

Information for: File # 2014-03274-RQM

Applicant: City of Long Prairie

Corps Contact: Robert Maroney

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Phone: (651) 290-5766

Primary County: Todd County, Minnesota

Section, Township, Range: Sections: 1 & 12, T129N, R30W; Sections: 7 & 18, T129N, R29W.

Information Complete On: 28 September 2015

Posting Expires On: 8 October 2015

Authorization Type: LOP-05-MN

This application is being reviewed in accordance with current practices for documenting Corps jurisdiction under Section(s) 9 & 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act.

We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are subject to Corps of Engineers jurisdiction under Section(s) 9 & 10 of the Rivers and Harbors Act of 1899 and/or Section 404 of the Clean Water Act. If an approved jurisdictional determination is completed as part of the review process for this application, a copy will be posted on the St. Paul District web page at the following link:

<http://www.mvp.usace.army.mil/Missions/Regulatory.aspx>

PROJECT DESCRIPTION AND PURPOSE:

Project Purpose

The purpose of the CentraCare expansion in Long Prairie, Minnesota is to serve a growing community with a modern assisted living facility and hospital. As part of the CentraCare Hospital Addition in Long Prairie, MN, the City of Long Prairie is constructing an access road to the facility. The proposed access road will provide vehicle access to the facilities, including emergency vehicle access.

Project Description

As part of the CentraCare Hospital Addition in Long Prairie, MN, the City of Long Prairie is constructing an access road to the facility. The development will consist of an assisted living facility to be built first and a hospital facility to be built in the future. The access road will connect to MTH 27 to the north and CSAH 12 to the south. This configuration will provide access to the facilities from two major arteries, allowing for rapid access for emergency vehicles. City utilities need to be constructed to reach the CentraCare facilities and are being constructed in conjunction with the roadway project.

Name, Area, and Types of Waters (including wetlands) Subject to Loss:

Aquatic resources impacted by this project include 2.42 acres of wetlands. Wetland community types and quantities impacted by this project are: 2.42 acres of fresh wet meadow (Type 2). Approximately 0.45 acres of wetland impact will be temporary excavation impacts associated with utility lines and approximately 1.97 acres of impact will be permanent wetland impacts associated with road construction.

Alternatives Considered:

“No-Build” Alternative – The “No-Build” alternative would not result in wetland impacts. The “No-Build” alternative is not a feasible option for this project, as the no-build alternative would not accomplish the overall project purpose. The no build alternative will be carried forward though the analysis as a baseline comparison to the other alternatives.

Alternative 1 (Figure 2) – The road alignment in Alternative 1 follows the power line right-of-way. This alternative was considered because it allows the road to follow an established easement. The road would cut across Wetland WB-01 at the western end of the wetland, splitting it, leaving a small remnant wetland. The hydrology to this wetland would most likely be insufficient to maintain the wetland as a viable aquatic resource. Therefore, the road impacts and remnant wetland would be mitigated for, leaving a total impact to Wetland WB-01 of 0.91-acres. This alignment would split Wetland WB-02, but the remnant left is large enough to maintain wetland hydrology. Impacts to Wetland WB-02 would be 1.26-acres. This option was discarded because of the large amount of wetland impacts and the right-of-way alignment forces the proposed access road onto an adjacent property.

Alternative 2 (Figure 3) – The Alternative 2 road alignment decreases wetland impacts significantly from Alternative 1. The Alternative 2 alignment swings the road as much as allowed by MnDOT standards to avoid the wetlands. Impacts to

Wetland WB-01 are minimized by swinging the road to the west, 0.71-acres of impacts. The alignment through Wetland WB-02 swings to the east, decreasing impacts to 0.89-acres. Wetland WB-02 impacts increase due to the viability of the remnant wetland left on the east side of the road. It may not receive enough hydrology in order to stay viable, therefore the entire remnant would be mitigated for, increasing impacts to 1.34-acres. This alternative was discarded for safety reasons. This access road will be used by emergency vehicles with priority patients being delivered to the medical facilities. The curves in the road cause a safety issue with emergency vehicles which maybe traveling at a higher speed then what is posted. Therefore, the preferred option is to have a road that is as straight as possible.

Compensatory Mitigation:

The applicant has proposed to debit wetland credits from a private account as compensatory mitigation for unavoidable wetland impacts associated with this project. The credits will be drawn from bank #1287 in Benton County, at a 2.5:1 ratio. Compensatory mitigation will be provided for the 1.97 acres of permanent wetland impact by debiting 4.925 standard wetland credits from this Corps approved bank.

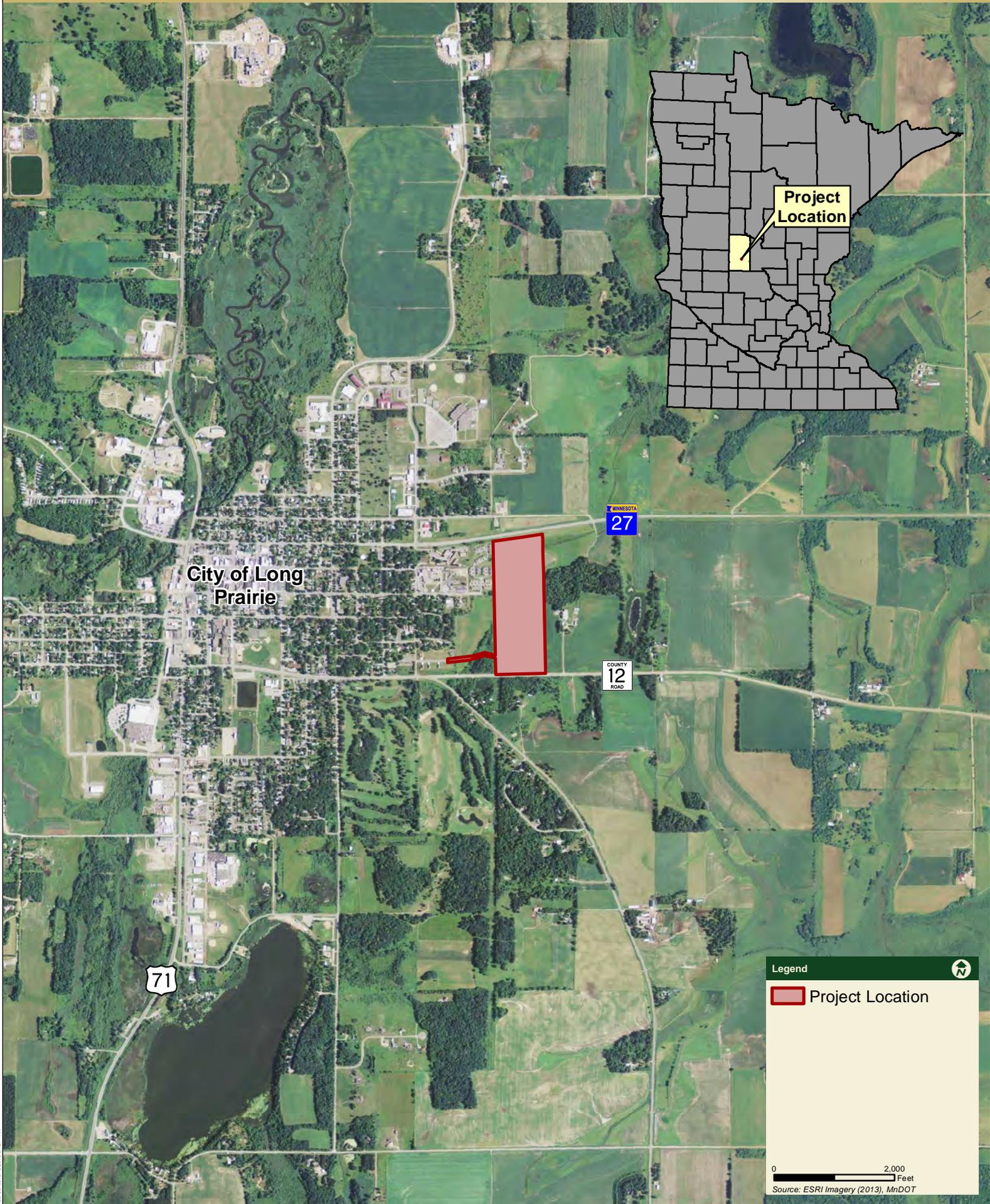
National Historic Preservation Act (Section 106)

Section 106 of the National Historic Preservation Act will be addressed in accordance with the Programmatic Agreement between the St. Paul District Army Corps of Engineers and the Minnesota State Historic Preservation Office.

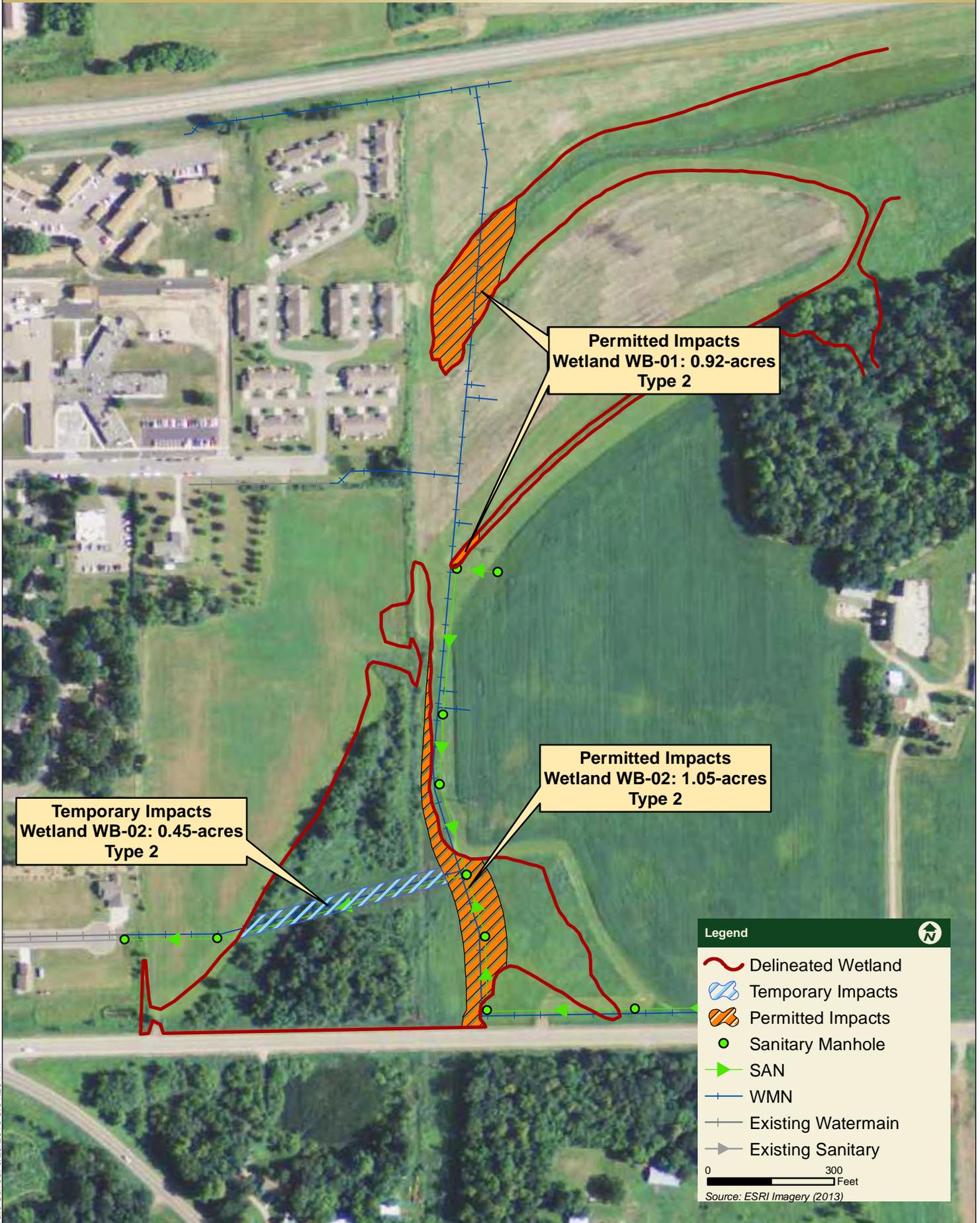
Endangered Species Act

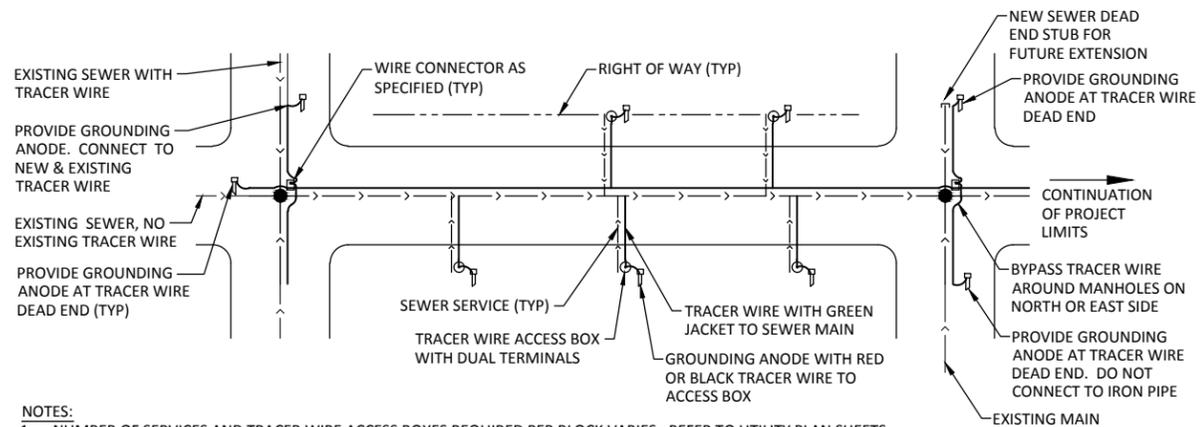
The St. Paul District Army Corps of Engineers has made a determination of "No Effect", completing the consultation requirements defined in Section 7 of the Endangered Species Act of 1973, as amended.

Drawings See attached.



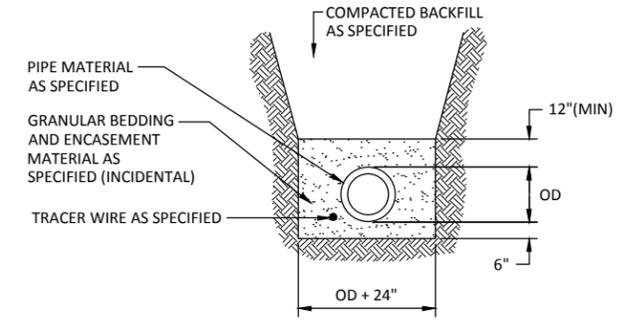
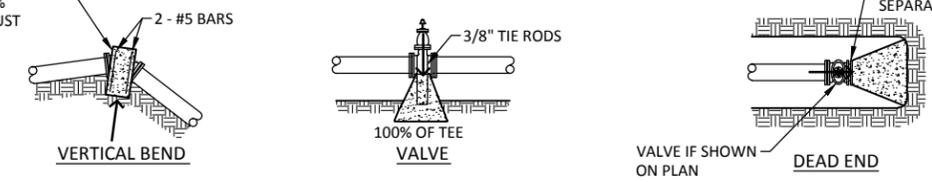
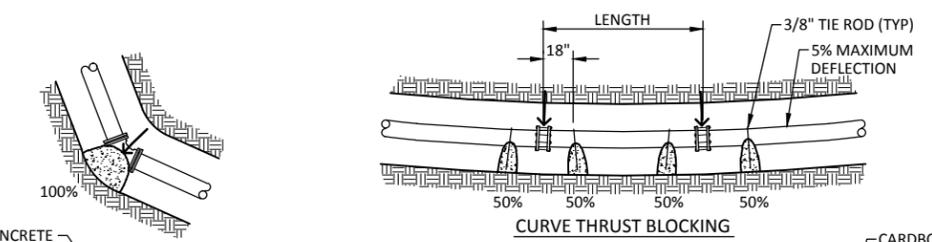
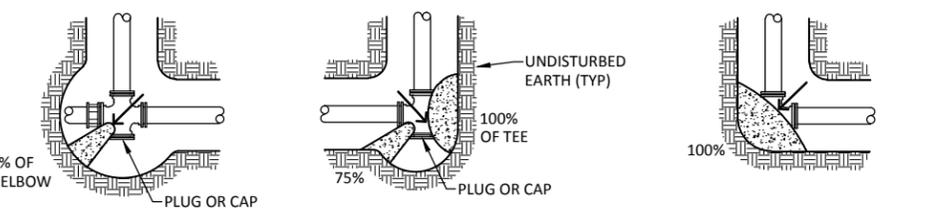
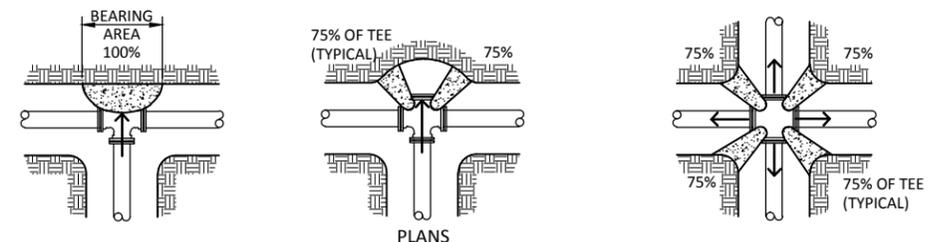
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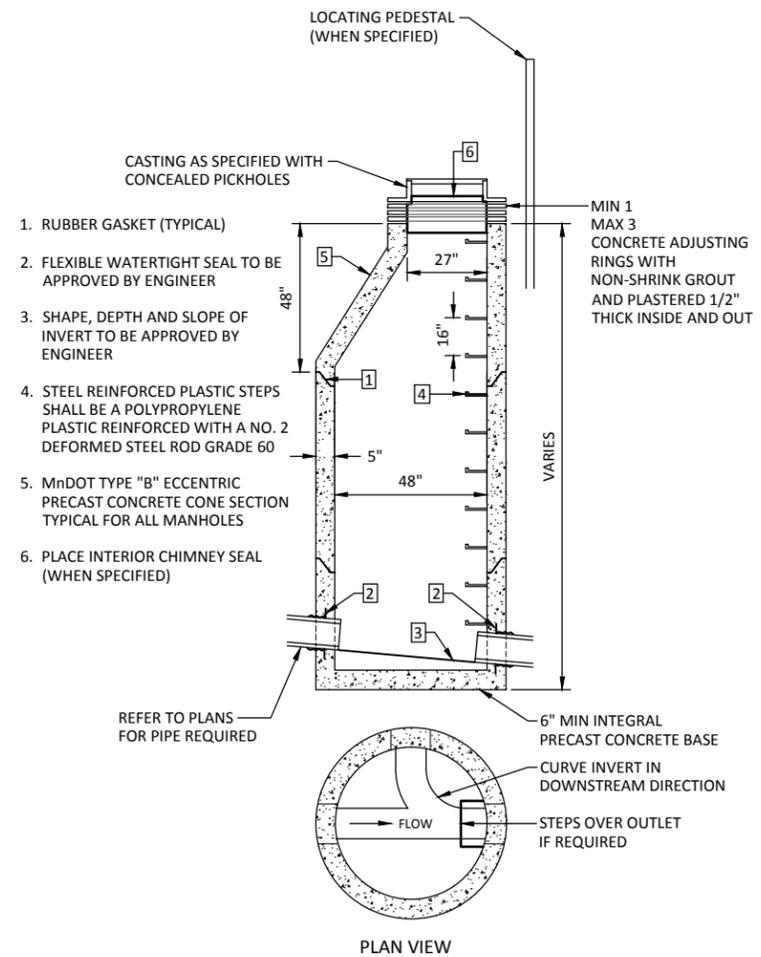


- NOTES:**
1. NUMBER OF SERVICES AND TRACER WIRE ACCESS BOXES REQUIRED PER BLOCK VARIES. REFER TO UTILITY PLAN SHEETS.
 2. EXTEND BOTH THE GREEN SEWER TRACER WIRE AND THE GROUNDING ANODE TRACER WIRE TO THE GROUND SURFACE INSIDE A TRACER WIRE ACCESS BOX. CONNECT THE TRACER WIRES TO SEPARATE TERMINALS ON THE TRACER WIRE ACCESS BOX.
 3. CONNECTIONS TO EXISTING SEWER MAINS AND TRACER WIRES VARY BY LOCATION.

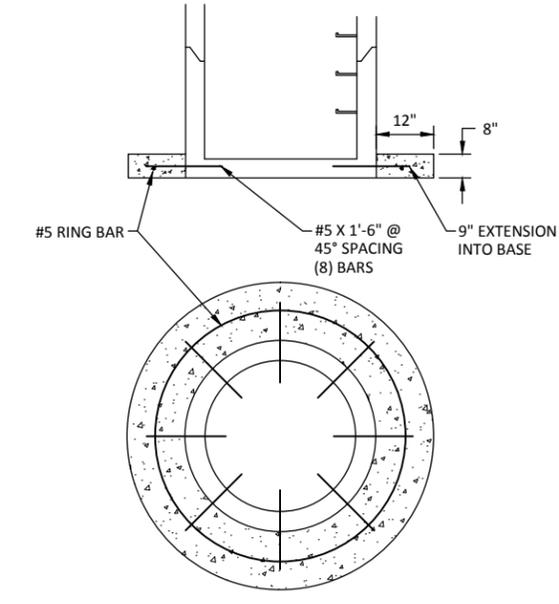
TRACER WIRE SYSTEM SCHEMATIC - SANITARY SEWER
NOT TO SCALE



NON-RIGID SANITARY SEWER TRENCH
NOT TO SCALE



SANITARY MANHOLE
NOT TO SCALE



48" MANHOLE ANTI-BUOYANCY COLLAR
NOT TO SCALE

100% BEARING AREA (SQ FT)

PIPE SIZE	DEAD END OR TEE	90° ELBOW	45° ELBOW	22 1/2° ELBOW
4	2.4	3.4	1.9	0.9
6	4.9	6.9	3.8	1.9
8	8.4	11.8	6.4	3.4
10	13.7	19.3	10.5	5.4
12	19.4	27.3	14.9	7.7
14	26.3	37.0	20.1	10.3
16	34.0	47.9	26.2	13.3
18	43.9	61.8	33.7	17.2
20	54.3	76.4	41.7	21.2
24	77.9	109.8	59.8	30.5

NOTE:
BEARING AREAS ARE BASED ON 250 LB MAXIMUM PRESSURE AND SOIL BEARING STRENGTH OF 2000 LB/SQ FT.

ARROWS () INDICATE THRUST DIRECTION

NOTES:

1. FIGURE (100%) AT THRUST BLOCK INDICATES PER CENT OF TOTAL THRUST TO BE APPLIED FOR BEARING AREA.
2. CONCRETE FOR THRUST BLOCKS TO BE 2000 PSI.
3. RESTRAINING RODS ARE REQUIRED AT ALL TEES AND AT BENDS DEFLECTING 22-1/2° OR MORE.
4. WRAP THE PIPE WITH POLYETHYLENE WRAPPING PRIOR TO POURING THE THRUST BLOCK.
5. SEE SOILS REPORT FOR BEARING STRENGTH OF SOIL. IN ABSENCE OF A SOILS REPORT, AN AVERAGE SOIL (SPADABLE MEDIUM CLAY) CAN BE ASSUMED TO HAVE A BEARING STRENGTH OF 2000 PSI.
6. THRUST BLOCKS ARE NOT REQUIRED ON PVC WITH SOLVENT WELDED JOINTS.

SIDE THRUST PER 100 LB/SQ IN PRESSURE PER DEGREE OF DEFLECTION

PIPE SIZE	SIDE THRUST-LB	PIPE SIZE	SIDE THRUST-LB
4	35	14	377
6	72	16	486
8	122	18	665
10	197	20	790
12	278	24	1150

MULTIPLY THRUST BY DEGREE OF DEFLECTION TO OBTAIN TOTAL THRUST

CONCRETE THRUST BLOCKS
NOT TO SCALE

NOTE: DETAILS ARE NOT TO SCALE

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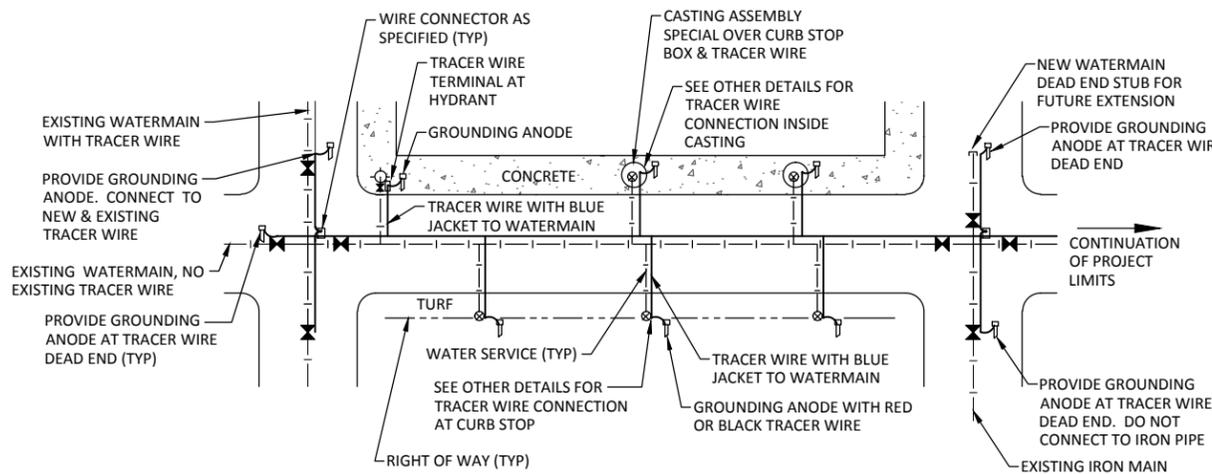
Charles W. Dewolf
CHARLES W. DEWOLF
LIC. NO. 40391 DATE 09/04/2015

DESIGNED BGD
DRAWN JJF
CHECKED KML

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AMES, IA SPENCER, IA DES MOINES, IA FARGO, ND

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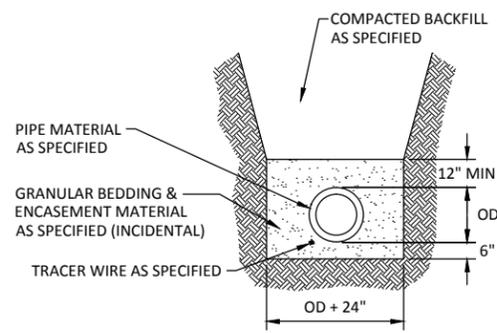
CITY OF LONG PRAIRIE, MINNESOTA
CENTRACARE STREET & UTILITY IMPROVEMENTS
DETAILS



- NOTES:
1. NUMBER OF SERVICES, CASTINGS AND TRACER WIRE ACCESS BOXES REQUIRED PER BLOCK VARIES. REFER TO UTILITY PLAN SHEETS.
 2. CONNECTIONS TO EXISTING WATERMAINS AND TRACER WIRES VARY BY LOCATION.
 3. DO NOT CAD WELD TRACER WIRE TO DUCTILE IRON PIPE.

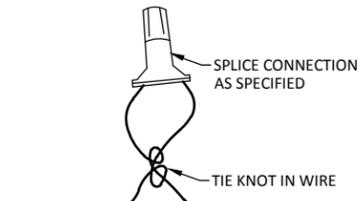
TRACER WIRE SYSTEM SCHEMATIC - WATER DISTRIBUTION

NOT TO SCALE



PVC WATERMAIN TRENCH

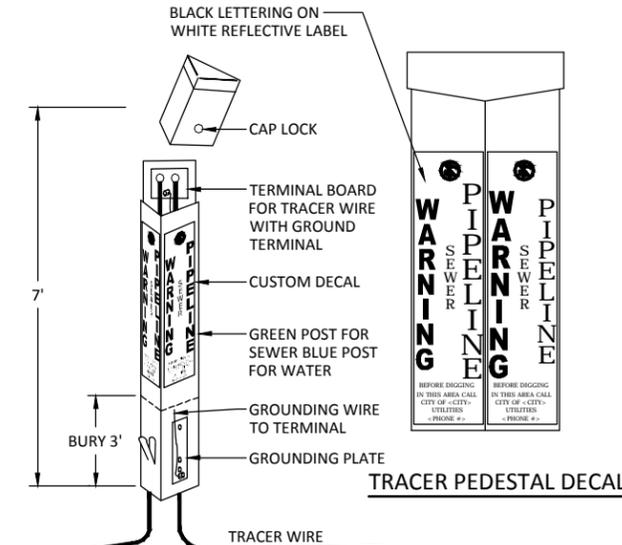
NOT TO SCALE



WHERE IN-LINE SPLICES ARE REQUIRED ALONG PIPES, THE TRACER WIRE SHALL BE KNOTTED PRIOR TO INSERTION INTO THE SPLICE CONNECTION.

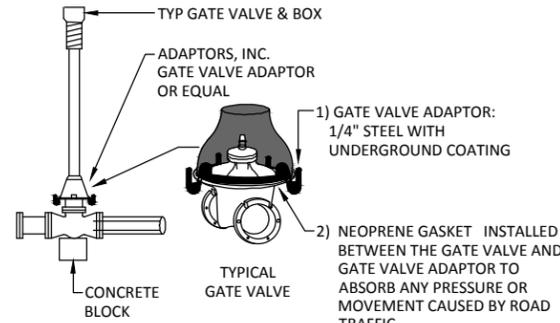
IN-LINE TRACER WIRE SPLICE

NOT TO SCALE



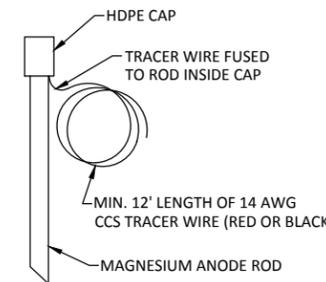
TRACER PEDESTAL/UTILITY MARKER

NOT TO SCALE



GATE VALVE ADAPTOR

NOT TO SCALE

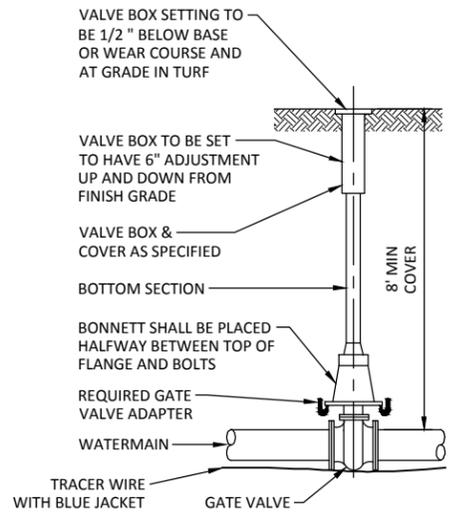


GROUNDING ANODE

NOT TO SCALE

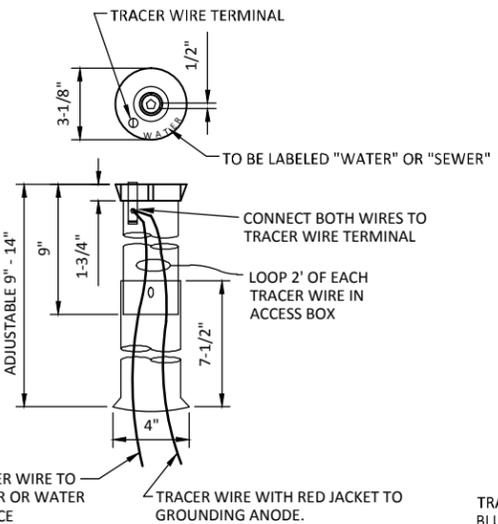
NOTE: MAGNESIUM ROD DIMENSIONS SHALL BE APPROX. 18" LONG BY 1.3" DIAM., AND APPROX. 1 LB IN WEIGHT

- NOTES:
1. VALVE BOX SHALL BE CENTERED ON OPERATING NUTS, STRAIGHT, FREE FROM DEBRIS, AND ALL SECTIONS UNBROKEN
 2. VALVES IN EASEMENTS SHALL HAVE CHANNEL POST WITNESS MARKERS WITH REFLECTIVE "GV" SIGN
 3. DEEP VALVES SHALL HAVE NUT EXTENSIONS INSTALLED TO ELEVATION TO ACCOMMODATE STANDARD 10' KEY; BOTTOM NUT SHALL BE BOLTED TO VALVE NUT AND ONLY ONE SECTION
 4. COMPACTION WITH MECHANICAL TAMPER AROUND VALVE BOX SHALL BE PLACED AND COMPACTION WITH 2' LIFTS TO ACHIEVE 95% COMPACTION
 5. GATE VALVES LOCATED WITHIN THE CONCRETE SIDEWALK SHALL INCLUDE A METAL SEPARATOR BETWEEN THE VALVE BOX AND THE CONCRETE



GATE VALVE BOX INSTALLATION

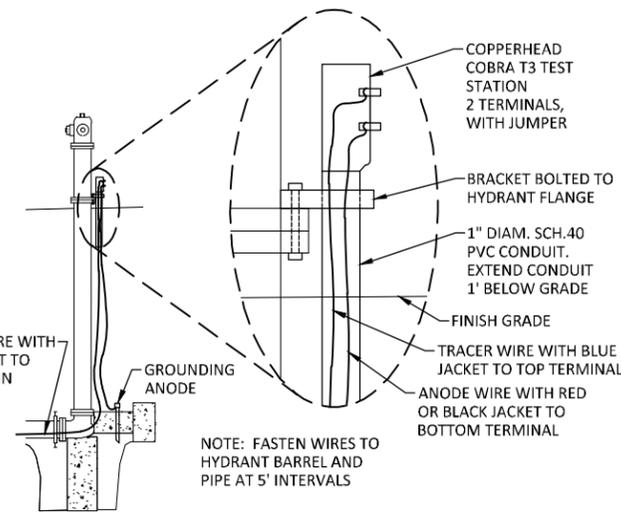
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ADJUSTABLE TRACER WIRE ACCESS BOX

NOT TO SCALE

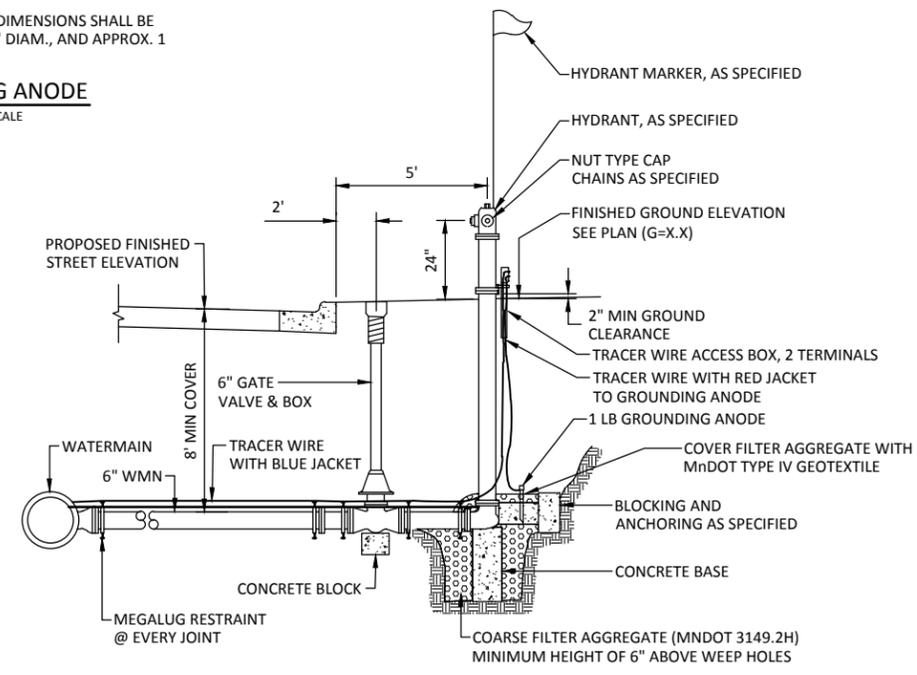
- NOTES:
1. TRACER WIRE ACCESS BOXES ARE REQUIRED NEXT TO CURB STOPS INSTALLED IN TURF AREAS. (INCIDENTAL)
 2. SEE WATER SERVICE DETAIL FOR TYPE OF GROUNDING ANODE REQUIRED.



TRACER WIRE AT HYDRANT

NOT TO SCALE

NOTE: FASTEN WIRES TO HYDRANT BARREL AND PIPE AT 5' INTERVALS



HYDRANT INSTALLATION, MEGALUGS

NOT TO SCALE

HYDRANTS LOCATED WHERE THE GROUNDWATER TABLE IS ABOVE THE DRAIN OUTLET SHALL HAVE THE OUTLET DRAIN PLUGGED AND SHALL BE EQUIPPED WITH A TAG STATING "PUMP AFTER USE"

NOTE: DETAILS ARE NOT TO SCALE

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LIC. NO. 40391 DATE 09/04/2015

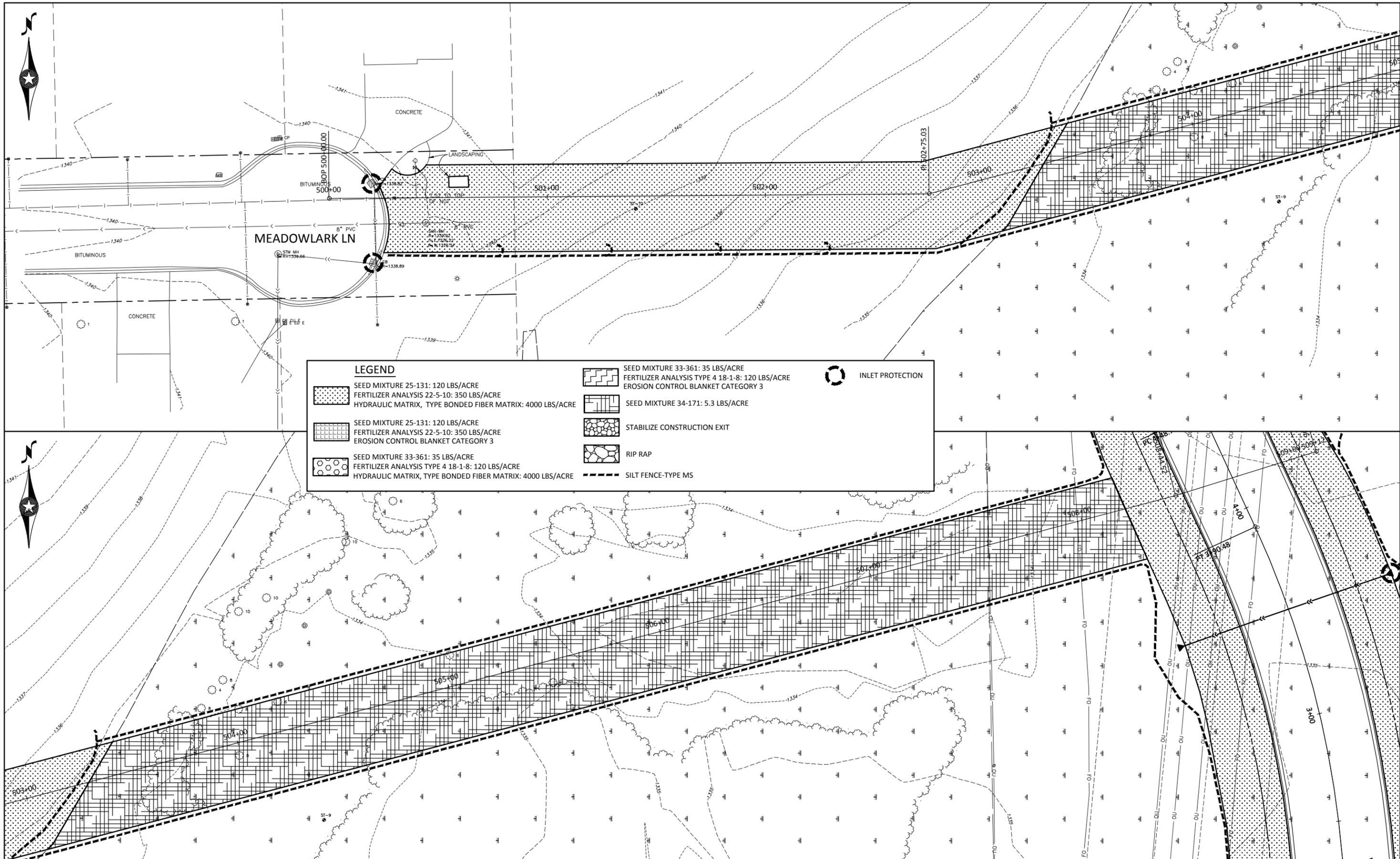
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DRAWN: JJF
CHECKED: KML

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SHEET
2.3



LEGEND

	SEED MIXTURE 25-131: 120 LBS/ACRE FERTILIZER ANALYSIS 22-5-10: 350 LBS/ACRE HYDRAULIC MATRIX, TYPE BONDED FIBER MATRIX: 4000 LBS/ACRE		SEED MIXTURE 33-361: 35 LBS/ACRE FERTILIZER ANALYSIS TYPE 4 18-1-8: 120 LBS/ACRE EROSION CONTROL BLANKET CATEGORY 3		INLET PROTECTION
	SEED MIXTURE 25-131: 120 LBS/ACRE FERTILIZER ANALYSIS 22-5-10: 350 LBS/ACRE EROSION CONTROL BLANKET CATEGORY 3		SEED MIXTURE 34-171: 5.3 LBS/ACRE		STABILIZE CONSTRUCTION EXIT
	SEED MIXTURE 33-361: 35 LBS/ACRE FERTILIZER ANALYSIS TYPE 4 18-1-8: 120 LBS/ACRE HYDRAULIC MATRIX, TYPE BONDED FIBER MATRIX: 4000 LBS/ACRE		RIP RAP		SILT FENCE-TYPE MS



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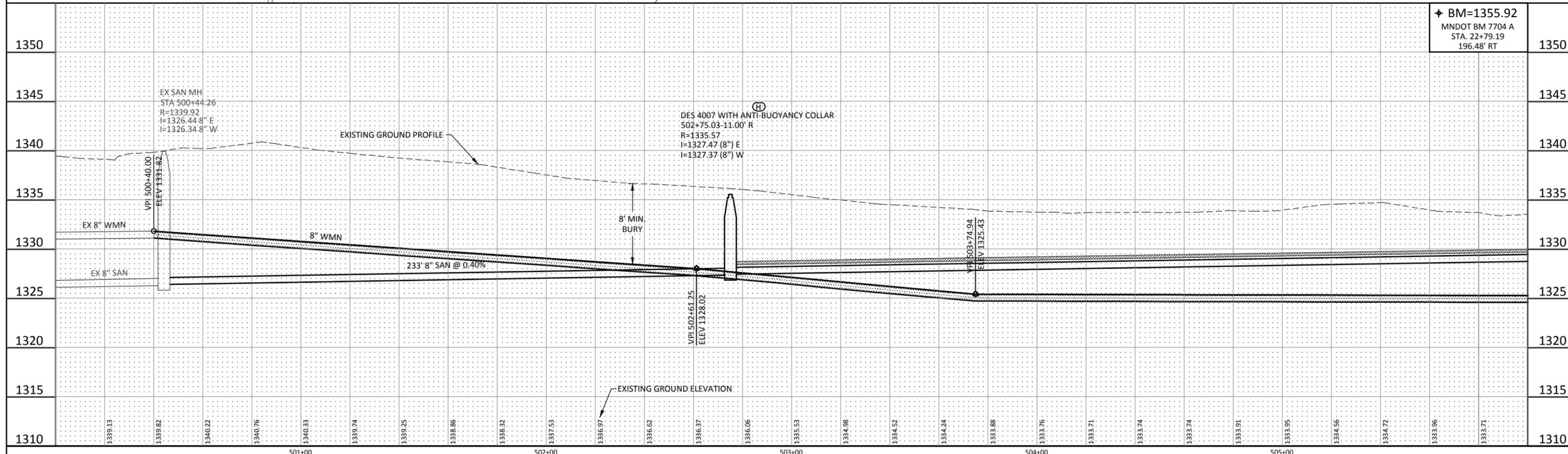
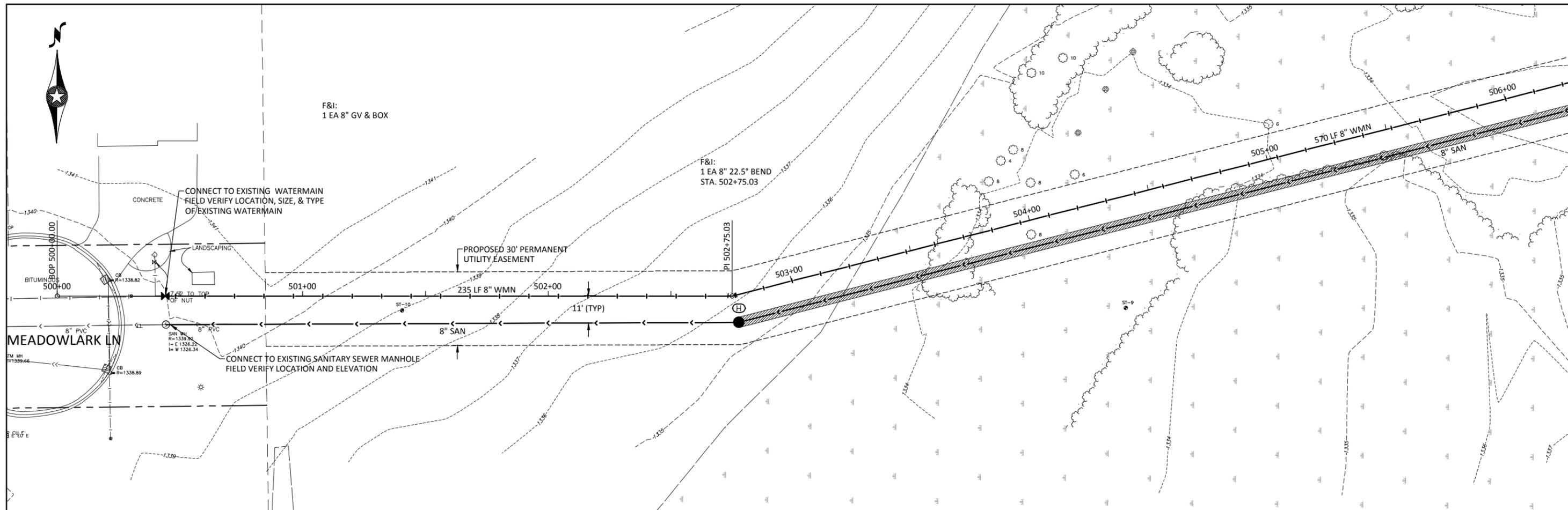
CITY OF LONG PRAIRIE, MINNESOTA
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 SWPPP - MEADOWLARK LANE & WETLAND

SHEET
4.5

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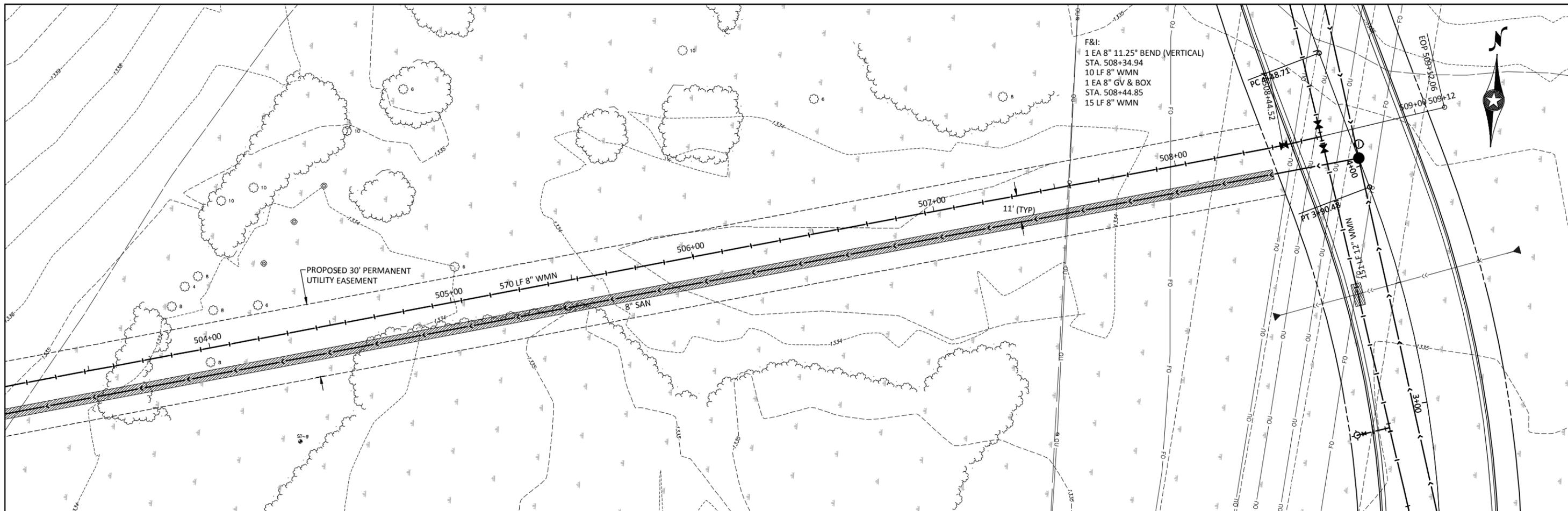


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REV.	BY	DATE																

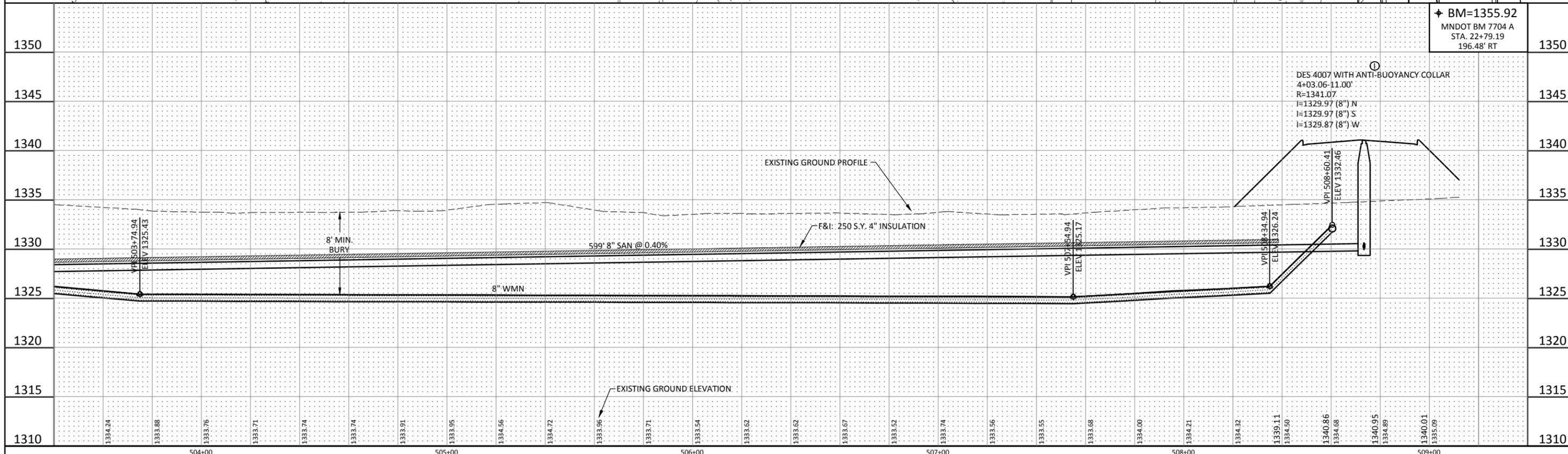


<p>0 20 40 SCALE FEET</p> <p>0 5 10 SCALE FEET</p>	<p>I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.</p> <p><i>Charles W. DeWolf</i> CHARLES W. DEWOLF LIC. NO. 40391 DATE 09/04/2015</p>	<p>DESIGNED BGD DRAWN JJF CHECKED KML</p>	<p>BOLTON & MENK, INC. Consulting Engineers & Surveyors MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN BURNSVILLE, MN WILLMAR, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA DES MOINES, IA FARGO, ND</p>	<p>REV. BY DATE</p>	<p>CITY OF LONG PRAIRIE, MINNESOTA CENTRACARE STREET & UTILITY IMPROVEMENTS UTILITY PLAN & PROFILE - MEADOWLARK LANE</p>	<p>SHEET 6.1</p>
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F&I:
 1 EA 8" 11.25° BEND (VERTICAL)
 STA. 508+34.94
 10 LF 8" WMN
 1 EA 8" GV & BOX
 STA. 508+44.85
 15 LF 8" WMN



BM-1355.92
 MNDOT BM 7704 A
 STA. 22+79.19
 196.48' RT

DES 4007 WITH ANTI-BUOYANCY COLLAR
 4+03.06-11.00'
 R=1341.07
 I=1329.97 (8") N
 I=1329.97 (8") S
 I=1329.87 (8") W



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UTILITY PLAN & PROFILE - WETLAND				