85	9.55	4" PVC SDR-26
1	8	SOG	913.2	382nd DRIVE	5+00.2	111	888.35	46.1	14	903.94	9.26	4" PVC SDR-26
1	9	SOG	912.8	382nd DRIVE	5+42.0	22	888.63	47.4	13	903.25	9.55	4" PVC SDR-26
1	10	SOG	912.6	382nd DRIVE	5+89.6	70	888.82	49.5	13	903.48	9.12	4" PVC SDR-26
1	11	FB	904.4	FARNHAM CT	0+71.5	69	897.29	43.0	0	898.82	5.58	4" PVC SDR-26
1	12	FB	904.0	FARNHAM CT	1+24.2	122	897.50	43.0	0	899.03	4.97	4" PVC SDR-26
1	13	FB	903.8	FARNHAM CT	1+75.31	172	897.71	43.0	0	899.24	4.56	4" PVC SDR-26
1	14	FB	903.8	FARNHAM CT	2+32.3	230	897.94	43.0	0	899.47	4.33	4" PVC SDR-26
1	15	FB	903.8	FARNHAM CT	2+79.1	277	898.13	43.0	0	899.66	4.14	4" PVC SDR-26
1	16	FB	904.0	FARNHAM CT	3+30.9	328	898.34	43.0	0	899.87	4.13	4" PVC SDR-26
1	17	FB	905.0	FARNHAM CT	4+42.2	21	898.90	82.1	0	901.21	3.79	4" PVC SDR-26
1	18	FB	905.6	FARNHAM CT	4+84.3	63	899.08	82.7	0	901.40	4.20	4" PVC SDR-26
1	19	SOG	913.6	FARNHAM CT	4+88.07	67	899.10	74.8	2	903.27	10.33	4" PVC SDR-26
1	20	SOG	913.4	FARNHAM CT	5+05.9	85	899.17	51.3	3	903.87	9.53	4" PVC SDR-26
1	21	FB	904.8	FARNHAM CT	4+98.5	78	899.14	54.4	0	900.90	3.90	4" PVC SDR-26
1	22	FB	904.8	FARNHAM CT	4+77.2	56	899.05	68.5	0	901.09	3.71	4" PVC SDR-26
1	23	FB	904.8	FARNHAM CT	4+55.1	34	898.96	68.0	0	900.99	3.81	4" PVC SDR-26
1	24	FB	904.6	FARNHAM CT	4+26.0	4	898.83	48.6	0	900.47	4.13	4" PVC SDR-26
1	25	FB	904.4	FARNHAM CT	3+89.1	387	898.58	43.0	0	900.11	4.29	4" PVC SDR-26
1	26	FB	904.2	FARNHAM CT	3+42.8	340	898.39	43.0	0	899.92	4.28	4" PVC SDR-26
1	27	FB	904.0	FARNHAM CT	2+92.7	290	898.19	43.0	0	899.72	4.28	4" PVC SDR-26
1	28	FB	903.8	FARNHAM CT	2+39.4	237	897.97	43.0	0	899.50	4.30	4" PVC SDR-27
1	29	FB	903.8	FARNHAM CT	1+87.5	185	897.76	43.0	0	899.29	4.51	4" PVC SDR-26
1	30	FB	904.0	FARNHAM CT	1+35.8	133	897.55	43.0	0	899.08	4.92	4" PVC SDR-26
1	31	FB	904.4	FARNHAM CT	0+82.5	80	897.33	43.0	0	898.86	5.54	4" PVC SDR-26
3	1	FB	907.0	379TH STREET	0+97.7	199	901.44	43.0	0	902.97	4.03	4" PVC SDR-26
3	2	FB	906.8	379TH STREET	1+70.5	125	900.89	43.0	0	902.42	4.38	4" PVC SDR-26
3	3	FB	906.6	379TH STREET	2+35.4	61	900.38	43.0	0	901.91	4.69	4" PVC SDR-26
3	4	SOG	914.5	FALLOREST CT	2+03.8	201	902.05	75.9	0	904.24	10.26	4" PVC SDR-26
3	5	SOG	914.5	FALLOREST CT	2+27.7	225	902.30	73.3	0	904.44	10.06	4" PVC SDR-26
3	6	SOG	915.2	FALLOREST CT	2+32.8	230	902.36	65.7	0	904.34	10.86	4" PVC SDR-26
3	7	FB	907.2	FALLOREST CT	2+39.7	237	902.46	56.8	0	904.27	2.93	4" PVC SDR-26
3	8	FB	907.2	FALLOREST CT	2+41.6	239	902.45	62.5	0	904.37	2.83	4" PVC SDR-27
3	9	FB	907.5	FALLOREST CT	2+12.9	210	902.14	76.6	0	904.34	3.16	4" PVC SDR-28
3	10	FB	906.9	FALLOREST CT	1+85.4	182	901.85	68.6	0	903.89	3.01	4" PVC SDR-29
3	11	FB	905.3	379TH STREET	3+84.8	84	899.09	52.5	0	900.81	4.49	4" PVC SDR-26
3	12	FB	905.0	379TH STREET	4+34.7	123	898.66	51.8	0	900.37	4.63	4" PVC SDR-26
3	13	FB	904.2	379TH STREET	4+85.4	183	898.25	47.7	0	899.87	4.33	4" PVC SDR-26
3	14	FB	903.6	379TH STREET	5+39.8	237	897.80	43.0	0	899.33	4.27	4" PVC SDR-26
3	15	FB	902.5	FALK AVE	17+00	13	895.76	42.0	0	897.27	5.23	4" PVC SDR-26
3	16	FB	903.0	FALK AVE	16+36.3	348	895.41	43.0	0	896.94	6.06	4" PVC SDR-27
3	17	FB	903.2	FALK AVE	15+84.3	296	895.20	43.0	0	896.73	6.47	4" PVC SDR-28
3	18	FB	903.5	FALK AVE	15+32.1	244	894.99	43.3	0	896.53	6.97	4" PVC SDR-29
3	19	FB	904.0	FALK AVE	14+80.2	191	894.78	43.4	0	896.32	7.68	4" PVC SDR-30
3	20	FB	904.0	FALK AVE	14+29.1	141	894.58	43.5	0	896.12	7.88	4" PVC SDR-31
3	21	FB	903.4	FALK AVE	13+75.6	87	894.36	43.7	0	895.90	7.50	4" PVC SDR-32
4	1	SOG	910.9	FALK AVE	19+47.5	112	896.98	43.0	3	901.51	9.39	4" PVC SDR-33
4	2	SOG	910.6	FALK AVE	19+04.7	68	896.80	43.0	3	901.33	9.27	4" PVC SDR-34
4	3	SOG	910.4	FALK AVE	18+52.0	16	896.58	43.0	3	901.11	9.29	4" PVC SDR-35
4	4	SOG	910.1	FALK AVE	18+20.5	46	896.35	43.5	3	900.89	9.21	4" PVC SDR-36
4	5	SOG	910.1	FALK AVE	17+47.3	60	895.95	44.5	3	900.51	9.59	4" PVC SDR-37
4	6	SOG	910.1	FALK AVE	17+05.5	416	895.79	44.5	3	900.35	9.75	4" PVC SDR-38
4	7	SOG	910.6	FALK AVE	16+45.4	356	895.44	43.1	4	900.97	9.63	4" PVC SDR-39
4	8	SOG	910.6	FALK AVE	15+93.2	303	895.24	43.0	4	900.77	9.83	4" PVC SDR-40
4	9	SOG	910.8	FALK AVE	15+39.3	250	895.02	42.7	5	901.54	9.26	4" PVC SDR-41
4	10	SOG	911.2	FALK AVE	14+87.0	198	894.81	42.6	5	901.33	9.87	4" PVC SDR-42
4	11	SOG	911.2	FALK AVE	14+38.5	150	894.61	42.5	6	902.13	9.07	4" PVC SDR-43
5	1	FB	906.0	379TH STREET	1+04.0	192	901.39	43.0	0	902.92	3.08	4" PVC SDR-44
5	2	FB	905.8	379TH STREET	1+79.5	117	900.81	43.0	0	902.34	3.46	4" PVC SDR-45
5	3	FB	905.6	379th STREET	2+31.7	64	900.42	43.0	0	901.95	3.65	4" PVC SDR-46
5	4	FB	905.4	379th STREET	2+82.6	14	900.02	43.0	0	901.55	3.85	4" PVC SDR-47
5	5	FB	905.0	379th STREET	3+33.1	263	899.51	38.0	0	900.94	4.06	4" PVC SDR-48
5	6	FB	904.6	379th STREET	3+92.8	203	899.03	34.2	0	900.38	4.22	4" PVC SDR-49
5	7	FB	904.4	379th STREET	4+44.8	153	898.59	34.2	0	899.94	4.46	4" PVC SDR-50
5	8	FB	904.2	379th STREET	4+97.1	100	898.15	38.8	0	899.60	4.60	4" PVC SDR-51
5	9	FB	904.0	379th STREET	5+52.2	45	897.69	43.0	0	899.22	4.78	4" PVC SDR-52
5	10	FB	903.6	379th STREET	5+95.5	2	897.34	43.1	0	898.87	4.73	4" PVC SDR-53
5	11	FB	903.0	379th STREET	6+53.9	116	896.98	44.6	0	898.54	4.46	4" PVC SDR-54
5	12	FB	902.6	379th STREET	7+04.7	66	896.78	43.7	0	898.32	4.28	4" PVC SDR-55

DATE: 04/24/2025
DESIGN BY: MJM
DRAWN BY: MJM
CHECKED BY: CJD
DWG FILE: DETAILS
FILE NO.: 22-0300.00

REV NO. 1
2

DATE 04/01/2025
04/24/2025

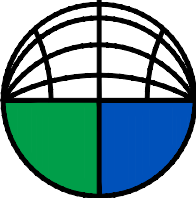
DESCRIPTION REVISION PER CITY REVIEW
REVISION PER CITY REVIEW

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.

NOT FOR CONSTRUCTION

Signed: Christopher J. Dahn
Date: 58628
Lic. No.

BOGART, PEDERSON & ASSOCIATES, INC.



LAND SURVEYING
ENGINEERING
ENVIRONMENTAL SERVICES
13076 FIRST STREET BECKER, MN 55509-9322
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chisago County, MN

SERVICE INFORMATION

SHEET NO.

C6.8

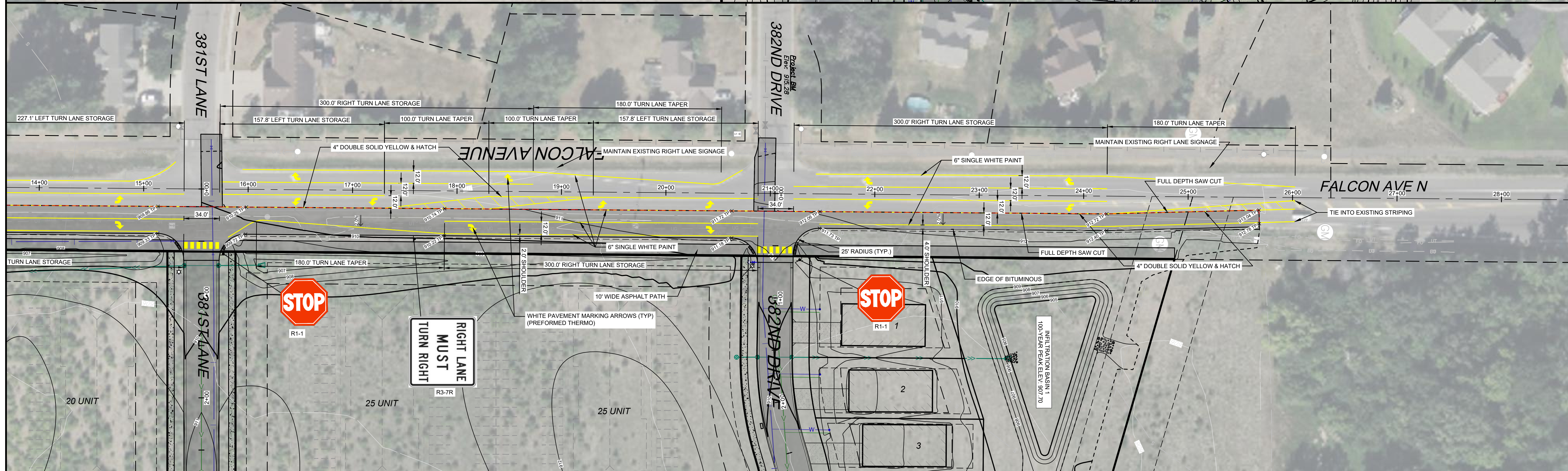
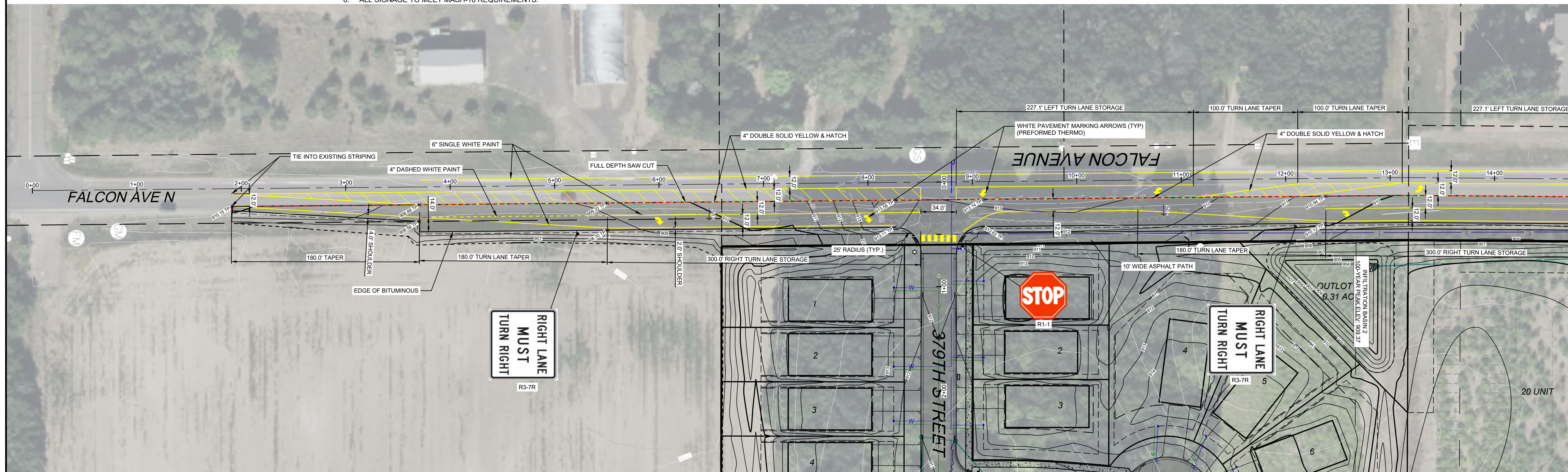
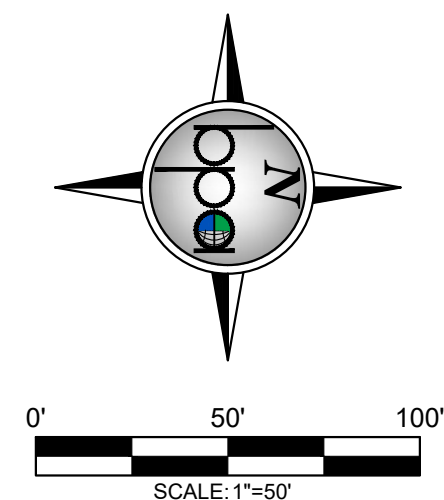
Page 61 of 208

LEGEND:

- | | |
|---|-------------------------------|
|  | SAWCUT LOCATION (FULL DEPTH) |
|  | TURN ARROW (TYPICAL) |
|  | STRAIGHT ARROW (TYPICAL) |
|  | PERMANENT SIGNAGE |
|  | NEW TOP OF PAVEMENT ELEVATION |

TURN LANE NOTES:

1. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS IN THE FIELD REPRESENTED WITHIN THE PLANS AS SHOWN AND ALERT THE ENGINEER BEFORE BIDDING THE PROJECT AND BEGINNING CONSTRUCTION.
2. CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES WHICH MAY AFFECT THIS WORK AND NOTIFY THE OWNER OF ANY CHANGES. CONTACT LOCAL UTILITY COMPANIES FOR EXACT LOCATIONS PRIOR TO BIDDING THE PROJECT AND COMMENCING WORK.
3. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT SILT AND DEBRIS RUN-OFF DURING GRADING OPERATIONS (I.E. SILT FENCE, STRAW BALES, ETC.).
4. CONTRACTOR SHALL VERIFY CRITICAL ELEVATIONS TO ENSURE CONFORMANCE WITH GRADING PLAN, PARTICULARLY WITH EXISTING STRUCTURES AND/OR PAVEMENTS TO REMAIN. MEET EXISTING GRADES ALONG STREETS, PROPERTY LINES, AND DRIVEWAY ENTRANCES. RESTORE ALL PAVEMENTS THAT REMAIN TO THEIR ORIGINAL IF NOT BETTER CONDITION. NOTIFY OWNER OF ANY CONFLICTS PRIOR TO BIDDING THE PROJECT.
5. LONGITUDINAL PAVEMENT MARKINGS SHALL BE LATEX PAINT. THE TURN ARROWS SHALL BE PERFORMED THERMO.
6. EXISTING CONFLICTING PAVEMENT MARKINGS WILL NEED TO BE REMOVED BEFORE FINAL PERMANENT STRIPING IS PLACED.
7. DURING CONSTRUCTION, CONFLICTING PAVEMENT MARKINGS WILL NEED TO BE COVERED WITH BLACK REMOVABLE LANE TAPE OR WATER BLASTED AND THEN HAVE PAVEMENT MARKINGS INSTALLED FOR TEMPORARY CENTERLINE DURING CONSTRUCTION.
8. ALL SIGNAGE TO MEET MASH-16 REQUIREMENTS.



DATE:	04/24/2025	REV NO.	DATE	DESCRIPTION
DESIGN BY:	MJM	1	04/01/2025	REVISION PER CITY REVIEW
DRAWN BY:	MJM	2	04/24/2025	REVISION PER CITY REVIEW
CHECKED BY:	CJD			
DWG FILE:	EROSION			
FILE NO.:	22-0030.00			

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.

NOT FOR CONSTRUCTION

Signed: _____
 Christopher J. Dahm
 Date: _____ Lic. No. 58628



**BOGART, PEDERSON
& ASSOCIATES, INC.**

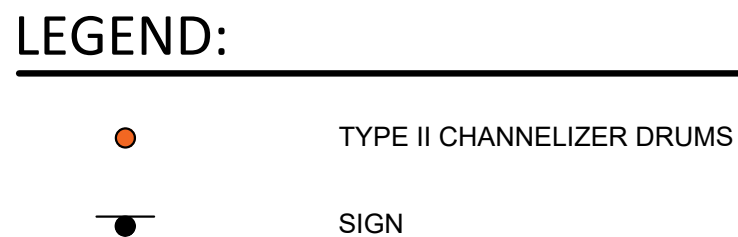
LAND SURVEYING
AND ENGINEERING
ENVIRONMENTAL SERVICES

13076 FIRST STREET, BECKER, MN 55308-3322
TEL: 763-262-3822 FAX: 763-262-4844

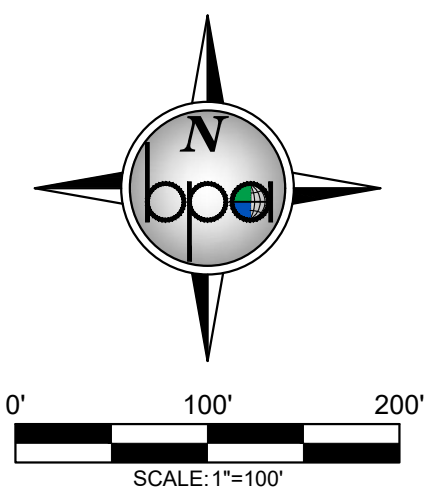
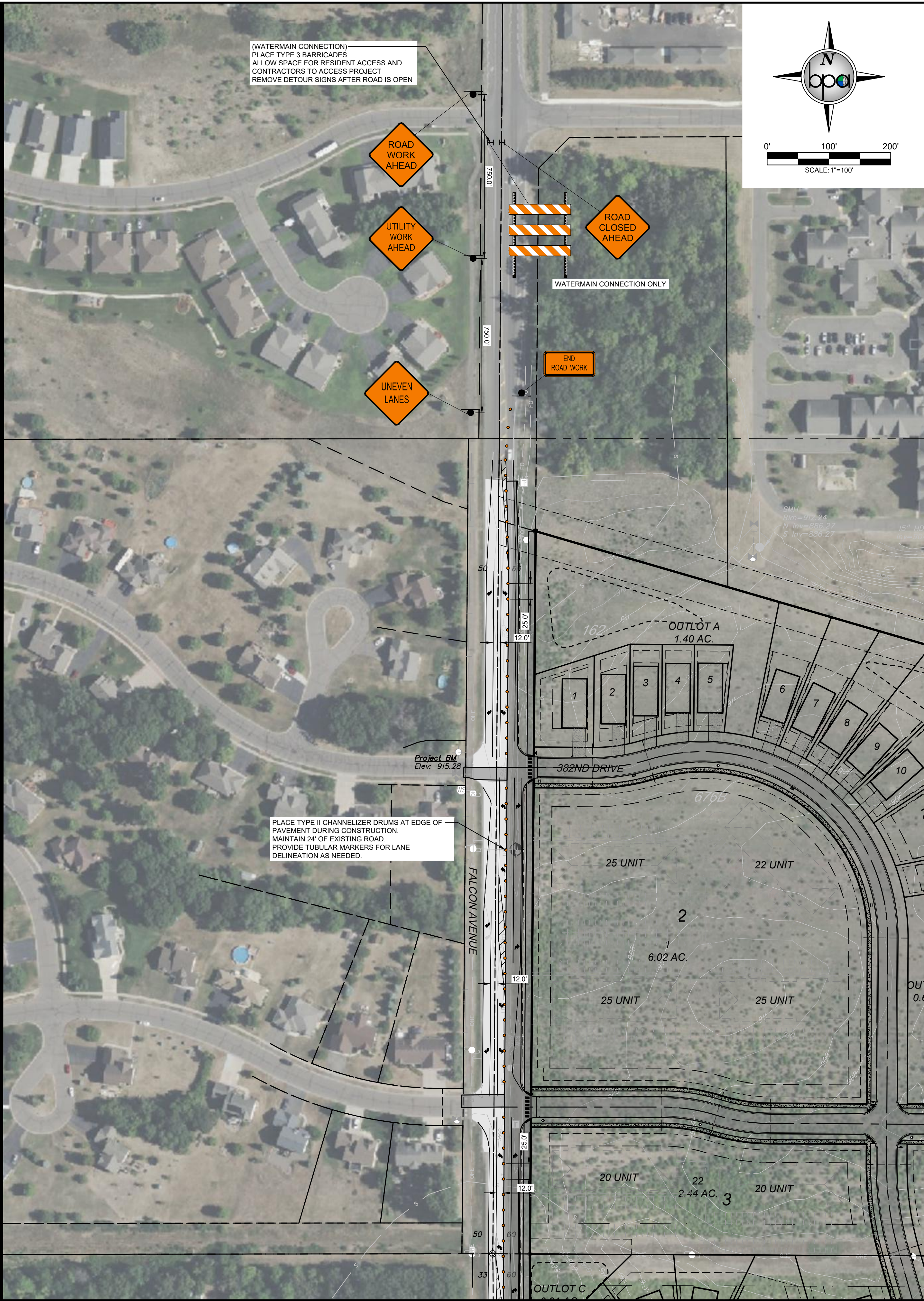
CEDAR RIDGE COMMUNITY LLC CEDAR RIDGE COMMUNITY City of North Branch, Chisago County, MN	TURN LANE PLAN
---	-----------------------

SHEET NO.

C7.1



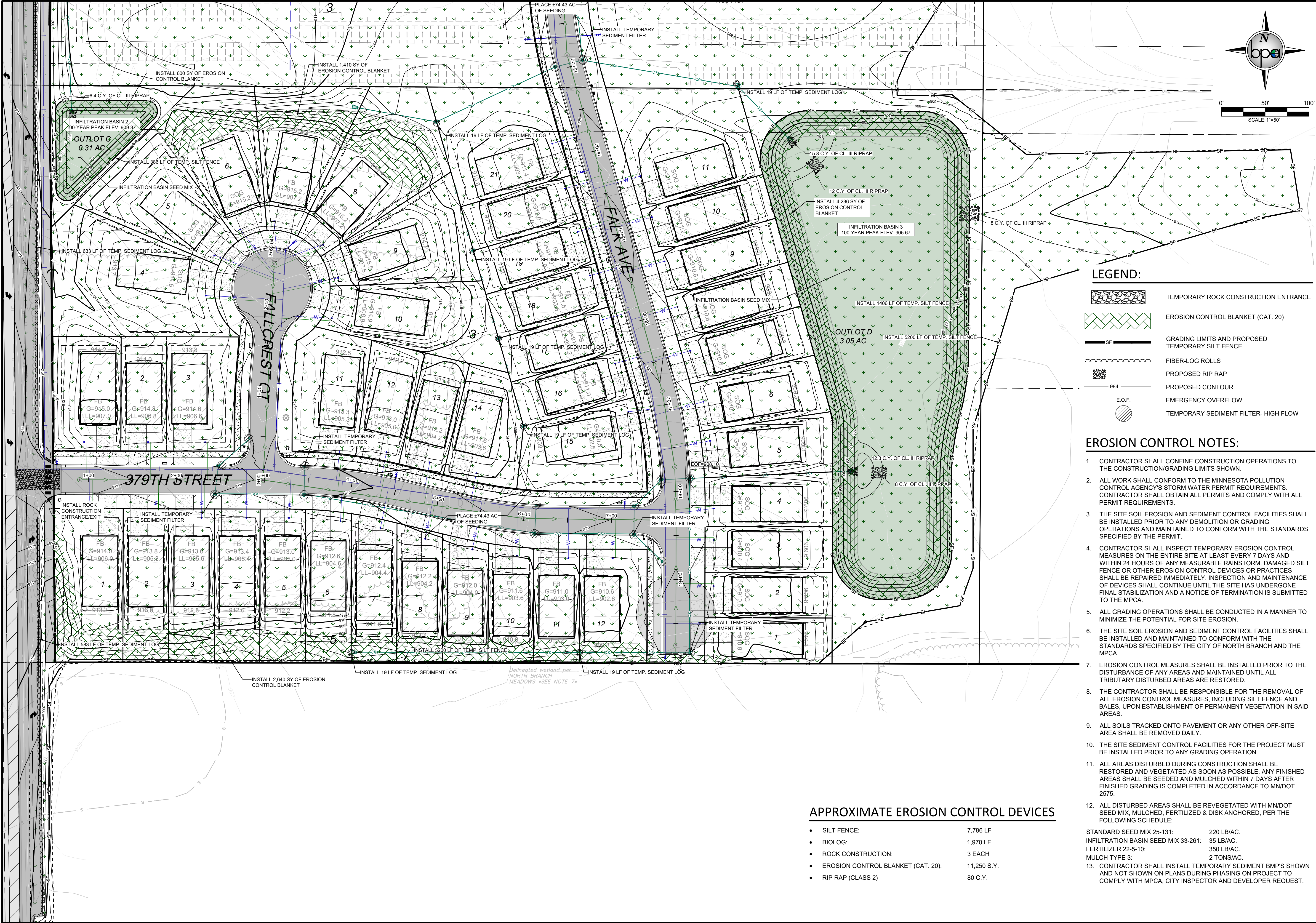
1. SIGNS TO FOLLOW CONVENTIONAL ROAD SIZINGS (36" X 36" COMMON)
2. TRAFFIC CONTROL SHALL MEET THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL.
3. ALL TEMPORARY TRAFFIC CONTROL SIGNS TO BE ON SKIDS.
4. ADDITIONAL SIGNS AND CHANNELIZERS SHALL BE SUPPLIED AND MOVED BY CONTRACTOR AS NEEDED FOR SAFE ROAD CONSTRUCTION.
5. CONTRACTOR SHALL PROVIDE ADDITIONAL TRAFFIC CONTROL SIGNS, CHANNELIZERS, AND FLAGGERS AS NEEDED.
6. EXISTING CONFLICTING PAVEMENT MARKINGS WILL NEED TO BE REMOVED BEFORE FINAL PERMANENT STRIPING IS PLACED.
7. DURING CONSTRUCTION, CONFLICTING PAVEMENT MARKINGS WILL NEED TO BE COVERED WITH BLACK REMOVABLE LANE TAPE OR WATER BLASTED AND THEN HAVE PAVEMENT MARKINGS INSTALLED FOR TEMPORARY CENTERLINE DURING CONSTRUCTION.



SHEET NO.	CEDAR RIDGE COMMUNITY LLC CEDAR RIDGE COMMUNITY City of North Branch, Chisago County, MN	 BOGART, PEDERSON & ASSOCIATES, INC. LAND SURVEYING CIVIL ENGINEERING ENVIRONMENTAL SERVICES 13076 FIRST STREET, BECKER, MN 55308-9322 TEL: 763-262-8822 FAX: 763-262-8844	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. NOT FOR CONSTRUCTION Signed: _____ Christopher J. Dann Date: _____ Lic. No. 58628	DATE: 04/24/2025	REV	DATE	DESCRIPTION
				DESIGN BY: MJM	1	04/01/2025	REVISION PER CITY REVIEW
				DRAWN BY: MJM	2	04/24/2025	REVISION PER CITY REVIEW
				CHECKED BY: CJD			
				DWG FILE: SITE BASE			
				FILE NO.: 22-0030.00			
	TRAFFIC CONTROL PLAN (TURN LANE)						



CEDAR RIDGE COMMUNITY LLC CEDAR RIDGE COMMUNITY City of North Branch, Chicago County, MN		BOGART, PEDERSON & ASSOCIATES, INC. LAND SURVEYING ENVIRONMENTAL SERVICES 13076 FIRST STREET, BECKER, MN 55509-9922 TEL: 763-262-8822 FAX: 763-262-8844		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. NOT FOR CONSTRUCTION Signed: Christopher J. Dahn Lic. No. 58628 Date: _____	
TRAFFIC CONTROL PLAN (DETOUR)		DATE: 04/24/2025 DESIGN BY: MJM DRAWN BY: MJM CHECKED BY: CJD DWG FILE: SITE BASE FILE NO.: 22-0030.00		REV NO. 1 DATE 04/01/2025 REVISION PER CITY REVIEW	
SHEET NO. C7.3		REV NO. 2 DATE 04/24/2025 REVISION PER CITY REVIEW		DESCRIPTION	



LEGEND:

- TEMPORARY ROCK CONSTRUCTION ENTRANCE
- EROSION CONTROL BLANKET (CAT. 20)
- GRADING LIMITS AND PROPOSED TEMPORARY SILT FENCE
- FIBER-LOG ROLLS
- PROPOSED RIP RAP
- PROPOSED CONTOUR
- EMERGENCY OVERFLOW
- TEMPORARY SEDIMENT FILTER- HIGH FLOW

EROSION CONTROL NOTES:

- CONTRACTOR SHALL CONFINE CONSTRUCTION OPERATIONS TO THE CONSTRUCTION/GRADING LIMITS SHOWN.
- ALL WORK SHALL CONFORM TO THE MINNESOTA POLLUTION CONTROL AGENCY'S STORM WATER PERMIT REQUIREMENTS. CONTRACTOR SHALL OBTAIN ALL PERMITS AND COMPLY WITH ALL PERMIT REQUIREMENTS.
- THE SITE SOIL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE INSTALLED PRIOR TO ANY DEMOLITION OR GRADING OPERATIONS AND MAINTAINED TO CONFORM WITH THE STANDARDS SPECIFIED BY THE PERMIT.
- CONTRACTOR SHALL INSPECT TEMPORARY EROSION CONTROL MEASURES ON THE ENTIRE SITE AT LEAST EVERY 7 DAYS AND WITHIN 24 HOURS OF ANY MEASURABLE RAINSTORM. DAMAGED SILT FENCE OR OTHER EROSION CONTROL DEVICES OR PRACTICES SHALL BE REPAIRED IMMEDIATELY. INSPECTION AND MAINTENANCE OF DEVICES SHALL CONTINUE UNTIL THE SITE HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO THE MPCA.
- ALL GRADING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO MINIMIZE THE POTENTIAL FOR SITE EROSION.
- THE SITE SOIL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE INSTALLED AND MAINTAINED TO CONFORM WITH THE STANDARDS SPECIFIED BY THE CITY OF NORTH BRANCH AND THE MPCA.
- EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE DISTURBANCE OF ANY AREAS AND MAINTAINED UNTIL ALL TRIBUTARY DISTURBED AREAS ARE RESTORED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL EROSION CONTROL MEASURES, INCLUDING SILT FENCE AND BALES, UPON ESTABLISHMENT OF PERMANENT VEGETATION IN SAID AREAS.
- ALL SOILS TRACKED ONTO PAVEMENT OR ANY OTHER OFF-SITE AREA SHALL BE REMOVED DAILY.
- THE SITE SEDIMENT CONTROL FACILITIES FOR THE PROJECT MUST BE INSTALLED PRIOR TO ANY GRADING OPERATION.
- ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED AND VEGETATED AS SOON AS POSSIBLE. ANY FINISHED AREAS SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS AFTER FINISHED GRADING IS COMPLETED IN ACCORDANCE TO MN/DOT 2575.
- ALL DISTURBED AREAS SHALL BE REVEGETATED WITH MN/DOT SEED MIX, MULCHED, FERTILIZED & DISK ANCHORED, PER THE FOLLOWING SCHEDULE:

STANDARD SEED MIX 25-131:	220 LB/AC.
INFILTRATION BASIN SEED MIX 33-261:	35 LB/AC.
FERTILIZER 22-5-10:	350 LB/AC.
MULCH TYPE 3:	2 TONS/AC.
- CONTRACTOR SHALL INSTALL TEMPORARY SEDIMENT BMP'S SHOWN AND NOT SHOWN ON PLANS DURING PHASING ON PROJECT TO COMPLY WITH MPCA, CITY INSPECTOR AND DEVELOPER REQUEST.

APPROXIMATE EROSION CONTROL DEVICES

• SILT FENCE:	7,786 LF
• BIOLOG:	1,970 LF
• ROCK CONSTRUCTION:	3 EACH
• EROSION CONTROL BLANKET (CAT. 20):	11,250 S.Y.
• RIP RAP (CLASS 2)	80 C.Y.

DATE: 04/24/2025	DESIGN BY: MJM	CHECKED BY: MJM	DWG FILE: EROSION	FILE NO.: 22-0303.00
REVISION NO. 1	04/01/2025	REVISION PER CITY REVIEW		
REVISION NO. 2	04/24/2025	REVISION PER CITY REVIEW		

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.

NOT FOR CONSTRUCTION

Signed: Christopher J. Dahm
Date: 4/24/25
Lic. No. 58628

BOGART, PEDERSON & ASSOCIATES, INC.
LAND SURVEYING
ENVIRONMENTAL SERVICES
13076 FIRST STREET, BECKER, MN 55509-9322
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

SOUTH EROSION CONTROL PLAN

SHEET NO. **C8.2**

STORM WATER POLLUTION PREVENTION PLAN NARRATIVE:

GENERAL INFORMATION

THIS STORMWATER POLLUTION PREVENTION PLAN IS PREPARED IN ACCORDANCE TO THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NO. MN R1000001 FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.
PROJECT NAME: CEDAR RIDGE COMMUNITY
LOCATION: FALCON AVE N, NORTH BRANCH MN. 55056
CHISAGO COUNTY
LAT/LONG: 45.501044, -93.000047

DESCRIPTION OF CONSTRUCTION ACTIVITY:

DEVELOPMENT CONSISTS OF PAVING, GRADING, UTILITY INSTALLATION, AND TURF ESTABLISHMENT.

PROJECT CONTACTS

CEDAR RIDGE COMMUNITY LLC AND THE CONTRACTOR ARE RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMP'S BEFORE AND DURING CONSTRUCTION.

SWPPP PREPARATION:

SWPPP PREPARER: MICHAEL MORDAL-HUEBSCH
BOGART, PEDERSON & ASSOCIATES
ENGINEER AND SWPPP DESIGNER (EXP 2023)
ADDRESS: 13076 FIRST STREET
BECKER, MN 55308-9322
TELEPHONE: 763-262-8822
EMAIL: CDAHN@BOGART-PEDERSON.COM
OWNER:
OWNER CONTACT: JASON BETZLER
ADDRESS: 12222 313TH AVE, PRINCETON, MN 55371
TELEPHONE: (763)-360-1453
EMAIL: MILLELACSWALLEYE@LIVE.COM

CONTRACTOR (TO BE FILLED OUT BY THE CONTRACTOR):

BUSINESS NAME _____
OWNER NAME _____
MAILING ADDRESS _____
CITY _____
TELEPHONE _____
EMAIL _____
CONTACT NAME _____
MAILING ADDRESS _____
CITY _____
TELEPHONE _____
EMAIL _____

ESTIMATED DATES OF CONSTRUCTION:

START DATE / / (TO BE FILLED IN BY CONTRACTOR)
COMPLETION DATE / / (TO BE FILLED IN BY CONTRACTOR)

PERMANENT STORMWATER DESIGN CALCULATIONS:

SEE THE STORM WATER MANAGEMENT REPORT FOR MORE INFORMATION. CONTACT BOGART, PEDERSON & ASSOCIATES FOR REPORT. PROPOSED FLOW RATE IS LIMITED THROUGH DIRECTING STORM WATER TO FOUR INFILTRATION BASINS.
SOIL GROUP: A

DESCRIPTION OF EROSION CONTROL ACTIVITY:

EROSION CONTROL CONSISTS OF SILT FENCE PERIMETER CONTROL, TURF ESTABLISHMENT THROUGH SEEDING AND EROSION CONTROL BLANKET, AND ROCK CONSTRUCTION ENTRANCE PLACEMENT.

CUMULATIVE IMPERVIOUS SURFACES:

AREA OF DISTURBANCE: 42.6 ACRES
PRE-CONSTRUCTION IMPERVIOUS AREA: 1.49 ACRES
POST CONSTRUCTION IMPERVIOUS AREA: 14.32 ACRES
NEW IMPERVIOUS AREA: 12.83 ACRES

RECEIVING WATERS:

STORM WATER FROM THIS SITE WILL BE DISCHARGED TO THE FOUR INFILTRATION BASINS ON SITE.

PLANS AND SPECIFICATIONS

- THE PLAN SHEETS OF THIS PLAN SET INDICATE THE FOLLOWING ITEMS:
- THE PROJECT LOCATION AND CONSTRUCTION LIMITS.
 - LOCATIONS OF IMPERVIOUS SURFACES.
 - LOCATIONS OF AREAS NOT TO BE DISTURBED (E.G., BUFFER ZONES, WETLANDS, ETC.).
 - STEEP SLOPE LOCATIONS.
 - LOCATIONS OF ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMP'S TO BE INSTALLED ON THE PROJECT.
 - THE DETAIL SHEETS INDICATE EROSION AND SEDIMENT CONTROL BMP'S TO BE INSTALLED ON THE PROJECT.
 - IF DEWATERING IS REQUIRED FOR THIS PROJECT, THE PUMP DISCHARGE SHALL BE TREATED PRIOR TO BEING DISCHARGED OFF-SITE OR INTO A SURFACE WATER. THE DISCHARGE SHALL BE VISUALLY CHECKED TO ENSURE THAT IT IS VISIBLY CLEAN WATER.

TEMPORARY SEDIMENT CONTROL PRACTICES

DOWN GRADIENT SILT FENCE AND SEDIMENT LOG INSTALLATIONS ARE TO BE INPLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK OPERATIONS.

TOPSOIL IS TO BE WINDROWED ALONG THE CONSTRUCTION LIMITS AND PLACED AS SLOPE DRESSING IMMEDIATELY FOLLOWING COMPLETION OF THE GRADING OPERATIONS, AS THE GRADING OPERATIONS PROCEED.

TOPSOIL PLACEMENT ALONG THE EMBANKMENT SLOPES THOUGH THE WETLANDS AREA IS TO BE SPREAD BY A LOW IMPACT CRAWLER TRACTOR OPERATING UP AND DOWN THE SLOPES SO AS TO PROVIDE TRACK PRINTS PARALLEL WITH THE CONTOURS.

INSTALLATION OF MINDOT CATEGORY 3 EROSION CONTROL BLANKET ALONG THE EMBANKMENT SLOPES ADJACENT THE WETLANDS AREA.

ALL TEMPORARY SOILS STOCKPILES WILL REQUIRE AN EFFECTIVE MEANS OF SEDIMENT CONTROL SUCH AS AN EROSION CONTROL BLANKET COVERING OR SILT FENCE INSTALLATION ALONG THE TOE OF SLOPE.

ALL COMPLETED SWALES SLOPES AND BOTTOMS NOT DRAINING TOWARDS WETLAND AREAS ARE TO BE STABILIZED WITHIN 7 DAYS.

TEMPORARY STABILIZATION WILL BE REQUIRED IN AREAS WHERE GRADING OPERATIONS ARE SUSPENDED OR CEASED FOR A PERIOD OF 7 DAYS OR GREATER.

A ROCK CONSTRUCTION ENTRANCE FOR SEDIMENT CONTROL IS TO BE PROVIDED AT THE PROJECT ENTRANCE ON FALCON AVE N.

STREET SWEEPING OF THE PAVED SURFACES WILL BE REQUIRED AS DIRECTED BY THE ENGINEER.

TIMING OF EROSION CONTROL:

SILT FENCE AND SEDIMENT LOGS WILL BE INSTALLED PRIOR TO CONSTRUCTION.

RIPRAP AND FILTER BLANKET WILL BE PLACED AT THE OUTLETS WITHIN 24 HOURS OF THE OUTLET PLACEMENT.

THE CONTRACTOR MUST STABILIZE ALL EXPOSED SOIL AREAS IMMEDIATELY FOLLOWING CONSTRUCTION WHEREVER CONSTRUCTION WILL NOT OCCUR FOR A PERIOD GREATER THAN OR EQUAL TO 7 DAYS.

STABILIZATION WORK MUST BE COMPLETE WITHIN 7 CALENDAR DAYS AFTER THE CONSTRUCTION WORK IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED.

AREAS THAT ARE WITHIN 200 FT OF A PUBLIC WATER MUST BE STABILIZED WITHIN 24 HOURS OF COMPLETING CONSTRUCTION DURING PERIODS OF "WORK IN WATER RESTRICTIONS" FOR TIME PERIODS DECLARED BY THE DNR.

THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE DISTURBED AREA UNTIL VEGETATION IS ESTABLISHED.

ONCE VEGETATION IS ESTABLISHED AND CONSTRUCTION IS COMPLETE, THE SILT FENCE AND ANY OTHER TEMPORARY EROSION CONTROL THAT IS NOT BIODEGRADABLE SHALL BE REMOVED.

STREET SWEEPING TO BE PROVIDED AS DIRECTED BY THE ENGINEER OR OWNER. THE CITY REQUIRES STREET SWEEPING TO OCCUR WITHIN 8 HOURS OF NOTICE FROM THE CITY.

APPLYING MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE OR SIMILAR EROSION PREVENTION PRACTICES IS NOT ACCEPTABLE STABILIZATION IN ANY PART OF A TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE. BLANKETS OR OTHER APPROVED, BY THE ENGINEER, METHOD SHALL BE USED.

INSPECTION AND MAINTENANCE ACTIVITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING THE WORK OF ALL OPERATIONS, INCLUDING SUBCONTRACTORS AND UTILITY COMPANIES, SUCH THAT EROSION AND SEDIMENT CONTROL MEASURES ARE FULLY EXECUTED FOR EACH OPERATION AND IN A TIMELY MANNER OVER THE DURATION OF THE PROJECT. OPERATORS HAVE DAILY ACCESS TO THE PROJECT SITE. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE SWPPP IMPLEMENTATION UNTIL THE ENTIRE SITE HAS UNDERGONE FINAL STABILIZATION AND N.O.T HAS BEEN SUBMITTED TO THE MPCA.

THE CONTRACTOR IS TO PROVIDE A TRAINED INDIVIDUAL RESPONSIBLE FOR THE IMPLEMENTATION, INSPECTION AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL BMP'S ON THE PROJECT. THAT INDIVIDUAL IS TO BE IDENTIFIED AT THE PRE-CONSTRUCTION CONFERENCE AND LISTED IN THE MINUTES THEREOF.

THE APPOINTED INDIVIDUAL IS TO PERFORM A ROUTINE INSPECTION OF THE ENTIRE SITE AT LEAST ONCE EVERY SEVEN DAYS DURING CONSTRUCTION OPERATIONS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS.

A INSPECTION FORM WILL BE PROVIDED BY THE CONTRACTOR. ANY DEFICIENCIES IN THE EROSION AND SEDIMENT CONTROL BMP'S ARE TO BE NOTED ON THE INSPECTION FORM AND CORRECTED BY THE END OF THE NEXT BUSINESS DAY.

PERIMETER CONTROL DEVICES ARE TO BE REPAIRED OR REPLACED WHEN THEY ARE NO LONGER EFFECTIVE OR WHEN THE SEDIMENT REACHES ONE-HALF THE HEIGHT OF THE DEVICE.

TRAINING DOCUMENTATION:

SWPPP IMPLEMENTATION, REVISING, AMENDING, AND INSPECTING (TO BE FILLED IN BY THE CONTRACTOR)

NAME OF INDIVIDUAL OVERSEEING & INSPECTING _____
DATE OF TRAINING _____
NAME OF INSTRUCTOR _____
ENTITY PROVIDING TRAINING _____
CONTENT OF TRAINING _____
TOTAL HOURS OF TRAINING _____

BMP INSTALLATION, MAINTENANCE, AND REPAIR (TO BE FILLED IN BY THE CONTRACTOR)

NAME OF INDIVIDUAL OVERSEEING & INSPECTING _____
DATE OF TRAINING _____
NAME OF INSTRUCTOR _____
ENTITY PROVIDING TRAINING _____
CONTENT OF TRAINING _____
TOTAL HOURS OF TRAINING _____

POLLUTION PREVENTION

FERTILIZERS ARE TO BE APPLIED ONLY IN THE AMOUNTS AS SPECIFIED AND WORKED INTO THE SOIL TO MINIMIZE EXPOSURE TO STORMWATER RUNOFF.

ONSITE REFUELING OPERATIONS ARE TO BE CONDUCTED WITH CARE. ANY INADVERTENT SPILLAGE OF FUEL OR CHEMICALS IS TO BE IMMEDIATELY CLEANED UP, REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE TO STATE AND LOCAL REGULATIONS. MAJOR SPILLS ARE TO BE REPORTED TO THE MPCA 24 HOURS NOTIFICATION NETWORK AT 800 422 0798. ALL VEHICLES ON-SITE ARE TO BE MONITORED FOR LEAKS AND SUBJECT TO ROUTINE PREVENTIVE MAINTENANCE EFFORTS TO REDUCE THE LIKELIHOOD OF LEAKAGE AND OR SPILLS.

PORTABLE SANITARY WASTE FACILITIES ARE TO BE PROVIDED ONSITE AND EMPTIED ON A BI-WEEKLY BASIS.

CONCRETE BATCH TRUCKS WILL NOT BE ALLOWED TO DISCHARGE DRUM AND CHUTE WASHOUT DIRECTLY ON THE GROUND. A PORTABLE WASHOUT RECEPTACLE IS TO BE PROVIDED BY THE CONTRACTOR AT THE LOCATION AS PROVIDED BY THE OWNER.

FINAL STABILIZATION

FINAL STABILIZATION OCCURS WHEN 70 PERCENT OF THE PERVIOUS AREA IS COVERED WITH UNIFORM, PERMANENT VEGETATION.

ALL TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES ARE TO BE REMOVED AND THE NPDES NOTICE OF TERMINATION IS TO BE PREPARED AND SUBMITTED TO THE MPCA.

LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

DESCRIPTION	TITLE	LOCATION
EROSION CONTROL DETAILS	CONSTRUCTION DETAILS	C9.1-C9.4
EROSION CONTROL LOCATIONS	EROSION CONTROL LOCATIONS	C8.1-C8.2

24 HOUR MPCA EMERGENCY NOTIFICATION:
TELEPHONE NUMBERS: 851-649-5451
800-422-0798

ESTIMATED QUANTITIES:

THE FOLLOWING QUANTITIES IS AN ESTIMATED PRELIMINARY AMOUNT REQUIRED FOR SEDIMENT CONTROL BMP'S AT THE START OF THE PROJECT. THIS ESTIMATE IS PROVIDED AS REQUIRED BY THE MINNESOTA POLLUTION CONTROL AGENCY GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY. ANY ADDITIONAL AND/OR REPLACEMENT BMP'S QUANTITIES WILL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

ESTIMATED PRELIMINARY QUANTITIES AT START OF PROJECT:	UNIT	ESTIMATED INITIAL QUANTITY
TEMPORARY CONSTRUCTION ENTRANCE	EA	3
TEMPORARY SEDIMENT FILTER	EA	35
TEMPORARY CONCRETE WASHOUT	EA	1
TEMPORARY PUMP SEDIMENT CONTROL DEVICE	EA	1
TEMPORARY SEDIMENT LOGS	LF	1,970
TEMPORARY SILT FENCE	LF	7,786
EROSION CONTROL BLANKET (CAT. 20)	SY	11,250

TEMPORARY EROSION AND SEDIMENT CONTROL SPECIFICATIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. PREVENTION OF SEDIMENTATION OF WATERWAYS, OPEN DRAINAGE WAYS, AND STORM AND SANITARY SEWERS DUE TO CONSTRUCTION ACTIVITIES.

1.02 REFERENCE STANDARDS

- A. GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM. MINNESOTA PERMIT NO. MN R100001.

1.03 PERFORMANCE REQUIREMENTS

- A. COMPLY WITH ALL REQUIREMENTS OF THE MINNESOTA POLLUTION CONTROL AGENCY FOR EROSION AND SEDIMENT CONTROL.
- B. DO NOT BEGIN CLEARING, GRADING, OR OTHER WORK INVOLVING DISTURBANCE OF GROUND SURFACE COVER UNTIL APPLICABLE PERMITS HAVE BEEN OBTAINED, FURNISH ALL DOCUMENTATION REQUIRED TO OBTAIN APPLICABLE PERMITS.
1. OBTAIN AND PAY FOR PERMITS REQUIRED BY AUTHORITY HAVING JURISDICTION.
- C. TIMING: PUT PREVENTIVE MEASURES IN PLACE PRIOR TO DISTURBANCE OF SURFACE COVER AND BEFORE PRECIPITATION OCCURS.
- D. EROSION OFF SITE: PREVENT EROSION OF SOIL AND DEPOSITION OF SEDIMENT ON OTHER PROPERTIES CAUSED BY WATER LEAVING THE PROJECT SITE DUE TO CONSTRUCTION ACTIVITIES FOR THIS PROJECT.
1. PREVENT TRACKING OF MUD ONTO PUBLIC ROADS OUTSIDE SITE.
2. PREVENT MUD AND SEDIMENT FROM FLOWING ONTO PAVEMENTS.
- E. SEDIMENTATION OF WATERWAYS OFF SITE: PREVENT SEDIMENTATION OF WATERWAYS OFF THE PROJECT SITE, INCLUDING RIVERS, STREAMS, LAKES, PONDS, OPEN DRAINAGE WAYS, STORM SEWERS, AND SANITARY SEWERS.
1. IF SEDIMENTATION OCCURS, INSTALL OR CORRECT PREVENTIVE MEASURES IMMEDIATELY AT NO COST TO OWNER. REMOVE DEPOSITED SEDIMENTS, COMPLY WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
- F. MAINTENANCE: MAINTAIN TEMPORARY PREVENTIVE MEASURES UNTIL PERMANENT MEASURES HAVE BEEN ESTABLISHED.

PART 2 PRODUCTS

2.01 MATERIALS

- A. TEMPORARY SILT FENCE: WOVEN POLYPROPYLENE GEOTEXTILE RESISTANT TO COMMON SOIL CHEMICALS, MILDEW, AND INSECTS; NON-BIODEGRADABLE; IN LONGEST LENGTHS POSSIBLE; FABRIC INCLUDING SEAMS WITH THE FOLLOWING MINIMUM AVERAGE ROLL LENGTHS:
1. AVERAGE OPENING SIZE: 20 U.S. STD. SIEVE, MAXIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM D4751.
2. PERMITTIVITY: 0.05 SEC-1, MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM D4491.
3. ULTRAVIOLET RESISTANCE: RETAINING AT LEAST 70 PERCENT OF TENSILE STRENGTH, WHEN TESTED IN ACCORDANCE WITH ASTM D4355/D4355M AFTER 500 HOURS EXPOSURE.
4. TENSILE STRENGTH: 100 LB-F, MINIMUM, IN CROSS-MACHINE DIRECTION; 124 LB-F, MINIMUM, IN MACHINE DIRECTION; WHEN TESTED IN ACCORDANCE WITH ASTM D4632.
5. ELONGATION: 15 TO 20 PERCENT, WHEN TESTED IN ACCORDANCE WITH ASTM D4632.
6. TEAR STRENGTH: 65 LB-F, MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM D4533.
7. COLOR: MANUFACTURER'S STANDARD, WITH EMBEDMENT AND FASTENER LINES PREPRINTED.
8. SILT FENCE POSTS: ONE OF THE FOLLOWING, MINIMUM 5 FEET LONG:
- a. STEEL U- OR T-SECTION, WITH MINIMUM MASS OF 1.33 LB PER LINEAR FOOT.
- b. SOFTWOOD, 4 BY 4 INCHES IN CROSS SECTION.
- c. HARDWOOD, 2 BY 2 INCHES IN CROSS SECTION.
- B. TEMPORARY SEDIMENT LOGS: FILTER LOGS SHALL CONSIST OF TYPE WOOD FIBER BIOROLLS AND THE REQUIREMENTS OF MINDOT SPEC. 3897.
1. SHALL BE ONE OF THE FOLLOWING.
- a. SHALL BE SILT-SOXX PERIMETER CONTROL BY FILTREXX, INC., OR EQUAL.
- C. TEMPORARY SEDIMENT FILTER.
1. SHALL BE ONE OF THE FOLLOWING.
- a. DROP-IN SEDIMENT FILTER UNIT THAT INSERTS INTO THE INLET.
- 1) SHALL BE FLEXSTORM PURE: PERMANENT INLET FILTER BY ADS, INC., OR EQUAL.
- (a) PROVIDE CURB OPENING PROTECTION FOR EXISTING INLETS WITH CURB OPENINGS.
- D. TEMPORARY ROCK CONSTRUCTION ENTRANCE.
1. ROCK SHALL BE CLEAN 1 TO 2 INCH WASHED ROCK.
- E. TEMPORARY SLOPE EROSION PROTECTION.
1. SHALL BE ONE OF THE FOLLOWING.
- a. EROSION CONTROL BLANKET.
- 1) SHALL CONSIST OF A UNIFORM WEB OF INTERLOCKING STRAW OR WOOD FIBERS SANDWICHED BETWEEN AN ATTACHED TOP AND BOTTOM LAYER OF NET BACKING.
- 2) THE NETTING SHALL BE BIODEGRADABLE CONTAINING SUFFICIENT UV STABILIZATION FOR BREAKDOWN TO OCCUR WITHIN A NORMAL GROWING SEASON.
- 3) STAPLES USED TO ANCHOR THE BLANKETS SHALL BE U-SHAPED, 11 GAUGE OR HEAVIER STEEL WIRE HAVING A SPAN WIDTH OF 1 INCH AND A LENGTH OF 8 INCHES OR MORE FROM TOP TO BOTTOM AFTER BENDING.
- 4) THE EROSION CONTROL BLANKETS ACCEPTABLE FOR USE ON THIS PROJECT INCLUDE:
- (a) GEO-SYNTHETICS, INC. - LANDLOK 52.
- (b) NORTH AMERICAN GREEN - S150.
- (c) OR EQUAL.
- b. BONDED FIBER MATRIX.
- 1) THE FIBERS SHALL BE COMPOSED OF 100% WOOD OR WOOD BY-PRODUCTS. A MINIMUM OF 25% OF THE FIBERS SHALL AVERAGE 10 TO 16 MM (0.4 INCHES) IN LENGTH AND 50% OR MORE SHALL BE RETAINED ON A CLARK FIBER CLASSIFIER 24 MESH SCREEN. FIBERS SHALL BE COLORED WITH A WATER SOLUBLE, NON-TOXIC DYE, TO AID IN UNIFORM APPLICATION OVER THE SITE.
- 2) THE BINDER SHALL BE A HYDRO COLLOID BASED (GUAR GUM) WITH ADDED SLOW-RELEASE AND AGRICULTURAL BASED FERTILIZERS. THE BINDER SHALL NOT DISSOLVE OR DISPERSE UPON RETWETTING.
- 3) THE BFM SLURRY SHALL DRY TO FORM A CRUST APPROXIMATELY 3/4 MM (1/8 TO 1/4 INCHES) THICK ADHERING TO THE SOIL SURFACE.
- 4) THE MOISTURE CONTENT OF THE MATRIX SHALL BE 12% +/- 3% BY WEIGHT.
- 5) THE MATRIX SHALL CONSIST OF MATERIALS THAT ARE 100% BIODEGRADABLE AND 100% BENEFICIAL TO PLANT LIFE.
- 6) THE MATRIX SHALL PROVIDE 100% CONTINUOUS COVERAGE AND SHALL HAVE NO HOLES GREATER THAN 1MM IN SIZE.
- 7) THE HYDRATED MIXTURE DENSITY SHALL BE APPROXIMATED BY A SLUMP TEST PRIOR TO APPLICATION.
- 8) THE BFM MULCH: WATER RATIO SHALL BE AS MANUFACTURER RECOMMENDATIONS. THE MINIMUM BFM MULCH TO WATER RATIO IS 50LBS BFM MULCH AND 100 GALLONS WATER. THE WATER RATE WILL VARY BETWEEN 100 GALLONS AND 125 GALLONS PER 50LBS, DEPENDING ON WHICH OF THE PRODUCTS IS USED.
- 9) THE BONDED FIBER MATRIX MULCH PRODUCTS ACCEPTABLE FOR USE ON THIS PROJECT INCLUDE:
- (a) ECOAEGIS - MANUFACTURED BY CANFOR.
- (b) SOIL GUARD - MANUFACTURED BY MAT, INC.
- (c) CONWED 3000 - MANUFACTURED BY CONWED FIBERS, INC.
- F. TEMPORARY PUMPED SEDIMENT CONTROL DEVICE.
1. NON-WOVEN GEOTEXTILE FABRIC SEWN INTO A BAG USING A DOUBLE NEEDLE MACHINE AND HIGH STRENGTH THREAD.
- a. SEAMS SHALL HAVE AN AVERAGE WIDTH STRENGTH OF 60LB/INCH AS PER ASTM D4883 AND MEET OR EXCEED THE FOLLOWING:
- 1) GRAB TENSILE OF 205 LBS AS PER ASTM D 4632.
- 2) PUNCTURE OF 110 LBS AS PER ASTM D 4833.
- 3) FLOW RATE OF 95 GAL/MIN/SF AS PER ASTM D 4491.
- 4) PERMITTIVITY OF 1.5 SEC-1 AS PER ASTM D 4491.
- 5) MULLEN BURST STRENGTH OF 350 PSI AS PER ASTM D 3786.
- 6) ACOF OF 80% US SIEVE AS PER ASTM D 4751.
2. SPOUT LARGE ENOUGH TO ACCOMMODATE A 4 INCH DISCHARGE HOSE WITH STRAP TO TIE UNIT CLOSED.
3. SHALL BE ONE OF THE FOLLOWING.
- a. DIRT BAG.
- 1) ACF ENVIRONMENTAL, INC., 2831 CARDWELL ROAD, RICHMOND, VIRGINIA 23234, 800-448-3636.
- b. DANDY DEWATERING BAG.
- 1) DANDY PRODUCTS, INC., P.O. BOX 1980, WESTERVILLE, OHIO 43086, 800-591-2294.
- c. OR EQUAL.

PART 3 EXECUTION

3.01 PREPARATION

- A. SCHEDULE WORK SO THAT SOIL SURFACES ARE LEFT EXPOSED FOR THE MINIMUM AMOUNT OF TIME.
- B. THE CONSTRUCTION SITE OPERATOR SHALL FOLLOW ALL REQUIREMENTS OF THE MINNESOTA STORMWATER PERMIT NO. MN R100001.
- C. THE CONTRACTOR SHALL COMPLETE AND SIGN THE NOTICE OF INTENT, OBTAIN THE OWNER'S SIGNATURE, AND SUBMIT TO THE MPCA.
1. PROVIDE A SIGNED COPY TO THE OWNER.

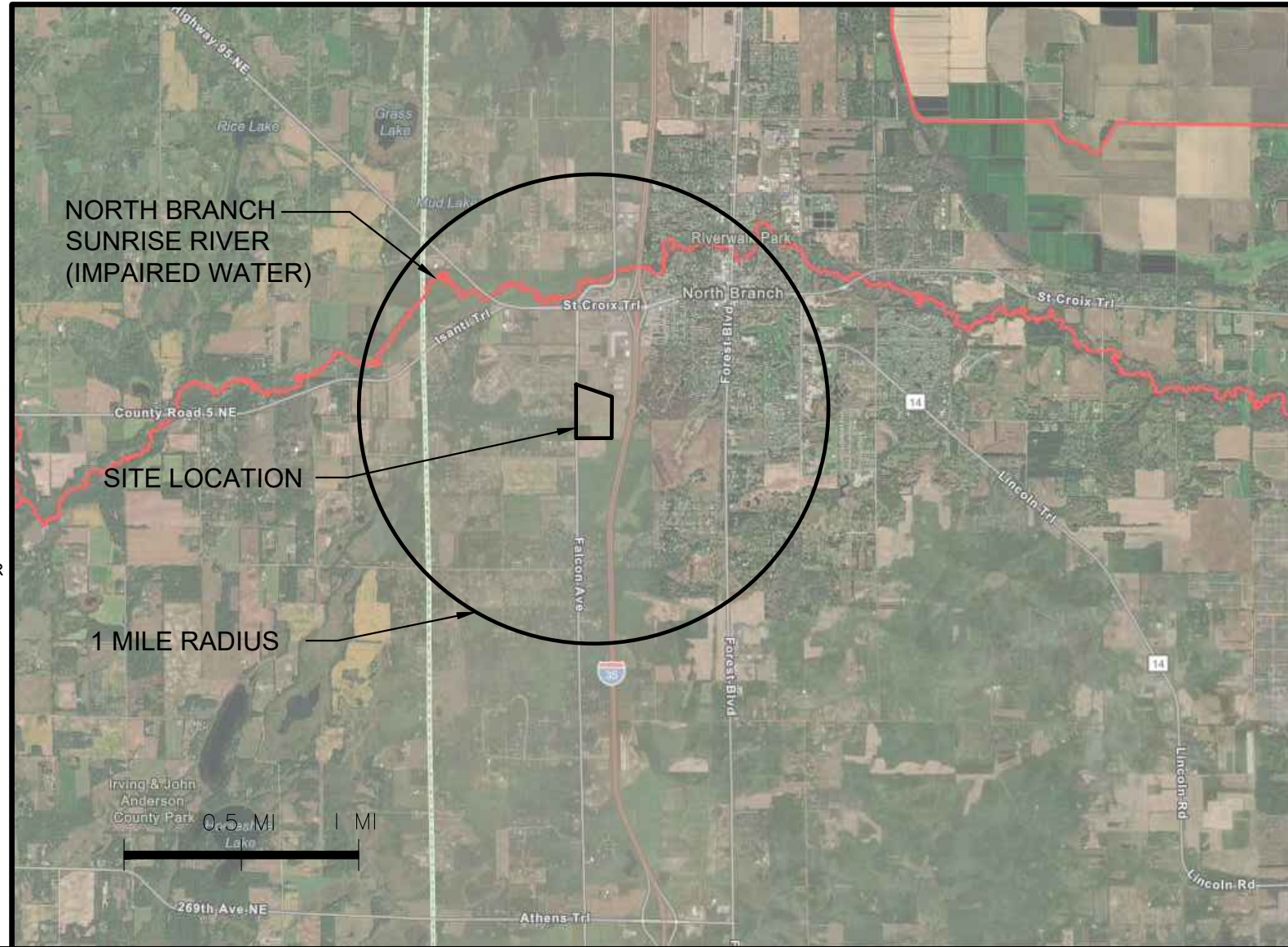
3.03 INSTALLATION

- A. TEMPORARY ROCK CONSTRUCTION ENTRANCE.
1. THE ROCK AREA SHALL BE A MINIMUM OF 6 INCHES DEEP, EXTEND THE FULL WIDTH OF THE EGRESS AREA AND SHALL BE AT LEAST 50 FT LONG, HOWEVER, LONGER ENTRANCES MAY BE REQUIRED TO ADEQUATELY CLEAN THE TIRES.
2. GEOTEXTILE FABRIC MAY BE USED TO PREVENT MIGRATION OF MUD FROM THE UNDERLYING SOIL INTO THE ROCK.
- B. TEMPORARY SILT FENCES:
1. STORE AND HANDLE FABRIC IN ACCORDANCE WITH ASTM D4873.
2. USE NOMINAL 30 INCH HIGH BARRIERS, MINIMUM 60 INCH LONG POSTS SPACED AT 6 FEET MAXIMUM SPACING.
3. EMBED BOTTOM OF FABRIC IN A TRENCH ON THE UPSLOPE SIDE OF FENCE, WITH 6 INCHES OF FABRIC LAID FLAT ON BOTTOM OF TRENCH FACING UPSLOPE; BACKFILL TRENCH AND COMPACT.
4. MINIMUM POST EMBEDMENT:
- a. STEEL POST = 24 INCHES, MINIMUM.
- b. WOOD POST = 18 INCHES, MINIMUM.
5. DO NOT SPLICE FABRIC WIDTH; MINIMIZE SPLICES IN FABRIC LENGTH; SPLICE AT POST ONLY, OVERLAPPING AT LEAST 18 INCHES, WITH EXTRA POST.
6. FASTEN FABRIC TO WOOD POSTS USING ONE OF THE FOLLOWING:
- a. FOUR NAILS PER POST WITH 3/4 INCH DIAMETER FLAT OR BUTTON HEAD, 1 INCH LONG, AND 14 GAGE, 0.083 INCH SHANK DIAMETER.
- b. FIVE STAPLES PER POST WITH AT LEAST 17 GAGE, 0.0453 INCH WIRE, 3/4 INCH CROWN WIDTH AND 1/2 INCH LONG LEGS.
7. FASTEN FABRIC TO STEEL POSTS USING WIRE, NYLON CORD, OR INTEGRAL POCKETS.
- C. TEMPORARY SEDIMENT LOGS:
1. PERIMETER CONTROL SHOULD BE INSTALLED PARALLEL TO THE BASE OF THE SLOPE OR OTHER DISTURBED AREA.
2. STAKES SHOULD BE INSTALLED THROUGH THE MIDDLE OF THE PERIMETER CONTROL ON 10 FT CENTERS, USING 2 IN BY 2 IN BY
- 3 FT WOODEN STAKES. IN THE EVENT STAKING IS NOT POSSIBLE, I.E. WHEN PERIMETER CONTROL IS USED ON PAVEMENT, HEAVY CONCRETE BLOCKS SHALL BE USED BEHIND THE PERIMETER CONTROL TO HELP STABILIZE DURING RAIN EVENTS.
- D. TEMPORARY SEDIMENT FILTERS.
1. DROP-IN SEDIMENT TRAP.
- a. PLACE AS RECOMMENDED BY THE MANUFACTURER.
- E. TEMPORARY PUMPED SEDIMENT CONTROL DEVICE.
1. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.
- F. TEMPORARY SLOPE EROSION PROTECTION.
1. PLACE AT ANY AND ALL FINISH SLOPES THAT ARE STEEPER THAN 10H:1V.
2. SEED AND FERTILIZE PER SPECIFICATION 32 9219 PRIOR TO INSTALLING TEMPORARY SLOPE EROSION PROTECTION.
3. BONDED FIBER MATRIX.
- a. INSTALL THE BFM AS PER THE MANUFACTURER'S INSTRUCTIONS WITH THE FOLLOWING MINIMUM GUIDELINES.
- 1) THE BFM SHALL BE APPLIED WITH HYDRAULIC SPRAY EQUIPMENT BY A MANUFACTURER'S CERTIFIED APPLICATOR.
- 2) APPLICATION SHALL BE DONE AT LEAST 24 HOURS IN ADVANCE OF PROJECTED RAINFALL TO ALLOW THE BFM MULCH ADEQUATE TIME TO DRY.
- 3) THE BFM MULCH SHALL BE APPLIED IN TWO STAGES (ONE-HALF RATE) WITH AMPLE TIME TO DEWATER THE FIRST APPLICATION.
- 4) THE BFM MULCH SHALL BE APPLIED FROM AT LEAST TWO ALTERNATE DIRECTIONS, PREFERABLY 90 DEGREES APART, IF POSSIBLE, TO ENSURE ALL SOIL FACES ARE COVERED.
- 5) THE INSTALLATION RATE OF THE BFM MULCH SHALL BE 3500 LBS PER ACRE, MINIMUM AND 100% COVERAGE.
4. EROSION CONTROL BLANKET.
- a. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.

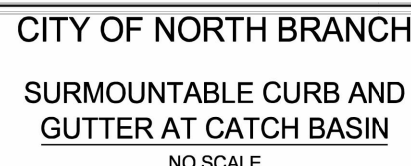
3.04 MAINTENANCE

- A. INSPECT PREVENTIVE MEASURES WEEKLY, WITHIN 24 HOURS AFTER THE END OF ANY STORM THAT PRODUCES 0.5 INCHES OR MORE RAINFALL AT THE PROJECT SITE, AND DAILY DURING PROLONGED RAINFALL.
- B. REPAIR DEFICIENCIES IMMEDIATELY.
- C. TEMPORARY SILT FENCES:
1. PROMPTLY REPLACE FABRIC THAT DETERIORATES UNLESS NEED FOR FENCE HAS PASSED.
2. REMOVE SILT DEPOSITS THAT EXCEED ONE-THIRD OF THE HEIGHT OF THE FENCE.
3. REPAIR FENCES THAT ARE UNDERCUT BY RUNOFF OR OTHERWISE DAMAGED, WHETHER BY RUNOFF OR OTHER CAUSES.
- D. TEMPORARY CONSTRUCTION EXIT.
1. PERIODIC ADDITION OF ROCK OR REMOVAL AND REPLACEMENT OF PAD SHALL BE PROVIDED AS VOIDS BECOME FILLED WITH SOIL.
- E. TEMPORARY PUMPED SEDIMENT CONTROL DEVICE.
1. REPLACE THE UNIT WHEN 1/2 FULL OF SEDIMENT OR WHEN SEDIMENT HAS REDUCED THE FLOW RATE OF THE PUMP DISCHARGE TO AN IMPRACTICAL RATE.
- F. PLACE SEDIMENT IN APPROPRIATE LOCATIONS ON SITE; DO NOT REMOVE FROM SITE.
- 3.05 CLEAN UP
- A. REMOVE TEMPORARY MEASURE AFTER PERMANENT VEGETATION HAS BEEN ESTABLISHED.
- B. WHERE REMOVAL OF TEMPORARY MEASURES WOULD LEAVE EXPOSED SOIL, SHAPE SURFACE TO AN ACCEPTABLE GRADE AND FINISH TO MATCH ADJACENT GROUND SURFACES.
- END OF SECTION

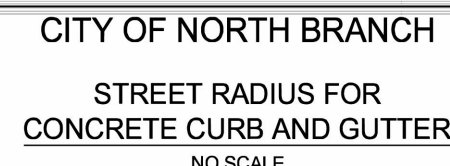
IMPAIRED WATERS MAP



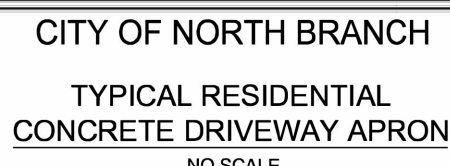
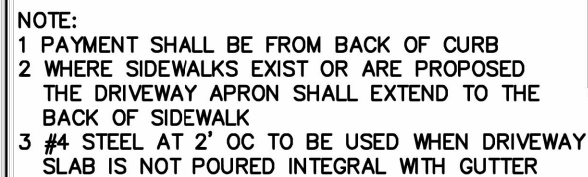
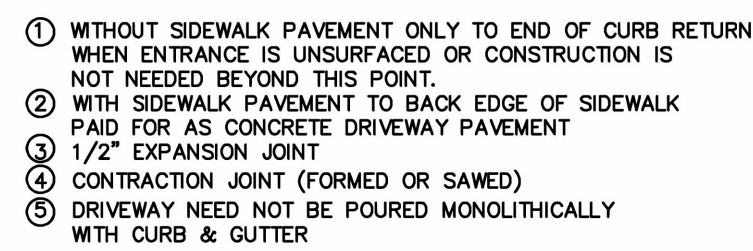
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.	DATE: 04/24/2025	REV NO: 1	DATE: 04/01/2025	DESCRIPTION: REVISION PER CITY REVIEW
	DESIGN BY: MJM	DRAWN BY: MJM	CHECKED BY: CJD	REVISION PER CITY REVIEW
NOT FOR CONSTRUCTION	FILE NO: 22-0030.00	SWPPP		
	Signed: Christopher J. Dahn			
CEDAR RIDGE COMMUNITY LLC CEDAR RIDGE COMMUNITY City of North Branch, Chisago County, MN	Bogart, Pederson & Associates, Inc. LAND SURVEYING ENGINEERING ENVIRONMENTAL SERVICES 13076 FIRST STREET, BECKER, MN 55308-9322 TEL: 763-262-8822 FAX: 763-262-8844	SWPPP NARRATIVE	58628	
			Lic. No.	
SHEET NO.		C8.3		



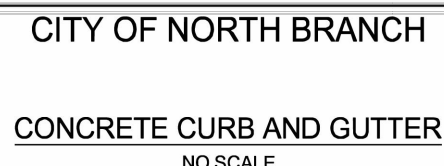
2025 - STANDARD DETAIL
DETAIL NO.
RDW - 004



2025 - STANDARD DETAIL
DETAIL NO.
RDW - 005



2025 - STANDARD DETAIL
DETAIL NO.
RDW - 006

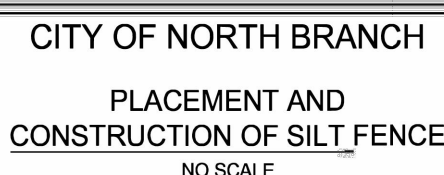
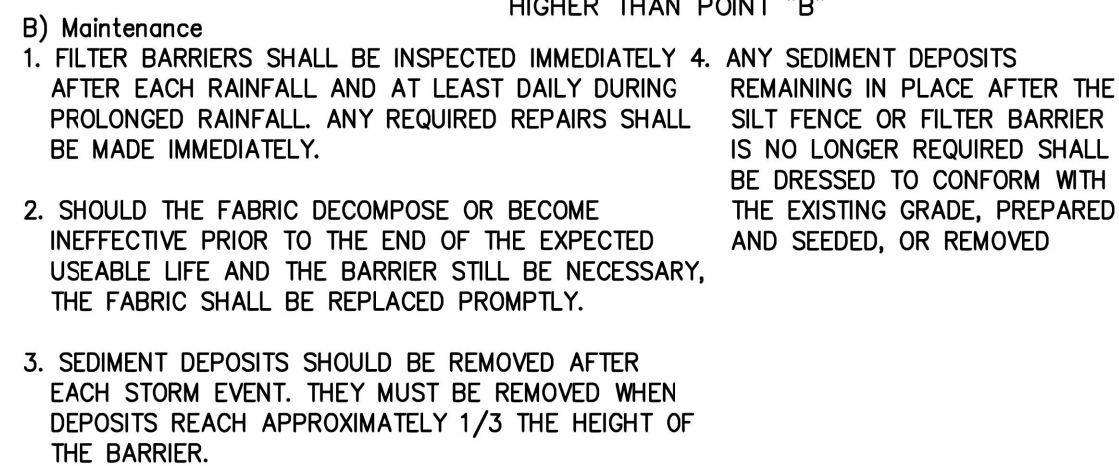


2025 - STANDARD DETAIL
DETAIL NO.
RDW - 003

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.

NOT FOR CONSTRUCTION

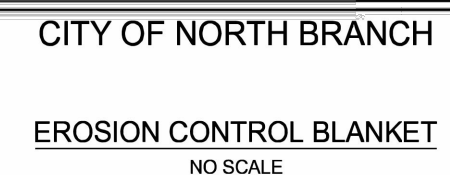
Signed: _____ Christopher J. Dahm
 Date: _____ Lic. No. 58628



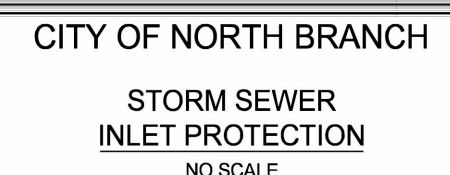
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DETAIL NO.

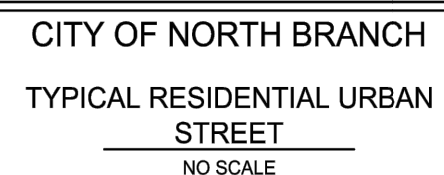
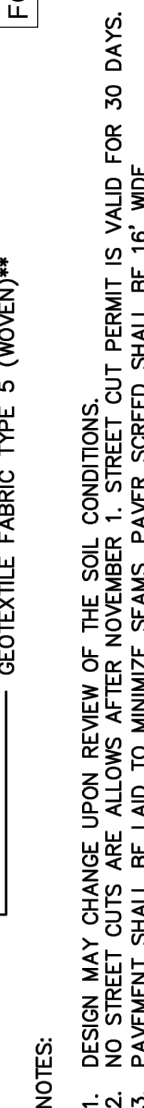
FRQ-001



2025 - STANDARD DETAIL
DETAIL NO.
ERO-006



2025 - STANDARD DETAIL
DETAIL NO.
FRQ-003

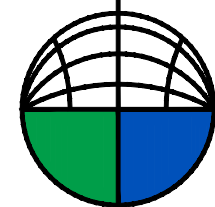


2025 STANDARD DETAIL

DETAIL NO.

RDW - 001

**BOGART, PEDERSON
& ASSOCIATES, INC.**

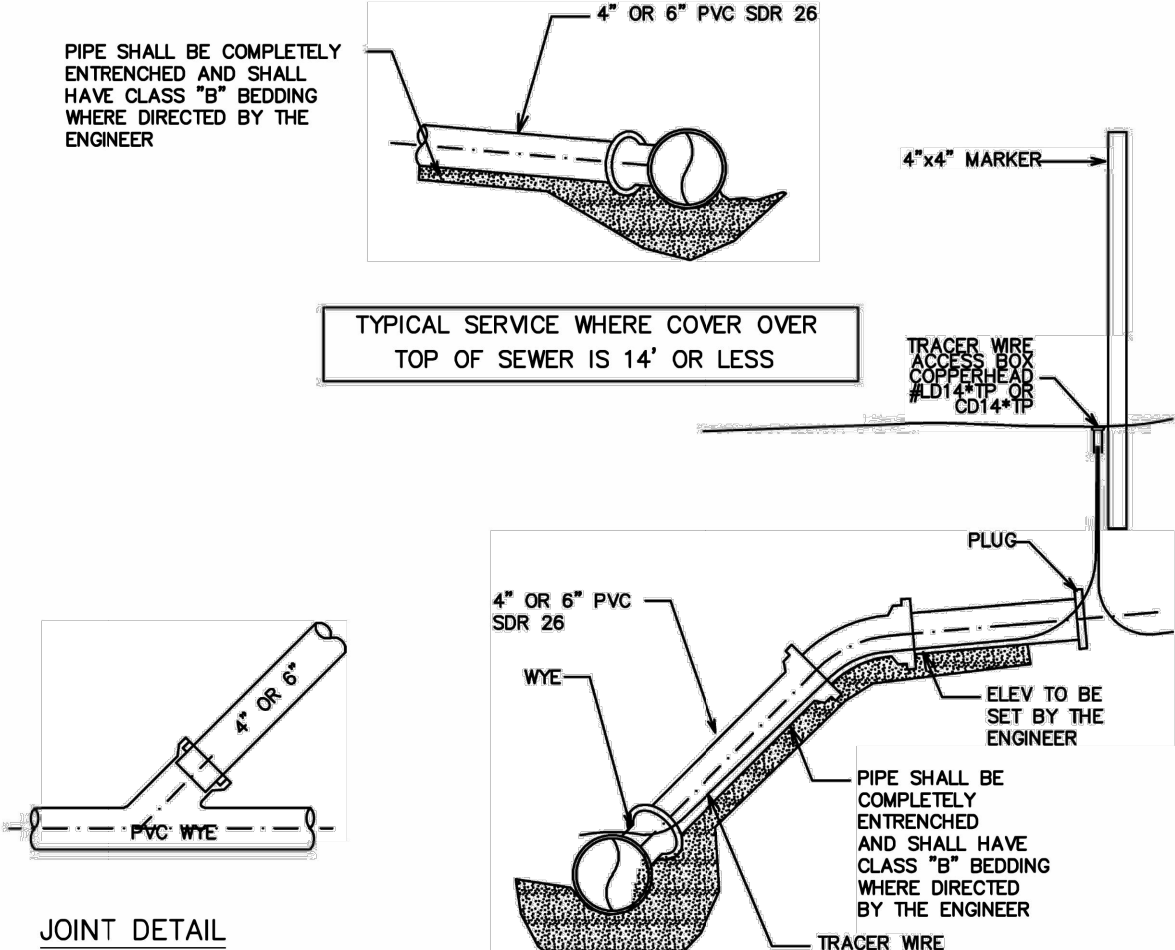


**CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY**
City of North Branch, Chicago County, MN

DETAILS

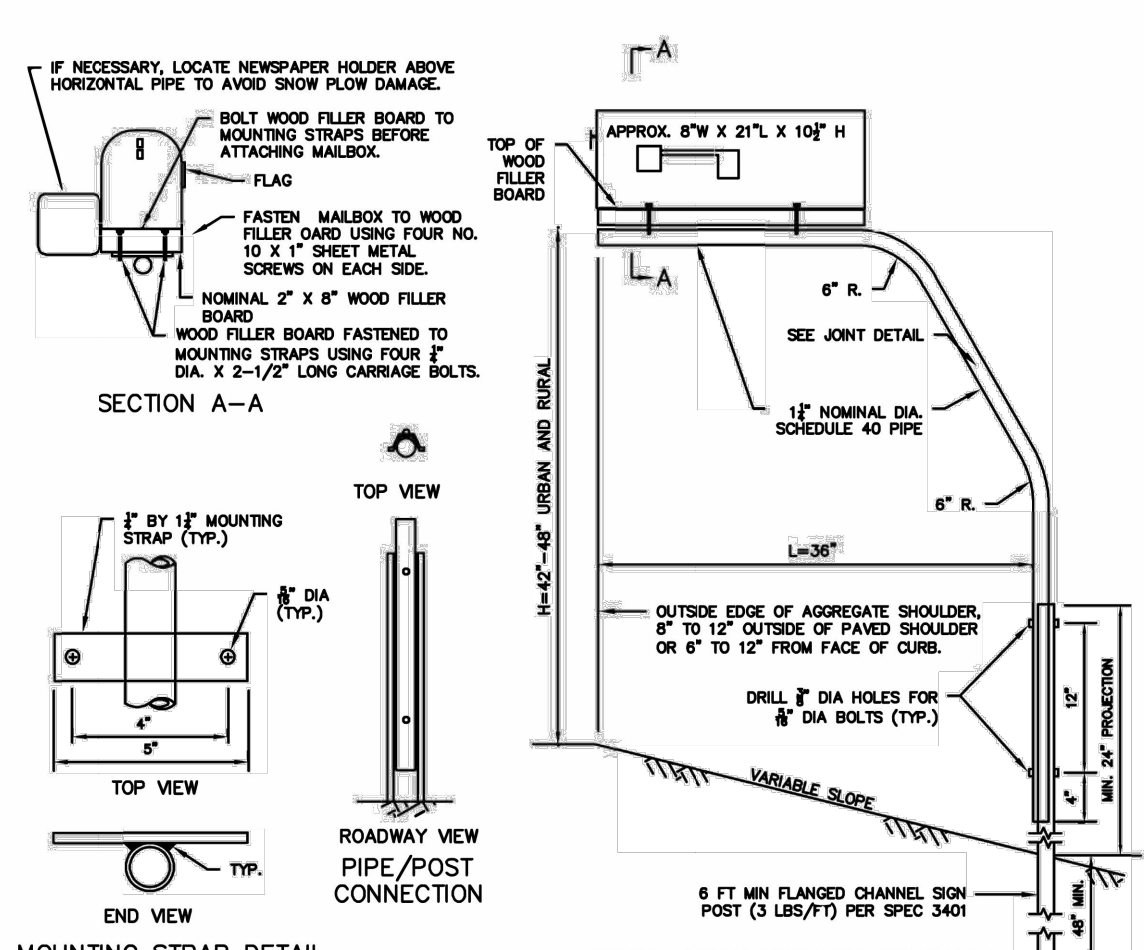
SHEET NO.

C9.1



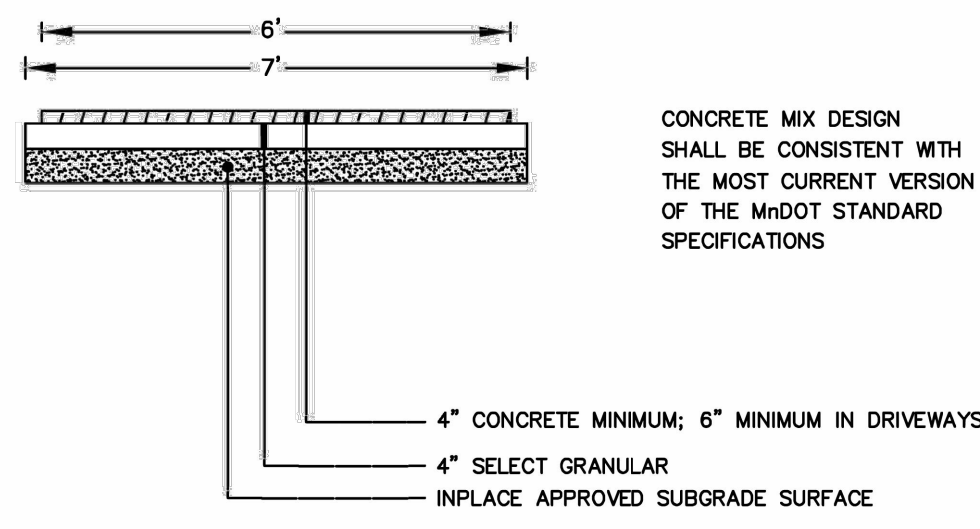
- NOTES:
- 1) ALL SERVICE CONNECTIONS INCLUDING NECESSARY BENDS AND SPECIAL FITTINGS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER LINEAR FOOT OF 4" OR 6" NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR CONCRETE ENCASEMENT OR PIPE BEDDING.
 - 2) ALL SERVICE CONNECTIONS SHALL TERMINATE 10' INSIDE PROPERTY LINE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
 - 3) SERVICE STUB SHALL BE PLUGGED AND MARKED WITH A 4" x 4" TIMBER PROTRUDING 3' OUT OF GROUND, (PAINTED GREEN).
 - 4) NO SADDLES WILL BE ALLOWED.
 - 5) RETRO-FIT INSTALLATIONS TO BE CONSTRUCTED BY CUTTING IN A PVC WYE AND PVC SLEEVE.
 - 6) SEWER SERVICES ARE TO BE LOCATED 3' DOWNSTREAM OF WATER SERVICE IF IN THE SAME TRENCH.

	CITY OF NORTH BRANCH		2025 - STANDARD DETAIL
	SANITARY SEWER SERVICE DETAIL	DETAIL NO.	SAN-001



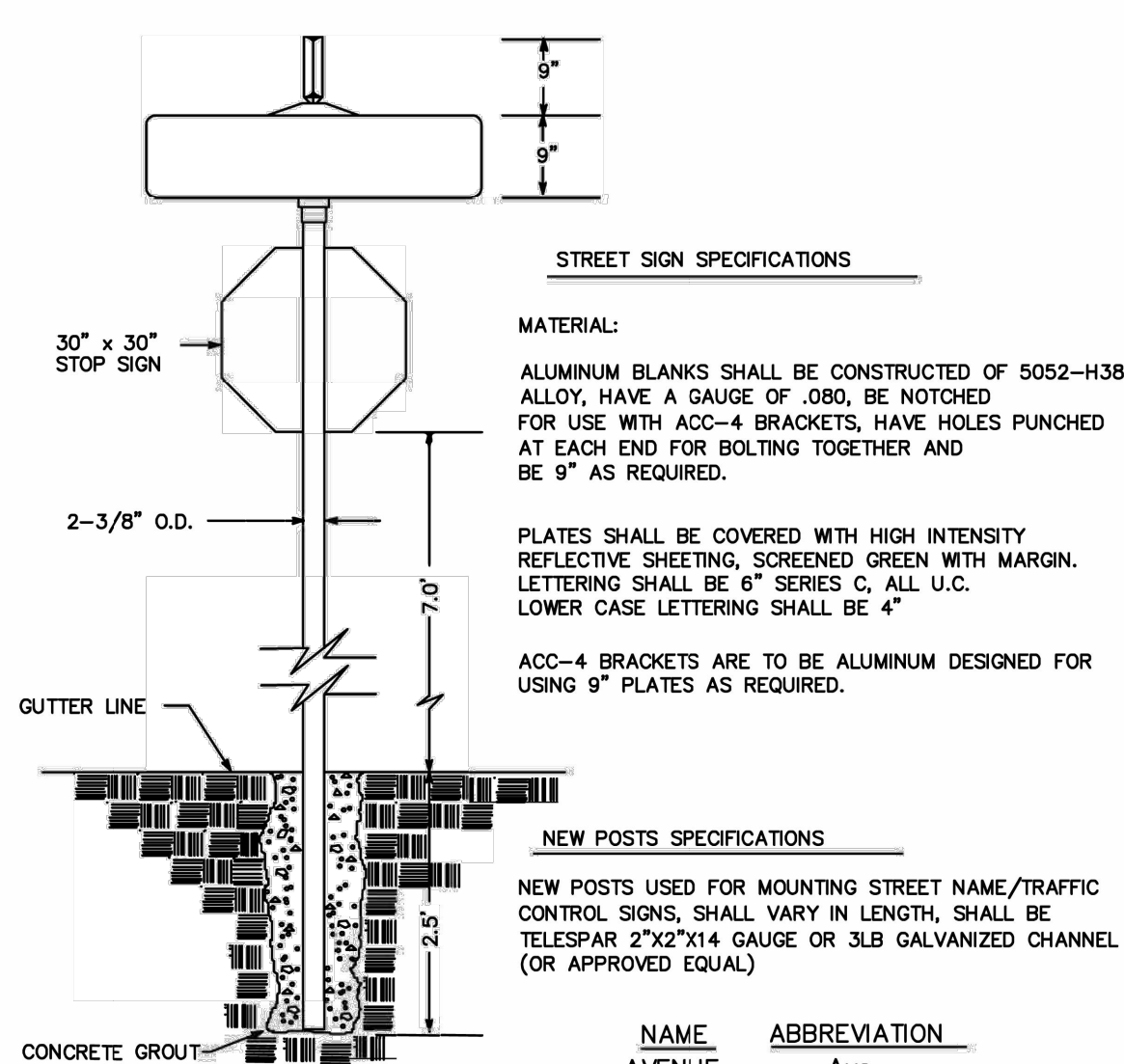
- NOTES:
- MAILBOX LOCATIONS SHOW BE STAKED BEFORE INSTALLATION FOR PROPER HEIGHT AND DISTANCE FROM ROADWAY. ONCE STAKED, THE INSTALLER MUST NOTIFY THE ENGINEER AND THE POST OFFICE. THE ENGINEER AND THE POSTMASTER SHALL APPROVE THE STAKED LOCATIONS PRIOR TO FINAL INSTALLATION.
- THE MINIMUM SPACING (CENTER TO CENTER) BETWEEN MULTIPLE SUPPORTS SHALL BE EQUAL TO THE HEIGHT OF THE MAILBOX SUPPORT.

	CITY OF NORTH BRANCH		2025 - STANDARD DETAIL
	MAIL BOX INSTALLATION DETAIL	DETAIL NO.	RDW - 013



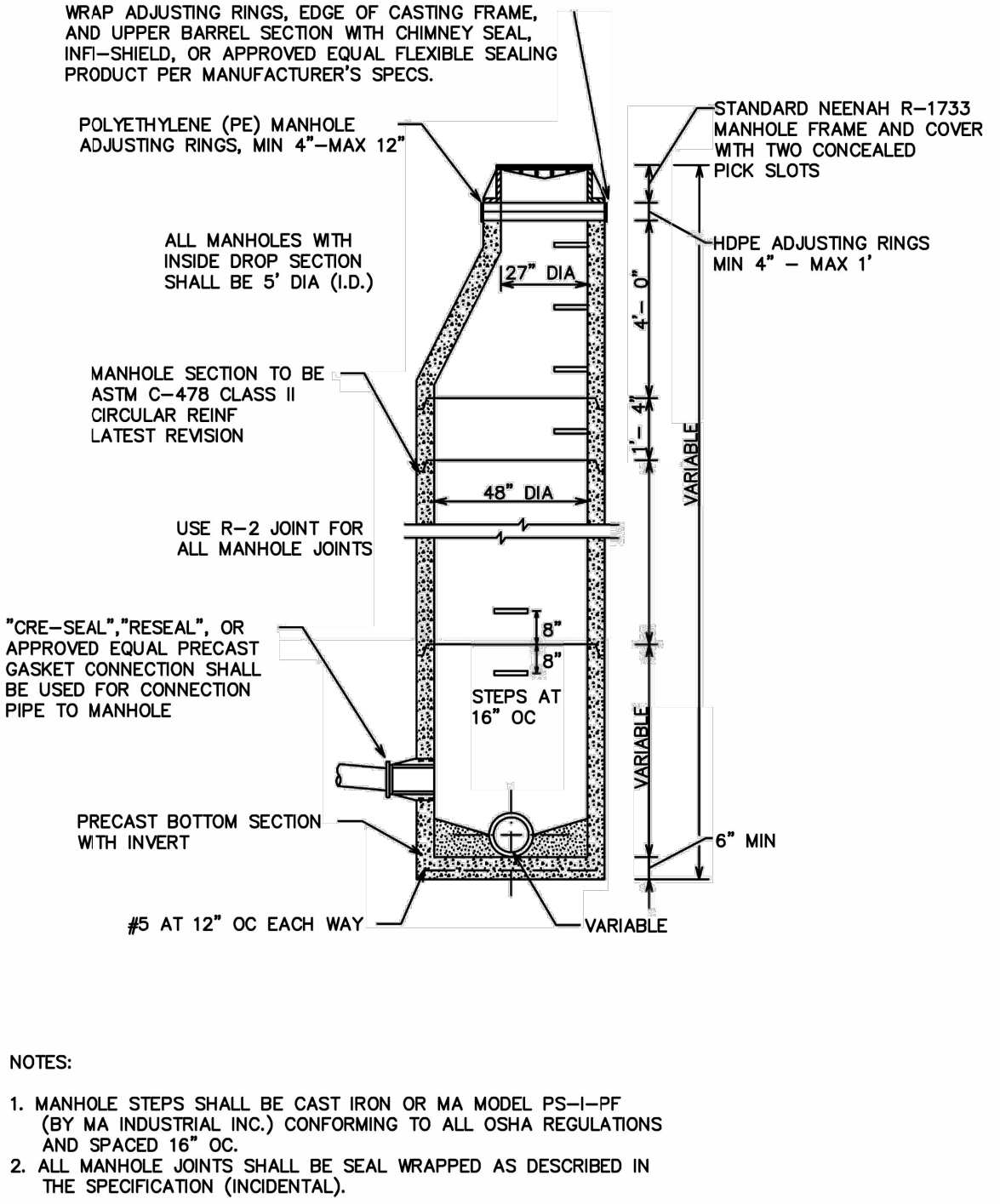
6' WIDE CONCRETE WALK
TYPICAL SECTION

	CITY OF NORTH BRANCH		2025 - STANDARD DETAIL
	TYPICAL CONCRETE WALK	DETAIL NO.	RDW - 012



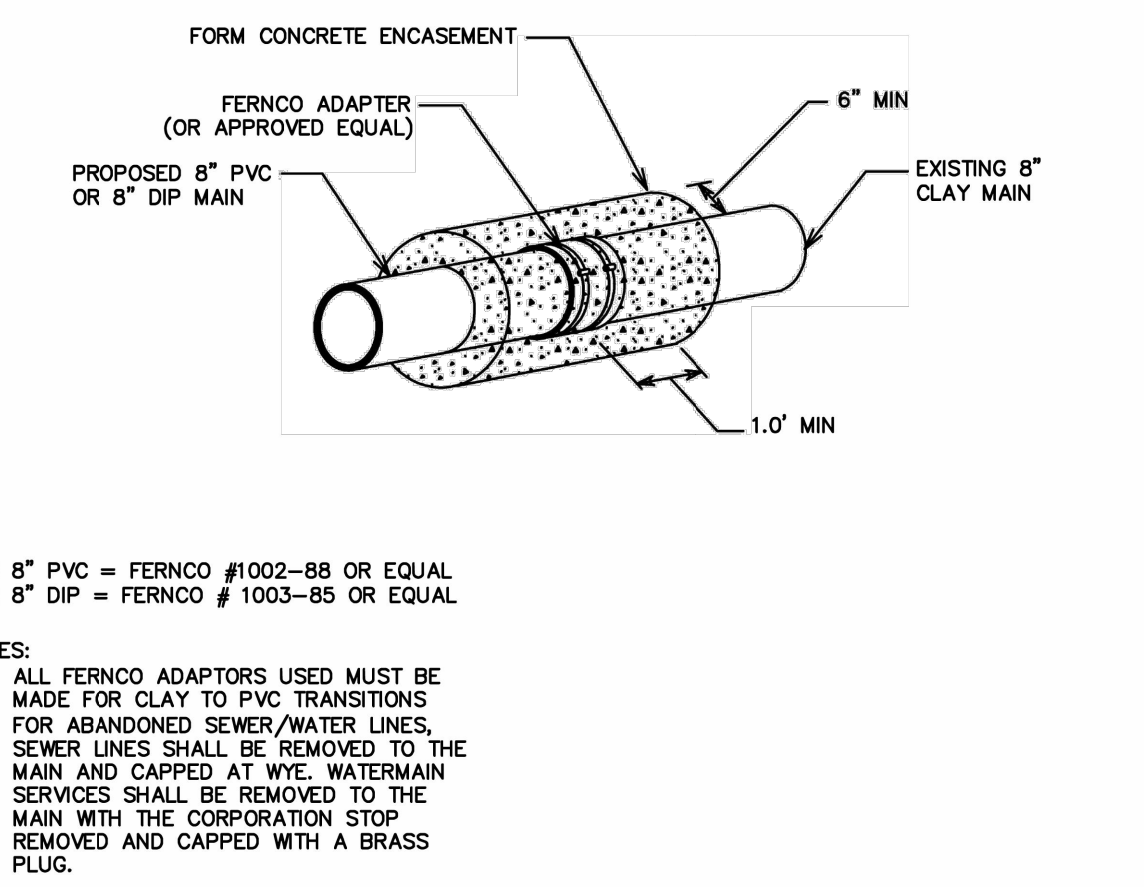
NAME	ABBREVIATION
AVENUE	Ave
BOULEVARD	Blvd
CIRCLE	Cir
COURT	Ct
DRIVE	Dr
EAST	E
PARKWAY	Pkwy
PLACE	Pl
STREET	St
TERRACE	Ter
TRAIL	Trl
WEST	W

	CITY OF NORTH BRANCH		2025 - STANDARD DETAIL
	TYPICAL STREET SIGN	DETAIL NO.	RDW - 010



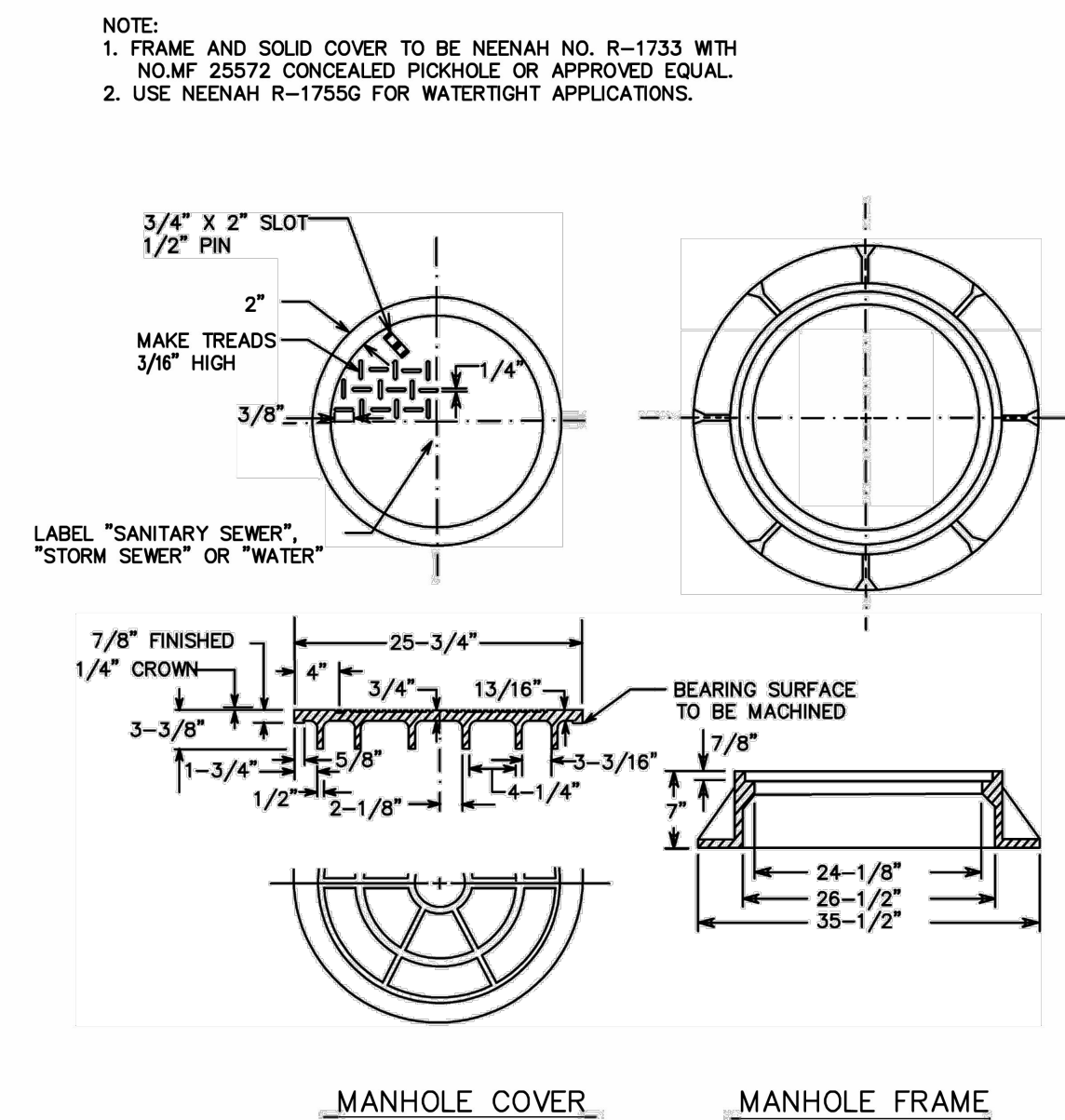
- NOTES:
1. MANHOLE STEPS SHALL BE CAST IRON OR MA MODEL PS-I-PF (BY MA INDUSTRIAL INC.) CONFORMING TO ALL OSHA REGULATIONS AND SPACED 16" OC.
 2. ALL MANHOLE JOINTS SHALL BE SEAL WRAPPED AS DESCRIBED IN THE SPECIFICATION (INCIDENTAL).

	CITY OF NORTH BRANCH		2025 - STANDARD DETAIL
	STANDARD MANHOLE FOR SANITARY SEWER	DETAIL NO.	SAN-002



- NOTES:
- 1) ALL FERNCO ADAPTORS USED MUST BE MADE FOR CLAY TO PVC TRANSITIONS.
 - 2) FOR ABANDONED SEWER/WATER LINES, SEWER LINES SHALL BE REMOVED TO THE MAIN AND CAPPED AT WYE. WATERMAIN SERVICES SHALL BE REMOVED TO THE MAIN WITH THE CORPORATION STOP REMOVED AND CAPPED WITH A BRASS PLUG.

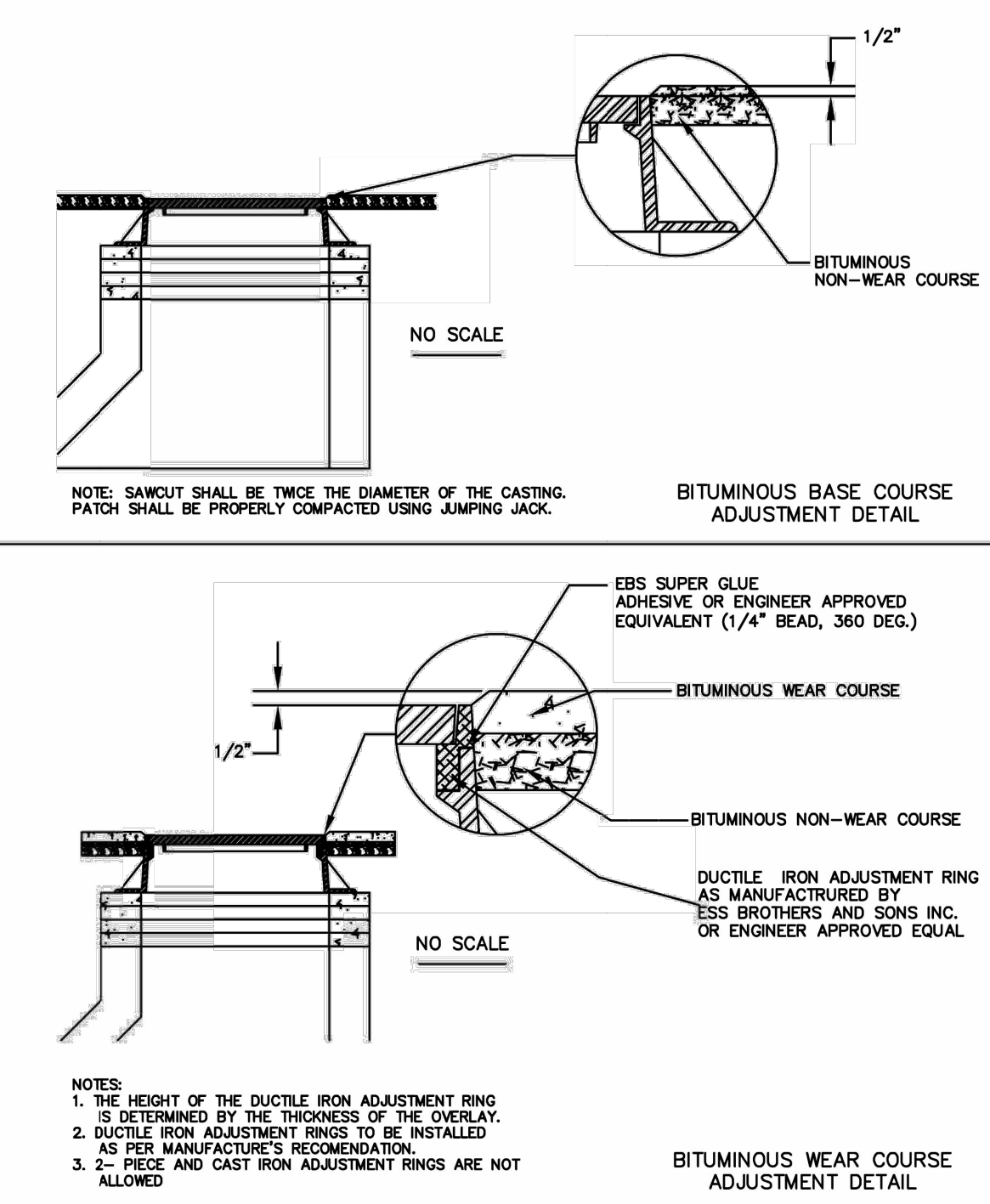
	CITY OF NORTH BRANCH		2025 - STANDARD DETAIL
	SANITARY SEWER MAIN TO CLAY PIPE CONNECTION DETAIL	DETAIL NO.	SAN - 003



- NOTE:
1. FRAME AND SOLID COVER TO BE NEENAH NO. R-1733 WITH NO.MF 25572 CONCEALED PICKHOLE OR APPROVED EQUAL.
 2. USE NEENAH R-1755G FOR WATERTIGHT APPLICATIONS.

MANHOLE COVER MANHOLE FRAME

	CITY OF NORTH BRANCH		2025 - STANDARD DETAIL
	STANDARD SANITARY & STORM SEWER FRAME & COVER FOR MANHOLE	DETAIL NO.	SAN-004



- NOTES:
1. THE HEIGHT OF THE DUCTILE IRON ADJUSTMENT RING IS DETERMINED BY THE THICKNESS OF THE OVERLAY.
 2. DUCTILE IRON ADJUSTMENT RINGS TO BE INSTALLED AS PER MANUFACTURE'S RECOMMENDATION.
 3. 2- PIECE AND CAST IRON ADJUSTMENT RINGS ARE NOT ALLOWED.

BITUMINOUS WEAR COURSE ADJUSTMENT DETAIL

	CITY OF NORTH BRANCH		2025 - STANDARD DETAIL
	CASTING ADJUSTMENT FOR SANITARY AND STORM SEWER	DETAIL NO.	SAN-005

DATE:	REV NO.	DATE	DESCRIPTION
04/24/2025	1	04/01/2025	REVISION PER CITY REVIEW
	2	04/24/2025	REVISION PER CITY REVIEW
DESIGN BY:	MM		
DRAWN BY:	MM		
CHECKED BY:	CJD		
DWG FILE:	DETAILS		
FILE NO.:	22-0030.00		

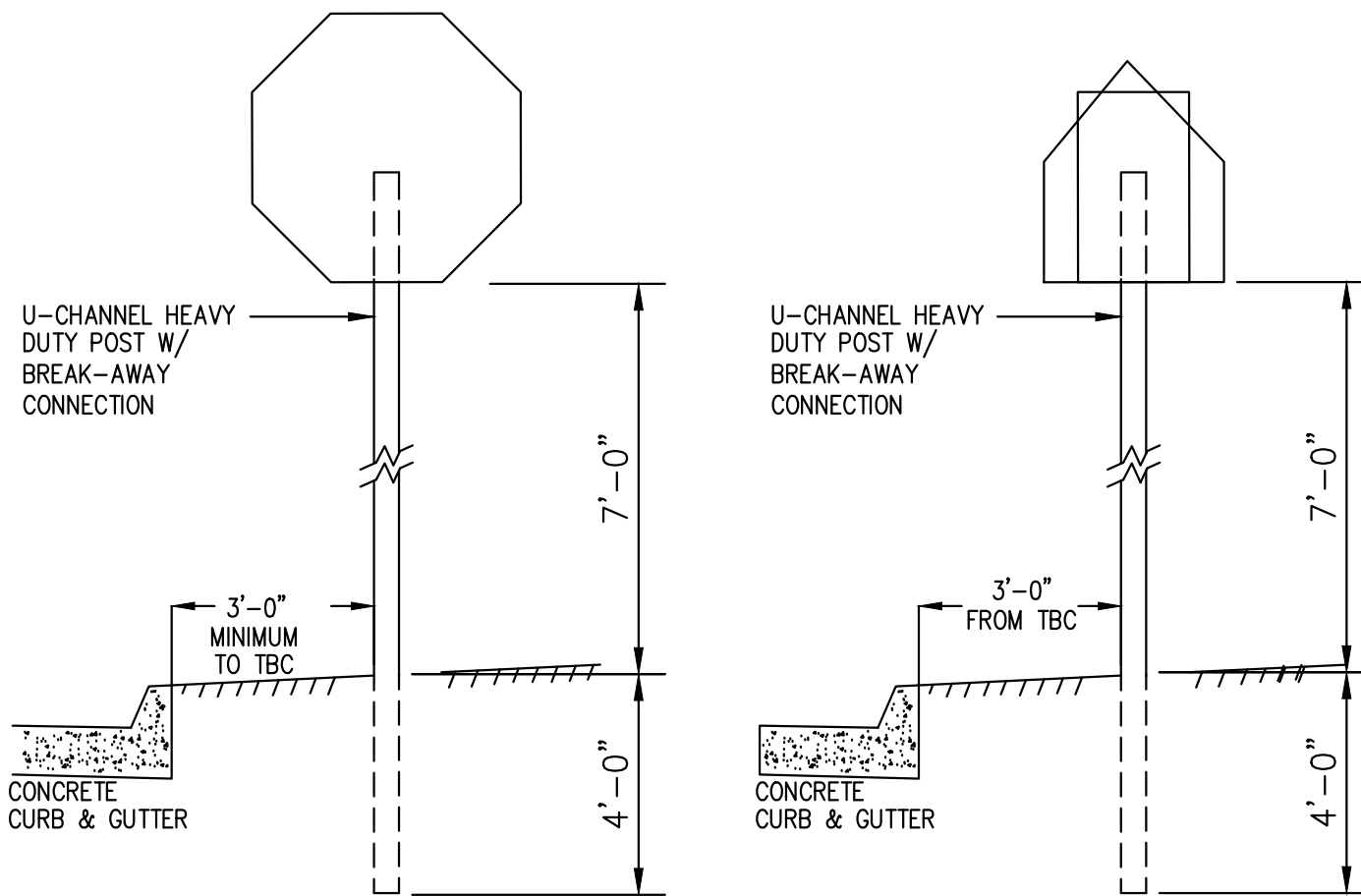
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

NOT FOR CONSTRUCTION

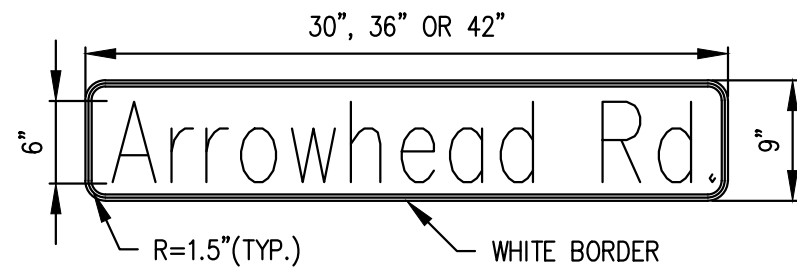
Signed: Christopher J. Dahn Lic. No. 58628

Date: _____

	CEDAR RIDGE COMMUNITY LLC CEDAR RIDGE COMMUNITY	
	City of North Branch, Chicago County, MN	
SHEET NO.		DETAILS
C9.2		



TRAFFIC SIGNS
N.T.S.



TRAFFIC SIGNS
N.T.S.



Having external prismatic optics incorporated into the fixture globe, light output of the LED array is optimized to work with the refractive optics to offer excellent light distribution and overall fixture efficiency. The housing is made of cast aluminum and is finished with a black, polyester powder paint to ensure maximum durability.

Height: 46.25" **Width:** 16" **Weight:** 40 lbs. **Color:** Black **Watt:** 60 LED
Max EPA: 1.8 sq. ft. **Made of:** Cast Aluminum **IES Lighting Classification:** Type 1

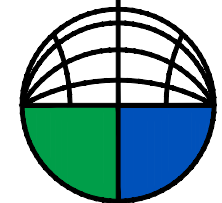
DATE:	04/24/2025	REV NO.	DATE	DESCRIPTION
DESIGN BY:	MJM	1	04/01/2025	REVISION PER CITY REVIEW
DRAWN BY:	MJM	2	04/24/2025	REVISION PER CITY REVIEW
CHECKED BY:	CJD			
DWG FILE:	DETAILS			
FILE NO.:	22-00300.00			

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.

NOT FOR CONSTRUCTION

Signed: _____ Christopher J. Dahn
 Date: _____ Lic. No. 58628

**BOGART, PEDERSON
& ASSOCIATES, INC.**

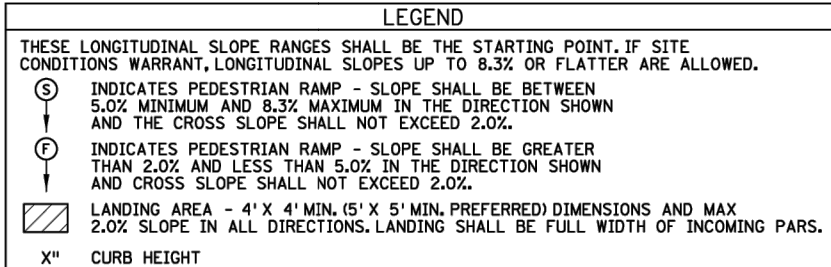


CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chisago County, MN

SHEET NO

DETAILS

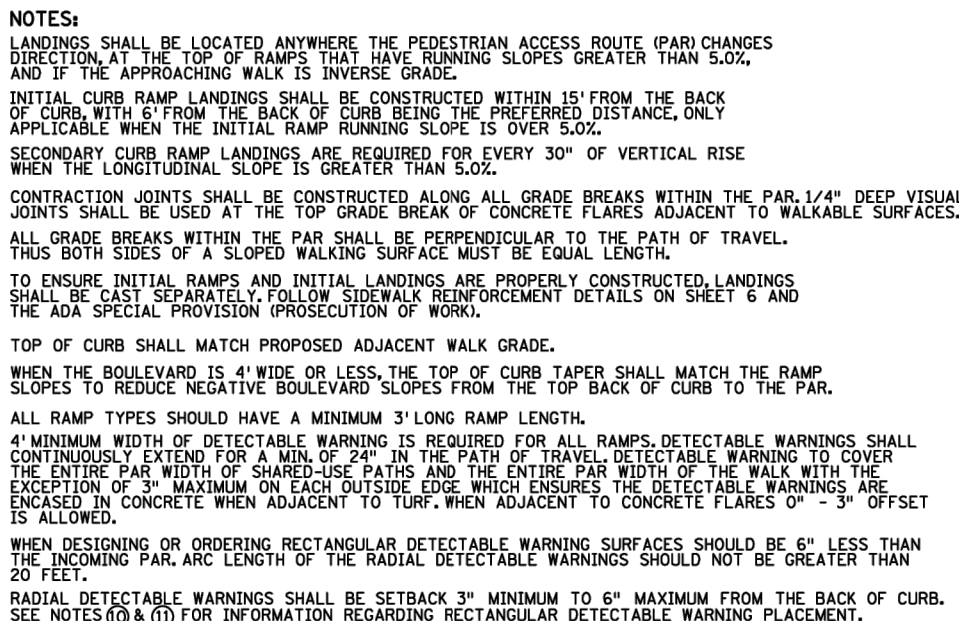
C9.5



6	PEDESTRIAN CURB RAMP DETAILS
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 MINNESOTA DEPARTMENT OF TRANSPORTATION	STANDARD PLAN 5-297.250	1 OF 6
	 THOMAS STRUCHINSKI STATE DESIGN ENGINEER	APPROVED: 11-04-2021 REVISED:

STATE PROJ. NO.	(TH)	SHEET NO.	OF	SHEETS
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- 1 MATCH FULL CURB HEIGHT.
- 2 3" HIGH CURB WHEN USING A 3" LONG FLANGE.
- 3 4" HIGH CURB WHEN USING A 4" LONG FLANGE.
- 4 MINIMUM CURB HEIGHT IS 4" (4" MIN. DISTANCE REQUIRED BETWEEN DOMES).
- 5 PREFERRED (7" MIN. DISTANCE REQUIRED BETWEEN DOMES).
- 6 THE "BUMP" IN BETWEEN THE RAMPS SHOULD NOT BE IN THE PATH OF TRAVEL FOR COMBINED DIRECTION OF TRAVEL. THE BUMP SHOULD BE LOCATED AT THE END OF THE SWITCH RAMP TO A FAVORABLE EXPRESSED CORNER.
- 7 WHEN USING SLOPED CONCRETE PAVED FLARES ON THE OUTSIDE OF DIRECTIONAL RAMPS, AND AN ADJACENT WALKABLE SURFACE, THE FLARE SHOULD BE USED TO STOP TRIPPING HAZARDS AND FACILITATE AN EASY TURN.
- 8 GRADING SHALL ALWAYS BE DONE WHEN FEASIBLE. V. CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDE LINE, WITHIN THE RIGHT OF WAY ALLOWANCE, WHEN ADJACENT TO PARKING LOTS, CONCRETE OR BITUMINOUS PAVED SURFACES, OR OTHER HARD SURFACES, TO PREVENT TRIPPING HAZARDS AND FACILITATE AN EASY TURN.
- 9 MAX. 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK AND TO FLOW LINE SHALL BE CONSTRUCTED INTEGRAL WITH CURBS AND GUTTER.
- 10 8% TO 10% WALKABLE FLARE.
- 11 PLACEMENT DOWNS AT THE BACK OF CURB WHEN ALLOWABLE SLOPE CRITERIA IS EXCEEDED.
- 12 FRONT EDGE OF DETECTABLE WARNING SHALL BE SET BACK 2' MAXIMUM WHEN ADJACENT TO WALKABLE SURFACE, AND 3' MAXIMUM WHEN ADJACENT TO NON-WALKABLE SURFACE WITH ON-CORNER SET BACK 5' FROM DETECTABLE WARNING. DETECTABLE WARNING SHALL BE SET BACK 2' MAXIMUM WHEN ADJACENT TO WALKABLE SURFACE. DETECTABLE WARNING SHALL BE SET BACK 2' MAXIMUM WHEN ADJACENT TO WALKABLE SURFACE WITH ON-CORNER SET BACK 5' FROM DETECTABLE WARNING. DETECTABLE WARNING SHALL BE SET BACK 2' MAXIMUM WHEN ADJACENT TO WALKABLE SURFACE. DETECTABLE WARNING SHALL BE SET BACK 2' MAXIMUM WHEN ADJACENT TO WALKABLE SURFACE WITH ON-CORNER SET BACK 5' FROM DETECTABLE WARNING.

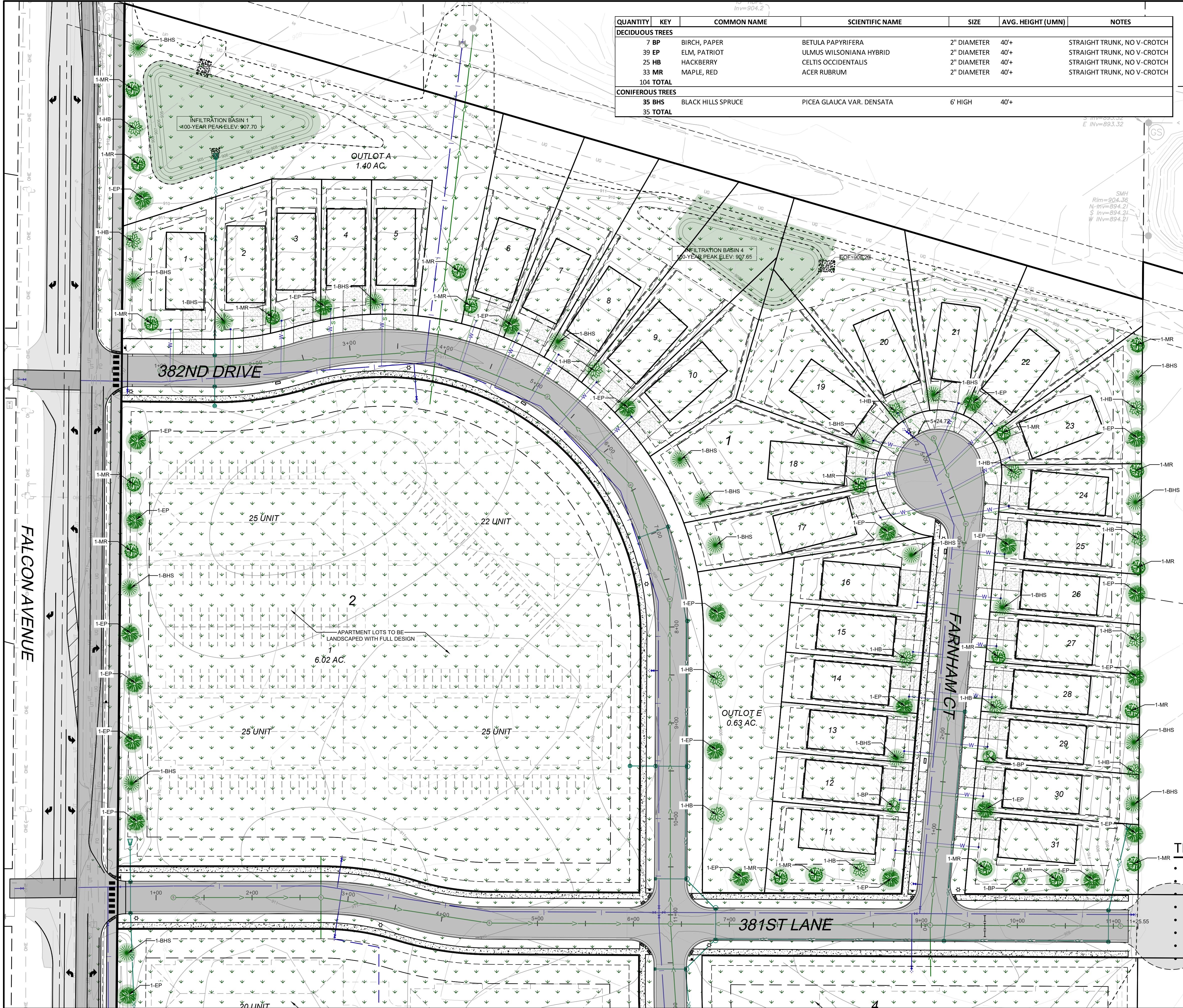
- 11 RECTANGULAR DETECTABLE WARNINGS MAY BE SETBACK UP TO 9" FROM THE BACK OF CURB WITH CORNER SET 3" FROM BACK OF CURB. IF 9" SETBACK IS EXCEEDED USE RADIAL DETECTABLE WARNINGS.
- 12 FOR DIRECTIONAL RAMPS WITH THE DETECTABLE WARNINGS PLACED AT THE BACK OF CURB, THE DETECTABLE WARNINGS SHALL BE PLACED AT THE BACK OF CURB AND NOT IN THE WALKWAY, TRAVEL LANE, OR TRAVEL AND HELPS IDENTIFY THE CURB TAPER OBSTRUCTING THE PATH OF PEDESTRIAN TRAVEL.
- 13 THE CONCRETE, SLAB SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE BACK OF CURB. MAINTAIN 3" BETWEEN EDGE OF DOWNS AND EDGE OF CONCRETE.
- 14 TO BE USED FOR ALL DIRECTIONAL RAMPS, EXCEPT WHERE DOWNS ARE PLACED AT THE BACK OF CURB.
- 15 TO BE USED FOR ALL DIRECTIONAL RAMPS 4 INCHES FROM SIDE OF CURB. A MINIMUM 2 INCHES OF CONCRETE COVER ABOVE EACH SIDE OF FLEX (INCIDENTAL).

LEGEND	
THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.	
⑤	INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
⑥	INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.
	LANDING AREA - 4' x 4' MIN. IS 5' x 5' MIN. PREFERRED DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARLS.
X"	CURB HEIGHT

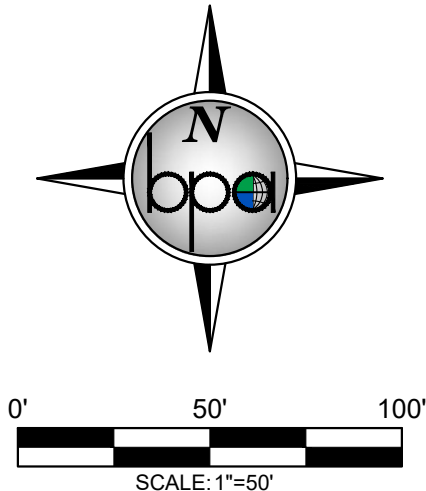
250	2 OF 6	PEDESTRIAN CURB RAMP DETAILS
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	STANDARD PLAN 5-297.250	2 OF 6
	 THOMAS J. SYRECKI STATE DESIGN ENGINEER	APPROVED: 11-04-2020 REVISED:

(T.H.) SHEET NO. OF SHEETS



QUANTITY	KEY	COMMON NAME	SCIENTIFIC NAME	SIZE	AVG. HEIGHT (UMN)	NOTES
DECIDUOUS TREES						
7	BP	BIRCH, PAPER	BETULA PAPYRIFERA	2" DIAMETER	40'+	STRAIGHT TRUNK, NO V-CROTCH
39	EP	ELM, PATRIOT	ULMUS WILSONIANA HYBRID	2" DIAMETER	40'+	STRAIGHT TRUNK, NO V-CROTCH
25	HB	HACKBERRY	CELTIS OCCIDENTALIS	2" DIAMETER	40'+	STRAIGHT TRUNK, NO V-CROTCH
33	MR	MAPLE, RED	ACER RUBRUM	2" DIAMETER	40'+	STRAIGHT TRUNK, NO V-CROTCH
104	TOTAL					
CONIFEROUS TREES						
35	BHS	BLACK HILLS SPRUCE	PICEA GLAUCA VAR. DENSATA	6' HIGH	40'+	
35	TOTAL					



LEGEND:

- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED TURF ESTABLISHMENT
- PROPOSED INFILTRATION SEED EST.
- PROPOSED DECIDUOUS TREE
- PROPOSED CONIFEROUS TREE
- PROPOSED SHRUB

LANDSCAPE REQUIREMENTS:

PER CITY OF NORTH BRANCH ZONING ORDINANCE:
ALL LANDSCAPING INCORPORATED IN SAID PLAN SHALL CONFORM TO THE FOLLOWING STANDARDS AND CRITERIA:
A. ALL PLANTS MUST AT LEAST EQUAL THE FOLLOWING MINIMUM SIZE:

SHADE TREES	POTTED/BARE ROOT OR BALLED & BURLAPPED
HALF TREES	2-INCH DIAMETER
EVERGREEN	1-1/2 INCH DIAMETER
TALL SHRUBS & HEDGE MAT.	6 FEET HIGH
LOW SHRUBS - DECIDUOUS	6 FEET HIGH
-EVERGREEN	24 - 30 INCHES
-SPREADING EVERGREENS	24 - 30 INCHES
	18 - 24 INCHES

B. LANDSCAPE GUARANTEE: ALL NEW PLANTS SHALL BE GUARANTEED FOR TWO (2) FULL YEARS FROM THE TIME PLANTING HAS BEEN COMPLETED. ALL PLANTS SHALL BE ALIVE AND IN SATISFACTORY GROWTH AT THE END OF THE GUARANTEE PERIOD OR BE REPLACED.

(SEE CITY ORDINANCE FOR FULL REQUIREMENTS)

LANDSCAPE NOTES:

- ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED AND VEGETATED AS SOON AS POSSIBLE. ANY FINISHED AREAS SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS AFTER FINISHED GRADING IS COMPLETED IN ACCORDANCE TO MN/DOT 2575.
- PLANTING SOIL SHALL CONSIST 1:1:1 CONSISTING OF 33% SELECT LOAMY TOPSOIL, 33% PEAT MOSS, 33% PIT RUN SAND.
- ALL DISTURBED AREAS SHALL BE REVEGETATED WITH MN/DOT SEED MIX, MULCHED, & DISK ANCHORED, PER THE FOLLOWING SCHEDULE:
SEED MIX 25-131: 220 LB/AC.
INFILTRATION BASIN SEED MIX 33-261: 35 LB/AC.
MULCH TYPE 3: 2 TONS/AC.

TREE PRESERVATION NOTES:

- TREE REMOVAL AREA: 4.17 ACRES
- TREE PRESERVATION AREA: 0.04 ACRES
- TREE PRESERVATION %: 1%
- 50% OF TREE REMOVAL AREA: 2.08 ACRES
- ASSUMPTIONS FOR REPLACEMENT: 500 S.F. OF COVERAGE PER TREE
- 2.08 ACRES / 500 S.F.: 182 TREES TO BE REPLACED
- TREES PROPOSED: 139
- MISSING TREES TO BE PAID: 43

DATE: 04/24/2025
DESIGN BY: NJM
DRAWN BY: NJM
CHECKED BY: CJD
DWG FILE: EROSION
FILE NO.: 22-0303.00

DESCRIPTION
REVISION PER CITY REVIEW
04/01/2025
04/24/2025

DATE: 04/24/2025
DESIGN BY: NJM
DRAWN BY: NJM
CHECKED BY: CJD
DWG FILE: EROSION
FILE NO.: 22-0303.00

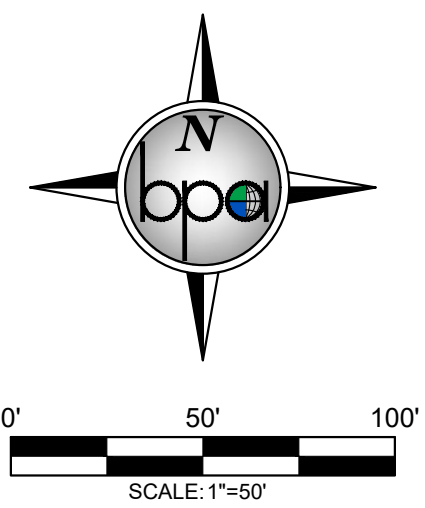
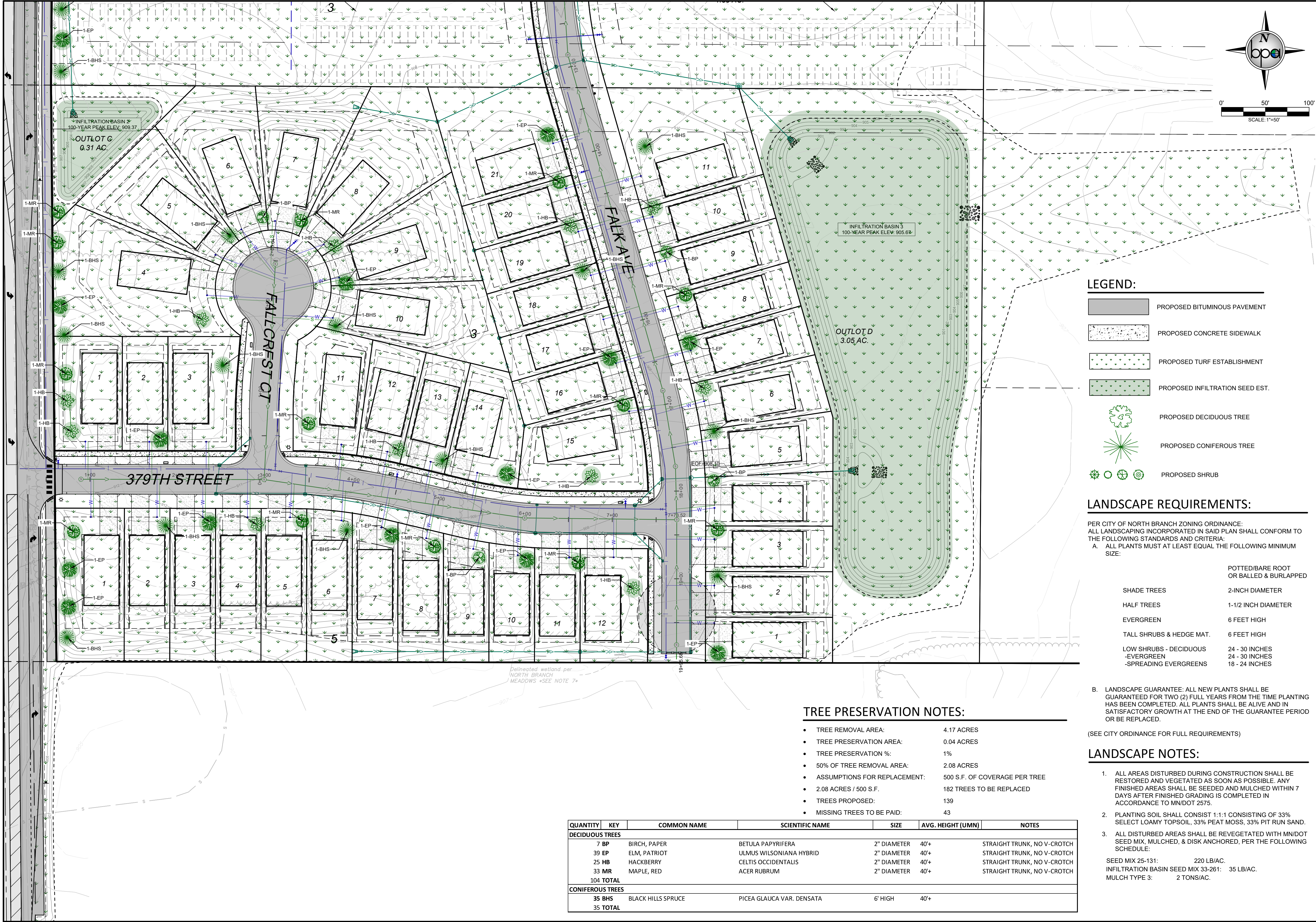
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
NOT FOR CONSTRUCTION
Signed: Christopher J. Dahn
Date: 5/8/28
Lic. No.

BOGART, PEDERSON & ASSOCIATES, INC.
LAND SURVEYING
ENGINEERING
ENVIRONMENTAL SERVICES
13076 FIRST STREET, BECKER, MN 55508-9322
TEL: 763-262-8822 FAX: 763-262-8844

CEDAR RIDGE COMMUNITY LLC
CEDAR RIDGE COMMUNITY
City of North Branch, Chicago County, MN

SHEET NO.
C10.1

NORTH LANDSCAPE PLAN



LEGEND:

- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED TURF ESTABLISHMENT
- PROPOSED INFILTRATION SEED EST.
- PROPOSED DECIDUOUS TREE
- PROPOSED CONIFEROUS TREE
- PROPOSED SHRUB

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 - 1-1/2 INCH DIAMETER
 - 6 FEET HIGH
 - 6 FEET HIGH
 - 24 - 30 INCHES
 - 24 - 30 INCHES
 - 18 - 24 INCHES

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(SEE CITY ORDINANCE FOR FULL REQUIREMENTS)

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- PLANTING SOIL SHALL CONSIST 1:1:1 CONSISTING OF 33% SELECT LOAMY TOPSOIL, 33% PEAT MOSS, 33% PIT RUN SAND.
- ALL DISTURBED AREAS SHALL BE REVEGETATED WITH MN/DOT SEED MIX, MULCHED, & DISK ANCHORED, PER THE FOLLOWING SCHEDULE:
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QUANTITY	KEY	COMMON NAME	SCIENTIFIC NAME	SIZE	AVG. HEIGHT (UMN)	NOTES
DECIDUOUS TREES						
7 BP	BIRCH, PAPER	BETULA Papyrifera		2" DIAMETER	40'+	STRAIGHT TRUNK, NO V-CROTCH
39 EP	ELM, PATRIOT	ULMUS Wilsoniana Hybrid		2" DIAMETER	40'+	STRAIGHT TRUNK, NO V-CROTCH
25 HB	HACKBERRY	Celtis Occidentalis		2" DIAMETER	40'+	STRAIGHT TRUNK, NO V-CROTCH
33 MR	MAPLE, RED	Acer Rubrum		2" DIAMETER	40'+	STRAIGHT TRUNK, NO V-CROTCH
104 TOTAL						
CONIFEROUS TREES						
35 BHS	BLACK HILLS SPRUCE	Picea glauca var. densata		6' HIGH	40'+	
35 TOTAL						

DATE: 04/24/2025

DESIGN BY: MJM

DRAWN BY: MJM

CHECKED BY: CJD

DWG FILE: EROSION

FILE NO.: 22-030.00

REV NO. 1

DATE 04/01/2025

DESCRIPTION REVISION PER CITY REVIEW

REV NO. 2

DATE 04/24/2025

DESCRIPTION REVISION PER CITY REVIEW

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.

NOT FOR CONSTRUCTION

Signed: Christopher J. Dahn
Date: 4/24/2025
Lic. No. 58628

BOGART, PEDERSON & ASSOCIATES, INC.

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ENGINEERING
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CEDAR RIDGE COMMUNITY LLC

CEDAR RIDGE COMMUNITY

City of North Branch, Chicago County, MN

SOUTH LANDSCAPE PLAN

SHEET NO.

C10.2



Prepared By: Nathan Sondrol, Community Development Director

Presenter: Nathan Sondrol, Community Development Director

Date: 05/01/2025

Board & Commission: Parks, Trails and Open Space Commission

Subject: Comprehensive Plan Update

The City Council discussed the roll-out of the Comprehensive Plan Update at their meeting on April 29, 2025.

The Council is looking for discussion and input from the commission on Comprehensive Plan from the Planning Commission as it relates to Landuse, Housing and Transportation.

Voting Requirements:

Voting Options Simple Majority



City of North Branch 2025 Comprehensive Plan Review

Agenda

Introduction

Building the team

Engaging the community

Comprehensive Plan Review

Final tips & takeaways



Overview

North Branch Comprehensive Plan was completed in 2018 with a purpose of serving as a vision and roadmap for where the community is headed.

Our goal is to review the Plan and discuss potential revisions, ensuring community understanding and buy-in.



2018

The intension of the plan was to be used in day-to-day activities by City Staff, City Council, and other Commissions and Stakeholders to help form important policy decisions such as...

Infrastructure and development

Capital improvements

Zoning and regulatory changes

And communicating a consistent vision.

2018

The current plan was initiated and completed in 2018 using valuable input from the community.

A series of four community meetings

In-person and on-line surveys

Public Meetings of the Planning, Economic Development Authority, and Parks/Trails/Open Space Commissions, and the City Council.

Comments were received via the project website, emails, and social media outlets.

Vision

North Branch is a growing and safe community with outstanding natural and recreational amenities and opportunities for all, and well-maintained infrastructure, vibrant business districts and neighborhoods, and provides residents with an excellent quality of life.



Building the Team

Co-Chairs – To provide direction and be a conduit of information to the rest of the team.

- ♦ Kevin Schieber, Mayor
- ♦ Matthew Hill, City Administrator

Update Coordinating Team – too be determined

- ♦ City Staff
- ♦ City Council Members
- ♦ Planning Commissioners
- ♦ EDA Commissioners
- ♦ Parks, Trails, and Open Space Commissioners
- ♦ North Branch Area Public Schools
- ♦ North Branch Area Chamber of Commerce
- ♦ Residents!

Calendar / Goals

May – Request input from Council, Commissions, and Community Organizations

May 5 – PTOS Committee

May 6 – Planning Commission

May 13 – North Branch Chamber of Commerce

May 20 – Economic Development Authority Commission

May 20 – City Council Special Meeting including request to residents for their input with invitation for first of two community meetings to gather general input on June 17



Needs assessment of current Comprehensive Plan



Vision and Values – has anything changed that requires the City to add or change?

Land Use – Do the existing land use ordinances and zoning maps need to be altered or adjusted to meet the current and future needs?

Housing – Does the current housing plans for maintaining and developing quality future housing stock still hold true?

Economic Development – Has the economic climate changed creating new opportunities for economic growth and redevelopment in areas of the City?

Needs assessment of current Comprehensive Plan



NORTH BRANCH



Transportation – Does the existing and future improvements noted in the 2018 Comprehensive Plan still meet the needs of the Community?

Utilities – Review of the current improvement plans and confirm that it meets the needs of both housing and industrial growth.

Natural Environment, Parks, Trails, and Recreation – Make sure that the trail connections and being met to connect the new housing development and have plans available for new and future park dedication fees.

Needs assessment of current Comprehensive Plan



Staff, Council and Commissioners have identified the following areas within the Comprehensive Plan that need updates

- **Land Use** – Zoning, Urban Service Area, Ordinance Updates.
- **Business Development** – Identify new ways of supporting existing businesses and new industry with guidance, direction, and financial support.
- **Municipal Utilities** – Assure that our long term plans can accommodate the expected growth of the Community.
- **Public Safety** – Possibility of adding an outline of the Community's vision and goals for addressing safety concerns, including road and pedestrian safety, emergency response, and crime prevention.

Next Steps



- **August and September** - The Update Coordinating Team will gather the input provided and work together to provide guidance to the City Council on a proposal of needed changes.
- ♦ **June and July** - Commissions, Council, School and Chamber Boards, and Residents will provide the Advisory Committee with their thoughts on the current plan and requests for change at their meetings in June and July. The City will provide two community gatherings to review the current plan and ask for feedback, one on June 17 at City Hall and one on July 15 at the North Branch Public Library.

THANK YOU!

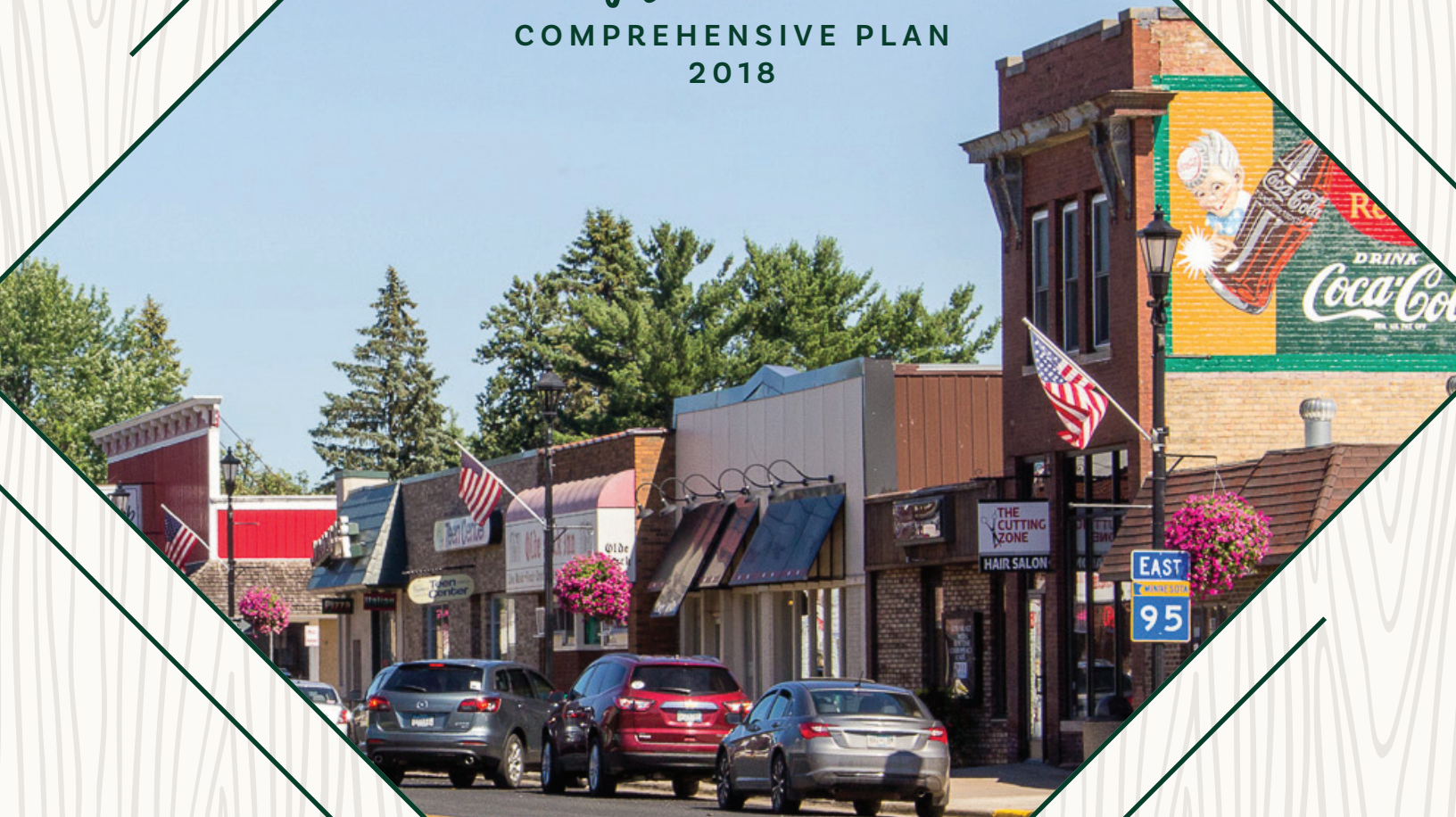
- ♦ The City of North Branch looks forward to hearing from you!



NORTH BRANCH

— *Minnesota* —

COMPREHENSIVE PLAN
2018



NORTH BRANCH COMPREHENSIVE PLAN

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Natural Environment, Parks,
Trails, And Recreation

The purpose of the Comprehensive Plan is to serve as a vision and roadmap for where the community is headed.



1

INTRODUCTION

Purpose of the Plan

The purpose of the Comprehensive Plan is to serve as a vision and roadmap for where the community is headed. The ideas and goals expressed in this plan are intended to be a reflection of the community's values and the desire for what North Branch is to become. Each chapter of the Comprehensive Plan provides the "big picture" of several important topics that are intertwined and have an impact on quality of life in North Branch.

It is the intention that this plan will be used on a day-to-day basis by city staff, the City Council, and other commissions and stakeholders to help inform important policy decisions, such as decisions involving infrastructure and development, the acquisition and sale of public land, capital improvements, zoning and regulatory changes, and communicating a consistent vision. It is anticipated that residents may use the plan to determine property use, understand decisions made by the City, and make improvements to property in a manner consistent with the plan. Developers may use the plan as a way to make decisions based on the goals and identified improvements.

The city of North Branch was formed in 1994 from the consolidated cities of Branch and North Branch. Shortly after consolidation, the city undertook a comprehensive planning process. Resulting from that process was the Comprehensive Plan adopted in 1995 for the consolidated city of North Branch comprised of 36 square miles in Chisago County, Minnesota. The plan was updated in 2003 and again in 2009. The comprehensive plan approach is intended to cover approximately a 10 - 20 year time period and may be amended and updated from time to time as conditions change. Time has passed and current growth and development necessitated a comprehensive update to the plan.

Planning Process

This Comprehensive Plan update was initiated and completed in 2018. Valuable input was gathered from those in the community through a series of four community cafes, in person and on-line surveys, and various public meetings conducted by the Planning Commission, Economic Development Authority (EDA), Parks Trails and Open Spaces (PTOS), and the City Council. A booth was held at the community's Expo and Job Fair event in April 2018, and a survey was administered to 7th and 8th graders at the North Branch Middle School as a way to gather input from younger stakeholders with regard to the city's parks and amenities.

As the plan evolved, drafts were available on the city's website and were presented and commented on at Planning Commission, PTOS, EDA and/or City Council meetings. Comments were also received via the project website, emails, and through the project Social Pinpoint page. The plan was reviewed by both the Planning Commission and City Council at their respective regular meetings in August, 2018. A public hearing was held before the Planning Commission on September 20, 2018, and adopted by the City Council on October 23, 2018.

Organization of the Plan

The Comprehensive Plan provides a “big picture” look at several important areas that have an impact on quality of life for North Branch. The Comprehensive Plan covers the following chapters:

CHAPTER 1: INTRODUCTION

This chapter provides an overview of what the Comprehensive Plan is and its purpose. It discusses the process for developing the plan and how it is organized.

CHAPTER 2: VISION AND VALUES

This chapter outlines the vision and values for the community that is intended to be expressed through all other chapters.

CHAPTER 3: LAND USE

This chapter establishes an existing and future land use for all property in the City. It also identifies future growth areas.

CHAPTER 4: HOUSING

This chapter provides an overview of existing housing conditions and a plan for maintaining and developing a quality future housing stock.

CHAPTER 5: ECONOMIC DEVELOPMENT

This chapter provides an analysis of the existing economic climate and opportunities for economic growth and redevelopment areas.

CHAPTER 6: TRANSPORTATION

This chapter analyzes the existing transportation system and future improvements, mostly as it relates to auto-oriented transportation. Non-motorized transportation is discussed further in Chapter 8: Natural Environment, Parks, Trails, and Recreation.

CHAPTER 7: UTILITIES

This chapter examines the existing system and future improvements to public utilities as it relates to the water, wastewater, and stormwater systems.

CHAPTER 8: NATURAL ENVIRONMENT, PARKS, TRAILS, AND RECREATION

This chapter examines the city’s natural resources, including open space and natural habitats, existing park and trail system, as well as recreational opportunities and establishes planning criteria, guidelines and standards for protecting the natural environments and future development of various amenities.



Implementing the Plan

Summary of Land Use Implementation Strategies

The North Branch Comprehensive Plan is a flexible document working to the advantage of the community. The Plan Goals and Objectives should be reviewed every three years ensuring relevancy to current conditions and priorities. The Planning Agency should advocate use of the plan, review various projects for consistency with the Plan, and advise the City Council in matters related to implementation. In addition, any projects implemented should detail a timeline and have a funded budget. The Plan encourages interaction with governmental agencies, non-profits, and local citizens. Capital Improvement Programs (CIPs) shall be reviewed and updated annually.

Summary of Non-Land Use Implementation Strategies

North Branch, like most cities having faced financial difficulties, faces a number of challenges towards expanding affordable housing, replacing aging infrastructure and attracting new development and administrators to involve a variety of organizations. Additional difficulties include finding funding sources to address those issues over time and seeking to provide maximum flexibility in the planning and timing of needed public improvements. The Plan recognizes that North Branch has limited financial resources and vast human resources. The citizens of North Branch, through their involvement with government and various civic and charitable organizations, will be a key component of the actions necessary to implement the Comprehensive Plan. The City should involve other City Boards and Commissions, volunteer groups, local non-profit organizations such as the Chamber of Commerce, and other governmental agencies in planning and funding these future projects.

ACKNOWLEDGEMENTS

2018 COMPREHENSIVE PLAN UPDATE COORDINATING TEAM

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AND AN EXTRA SPECIAL THANKS TO BRIAN VOSS FOR HIS FANTASTIC PHOTOS AND TO ALL OF THE RESIDENTS, STUDENTS AND BUSINESS OWNERS WHO PARTICIPATED IN COMMUNITY SURVEYS, ATTENDED COMMUNITY CAFES, AND PROVIDED VALUABLE INPUT TO THE COMPREHENSIVE PLAN UPDATE, OUR SUPPORTERS AND TO THE TEAM THAT HELPED GET THE WORD OUT ABOUT THE COMPREHENSIVE PLAN INPUT SESSIONS, INCLUDING THE NORTH BRANCH DOMINOS AND THE NORTH BRANCH AREA CHAMBER.

2

VALUES AND VISION

Values

Residents and other stakeholders were asked what they loved about North Branch at the Community Expo, at a chamber meeting, and at the first community café. The values expressed most often were:

THE STRONG SENSE OF COMMUNITY

A HOME TOWN FEEL

THE CITY'S COMMITMENT TO ITS PARKS AND TRAILS

A COMMUNITY THAT ENCOURAGES BIKING AND WALKING

QUALITY SCHOOLS

These values were reiterated at each of the other three community cafes and served as the foundation for the vision statements expressed below.

Vision for North Branch in 10 years

North Branch is a growing and safe community with outstanding natural and recreational amenities and opportunities for all, and well maintained infrastructure, vibrant business districts and neighborhoods, and provides residents with an excellent quality of life.

Vision for Land Use

The City of North Branch is a complete community that provides a well-balanced and wide range of places to live, work, shop and play. Land uses make efficient use of existing infrastructure, contribute to a strong local economy, preserve natural resources and contribute to a high quality of life.

Residential Uses

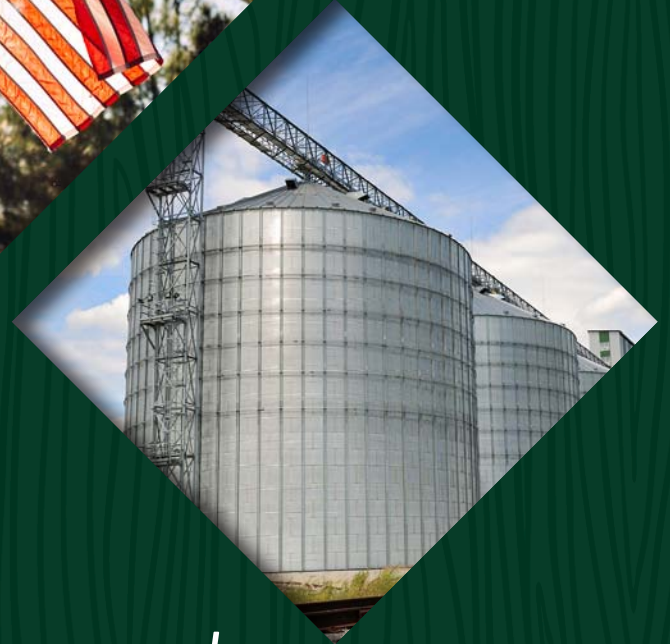
A diverse housing stock allows people at any stage in their life to be able to find a home in North Branch. Older housing is well maintained while new development expands housing options to complement existing neighborhoods.

Commercial and Industrial Uses

A significant amount of commercial and industrial uses can be found within the City that allow residents to work in North Branch, while also being able to meet all of their day-to-day needs. Commercial and industrial uses are compatible with their surrounding land uses.

Public/Institutional

Public and institutional uses are viewed as valued resources to the community and contribute to making North Branch a better place to live and do business.



North Branch is a growing and safe community with outstanding natural and recreational amenities and opportunities for all, and well maintained infrastructure, vibrant business districts and neighborhoods, and provides residents with an excellent quality of life.

Parks, Open Spaces and Trails

Quality parks and open space are within close proximity to all residents, providing recreational opportunities to encourage an active lifestyle. A wide variety of community facilities are provided to serve a range of interests. The City of North Branch has a proposed trail system that will allow bicycle and pedestrian access to most of the major pedestrian generators within the city, including schools, shopping areas, and parks. Many of the proposed trails are destinations in themselves, offering scenic walks or rides around many of the city's scenic views. With recreational activities such as running, bicycling, and walking increasing in popularity, the city's trail system will not only offer a recreational opportunity in itself, but will also help to connect the community's parks with the neighborhoods.

Vision for Economic Development

A strong business community is the cornerstone of a vibrant city. Economic development encompasses the policies and activities that improve the long term economic and social wellbeing of the community. Communities with strong economies have financial resources to support the levels of service that their residents need and desire. Successful communities realize that economic development is about bringing together social, natural, infrastructure, and economic assets in the community to sustain the "whole" community.

Vision for Municipal Utilities

The City of North Branch, individually and in collaboration with the North Branch Water & Light Utility, has a significant investment in its existing public utilities systems (water, wastewater and stormwater). The continued expansion and development within the Urban Service Area will require the extension of public utilities. In general, the existing infrastructure system is well-positioned and of adequate size to support expansion. However, coordination will be required between community development and the required expansion of the utility system. In some cases, the cost of providing utility service may dictate where and when future growth will occur.

Vision for Transportation

North Branch is located at the cross roads of I35 and TH95, providing for ease in and out of the city. Within the city limits, however, these features will require a coordinated approach to providing movement of traffic through the city to local destinations, safe pedestrian and bike corridors, and improved intersections to safely serve the increasing number of commercial vehicles passing through North Branch.

Vision for the Environment and Sustainability

Natural infrastructure includes all systems that relate to natural resources and contribute to an improved public life. Natural infrastructure considers the full range of natural resource uses including economic, environmental, health, cultural, and aesthetic. This broad view leads us to include surface water, groundwater, stormwater, wastewater, drinking water, geology, topography, soils, natural areas, open space, green spaces, urban forest, habitat, vegetation, scenic views, and parks and trails in natural infrastructure.

Natural infrastructure is a key element in planning where development should or should not take place within a city. This element is important to communities and development as it avoids certain development hazards, provides health benefits to citizens, protects ecological systems and enhances biological diversity, and offers communities unique quality of life components. Consideration of natural infrastructure ensures that homes are built upon stable dry soils, provides clean drinking water, accounts for resource based economic activities, provides scenic views and open spaces, and plans development that respect the integrity of natural systems and incorporate natural features into development.

Minnesota GreenStep City

In 2018, the Mayor and City Council approved a resolution to make North Branch a GreenStep City through the MPCA and League of Minnesota Cities' program. Minnesota GreenStep Cities is a voluntary challenge, assistance and recognition program to help cities achieve their sustainability and quality-of-life goals. This free continuous improvement program, managed by a public-private partnership, is based upon 29 best practices. Each best practice can be implemented by completing one or more actions at a 1, 2 or 3-star level, from a list of four to eight actions. These actions are tailored to all Minnesota cities, focus on cost savings and energy use reduction, and encourage civic innovation. North Branch is currently a Step 1 City. As North Branch plans for the future, it will continue to consider GreenStep City Best Management Practices as they relate to the goals and objectives of this comprehensive plan.



3

LAND USE & GROWTH

Introduction

The Land Use & Growth Management Chapter is a roadmap that helps guide City officials and staff on how to make policy decisions related to land use and future growth. These policies may influence the type, location and density of future development within the community. This chapter is intended to result in orderly and efficient development that utilizes land efficiently and makes the most of the community's resources. It offers guidance on key initiatives for the community which is consistent with the City's vision and goals.

In this chapter is a description of existing land use patterns, as well as an overview of how the City anticipates land will be used and developed in the future. It accommodates growth and applies the desired qualities of the community.

Another important aspect of this chapter is that it also serves as the foundation for reviewing the City's Zoning Ordinances, Zoning Map, Subdivision Regulations and other implementation tools. Implementation of the Land Use Plan produces several important implications:

USES

Every parcel is placed into a specific land use category. Each category includes a description of the type of land use or uses intended for that category. This description should match with the types and forms of development currently found in North Branch and desired for the future.

RELATIONSHIPS

Much like a jigsaw puzzle, the true picture comes from how each piece fits together into a whole. The Land Use Plan guides how elements of the built and natural environment come together in North Branch. These relationships will determine how North Branch will look, function and feel.

ACTIONS

The Land Use Plan sets the framework for public actions and investments. Utilities, streets, parks, and facilities are all influenced by the form and pace of development.

Figure 3-1: Existing Land Use

Identifies the location, amount, and types of existing land uses in the City of North Branch in 2018. The inventory as conducted as part of this planning process reflects general development patterns and is intended for general planning purposes only.

*The City of North Branch is
a complete community that
provides a well-balanced and
wide range of places to live,
work, shop and play.*

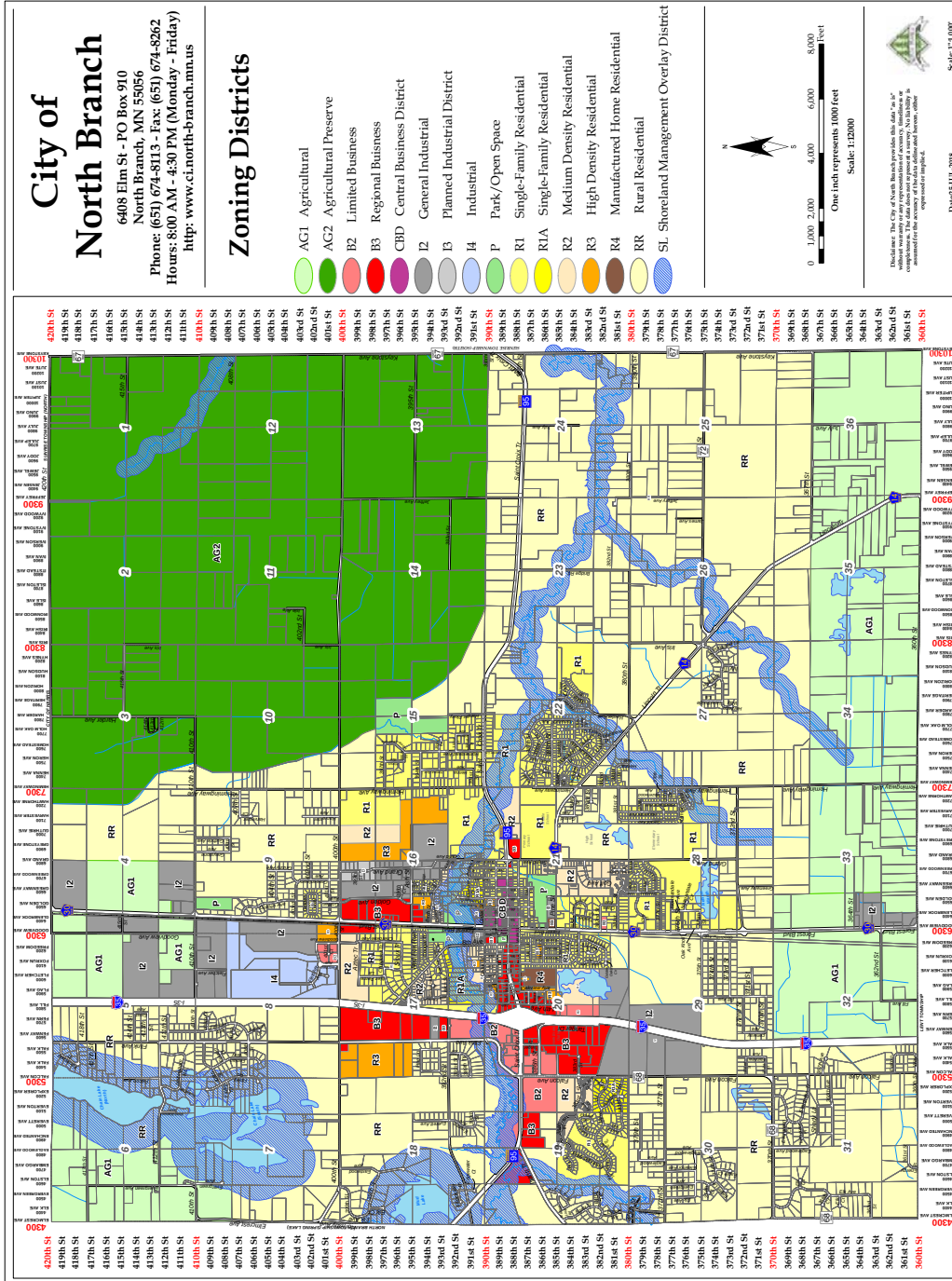


Table 3-A: Summary of Existing Land Use - 2018 summarizes the amount and type of existing land uses designated (whether or not fully developed) in North Branch.

Table 3 – A: Summary of Existing Zoning 2018		
<i>Existing Land Use Designation</i>	<i>Gross Acres*</i>	<i>Net Percent of City</i>
<i>Agriculture (AG1 and AG2)</i>	<i>8,680.2</i>	<i>37.6%</i>
<i>Rural Residential (RR)</i>	<i>9,961</i>	<i>43%</i>
<i>Low Density Residential (R1 and R1A)</i>	<i>1,869.7</i>	<i>8.1%</i>
<i>Medium Density Residential (R2)</i>	<i>403.4</i>	<i>1.7%</i>
<i>High Density Residential (R3)</i>	<i>216.6</i>	<i>.9%</i>
<i>Manufactured Home Residential (R4)</i>	<i>27.2</i>	<i>.11%</i>
<i>Central Business District (CBD)</i>	<i>43</i>	<i>.18%</i>
<i>Limited Business District (B2)</i>	<i>214.8</i>	<i>.9%</i>
<i>Regional Business District (B3)</i>	<i>437.3</i>	<i>1.9%</i>
<i>General Industrial District (I2)</i>	<i>858.1</i>	<i>3.7%</i>
<i>Planned Industrial District (I3)</i>	<i>21.6</i>	<i>.09%</i>
<i>Industrial District (I4)</i>	<i>158.6</i>	<i>.7%</i>

*Gross acres of use determined by GIS mapping data.

Figure 3-1:
Existing Zoning



Existing Zoning

Agriculture (AG1 and AG2)

Over one-third of the city's land area (37.6%) is currently used for agricultural purposes. Housing densities are low, and this zoning is characterized by active farms, hobby farms and homes on large lots. The northeast corner of the city is the historic river bottom of the St. Croix River and is framed by the historic river bluff line. Soils are well suited for sod farming and the production of produce. By maintaining a low density of development, it is the City's intent to preserve and protect the many natural resources found in this part of North Branch, including lakes, streams, wetlands and woodlands.

Rural Residential (RR)

Rural Residential makes up 9,961 acres or 43% of the total acreage in the City of North Branch. This land use is largely characterized by single family residences set on larger lot sizes to accommodate on-site sewage treatment systems. Some of these areas are located within the city's designated Urban Service Area and no new development is allowed within this zoning district without connecting to municipal services. Areas located outside of the Urban Service Area must meet a minimum buildable acre standard so as to ensure that there is sufficient land area with the appropriate soil separation to support both a primary and a future secondary on-site sewage treatment system.

Low Density Residential (R1 and R1A)

Low Density Residential makes up 1,869.7 acres or 8.1% of the total acreage in the City of North Branch. This land use is largely characterized by single-family homes with densities of 1 to 4 dwelling units per acre in those areas served by municipal utilities. Older areas of the city were platted before municipal utilities were established, resulting in larger lot sizes to accommodate on-site sewage treatment systems. The city has a limited inventory of older, historic homes that are located primarily in the one square mile area that had been the original city of North Branch. The areas around the historic center feature homes built approximately 50 years ago, with new development happening neighborhood by neighborhood since that time. 2017 marked the start of a new housing boom with new single family homes being constructed on existing lot inventory and multiple developments platted for the purpose of constructing even more single family homes. The new development that is planned or in process as of the writing of this plan is intended to provide the city with a more diverse mix of housing styles and at a wider range of price points.

Medium Density Residential (R2)

Medium Density Residential makes up 403.4 acres or 1.7% of the total acreage in the City of North Branch. Medium Density Residential is characterized by single family homes on smaller lots that required for R1, townhome style development, and two-family attached homes densities of 1 to 6 dwelling units per acre.

High Density Residential (R3)

High Density Residential makes up 216.6 acres or .9% of the total acreage in the City of North Branch. High Density Residential is characterized by land use that consists of all forms of multi-family attached housing units such as two-family attached homes, townhomes and apartment buildings.

High density residential has densities of up to 18 dwelling units per acre.

Manufactured Home Residential (R4)

The Manufactured Home Residential zoning classification only exists for the benefit of the four established manufactured home parks. It currently makes up 27.2 acres or .1% of the total acreage in the City of North Branch. Changes in Minnesota laws now allow manufactured homes in any zoning district that allows twin homes, subject to all applicable lot standards, such as lot size, frontage, road widths, etc. The new land use map and updates to the zoning map will include areas previously zoned at R4 within either an R2 or R3 zoning class.

Central Business District (CBD)

The Central Business District is a unique classification intended to provide for a planned, unified development of the City's historical downtown area. This zoning classification makes up 43 acres or .18% of the total acreage in the City of North Branch. Permitted uses include service based businesses, office uses, retail uses, apartments and hotel uses, among other things, in close proximity to one another to promote pedestrian movement between businesses. The area offers a mix of street and lot parking, with the parking lots being located behind buildings at various locations throughout the district. The existing land use is primarily commercial buildings, many of which are vacant and in need of rehabilitation. The area is dotted with existing single family homes which were intended to be phased out of use and converted to commercial uses over time. The area is adjacent to TH95, with sidewalks that provide pedestrian passage, but pedestrian movement across TH95 is difficult and poses a significant challenge to the goal of this area being an inviting public space offering a "range of retail and civic experiences" as hoped by the authors of the 2009 Comprehensive Plan.

Limited Business District (B2)

The Limited Business District makes up 214.8 acres or .9% of the total acreage in the City of North Branch. This land use is characterized by business uses and services, lodging, and retail that are also permitted in the CBD, but that are dependent on automobile traffic. Additionally, the area is intended to serve as a transition zone between the CBD and the Regional Business District (B3).

Regional Business District (B3)

The Regional Business District makes up 437.3 acres or 1.9% of the total acreage in the City of North Branch. This land use is characterized by business uses and services, lodging, and retail that are also permitted in the CBD and B2, but also provide for the location of commercial activities that serve primarily regional or nonlocal market. The lot sizes are larger so as to provide the area needed for retail and commercial activities that require very large buildings.

Light Industrial/Office District (I1)

The Light Industrial/Office District is defined as a region characterized by office, manufacturing and warehousing uses, but currently no part of the city is zoned for this use.

General Industrial District (I2)

The General Industrial District makes up 858.1 acres or 3.7% of the total acreage in the City of North Branch. This land use is characterized by manufacturing, assembly, warehousing, storage, showrooms and contractor shops.

Planned Industrial District (I3)

The Planned Industrial District is similar to I1, and makes up 21.6 acres or .09% of the total acreage in the city.

Industrial District (I4)

The Industrial District makes up 158.6 acres or .7% of the total acreage in the City of North Branch. This land use is characterized by manufacturing, assembly, warehousing, storage, showrooms and contractor shops as can be found in I2, but its location adjacent to I35 makes this area highly visible and is subject to stricter design standards. Currently, over 200 acres in the I2 and I4 zoning classifications are vacant but ready for development in the industrial park owned by the City through its Economic Development Authority.

Overlay Districts

Sensitive areas, such as those adjacent to bodies of water or within a designated flood plain or flood fringe are managed by the City in accordance with applicable Minnesota Statutes. Setbacks, design standards and other restrictions on use within the overlay district are imposed so as to limit ecological impact and loss.

Analysis of Existing Land Use

With over 36 square miles of land, an analysis of the existing land use illustrates several important issues about current and future development:

The largest land use category in terms of area in the City is agriculture. Followed by the rural residential land use category. It is anticipated that the agricultural areas will continue to be used for agricultural production due to its geologic characteristics and the community's desire to support its rich agricultural heritage and industry. The rural residential areas, which are served by private wells and septic systems, will also have agricultural or hobby farm uses. The total land areas for these two uses will not likely change, but development within these areas will occur at a much slower pace than the low density residential uses served by municipal utilities.

The second largest residential land use category is low density residential. It is anticipated that expanded development within this zoning classification will continue to grow throughout the life of this plan, resulting in greater intensity of the use without increasing the overall land area designated for this use. The three primary residential categories (R1 and R2) account for 9.8% of the total land use in the City.

The Central Business District is characterized by a development style common among other older downtowns. It is pedestrian oriented in nature with buildings built to the sidewalk. Parking for these uses is typically on street, in the rear of buildings, or shared among several users. The transition from residential uses to commercial uses did not occur as anticipated when the zoning district was created. There are numerous vacant buildings and the area is ripe for redevelopment.

The City, through its Economic Development Authority, owns over 200 acres of land zoned for industrial uses. Until this land is sold and developed, no additional industrial zoned land is needed within the Urban Service Area. If the city were to allow for heavy industrial uses, consideration should be given for compatibility with adjacent land uses. Controls should be in place that protect against negative impacts to neighboring property.

The nation's third largest solar farm is partially located within the City's limits. Other smaller solar installations are located entirely within the City. The solar installations feature native plantings intended to re-establish prairie habitat and support pollinator species, such as the Monarch butterfly.

The City benefits from existing park facilities, trails and open spaces. Approximately .6% of the total acreage in the City of North Branch is utilized as city owned park and open space uses. The City is also home to the Janet Johnson WMA, owned and managed by Minnesota Department of Natural Resources. The Sunrise Prairie Regional Trail and other city sidewalks and trails serve the city's goal of being walkable and bikeable, but it is the goal of the city to expand those opportunities and consideration should be given to identify areas for preservation for these purposes.

There are significant residential development opportunities in the northwest portion of the city. Large tracts of land are currently undeveloped and the opportunity exists to establish traffic corridors without the need for redevelopment.

Vision for Land Use

The City of North Branch is a complete community that provides a well-balanced and wide range of places to live, work, shop and play. Land uses make efficient use of existing infrastructure, contribute to a strong local economy, preserve natural resources and contribute to a high quality of life.

RESIDENTIAL USES

A diverse housing stock allows people at any stage in their life to be able to find a home in North Branch, which may include housing options suitable to multigenerational households. Older housing is well maintained while new development expands housing options to complement existing neighborhoods.

COMMERCIAL AND INDUSTRIAL USES

A significant amount of commercial and industrial uses can be found within the City that allow residents to work in North Branch, while also being able to meet all of their day-to-day needs. Commercial and industrial uses are compatible with their surrounding land uses.

PUBLIC/INSTITUTIONAL

Public and institutional uses are viewed as valued resources to the community and contribute to making North Branch a better place to live and do business.

PARKS, OPEN SPACES AND TRAILS

Quality parks and open space are within close proximity to all residents, providing recreational opportunities to encourage an active lifestyle. A wide variety of community facilities are provided to serve a range of interests. The City of North Branch has a proposed trail system that will allow bicycle and pedestrian access to most of the major pedestrian generators within the city, including schools, shopping areas, and parks. Many of the proposed trails are destinations in themselves, offering scenic walks or rides around many of the city's scenic views. With recreational activities such as running, bicycling, and walking increasing in popularity, the city's trail system will not only offer a recreational opportunity in itself, but will also help to connect the community's parks with the neighborhoods.

GOAL 1

Maximize the use of land within the City of North Branch in a way that strengthens the local economy, preserves natural resources, and ensures a high-quality of life for all residents.

Goals, Objectives, and Policies

The following is the primary goal for land use followed by a series of objectives and policies intended to influence future land use decisions in a direction that is aligned with the Vision Statement.

OBJECTIVE 1.1

PRESERVE AND ENHANCE THE SMALL BUSINESS ENVIRONMENT OF THE DOWNTOWN.

Policy 1.1.1

Encourage and promote the renovation and rehabilitation of existing buildings within the downtown.

Policy 1.1.2

Connect businesses with façade improvement grants and loans.

Policy 1.1.3

Make infrastructure improvements that enhance the pedestrian realm such as lighting and seating and gathering places for community activities.

OBJECTIVE 1.2

USE LAND IN A MANNER THAT STRENGTHENS THE ECONOMY OF NORTH BRANCH.

Policy 1.2.1

Strive for a balance of areas guided for industrial uses and areas guided for commercial uses.

Policy 1.2.2

Continue to identify all areas prime for redevelopment and analyze the best use for each property. Work to re-zone these properties and amend this plan as appropriate.

Policy 1.2.3

Increase the number of residential housing units in the City to attract new residents to increase the workforce and thereby improve the local market for commercial and industrial opportunities.

Policy 1.2.4

Actively work to infill vacant land within the Urban Service Area that will be connected to municipal services, while preserving a network of functional ecologic areas.



Policy 1.2.5

Allow for mixed uses within some zoning districts to accommodate commercial, retail and residential uses.

Policy 1.2.6

Discourage “leapfrog” patterns of development on municipal utilities.

OBJECTIVE 1.3

PROTECT AND PRESERVE NATURAL RESOURCES FOR LONG TERM ENVIRONMENTAL SUSTAINABILITY AND THE ENJOYMENT OF RESIDENTS.

Policy 1.3.1

Work with landowners and other governmental entities to either obtain property or ensure protection of natural areas with high ecological value.

Policy 1.3.2

Discourage patterns of development that would stress existing infrastructure and ecosystems.

OBJECTIVE 1.4: USE LAND IN A MANNER THAT ENSURES A HIGH QUALITY OF LIFE FOR RESIDENTS.

Policy 1.4.1

Expand parks, trails, sidewalks and other amenities as the City’s population continues to grow.

Policy 1.4.2

Review and encourage methods of development which promote linkages among residential, civic, commercial, industrial and recreational facilities using trails and sidewalks for safe and enjoyable pedestrian uses and provides pedestrian connections between complementary land uses.

Policy 1.4.3

Review and encourage street and sidewalk designs to provide for easy access by police, fire and ambulance services, school buses, and plowing.

Land Use Plan

The land use plan provides the framework for the growth and development of the City. The land use plan serves as a guide for the character and intensity of development and will be supported by other land use controls and public actions taken pursuant to the Comprehensive Plan.

The land use map appears in Figure 3-2: Future Land Use. The plan illustrated by this map evolved from inputs and evaluations received through the planning process. The Plan builds on the existing community pattern to achieve the desired vision for the future of North Branch. Where the Future Land Use map guides property for something different than the existing zoning, zoning approvals such as variances and conditional use permits should not be considered inconsistent with the comprehensive plan if otherwise deemed appropriate.

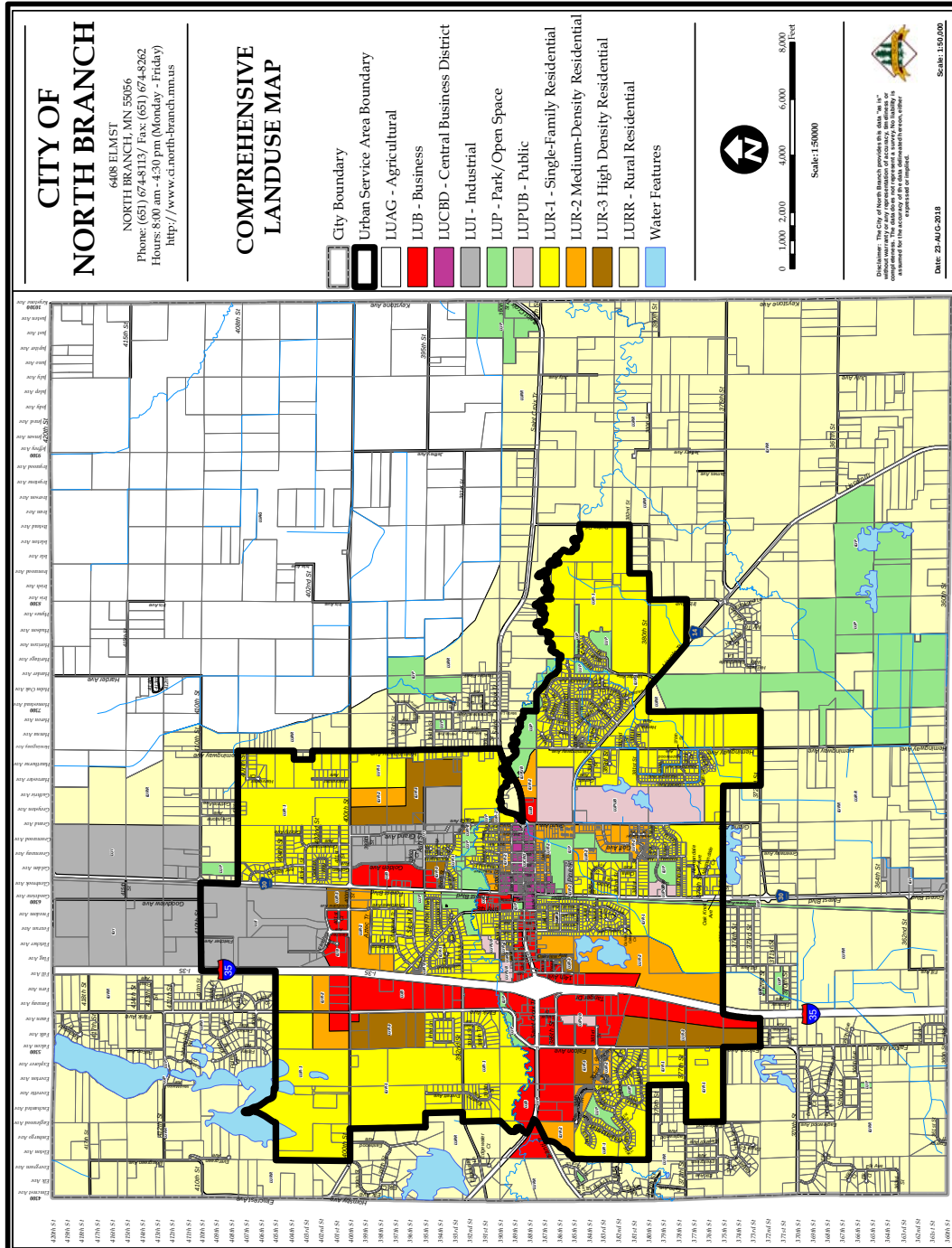
Table 3 – B: Summary of Future Land Use

<i>Future Land Use by Designation</i>	<i>Gross Acres*</i>	<i>Net Percent of City</i>
<i>Agriculture (AG)</i>	5,271.4	22.9%
<i>Rural Residential (RR)</i>	9,992.6	43.3%
<i>Low Density Residential (R1)</i>	3,492.5	15.1%
<i>Medium Density Residential (R3)</i>	577.2	2.5%
<i>High Density Residential (R3)</i>	330.8	1.4%
<i>Central Business District (CBD)</i>	71.4	.3%
<i>General Business District (B)</i>	802.2	3.5%
<i>Industrial District (I)</i>	1,123.7	4.9%

*Gross acres of use determined by GIS mapping data and does not include public and institutional areas which are separately defined under the proposed land use map.



Figure 3-2:
Future Land Use



Residential

Rural Residential

The land use in this category is hobby farms and homes on large lots. The area is outside of the designated Urban Service Area and will be served by wells and individual septic systems. Individual lots must be a minimum size of one acre buildable, and the presence of wetlands and other natural features may result in actual lot sizes much larger than one acre in order to achieve the required one acre buildable standard. This lowest density of residential development is intended to reduce demands on the rural roads and protect the natural resources found in North Branch. The primary zoning district that would generally correspond to this land use designation would be the LURR Rural Residential District.

Low Density Residential

The land use in this category is single-family detached homes served by municipal utilities. This plan anticipates that this is where the majority of new housing units will be added over the next 20 years. One of the biggest strengths of the City of North Branch is its attractiveness to young families. Part of this attraction is due to the anticipated development of quality affordable single-family homes, and the existing parks and trails system, school district and proximity to the metropolitan areas of Minneapolis and St. Paul. Continuing to add new housing units will provide more opportunities for all families to locate in North Branch, while making older housing more affordable. Densities targeted in this category are limited to no more than 4 dwelling units per acre. The primary zoning district that would generally correspond to this land use designation would be the LUR-1 Single Family District.

Medium Density Residential

Medium density residential uses are typically in the form of single family homes on smaller lot sizes, townhomes, duplexes, and small scale apartment and condo buildings and served by municipal utilities. Advantages of these types of housing are that less property maintenance may be required since yards are smaller and some medium density developments may have associations that handle lawn care and snow removal. As a result, these types of housing tend to be very attractive to seniors and professionals. Densities targeted in this category are up to 6 dwelling units per acre. The primary zoning district that would generally correspond to this land use designation would be the LUR-2 Medium Density District.

High Density Residential

The High Density Residential land use category consists of multiple family attached housing oriented in a vertical fashion, more commonly referred to as apartments and condominiums and served by municipal utilities. Housing units may be owner or renter occupied. High density housing is an efficient land use because it contains more dwelling units per acre than other residential uses.

High density residential uses are located in places with compatible adjacent land uses and where the local street system will accommodate the traffic. Ideally, they are located near commercial uses or employment centers to maximize the number of people who can walk or use alternative modes of transportation.

The densities targeted in this category are over 6 dwelling units per acre. The primary zoning district that would correspond to this land use designation would be the LUR-3 High Density Residential.

Agriculture

Agriculture

The city's strong agricultural heritage is clearly visible in the farm fields located in the northeast corner of the city. The fields, bordered by the historic St. Croix River bluff line, are dotted with artesian wells, have deep pockets of organic soils generally not conducive to development, and are linked by a series of more traditional farm style roads. Single family homes are present and seem accessory to the commercial operations of the farms. Non-agricultural uses will be limited and densities targeted in this category are no more than one dwelling unit per 10 acres. The primary zoning district that would correspond to this land use designation would be the LUAG Agriculture.

Commercial

Downtown Business

Although a number of single family homes currently exist in the Central Business District, new residential development should be part of a mixed use plan with a balance of housing and commercial uses within a single building or complex. Replacing single family homes with mixed use structures and redeveloping existing commercial buildings will help support a healthy business environment and allow more people to be able to walk to their destinations.

Buildings should be located close to the street but with ample space for sidewalks. Parking should generally remain in the rear of the property when on-premise parking is offered. Streetscape improvements that enhance the pedestrian realm, such as planters, hanging baskets, street trees, outdoor seating, public art, street lighting, should be prioritized here. The City should continue to work with business owners and encourage façade improvements by connecting them to grant and funding opportunities. The primary zoning district that would correspond to this land use designation would be the LUCBD Central Business District.

General Business

The General Business guiding designation allows a wide variety of uses including those for convenience oriented, neighborhood-oriented, community-oriented and bulk retail-oriented markets and consumers. These areas provide a wide range of goods and services to serve many of the shopping and dining needs of people who live, work in or visit the City. Certain commercial uses, such as those devoted to motor vehicle-oriented retail or service activities (e.g., vehicle service and fuel sales, drive-through businesses and sales of motor vehicles) depend on access to major transportation routes and often have characteristics that are incompatible with residential areas. Other commercial uses, such as those involving wholesale and retail trade of large volume or bulk commercial items with on-site storage and warehousing, may have both commercial and industrial characteristics.

This guiding designation also allows a variety of uses including professional offices, administrative offices, research and laboratory facilities, wholesale showrooms, service facilities (e.g., conference

centers, lodging and reception halls), and business uses having limited contact with the general public. These areas may provide for limited retail sale of convenience-type products and services for the immediate surrounding area.

Commercial uses in this classification are expected to develop with the highest standards of design and performance, with a higher level of amenities such as landscaping, preservation of natural features, architectural controls, pedestrian trails and other features. Office parks and campus-style developments are encouraged in these areas. Commercial office uses can also serve as, and provide for, an orderly and progressive transition between higher and lower intensity land uses. Locations adjacent to the Central Business District, TH95 and I35 may be subject to stricter design standards so as to achieve an attractive, inviting and high quality retail shopping and commercial services in areas of high visibility and sensitivity to surrounding uses. The primary zoning district that would correspond to this land use designation would be the LUB General Business District.

Industrial

Industrial uses include all forms of businesses with manufacturing, distribution, warehousing or other industrial uses that may have consequences typically associated an industrial activity such as noise, odor, dust or low quality aesthetics. As a result, when these uses are in close proximity to residential, park and open space uses, additional restrictions may be appropriate. These uses may generate truck traffic and may involve outdoor storage. Locations adjacent to residential uses, I35, TH95 or other high visibility areas may be subject to additional design standards. The primary zoning district that would correspond to this land use designation would be the LUI Industrial District.

Public/Institutional

Public, semi-public or institutional uses are comprised of churches, schools, city offices, public works facilities, fire stations, public utilities, and other governmental or non-profit entities. This use may also include parks, designated open spaces and regional storm water management, such as publicly maintained storm water management ponds. This land use classification is intended to differentiate these sites as providing a common amenity or service and not land that is intended to be developed. The primary zoning district that would correspond to this land use designation would be the LUPUB Public/Institutional District.

Required Zoning Changes

The City has adopted zoning regulations for the purpose of carrying out the policies and goals of the land use plan element of the Comprehensive Plan. The application of zoning districts and the specific regulations should support the objectives of the Plan. As a result, an outcome of adopting the plan will be the review and modification of the Zoning Ordinance and Zoning Map as necessary.

The land use plan provides the basis for guiding zoning decisions that will be made by the City and private property owners. Minnesota Statutes Section 462.357 states that “.....the planning agency shall study and propose to the governing body reasonable and practical means for putting the plan into effect. Subject to the limitations of the following sections, such means include, but not limited to, zoning regulations, for the subdivision of land, an official map.....” This statute anticipates that the

zoning regulations will be reviewed and updated to ensure implementation of the land use plan. In a broad sense, this review of the zoning ordinance should examine the following:

- The regulations for each zoning district should be reviewed to determine if they fit with the intent of the Comprehensive Plan.
- Zoning districts should be examined in relationship to the land use designation. Changes in zoning districts may be needed to match zoning with land use.
- The City will need to thoroughly review and update its Ordinances to address inconsistencies and conflicts to integrate the concepts described in this Comprehensive Plan. Updating the Zoning Ordinance will be a large undertaking that will require significant input, time and energy.

One of the policy decisions the City will need to make is how to implement the land use plan through the zoning map. Unlike the Metropolitan Land Planning Act (Minnesota Statutes Section 473), which requires consistency between the land use plan and zoning in cities within the Twin Cities metropolitan area, North Branch may choose to take a number of implementation strategies. Each has varying implications for existing property uses and current zoning. The strategies include, but are not limited to, the following:

- Keep current zoning in place until such time as the use terminates or redevelopment is initiated.
- Rezone property to a zoning district compatible with a land use plan category.
- Develop an interim strategy to address current use situations as they relate to long term objectives.



4

HOUSING

Introduction

Housing is an important component of all communities. Not only do the quality, availability, affordability, and diversity of housing enhance the quality of life in the City, it also supports economic development and contributes to a community's sense of place.

Housing is not a single, one size fits all, commodity. Personal housing needs change as life passes from young, single adults to family, to empty nesters to elderly. This chapter provides an inventory and analysis of North Branch's existing housing and paints a broad picture of future residential development.

North Branch has experienced significant population growth since 2000. The US Census estimated the city's population at 8,023 in 2000 and 10,125 in 2010, representing a 26.2% increase. The Minnesota State Demographer estimates North Branch's population at 10,608 as of April 1, 2017, representing another increase in population of approximately 5% despite the effects of the recession. The population is expected to continue to increase over the next 10 years, resulting in a projected population of 11,934 by 2030, with the 75-84 age group growing the fastest, at a projected rate of 40% according to the recent Maxfield Research and Consulting Comprehensive Housing Needs Analysis for Chisago County, dated June, 2018 (the "Maxfield Study"). Over this same period of time, the number of households has grown from 2,815 in 2000, 3,604 in 2010 and 3,801 as of 2017 and the projected number of households is 4,276 by 2030.

Housing Supply

Quantity and Types of Housing Units

As of April 1, 2017, the number of households is estimated at 3,801 according to the state demographer's office. Data describing the household type, as shown in Table 4-A, is based on data available as an estimate. Refer to Table 4-A: Housing Supply by Type, for more information.

Table 4-A Housing Supply by Type/Units Per Structure	Number Units	Percentage of units
Single-Family detached	3,040	80%
Single-Family Attached	164	4%
2-4 Unit multi-family	129	3%
5 + Unit multi-family	305	8%
Mobile home	177	5%
TOTAL UNITS	3815	100%

By US Census 2016

Comparison of Owner-Occupied and Renter-Occupied Units

It is important for communities to have a mixture of both owner-occupied and renter-occupied units. In general, many communities strive to have roughly 65-70% of their housing units owner-occupied. As of 2016, approximately 84.1% of the housing units in North Branch were owner-occupied, significantly higher than the national average (63.6%).

Table 4-B Housing Tenure by occupied	Number Units	Percentage of units
Owner-Occupied	3094	84.10%
Renter-Occupied	585	15.90%
TOTAL	3679	100%

By US Census 2016

According to the US Census Bureau, the median gross rent (2012 - 2016) was \$872.00. Refer to Table 4-C: Rental Rates - 2016, for additional information.

Table 4-C Occupied Units Paying Rent - 2016	Number Units	Percentage of units
Less than \$500	53	9%
\$500 to \$999	313	54%
\$1,000 to \$1,499	165	29%
\$1,500 to \$1,999	24	4%
\$2,000 to \$2,499	7	1%
\$2,500 to \$2,999	0	0%
\$3,000+	13	2%
TOTAL	575	100%
Median Dollars	\$872	

By US Census 2016

Few owner occupied houses are sold and converted to rentals, leaving a significant shortage of single family homes for rental. In addition, the existing multi-tenant properties experience a very low vacancy rate. The Maxfield Study (as commissioned by the Chisago County HRA/EDA in 2018) estimated the rental vacancy rate for North Branch and the immediate surrounding area at 2.4%. The US Census data from 2016 estimates the vacancy rates for North Branch specifically at 1.2% for owner occupied homes and 0% for rental units. Policies encouraging and promoting rental housing, whether traditional apartment style or via townhome-style construction, targeting all age groups and incomes, should be considered.

Value of Housing

According to the US Census Bureau, the median value of owner-occupied housing units in North Branch (2012 - 2016) was \$163,000. Refer to Table 4-D: Owner- Occupied Housing by Value, for additional information. According to the US Census Bureau, a median selected monthly owner cost with a mortgage (2012 - 2016) was \$1,500.00 and median selected monthly owner costs without a mortgage (2012 - 2016) was \$500.00.

Table 4 - D Owner-Occupied Housing Units by Value	Number Units	Percentage of units
Less than \$50,000	151	5%
\$50,000 to \$99,999	236	8%
\$100,000 to \$149,999	823	27%
\$150,000 to \$199,999	959	31%
\$200,000 to \$299,999	673	22%
\$300,000 to \$499,999	210	7%
\$500,000 to \$999,999	25	1%
\$1,000,000 +	17	1%
TOTAL	3094	100%
Median Dollars	\$163,000	

By US Census 2016

Residential Construction

1,219 new housing units were added in North Branch between 2000 and 2017. This includes 80 multifamily units and 1,139 single family homes.

At the peak of the past 18 years (from 2000 - 2005), single family home construction averaged about 150 homes per year. During the early years of the recession (from 2006 - 2011), the average number of new homes was only 13 homes per year, meaning some new housing growth, but in very limited numbers. The last 6 years of this period (from 2012 - 2017) has seen on average 41 new homes per year, demonstrating that North Branch remained a viable new housing market when other communities saw little or no growth for the past ten years.

Table 4-E Building Permit Trends 2000 thru 2017

Year	Single Family Dwellings	Multi-Family Dwellings	TOTAL
2000	200		200
2001	156		156
2002	132	24	156
2003	153		153
2004	87	56	143
2005	90		90
2006	29		29
2007	27		27
2008	8		8
2009	5		5
2010	2		2
2011	5		5
2012	31		31
2013	41		41
2014	36		36
2015	45		45
2016	50		50
2017	42		42

Tenure by Age of Householder

Demand is great for affordable owner-occupied homes. Demand overall is calculated for approximately 1,000 new for-sale units over the next 10 years. Existing lot supply is low, therefore new lots will need to be platted soon to meet the growing demand for new construction over the next decade. Price points to accommodate a range of incomes and desired amenities will need to be balanced and future new housing inventory should be offered in a variety of layouts and styles, at a variety of different prices, and in locations throughout the city to address demand from all age groups and income brackets.

The city has a relatively small number of senior housing facilities, with a county wide vacancy rate of 1.7% based on the Maxfield Study. The Maxfield Study also indicated that market equilibrium is typically 3%. Consequently, the Maxfield Study concluded that there is a strong demand for senior housing (2017 - 2030), with the majority of demand in the form of independent/active living housing (i.e. no services). The Maxfield Study recommended several new senior housing concepts including a senior co-operative, active adult rental, affordable rental, independent living with some services, a memory care units.

Life-Cycle Housing and Profile of Households

The housing needs of a community relate to the demographic profile of the household. Typically,



*The City of North Branch
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housing stock and
variety of affordable
options that allow
residents to find housing
at all stages of life.*

households move through several life-cycle stages; including entry-level households, first time homeowners, move-up buyers, empty nesters/young seniors, and older seniors. The following describes each of these household types and the effect that they have on housing demands in North Branch.

ENTRY-LEVEL HOUSEHOLDS

People in the 19 to 24 year old age group typically leave their childhood home and establish their own household. They often rent a house or an apartment because they generally do not have the income and savings needed to buy a home. In addition, many people in this age group move frequently, so they are hesitant to buy a house. They are also more apt to share housing with other unrelated people of similar age.

The entry-level household population in North Branch will fluctuate annually. Many North Branch residents that graduate from high school move to other communities to attend a university or to pursue other job opportunities. In the long term, unless current conditions and trends change, North Branch will not see a significant increase in the 19 to 24 year old age group.

FIRST TIME HOMEOWNERS

First time homeowners are typically in their 20s and 30s. They are usually “move-up” renters, meaning they “move up” from an apartment to a home. They are often married with young children and prone to moving within a few years of buying their first home for several reasons; including, increased salaries allowing them to move to more expensive housing, an increased number of children may require larger housing, and job opportunities may require that they move to another community.

MOVE-UP BUYERS

Move-up buyers are typically in their 30s and 40s. They move up from the smaller, less expensive house that they had purchased earlier. From an economic growth perspective, this is an important age group of people.

Typically, move-up buyers have children in school and an established job. They are less apt to move to another community and start over. Also, professionals who are moving to a community to advance their career are generally looking to move to a more expensive house than what they had in their previous community. North Branch should continue to ensure that it has adequate choices for those who are looking for move-up housing that will satisfy their needs until they are in their late 50s and beyond.

EMPTY NESTERS AND YOUNG SENIORS

Empty nesters and young seniors are generally in their 50s and 60s. Often, their children have moved out of their house and left them with a larger house than needed. Empty nesters

and young seniors often want to live in a smaller house, like a townhouse, that has less maintenance. As the baby boom generation moves into this age group, this population will likely increase in North Branch and there may also be a shift in this population group from their homes into apartments. There has already been a notable increase in demand for apartment and townhome style rentals in North Branch by members of the baby boom generation.

ADVANCED SENIORS

Those in their 80s and older are often looking for low maintenance or assisted living housing. As the population ages, North Branch should continually ensure that it has adequate housing to meet the needs of seniors, including the opportunity for multi-generational housing options, such as “senior or mother-in-law apartments”.

SPECIAL NEEDS

Housing for those with special needs includes housing for older adults and individuals with mental and/or physical disabilities or health issues whether it be temporary care, transitional housing, or long term care. The number of people with special housing needs is expected to increase as the population of North Branch continues to age. Ecumen offers a range of housing options at its North Branch facility. Bickford of North Branch offers assisted living and memory care. Apartment complexes including Shields Plaza and Splittstoser Apartments are tailored to the 55+ population and those needed wheel chair accessibility. A new supportive housing, 20 unit apartment complex intended for individuals with mental illness, called Willow Grove, is in development and construction is anticipated in 2019. North Branch is also home to Karcher Services, Provide Care and Progressive Living Solutions that offer a variety of care options.

Affordable Housing

The United States Department of Housing and Urban Development (HUD) generally defines housing as affordable if it costs less than thirty (30) percent of a household’s income. However, HUD’s Section 8 Income Guidelines are the basis for most affordable housing programs. Section 8 guidelines define low and moderate incomes on a sliding scale, depending on the number of persons in the family. For example, a four person household is considered “moderate income” if their family income is eighty (80) percent of the area’s median family income.

It is noted most housing affordability programs and data place emphasis on creating owner-occupied units at eighty (80) percent of the median family income (moderate income) and rental units at fifty (50) percent of the median family income (low income). Since low income persons are typically renters, the definition of “low income” is tied to the number of persons in each unit. This plan identifies “affordable owner occupied units” as those affordable for moderate income families (eighty (80) percent of median income). Affordable rental units are based on fifty (50) percent of the median income and reflected on a per capita and per family basis. While there are no units of designated as “subsidized” under HUD standards, there are 49 housing units that are subsidized under the USDA subsidy program in North Branch.

A new 48 unit, townhome style, affordable housing project is planned for construction in 2019. This workforce rental housing project will feature homes with 1 – 3 bedrooms, garages and on-site management an amenities.

Income by Age of Householder in North Branch.

Looking at income data is also important when predicting future housing demands in the City of North Branch. As of 2000 US Census, the median household income was \$50,924. By 2016, the median household income increased to approximately \$69,419 and the top employment industries, according to Data USA (2016), are health care and social service (912), manufacturing (680) and construction (656). The total population in 2017 age 16 and over was approximately 7,690, of which approximately 71.6% were considered to be in the labor force (US Census). The unemployment rate in the City of North Branch in September 2015 was approximately 3.4%. During this same time, Minnesota had an unemployment rate of about 3.2% (City-Data.com).

Income distributions as reported by the U.S. Census Bureau can be compared to affordability standards to determine how many households and families in the City of North Branch may require affordable housing. An estimated 1,144 households (30%) have annual household incomes of less than 80% of the median household income reported by the American Community Survey in 2016.

Table 4 - F Household income and benefits	Number Units	Percentage of units
Less than \$10,000	214	6%
\$10,000 to \$14,999	147	4%
\$15,000 to \$24,999	128	3%
\$25,000 to \$34,999	306	8%
\$35,000 to \$49,999	349	9%
\$50,000 to \$74,999	921	25%
\$75,000 to \$99,999	754	20%
\$100,000 to \$149,999	631	17%
\$150,000 to \$199,999	199	5%
\$200,000 +	30	1%
TOTAL HOUSEHOLDS	3679	100%
Median Household Income (dollars)	\$ 69,419.00	
Mean Household Income (dollars)	\$ 73,436.00	

By US Census Bureau, 2012-2016 American Community Survey

Table 4 -G Owner Monthly Costs as Percent of Household Income - 2016	Number Units	Percentage of units
Less than 20.0%	810	34%
20.0 to 24.9%	677	28%
25.0 to 29.9%	223	9%
30.3 to 34.9%	233	10%
35.0 % +	461	19%
Total	2404	100%

By US Census 2016

Table 4-H Gross Rent as a Percentage of Household Income	Number Units	Percentage of units
Less than 15%	58	10%
15.0 to 19.9%	37	6%
20.0 to 24.9%	50	9%
25.0 to 29.9%	23	4%
30.0 to 34.9%	88	15%
35.0% +	319	55%
Total	575	100%

By US Census 2016

Future Population and Household Projections

The future housing projections reported in the Maxfield Study assume that approximately 1,000 new housing units are needed to be constructed over the next 10 years to address pent up demand. The City recognizes that there are many factors and demographic trends that influence the number of housing units constructed and household size and that these numbers will likely change from year to year.

Vision for Housing

The City of North Branch has a high quality housing stock and variety of affordable options that allow residents to find housing at all stages of life. Quality housing is available for all income and age ranges. Existing homes have been well maintained and renovated, as the unique character of each neighborhood is preserved. The City is open to creatively seeking opportunities to meet our housing needs and responsibly providing our share of affordable housing. Housing in North Branch continues to be a strength in attracting young families to the area and supporting the desires of existing residents to find alternative housing options for their senior years that allows them to transition from their large single family homes into something more manageable with the amenities they desire all while remaining in North Branch.

Goals, Objectives, and Policies

The following is a series of goals, objectives, and policies intended to achieve the vision for housing stated above.

OBJECTIVE 1.1

PROVIDE A FULL RANGE OF HOUSING CHOICES THAT MEET RESIDENTS' NEEDS AT EVERY STAGE OF THEIR LIVES.

Policy 1.1.1

Attract a variety of residential developers to ensure a diversity of housing styles, layouts and costs.

Policy 1.1.2

Provide a variety of different residential zoning districts that have varying regulations with regard to setbacks, height, density, lot coverage and possible opportunity for accessory dwelling units.

Policy 1.1.3

Ensure that land is available in applicable zoning districts to allow for senior living options for all abilities (independent to assisted).

Policy 1.1.4

Encourage projects that include amenities to build and encourage active lifestyles.

OBJECTIVE 1.2

PROVIDE QUALITY AND SUFFICIENT AFFORDABLE HOUSING THAT MEETS THE AREA'S DEMAND.

Policy 1.2.1

Work with developers on providing affordable market rate housing.

Policy 1.2.2

Develop policies for naturally occurring affordable multi-family housing that encourage the maintenance and upgrading of aging apartment buildings, while maintaining affordability and preventing displacement of residents.

Policy 1.2.3

Promote additional housing diversity to serve families at all stages of their life cycle through housing finance programs and possible public-private partnerships.

GOAL 1

Allow all people the opportunity to call North Branch their home.



GOAL 2

Provide attractive and desirable residential properties.

OBJECTIVE 2.1

PROVIDE RESIDENTIAL NEIGHBORHOODS THAT ARE WELL DESIGNED.

Policy 2.2.1

For new development or redevelopment, consider streetscape improvements such as attractive street lighting, boulevards, sidewalks on at least one side of the street, landscaping and vegetation, and other amenities that enhance the visual appearance of neighborhoods. Consider similar opportunities in existing neighborhoods as street reconstruction projects occur.

Policy 2.2.2

Seek opportunities to provide additional green space and recreation amenities in residential areas that may be lacking them.

Policy 2.2.3

Promote moderate and higher density housing, such as apartment style and townhome style units, in areas where appropriate, such as within and near downtown, commercial areas, and along arterial roadways. Promote development practices that result in low traffic volumes near low density residential areas.

Policy 2.2.4

Promote residential development that occurs in an orderly manner consistent with the future land use plan and that makes efficient and responsible use of municipal utilities and infrastructure expansion and incentivizes (for example, through access to technical assistance) construction of more energy efficient and water efficient housing).

Policy 2.2.5

Implement housing codes and support programs which lead to a housing stock that reflects the City's commitment to sustainability and healthy living.



5

ECONOMIC DEVELOPMENT

Introduction

A strong business community is the cornerstone of a vibrant city. Economic development encompasses the policies and activities that improve the long term economic and social wellbeing of the community. Communities with strong economies have financial resources to support the levels of service that their residents need and desire. Successful communities realize that economic development is about bringing together social, natural, infrastructure, and economic assets in the community to sustain the “whole” community.

The City’s Economic Development Authority recently adopted a strategic plan to guide and inform its decision making over the next 3 – 5 years. The EDA identified the following strategic priorities:

- Expansion of broadband (high speed internet)
- Business growth, including continued land sales and development
- Transportation
- Community
- Housing

Inventory and Analysis

Existing Characteristics of the Economy

A significant number of North Branch residents commute to work, but have indicated via survey and other tools, that they would prefer to work in the city if comparable jobs were available. Therefore, retaining and attracting jobs is an ongoing objective for the City of North Branch. As of 2018 Assessment Year, non-residential property values amounted to \$146,754,700, as follows: commercial \$91,277,300, industrial \$22,953,100 and apartments \$32,524,300. The Minnesota Department of Employment and Economic Development estimates the unemployment rate in Chisago County at 3 percent, higher than the state average of 2.9 percent.

Table 5-A shows the employment and business profile of North Branch. The highest employment industry is health care and social assistance which provides 17.5 percent of all jobs in North Branch. Educational services is the second highest source of employment (13.1 percent), and construction, and other services provide about 12.6 percent each of the community’s total jobs. (Data-USA.com)

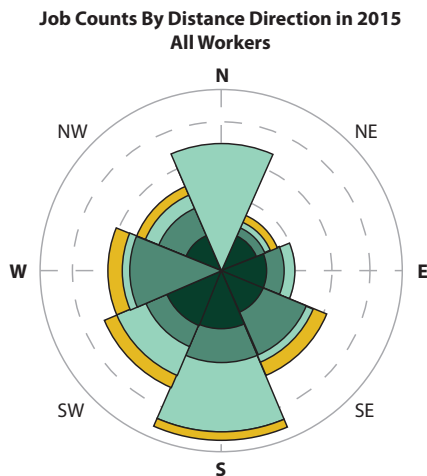
Table 5 –A Business and Employment Statistics

Name	Industry	Approximate # of Employees
North Branch School District	Education	388
Villages of North Branch	Elder Care	185
Andersen Windows	Manufacturing	180
Lakes Region EMS	Emergency Medical Services	92
County Market	Retail	90
Fairview Health System	Health Care	85
Branch Manufacturing	Manufacturing	72
Environmental Stoneworks	Manufacturing	69
Zinpro	Manufacturing	62
ShopKo	Retail	60
Wisconsin Coil Spring	Manufacturing	56

Commuting

According to the US Census as of 2015, 59.4 percent of North Branch residents commute more than 10 miles to work, resulting in an average commute time of 32.3 minutes trip.

Figure 5-1: Commute Distances



Jobs by Distance | Work Census Block to Home Census Block

2015

	Count	Share
Total Primary Jobs	3,366	100.0%
Less than 10 miles	1,368	40.6%
10 to 24 miles	1,148	34.1%
25 to 50 miles	614	18.2%
Greater than 50 miles	236	7.0%

Finance Tools

Community development actions require a framework for financial decision-making. The investment of public dollars to achieve community development objectives should be guided by several key principles:

- Financial resources are limited. The city has limited funding to apply to community development initiatives, so the use of resources must be targeted to achieve the greatest effect on community needs.
- Financial decisions require a long-term perspective. The current use of financial resources may reduce monies available in the future. In evaluating short-term opportunities, it is important to question the long-term impact on community development.
- Public funds should lead to private investment. While this section focuses on public finance actions, the Comprehensive Plan cannot become reality without private investment. The use of public funds should be targeted to actions that encourage private investment in North Branch.

The area of North Branch located north of TH95 received Opportunity Zone designation by the US Department of Treasury. While the tax credit opportunities that this designation allows are a private sector concern, the City will promote this designation as a tool for land sales and development in the City's Interstate Business Park as well as the other undeveloped portions of the City within the designated Opportunity Zone census tract.

Tax Increment Financing

Tax increment financing (TIF) is the primary development finance tool available to Minnesota cities (Minnesota Statutes, Sections 469.174 through 469.179). TIF is simple in concept, but complex in its application. Through tax increment financing, the property taxes created by new development (or redevelopment) are captured and used to finance activities needed to encourage the development. The challenge in using TIF lies with the complex and ever-changing statutory limitations.

Tax Abatement

Tax abatement acts like a simpler and less powerful version of tax increment financing. With TIF, the city controls the entire property tax revenue from new development. Under the abatement statute (Minnesota Statutes, Sections 469.1812 through 469.1815), the city, county and school district have independent authority to grant tax abatement.

Special Assessments

Public improvements are often financed using the power to levy special assessments (Minnesota Statutes Chapter 429). A special assessment is a means for benefiting properties to pay for all or part of the costs associated with improvements, and to spread the impact over a period of years. This tool can be applied to both the construction of new improvements and the rehabilitation of existing improvements.

Grant Programs

Cities can leverage funding from various grant programs to help take on economic development initiatives. There are numerous grant programs available to cities provided by various state and federal agencies related to economic development and downtown redevelopment. The Community Development Block Grant program (CDBG) administered by the U.S. Department of Housing and Urban Development (HUD) provides grants on an annual basis to states and eligible local governments for community development activities. In some cases, communities may choose to use these dollars for business retention and job growth activities. The City should also explore the use of these dollars for downtown redevelopment. The Minnesota Department of Employment and Economic Development is another agency with financial assistance available to local governments for business development, infrastructure, community development and site cleanup and redevelopment. Many other funding sources exist and city staff should monitor and pursue these opportunities when appropriate.





A significant number of North Branch residents commute to work, but have indicated via survey and other tools, that they would prefer to work in the city if comparable jobs were available.

GOAL 1

Encourage economic growth to meet the demand for commercial and industrial development.

Vision for Economic Development

The City of North Branch will remain focused on retaining a high quality of life, while at the same time working to encourage and facilitate job growth in its commercial and industrial sectors.

Goals, Objectives, and Policies

The following section outlines the primary goals for economic development, followed by a series of objectives and policies intended to influence future economic development efforts that align with the community visions in this plan.

OBJECTIVE 1.1

DEVELOP THE INTERSTATE BUSINESS PARK.

Policy 1.1.1

Strive to maximize the community's strategic location as a valuable resource, promoting the Opportunity Zone designation whenever possible.

Policy 1.1.2

Actively target companies, both large and small, that offer good employment prospects, draw from the local labor pool, and are good corporate citizens.

Policy 1.1.3

Work to maintain a labor force in the immediate area that supports the growth of business and industry in the Interstate Business Park, including but not limited to expanding the inventory of affordable housing, providing transportation alternatives and encouraging expansion of services.

Policy 1.1.4

Coordinate with stakeholders and regional partners to identify users of rail and support development of rail spur adjacent to the Interstate Business Park.



OBJECTIVE 1.2

REVITALIZE THE HISTORIC DOWNTOWN AREAS OF NORTH BRANCH.

Policy 1.2.1

Address unique development challenges including the reuse and redevelopment of vacant buildings in the historic downtown areas.

Policy 1.2.2

Explore and implement plans to enhance pedestrian friendly features, promote available parking, and collaborate with Minnesota Department of Transportation to establish safe pedestrian crossings at intersections within the downtown area.

GOAL 2

Balance the use of undeveloped land and infill development throughout the City.

OBJECTIVE 2.1

CONTINUE AND EXPAND REDEVELOPMENT EFFORTS.

Policy 2.1.1

Foster private investment and economic activity without compromising community objectives to maintain and enhance North Branch's natural environment.

Policy 2.1.2

Promote the areas north of TH95 as being designated for Opportunity Zone tax treatment to further enhance private investment in those areas.



OBJECTIVE 3.1

RETAIN AND SUPPORT LOCAL BUSINESS AND INDUSTRY.

Policy 3.1.1

Set attracting new, and retention of existing, businesses and industries as a priority of the City's economic development plan.

Policy 3.1.2

Continue outreach by City Staff and Elected Officials whereby the City representatives meet periodically on an individual basis with businesses and industries to listen to concerns and discuss opportunities for success. During these meetings, identify any perceived or real barriers or obstacles (such as overly restrictive ordinances) that the City could potentially remove or minimize to help industries and businesses prosper, while still protecting the overall health, safety and welfare of the community.

Policy 3.1.3

Coordinate with regional organizations, the North Branch School District, higher education institutions, and others in their efforts to promote training opportunities that can help businesses and industries prosper. If appropriate, co-sponsor and/or offer City facilities and/or meeting space for employee training programs.

Policy 3.1.4

Continue to promote North Branch's high quality of life as a means to help attract new businesses and industries.

Policy 3.1.5

Continue to work with local businesses and industries to ensure needs for expansion and development are adequately met.

Policy 3.1.6

Pursue ways to streamline the development approval process while still maintaining high quality development standards, by using consistent work flow practices, checklists, and hosting developer information sessions regularly.

Policy 3.1.7

Periodically review and promote economic development incentive programs such as Tax Increment Financing (TIF), Tax Abatement, utility energy and water efficiency design and improvement programs, county and state waste and pollution prevention assistance and other regional, state and national loan, grant and incentive programs to support business growth and development.

GOAL 3

Enhance North Branch's reputation as a resource to new and expanding businesses.



6

TRANSPORTATION

Introduction

The purpose of the Transportation chapter of the Comprehensive Plan is to provide guidance to the City of North Branch, as well as existing and future landowners in preparing for future growth and development. As such, whether an existing roadway is proposed for upgrading or a land use change is proposed on a property, this Plan provides the framework for decisions regarding the nature of roadway infrastructure improvements necessary to achieve safety, adequate access, mobility, and performance of the existing and future roadway system. The primary goal of this Plan is to establish local policies, standards, and guidelines to guide major transportation investments and policy decisions.

Transportation System Principles And Standards

The transportation system principles and standards included in this Plan create the foundation for developing the transportation system, evaluating its effectiveness, determining future system needs, and implementing strategies to fulfill the goals and objectives identified.

Functional Classification

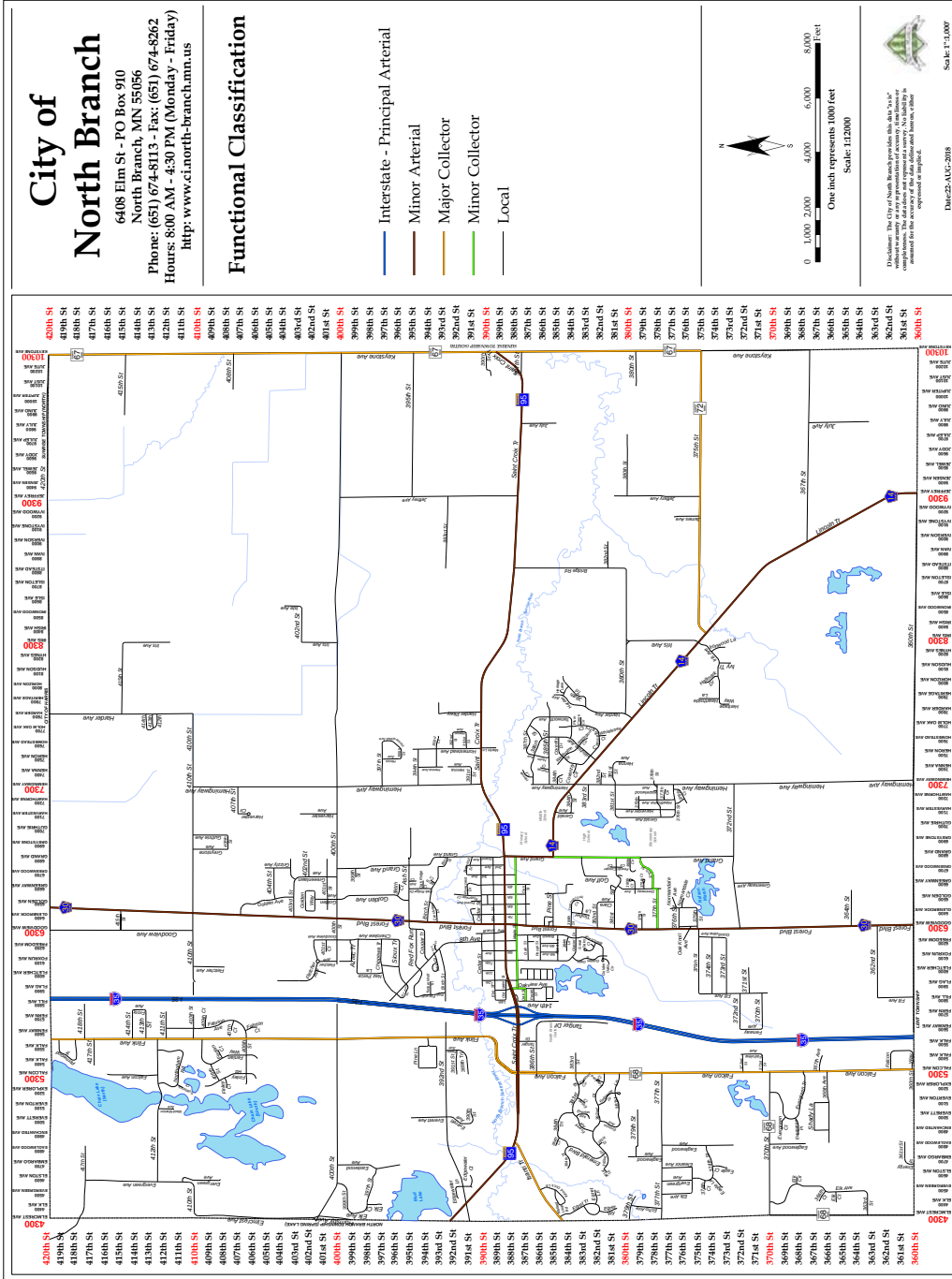
It is recognized that individual roads and streets do not operate independently in any major way. Most travel involves movement through a network of roadways. It becomes necessary to determine how this travel can be channelized within the network in a logical and efficient manner. Functional classification defines the nature of this channelization process by defining the part that any particular road or street should play in serving the flow of trips through a roadway network. Functional classification is the process by which streets and highways are grouped into classes according to the character of service they are intended to provide. Functional classification involves determining what functions each roadway should perform prior to determining its design features, such as street widths, speed, and intersection control.

The Minnesota Department of Transportation (MnDOT) has developed definitions and criteria for roadway classification based on function. The functional classification system typically consists of four major classes of roadways: Principal Arterials, Minor Arterials, Major Collectors, and Minor Collectors. Roadways are classified as either arterials, collectors, or local streets based on several criteria including (but not limited to) geographic units connected, types of streets connected, length of trip served, distance between streets of the same classification, volume of traffic carried by the facility, speed limit and design (right-of-way width and access provisions).

This Plan provides the framework for decisions regarding the nature of roadway infrastructure improvements necessary to achieve safety, adequate access, mobility, and performance of the existing and future roadway system



Figure 6-1:
Functional Classification
Map



The existing roadway classifications in North Branch are described below.

A. PRINCIPAL ARTERIALS

Roadways of this classification typically connect large urban areas to other large urban areas or they connect metro centers to regional business concentrations via a continuous roadway without stub connections. They are designed to accommodate the longest trips. Their emphasis is focused on mobility rather than access. They connect only with other Principal Arterials, interstate freeways, and select Minor Arterials and Collector Streets. There is one Principal Arterial roadway in the City of North Branch, Interstate 35 that runs north/south through the state of Minnesota and extending to Texas.

B. MINOR ARTERIALS

Roadways of this classification typically link urban areas and rural Principal Arterials to larger towns and other major traffic generators capable of attracting trips over similarly long distances. Minor Arterials service medium length trips, and their emphasis is on mobility as opposed to access in urban areas. They connect with Principal Arterials, other Minor Arterials, and Collector Streets. Connections to Local Streets should be avoided if possible. Minor Arterials are responsible for accommodating thru-trips, as well as trips beginning or ending outside the North Branch area. Minor Arterial roadways are typically spaced approximately ½ to 1 mile in developed areas and approximately 1 to 2 miles in developing areas. TH95, which runs east-west from the Wisconsin boarder on the east end and St. Cloud on the west end, Chisago County Rd. 14 and Chisago County Rd. 30 are identified as Minor Arterial roadways in North Branch.

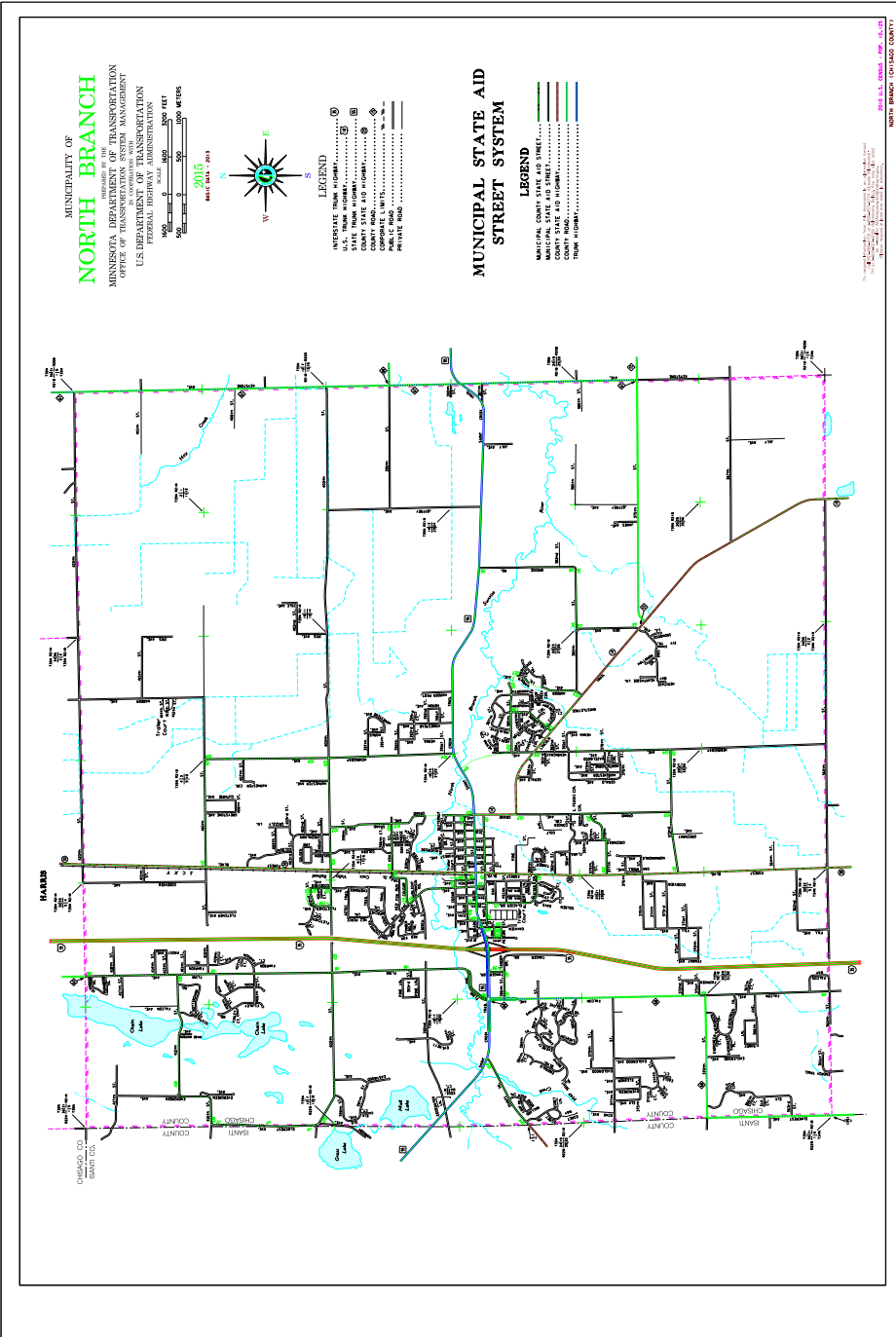
C. MAJOR COLLECTORS

Roadways of this classification typically link neighborhoods together within a city or they link neighborhoods to business concentrations. In highly urban areas, they also provide connectivity between major traffic generators. A trip length of less than 5 miles is most common for Major Collector roadways. A balance between mobility and access is desired. Major Collector street connections are predominately to Minor Arterials, but they can be connected to any of the other four roadway functional classes. Local access to Major Collectors should be provided via public streets and individual property access should be avoided. Generally, Major Collector streets are predominantly responsible for providing circulation within a city. However, the natural features associated with wetland and drainage complexes and parks, and location of principal arterials through the community results in circulation within North Branch being reliant on a combination of the Minor Arterial and Major Collector roadways. Major Collectors are typically spaced approximately ¼ to ¾ mile in developed areas and approximately ½ to 1 mile in developing areas. Flink Ave., Falcon Ave., portions of Keystone and Chisago County Rd. 72, and Isanti Trail are functionally classified as Major Collector roadways in the North Branch area.

D. MINOR COLLECTOR STREETS

Roadways of this classification typically include city streets and rural township roadways, which facilitate the collection of local traffic and convey it to Major Collectors and Minor Arterials. Minor Collector streets serve short trips at relatively low speeds. Their emphasis is focused on access rather than mobility. Minor Collectors are responsible for providing connections between neighborhoods and the Major Collector/Minor Arterial roadways. These roadways should be designed to discourage short-cut trips through the neighborhood by creating jogs in the roadway (i.e. not direct, through routes). Portions of Oakview, Oak, Maple, Grand, 378th, 377th and Greenway are functionally classified as Minor Collector roadways in the North Branch area.

Figure 6-2:



Roadway Capacity

Capacities of roadway systems vary based on the roadway’s functional classification. Based on accepted standards, roadway capacity per lane for divided arterials is 700 to 1,000 vehicles per hour and 600 to 900 vehicles per hour for undivided arterials. These values tend to be around 10% of the daily physical roadway capacity.

Principal and Minor Arterials

Based on the per lane capacity figures cited above, a two-lane arterial roadway has a daily capacity of 12,000 to 18,000 vehicles per day, a four-lane divided arterial street has a daily capacity of 28,000 to 40,000 vehicles per day, and a four-lane freeway has a daily capacity of approximately 70,000 vehicles per day. The variability in capacities are directly related to many roadway characteristics including access spacing, traffic control, adjacent land uses, as well as traffic flow characteristics, such as percentage of trucks and number of turning vehicles. Therefore, it is important that the peak hour conditions are reviewed to determine the actual volume-to-capacity on roadway segments with average daily traffic volumes approaching these capacity values.

Major Collectors and Minor Collector Streets

Major Collector and Minor Collector streets have physical capacities similar to those of a two-lane arterial street, however the acceptable level of traffic on a residential street is typically significantly less than the street’s physical capacity. The acceptable level of traffic volumes on Major Collectors and Minor Collector streets vary based on housing densities and setbacks, locations of parks and schools, and overall resident perceptions. Typically, traffic levels on Major Collector streets in residential/ educational areas are acceptable when they are at or below 50% of the roadway’s physical capacity, resulting in an acceptable capacity of 6,000 to 9,000 vehicles per day. Acceptable traffic levels on Minor Collector streets are considerably less. Typically, a daily traffic volume of 1,000 to 1,500 vehicles per day is acceptable on Minor Collector streets in residential areas.

Table 6-A: Roadway Types and Capacities, identifies various roadway types and the estimated daily capacities that the given roadway can accommodate.

Table 6-A: Roadway Types and Capacity	
Roadway Type	Daily Capacities
Minor Collector Street	Up to 1,000
Urban 2-Lane	7,500 - 12,000
Urban 3-Lane or 2-Lane Divided	12,000 - 18,000
Urban 4-Lane Undivided	Up to 20,000
Urban 4-Lane Divided	28,000 to 40,000
4-Lane Freeway	Up to 70,000

The capacity of a transportation facility reflects its ability to accommodate a moving stream of people or vehicles. It is a measure of a supply side of transportation facilities. Level of Service (LOS) is a measure of the quality of flow. The concept of LOS uses qualitative measures that characterize

operational conditions with a traffic stream and their perception by motorists. Six LOS are defined for roadways. They are LOS A, B, C, D, E, and F. LOS A represents the best operating conditions and LOS F represents the worst. The LOS of a multilane roadway can be dictated by its volume-to-capacity (v/c) ratio. The LOS of a two-lane roadway is defined in terms of both percent time-spent-following and average travel speed. LOS F is determined when v/c ratio is over 1.00. The criteria for LOS and general v/c ratio for multilane highways and speed for two-lane highways are provided in Table 6-B below:

Table 6-B: Highway Level of Service		
LOS	Multilane	Two-Lane
	v/c Ratio	Avg. Travel Speed (mph)
A	<0.28	>55
B	>0.28 - 0.45	>50-55
C	>0.45 - 0.65	>45-50
D	>0.65 - 0.86	>40-45
E	>0.86 - 1.00	≤40
F	> 1.00	v/c >1.00

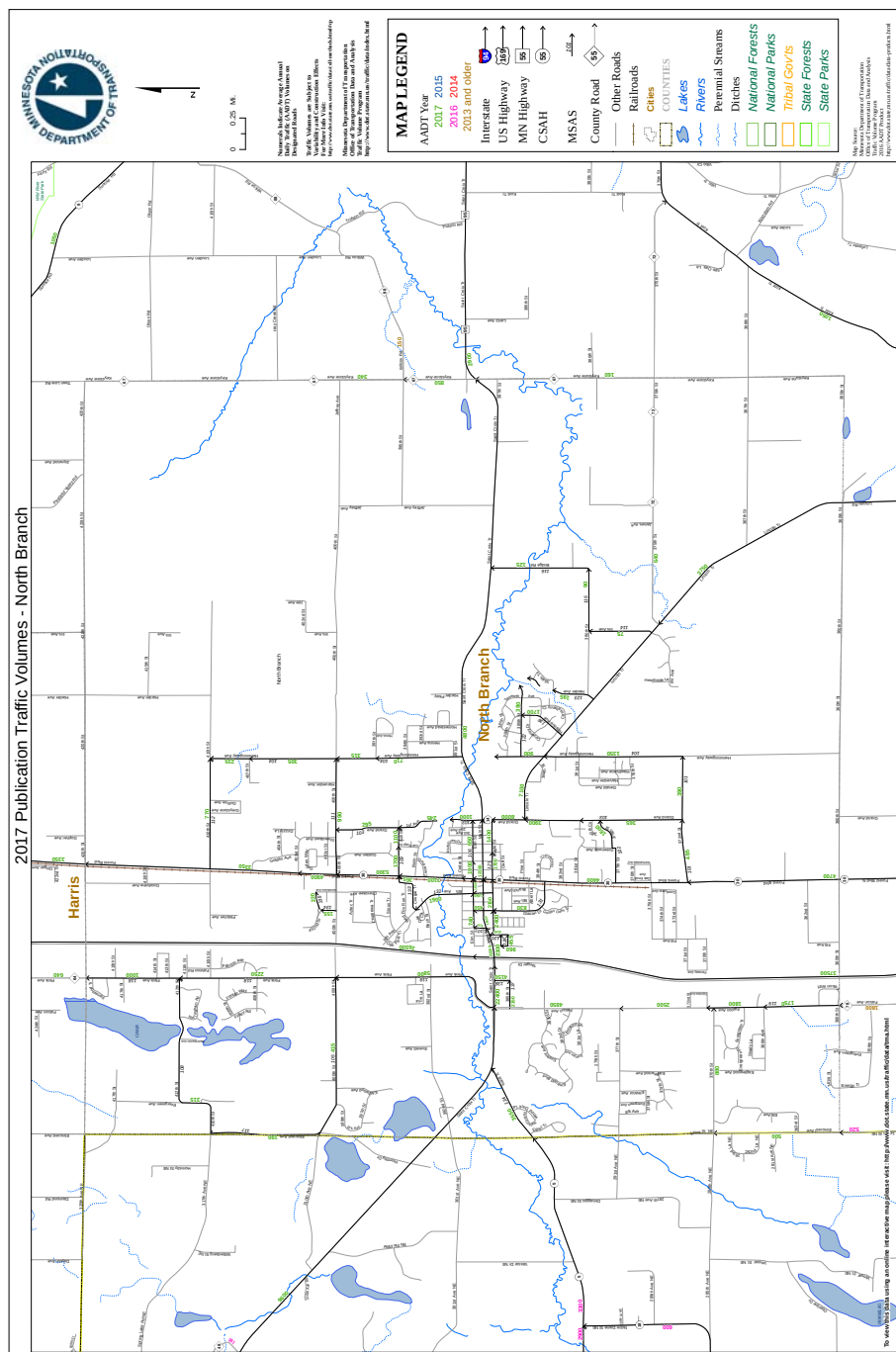
For roadways in urban sections, the urban street class and average travel speed determine the LOS. This is generally similar to the LOS for two-lane highways but takes into account the free flow speed of the facility (average speed achieved with no other vehicles present on roadway) and the addition of traffic control.

This criterion is established in Table 6-C below:

Table 6-C: Urban Street Level of Service				
Range of Free-Flow Speed	55 to 45	45 to 35	35 to 30	35 to 25
LOS	Avg. Travel Speed (mph)			
A	>42	>35	>30	>25
B	>34-42	>28-35	>24-30	>19-25
C	>27-34	>22-28	>18-24	>13-19
D	>21-27	>17-22	>14-18	>9-13
E	>16-21	>13-17	>10-14	>7-9
F	≤16	≤13	≤10	≤7

Generally, the City of North Branch should consider capacity improvements on roadways with a LOS D or worse and volume-to-capacity ratios over 0.75 during the peak hours.

Figure 6-3:
MNDOT
Traffic
Volumes

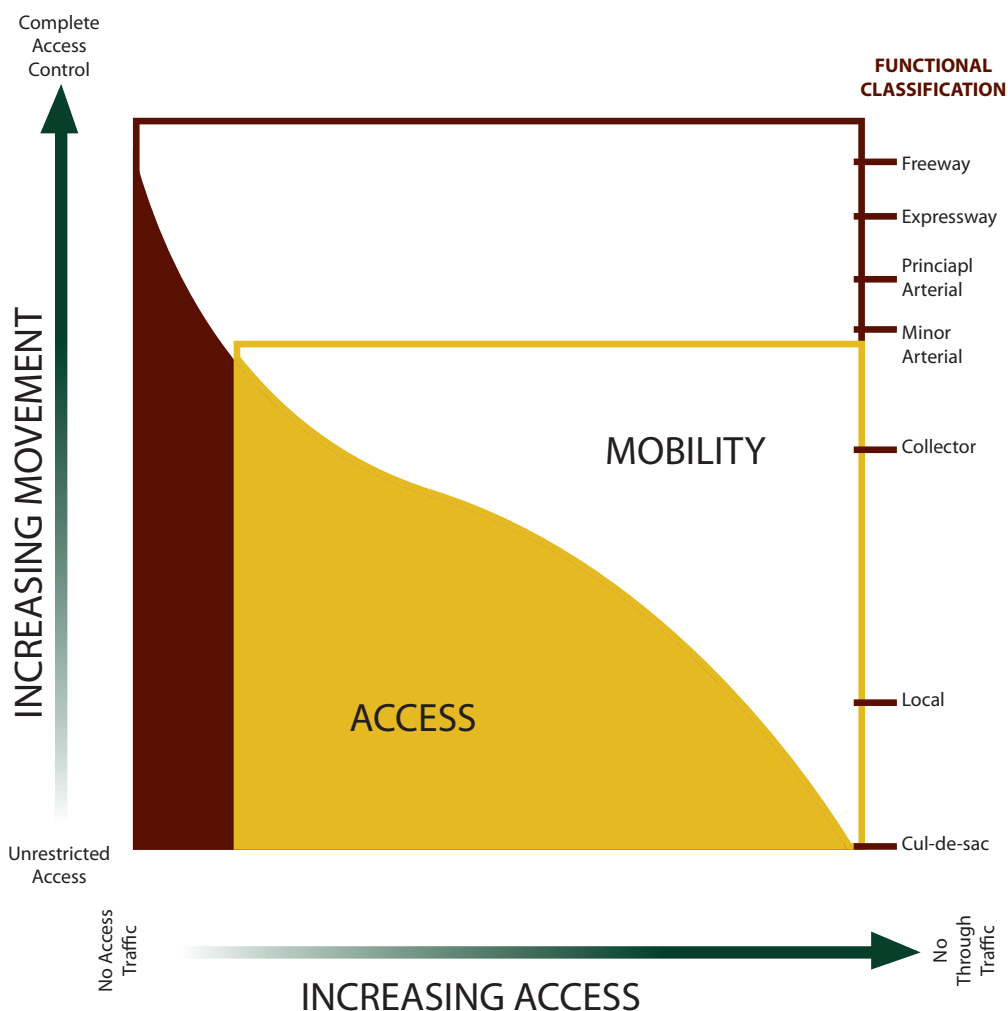


Access Management Guidelines

Access management guidelines are developed to maintain traffic flow on the network so each roadway can provide its functional duties, while providing adequate access for private properties to the transportation network. This harmonization of access and mobility is the keystone to effective access management.

Mobility, as defined for this Transportation Plan, is the ability to move people, goods, and services via a transportation system component from one place to another. The degree of mobility depends on a number of factors, including the ability of the roadway system to perform its functional duty, the capacity of the roadway, and the operational level of service on the roadway system.

Access, as applied to the roadway system in North Branch, is the relationship between local land use and the transportation system. There is an inverse relationship between the amount of access provided and the ability to move through-traffic on a roadway. As higher levels of access are provided, the ability to move traffic is reduced. The graphic below illustrates the relationship between access and mobility.



Each access location (i.e. driveway and/or intersection) creates a potential point of conflict between

vehicles moving through an area and vehicles entering and exiting the roadway. These conflicts can result from the slowing effects of merging and weaving that takes place as vehicles accelerate from a stop turning onto the roadway, or deceleration to make a turn to leave the roadway. At signalized intersections, the potential for conflicts between vehicles is increased, because through-vehicles are required to stop at the signals. If the amount of traffic moving through an area on the roadway is high and/or the speed of traffic on the roadway is high, the number and nature of vehicle conflicts are also increased.

Accordingly, the safe speed of a road, the ability to move traffic on that road, and safe access to cross streets and properties adjacent to the roadway all diminish as the number of access points increase along a specific segment of roadway. Because of these effects, there must be a balance between the level of access provided and the desired function of the roadway.

Roadway Width

Right-of-way width is directly related to the roadway’s width and its ability to carry vehicular and pedestrian traffic in a safe and efficient manner. For Minor Collector streets in residential areas, a minimum right-of-way width of 80 feet is recommended for the added roadway width, as well as to provide added setback distance between the roadway and homes along the roadway. Right-of-way widths of 80 feet to greater than 100 feet may be required on Minor Arterials and Major Collector roadways within commercial areas to accommodate the potential for higher traffic volumes and the need for additional lanes.

For the City of North Branch, geometric design standards for the reconstruction or construction of new Minor Arterial, Major Collector, and Minor Collector Streets will be based on MnDOT State- Aid standards.

Table 6-D: Access Spacing Guidelines for Collector Roadways in North Branch (1) (2)		
Type of Access by Land Use Type	Minor Arterial/Major Collector	Minor Collector
Low & Medium Density Residential		
Private Access	Not Permitted (3)	As Needed (4)
Minimum Corner Clearance from a Collector Street	660’	300’
Commercial, Industrial or High Density Residential		
Private Access	Not Permitted (3)	As Needed (4)
Minimum Corner Clearance from a Collector Street	660’	660’

(1) Some existing City streets that are currently functionally classified as Minor Arterial, Major Collector, or Minor Collector do not meet these criteria. These guidelines should be used for new streets and roadways that will functionally classified as Minor Arterial, Major Collector, or Minor Collector

(2) These guidelines apply to City streets only. Chisago County and MnDOT have access authority for roadways under their jurisdiction.

- (3) Access to Minor Arterials and Major Collectors should be limited to public street access. Steps should be taken to redirect private accesses on Major Collectors to other local streets. New private access to Major Collectors is not permitted unless deemed necessary.*
- (4) Private access to Minor Collectors is to be evaluated by other factors. Whenever possible, residential access should be directed to non-continuous streets rather than Minor Collector roadways. Commercial/Industrial properties are encouraged to provide common accesses with adjacent properties when access is located on the Minor Collector system. Cross-traffic between adjacent compatible properties is to be accommodated when feasible. A minimum spacing between accesses of 660' in commercial, industrial, or high density residential areas is encouraged for the development of turn lanes and driver decision reaction areas.*

Geometric Design Standards

Geometric design standards are directly related to a roadway's functional classification and the amount of traffic that the roadway is designed to carry. The following is a discussion of various geometric design elements and how each element relates to a particular roadway's ability to perform its function in the roadway network.

Roadway Width

Roadway and travel lane widths are directly associated with a roadway's ability to carry vehicular traffic. On Minor Arterial roadways, Major Collector roadways, Minor Collector streets and local streets, a 12-foot lane is required for each direction of travel unless the road meets the criteria for a more flexible design based on environmental factors as per the most recent State-Aid Operations Guide. The 24-foot total travel width is needed to accommodate anticipated two-way traffic volumes without delay. In addition to the travel width, minimum shoulder/parking lane widths are also required to accommodate parked or stalled vehicles. Roadway widths not meeting the Geometric Design Standards will result in decreased performance of the particular roadway and additional travel demand on the adjacent roadway network components. For example, a substandard Major Collector roadway may result in additional travel demand on an adjacent Minor Collector street resulting in an overburden for adjacent landowners. Similarly, additional local circulation may result on an adjacent Minor Arterial resulting in reduced mobility for regional trips.

Sidewalk/Trail

Sidewalks and/or trails are recommended to be adjacent to all Minor Arterial, Major Collector and Minor Collector roadways within North Branch to accommodate pedestrian, bicycle, and other non-motorized travel in a safe and comfortable manner. These roadways are expected to carry a significant amount of vehicular traffic and separation of travel modes is necessary. In commercial and industrial areas, the requirements for trails and sidewalks may vary to accommodate additional pedestrian and bicycle traffic.

Along Minor Arterials and Major Collector roadways, an 8-10 foot wide bituminous or concrete trail and/or 6-foot wide concrete sidewalk is recommended on either side of the roadway to accommodate local pedestrian and bicycle travel. The pedestrian facilities on both sides of these roadways allow

for pedestrian travel within the corridor without introducing excessive crossing demand on Minor Arterials and Major Collectors. A sidewalk and trail will accommodate pedestrian and bicycle travel along the corridor, as well as provide a safe, comfortable link between lower volume residential streets and the other pedestrian and trail facilities within the community. A 10-foot wide trail would be more desirable as the 10-foot width would better accommodate two-way bicycle traffic. The City of North Branch’s comprehensive trail plan will be utilized to determine where bike trails are required.

Along Minor Collector roadways, a 6-foot concrete sidewalk is recommended on at least one side of the roadway both sides being preferred. With the anticipated vehicular volumes on Minor Collector streets, pedestrians can safely cross the roadway, however, pedestrian travel along the roadway may become uncomfortable.

Design Speed

The design speed of a roadway is directly related to the roadway’s function in the roadway system. The focus of Minor Arterial roadways is mobility; therefore these roadways should be designed to accommodate higher travel speeds. Likewise, Minor Collector roadways are more focused on accessibility and should be designed to accommodate lower travel speeds. The function of Major Collectors is balanced between mobility and accessibility; therefore these roadways should be designed accordingly. Table 6-F below presents the recommended design speed for the North Branch roadway network.

Table 6-E: Roadway Design Speed Guidelines	
Functional Classification	Design Speed (1)
Minor Collector Street	30 mph
Major Collector Roadway	35 – 40 mph
Minor Arterial Roadway	45 – 55 mph

At the discretion of the City Engineer for City roadways, with approval by the City Council.

Roadway Jurisdiction

Roadway jurisdiction directly relates to functional classification of roadways. Generally, roadways with higher mobility functions (such as arterials) fall under the jurisdiction of the State of Minnesota or Chisago County. Recognizing that these roadways serve greater areas resulting in longer trips and higher volumes, jurisdiction of Principal Arterial and Minor Arterial roadways should remain under the jurisdiction of the state and county, respectively. Similarly, roadways with more emphasis on local circulation and access (such as collectors) will likely fall under the jurisdiction of the local government unit. These roadways serve more localized areas and result in shorter trip lengths and lower volumes. Major Collector and Minor Collector roadways should fall under the jurisdiction of the City of North Branch.

As roadway segments are considered for turn-back to the City, efforts will be taken to evaluate the roadway features for conformance to current standards, structural integrity, and safety. This effort will help the City develop short and long-range programs to assume the responsibilities of jurisdictional

authority.

Current Transportation Conditions

The City is located at the cross roads of I35 and TH95. TH95 also intersects with several Chisago County roads, including Co 30, formerly known as Hwy. 61, the historic highway that runs along the eastern border of Minnesota spanning from the Iowa border and running up along the north shore of Lake Superior. Based 2017 MnDOT traffic data, daily traffic counts along I35 heading north to North Branch average 37,500. An estimated 22,400 cars move west from I35 along TH95 each day. The daily traffic count is estimated at 22,500 cars moving east from I35 along TH95. An estimated 15,400 cars pass through the intersection of TH95 and Co. 30, making this intersection an area of concern due to ineffective turn lanes and a reduced turning radius for large vehicles such as fifth wheel RV's, passenger vehicles with trailers and semi's needing to turn from or onto TH95 at that intersection.

Truck and passenger vehicle traffic also pose an issue with regard to the city's minor arterial and collector roads. The City's industrial park, located north of 400th Street, could benefit from more direct access to I35, reducing truck traffic at the intersection of TH95 and Co. 30, relieving pressure on the existing bridge at I35 and providing for movement east/west through the City. As and when appropriate, the City should engage MnDOT about a new bridge and interchange on I35 at 400th Street.

The city of North Branch has 105 miles of local streets and road infrastructure to maintain. This consists of 70 miles of asphalt pavement, and 35 miles of gravel. Of the 70 miles that are currently paved, 17.1 are state aid and 52.9 are non-state aid. Assuming streets are overlaid once every 20 years, the city of North Branch should be overlaying 2.65 miles per year so all 52.9 miles of the currently paved non-state aid street system is overlaid once every 20 years. As more streets are constructed, the number of paved streets increases adding to the total of streets that should be overlaid on a regular schedule. There are currently 17.9 miles of paved local streets that are over 20 years old, and have never been overlaid.

Issues facing the City include:

- Lack of effective controls at various intersections between City/County Roads and TH95, including the intersections at 392nd and Isanti Trail.
- Existing intersection controls at TH95 and Grand and along Lincoln (Co. Rd. 14) at Grand and Hemingway are inefficient and pose significant accident hazards because of the volume and number of traffic movements.
- The intersection at TH95 and Co. 30 is not adequate for truck/trailer movement, lacking adequate area of turns, poor sight lines and lacking adequate stacking for vehicles waiting to turn.
- TH 95 passes through the historic downtown area and pedestrian crossings are difficult at best.
- Several intersections have cross traffic approaching the intersection at a 45° approach, impairing sight lines at the intersections.
- There are only limited marked pedestrian crossings along Co. 30.
- High pedestrian roads, such as Maple Street, do not have sidewalks, forcing pedestrians to walk in the street.

Pavement Management Plan

Local Streets (non-State Aid Streets)

Funding local street rehabilitation is not a one-time need. It's a permanent need that must be addressed in order to preserve this huge asset. Assuming streets are overlaid once every 20 years, the city of North Branch should be overlaying 2.65 miles per year so all 52.9 miles of the currently paved non-state aid street system is overlaid once every 20 years. This equates to a cost of approximately \$1,250,000 per year. As more streets are constructed, the number of paved streets increases adding to the total of streets that should be overlaid on a regular schedule.

There are currently 17.9 miles of paved local streets that are over 20 years old, and have never been overlaid. See attached map. As the years pass, more streets will reach that 20 year mark thereby adding to the total that should be overlaid.

All cities need to have a continuous program for maintaining streets. The typical program includes rehabilitating a number of streets each year to keep the overall pavement condition at an acceptable level, spreading out the cost of maintenance over a long period of time. Funding PMP's vary across the state, but the goal for each one is to have a continuous long-term funding plan.

Street Rehabilitation Funding

Funding PMP's typically involve tax levies, assessments, franchise fees, local option sales tax or a combination thereof.

- Tax rates are very competitive for attracting business and using 100% property taxes puts an undue burden on moderate to higher-valued businesses and homes to pay for a street system that serves the entire City. Nonprofit organizations do not pay property tax and would not pay their share of the improvement cost if general taxes are solely used for this purpose.
- Special assessments are a common way to fund improvements and maintenance as the City can spread the cost to property owners over a period of time. However, there is a limit to the amount that can be levied. Assessments can be highly controversial and often are unanticipated costs by the property owner. As such, it can be difficult to enact an assessment roll and effectively collect the necessary funding to pay for the improvements. Often, the projects will not move forward until the street is in complete failure, adding to the cost of the repair.
- Franchise fees spread costs out to everyone over a longer period of time and provide a dedicated fee to ensure local control of the revenue and that repairs stay on schedule with the Pavement Management Plan.
- Local Option Sales Taxes (LOST) can also be used to fund pavement management programs.

Pavement Management Program

As mentioned above, funding PMP's vary considerably and many times include a variety of funding sources. As with all PMP programs, funding sources can be changed and modified as situations and conditions change in the future.

In addition to researching how best to fund a PMP, staff also reviewed the city's standard details for road construction to determine if changes should be made that would extend the life of new roads. Staff reviewed standards from other cities and the life expectancy results these cities were experiencing, and determined a few changes should be made to the city's road standards. These changes are as follows:

- Increase the bituminous thickness from 3.5 to 4.5 inches.
- Use a flexible sealer between the bituminous and concrete curbing to eliminate water infiltration.
- In areas where there is the potential for bad soil conditions, require soil borings and a geological report/recommendation for the pavement section.

PMP Plan 2019-2044

All city streets will be evaluated based on the following criteria:

- Age and condition of street surface
- Type of street usage
- Volume of traffic
- Annual maintenance costs
- Relationship to other construction or projects
 - Planned county road improvements
 - Planned MnDOT improvements (if any)
 - Utility projects
 - Planned new construction
 - Public safety considerations

Those roads demonstrating the greatest need for Paving or resurfacing projects for those roads demonstrating the greatest need based on the above mentioned criteria will be designed and constructed to the extent of available funding until all city non-state aid streets have completed one full cycle of resurfacing. Phase 1 of the project will consist of overlays to the 17.9 miles that have never been overlaid. See attached map. Phase 2 of the project will consist of paving high traffic gravel roads. If funding is available phases 1 and 2 will be undertaken concurrently. Once Phases 1 and 2 have been completed, funds will be used for Phase 3 with consists of overlaying the remaining 35 miles of city streets existing as of the date of the plan.

Future Transportation System

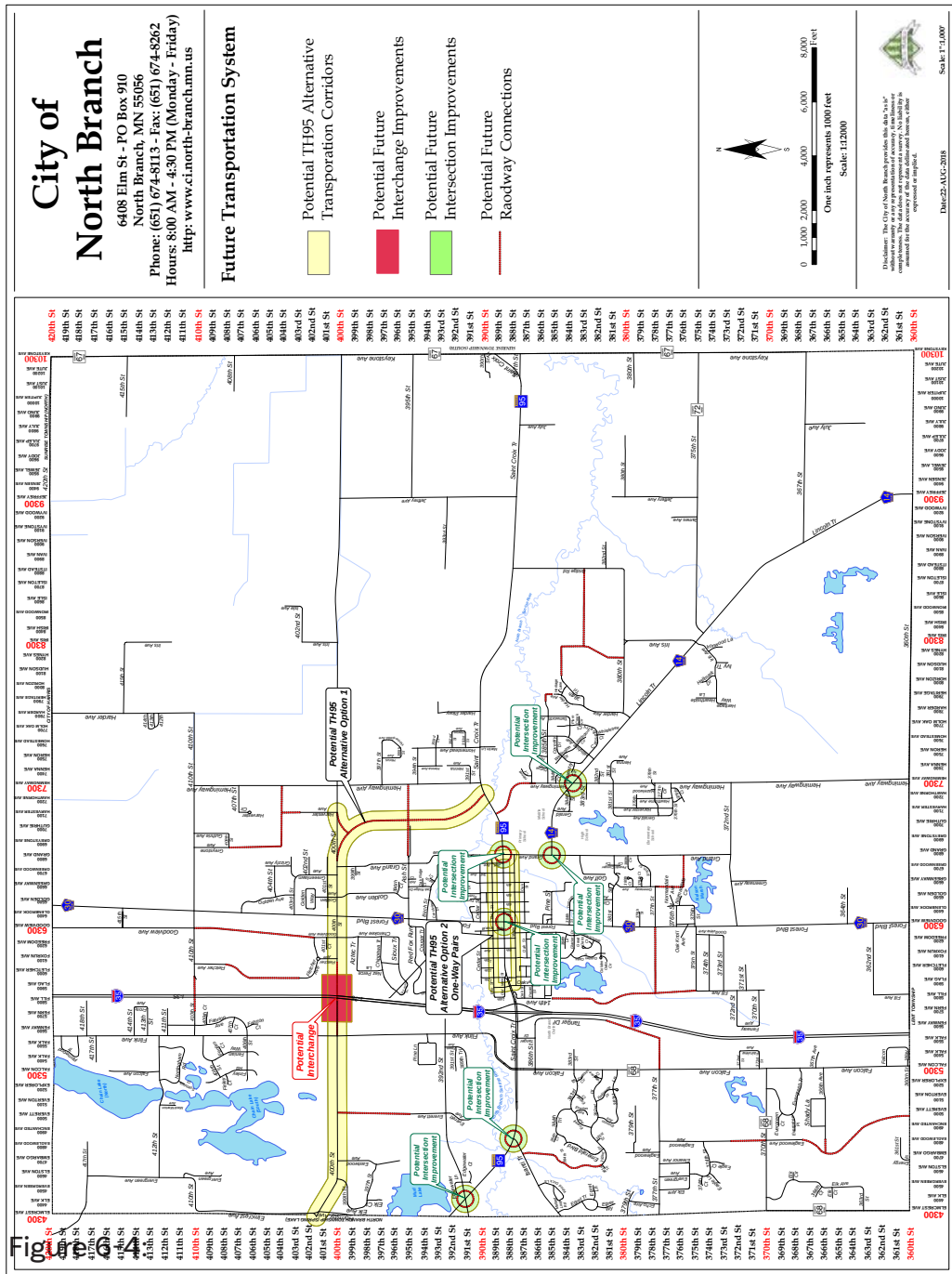
The City will monitor traffic and upgrade roads and intersections based on new housing and commercial development. Several intersections were identified by residents, staff, appointed committee members and elected officials as needing upgraded traffic controls utilizing best management practices such as roundabouts. Future growth and development will likely require roundabouts for efficient and safe movement in and through high volume intersections.

North Branch is located at the crossroads of I35 and TH95, but the current route of TH95 extends through the historic downtown of North Branch creating congestion and conflict between pedestrian, passenger vehicles and truck traffic at the intersection of TH95 and Co. 30 and extending west to

the existing overpass at I35. Citizens, staff and elected officials recognize that traffic volume and additional development within the community have created a need for alternatives to the existing TH95 corridor. Two possible options were mentioned at the city's community café relative to transportation concerns.

The first option is to plan for a new interchange on I35 at 400th Street, diverting traffic from Main Street north to 400th, crossing and accessing I35, and then extending to the west into Isanti County along 400th on the west side of I35. This option was considered by a citizen committee in 2016 and it remains a viable option, subject to funding, construction of a bridge overpass and the dedication of land for the new public rights of way. A second option is to utilize a split pair approach, diverting east or west bound TH95 traffic onto a parallel street. Additionally, expanding development in the Interstate Business Park, congestion along TH95 and current traffic volumes at the existing interchange at TH95 and I35 will drive the need for a new interchange at 400th and I35. [insert future transportation system map]





GOAL 1

Implement and enforce standards for new streets and roadways within identified growth areas.

Transportation System Goals, Objectives, And Policies

The following section outlines the primary goals for the transportation system followed by a series of objectives and policies intended to influence future development efforts that align with the community visions in this plan.

OBJECTIVE 1.1

ASSIGN APPROPRIATE FUNCTIONAL CLASSIFICATION TO EXISTING AND NEW STREETS AND ROADWAYS.

Policy 1.1.1

Monitor traffic and other transportation characteristics of existing streets and roadways and make recommendations regarding changes to the functional classification of the existing streets and roadways.

OBJECTIVE 1.2

IMPLEMENT AND ENFORCE STANDARDS FOR EXISTING AND NEW STREETS AND ROADWAYS.

Policy 1.2.1

Incorporate standards related to complete street standards and geometric design standards as outlined herein into the City's zoning ordinances related to new streets and roadways insuring developers are aware of City standards.

Policy 1.2.2

Monitor best practices and incorporate new standards related to complete streets and geometric design as outlined herein into the reconstruction of existing streets and roadways and implement to the extent practical.

Policy 1.2.3

Prevent the creation of "private streets" or alleys or the like unless in full compliance with the street detail sheets in effect at the time; internal driveways should be constructed and maintained by an association.

Policy 1.2.4

Periodically, review and assess road design standards, including those set forth in the Big Book of Ideas, version 1.1 as may be amended or updated, prepared by ch2m:Team for Chisago County as a result of the Towards Zero Deaths initiative, Complete Streets Implementation Guide for Minnesota Local Agencies (MnDOT, MN Local Roads Research Board:2013) and incorporate new engineering techniques to extend the useful life of the road surface and promote public safety.



OBJECTIVE 2.1

IDENTIFY A POSSIBLE CORRIDOR FOR MOVING TRAFFIC EAST/WEST THROUGH THE CITY VIA A BY-PASS OR SPLIT PAIRS

Policy 2.1.1

Zone developable land near the corridor that is compatible with a future truck by-pass.

Policy 2.1.2

Work with developers along the corridor for future dedications of public right of way for this purpose.

Policy 2.1.3

Restrict new driveways or other access onto Elm Street, from Grand Ave. west to 14th Ave. to preserve Elm Street as a possible path for a split pair approach to managing increasing traffic counts TH95

OBJECTIVE 2.2

IDENTIFY LOCATIONS FOR FUTURE THROUGH STREETS AND CONNECTORS TO MORE EFFICIENTLY MOVE TRAFFIC WITHIN THE CITY

Policy 2.2.1

Develop a master plan for connecting existing streets to loop traffic and provide for alternative routes throughout existing developments.

Policy 2.2.2

Work with developers to obtain dedications of public right of way for construction of future through streets.

GOAL 2

Establish a transportation plan to more effectively move traffic in and through the city.



GOAL 3

Develop, implement and promote alternative transportation modes in order to achieve a walkable and bikeable community.

OBJECTIVE 3.1

EXPAND BIKE AND PEDESTRIAN PLANS TO PROMOTE SAFE AND EFFICIENT MOVEMENT ALONG STREETS, LOCAL AND REGIONAL TRAILS, BIKE PATHS AND SIDEWALKS.

Policy 3.1.1

Encourage walking as a healthy mode of transportation for short trips, within neighborhoods and to nearby commercial areas.

Policy 3.1.2

Create more complete networks of pedestrian facilities, and improve the quality of the pedestrian environment, by connecting to neighborhoods, regional and community parks, preserves, facilities, schools, and commercial areas and by connecting to destinations and pedestrian/bicycle facilities in neighboring communities.

Policy 3.1.3

Improve pedestrian safety, accessibility, and convenience for people of all ages and abilities for example, use neighborhood context and Complete Streets Policies to guide the design of trail and sidewalk projects

Policy 3.1.4

Expand bicycle transportation options that are safe, comfortable, and accessible to people of all ages and abilities, including other surface transportation models, such as bike lanes.

Policy 3.1.5

Use traffic calming tools, traffic diversion and other available tools and methods to create and maintain sufficiently low automotive volumes and speeds on city streets to improve bicycle and pedestrian safety.



OBJECTIVE 3.2

CREATE A SAFE, MULTI-PURPOSE AND ALL SEASON TRAIL SYSTEM.

Policy 3.2.1

Sign paved shoulders when utilized to supplement the non-motorized system, transitioning to off-road facilities or bike lanes where and when possible.

Policy 3.2.2

Add system wayfinding and signage at key locations.

Policy 3.2.3

Consider options for hiking, biking, walking, skating and cross-country skiing.

Policy 3.2.4

Update the Snow and Ice Control Policy on an annual basis to ensure the appropriate prioritization of the network.

OBJECTIVE 3.3

DEVELOPMENT AND IMPLEMENT OPTIONS FOR MASS TRANSIT.

Policy 3.3.1

Support a public transit system and regional transportation to provide increased mobility options and access.

Policy 3.3.2

Support regional efforts to expand transit options, such as bus rapid transit, park and ride lots, ride sharing and express bus service to Minneapolis and St. Paul.

7

UTILITIES

Introduction

Water System

Existing Systems

The City's water system is operated and managed by a separate municipal utility, North Branch Water & Light (NBWL). NBWL has six municipal water supply wells including Well 1 (unique number 217922), Well 2 (unique number 112244), Well 3 (unique number 522767), Well 4 (unique number 706844), Well 5 (unique number 749383), and Well 6 (unique number 593584). Wells 1, 2, and 6 pump water from the Middle Proterozoic sedimentary aquifer and the Mount Simon - Hinckley aquifer. Well 3 and Well 5 pump water from the Mount Simon-Hinckley aquifer. Well 4 pumps from a buried Quaternary sand and gravel aquifer. Well locations are shown on Figure 7-A and well construction data are presented in Table 7-A.



Figure 7-1: Well Locations

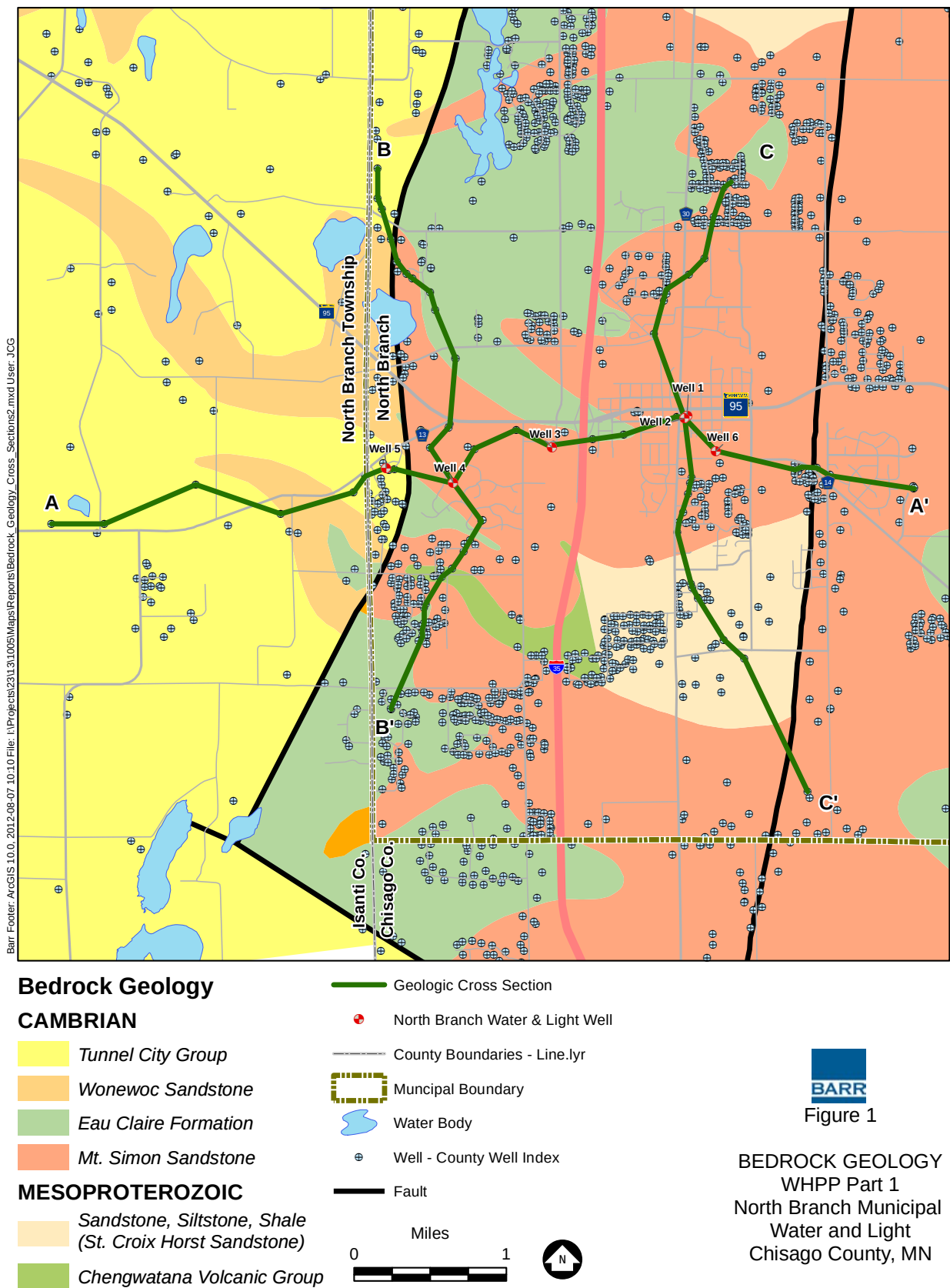
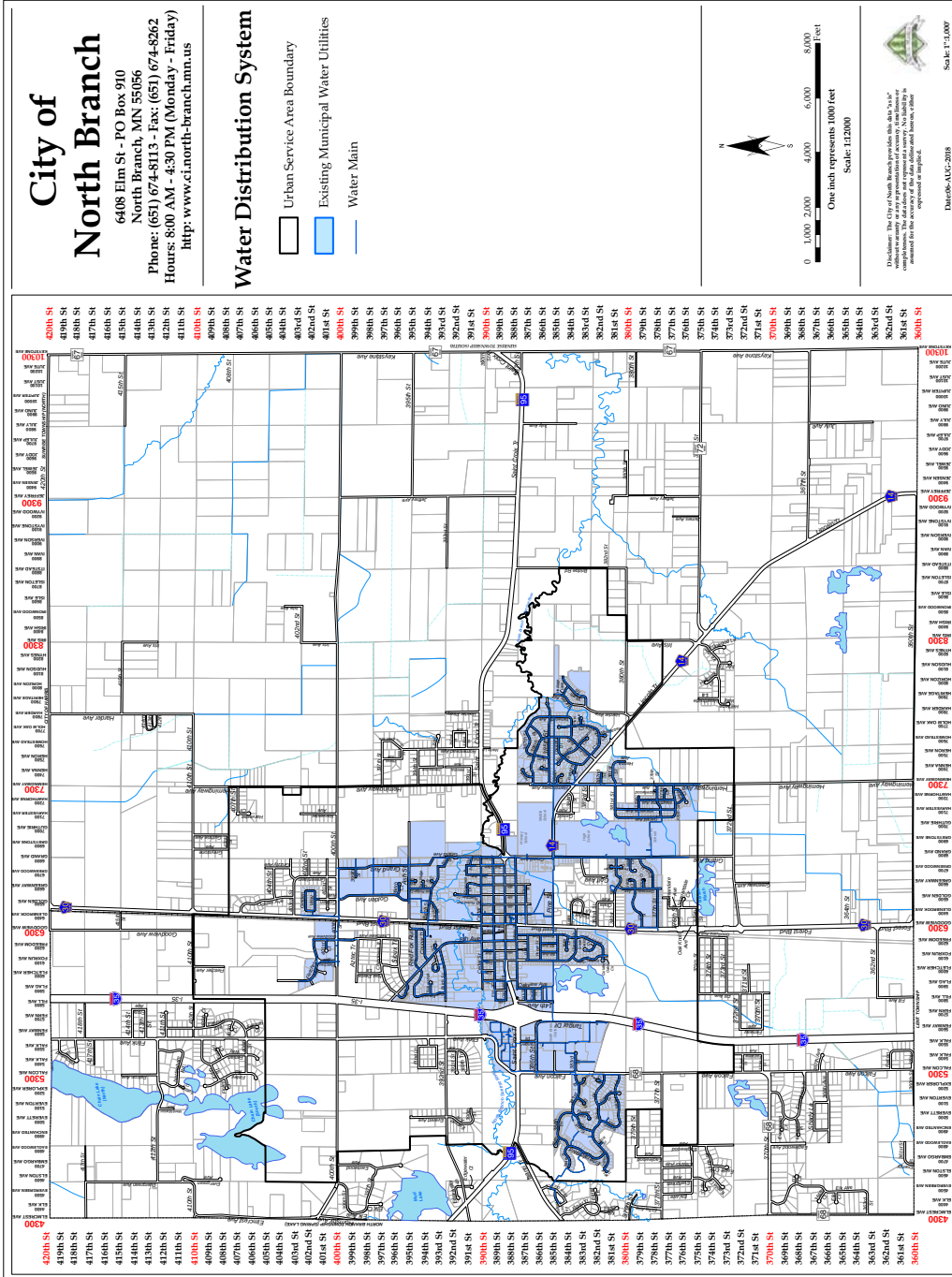


Figure 7-2:
Water Distribution
System Map



In response to the 2003 Comprehensive Water System Plan study (2002 thru the year 2043), based on land use, gross development acreages, and potential ultimate service area, the utility built two new water treatment plants, added new wells, raw water lines to the water system and storage capacity, this to meet the growing need of our community. The study also considered the quantity and timing of future water demands with estimated land use planning maps, estimated developable acreage, and water demand per acre for each land use type. Both average and peak day demands were estimated. The resulting projected average water demand is 1.9 mgd, 3.3 mgd and 7.2 mgd in 10, 20 and 40 years, respectively. See Table 7-B for pumping capacity and projections. Today, the treatment capacity is 3,500 gpm and the storage capacity is 2,000,000 gallons; average residential customer use as of 2016 is 4.22 thousand gallons of water per month. As areas develop in the community going forward, there will need to be new infrastructure added, including new trunk lines and elevated storage. However, Well No. 5 was found to produce water in quantities much greater than originally anticipated. It is likely that Well No. 5 would be expanded to produce the necessary amount of water to meet consumer demand before a new well would be drilled. See Figure 7-3 and 7-4 for anticipated Trunk Water Main locations and phasing.



The Utility will continue to supply sufficient water quantity for system users and emergency needs.

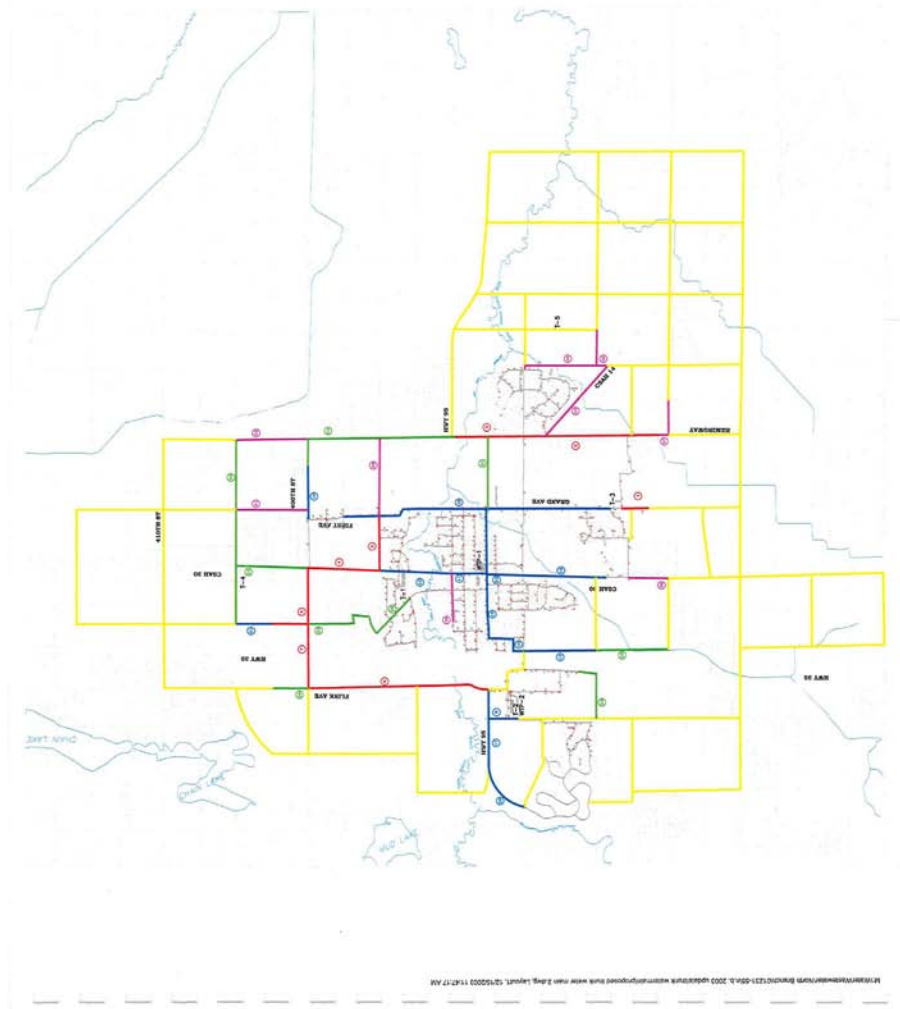


Figure 7-4:
North Branch Trunk Water
Main System Phasing

NBWL has an approved wellhead protection plan that addresses municipal water supply wells used by North Branch (6 municipal wells) and the associated source water aquifers (the Middle Proterozoic Sedimentary Aquifer, the Mount Simon – Hinckley Aquifer and Buried Quaternary Sand and Gravel Aquifer- the aquifers from which the municipal wells pump water). Part 1 of the Plan was completed and approved by the Minnesota Department of Health (MDH) in August of 2012. The WHP Plan Part 1 presented the delineation of the Wellhead Protection Area (WHPA), the Drinking Water Supply Management Area (DWSMA), and the vulnerability assessments for the system’s wells and aquifers within the DWSMA. The vulnerability assessment for the aquifers within the DWSMA was performed using available information and indicates that the vulnerability of the aquifers used by the system is classified as low. In 2015, the plan was updated to include Part 2. In Part 2, NBWL acknowledged that while water utility has jurisdiction over the drinking water system within the City, it does not have jurisdiction over land use planning within the City. NBWL indicated its desire to work collaboratively with the City as to future development. The goals for water quality adopted by NBWL included the following:

GOAL 1

The Utility will maintain or improve the current level of water quality so that the municipal water supply will continue to meet or exceed all applicable state and federal water quality standards.

GOAL 2

The Utility will continue to supply sufficient water quantity for system users and emergency needs.

GOAL 3

The Utility will provide and promote activities that protect the source water aquifer that provides water to the municipal system.

GOAL 4

The Utility will continue to collect data to support future wellhead and source water protection efforts.

Table 7-A: Well Construction Data

Local Well Name	nique Number	Aquifer	Casing Depth (ft)	Well Depth (ft)	Date
NB 1	217922	Middle Proterozoic Sedimentary and Mt. Simon-Hinckley	263 feet	762 feet	03/13/1947
NB 2	112244	Middle Proterozoic Sedimentary and Mt. Simon-Hinckley	261 feet	733 feet	10/06/1978
NB 3	522767	Mt. Simon-Hinckley	186 feet	304 feet	1993
NB 4 or "Water & Light"	706844	Buried Quaternary Sand and Gravel	171 feet	240 feet	02/10/2004
NB 5	749383	Mt. Simon-Hinckley	329 feet	467 feet	09/14/2007
NB 6 or "NB Golf Course"	593584	Middle Proterozoic Sedimentary and Mt. Simon-Hinckley	300 feet	410 feet	4/22/1999

Table 7-B: Annual and Projected Pumping Rates for North Branch Wells

Unique Number	Well Name	Total Annual Withdrawal (gal/yr)				
		2006	2007	2008	2009	2010
217922	1	159,891,000	158,063,000	91,027,000	3,942,000	209,000
112244	2	36,396,000	50,106,000	12,814,000	350,000	0
522767	3	5,872,000	3,352,000	65,103,000	129,316,000	124,964,000
706844	4	28,112,000	27,832,000	43,557,000	81,604,000	74,783,000
749383	5	0	0	0	13,254,000	806,000
593584	6	0	0	0	0	15,390
TOTALS		230,271,000	239,353,000	212,501,000	228,466,000	200,777,390

Source: MN DNR SWUDS Database

Unique Number	Well Name	Percentage of Annual Withdrawal					Average Annual % of Withdrawal
		2006	2007	2008	2009	2010	
217922	1	69.4%	66.0%	42.8%	1.7%	0.1%	36.0%
112244	2	15.8%	20.9%	6.0%	0.2%	0.0%	8.6%
522767	3	2.6%	1.4%	30.6%	56.6%	62.2%	30.7%
706844	4	12.2%	11.6%	20.5%	35.7%	37.2%	23.5%
749383	5	0.0%	0.0%	0.0%	5.8%	0.4%	1.2%
593584	6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Unique Number	Well Name	Projected Water Use (2015)			Maximum Total Pumping for Model Input ²		
		Total ¹ (gal/yr)	% of Total Projected	Projected Well Pumpage Based on % (gal/yr)	gal/yr	gal/day	m3/day
217922	1		36.0%	105,372,000	159,891,000	438,058	1,658
112244	2		8.6%	25,172,200	50,106,000	137,277	520
522767	3		30.7%	89,858,900	129,316,000	354,290	1,341
706844	4		23.5%	68,784,500	81,604,000	223,573	846
74938	5		1.2%	3,512,400	13,254,000	36,312	137
593584	6		0.0%	0	21,000,000	57,534	218
	TOTALS	292,700,000		292,700,000	455,171,000	1,247,044	4,720

1 Percentages for Wells 1 through 6 are based the average annual % of annual withdrawal for the period 2005 through 20009.

2 Well 6 rate of 21 mg/yr represents sum of estimated pumping for irrigation (17 mg/yr) and municipal peak demand (4 mg/yr) that was provided by WSB & Associates

GOAL 1

Expand existing wastewater system infrastructure to meet the demands generated by continued development.

Water System Goals, Objectives, and Policies

The following section outlines the primary goals for the water system followed by a series of objectives and policies intended to influence future development efforts that align with the community visions in this plan.

OBJECTIVE 1.1

EXPAND THE TRUNK WATERMAIN SYSTEM WITHIN THE URBAN SERVICE AREA.

Policy 1.1.1

Implement the expansion of the trunk watermain system within the Urban Service Area through orderly development.

Policy 1.1.2

The trunk watermain system within the future growth areas should generally follow the configuration as shown in Figure 7-4. Final trunk watermain sizes and locations should be based on the type, location and sequence of development within the projected growth areas.

Policy 1.1.3

Develop a financing strategy for funding the expansion of the trunk watermain system.



OBJECTIVE 2.1

REPLACE AGING WATER DISTRIBUTION SYSTEM INFRASTRUCTURE.

Policy 2.1.1

Prepare a study to document the condition of deficient watermain based on age, materials and history of breaks, leaks, freezing and other deficiencies.

Policy 2.1.2

Utilize the information from the watermain condition study, in conjunction with the condition information for other infrastructure elements, to develop, expand and prioritize projects to be included in the capital improvements.

OBJECTIVE 2.2

MONITOR THE CONDITION OF EXISTING WATER SUPPLY, TREATMENT, AND STORAGE INFRASTRUCTURE AND REPLACE AS REQUIRED.

Policy 2.2.1

Monitor the condition of the existing wells and related equipment and continue with regular inspections, maintenance and miscellaneous equipment replacement as required.

Policy 2.2.2

Monitor the condition of the water storage facilities and related equipment and continue with regular inspections, maintenance and miscellaneous equipment replacement as required.

Policy 2.2.3

Support planning intended to provide well head protection for wells supplying the municipal water system.

GOAL 2

Monitor, evaluate and improve the condition of the City's existing wastewater system infrastructure.



Wastewater System

Existing Systems

The existing wastewater collection system within the City of North Branch consists of a network of sanitary sewers ranging in size from 8 inches to 30 inches in diameter, totaling 40 miles of sanitary sewer pipe line throughout the city. There are also 12 wet well lift stations located throughout the City which collect and pump the wastewater from those areas which cannot be served by gravity sewers. The sanitary sewers and lift stations throughout the City collect into 2 main trunk sewers. The interconnected systems of lift stations pump all of the wastewater generated within the City North Branch to the City of North Branch's wastewater treatment facility. The City of North Branch has a mechanical treatment plant that came on line in 2004. The type of plant is an activated sludge extended aeration with aerated ash holding tanks and sludge storage tanks. The plant has an effluent phosphorus limit of 1 mg/l and the effluent is disinfected before being discharged into the North Branch of the Sunrise River. Figure No. 7-5 shows the trunk sewers system.

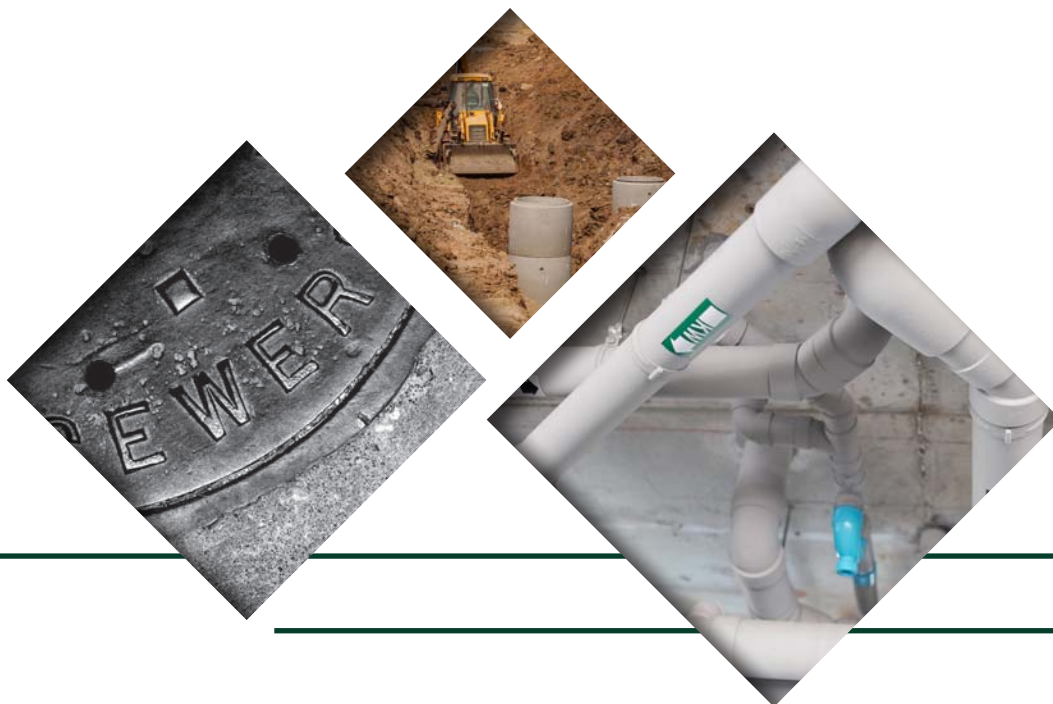
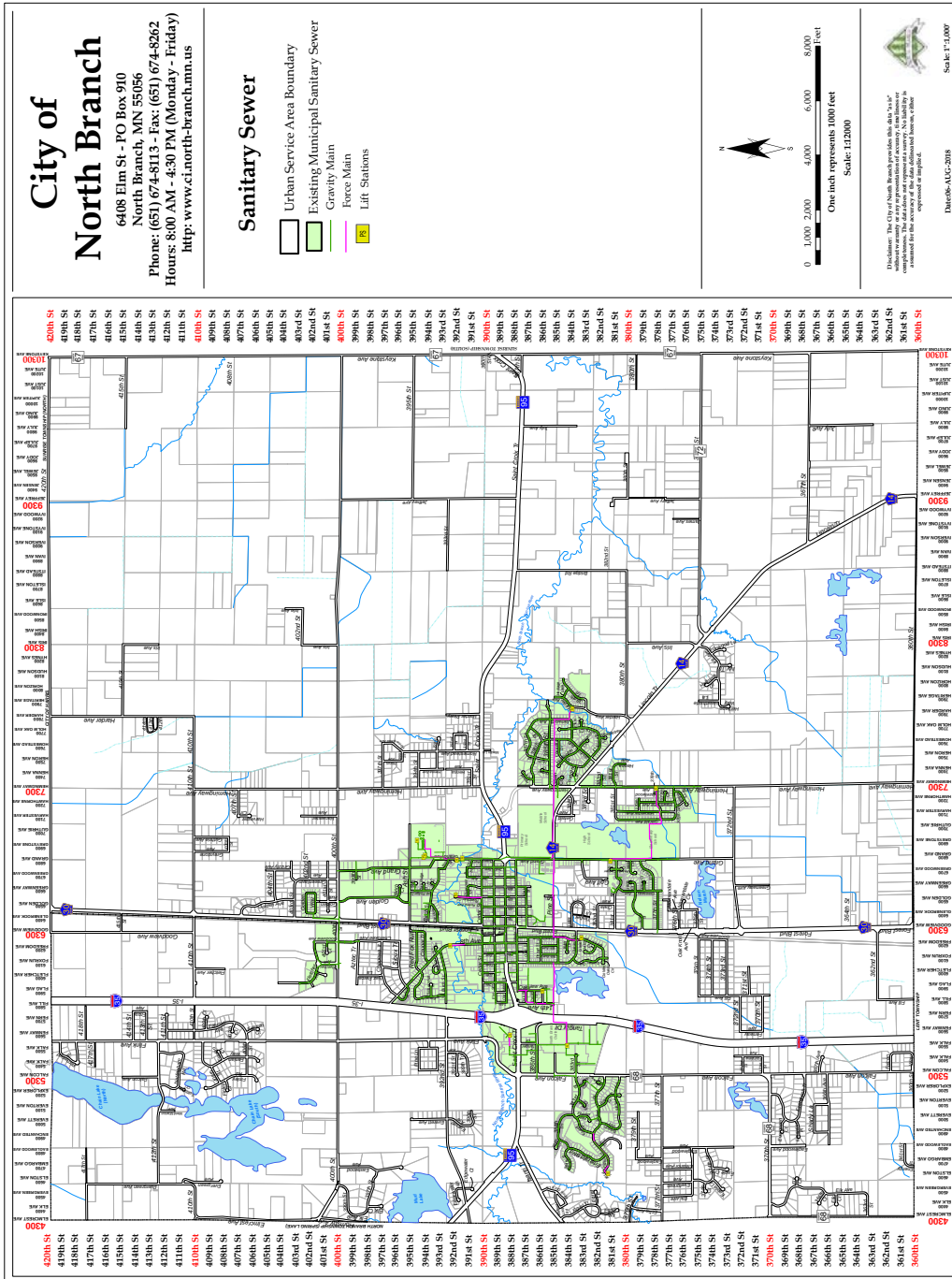


Figure 7-5:
Existing Sanitary
Sewer Map

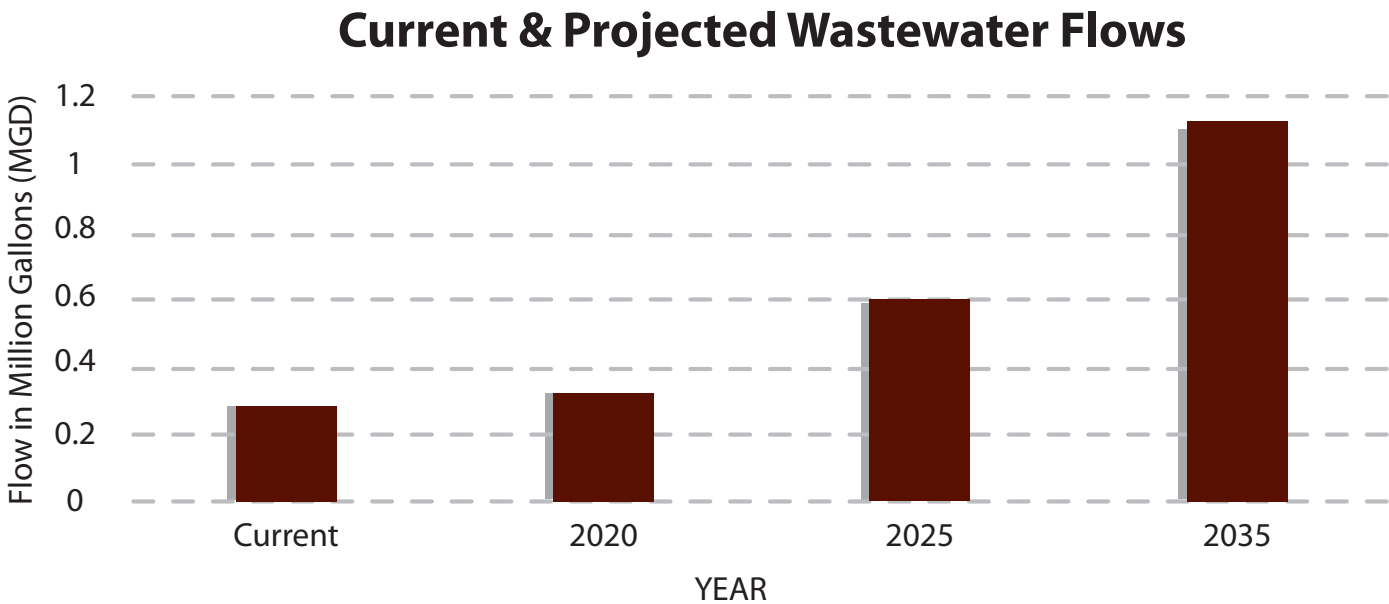


The capacity of the existing wastewater collection system is controlled, for the most part, by the capacity of the existing lift stations, trunk sewers, and the City’s wastewater treatment plant. The treatment plant capacity is .812 MGD wet weather flow, and has a current flow of .290 MGD. The sanitary sewer system and the lift stations within the City of North Branch are well maintained and well managed. Lift stations are cleaned every six months and the complete sanitary sewer system is cleaned annually. The sanitary sewer system is televised to verify the pipe condition and assure reliability of the system. Older segments of the municipal sanitary sewer pipes segments should be replaced as street construction projects are implemented using newer materials less susceptible to inflow and infiltration of ground water and surface water into the system. The City will continue to implement an on-going lift station maintenance and equipment replacement program to maximize the useful lives of the lift stations. Periodic repairs and replacements will be performed as required.

Future Improvements

The following table shows the current and projected wastewater flows from the City of North Branch:

Table 7-E:



The average daily wastewater flow is the total annual volume of wastewater collected within the City of North Branch and pumped to the North Branch Wastewater Treatment Plant divided by 365 days. The average wet weather wastewater flow is average daily flow for the 30 consecutive days that have the highest total flow during that 30-day period in each year.

The capacity of the existing wastewater collection system is controlled, for the most part, by the capacity of the existing lift stations, trunk sewers, and the City's wastewater treatment plant.



Figure 7-6:
Future Trunk Wastewater

Monthly Flows January 2019

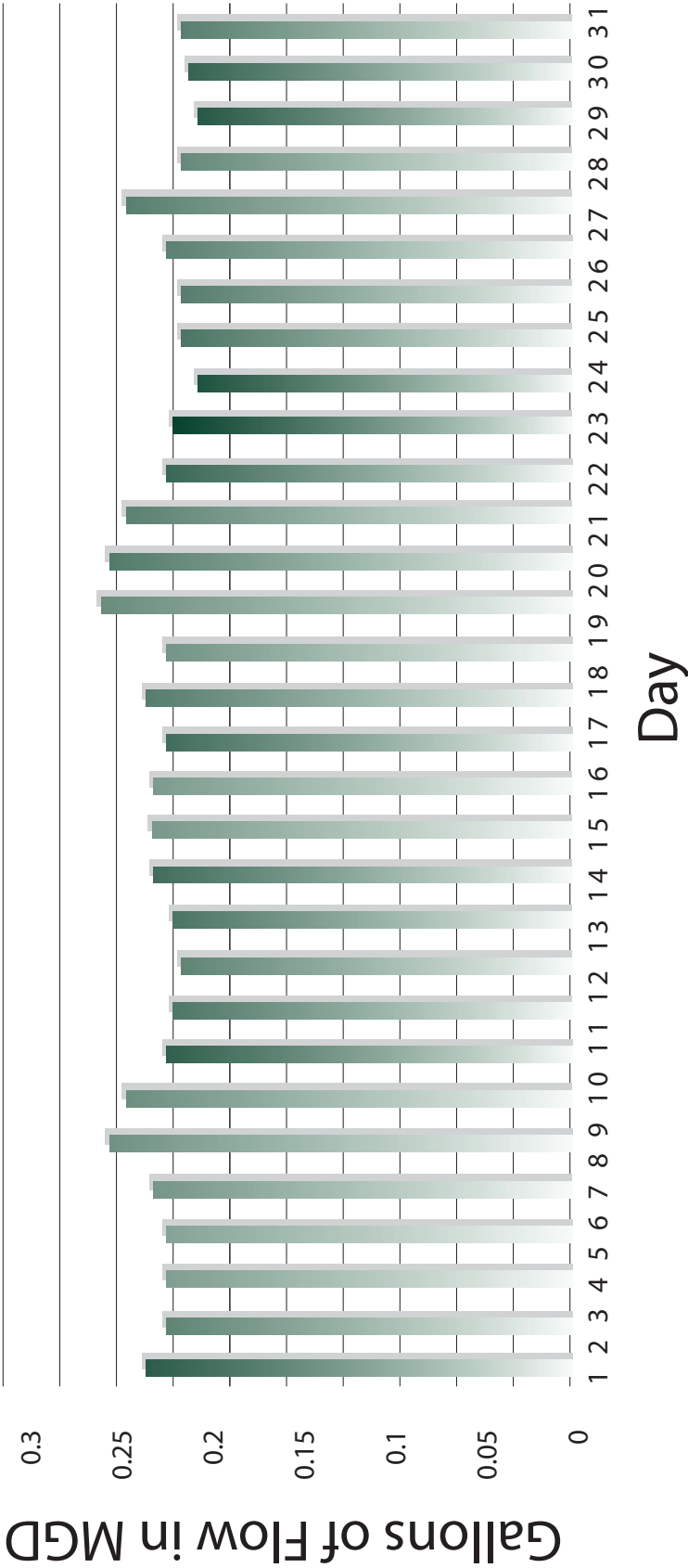


Figure 7-7:
Trunk Wastewater System

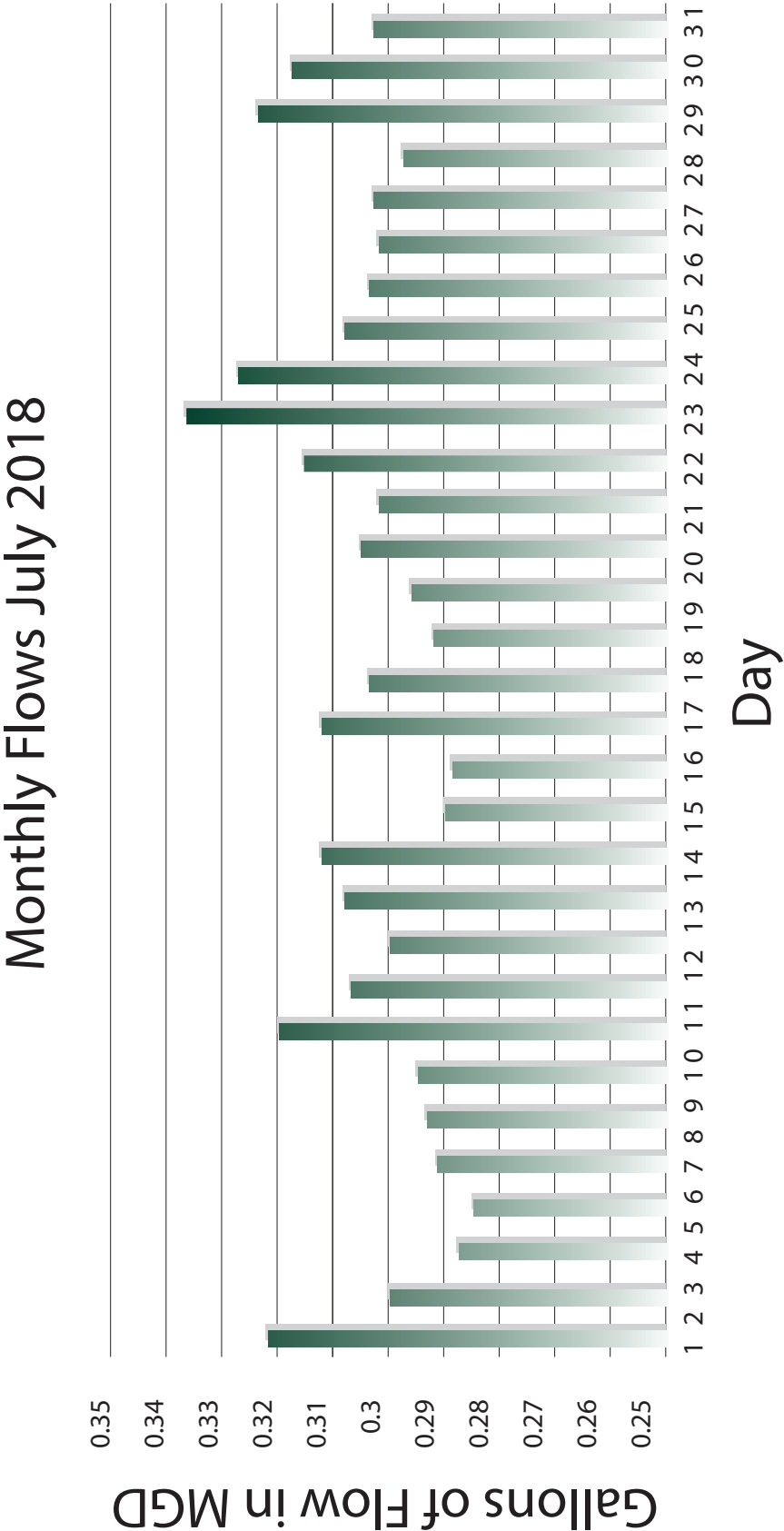
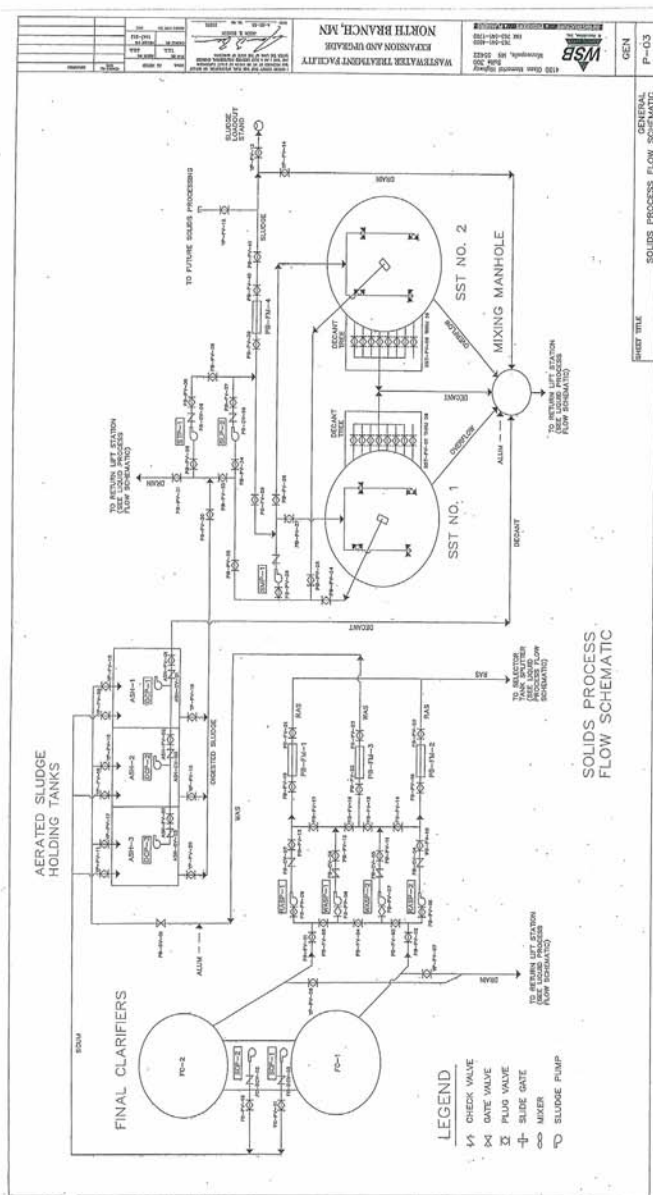


Figure 7-9:
Wastewater Treatment
Facility Expansion &
Upgrade



A system of sanitary sewers will be extended from the trunk sewer into the development areas. These trunk sewers will range in size from 8 inches to 15 inches in diameter. The exact size and configuration of the sanitary sewer system will be dependent on the type and density of development, existing and proposed topography, and in the case of commercial and industrial areas, the extent of water usage/ wastewater discharged. The approximate configuration of the primary network of sanitary sewers and lift stations within the projected development areas is shown in Figures 7-5.



The following section outlines the primary goals for the wastewater system followed by a series of objectives and policies intended to influence future development efforts that align with the community visions in this plan.

Wastewater System Goals, Objectives, and Policies

OBJECTIVE 1.1

EXPAND THE TRUNK WASTEWATER SYSTEM INTO FUTURE GROWTH AREAS.

Policy 1.1.1

Implement the expansion of the trunk sanitary sewer system as areas within the Urban Service Area are developed.

Policy 1.1.2

The trunk wastewater collection system within the future growth areas should generally follow the configuration as shown in Figures 7-6. Final trunk sanitary sewer and lift station sizes and locations should be based on the type, location and sequence of development within the projected growth areas.

Policy 1.1.3

Develop a financing strategy for funding the expansion of the trunk sanitary sewer system; monitor sewer access and trunk fees being assessed to insure that they reflect the costs of the system as it expands; explore assistance programs to reduce demands on the waste water system, resulting in reduced energy and other costs.

GOAL 1

Expand existing wastewater system infrastructure to meet the demands generated by continued development.



GOAL 2

Monitor, evaluate and improve the condition of the City's existing wastewater system infrastructure.

OBJECTIVE 2.1

REPLACE AGING SANITARY SEWER SYSTEM INFRASTRUCTURE.

Policy 2.1.1

Prepare a study to document the condition of deficient sanitary sewers and collection system lift stations based on age, materials and deficiencies identified in sewer televising reports.

Policy 2.1.2

Utilize the information from the sanitary sewer condition study, in conjunction with the condition information for other infrastructure elements, to develop, expand and prioritize projects to be included in the capital improvements.

OBJECTIVE 2.2

MONITOR THE CONDITION OF EXISTING WASTEWATER PUMPING AND TREATMENT INFRASTRUCTURE AND REPLACE AS REQUIRED

Policy 2.2.1

Monitor NPDES wastewater quality standards and identify possible changes to the treatment processes currently utilized by the City.

Policy 2.2.2

Monitor the condition of the City's main lift stations, including the pumps, and continue with regular inspections, maintenance and miscellaneous equipment replacement, with emphasis on higher efficiency equipment, as required to accommodate existing and new users of the system.

Policy 2.2.3

Remove old wastewater ponds/infrastructure to accommodate future expansion as needed.



Stormwater System

General

The goal of the plan is to maintain and improve surface water quality and minimize impacts of increased water quantity through appropriate planning, policy enforcement and capital improvement projects.

Most Minnesota cities have existing pipe networks that were designed to relieve ponding within the original platted city limits. When these systems were designed, the concern for the downstream properties was not a consideration. The goal was the efficient and cost effective removal of stormwater runoff from developed areas. In North Branch's case, this meant the construction of direct pipelines to the Sunrise River with eventual transfer to the St. Croix River.

As little as 20 years ago, the urban storm sewer pipe design recommended by the Minnesota Department of Transportation (MnDOT) on County State Aid Highways for cities the size of North Branch was a 3-year design storm. That is, the pipe system was designed to handle less than a typical 3.5-inch rainfall. Now, as rainfall intensities appear to be increasing and construction costs are increasing faster than material costs, the recommended design is for the pipes to handle a 10-year storm while ensuring that overflow spillway routes prevent property damage for larger storms.

Based on the existing system, the effects of unmitigated growth on the downstream systems can be devastating and can lead to legal action against the governing authority. One of the best methods of mitigating the effects of growth is through the construction of stormwater retention basins. These basins are designed to store excess runoff at elevations where there is no adjacent property damage. The runoff is stored until the existing storm sewer system can take it away. Studies have shown that these basins not only provide flood protection, but can also help to remove stormwater pollutants.

Typically, the most efficient and most economical retention basins serve larger areas. Hence, an effort has been made to locate regional retention ponds as opposed to scattering smaller, localized development basins throughout the City. However, topography and available space must provide optimum locations for regional ponds. Regional ponds cannot be located in an existing wetland without the costly mitigation of the impacted wetland. They are also not recommended in floodplains. Recently, a Minnesota suburb was fined by the Minnesota Pollution Control Agency (MPCA) for illicit discharge of sediment into the Minnesota River associated with its floodplain stormwater treatment pond having its containment bank eroded away by the flooded river. This comprehensive plan considers these factors when recommending Best Management Practices (BMPs). It also considers information from long term residents of North Branch and City staff regarding the observation of the natural ponding associated with heavy rainfalls when siting regional basins.

One drawback associated with regional pond planning is finding a funding mechanism to purchase the land needed and finding ways to have new development assist in their construction. Ideal planning of regional basins includes the purchase of the needed land while constructing the basin with funding generated from area charges on the new developments that generate the excess runoff. The trouble is that the land acquisition should be made before the development occurs, but the development fees are used to pay for the land and regional pond. Greater Minnesota cities are also reluctant to

impose development charges, because their goal is to attract new businesses with low cost, and not to burden them with additional fees.

Although regional ponds are the most cost effective method of hydraulically managing flooding, they are not necessarily the best method of handling the new water quality regulations for stormwater. The water quality regulations for stormwater are ever changing. For example, since 2007, the City of North Branch has been required to obtain a permit for its Municipally Separate Storm Sewer System (MS4).

This MS4 permit is renewed every 5 years and the permit rules continue to evolve. The MS4 permit and in the coincidental Construction Stormwater Permit, municipalities and developers are required to reduce the runoff volume from new construction sites by removing the first 1-inch of runoff. To accomplish this, each new construction site having more than 1-acre of new impervious surfacing must take all appropriate measures to reduce the additional runoff volume created by the proposed new impervious surfaces (roofs and pavement).

Typically the most cost effective ways of accomplishing the required volume reduction is through infiltration or rainwater harvesting. Infiltration practices have the benefit of using the soil to assist in filtering the runoff. They also reduce runoff volumes from a developed area by taking a portion of the runoff and recharging the ground water. As such, they are often touted by surface water management agencies and review authorities. However, they must also be strategically placed to prevent the potential for contamination of City wells. Many cities have restricted the use of infiltration practices inside their wellhead protection area or well capture zone.

Filtration practices, such as filtration basins, biofilters, iron infused sand filters, etc., are similar to the more common infiltration practices, but are designed so that the stormwater filters through plants and filter media before draining into a storm sewer and not infiltrating into the ground. Filtration basins are recommended to manage stormwater runoff and improve water quality within the 1-year Wellhead Protection Area (WHPA). Filtration basins are recommended wherever they will fit into the designs and encouraged wherever local private property owners might request retrofitting them into their landscaping. Any private filtration basins that are installed will help lessen the load on the existing storm sewer system and improve water quality.

The northwest quadrant of North Branch is ideally suited for infiltration because the underlying soils are predominately sandy. On the other hand, much of the southern portion of North Branch has clay soils that are not conducive to infiltration. Because of these water quality regulation changes, it may be advantageous to plan regional ponds for flood prevention associated with extreme rainfall events, while planning smaller water quality BMPs on a neighborhood or individual development scale.

Wetlands

In 1991, the Minnesota Legislature passed the Wetlands Conservation Act (WCA). The WCA is administered according to Minnesota Rules Chapter 8420 to implement the purpose of the Act, which is to:

1. Achieve no net loss in the quantity, quality, and biological diversity of Minnesota's existing wetlands;
2. Increase the quantity, quality and biological diversity of Minnesota wetlands by restoring or enhancing diminished or drained wetlands;
3. Avoid direct and indirect impacts from activities that destroy or diminish the quantity, quality, or biological diversity of wetlands;
4. Replace wetland values where avoidance of activities is not feasible and prudent.

Pretreatment of all stormwater from new developments is required prior to discharge into any wetlands. Wetlands may be, and are currently being used for stormwater storage for larger rainfall events. They may continue to be used for this purpose even after upstream development, provided that:

1. There is acceptable Best Management Practice pretreatment of the runoff in accordance with the MPCA NPDES/ SDS Construction Permit, Section III.D., Permanent Stormwater Management System.
2. The bounce from the normal water level to the high water level does not exceed two feet.

The Minnesota Wetland Conservation Act (WCA) requires the designated Local Governmental Unit (LGU) in charge of administering the WCA to generate a Notice of Wetland Conservation Act Decision for any impact to wetlands within the City of North Branch. For North Branch, the wetland LGU is Chisago County. In all but minor decisions, the LGU will call for a Technical Evaluation Panel (TEP) review of the application or impact prior to issuing a decision. The LGU must give notice of proposed actions affecting wetlands to all of the following:

1. The Minnesota Board of Water and Soil Resources
2. The Soil and Water Conservation District
3. The Minnesota Department of Natural Resources
4. The City of North Branch
5. The U.S. Army Corps of Engineers
6. Interested citizens requesting notification of such actions

If a TEP meeting is required, all listed parties are invited to review the proposed action. However, it is not uncommon for a TEP meeting to consist of only a small contingent of this list, as some invitees may have no jurisdiction over the proposed action.

NPDES Phase II Considerations

General City Permits

In 1987, the US Congress amended the Clean Water Act to include stormwater pollution and directed the Environmental Protection Agency (EPA) to initiate rulemaking. The first round of EPA rules were implemented in 1991 when NPDES Phase I permits were required for all cities exceeding 100,000 in population. Phase II was implemented in 2003 and targeted all cities with populations exceeding 10,000. In 2008, the Phase II rulemaking expanded the list of targeted cities to include cities with

populations exceeding 5,000 and that discharge into an impaired water. The Minnesota Pollution Control Agency (MPCA) assumed responsibility for implementing the rules and issuing all Phase II permits. The NPDES Phase II rules apply to all construction disturbances of one acre or more.

The federal mandates are intended to regulate these sources of continued environmental degradation. New developments have become increasingly targeted. All new developments, creating more than one acre of impervious surfacing, are required to have some form of stormwater treatment. In general, this need can be satisfied by properly designed infiltration/ filtration basins or wet retention basins. The following is a listing of the available stormwater quality and quantity systems currently being designed to handle the water quality/quantity issue:

a. Regional Wet Retention Basins

Numerous studies have been done on the water quality treatment afforded by wet retention basins, most notably one by William Walker Jr. for the Vadnais Lake Area Water Management Area (1987). The Walker study found that properly sized wet retention basins can effectively remove pollutants through sediment removal. When properly sized, these ponds can significantly reduce the contaminant levels, including phosphorus, commonly found in urban stormwater runoff. According to the MPCA's Stormwater Manual, on average wet retention basins can remove 84% of suspended solids, 50% of total phosphorus, and 30% of total nitrogen. Wet retention basins also provide flood storage. Wet retention basins are also well known for their stormwater quantity handling capabilities and work well for areas with Hydrologic Soil Group Type D (clay) soils.

b. Bioretention Systems

Another method of managing stormwater runoff is to install bioretention practices in strategic locations where stormwater will be collected and allowed to filtrate through the planting media or be taken up by vegetation before entering the storm sewer.

c. Infiltration/Filtration Bioretention Basins

According to the MPCA's Stormwater Manual 2, bioretention facilities capture rainwater runoff to be filtered through a prepared soil medium. Pollutants are removed by a number of processes including adsorption, filtration, volatilization, ion exchange and decomposition (Prince George's County, MD, 1993). Filtered runoff from bioretention basins can either be allowed to infiltrate into the surrounding soil (functioning as an infiltration basin or rainwater garden), or collected by an under-drain system and discharged to the storm sewer system or directly to receiving waters ("filtration only" bioretention basin). Due to the groundwater vulnerability and the WHPA covering a portion of lower North Branch, lined filtration basins are recommended for the areas of North Branch within the 1-year WHPA. Runoff from larger storms is generally allowed to bypass the filled bioretention basin and flow directly to the storm drain system. Infiltration/filtration basins are typically designed for treating the water quality and not for the water quantity of urban stormwater runoff.

That is, the MPCA requirement for water quality is to treat the first 1 inch of runoff from a site (water

quality volume). This is in contrast to the larger amount of runoff that may be actually leaving the site for a 3 to 6 inch rainfall (water quantity). Because stormwater quality has become a greater issue, bioretention basins have become a significant design tool for municipal stormwater systems. Bioretention basins can remove 85% of suspended solids, 100% of total phosphorus, and 50% of total nitrogen.

NPDES Phase II Construction Permits

The NPDES Phase II construction stormwater permit requirements have also taken effect. As of August 1, 2013 a new NPDES permit is in effect. A construction permit is required for any disturbance of more than 1 acre. The permit process is best summarized in the following table:

Table 7-E: Construction Stormwater Permit Requirements	
<i>Item</i>	<i>Requirement</i>
<i>Minimum Disturbance Triggering a permit</i>	<i>1 acre</i>
<i>New Homes</i>	<i>Permit required if part of the larger development</i>
<i>Permit Fee</i>	<i>\$400</i>
<i>Stormwater Pollution Prevention Plan (SWPPP)</i>	<i>1. Must be on file 2. Must be submitted if over 50 acres and is within 1 mile and discharges into a Special Water</i>
<i>Responsibility for compliance</i>	<i>Contractor is responsible for erosion controls.</i>
<i>Responsibility after land sale</i>	<i>Owner is responsible for implementation of the SWPPP</i>
	<i>Transferred with the property until Notice of Termination</i>

SWPPP for Construction Permits

The construction permit also requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP) for the disturbed site. The SWPPP requirements are as follows:

- a. Must be designed prior to permit application and available on site.
- b. Should typically use BMPs that are recognized as effective.
- c. Unique innovative designs may be used, but have formal review and monitoring requirements.
- d. Owner must identify a person with approved training in accordance with the Permit who will oversee the implementation of the SWPPP.
- e. Owner must identify a person with approved training in accordance with the Permit that will be responsible for long-term operation and maintenance of the permanent BMPs.
- f. Owner must develop a chain of responsibility to ensure that the SWPPP will be implemented and stay in effect until termination. The SWPPP must have the following:
 1. Location and type of all temporary and permanent erosion controls and sediment control BMPs.

2. Standard plates and specifications for the BMPs.
3. A site map with existing and final grades, subwatershed limits and direction of flow for both the pre and post development drainage areas. The site map must include existing and proposed impervious surfaces and soil types.
4. Locations of areas not to be disturbed (construction limits).
5. Locations of areas of phased construction to minimize duration of exposed soil.
6. All surface waters and wetlands within 1 mile that can be identified on a quadrangle map and will receive runoff from the site.
7. Methods used for final stabilization of exposed soils.
8. The range of soil particles expected to be present at the site.

Permanent Sedimentation Pond Requirements

If more than one acre of new impervious surface is created by the construction, permanent water quality BMPs are required as part of the permanent SWPPP. If the filtration or infiltration alternatives listed above are not possible, a permanent wet retention basin is the most utilized method of meeting the requirements. The new construction stormwater permit requires that the stormwater volume equivalent of 1 inch over any new impervious surface area be retained on site through infiltration or other volume reduction practices. There are some exceptions to this requirement, including projects that have Hydrologic Soil Group D (clay) soils. In the case of D soils, a permanent stormwater pond is a good option. The permanent pond requirements are summarized as follows:

- a. A permanent volume (dead storage) of 1,800 cubic feet per acre draining to the basin.
- b. A water quality volume (equal to 1 inch multiplied by the new impervious surface) that cannot be discharged at a rate exceeding 5.66 cfs per acre of pond surface area (when the pond has both the permanent volume and water quality volume in it).
- c. A 3 foot minimum depth and a 10 foot maximum depth.
- d. Outlets placed to minimize short circuiting and designed to skim floating debris.
- e. An emergency overflow.
- f. Adequate public access (typically 8 feet wide).

Regional Pond Considerations

An area regional pond may be used provided that:

- a. The regional pond is not a wetland.
- b. Must be designed to meet the treatment pond criteria for all impervious surfaces.
- c. Regional pond owner's authorization must be secured as part of the permitting process.

Existing Systems

The City of North Branch is a Municipally Separate Storm Sewer System (MS4). The City of North Branch ultimately drains to the Sunrise River. The City of North Branch operates an extensive stormwater treatment system, serving residential, commercial and industrial users. There are several stormwater ponds in the City's stormwater system.

All areas served by public ditches are subject to the rules governed by Minnesota Statute 103E and

under the governance of Nicollet County. Minnesota Statute 103E states that all connections to the ditch, or in this case, the County Tile, must be petitioned to the County Auditor.

There is no other record that the City has entered into any water resource management related agreements with its neighboring cities, the county, watershed district, lake associations or the state of Minnesota. The City of North Branch has been responsible for construction, maintenance, and other projects in or along the City's stormwater collection systems outside of the mainline County ditch and tile systems.

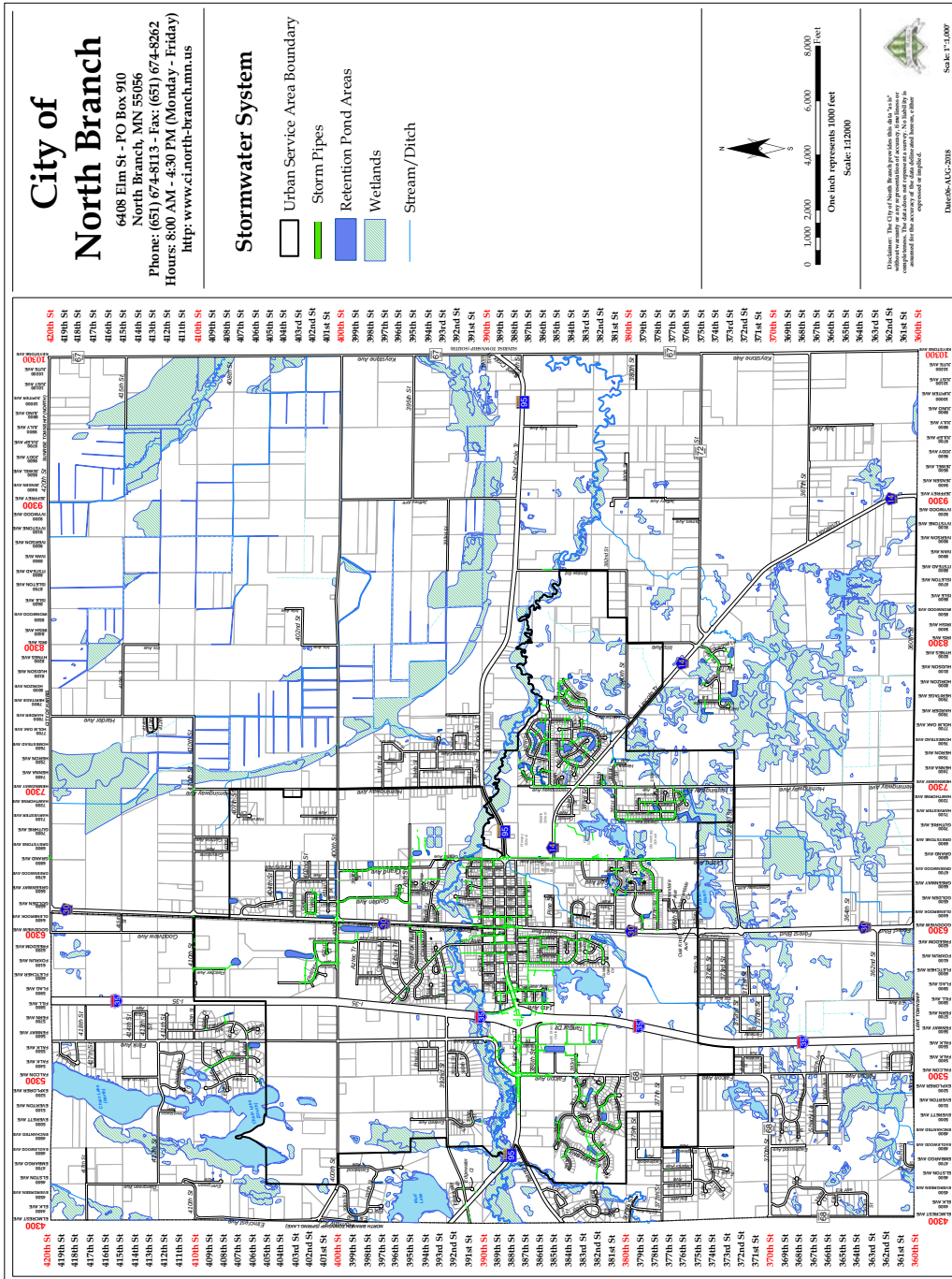
In 1998, the Minnesota Pollution Control Agency (MPCA) listed the North Branch of the Sunrise River as an impaired water for excessive E. coli fecal coliform TMDL under section 303 (d) of the Clean Water Act. The river, from its headwaters near Weber in Isanti County to its confluence with the main stem of the Sunrise River near Hay Creek in Chisago County, was listed as impaired for primary contact recreation swimming. The North Branch of the Sunrise River is located in east central Minnesota. It is a tributary of the Sunrise River and is part of the larger St. Croix River basin.

Future Improvements

Generally, the City will work to ensure erosion control and surface water quality standards are met through enforcement of the City's permitting requirements and implementation of Best Management Practices (BMPs) such as regional stormwater ponds. The City will ensure compliance with the National Pollutant Discharge Elimination System (NPDES) Phase II permits for municipal operations and for construction activity greater than 1 acre. City cooperation with the Minnesota Pollution Control Agency (MPCA) is key to maintaining the relevance of the City's plan.



Figure 7-11:
Storm Sewer
Existing Map



GOAL 1

Expand existing stormwater management system infrastructure to meet the demands generated by continued development.

Stormwater System Goals, Objectives, and Policies

The following section outlines the primary goals for the stormwater system followed by a series of objectives and policies intended to influence future development efforts that align with the community visions in this plan.

OBJECTIVE 1.1

EXPAND THE STORMWATER COLLECTION, TREATMENT AND OUTFALL SYSTEM INTO FUTURE GROWTH AREAS.

Policy 1.1.1

Include in existing stormwater system maps the locations of culverts serving the rural areas of the city (with dates of installation) so as to better anticipate repairs, replacements and future maintenance of the public ditch systems.

Policy 1.1.2

Implement the expansion of the stormwater collection, treatment and outfall system as areas outside the limits of the existing stormwater collection system are developed, with a focus on regional stormwater ponds, where possible and infiltration Minimal Impact Design Standards (green infrastructure).

Policy 1.1.3

Final collection, treatment and outfall sizes and locations should be based on the type, location and sequence of development within the projected growth areas.

Policy 1.1.4

Develop a financing strategy for funding the expansion of the stormwater collection, treatment and outfall system.



OBJECTIVE 2.1

REPLACE AGING STORM SEWER SYSTEM INFRASTRUCTURE.

Policy 2.1.1: Prepare a study to document the condition of deficient storm sewers and ponds based on age, materials and other known deficiencies.

Policy 2.1.2: Utilize the information from the storm sewer condition study, in conjunction with the condition information for other infrastructure elements, to develop, expand and prioritize projects, including those to implement green infrastructure science practices, to be included in the capital improvements.

OBJECTIVE 2.2

ADDRESS SEDIMENTATION ISSUES IN THE CITY'S EXISTING STORMWATER TREATMENT PONDS.

Policy 2.2.1

Develop a study to determine the levels and characteristics of sediment in the City's existing stormwater ponds.

Policy 2.2.2

Develop a plan for cleaning sediment from ponds and for disposal of sediment.

GOAL 2

Monitor, evaluate and improve the condition of the City's existing stormwater system infrastructure.



8

NATURAL ENVIRONMENT, PARKS, TRAILS, AND RECREATION

Introduction

Natural resources are beneficial to the social, environmental, and economic vitality of a community. To ensure their quality and benefits, it is essential to plan and manage natural resources and areas as we do residential and commercial areas. The City of North Branch will promote, preserve and enhance the natural resources within the city and protect them from adverse effects occasioned by poorly sited development or incompatible activities by regulating land disturbances or development activities that would have an adverse and potentially irreversible impact on water quality and unique and fragile environmentally sensitive land; by minimizing conflicts and encouraging compatibility between land disturbing and development activities and water quality and environmentally sensitive land; and by requiring detailed review standards and procedures for land disturbing or development activities proposed for such areas, thereby achieving a balance between urban growth and development and protection of water quality and natural areas.

Wildlife Corridor

The Minnesota DNR has identified a regional greenway corridor in North Branch as part of the Metro Wildlife Corridors project (a 12-county metro area). The project, “ensuring that people and nature in the Twin Cities Area can grow together for generations to come” seeks to protect and restore key natural lands in the metro area by:

- Focusing pro-actively on strategic areas, of which North Branch is a part
- Efficiently leveraging private and public partners and resources
- Building upon prior investments in public lands, and
- Enhancing the cost-effectiveness of conservation efforts by coordinating them within a regional framework.

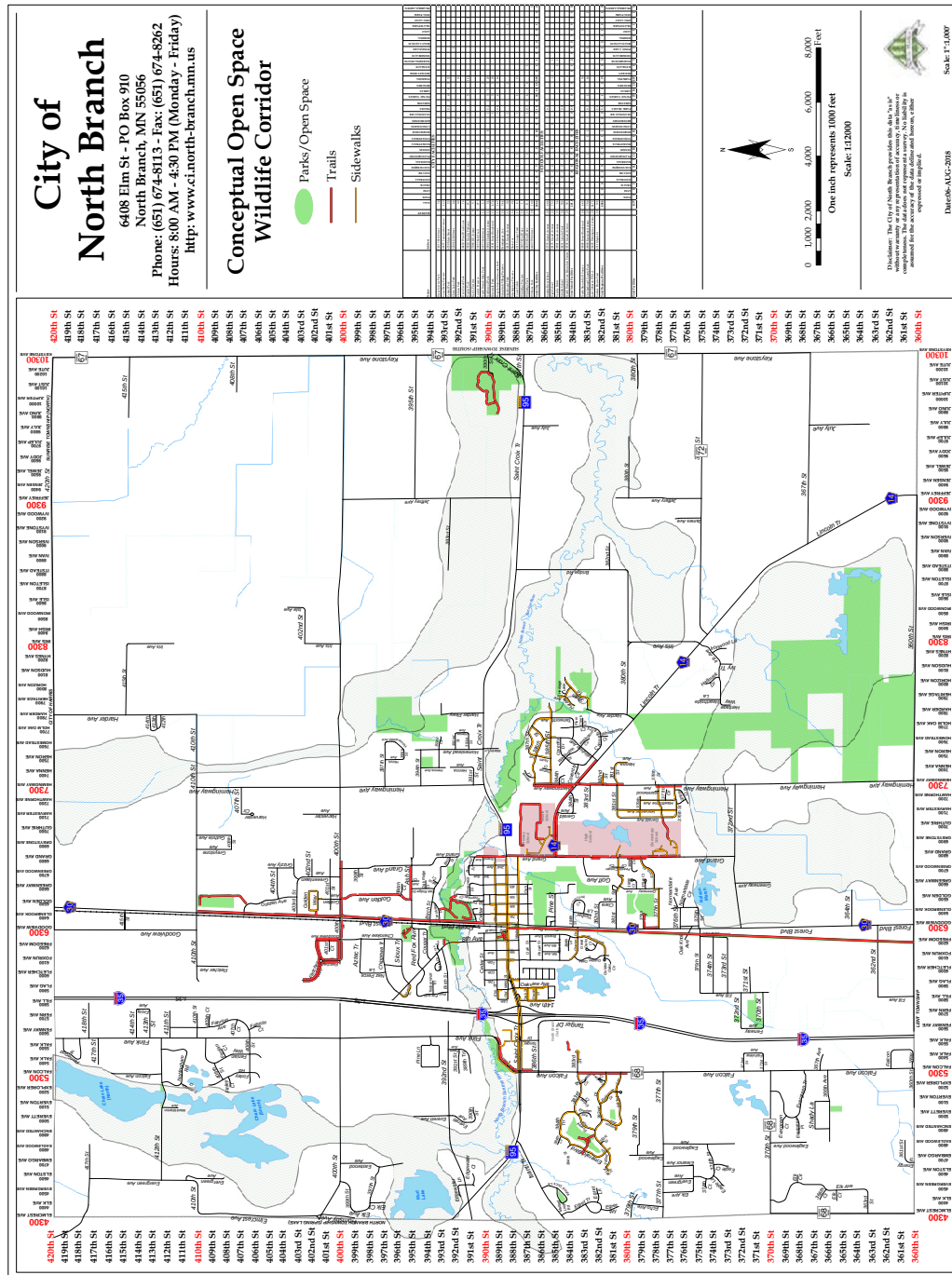
This corridor is specifically designed to incorporate, the high quality natural areas such as those identified in the Natural Resource Inventory or mapped by the MnDNR, natural corridors such as the Sunrise River, and areas that connect these features.

The City of North Branch supports the preservation of natural and open spaces along the north branch of the Sunrise River, the city’s name sake. It has also identified a conceptual greenway corridor, and as much as possible, development within the greenway corridor, should be encouraged to use conservation design strategies, conservation easements, park dedication, parcel evaluation, and the strategic siting of open space and natural areas parks to develop and improve habitat quality and connectivity within the greenways. Strategies to avoid fragmentation of existing natural areas are especially important for maintaining ecological function of the natural areas.



The City of North Branch will promote, preserve and enhance the natural resources within the city

Figure 8-1:



Tree Preservation

The City's tree preservation ordinance acknowledges the benefits and amenities trees offer to the community and acknowledges that trees are part of a more complex, interrelated system. Trees protect the environment by moderating climate, improving air quality, reducing erosion and stormwater runoff, and harboring wildlife. The ordinance focuses on protection of quality wooded areas rather than of individual trees. To preserve wooded areas in the City, each new development is required to submit a Tree Preservation Plan. The regulation also provides guidance for permitted tree removal, mitigation procedures, and tree replacement provisions.

Minnesota GreenStep City

In 2018, the Mayor and City Council approved a resolution to make North Branch a GreenStep City through the Minnesota Pollution Control Agency and League of Minnesota Cities' program. Minnesota GreenStep Cities is a voluntary challenge, assistance and recognition program to help cities achieve their sustainability and quality-of-life goals. This free continuous improvement program, managed by a public-private partnership, is based upon 29 best practices. Each best practice can be implemented by completing one or more actions at a 1, 2 or 3-star level, from a list of four to eight actions. These actions are tailored to all Minnesota cities, focus on cost savings and energy use reduction, and encourage civic innovation. North Branch is currently a Step 1 City. As North Branch plans for the future, it will continue to consider GreenStep City Best Management Practices as they relate to the goals and objectives of this comprehensive plan.

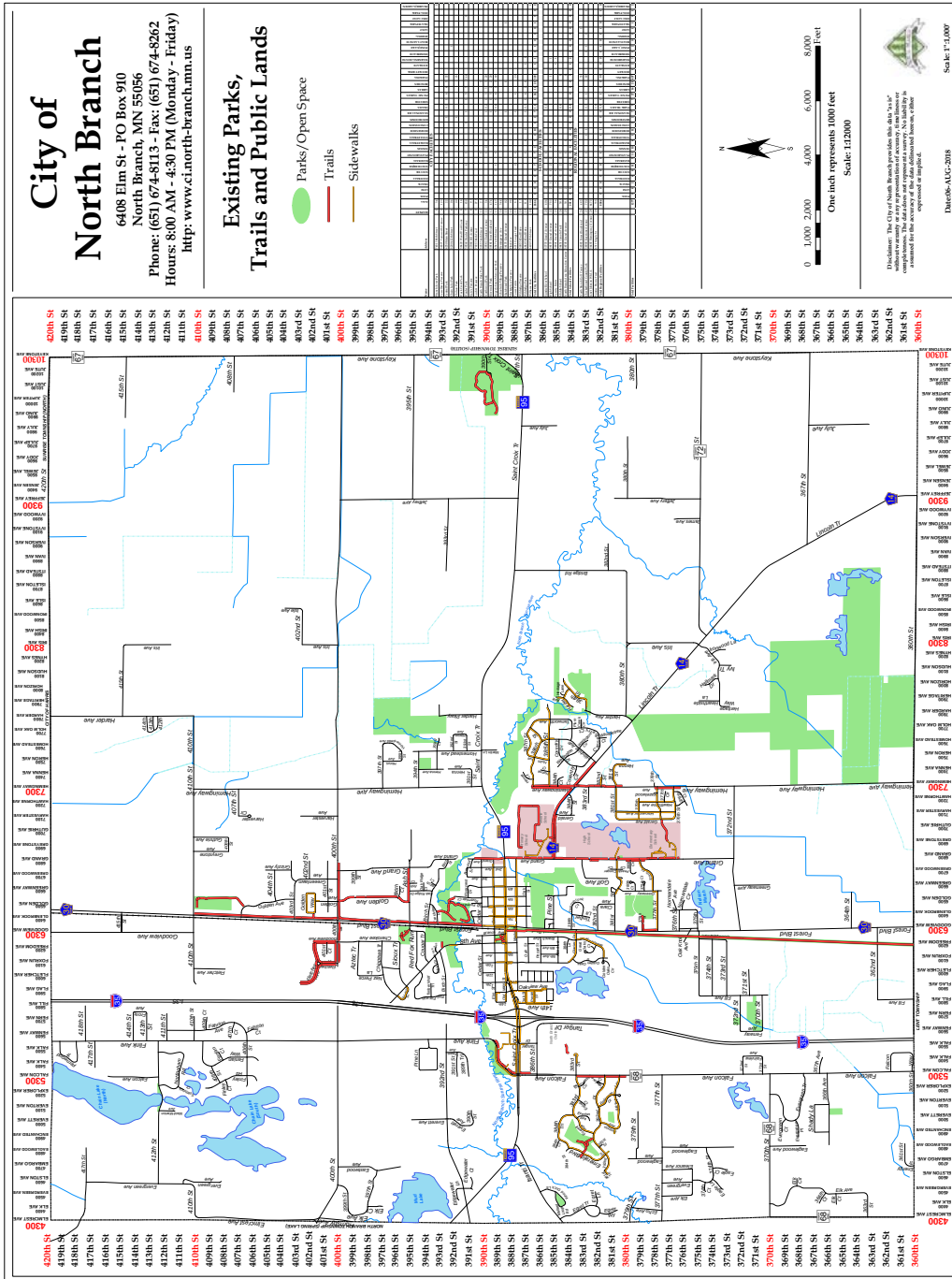
Parks, Trails and Recreation

The comprehensive parks and recreation plan is the first planning document devoted to establishing park, recreation, and trail planning criteria, guidelines, and standards, for future development of these amenities within the City of North Branch. The existing park system is already fairly developed with a strong emphasis and need placed on youth recreation opportunities. The community has done a good job of including sidewalks in various neighborhoods, but currently lacks a comprehensive trail system along TH 95 and the Sunrise Prairie Trail needs to be extended from 410th north to the city limits. Pedestrian and bike crossings are needed throughout the City. In addition, alternative transportation and exercise options through the use of trails should continue to be expanded and enhanced.

*North Branch is part of the
Metro Wildlife Corridors
project (a 12-county metro
area)*



Figure 8-2:
Existing Parks, Trails
& Public Lands



Vision for Natural Environment

Natural infrastructure includes all systems that relate to natural resources and contribute to an improved public life. Natural infrastructure considers the full range of natural resource uses including economic, environmental, health, cultural, and aesthetic. This broad view leads us to include surface water, groundwater, stormwater, wastewater, drinking water, geology, topography, soils, natural areas, open space, green spaces, urban forest, habitat, vegetation, scenic views, and parks and trails in natural infrastructure.

Natural infrastructure is a key element in planning where development should or should not take place within a city. This element is important to communities and development as it avoids certain development hazards, provides health benefits to citizens, protects ecological systems and enhances biological diversity, supports economic activities such as mining and forestry, and offers communities unique quality of life components. Consideration of natural infrastructure ensures that homes are built upon stable dry soils, provides clean drinking water, accounts for resource based economic activities, provides scenic views and open spaces, and plans development that respect the integrity of natural systems and incorporate natural features into development.



Natural Environment Goals, Objectives, and Policies

OBJECTIVE 1.1

PRESERVE OPEN SPACE AND WILDLIFE CORRIDOR.

Policy 1.1.1

Build upon the Metro Area Green Corridor System within North Branch incorporating the wooded edge while maintaining the rural character of the City's major natural amenities into the Open Space System.

Policy 1.1.2

Identify and conserve critical wildlife habitat including nesting sites, foraging areas, and migration corridors within or adjacent to natural areas, open spaces, and the developing urban areas, preserve sensitive habitat sites that support threatened species and urban wildlife habitat.

Policy 1.1.3

Identify and conserve forested and woodland cover and the scenic attributes provide between rural and urban land uses, preserve and protect significant environmental features including unique wetlands, open spaces, woodlands, shorelines, waterfronts and other characteristics that support wildlife and reflect the cities resource heritage.

Policy 1.1.4

Develop Partnerships with other organizations, institutions, and local units of government on planning and zoning, land use, preservation and conservation related issues, capitalize on the development and promotion of the North Branch of the Sunrise River and take ownership and promote the advantages of the City's relationship to the Saint Croix National Scenic Riverway and the importance the North Branch of the Sunrise River has to the river's federally protected status.

GOAL 1

Develop an integrated plan that balances community growth, natural resources, cultural and historical features.



OBJECTIVE 1.2

MAINTAIN HEALTHY URBAN FOREST AND PARK SYSTEM.

Policy 1.2.1

Continue high standards of park and public land maintenance, and management by continued investment in personnel, equipment, and methods, expand sustainable practices and invasive species management (i.e. the Emerald Ash Borer, buckthorn, etc.) and obtain the information, training and resources needed to effectively address planning, preservation and conservation issues.

Policy 1.2.2

Undertake citizen-based planning designed to manage growth and build needed infrastructure, while at the same time preserving the natural qualities with which the region is blessed.

Policy 1.2.3

Increase natural areas and open space linkages within the developing urban areas

OBJECTIVE 1.3

FOSTER NATURAL PARK DEVELOPMENT.

Policy 1.3.1

Promote native landscaping and greening initiatives, support use of best management practices and reduction of chemical use, establish community gardens, and encourage the use and planting of pollinator friendly habitats.

OBJECTIVE 1.4

IDENTIFY, PRESERVE, AND ENHANCE NORTH BRANCH'S MULTICULTURAL HERITAGE, TRADITIONS, AND CULTURAL FEATURES WITHIN HISTORICAL SITES, BUILDINGS, ARTWORK, PARKS, OPEN SPACE, AND TRAILS TO PRESERVE INTEREST AND PROVIDE A BALANCED SOCIAL EXPERIENCE.

Policy 1.4.1

Identify, designate and protect significant historic structures and sites, establish history and heritage preservation programs utilizing existing resources to help increase knowledge and promote the history and heritage of North Branch.

Policy 1.4.2

Implement natural resources and environmental educational and interpretive programs.

Vision for Parks, Trails, and Recreation

To provide a comprehensive and balanced system of parks, greenways, trails, and support for providers of recreation- orientated activities / programs for city residents in an as cost effective manner as possible.

Park Goals, Objectives, and Policies

The following section outlines the primary goals for parks followed by a series of objectives and policies intended to influence future development efforts that align with the community visions in this plan.

OBJECTIVE 1.1

PLAN AND DESIGN PARKS, TRAILS, SIDEWALKS, AND BIKE PATHS IN A WAY THAT ENSURES THEIR LONG TERM VIABILITY.

Policy 1.1.1

All park properties that are set aside (and/or are proposed in the future) must take into account the long-term commitments required to develop, operate, and maintain across their lifecycles, with buildings constructed to the state's SB2030 performance standards for on-going cost reductions, when feasible.

Policy 1.1.2

Balance maintained turf areas with natural areas to add aesthetic appeal, control maintenance costs, infiltrate stormwater, eliminate toxic chemical use and provide wildlife habitat, and reduce carbon emissions.

Policy 1.1.3

Update parks plan every 5-10 years depending on the amount of change and development within the city.

Policy 1.1.4

Explore alternative methods for parkland dedication that will assure sufficient park facilities well into the future.

Policy 1.1.5

Phase Improvements based on replacement needs and available funding. Manage system investments through analysis of applicable data.

GOAL 1

Plan for a sustainable park and trail system.



OBJECTIVE 1.2

UNDERSTAND CURRENT TRENDS AND COMMUNITY ISSUES, OPPORTUNITIES, AND NEEDS AS RELATED TO PARKS WITHIN THE CITY.

Policy 1.2.1

Discuss local and regional park and trails issues and opportunities with the Department of Natural Resources, Chisago County, adjacent communities, environmental organizations, and others.

Policy 1.2.2

Master plans should be prepared for each park prior to their development to ensure that the right mix of amenities are provided and the park's design is cohesive and complementary to the design for other parks and public spaces.

Policy 1.2.3

Ensure public participation in the master planning process is included for each park development project.

Policy 1.2.4

Analyze the placement and use of "nature play" equipment in existing and proposed parks.

OBJECTIVE 1.3

USE SUSTAINABLE DESIGN PRACTICES.

Policy 1.3.1

Use renewable energy where possible (i.e. solar lights for trails, solar power at athletic facilities).

Policy 1.3.2: Consider use of recycled materials and promote recycling in all park areas.

OBJECTIVE 1.4

IDENTIFY ALTERNATIVE, SUSTAINABLE REVENUE SOURCES.

Policy 1.4.1

Expand grassroots parks and recreation advocacy.

Policy 1.4.2

Pursue alternative revenue sources such as program fees, community funds, grants, charitable gaming, memorials, commemoratives, and donations, etc.

Policy 1.4.3

Encourage business involvement, sponsorship, and naming rights of parks, recreation facilities and events.

Policy 1.4.4

Apply marketing strategies to increase income potential and broaden awareness.

OBJECTIVE 2.1

SERVICE LOCAL PARK AND RECREATION NEEDS BY PROVIDING NEIGHBORHOOD AND COMMUNITY PARKS AS RESIDENTIAL GROWTH OCCURS.

Policy 2.1.1

Ensure neighborhood parks are developed as part of new residential neighborhoods with buildings constructed to the state's SB2030 performance standards for on-going cost reductions, when feasible.

Policy 2.1.2

Explore the possibility of including a community park in appropriate areas of the City.

Policy 2.1.3

Locate new parks based on how they can be best integrated with the new development that the park will serve.

GOAL 2

Provide additional park and recreation opportunities in areas of new development throughout the city.



GOAL 3

Adhere to Park
Master Planning
and Facility
Design Quality
/ Development
Standards.

OBJECTIVE 3.1

ENSURE THE QUALITY STANDARD FOR BUILT FEATURES WITHIN THE PARK SYSTEM IS CONSISTENT WITH INDUSTRY STANDARDS FOR SAFETY, DURABILITY, AND ACCESSIBILITY.

Policy 3.1.1

Periodically inspect and repair all parks, trails, and recreation facilities for hazardous conditions, including unsafe play equipment, fallen vegetation, etc.

Policy 3.1.2

The design of individual parks should be of a consistent quality, with buildings constructed to the state's SB 2030 performance standards for on-going cost reductions, when feasible.



OBJECTIVE 4.1

CREATE AND SUSTAIN CRITICAL PARTNERSHIP.

Policy 4.1.1

Partner with the North Branch School District, local athletic organizations, private enterprises, surrounding communities, and others to address those community and regional needs that cannot be met exclusively by the city or others.

Policy 4.1.2

Cultivate and support public/private partnerships with organizations like the YMCA, Park Trail Council and similar non-governmental organizations whose mission is to promote active living and recreation.

Policy 4.1.3

Involve representatives from the North Branch School District, athletic organizations, and others when developing new parks that may be co-located with educational and daycare facilities.

Policy 4.1.4

Consider the desire of the community to offer a multi-use athletic facility to the residents and attract regional tournaments and events.

Policy 4.1.5

Explore the impacts of developing such facilities, including impacts to adjacent neighborhoods.

Policy 4.1.6:

New facilities should provide year-round activities and programs for all age groups and all income levels.

Policy 4.1.7

Identify and build relationships with local special interest groups, such as scouting programs, Chisago County Master Gardeners, North Branch Monarch Strategy Group, North Branch Garden Club, North Branch Arts Group, Lions, Rotary, etc.

GOAL 4

North Branch's parks meet the diverse recreation needs of the community.



Policy 4.1.8

Identify and build relationships with regional organizations, such as Chisago County Parks and Recreation Department, Chisago Soil & Water Conservation District, Friends of Wild River State Park and association with the St. Croix River National Scenic Riverway and the Lower St Croix Management Commission, Chisago County Historical Society, etc.

OBJECTIVE 4.2

PROMOTE THE CITY'S PARKS AND RECREATION ACTIVITIES AND OPPORTUNITIES

Policy 4.2.1

Utilize diverse methods of communication, including social and digital media, and highlight youth, families, volunteers, etc. Provide information on the City's website and in outside publications about parks, facilities and programming that is accessible to all people.

Policy 4.2.2

Highlight the quality of life benefits of parks, trails, recreation and open space.



OBJECTIVE 5.1

USE PARK DESIGN TO MAKE THEM WELCOMING.

Policy 5.1.1

Ensure visible and legible signage at park entrances, use recognizable branding to indicate that parks are open to all people, provide entrances on public streets, and utilize vegetation that does not obscure views into and through the parks.

OBJECTIVE 5.2

IMPROVE THE PERCEPTION OF PUBLIC SAFETY.

Policy 5.2.1

Utilize planning techniques, designs and site planning to improve safety, such as cluster compatible activities to avoid conflicts and increase social observation, locate parking lots and facilities near streets so they are easily observable at night, locate restrooms and playgrounds in areas that are easily observable, and use the principles of Crime Prevention Through Environmental Design (CPTED) in the design of parks.

OBJECTIVE 5.3

ENSURE SAFETY THROUGH REGULAR MAINTENANCE AND EQUIPMENT UPGRADES.

Policy 5.3.1

Conduct annual inspections of parks, buildings, restrooms, shelters, ballfields, play courts, skate park, outdoor ice rinks, parking lots, trails, and nature areas. Input annual inspections into asset management system and use to analyze and prioritize system investments.

GOAL 5

Provide a welcoming and safe parks and recreation system.

