



ENDLESS ADVENTURES

INDOOR PLAYGROUND | 1740 PREMIER DRIVE, MANKATO, MN 56001



VARIANCE REQUEST & DESIGN COMPLIANCE SUBMITTAL

GENERAL CONTRACTOR / OWNER REP:

APX CONSTRUCTION GROUP
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ARCHITECT:

CREATE DESIGN
JUSTIN OLESON | (605) 695-1899 |

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BRIAN JOHNSON | (507) 552-1704 |

STRUCTURAL ENGINEER:

KVS ENGINEERING
MICHAEL KONRAD | (605) 343-9606 |

MECHANICAL ENGINEER:

JPB ENGINEERING
JAMIE KRONBECK | (701) 532-1786 |

ELECTRICAL ENGINEER:

INTEGRAL ENGINEERING
LUKE WEYER | (515) 783-7875 |

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TITLE PAGE | 9/23/2025

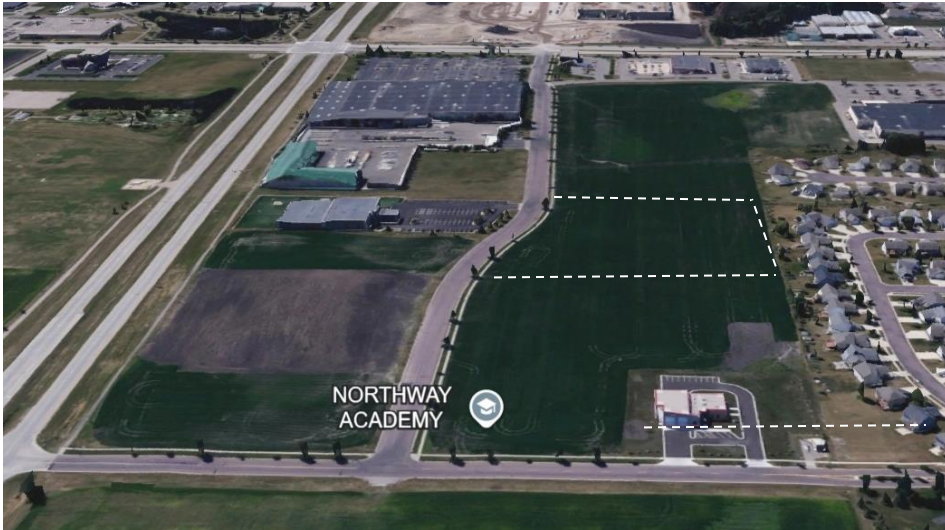
ENDLESS ADVENTURES | 1



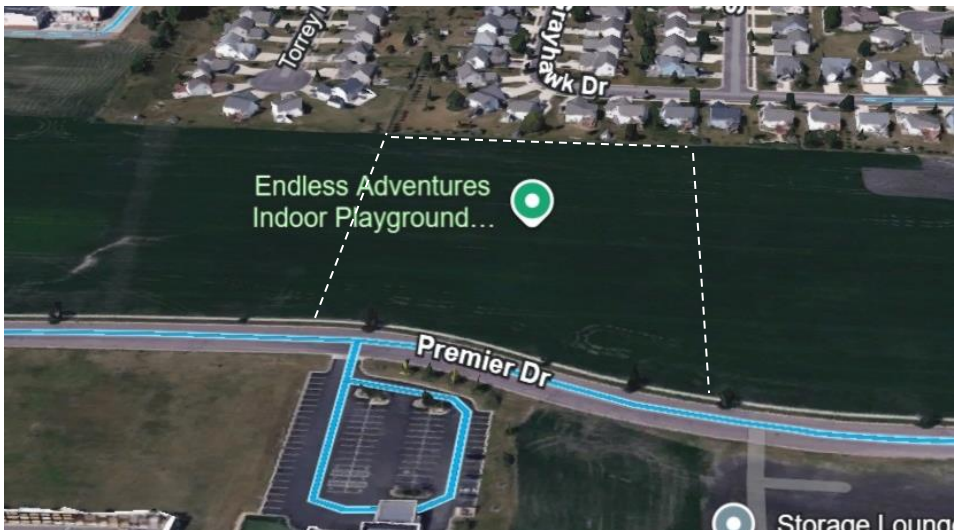
LOOKING NORTH



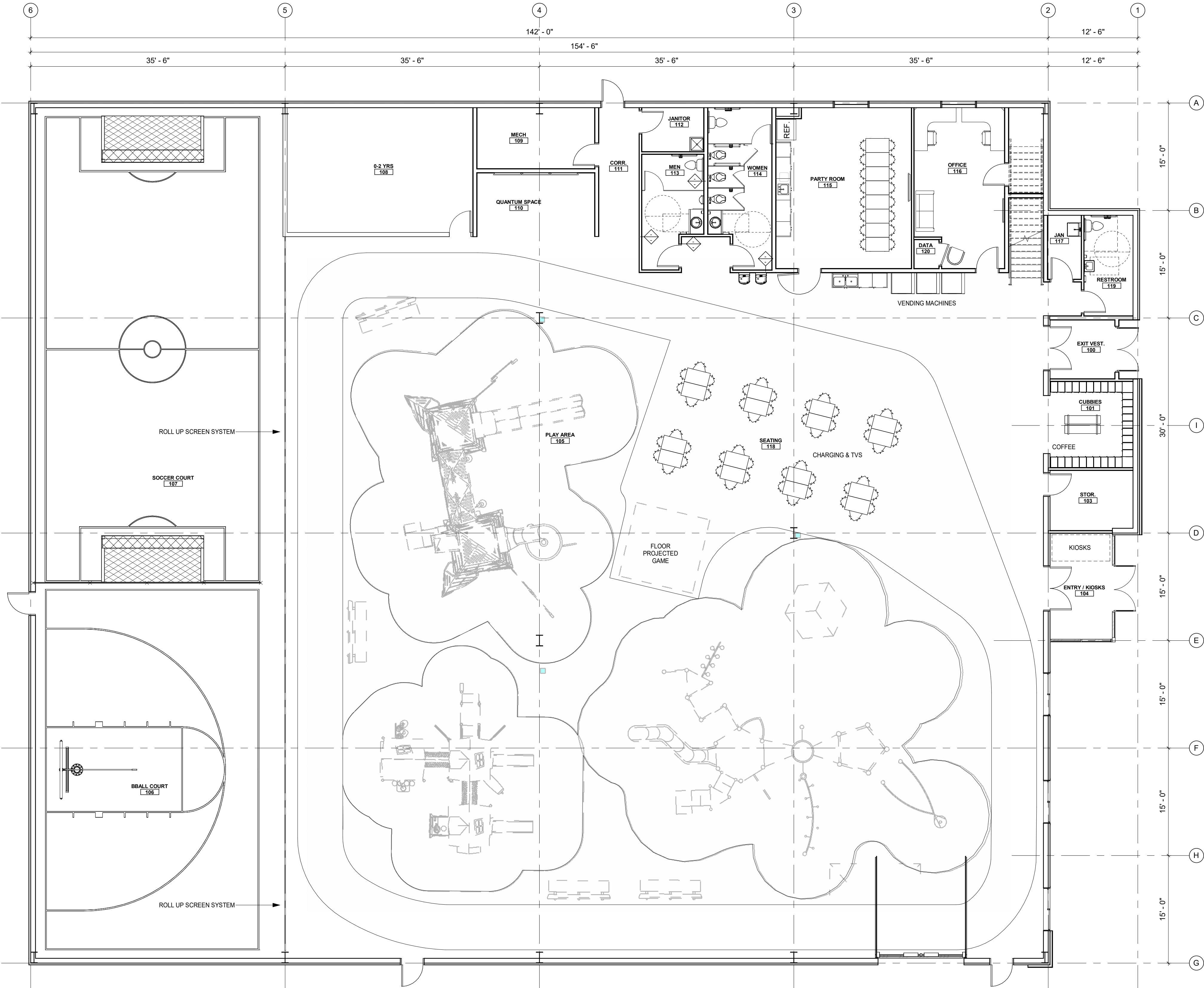
LOOKING EAST



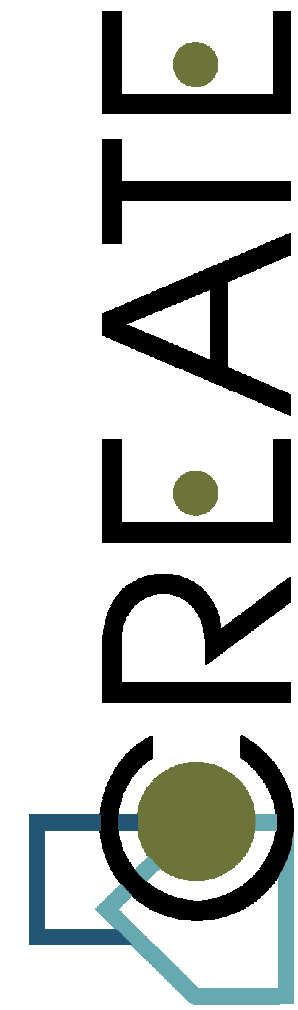
LOOKING SOUTH



LOOKING WEST



1 FLOOR PLAN - A
1/8" = 1'-0"



20560 N Shore Pl
Hartford, SD 57033
Wall Lake Township
phone: 605.695.1899

www.create-designdevelop.com

REVISION SCHEDULE

NO.	DESCRIPTION	DATE

MANKATO, MN
ENDLESS ADVENTURES

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 Architect under the laws of the State of South Dakota.

PRELIMINARY
NOT FOR CONSTRUCTION

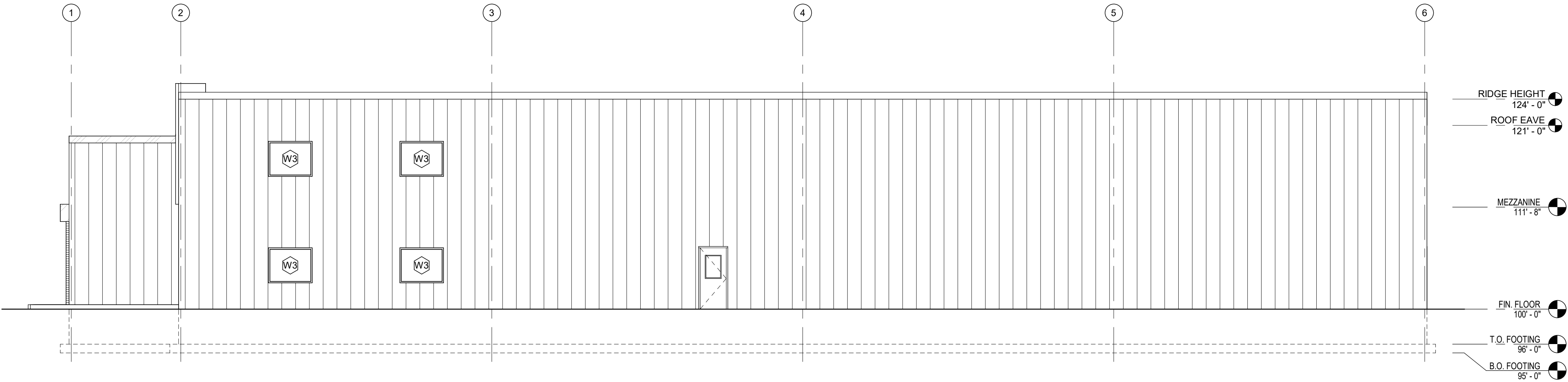
PROJECT NO.: 2555
ISSUE DATE: 9/17/2025
DESIGNED BY: SM
DRAWN BY: SM
CHECKED BY: AT

SHEET

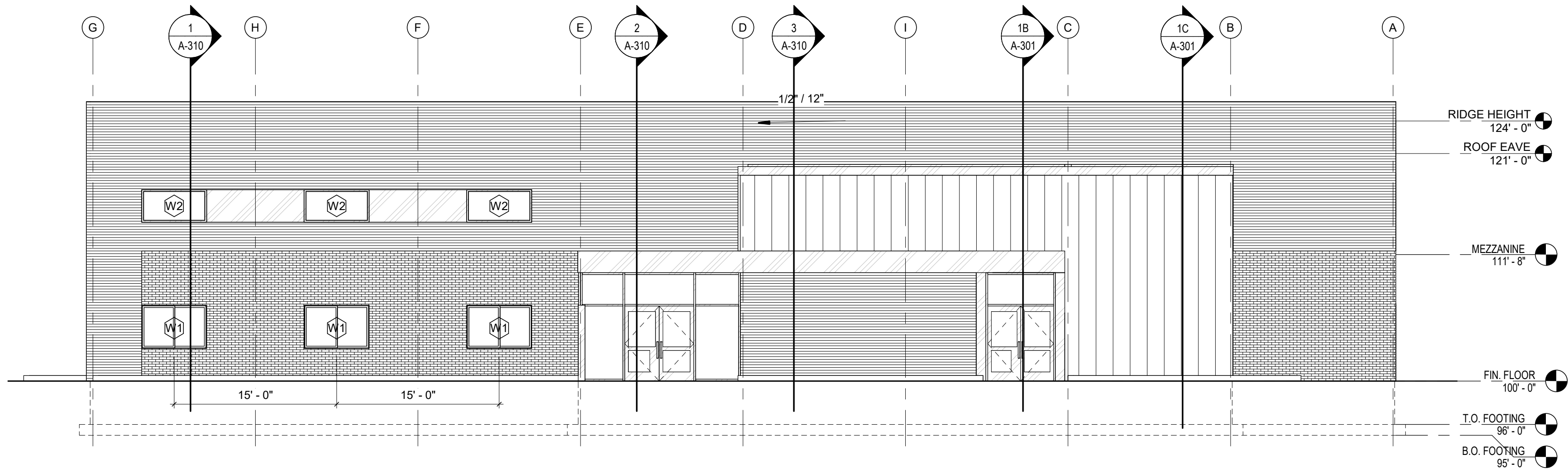
A-100

FLOOR PLAN

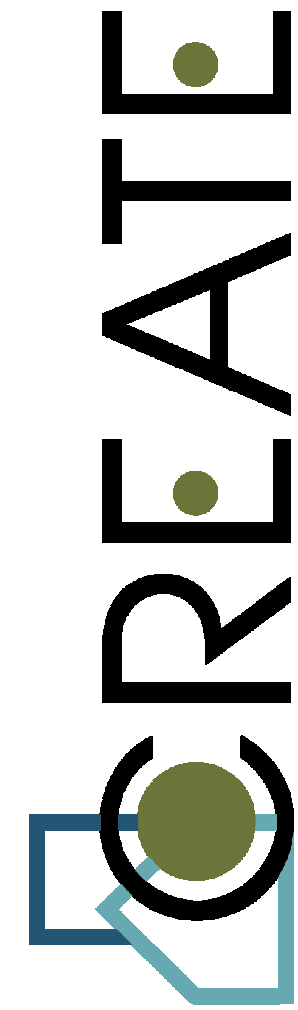
50% DD



1 NORTH ELEVATION
1/8" = 1'-0"



2 EAST ELEVATION
1/8" = 1'-0"



26560 N Shore Pl
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phone: 605.695.1899

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DESIGNED BY: AT
DRAWN BY: JO
CHECKED BY: JO

SHEET

A-201

BUILDING ELEVATIONS

50% DD

1

1

2

1

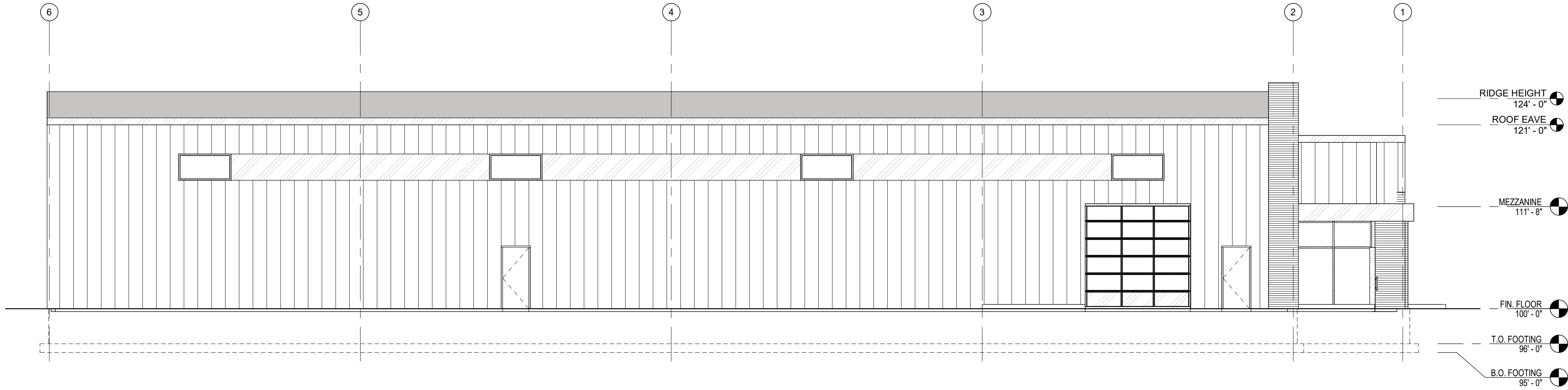
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1

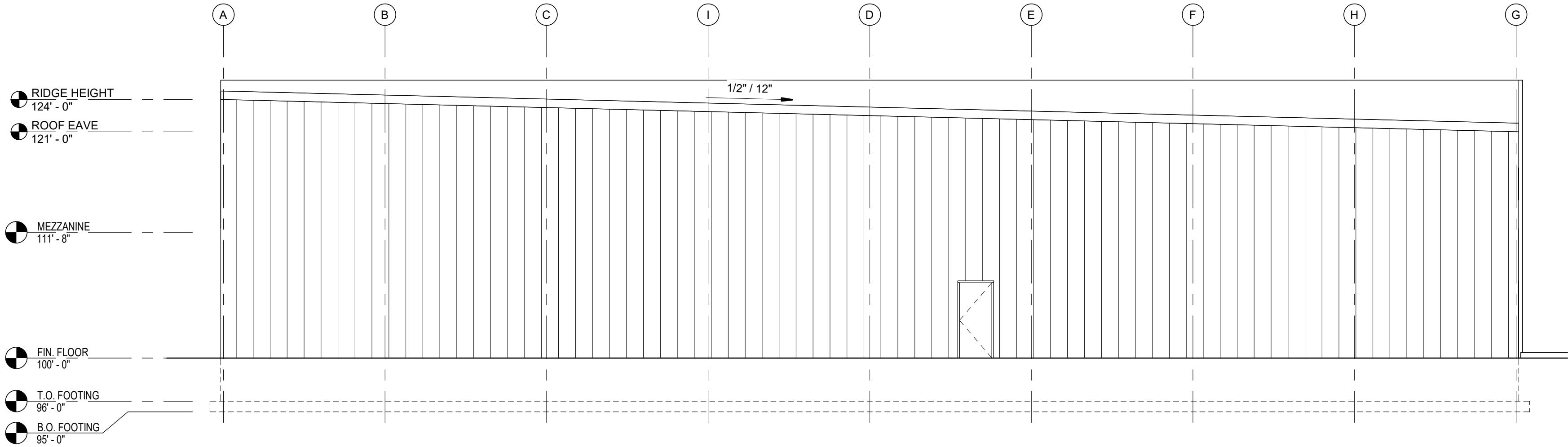
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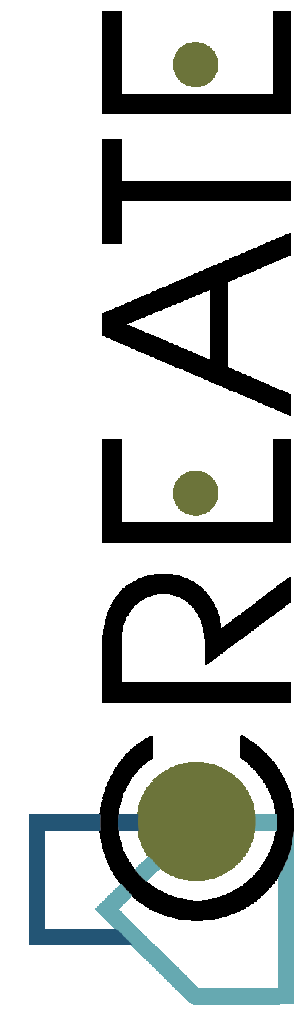
5



1B SOUTH ELEVATION
1/8" = 1'-0"



1A WEST ELEVATION
1/8" = 1'-0"



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DESIGNED BY: AT
DRAWN BY: JO
CHECKED BY: JO

SHEET
A-202
BUILDING ELEVATIONS

50% DD

1 ELEVATION – EAST / PREMIER DR

FINISH KEY SEE MATERIALS LIST FOR MORE DETAIL			
A	METAL PANEL 1	1,332 sf	42.73%
B	METAL PANEL 2	554 sf	17.77%
C	BRICK	646 sf	20.72
D	METAL TRIM		
E	STORE FRONT	211 sf	6.76%
F	WINDOWS	126 sf	4.04%

2 ELEVATION – SOUTH SIDE

FINISH KEY SEE MATERIALS LIST FOR MORE DETAIL			
A	METAL PANEL 1	125 sf	3.84%
B	METAL PANEL 2	2,797 sf	86.06%
C	BRICK		
D	METAL TRIM		
E	STORE FRONT	88 sf	2.7%
F	WINDOWS / EXIT DOORS	240 sf	6.83%

3 ELEVATION - WEST SIDE

FINISH KEY SEE MATERIALS LIST FOR MORE DETAIL			
A	METAL PANEL 1		
B	METAL PANEL 2	2,668 sf	99.22%
C	BRICK		
D	METAL TRIM		
E	STORE FRONT		
F	EXIT DOORS	21 sf	0.78%

4 ELEVATION - NORTH SIDE

FINISH KEY SEE MATERIALS LIST FOR MORE DETAIL			
A	METAL PANEL 1		
B	METAL PANEL 2	3,531 sf	97.39%
C	BRICK		
D	METAL TRIM		
E	STORE FRONT		
F	WINDOWS / EXIT DOORS	101 sf	2.61%



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EXTERIOR PERSPECTIVE | 9/23/2025

ENDLESS ADVENTURES | 7

COLOR OF FINISH MAY NOT BE REPRESENTED EXACTLY LIKE PHYSICAL SAMPLE



EXTERIOR WALL (MP-1)

Material Type: METAL PANEL MAIN
Mfr: METALLIC BLDG. SYSTEMS
Texture: FW-120 OR PBR
Color: CHARCOAL



EXTERIOR WALL (MP-2)

Material Type: METAL PANEL FEATURE
Mfr: METALLIC BLDG. SYSTEMS
Texture: PBD
Color: HAWAIIAN BLUE



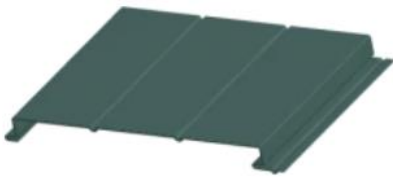
RETURN ACCENTS (MP-3)

Material Type: METAL PANEL
Mfr: METALLIC BLDG. SYSTEMS
Texture: SMOOTH PDVF
Color: COPPER METALLIC



BRICK/STONE ACCENT

Material Type: THIN BRICK
Mfr: BELDEN
Texture: VELOUR
Color: ALASKA WHITE OR SIM.



FW-120



PBD



PBR



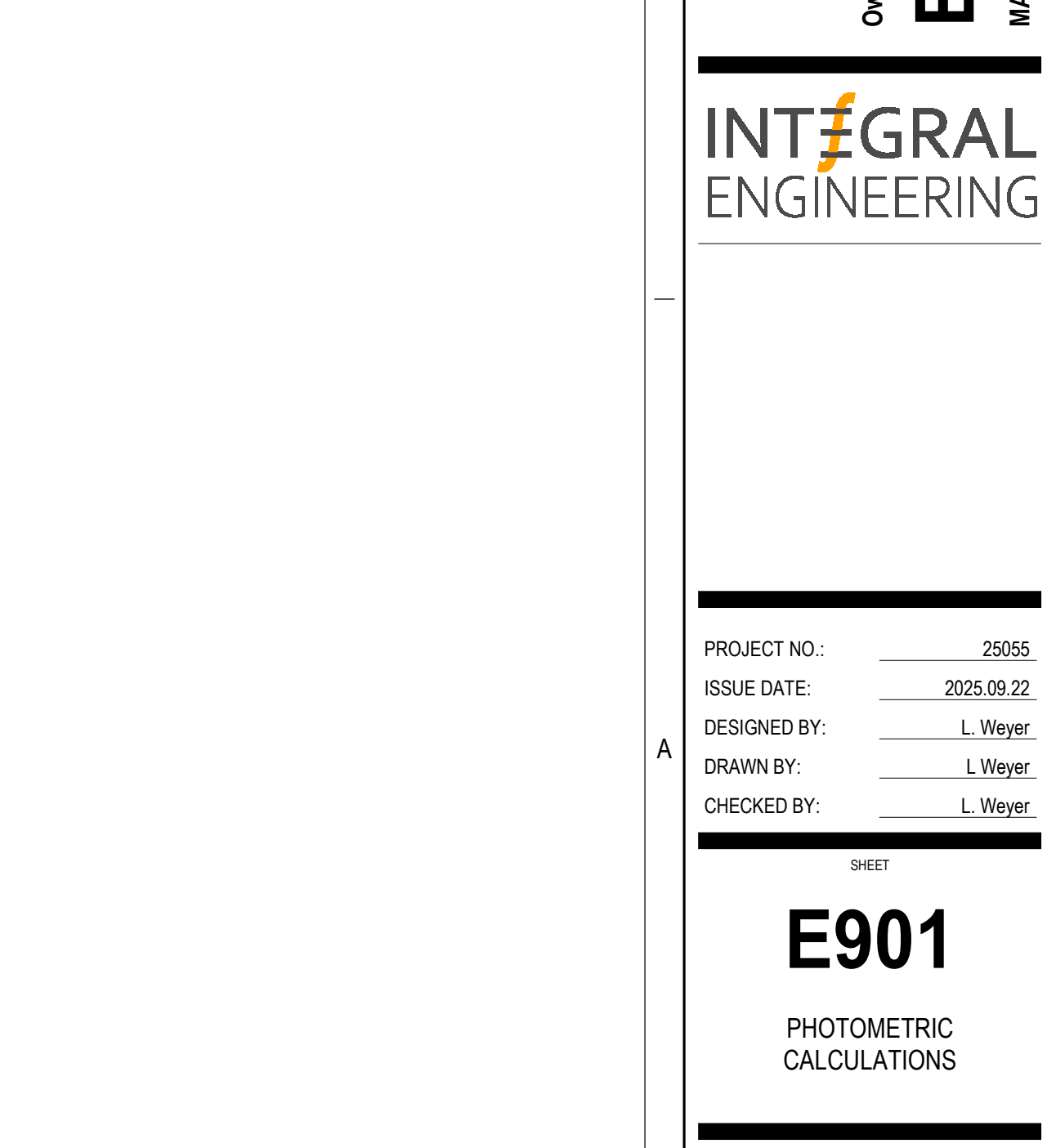
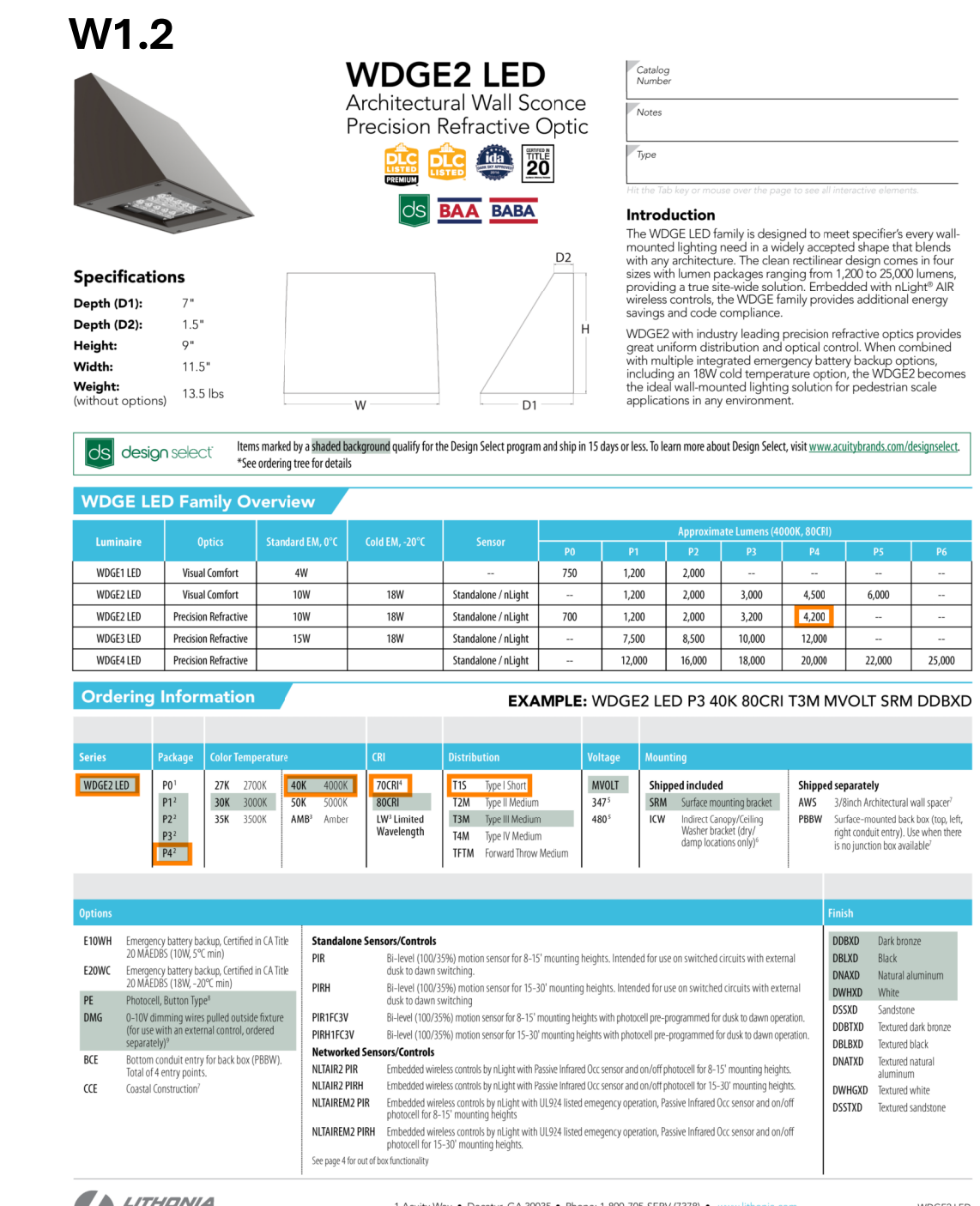
STOREFRONT / WINDOWS

Material Type: METAL
Mfr: KAWNEER OR SIM
Color: MATTE BLACK



BUILDING CAP / TRIM

Material Type: METAL
Mfr: TBD
Color: MATTE BLACK



ENDLESS ADVENTURES
IN LOT 5, BLOCK 2, VENSTAR SUBDIVISION
MANKATO, MN



PROJECT LOCATION

INDEX TO SHEETS

- C1: TITLE SHEET
C2: EXISTING CONDITIONS/REMOVAL PLAN
C3: HARDSCAPE PLAN
C4: LANDSCAPE PLAN
C5: UTILITY PLAN
C6: GRADING/SWPP PLAN
C7: DETAILS
C8: SWPPP NARRATIVE & DETAILS
C9: SPECIFICATIONS
C10: SPECIFICATIONS

THIS PLAN CONTAINS 10 SHEETS

LEGEND

- | | | | |
|----------|-----------------------------------|-----------|---|
| ○ | = 5/8"Ø X 16" iron stake monument | ⊞ | = Sign |
| ● | = Iron stake monument-Found | ⊞ | = Sign-Handicap |
| — W — | = Water Main | ⊞ | = Light Pole |
| — S — | = Sanitary Sewer | ⊞ | = Power Pole |
| — ST — | = Storm Sewer | ⊞ | = Guy Anchor |
| — G — | = Gas Main | ⊞ | = Fire hydrant |
| — UT — | = Underground Telephone | ⊞ | = Water Main Valve |
| — OT — | = Overhead Telephone | ⊞ | = Fire Sprinkler |
| — FO — | = Fiber-Optics | ⊞ | = Cleanout |
| — UE — | = Underground Electric | ⊞ | = Culvert |
| — OE — | = Overhead Electric | ⊞ | = Gas Main Valve |
| — X — | = Chain Link Fence | ⊞ | = Catch Basin |
| — ○ — | = Control Access | ⊞ | = Manholes |
| ⊞ | = Gate Post | 1271.23 | = Spot Elevation |
| ⊞ | = Bollards | RM1270.89 | = Rim Elevation |
| ⊞ | = Electric Meter | FL1262.34 | = Line Elevation |
| ⊞ | = Gas Meter | | |
| ⊞ | = Fiber-Optics Box | | |
| ⊞ | = Telephone Pedestal | | |
| ⊞ | = Light Tower | | |
| ⊞ | = Silt Fence | | |
| ⊞ | = Furnish & Install | | |
| — 1272 — | = Existing Elevation Contour Line | 27.00 | = Proposed Pavement Elevation |
| — 1272 — | = Proposed Elevation Contour Line | 128.0 | = Proposed Top/Bottom of Retaining Wall Elevation |
| | | 24.0 | |

APPLICABLE CONSTRUCTION PERMITS

ALL CONSTRUCTION WITHIN COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PERMIT AS ISSUED BY THE COUNTY HIGHWAY DEPT.

GENERAL NOTES

DEVELOPER, CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES GOVERNED BY STATE AND LOCAL JURISDICTION.
SITE IRRIGATING, LIGHTING, LANDSCAPING, SIGNING ARE NOT A PART OF THIS PLAN.
PROVIDE EROSION CONTROL PER NPDES PERMIT REQUIREMENTS AND AS SHOWN.
PROVIDE HANDICAP CURB RAMPS & SIGNAGE. COMPLY WITH ALL AMERICAN DISABILITY ACT REQUIREMENTS.
ALL CONCRETE OR ASPHALTIC PAVEMENT CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF MN/DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
A ROCK CONSTRUCTION ENTRANCE IS REQUIRED AT ALL ENTRANCES FROM BITUMINOUS PAVEMENT.
ACCESS FOR LOCAL RESIDENTS/BUSINESSES SHALL ALWAYS BE MAINTAINED.
PROVIDE PAVEMENT STRIPING AS SHOWN
CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR CONSTRUCTION.
SEE BOUNDARY SURVEY BY OTHERS FOR SITE BOUNDARIES.
ANY ALTERATIONS OR REVISIONS TO THE SITE DEVELOPMENT PLAN AS SHOWN SHALL NOT BE THE RESPONSIBILITY OF JONES, HAUGH & SMITH INC. AND SHALL RELEASE JONES, HAUGH & SMITH INC. OF ANY LIABILITY FOR ANY DAMAGES CAUSED THEREFROM UNLESS WRITTEN AUTHORIZATION OR PLAN REVISION HAS BE APPROVED BY JONES, HAUGH & SMITH INC. PRIOR.

BENCHMARK 1
TOP NUT OF FIRE HYDRANT ACROSS PREMIER
DR. FROM SITE, ELEV.=1005.48

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.
B. J. Jones
B. J. Jones
Reg. No. 42744 Date: 9/4/25

JONES
HAUGH
SMITH
Engineers & Surveyors
515 South Washington Ave. Albert Lea, MN 56007
507-373-4876

Consultant:

Project:

Revision:

No.: Date: 9/4/25

Drawn: bjj Checked:

Project Manager:

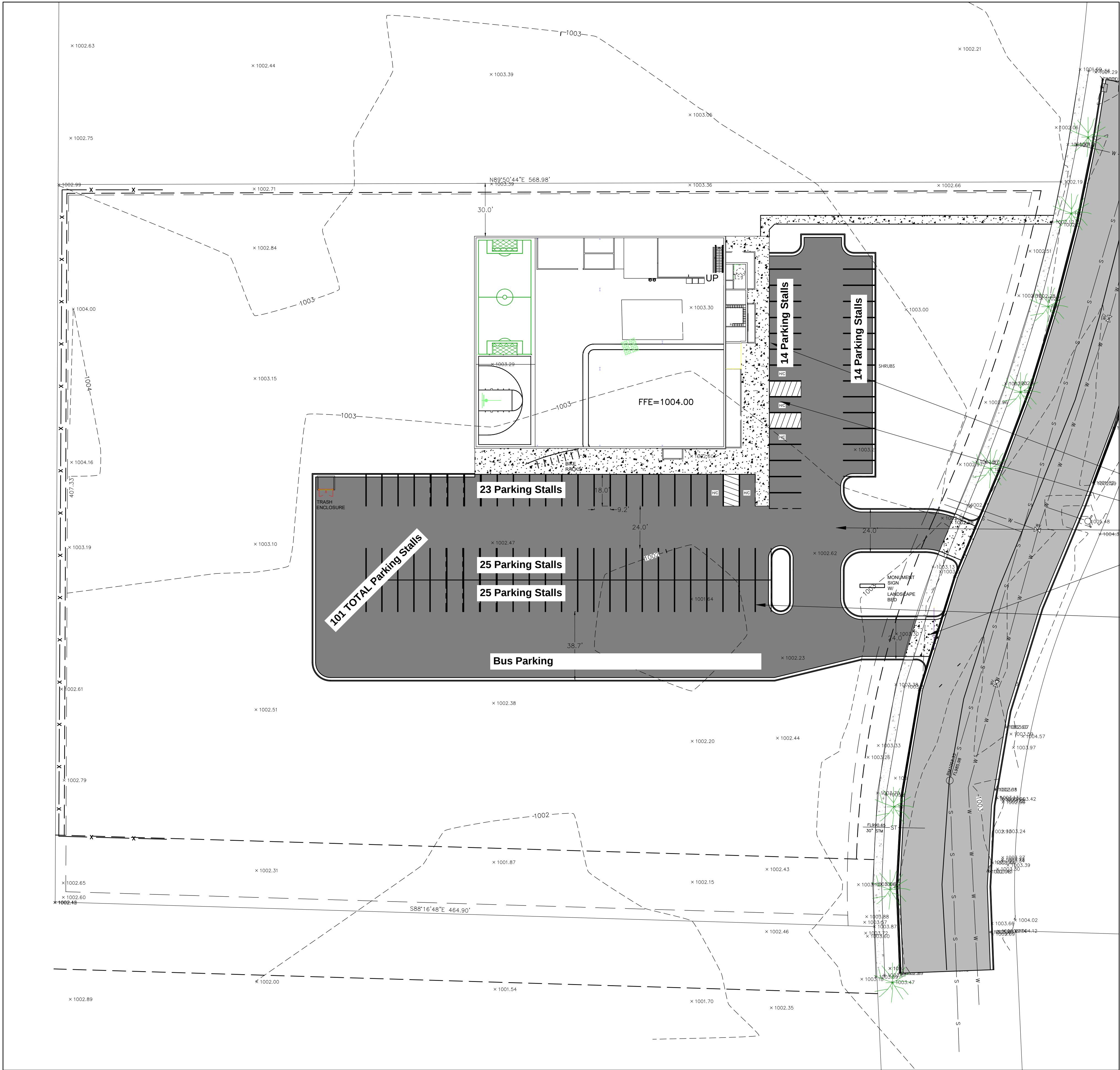
Project Status: CD

Sheet Title:

TITLE SHEET

Sheet No.:

C1



ZONING NOTES

B-3 COMMERCIAL DISTRICT
SUBD.3. HIGHWAY GATEWAY OVERLAY DISTRICT

BUILDING SETBACKS: FRONT: 15', SIDE: 6', REAR: 6'

CHAPTER 10. SEC. 10.47 - B-3 HIGHWAY COMMERCIAL DISTRICT
SUBD. 2 PERMITTED USES
A. USES LISTED IN THE B-1 COMMUNITY BUSINESS DISTRICT
(CH. 10.SEC. 10.45.SUBD.2.T./WW.)

PART V. SEC. 10.48. SUBD.3.SUBPART 5. YARDS & SETBACKS

PARKING

A.1. ON CORNER LOTS THE BUILD-TO ZONE IS 15' MINIMUM AND 85' MAXIMUM FROM THE PROPERTY LINE @ BOTH FRONTAGES
D. THE SIDE AND REAR YARD SETBACK IS 3' TO IMPERVIOUS SURFACE

PART IX. SEC 10.88. SUBD. 8 REFUSE CONTAINERS
ALL CONTAINERS SHOULD BE FULLY ENCLOSED BY A GATED ENCLOSURE TALL ENOUGH TO COMPLETELY SHIELD FROM VIEW. THE WALL SHOULD HAVE A FINISH SIMILAR TO THE PRIMARY BUILDING

J.1. MONUMENT SIGNAGE
a. 8' OR TALLER SHALL BE CONSTRUCTED WITH THE ENTIRE BOTTOM OF THE SIGN IN CONTACT WITH THE GROUND. BOTTOM 2' OF SIGN SHOULD BE BUILT OF STONE, CONCRETE, BRICK, OR BLOCK. A SOLID BACKGROUND AREA SHOULD BE PROVIDED TO THE TOP OF THE SIGN.
d. THE SQUARE FOOTAGE OF MONUMENT SIGN NOT TO EXCEED THE LINEAL FRONTAGE OF THE LOT (290 FT @ AUGUSTA DRIVE/ 270 FT @
g. DESIGN ELEMENTS OF THE SIGN SHOULD BE CONSISTENT WITH THOSE
e. THE SIGN FACE TO OCCUPY AT LEAST 50% OF THE SIGN.
f. LANDSCAPE THE BASE OF THE SIGN WITH AN AREA AT LEAST 50%

THE AREA OF THE SIGN FACE. CHOOSE HARDY, SEASONALLY OF THE MAIN BUILDING.
h. MINIMUM OF 5' SETBACK FROM PROPERTY LINES (AND NOT WITHIN 25' TRIANGLE @ THE CORNER OF THE LOT)

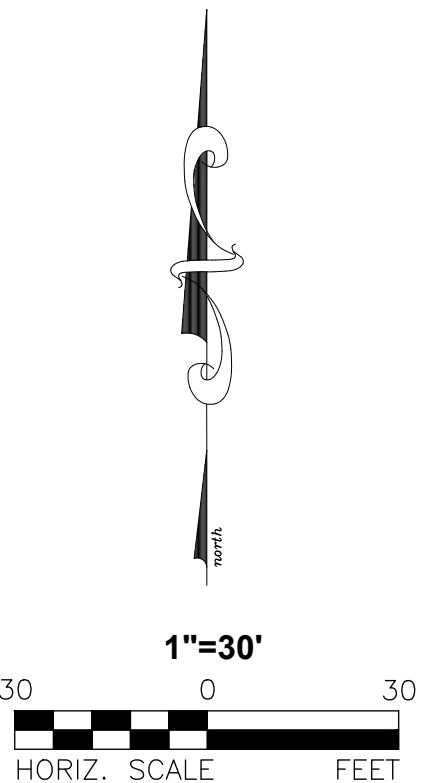
F&I THICKENED EDGE WALK ALONG BUILDING EXCEPT AT ADA STALLS TAPER BLACKTOP TO MATCH TOP OF WALK AT ADA STALLS PER DETAIL

RAMP BITUMINOUS TO MATCH SIDEWALK AT ADA STALLS—SEE GRADING PLAN & RAMP DETAIL

F&I BITUMINOUS PAVEMENT TYP. — SEE TYPICAL PAVEMENT SECTION

CITY OF MANKATO STANDARD CONCRETE COMMERCIAL ENTRANCE TYP.

F&I PAVEMENT STRIPING & MESSAGES TYP.



Consultant:



515 South Washington Ave. Albert Lea, MN 56007

Project:

Revision:

No.: Date: 9/4/25

Drawn: bjj

Project Manager:

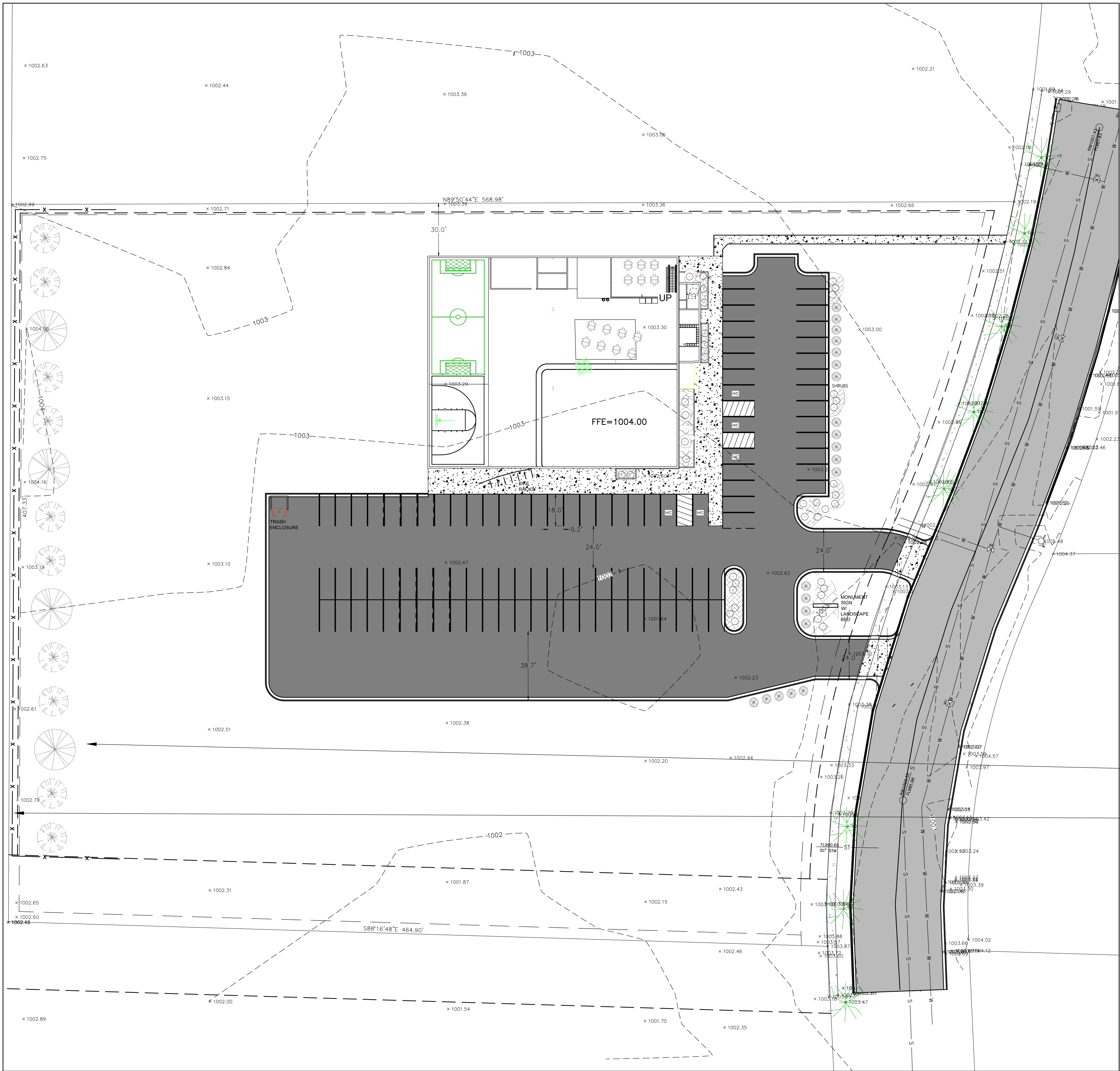
Project Status: CD

Sheet Title:

**HARDSCAPE
PLAN**

Sheet No.:

C3



LANDSCAPING NOTES

B-3 COMMERCIAL DISTRICT
SUBD.3, HIGHWAY GATEWAY OVERLAY DISTRICT

Sec. 10-1740 PERIMETER OFF STREET PARKING LOT
(1) SHADE TREE/ 50 LF OF FRONTAGE
(1) EVERGREEN TREE/ 25 LF OF FRONTAGE
80% OPAQUE ALONG ALL PARKING FRONTING STREET

PLANTING BEDS SHALL BE MULCHED WITH BARK CHIPS,
ROCK MULCH, FEATHER ROCKS OR SIMILAR MATERIAL.

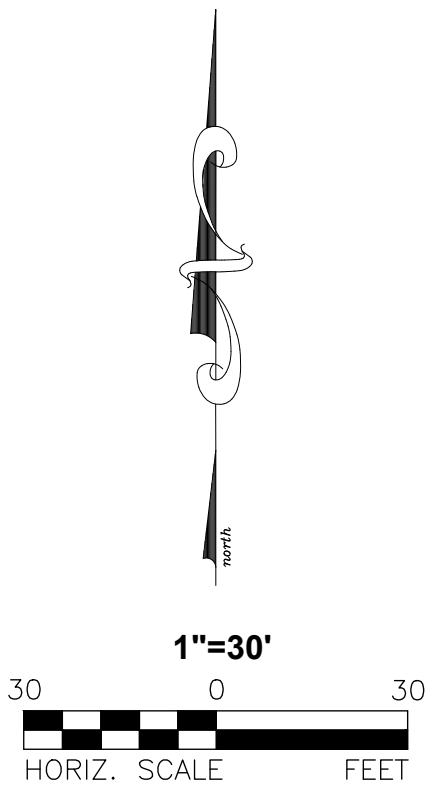
PERIMETER LANDSCAPING & TRANSITIONAL YARDS SHALL
CONSIST OF A COMBINATION OF GROUND COVER, SHADE
TREES OR EVERGREEN TREES, SHRUBS AND APPROPRIATE
SCREENING DEVICES SUCH AS DECORATIVE WALLS, FENCES OR
BERMS.

LANDSCAPING LEGEND

- =DENOTES SHADE TREE
- =EVERGREEN TREE
- =DENOTES SHRUB
- =DENOTES ARBOVITAE HEDGE (4' MIN. — 8' MAX)
(80% OPAQUE ALONG ALL PARKING FRONTING PREMIER DR.)
- =DENOTES EXISTING BOULEVARD TREE
- =DENOTES PLANTING BED W/ MULCH
- =DENOTES 6' HIGH VINYL FENCE

WEST 20' OF SITE TO BE TRANSITIONAL YARD LANDSCAPING (ABUTS RESIDENTIAL)

F&I 500LF 6' HIGH VINYL FENCING



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Brion J. Johnson
Reg. No. 42744
Date: 9/4/25

Consultant:

JONES HAUGH SMITH
Engineers + Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-4876

Project:

Revision:

No.:	Date: 9/4/25
Drawn: bjj	Checked:
Project Manager:	
Project Status: CD	
Sheet Title: LANDSCAPE PLAN	
Sheet No.: C4	



F&I STORM SEWER PIPING AND STRUCTURES SHOWN
SEE STRUCTURE SCHEDULE FOR MORE INFORMATION
CONNECT TO EXISTING 30" STUB FROM PREMIER DR.
W/ NEW MANHOLE

1. All plumbing shall be installed in accordance with the Minnesota Plumbing Code (see Minnesota Rules, Chapter 4714).
2. The water distribution system shall be disinfected per Minnesota Rules.
3. A sanitary sewer cleanout will be provided near the connection between the building drain and the building sewer.
4. PVC sanitary sewers will meet one of the following ASTM Standards: D3034, F789, D2665, or F891. ASTM D2241 pipe may be used for sewers 6 inch and larger. The installation will comply with ASTM D2321, which requires installation by open trench on a continuous granular bed.
5. PVC solvent weld joints will include a primer of contrasting color to the pipe and cement.
6. RCP storm sewers must comply with ASTM C76.
7. All joints and connections in the storm sewer system shall be gastight or watertight. Approved resilient rubber joints must be used to make watertight connections to manholes, catchbasins, and other structures. Cement mortar joints are permitted only for repairs and connections of existing lines constructed with such joints.
8. Polyethylene (PE) water services must meet ASTM D2239 or D2737 installed per ASTM D2774. Joints must use approved insert fittings with metal clamps. No more than two feet may be exposed within the building.
9. The bottom of the water service pipe located within ten feet of the sewer crossing must be at least 12 inches above the top of the sewer. When this is not feasible, the sewer pipe must be constructed of materials listed in the Minnesota Rules. The water service should not contain any joints or connections within 10 feet of the crossing.
10. All portions of the storm sewer system located within 10 feet of the building or water service line must be tested in accordance with Minnesota Rules.

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Brian J. Johnson
 Reg. No. 42744
 Date: 9/4/95



JONES
HAUGH
SMITH
Engineers + Surveyors
414 South Washington Ave., Suite 200
Albany, NY 12202

Consultant:

Project:

Revision

No.:	Date: 9/1/25
------	--------------

Drawn: **bjj**

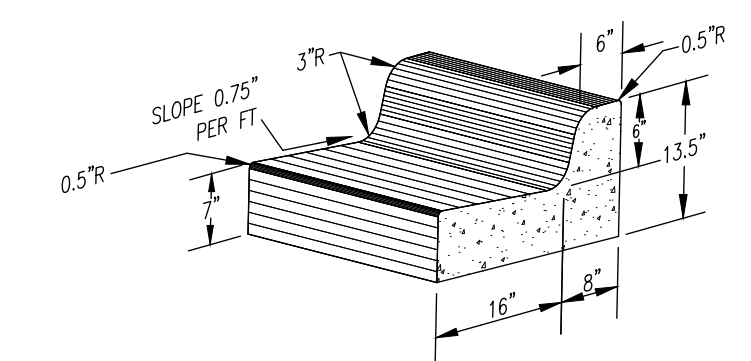
Project Manager

Project Status: **C**

UTILITY PLAN

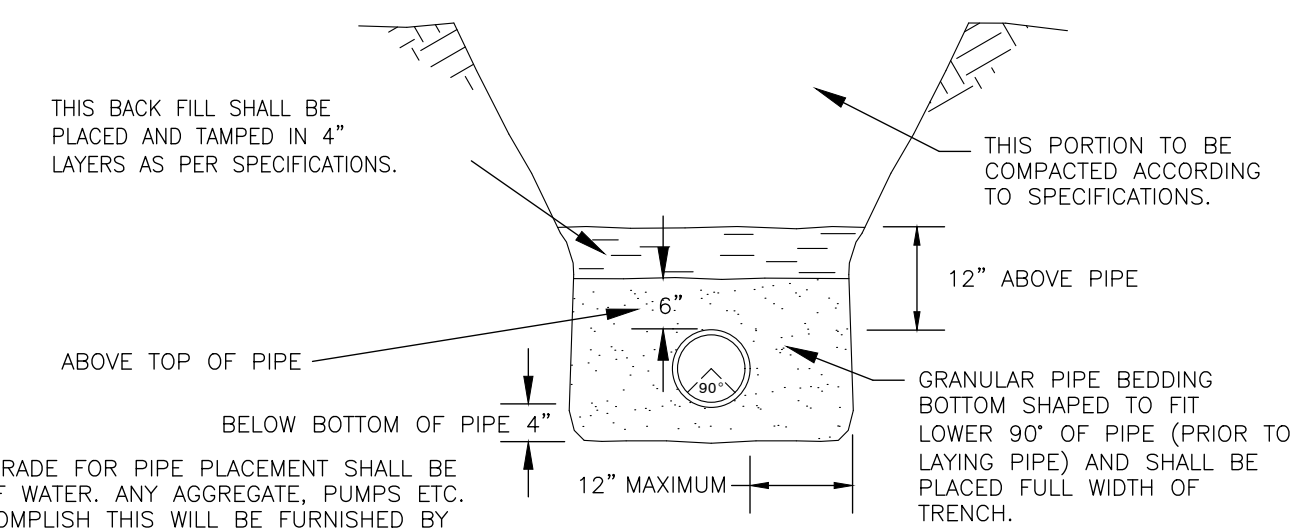
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C5

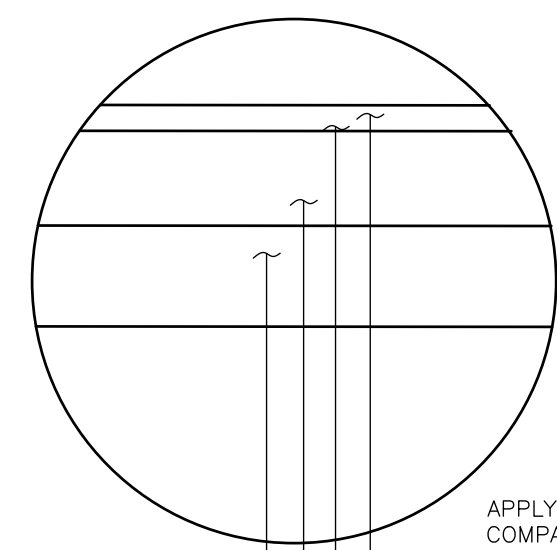


CONCRETE CURB & GUTTER DESIGN B618

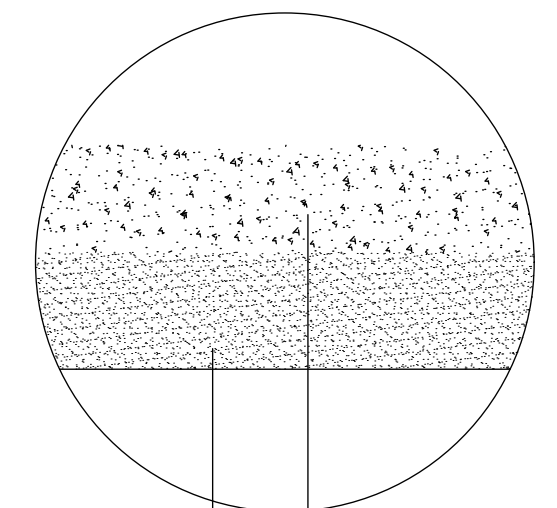
NOTE:
SHEETING, SHORING, BRACING AND SIDE SLOPES
REQUIRED BY SAFETY CODES AND REGULATIONS,
STATE INDUSTRIAL COMMISSION AND O.S.H.A. ARE
NOT SHOWN. CONTRACTOR SHALL ASSUME FULL
RESPONSIBILITY FOR THIS.



TYPICAL TRENCH
(PVC SEWER, WATER MAIN & PE PIPE)



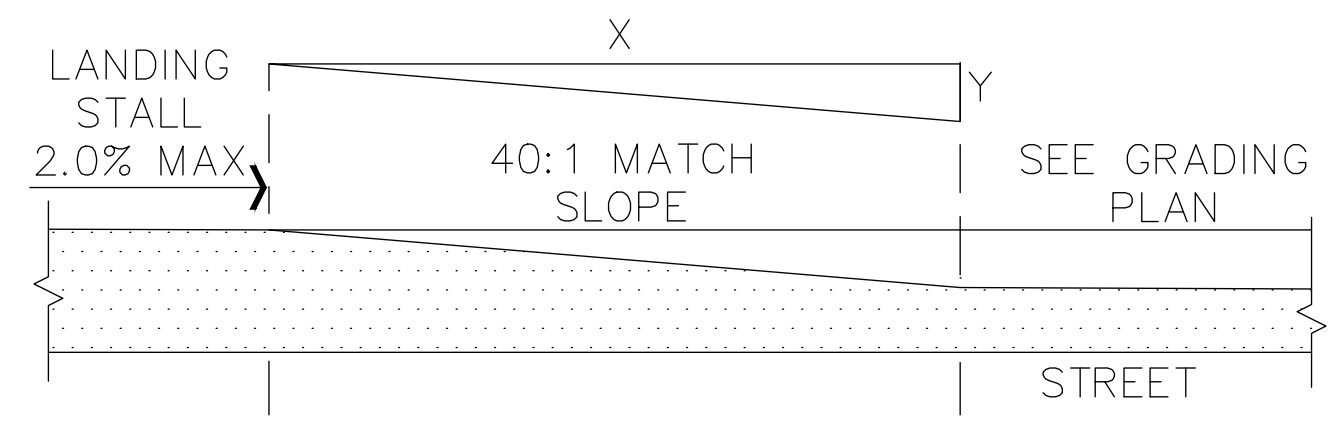
PARKING LOT PAVEMENT SECTION



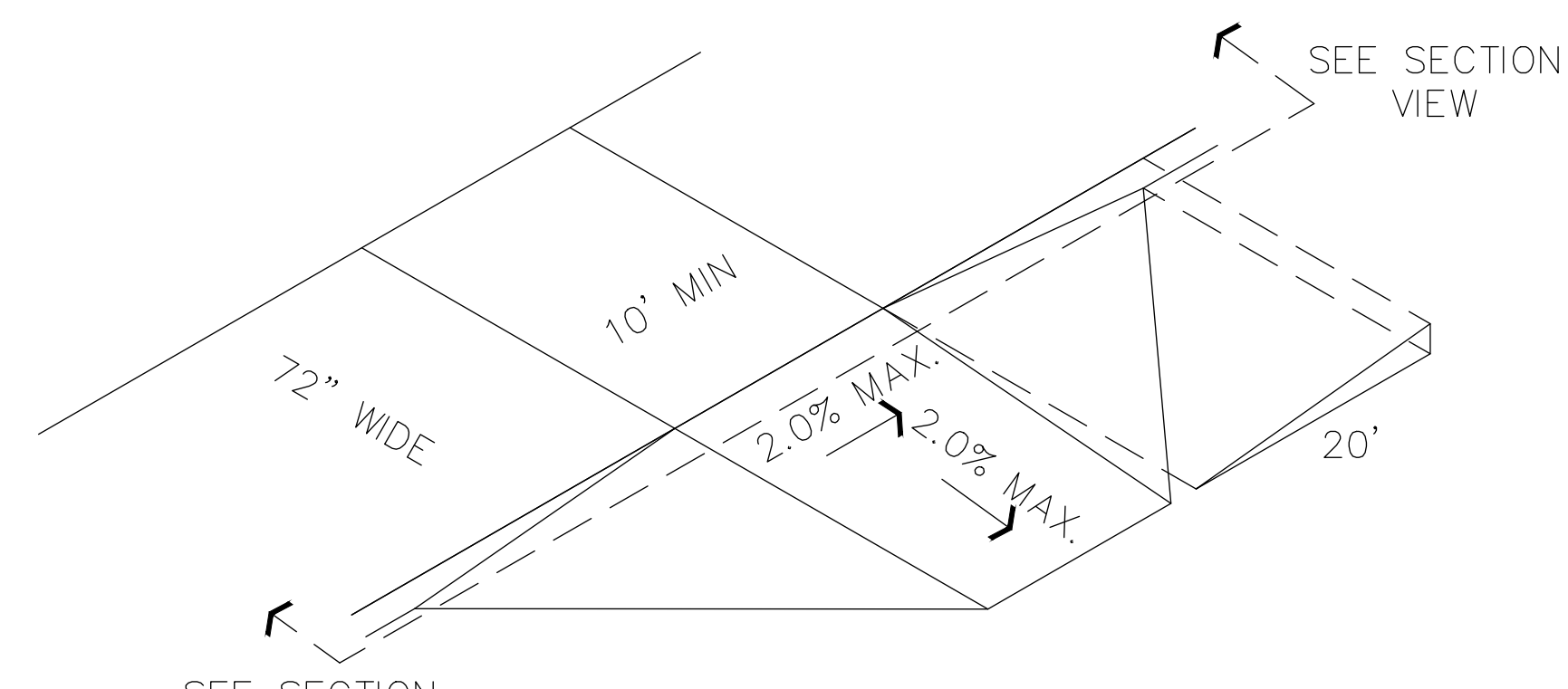
CONCRETE DRIVEWAY SIDEWALK SECTION

ALL JOINTS SHALL BE SEALED USING AN APPROVED
MN/DOT HOT POUR ELASTIC SEALANT (3723)
(INCIDENTAL)

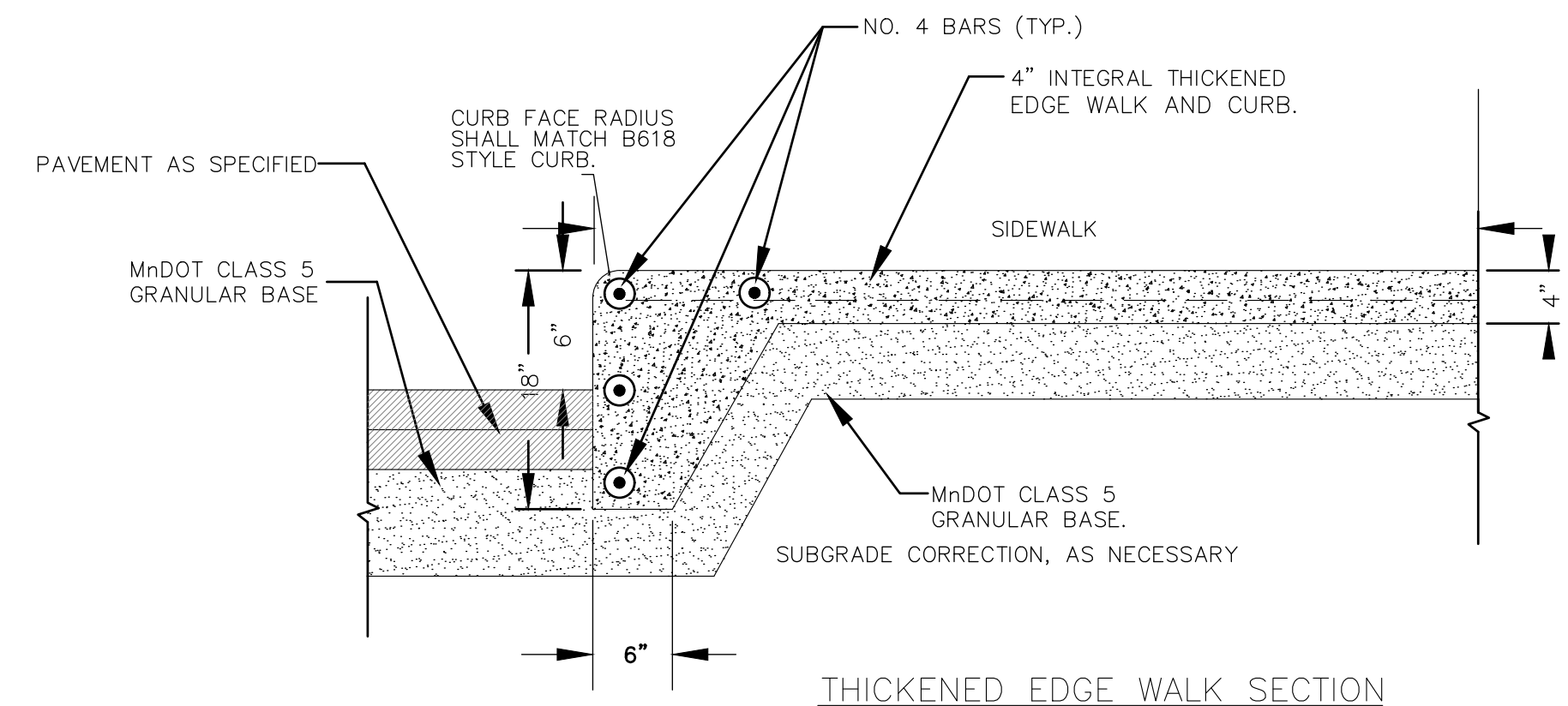
ALL CONCRETE SHALL BE PORTLAND CEMENT CONCRETE PAVEMENT
WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS,
A 4" MAXIMUM SLUMP AND 5% - 7% ENTRAINED AIR.



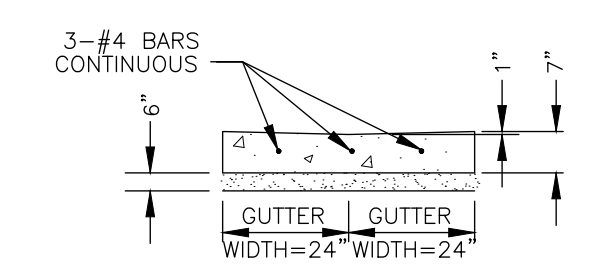
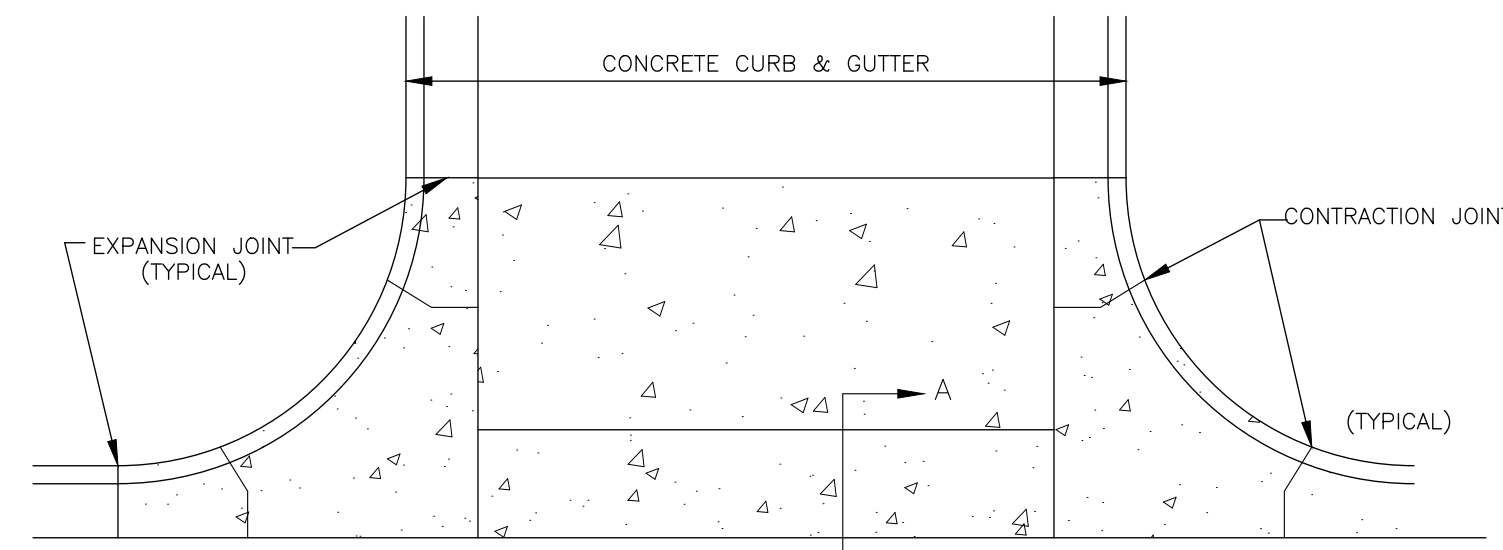
CROSS SECTION



CURB RAMP - BUILT UP PAVEMENT

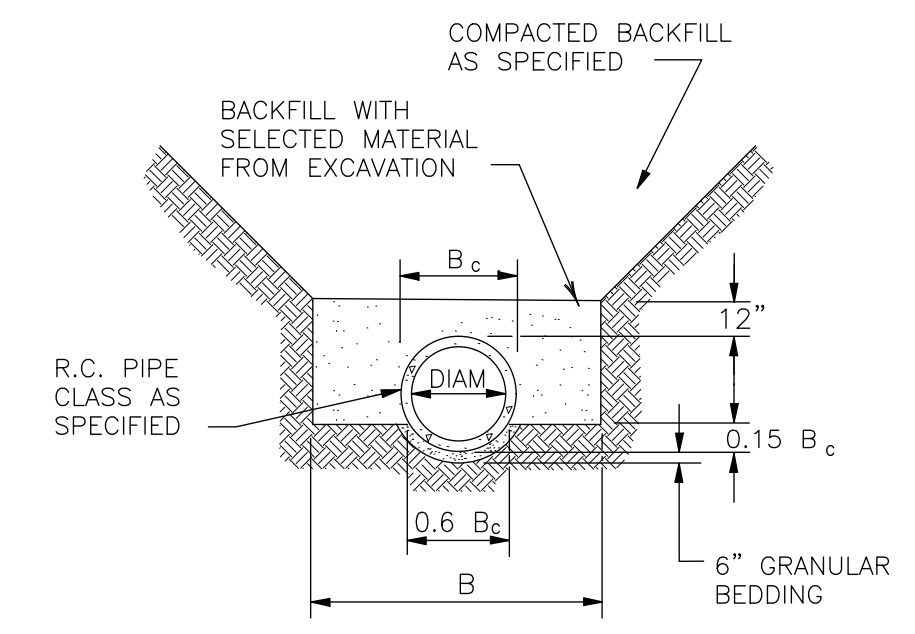


THICKENED EDGE WALK SECTION



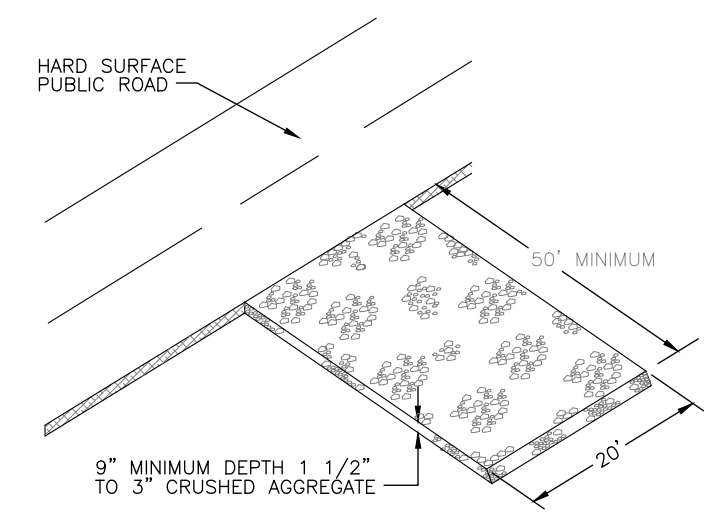
NOTE:
1. NO CONTRACTION JOINTS
IN CROSS GUTTER
2. THE CONCRETE VALLEY GUTTER
SHALL BE CONSTRUCTED ON
6" AGGREGATE BASE, CLASS 5 (MIN.)

CONCRETE VALLEY GUTTER-MANKATO STANDARD COMMERCIAL DRIVEWAY DETAIL



PIPE DIAM.	B
36" OR LESS	$B_c^c + 24"$
42" TO 54"	$1.5 \times B_c$
60" OR OVER	$B + 36"$

R.C. STORM SEWER TRENCH
CLASS "B" BEDDING CONDITION



EROSION CONTROL PROTECTION AT CONSTRUCTION ACCESS



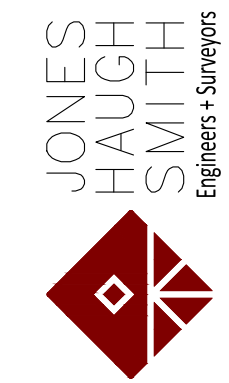
PROJECT LOCATION

EXISTING WETLANDS TYP.

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.

Brian J. Johnson
Reg. No. 42744

Date: 9/4/25



515 South Washington Ave. Albert Lea, MN 55737-3734

Consultant:

Project:

Revision:

No.:

Date: 9/4/25

Drawn: bj

Checked:

Project Manager:

Project Status: CD

Sheet Title:

SWPPP
NARRATIVE &
DETAILS

Sheet No.:

C7

GOVERNING SPECIFICATIONS

The Minnesota Department of Transportation's "Standard Specifications for Construction" 2018 Edition, including the Mn/DOT Special Provisions modified for this project, Minnesota Plumbing Code and the City Engineers Association of Minnesota Standard Specification, 2018 Edition, will govern except as modified or altered in the Special Provisions. All references to "State of Minnesota" or "Commissioner of Transportation" or "Department" are hereby revised to mean "Owner."

WORK WITHIN PROPERTY

The Contractor will work only in areas secured by the Owner, and will comply with all requirements of access agreements.

MATERIALS TESTING

Materials Testing will be by the Contractor. The Contractor will hire an independent testing consultant, approved by the Engineer, prior to the start of work to be tested.

1. The following materials tests will be provided by the Testing Company:

Work to be Tested	Method	Reference Spec.	Testing Rate
Sewer & Water Service Trenches	Specified Density	MnDOT 2105, 2451, 2501	1 test per 500 lf
Storm Sewer Trench Compaction	Specified Density	MnDOT 2105, 2451, 2501	1 test per 500 lf
Subgrade/Embankment Compaction	Specified Density	MnDOT 2105	1 test per 2500 cy placed (Clay, Sand, etc.)
Test Rolling	Fully Loaded Dump Truck		1 test per road
Select Granular Borrow	Specified Density	MnDOT 3149	1 per 5000 ton
	Gradation	MnDOT 3149	1 per Source
Aggregate Base (CL 3, CL 5)	Modified DCP	MnDOT 2211	2 tests per 1000 ton
	Gradation	MnDOT 2211	1 per 5000 ton
Bituminous Paving	Ordinary Comp.-Control Strip	MnDOT 2360	1 control strip per mobilization and/or per workday
Concrete Curb & Gutter	Air, Slump, Temp, Strength	MnDOT 2461	If non-integrant
Air, Temp. - 1 per day			
Slump, Strength - 1 per day; and each time water is added at the site			
Concrete Driveway or Sidewalk	Air, Slump, Temp, Strength	MnDOT 2461	
Air, Temp. - 1 per day			
Slump, Strength - 1 per day; and each time water is added at the site			
Concrete Paving		MnDOT 2301	
All Concrete Field testing or Concrete Pavement per 2012 MnDOT Schedule of Materials Control (page 32), except Pavement Texture and Smoothness.			

Table Notes:

- Specified Density also requires Moisture-Density and Relative Density
- The Engineer may omit duplicative trench compaction tests at his discretion

MAINTENANCE OF TRAFFIC (1404)

The Contractor will be responsible for traffic control on the Project, and will furnish, erect, and maintain all necessary traffic control devices required to provide safe movement of vehicular traffic through the Project. Any traffic control device installed will meet the requirements of the Minnesota Manual on Uniform Traffic Control Devices, Field Manual, latest edition, and the latest MnDOT specifications approved at the time of bid.

The Contractor will prepare and submit to the City Engineer and County Engineer for Approval a Traffic Control Plan for any work in or utilization of traveled Right-of-Way. The plan will be submitted a minimum of 48 hours prior to the commencement of work. No work in the Right-of-Way will commence without an Approved Traffic Control Plan.

Traffic control will be in accordance with the Traffic Control Layout Plan and the following:

Traffic control devices include, but are not limited to, barricades, warning signs, lane markings, trailers, flashers, cones, and drums, as required, and sufficient barricade weights to maintain barricade stability.
No material will be deposited on a traveled roadway.
Materials will not be placed on road right of way more than one week in advance of their use.
Contractor will notify the affected parties at least one week prior to commencement of disturbance of the private or business drives.
Coordination will be maintained with the Fire and Police Departments to ensure that passage is maintained for emergency vehicles at all times.
The Contractor will make one person responsible for the maintenance of all signs. The Contractor will check each intersection at the end of each day whether it is a working day or not. The name and telephone number of this person will be left with the Police, the City Engineer, and the Fire Departments.

UTILITY PROPERTY AND SERVICE (1507)

Construction operations in the proximity of utility properties will be performed in accordance with the Provisions of 1507, except as modified below:

The first paragraph of 1507 is deleted and the following substituted therefore:

It will be the Contractor's responsibility to contact all local utility companies and ascertain the location of all existing underground utilities, if any, prior to performing any excavation operations. The Contractor will conduct his/her operations in the vicinity of any such facilities, which may exist, in a manner that will prevent damage thereto.

It will be the Contractor's responsibility to utilize the One-Call Excavation Notice System at 'Gopher State One Call' (1-800-252-1166) required under Minnesota Statute Chapter 216D, 48 hours prior to performing any excavation adjacent to any underground facility, which may exist, in a manner that will prevent damage thereto.

CONSTRUCTION STAKES, LINES AND GRADES (1508)

All construction staking will be provided by the Contractor and performed by or under the direct supervision of a Land Surveyor licensed in the State of Minnesota.

Field Fit Adjustments to Grade Stakes

The Engineer may make minor adjustments (< 0.5") to the grade stakes after they have been placed, in order to adjust to actual conditions in the field or to ensure proper or better drainage. Any adjustments to proposed or in-place materials required due to minor adjustments made by the Engineer are incidental to the work.

CONTROL OF HAUL ROADS (1515), LAWS TO BE OBSERVED (1701)

In addition to the requirements of 1515 and 1701, the Contractor will abide by all weight restrictions implemented by the governing road authorities in the performance of the work and in delivering materials and equipment to the project site.

AIR LAND AND WATER POLLUTION (1717)

The provisions of Mn/DOT 1717 are hereby modified and supplemented as follows:

DEWATERING

Any dewatering necessary to construct the work will be done by the Contractor. The Contractor is responsible to determine the type and method of dewatering and to provide and implement all equipment and materials necessary to accomplish the work on this project. Discharged water from dewatering will be routed through a temporary sediment basin. Sediment trapped in the temporary basins will be removed and disposed of on-site.

PROTECTION OF SURFACE STRUCTURES

The Contractor will not trespass on any private property without the express written consent of the Owner thereof. Trees, shrubs, fences, poles and all other private property will be protected unless their removal is authorized. Any property damaged will be satisfactorily restored at the expense of the Contractor. Any land survey or property monuments destroyed, covered, moved, bent or disturbed will be replaced by a Licensed Land Surveyor at the expense of the Contractor.

Wherever construction is planned to cross private property, an easement for the construction has been acquired from the property owner. The Contractor will familiarize himself with the terms of such easements, which the Owner will have on file.

Ground surface, trees, shrubbery, fences and other private property will be restored to the same condition as existed prior to the beginning of construction. This will include consolidating backfill, graveling driveways and any other leveling and landscaping required to restore the premises to original condition. The topsoil will be piled separately from subsoil material and will be replaced in the trench above the subsoil material.

Except where sodding is required, all grassed areas disturbed during the construction will be seeded following landscaping.

The Contractor will restore at his own expense streets, roads, alleys, private or public structures such as water mains, water connections and appurtenances, culverts, drain tiles, sewers, manholes, catch basins, sewer connections, curb, gutter, sidewalk, street signs, or other structures designated to remain in place which are damaged or injured in any way by his acts, and will be responsible for all damages to other utilities he may encounter.

The Contractor will not claim, or be entitled to receive, compensation for any damages sustained by reason of the inaccuracy or omission of any of the information given on the drawings relative to surface, overhead, or underground structures, or by reason of his failure to properly protect such structures.

PROTECTION OF SIDE STREETS AND HAUL ROUTES

The Contractor will be responsible for any damage of the side streets in the area and any other streets that are used as haul routes. The Contractor will discuss all haul route possibilities with the City Engineer and County Engineer prior to their use. The City Engineer, County Engineer, and the Contractor together will inspect the condition of the proposed routes before, during and after their use. The Contractor will correct any damage that is caused by the hauling activities at no cost to the Owner.

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INTERFERENCE OF UNDERGROUND STRUCTURES

Existing utilities crossed by the new construction will be protected against damage, and/or replaced to original grade. Protection, temporary support and maintenance of existing utilities will be furnished by the Contractor at his own expense. The final installation will provide permanent support to prevent any settlement or movement, which may result in damage to these utilities.

Whenever existing pipe is replaced, the material of replacement will be DIP or PVC pipe of the same diameter as the original, long enough to extend at least one foot into the solid bank on either side of the excavation. The backfill under and around such pipe will be thoroughly compacted by mechanical means to preclude settlement. All connections between different types or sizes of pipe or improperly matched joint types will be encased in concrete with a minimum thickness of 6 inches.

Should it become necessary during the progress of the work to remove or relocate existing utilities or structures, the Owner will cause the same to be done at no expense to the Contractor, except as otherwise provided herein. The Contractor will notify those who maintain utilities sufficiently in advance of construction so they may make the necessary location, disclosure, relocation or other preparation. Where necessary to locate existing underground utilities, the Contractor, upon order of the Engineer, will make any required subsurface explorations and excavation, and will be allowed compensation therefor. Where relocation or reconstruction of existing utilities is impracticable, a change in line and/or grade of the new construction will be ordered, and the change will be made as directed. No deviation from the line or grade set by the Engineer will be made without his approval.

CONNECT TO EXISTING SANITARY SEWER

The Contractor will connect to the existing sanitary sewer at the locations shown on the plan. Exploratory excavation for determining the location of existing utilities and the connection to the existing sanitary sewer are incidental to the work. The Contractor will verify the connection elevation at the main is reasonably close to the elevation shown on the plan prior to beginning work. If the elevation is substantially different, the Contractor will notify the Owner and Engineer.

Where new connections are made to existing sanitary sewer manholes, the contractor will core drill the manhole wall and invert to the existing flow line, construct and shape a new invert for the new pipe, and provide a waterproof boot through the wall of the manhole for the new pipe.

SANITARY SEWER CONSTRUCTION REQUIREMENTS

- Noise -- The Contractor will insure all equipment is properly fitted with mufflers to reduce noise to the minimum attainable to avoid creating a nuisance in the residential and business area.
- Trench Compaction -- All trenches will be tamped using the existing material that has been excavated. Tamping will not be paid as a bid item, therefore the cost of this work will be included in the price bid for furnishing and installing the pipe.
- Piling Excavated Materials -- Excavated material will not be piled on private property without the express permission of the owner thereof, except where easements for the sewer construction or for related work have been obtained; nor will it be piled in any location that will require backfilling machinery to operate on private property. Where excavated material is piled on private property it will be placed to cause the least possible inconvenience to the property owner. Any damage caused thereby, including damage to buildings, walls, sidewalks, driveways, trees, shrubs, lawns, or any other property, will be repaired at the expense of the Contractor. Backcasting in order to minimize disturbance is incidental to the work.
- It will be the Contractor's responsibility to protect adjacent pipes in and around manholes to be reconstructed, and will replace any pipes damaged, cracked, or broken by the Contractor at their expense.
- All excavations, trenching and/or jacking and boring pits will be sheeted and/or shored as per OSHA requirements. No unsheeted trench will be left open overnight.
- Backfilling of all trenches within the limits of street excavation will comply with the provisions of MNDOT Specification 2112 including achieving 100% compacted density in the upper three feet of subgrade (below aggregate base) and 95% below the upper three feet. Density testing will be performed as directed by the Owner to verify compaction. Trench areas that are determined by the Owner to have yielded due to improper compaction will be deemed as Unacceptable Work and will be corrected by the contractor at no additional cost.
- Removal of former service lines. -- Service lines no longer being utilized will be removed to the main, as directed by the City. Removal and restoration of street surfacing required for the service removal is incidental.
- RECORDS OF LATERALS: The Contractor will maintain a complete and accurate record of the location and depth of each lateral. The Contractor will make measurements from the end of each service to prominent permanent features to facilitate its location in the future. The end of each lateral will be located in plan and elevation, and a sketch made to show the plan location. These records will be turned over to the Owner.

MATERIALS FOR SANITARY SEWER CONSTRUCTION:

The project calls for the use of Poly-Vinyl Chloride (PVC). Pipe and fittings should be properly bedded and encased in accordance with the Standard Detail Sheets and Standard Specifications for Sanitary Sewer Installation. All 8" and larger sanitary sewer shall be SDR 35, pipe smaller than 8" shall be SDR 26 Bedding and encasement beneath, along the sides, and above the pipe will be Select Granular material, tamped in place. The only deviation will be in poor soil conditions, as approved by the Engineer, where foundation rock will be substituted. Pipe bedding is incidental to pipe installation. Foundation rock is incidental to pipe installation. Joints for PVC-SDR 35, and PVC-SDR 26 gravity sewer pipe will be made using Elastomeric gaskets conforming to the requirements of ASTM D3212. Joints in precast concrete manholes will be made using a joint compound equal to Ram-Nek or rubber gasketed conforming to ASTM C443. All manhole castings will be equipped with solid lid covers, self-sealing, with concealed pick holes. Manhole casting will be Veenah R1772, or equal and will be labeled "SANITARY" on casting.

CONNECT TO EXISTING WATERMAIN

The Contractor will connect to existing watermain at the locations shown on the plan. All connections to existing water main are incidental to the work. All exploratory excavation in determining the location of existing water main is incidental to the work. The Contractor will coordinate with the utility owner and be responsible for any fees due for connections.

WATERMAIN CONSTRUCTION REQUIREMENTS

- Noise -- The Contractor will insure all equipment is properly fitted with mufflers to reduce noise to the minimum attainable to avoid creating a nuisance in the residential and business area.
- Bedding and encasement beneath, along the sides, and above the pipe will be Select Granular material, tamped in place. The only deviation will be in poor soil conditions, as approved by the Engineer, where foundation rock will be substituted. Pipe bedding is incidental to pipe installation. Foundation rock will be paid at the unit price per ton. No payment will be made for bedding materials which, in the opinion of the Engineer, was unnecessary for proper pipe installation.
- Trench Compaction -- All trenches will be tamped using the existing material that has been excavated. Tamping will not be paid as a bid item, therefore the cost of this work will be included in the price bid for furnishing and installing the pipe.
- Piling Excavated Materials -- Excavated material will not be piled on private property without the express permission of the owner thereof, except where easements for the sewer construction or for related work have been obtained; nor will it be piled in any location that will require backfilling machinery to operate on private property. Where excavated material is piled on private property it will be placed to cause the least possible inconvenience to the property owner. Any damage caused thereby, including damage to buildings, walls, sidewalks, driveways, trees, shrubs, lawns, or any other property, will be repaired at the expense of the Contractor.
- It will be the Contractor's responsibility to protect adjacent pipes in and around manholes to be reconstructed, and will replace any pipes damaged, cracked, or broken by the Contractor at their expense.
- All excavations, trenching and/or jacking and boring pits will be sheeted and/or shored as per OSHA requirements. No unsheeted trench will be left open overnight.
- Backfilling of all trenches within the limits of street excavation will comply with the provisions of MN/DOT Specification 2112 including achieving 100% compacted density in the upper three feet of subgrade (below aggregate base) and 95% below the upper three feet. Density testing will be performed as directed by the Engineer to verify compaction. Trench areas that are determined by the Engineer to have yielded due to improper compaction will be deemed as Unacceptable Work and will be corrected by the contractor at no additional cost.
- The Contractor will coordinate the construction of all private and municipal utilities.
- The Contractor will be responsible for all tapping or other fees paid to public or private utilities as work incidental to the contract.
- RECORDS OF LATERALS: The Contractor will maintain a complete and accurate record of the location and depth of each water lateral. The Contractor will make measurements from the end of each service to prominent features to facilitate its location in the future. The end of each lateral will be located in plan and elevation, and a sketch made to show the plan location. These records will be turned over to the Owner.

MATERIALS FOR WATERMAIN CONSTRUCTION- City of Faribault standards shall govern over all material specs listed below if discrepancies exist.

- Watermain shall be PVC SDR 18 meeting the requirements of AWWA C-900. Pipe and fittings should be properly bedded and encased in accordance with manufacturer's requirements. Foundation rock will be used in poor soil conditions.
- Bedding and encasement for pipe, beneath, along the sides, and above the pipe will be Select Granular material, tamped in place. The only deviation will be in poor soil conditions, as approved by the Engineer, where foundation rock will be substituted. Pipe bedding is incidental to pipe installation. All joints between pipe, fittings, valves, and hydrants will be equipped to provide electrical conductivity.
- Gaskets will be mechanical joint rubber gaskets, unless otherwise specified.
- Hydrants shall be Waterous Pacer WB-67-250 with 6" mechanical joint inlet and valve boxes as manufactured by American Flow Control Series 2500 or US Metro Pipe Seal with the Top marked WATER.
- The furnishing and installing of disinfection materials to disinfect the watermains will be the responsibility of the Contractor. The City Utilities Department will assist the Contractor in flushing and testing the watermains.
- The Contractor will use restrained joint mechanical joint flanges with mega lug retainer glands or equal on all hydrants, watermain offsets, bends, or other mechanical fittings. STAINLESS STEEL BOLTS will be required on all mechanical joints and sleeves.
- All exposed parts of the bolts and nuts will be completely coated with an approved asphaltic type rust preventive material. Any parts of the fittings that have been scraped will also be coated with an approved asphaltic type rust preventive material. Watermain fittings will conform to ANSI Standard A21.10. All watermain fittings, hydrants and retaining rods will be protected by using sacrificial zinc anode caps such as 175P190 Protecto Caps as manufactured by Eboa Iron or an approved equal. Two caps per mechanical joint will be used.

TESTING OF WATER MAIN

Hydrostatic pressure testing of water main and services will be conducted as follows:

After the pipe has been laid, including fittings and valves and blocking, all newly laid pipe or any valved section thereof, unless directed otherwise by the Engineer, will be subject to hydrostatic pressure of 150 pounds per square inch. The duration of each such test will be at least two hours.

Each section of pipe to be tested will be filled with water and all air expelled at the highest point. The required taps to expel air or to fill the water main will be supplied and installed by the Contractor and will be 3/4 inch and will include an approved service saddle when required.

The test apparatus will be applied at the lowest elevation on the section to be tested. The apparatus will be connected to the main at a service tap or special tap location. The pressure gauge will be a standard pressure gauge. The dial will register from 0 - 200 psi and have a dial size of 4 1/2 inches with 1-psi increments.

The hydrostatic test, pressure requirement for an acceptable test will be a maximum pressure drop of 2 psi during the last hour of the two-hour pressure test. If this test requirement cannot be met, the Contractor will investigate the cause, make corrections, and retest until the pressure drop requirement can be met.

Only if several consecutive tests indicate a consistent pressure drop and only after the Contractor has made numerous attempts to resolve the problem, acceptable to the Engineer, may the Contractor request in writing and the Engineer consider the use of the leakage test. The leakage test may be performed by the Contractor to determine the magnitude of the leak, however, meeting the leakage allowance will not automatically be considered acceptance, in lieu of the pressure test, for the section being tested. Final acceptance will be at the discretion of the Engineer.

When allowed, the leakage test will be performed in accordance with AWWA C-600, Section 4.1.5, 4.1.6 and the line will be accepted as per Section 4.1.7.

Operational Testing will be conducted as follows:

At the completion of the project and in the presence of the Engineer and the Contractor, representatives of the Owner will operate all valves, hydrants, and water services to ascertain that the entire facility is in good working order; that all valve boxes are centered and valves are opened; that all hydrants operate and drain properly; that all curb boxes are plumb and centered; and that water is available at all curb stops.

Disinfection Testing:

Before being placed in service, the completed water main will be disinfected. Disinfection materials and procedures, and the collection and testing of water samples, will be in accordance with the provisions of AWWA C-651. After the final flushing the water will be tested for bacteriologic quality and found to meet the standards prescribed by the Minnesota Department of Health.

Samples will be taken and tested after 24 and 48 hours of disinfection. Both tests must be returned with passing results prior to approval for service.

Where an existing water main is cut for the installation of any fitting, the pipe and fittings proposed to be installed will be disinfected prior to installation as follows:

The interior of the pipe and fittings will be cleaned of all dirt and foreign material.

The interior of the pipe and fittings will be thoroughly swabbed or sprayed with a 1 percent minimum hypochlorite solution.

Unless otherwise indicated in the Plans, Specifications, and Special Provisions, the Contractor will furnish all materials and perform the disinfecting, flushing, and testing as necessary for meeting the water quality requirements.

The flushing operations and the form of chlorine and method of application to be used will be subject to approval by the Engineer.

Consultant:

Project:

Revision:

No.:
Drawn: **bjj**
Project Manager:
Project Status: **CD**
Sheet Title:

Date: **9/4/25**
Checked:
Date: **9/4/25**

Sheet No.:
C9

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.

Eric J. Johnson

Reg. No. 42744

515 South Washington Ave. Albert Lea, MN 55073-373-4876

Engineers + Surveyors

JONES
HAUGH
SMITH

ENDLESS
ADVENTURES

