MARSHALL

CULTIVATING THE BEST IN US

FEASIBILITY REPORT

PROJECT ST-013

NORTH HIGH STREET

(NORTH 4TH STREET TO OAK STREET)

RECONSTRUCTION PROJECT

NOVEMBER 10, 2025

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

By:_____

Eric R. Hanson, P.E.
Registration No. 53316

FEASIBILITY REPORT

PROJECT ST-013
NORTH HIGH STREET
(NORTH 4TH STREET TO OAK STREET)
RECONSTRUCTION PROJECT
CITY OF MARSHALL, MINNESOTA

1.0 SCOPE

This Feasibility Report as authorized by the City Council, covers the following proposed improvements: reconstruction of the sidewalk, roadways, utility replacement and slope stabilization in the Redwood River on North High Street from N 4th Street to Oak Street. All public utilities will be replaced, including watermain, sanitary sewer, and storm sewer. Additionally, the sanitary sewer line will be replaced in the alley to the north of High Street between North 5th Street and North 6th Street. Other items of work included in this project are pavement removal, aggregate base, concrete surfacing, sidewalks, curb and gutter, and approximately 200 feet of slope stabilization and other minor work.

2.0 BACKGROUND / EXISTING CONDITIONS

Street

City records show this area was platted at various points between 1900 and 1952 with 80' rights-of-way at north 4th Street to 60' at north Oak Street. Between 5th and 6th street the ROW is variable based on the alignment of the Redwood River. The original pavement section does not meet the City's current standards for thickness and load rating. The existing pavement surface is beginning to show its age with considerable cracking. There are numerous patches due to pavement degradation.

The existing street width between North 4th Street to North 5th Street is 43.5' as measured from back of curb to back of curb. The existing street between North 5th Street to North 6th Street is 30' back of curb to back of curb. The existing street between North 6th Street and Oak Street is 40.5' back of curb to back of curb.

The existing rights-of-way in the alley between North 5th Street and North 6th Street is 20' with a 12' wide gravel surface.

The exiting sidewalk within the limits of the project varies from 4.5' to 5' wide. The existing sidewalk is exhibiting signs of distress with cracking and buckling observed. This sidewalk does not meet the current requirements of ADA accessibility due to several areas of cracking and faulting, and non-compliant slopes. Several of the existing pedestrian ramps are not ADA compliant.

Utilities

The existing water distribution system from North 4th Street to North 6th Street is a four-inch cast iron pipe (CIP). All the CIP in this project area is in poor condition, undersized, and does not provide sufficient fire flows from hydrants to meet current standards. The water distribution between 6th Street and Oak Street was replaced in 2010 and will stay in place.

The existing sanitary sewer in High Street from North 4th Street to North 6th Street is an eight-inch vitrified clay pipe (VCP). The sanitary sewer in the alley between North 5th Street and North 6th Street is a 6" vitrified clay pipe (VCP). During review of the project the sewer system was televised and evaluated. The age and condition of the sewer in these segments make this sewer a good candidate for replacement with this project.

There is a limited existing drainage system with the project area. There are insufficient and undersized catch basins to provide adequate surface drainage and all four outfalls to Redwood River need to be evaluated for removal or replacement. Staff will propose to reduce the number of outfalls to the river, likely from four outfalls down to two outfalls.

3.0 PROPOSED IMPROVEMENTS

Street

A bituminous pavement section will be proposed and discussed in this feasibility report. Staff proposes a street section comprised of four-inches of bituminous surfacing and 12-inches of Class 5 aggregate base. A geotextile fabric will be placed on the subgrade prior to the placement of the aggregate base. A four-inch perforated drain tile shall be installed at the back of the curb below the aggregate base to provide subsurface drainage for the street section.

The proposed roadway will be 37' wide as measured from the back of curb to back of curb, with two 11-foot driving lanes and two 7-foot parallel parking between North 4th Street and North 5th Street. The remaining road width between North 5th Street and Oak Street is proposed to be 30-feet wide as measured from back of curb to back of curb, with two 11-foot driving lanes and one 7-foot parking lane along the curbline with residential properties. Staff is proposing the lane width reduction between North 6th Street and Oak Street due to residential property being located on only one side of the road. The other side of the road is the Redwood River, and the city can reduce project cost by reducing the street width where possible. The project layout that is included with this report reflects these proposed changes.

The proposed alley will be 12-foot wide 4" gravel surface, to be replaced in-kind and in the same location.

Staff is proposing to install a five foot sidewalk on each side of the road from North 4th Street to North 5th Street. Between North 5th Street and Oak Street there will only be sidewalk on one side of the roadway, opposite the river. All sidewalk and pedestrian ramps will be reconstructed in a manner that is compliant with current ADA standards.

Utilities

The proposed utility improvements include replacing existing VCP sanitary sewer, existing DIP watermain, and all existing storm sewer.

The watermain improvements will consist of replacing all CIP watermain with Polyvinyl Chloride (PVC) watermain pipe. Watermain improvements are planned in close coordination with MMU staff input. The existing 4" CIP in the project area will be replaced with 6" PVC pipe. All water services will be replaced from the water main to the property line.

The sanitary sewer system improvements will include replacing all manholes, sewer main, and sewer services along the project. The VCP sewer main will be replaced with an 8-inch PVC main on north High Street and in the alley. All sewer services will be replaced from the sewer main to the property line in the High Street right-of-way (ROW), while sewer service lines in the alley will be reconnected within 5-FT of the sanitary sewer main. Because the alley is gravel, staff believes that each individual property owner can replaced their own sanitary sewer service line at a time in the future when they determine it is necessary.

The storm sewer system improvements will include replacing all manholes, intakes, and piping. A new collection system will be installed in the project area, in a manner that meets current standard to collect storm water based on the most current rainfall intensity and duration charts. Staff will review and provide a system that is capable of accommodating the typical 10 year storm event for the project's watershed.

4.0 STATEMENT OF PROBABLE COST

The estimated costs to complete the proposed improvements are shown below. The estimated construction costs include a 10% allowance for contingencies and a 16% allowance for administrative and engineering costs. The unit prices for each item of work used in determining the estimated cost of construction is based on previous projects that are similar in nature and the estimate is subject to change.

Street and Curb and Gutter	*$680614.00*
Watermain Replacement	*$254,253.00*
Sanitary Sewer Replacement	*$231,357.00*
Storm Sewer Replacement	*$140,850.00*
Subtotal Estimated Construction Cost	*$1,307,074.00*
Contingencies (10%)	*$130,707.00*
Total Estimated Construction Cost	*$1,437,781.00*
Estimated Engineering, & Administration (16%)	*$230,044.00*
Total Estimated Project Cost	***$1,667,825.00***

5.0 PROPOSED ASSESSMENTS

The adjacent properties will not be assessed for the watermain improvements. All costs for watermain and related work will be paid by MMU.

The adjacent properties will not be assessed for sanitary sewer main improvements. All costs for sanitary sewer main will be paid by the City of Marshall Wastewater Department. Sanitary sewer service lines and connection points to the main will be assessed to the adjacent property owners that benefit from the improvement, according to current sanitary sewer assessment procedures.

Costs for the street and sidewalk replacement will be partially assessed to the adjacent property owners in accordance with the most recent Special Assessment Policy and partially funded by the Wastewater Department, MMU, and Surface Water Management Utility fund.

A preliminary assessment roll showing the estimated assessments for each benefiting parcel, City Participation, and utility participation will be prepared at a later date for consideration by the City Council in accordance with the most recent Special Assessment Policy.

6.0 FEASIBILITY/CONDITIONS/QUALIFICATIONS

The proposed improvements described in this report are necessary, cost-effective, and feasible from an engineering standpoint. The feasibility of this project is contingent upon the findings of the City Council pertaining to project financing and public input.

7.0 PROPOSED PROJECT SCHEDULE

The following is the anticipated schedule for the project, assuming the City Council elects to proceed with the proposed improvements.

October 14, 2025 ..... Ordering Preparation of Report on Improvements

November 10, 2025 ..... Receiving Report & Calling for Hearing on Improvement

November 18, 2025 ..... Public Informational Meeting

November 25, 2025 ..... Public Hearing on Improvement/Order Plans & Specs

December 23, 2025 ..... Approve Plans & Specs/Authorize Call for Bids

January 9-February 3, 2026 ..... Advertise for Bids

February 3, 2026..... Bid Opening Date

February 10, 2026..... Award Contract

March 2026..... Notice to Proceed

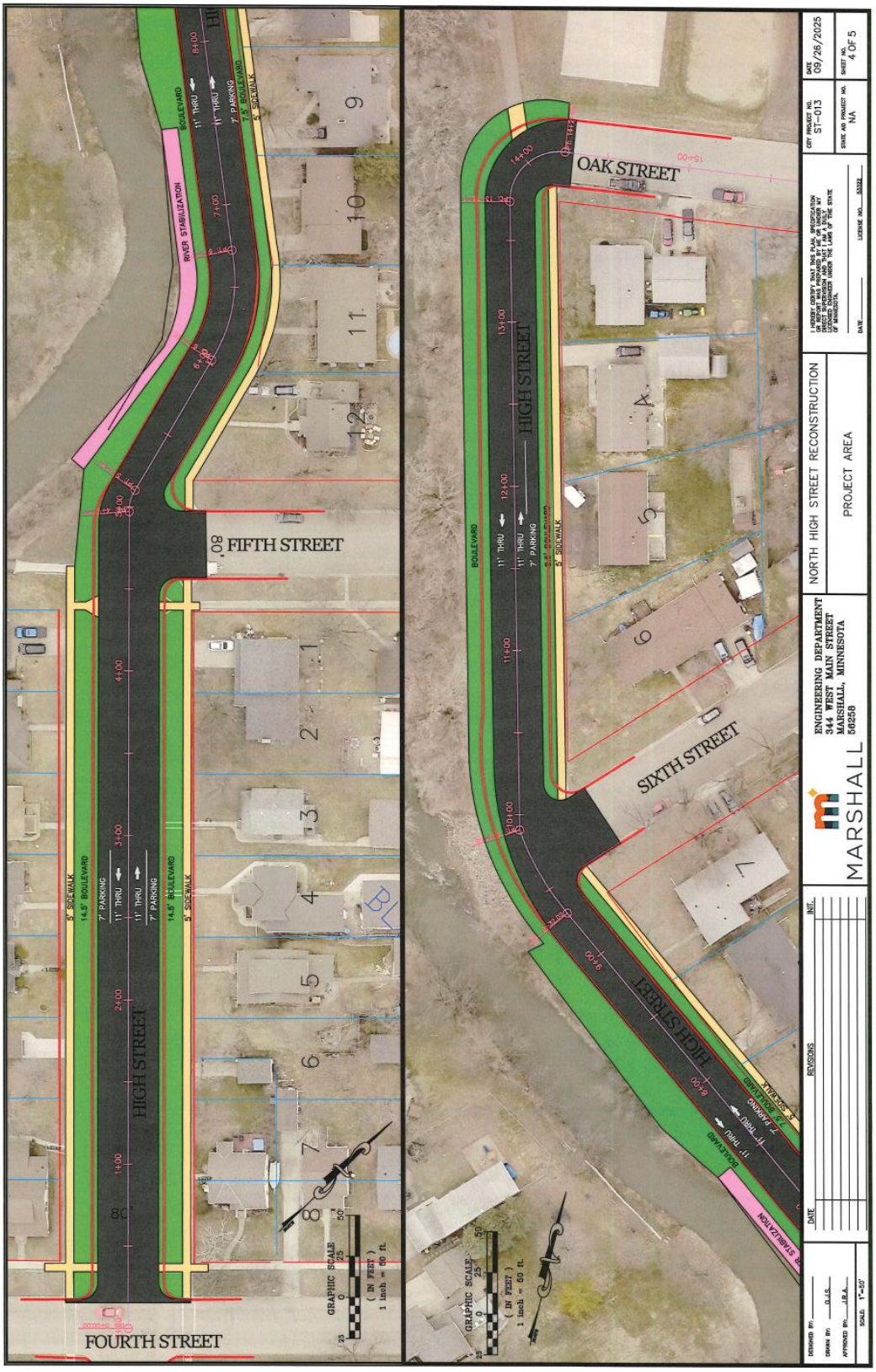
April 2026 ..... Begin Construction

October 2026..... End Construction

February 2027..... Public Hearing on Assessment/Adopt Assessment

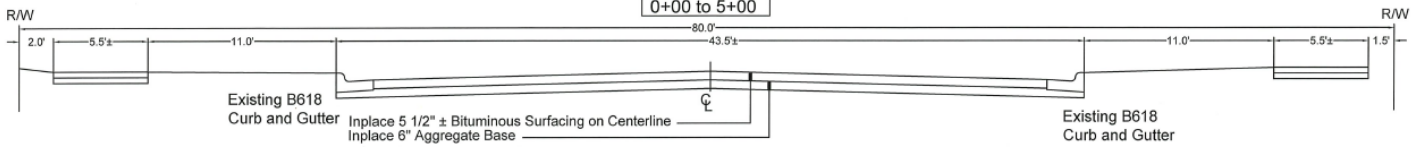
APPENDIX

PROJECT LAYOUTS

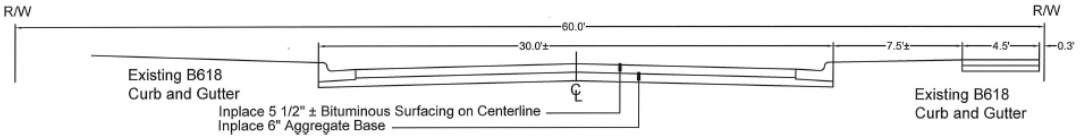


Existing Typical Section

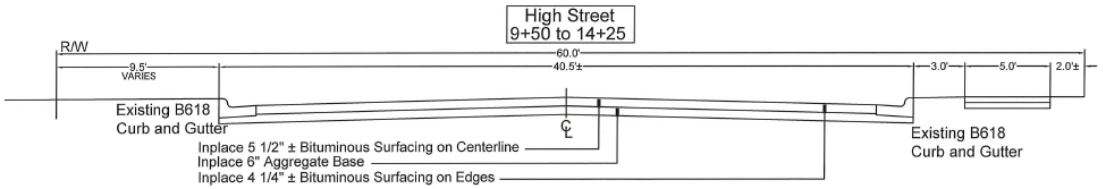
High Street 0+00 to 5+00



High Street 5+00 to 9+50

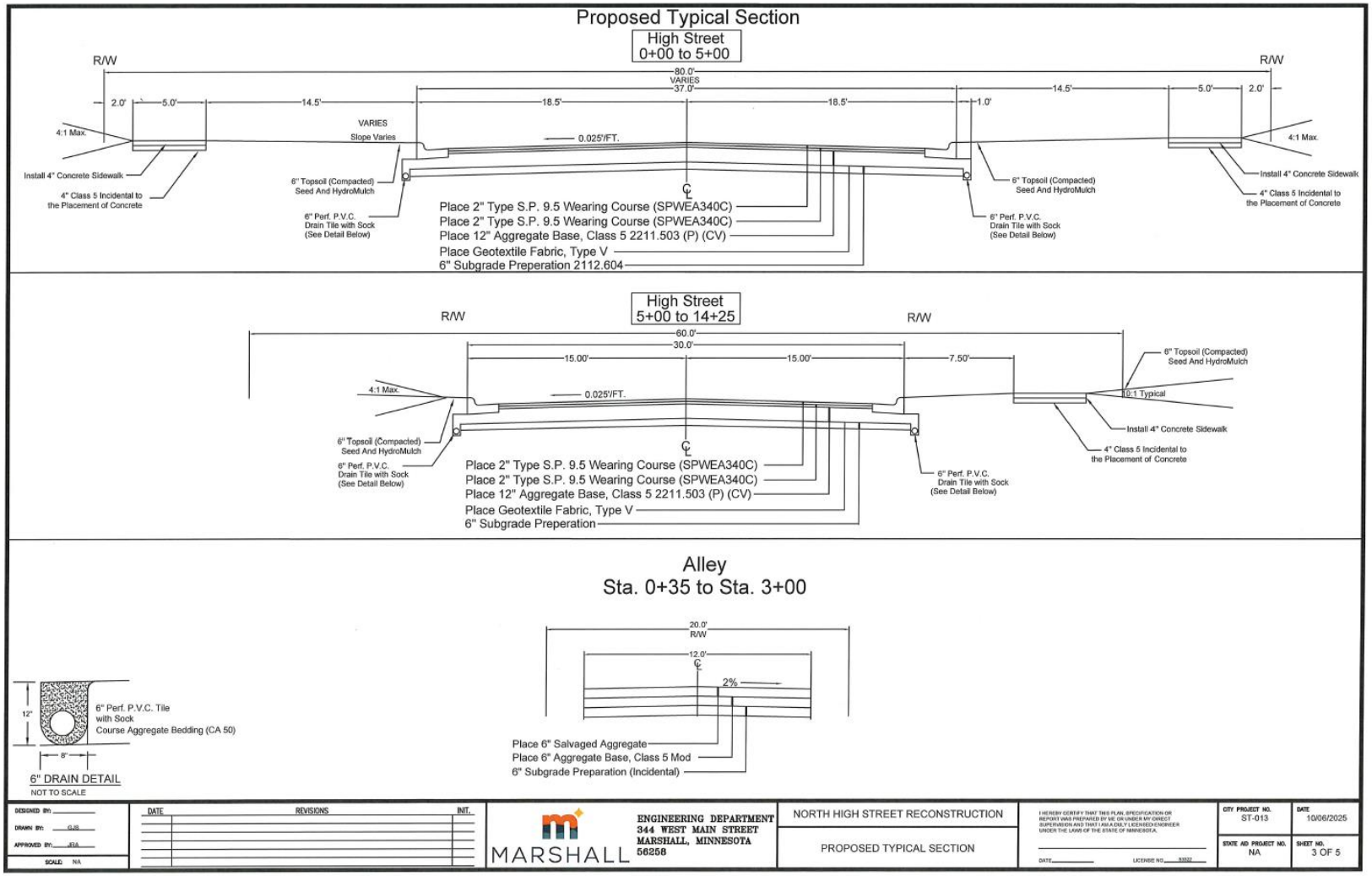


High Street 9+50 to 14+25



Not to Scale

DESIGNED BY:	DATE / REVISIONS / INIT.	MARSHALL ENGINEERING DEPARTMENT 344 WEST MAIN STREET MARSHALL, MINNESOTA 56258	NORTH HIGH STREET RECONSTRUCTION EXISTING TYPICAL SECTION	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 ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. DATE _____ LICENSE NO. 53337	CITY PROJECT NO. ST-013	DATE 10/06/2025
DRAWN BY: CJS					STATE AID PROJECT NO. NA	SHEET NO. 2 OF 5
APPROVED BY: JSA						
SCALE: NA						


Proposed Typical Section
High Street
0+00 to 5+00
R/W
R/W
80.0'
VARIES
37.0'
2.0'
5.0'
14.5'
18.5'
18.5'
1.0'
14.5'
5.0'
2.0'
VARIES
Slope Varies
4:1 Max.
0.025'/FT.
4:1 Max.
Install 4" Concrete Sidewalk
4" Class 5 Incidental to the Placement of Concrete
6" Topsoil (Compacted) Seed And HydroMulch
6" Perf. P.V.C. Drain Tile with Sock (See Detail Below)
Place 2" Type S.P. 9.5 Wearing Course (SPWEA340C)
Place 2" Type S.P. 9.5 Wearing Course (SPWEA340C)
Place 12" Aggregate Base, Class 5 2211.503 (P) (CV)
Place Geotextile Fabric, Type V
6" Subgrade Preperation 2112.604
6" Topsoil (Compacted) Seed And HydroMulch
6" Perf. P.V.C. Drain Tile with Sock (See Detail Below)
Install 4" Concrete Sidewalk
4" Class 5 Incidental to the Placement of Concrete
High Street
5+00 to 14+25
R/W
R/W
60.0'
30.0'
15.00'
15.00'
7.50'
4:1 Max.
0.025'/FT.
6" Topsoil (Compacted) Seed And HydroMulch
6" Perf. P.V.C. Drain Tile with Sock (See Detail Below)
Place 2" Type S.P. 9.5 Wearing Course (SPWEA340C)
Place 2" Type S.P. 9.5 Wearing Course (SPWEA340C)
Place 12" Aggregate Base, Class 5 2211.503 (P) (CV)
Place Geotextile Fabric, Type V
6" Subgrade Preperation
6" Topsoil (Compacted) Seed And HydroMulch
0:1 Typical
Install 4" Concrete Sidewalk
4" Class 5 Incidental to the Placement of Concrete
6" Perf. P.V.C. Drain Tile with Sock (See Detail Below)
Alley
Sta. 0+35 to Sta. 3+00
20.0'
R/W
12.0'
2%
Place 6" Salvaged Aggregate
Place 6" Aggregate Base, Class 5 Mod
6" Subgrade Preparation (Incidental)
12"
8"
6" Perf. P.V.C. Tile with Sock
Course Aggregate Bedding (CA 50)
6" DRAIN DETAIL
NOT TO SCALE
DESIGNED BY:
DRAWN BY: GJS
APPROVED BY: JEA
SCALE: NA
DATE
REVISIONS
INIT.
MARSHALL
ENGINEERING DEPARTMENT
344 WEST MAIN STREET
MARSHALL, MINNESOTA
56258
NORTH HIGH STREET RECONSTRUCTION
PROPOSED TYPICAL SECTION
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 ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
DATE
LICENSE NO. 53322
CITY PROJECT NO. ST-013
DATE 10/06/2025
STATE AID PROJECT NO. NA
SHEET NO. 3 OF 5