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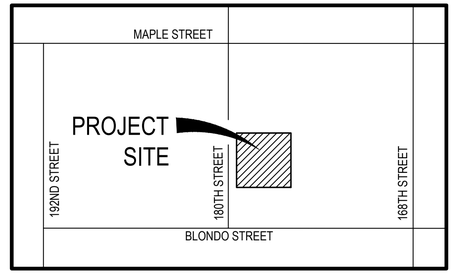
ANDRESEN MEADOWS

STORM SEWER EXTENSION - N 179TH STREET
OPW 54639 PROJECT TYPE: ST

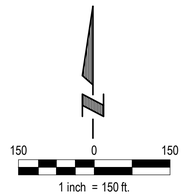
Located in the SW 1/4 of Section 9, Township 15N, Range 11E, of the 6th P.M.
SID NO. 555
DOUGLAS COUNTY, NEBRASKA



VICINITY MAP

APPROXIMATE BID QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT	
1	CLEARING & GRUBBING - GENERAL	1	LS	
2	REPAIR SPRINKLER SYSTEM - GENERAL (BY OTHERS)	4	EA	
3	INSTALL STRAW WATTLE	293	LF	
4	CONSTRUCT TYPE I CURB INLET	2	EA	
5	CONSTRUCT 72" STORM MANHOLE (1)	6.4	VF	
6	TAP EXISTING STORM MANHOLE	1	EA	
7	CONSTRUCT 15" RCP, CLASS III	364	LF	243 (3)
8	FULL DEPTH SAW CUT EXISTING PAVEMENT	414	LF	
9	REMOVE AND REPLACE CURB RAMP	40	SF	
10	REMOVE AND REPLACE DETECTABLE WARNING PANEL (1)	8	SF	
11	REMOVE AND REPLACE IMPRINTED SURFACING	111	SF	
12	REMOVE AND REPLACE SIDEWALK	1,079	SF	
13	REMOVE AND REPLACE DRIVEWAY	983	SF	
14	REMOVE AND REPLACE 7" PCC WITH INTEGRAL CURB AND GUTTER	194	SY	
15	INSTALL TIE BARS	44	EA	
16	RELOCATE LIGHT POLE (BY OTHERS)	1	EA	
17	INSTALL SODDING	244	SY	
18	ADJUST WATER MAIN (BY OTHERS)	1	EA	(3)
19	ADJUST GAS MAIN (BY OTHERS)	1	EA	
A	REMOVE 15" RCP	48	LF	
B	ADJUST GAS SERVICE LINES (BY OTHERS)	4	EA	
C	ADJUST WATER SERVICE LINES (BY OTHERS)	2	EA	
D	INSTALL BENTOMAT CLAY LINER	10	LF	



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER
2	NOTES & DETAILS
3	TOPOGRAPHIC SURVEY - N HWS CLEVELAND & N 179TH STREET
4	TOPOGRAPHIC SURVEY - CORBY STREET & N 179TH STREET
5	STORM - PLAN - N HWS CLEVELAND BOULEVARD & N 179TH STREET
6	STORM - PROFILE - N HWS CLEVELAND BOULEVARD & N 179TH STREET
7	STORM - PLAN - CORBY STREET & N 179TH STREET
8	STORM - PROFILE - CORBY STREET & N 179TH STREET

BENCHMARK:

BENCHMARK #1: CHISELED "X", SOUTH RIM OF A CURB INLET MANHOLE, FIRST CURB INLET EAST OF 179TH STREET ON THE SOUTH SIDE OF NORTH HWS CLEVELAND BOULEVARD. BOOK 4401, PAGE 31.
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ELEV: 1,166.71'

PROJECT INFORMATION

OPW 54639 (Project Number Assigned by PWD)	OMA-20110702-1209-1 (Grading Permit Project Number Assigned by PWD)	555 (SID Number)	10/1/2023 (Estimated Start Date)	12/1/2023 (Estimated Completion Date)
Storm Sewer Extension - N 179th Street (Project Name)	Andresen Meadows (Subdivision Name)			
N 179th Street and N HWS Cleveland Boulevard (Address)	Omaha (City)	NE (State)	68116 (Zip Code)	
X (City Council Resolution Number Granting Project Approval)	X (City Council Ordinance Number Granting Project Approval)	X (City Council Resolution/Ordinance Approval Date)		

PROJECT DESCRIPTION

This project is the construction of storm sewer extension.

APPLICANT
Douglas County SID 555
Adam Kratky
11440 West Center Road
Omaha, NE 68144
P: 402.334.0700
F: 402.334.0815
akratky@clpchem.com

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twooten@eacg.com

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CONTRACTOR
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dustin.wallis@armodus.com

OPW 54639 PROJECT TYPE: ST

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State of NE Certificate of Authorization #CA0008

E & A CONSULTING GROUP, INC.
Engineering Answers

ANDRESEN MEADOWS
STORM SEWER EXTENSION - N 179TH STREET
SID 555
DOUGLAS COUNTY, NEBRASKA

COVER

PROFESSIONAL CIVIL ENGINEER
TERESA M. WOOTEN
E-15787
2/14/2025
STATE OF NEBRASKA

Revisions			
No.	Date	Description	
1	10/16/2023	Pages 6 & 7	
2	5/21/2024	Pages 3, 4, 6, & 8	
3	2/14/2025	Pages 1, 3 & 5 - 8	

Proj No:	P2011.112.009
Date:	9/5/2023
Designed By:	JJN
Drawn By:	JJN
Scale:	AS SHOWN
Sheet:	1 of 8

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GENERAL NOTES

1. All project procedures, materials, bonds and reserves shall conform to the City of Omaha's Standard Specifications for Public Works Construction, dated 2020 ("Standard Specifications"). It is the responsibility of the CONTRACTOR to be aware of the contents of the Standard Specifications. The Standard Specifications can be found at: https://publicworks.cityofomaha.org/contractors-consultants2/contractors/standard-plates-curb-ramps-and-specifications

2. References to "Standard Plates" refers to the City of Omaha's 2020 Standard Plate list. These Standard Plates can be found at: https://publicworks.cityofomaha.org/2018-standard-plate-list

   The CONTRACTOR is referred to the following Standard Plates for use on this project:

PLATE NO.	DESCRIPTION	REVISION DATE
503-01	Sidewalk Construction	11/21/2019
503-02	Sidewalk Location	11/21/2019
504-01-(1&3)	Concrete Curb Ramps (2 Sheets)	02/11/2019
700-05	Cast Iron Manhole Rings and Covers	02/11/2019
701-01-(1-3)	Sewer Bedding	03/30/2020
702-07	Ring and Beehive Grate	02/11/2019
702-09-(1&3)	Curb Inlets	03/19/2020
702-09-(5)	Curb Inlets	06/17/2020
702-10	Reinforced Concrete Curb Inlet with Face Armor	02/11/2019
702-11	Storm Sewer Manhole	03/19/2020

3. Barricades shall conform to the Omaha Public Works "Barricading Standards, Specifications, Methods and Materials", and/or the "Manual on Uniform Traffic Control Devices", and any additions thereto. The aforementioned publications can be found at https://publicworks.cityofomaha.org/images/PDF/Barricading-Standards-Specs-Methods-and-Materials.pdf and https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/pdf_index.htm

4. The time limit to complete the work is listed on the Proposal in the Specifications.

5. The INSPECTOR shall ensure the CONTRACTOR adheres to and meets all construction specifications and plans; maintenance, safety, workmanship, and testing requirements; and applicable regulatory compliance issues.

6. Approval shall be obtained from the City of Omaha Public Works Department for all applicable public improvements prior to the commencement of construction. The CONTRACTOR shall check with the INSPECTOR for City of Omaha Public Works Department approval of the project before starting work.

7. The CONTRACTOR and INSPECTOR shall ensure all impacted government agencies (City of Omaha, Douglas County, State of Nebraska, Corps of Engineers, Papio-Missouri River Natural Resource District, United States Federal Government, etc.) have granted all applicable permission to proceed with construction prior to mobilization. Furthermore, 48 hours prior to the commencement of construction, the INSPECTOR shall notify all concerned parties that work will be proceeding within each impacted government agency jurisdictional boundary.

8. Construction found to be unacceptable to the City of Omaha Public Works Department shall be removed and replaced at the CONTRACTOR's expense.

9. The INSPECTOR shall notify the following City of Omaha Public Works Department personnel 48 hours prior to all preconstruction meetings and 48 hours prior to the start of any construction: Matt Grosse (Phone: 402-444-5282; email: matthew.grosse@cityofomaha.org) and Traffic Maintenance (Phone: 402-444-5160).

10. The INSPECTOR shall submit weekly progress reports to the following City of Omaha Public Works Department employee no later than the following week ending date: Matt Grosse (Phone: 402-444-5282; email: matthew.grosse@cityofomaha.org).

11. The INSPECTOR shall notify the following City of Omaha Public Works Department personnel 48 hours prior to lane closures and 24 hours prior to lane restrictions: Matt Grosse (Phone: 402-444-5282; email: matthew.grosse@cityofomaha.org) and Traffic Maintenance (Phone: 402-444-5160).

12. All operations conducted on the premises, including the warming-up, repair, arrival, departure, or running of trucks, earthmoving equipment, construction equipment, and any other associated equipment shall be limited to the period between 7:00 A.M. and 6:00 P.M. Monday thru Friday; and, no earthmoving or grading operations shall be conducted on the premises on Saturdays or Sundays or legal holidays, unless waived by the INSPECTOR and the City of Omaha Public Works Department.

13. The CONTRACTOR shall notify all impacted utility companies via One Call (dial 811 or 800-331-5666) 48 hours before work is started to verify utility locations.

14. The existence and location of any overhead or underground utility lines, pipes, or structures shown on these plans are obtained by a research of the available records. Existing utilities are approximate and for record purposes. Existing utilities are located on plans only for the convenience of the CONTRACTOR. Existing utility service laterals may not be shown on the plans. The CONTRACTOR shall locate all underground and overhead interference's which may affect his operation during construction and shall take all necessary precautions to avoid damage to same.

15. The CONTRACTOR shall take all precautionary measures necessary to protect existing utility lines, structures and street improvements which are to remain in place, from damage, and all such improvements or structures damaged by the CONTRACTOR'S operations shall be repaired or replaced satisfactory to the INSPECTOR and owning utility company at the expense of the CONTRACTOR.

16. All construction shall be as shown on these plans. Any revisions shall have the prior written approval of the DESIGNER and City of Omaha Public Works Department.

17. Construction may require the disturbance of existing drainage and erosion control measures. The CONTRACTOR shall make himself aware of the existing drainage and erosion control measures prior to bidding this work. A copy of the Grading and Erosion Control Plan OMA-20110702-1209-1 is available for review at the office of the DESIGNER and INSPECTOR. The function of these items must be maintained throughout construction with emphasis placed on restoring their integrity prior to any rainfall event. Erosion control improvements have been constructed on this site, including terraces, silt fencing, and temporary sediment basins. The CONTRACTOR shall be responsible for prompt reconstruction of any erosion control improvements disturbed by his operations. All disturbed erosion control improvements shall be fully reconstructed at the end of each working day prior to leaving the site.

18. Elevations are referenced to U.S.G.S. Datum.

19. CONTRACTOR shall adjust all new and existing inlets, valve boxes, manhole rims, and sewer clean outs, etc. to finish grade as applicable whether or not they are shown on the plans.

20. The CONTRACTOR must adhere to good housekeeping best management practices at all times. Good housekeeping best management practices focus on keeping the work site clean and orderly while handling materials and waste in a manner that eliminates the potential for pollutant runoff.

GENERAL NOTES

21. The construction documents (e.g., Contract, Bond, Insurance, Specifications, and Plans) are essential and a requirement in one part is as binding as though occurring in all. Thus, the construction documents are complementary in nature. The documents describe and provide the complete construction project. The CONTRACTOR may not take advantage of any apparent construction project errors or omissions. The CONTRACTOR shall notify the INSPECTOR promptly of any omissions or errors. In the case of a discrepancy between parts of the construction documents, the most stringent construction methodology shall rule.

22. The CONTRACTOR shall be responsible for coordinating their work with the Engineer in requesting line stakes and grades. The Owner will not be responsible for delays due to lack of grades or line stakes.

23. The CONTRACTOR shall be charged for replacing construction stakes and lot pins which are destroyed by his operations.

24. The CONTRACTOR is hereby referred to Subsection 100.03-E of the Standard Specifications relative to cleaning of the work area. The final estimate will not be processed until the Contractor has satisfactorily cleaned and flushed the pavement slab of all rubbish, excess material, mud and debris, and all parts of the work area have been left in a neat and presentable manner. All disturbed right-of-way areas shall be restored to a level and smooth section prior to acceptance of the work.

25. The CONTRACTOR shall place silt fence as shown and as directed by the Engineer to prevent sediment from leaving the construction site.

STORM SEWER CONSTRUCTION NOTES

1. The storm sewer system (pipe, manholes, inlets, special structures, etc,) shall be placed, compacted, and backfilled in accordance with the Standard Specifications.

2. PCC manholes, inlets, appurtenances, and special structures meeting all City of Omaha Specifications for Public Works Construction shall be used for storm sewer construction.

3. The CONTRACTOR shall ensure all storm sewer lines, manholes, and inlets are cleaned of debris (leaves, stone, dirt, construction material, etc.) prior to the APPLICANT taking ownership.

4. PCC pipe meeting the Standard Specifications shall be used for storm sewer construction.

5. The CONTRACTOR shall ensure all storm sewer pipe used for construction has been certified by the American Concrete Pipe Association (ACPA). All pipe must display the Q-CAST symbol to verify the manufacturer has met the ACPA's certification program. Visual inspections for defects shall continue to take place on the site.

6. No storm sewer service connections to any private lot shall be permitted prior to final acceptance by the City of Omaha Construction Division, Matt Grosse (Phone: 402-444-5282; email: matthew.grosse@cityofomaha.org), which shall include approved rectification of all punch list items and the submittal of mylar as-built drawings.

7. All inlet structures will be located in the field by the Engineer.

8. Additional crushed rock bedding for the sewers shall be placed at locations where unstable trench bottom conditions are encountered in accordance with Subsection 700.03-H of the Standard Specifications, as approved by the Engineer per Standard Plate 701-01. The cost of necessary crushed rock bedding will be paid at $25.00 per ton installed.

9. All storm sewer pipe shall be bedded with rock bedding in accordance with Standard Plate 701-01. Soil bedding is not acceptable. The cost of the crushed rock for pipe bedding shall be subsidiary to the cost of the pipe.

10. Joints for storm sewer pipes are required to have a fabricated gasket or bitumastic sealant.

11. All storm sewers are required to be video inspected. See Standard Specifications. All video inspection shall be paid by the Owner.

PAVEMENT CONSTRUCTION NOTES

1. The paving system (concrete or asphalt pavement, reinforcing, subgrade, signage, striping, etc) shall supplied and installed in accordance with the Standard Specifications.

2. Concrete for the pavement slab shall be 7" thick concrete class *"L65"* air-entrained concrete made from Type 1 Portland Cement in accordance with the Standard Specifications unless otherwise shown on plans.

3. All integral curbs shall be Type *"C"* in accordance with City of Omaha Standard Plate 502-01 unless otherwise shown on plans.

4. Water-reducing admixture shall be added to all hand-placed and finished concrete.

5. Street return radii are 25 feet unless noted otherwise on the plans.

6. All pavement removals shall be saw cut. Pavement shall be removed in complete panels. Pavement removal limits may be adjusted in the field to match existing joints.

7. If adverse weather conditions occur and paving subgrade becomes too wet for the CONTRACTOR to work and meet the requirements of the Standard Specifications, the ENGINEER shall determine and direct the CONTRACTOR to use a fly ash stabilized subgrade. The rate and installation requirements shall be determined by the Geotechnical ENGINEER to be appropriate for the project conditions. CONTARCTOR shall be paid for the actual cost of the materials plus five percent (5%) and shall be paid for the actual cost of labor and equipment necessary to place and work the fly ash into the subgrade.

8. Concrete thickened edges per Standard Plate 501-01 and 501-02 are required at locations where proposed paving ties into existing paving. Thickened edges shall not be paid for directly, but shall be subsidiary to items for which payment is made. Tie bars shall be required as directed by the ENGINEER. .

9. A diamond edge saw blade shall be used for cutting all required contraction and longitudinal pavement joints.

10. Under no conditions will heavy equipment be allowed on concrete paving without proper planking or bridging, and then only with the approval of the ENGINEER.

11. The CONTRACTOR shall construct ADA compliant curb ramps at all intersection returns where new sidewalk is constructed, as well as where existing sidewalk has been removed. All ADA compliant curb ramps shall conform to Standard Plate 504-01 and the City of Omaha's Curb Ramp Design Guidelines. These guidelines can be found at https://publicworks.cityofomaha.org/curb-ramp-design-guidelines. The CONTRACTOR shall have the INSPECTOR check the curb ramp forms for compliance prior to paving. Detectable Warning Panels shall be selected from the list of approved products and shall be a natural unfinished cast iron. The approved products list can be found at https://publicworks.cityofomaha.org/contractors-consultants2/contractors/standard-plates-curb-ramps-and-specifications/2-uncategorized/2623-detectable-warning-panels-for-ada-concrete-curb-ramps

12. Curb drops to accommodate the future construction of ADA accessible curb ramps (which are not included in this contract) shall be constructed at all radius returns per Standard Plate 504-01. Curb drops shall not be paid for directly, but shall be subsidiary to items for which payment is made.

13. Any existing manholes within the right-of-way shall be adjusted to match final grade after paving. For existing manholes with frame seals, the external frame seals shall be removed and reinstalled after paving operations. Adjustment to grade of any storm sewer manholes constructed under this contract shall be subsidiary to manhole construction.

14. All manhole, inlet, and valve covers within or nearby the paving area shall be removed or covered prior to placing pavement to avoid excess damage and concrete slop. Covers that cannot be cleaned and restored to like new condition shall be replaced at the CONTRACTORS expense.

15. The pavement shall be open for use in accordance with Section 500.03-O of the Standard Specifications.

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NOTES & DETAILS

PROFESSIONAL CIVIL ENGINEER
TERESA M. WOOTEN
E-15787
9-5-2023
STATE OF NEBRASKA

No.	Revisions	Date
1	Description	

Proj No: P2011.112.009
Date: 9/5/2023
Designed By: JJN
Drawn By: JJN
Scale: AS SHOWN
Sheet: 2 of 8

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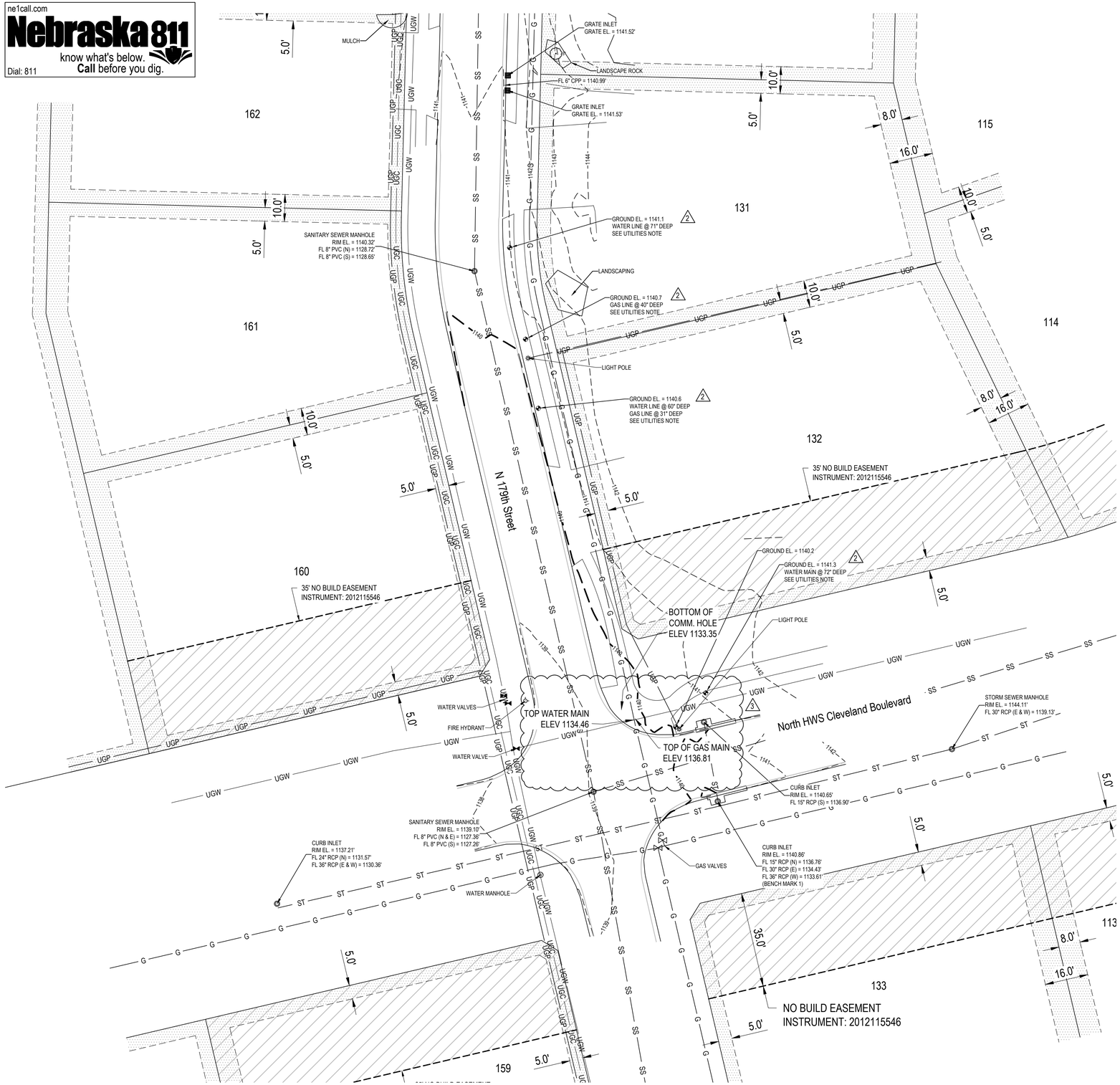

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1 inch = 20 ft.

LEGEND

NOTE: FOR REFERENCE ONLY, ITEMS DEPICTED IN LEGEND MAY NOT APPEAR ON PLANS.

- LIGHT POLE
- FIRE HYDRANT
- UTILITY VALVE (WATER)
- WATER MANHOLE
- UTILITY VALVE (GAS)
- MANHOLE
- CURB INLET
- SIGN
- G — G — GAS LINE
- UGW — UGW — WATER LINE
- UGP — UGP — POWER LINE (UNDER GROUND)
- UGC — UGC — COMMUNICATION LINE (TELEPHONE, TV)
- SS — SS — SANITARY SEWER LINE
- ST — ST — STORM SEWER LINE
- 1120 — EXISTING CONTOURS

HATCH LEGEND

- PLAT DEDICATED UTILITY EASEMENT INSTRUMENT: 2012115546
- 35.0' NO BUILD EASEMENT INSTRUMENT: 2012115546

UTILITIES NOTE:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM OBSERVED EVIDENCE TOGETHER WITH EVIDENCE FROM PLANS OBTAINED FROM UTILITY COMPANIES OR PROVIDED BY CLIENT, AND MARKING BY UTILITY COMPANIES AND OTHER APPROPRIATE SOURCES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE, IN WHICH CASE THE SURVEYOR SHALL NOTE ON THE PLAT OR MAP HOW THIS AFFECTED THE SURVEYOR'S ASSESSMENT OF THE LOCATION OF THE UTILITIES.

DEPTH OF UTILITY MEASUREMENTS FOUND VIA POTHOLING AND PROVIDED BY CONTRACTOR.

BENCHMARK:

BENCHMARK #1:	CHISELED "X", SOUTH RIM OF A CURB INLET MANHOLE. FIRST CURB INLET EAST OF 179TH STREET ON THE SOUTH SIDE OF NORTH HWS CLEVELAND BOULEVARD. BOOK 4401, PAGE 31.
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TOPOGRAPHIC SURVEY - N HWS CLEVELAND & N 179TH STREET

PROFESSIONAL CIVIL ENGINEER
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No.	Revisions	Date
1	Description	
2	Potholing information	5/21/2024
3	Potholing information	2/14/2025

Proj No:	P2011.112.009
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Sheet:	3 of 8

Jeremy Nichols 2/14/2025 2:20 PM \\EACG-fs\Revizers\Projects\2011\112\p09\engineering\cad files\03mn Sewer\03mn Extension-000.dwg

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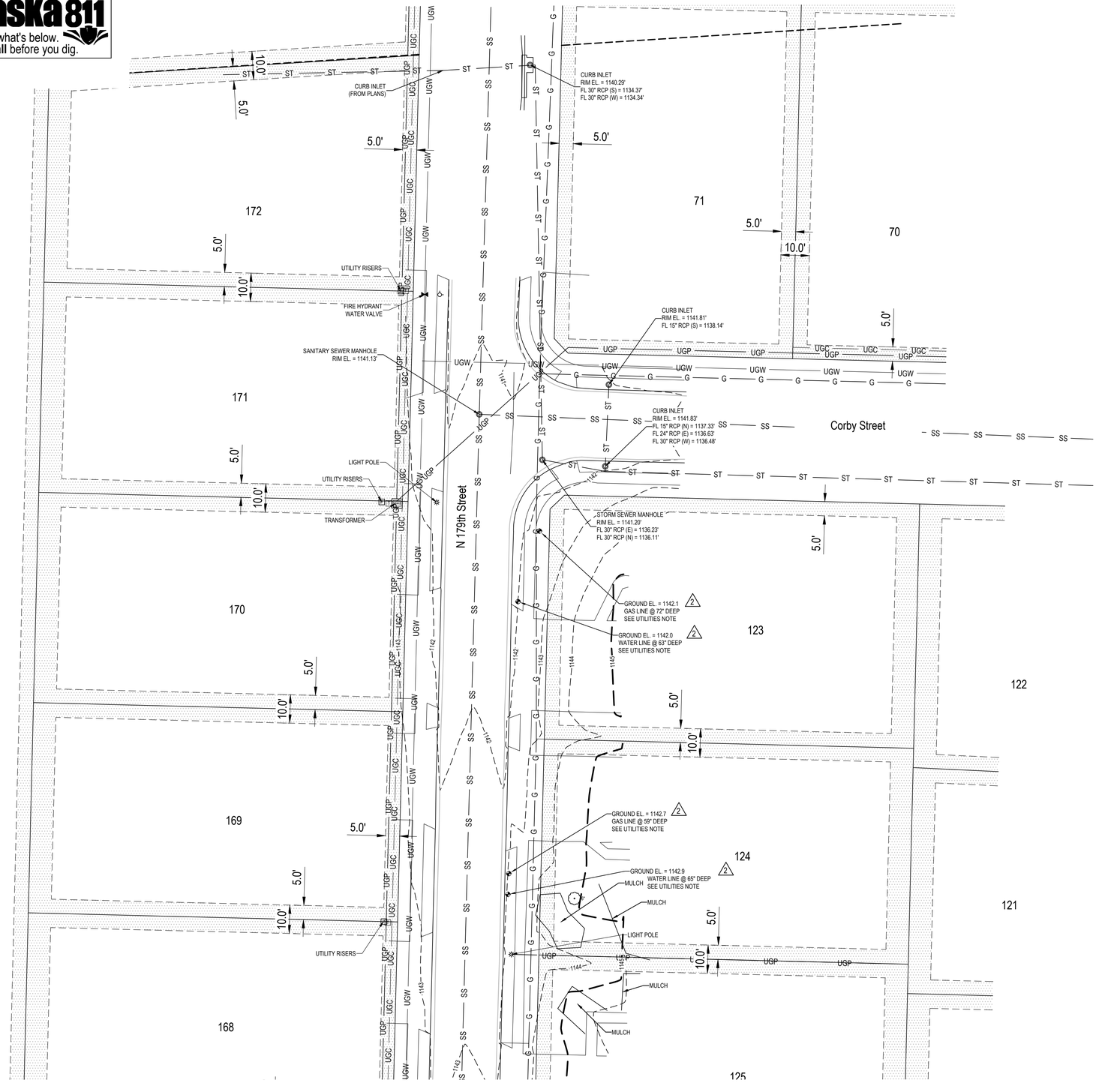

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TOPOGRAPHIC SURVEY - CORBY STREET & N 179TH STREET

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Scale:	AS SHOWN
Sheet:	4 of 8

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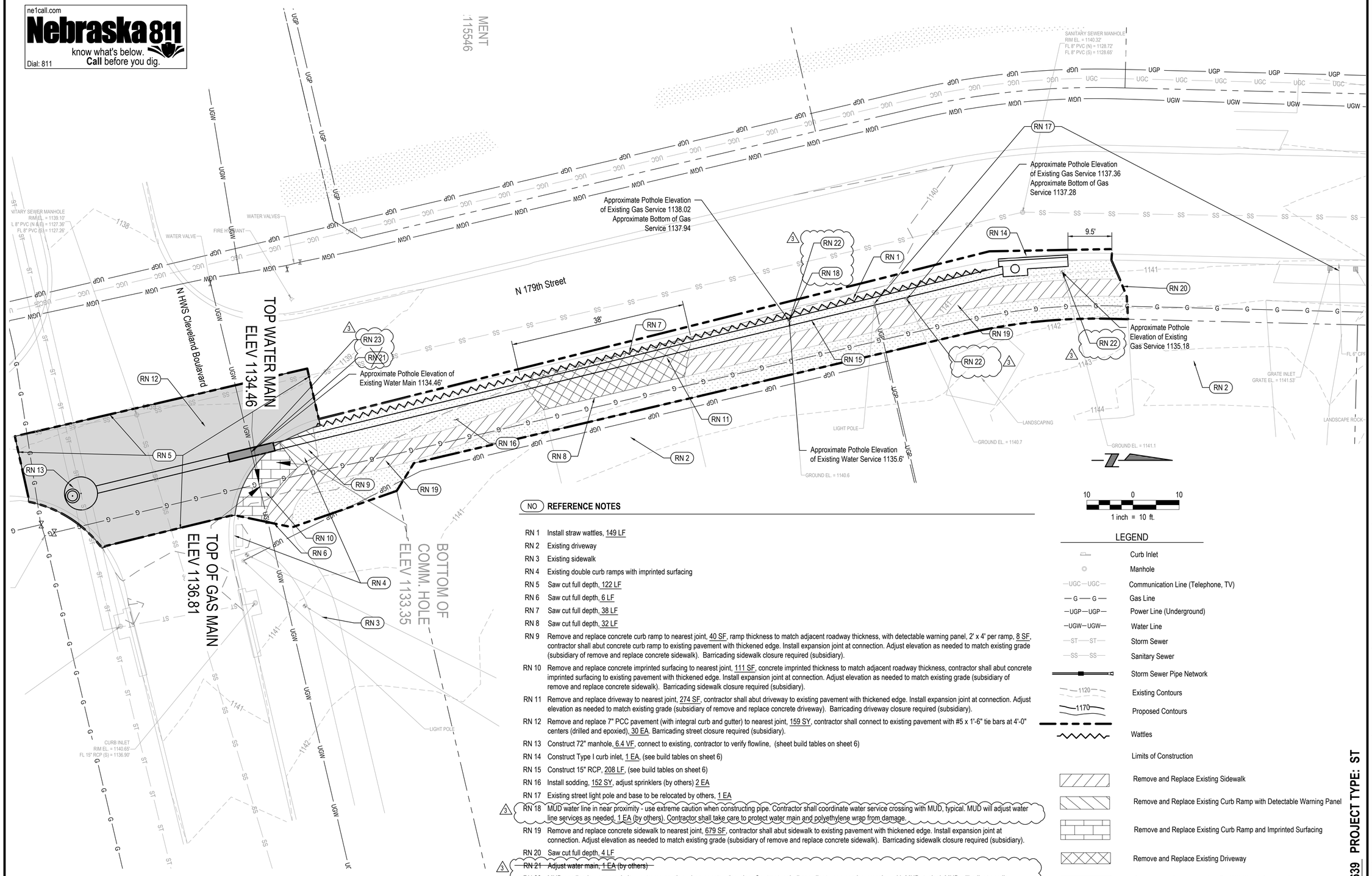

10 0 10
1 inch = 10 ft.

NO REFERENCE NOTES

RN 1 Install straw wattles, 149 LF

RN 2 Existing driveway

RN 3 Existing sidewalk

RN 4 Existing double curb ramps with imprinted surfacing

RN 5 Saw cut full depth, 122 LF

RN 6 Saw cut full depth, 6 LF

RN 7 Saw cut full depth, 38 LF

RN 8 Saw cut full depth, 32 LF

RN 9 Remove and replace concrete curb ramp to nearest joint, 40 SF, ramp thickness to match adjacent roadway thickness, with detectable warning panel, 2' x 4' per ramp, 8 SF, contractor shall abut concrete curb ramp to existing pavement with thickened edge. Install expansion joint at connection. Adjust elevation as needed to match existing grade (subsidiary of remove and replace concrete sidewalk). Barricading sidewalk closure required (subsidiary).

RN 10 Remove and replace concrete imprinted surfacing to nearest joint, 111 SF, concrete imprinted thickness to match adjacent roadway thickness, contractor shall abut concrete imprinted surfacing to existing pavement with thickened edge. Install expansion joint at connection. Adjust elevation as needed to match existing grade (subsidiary of remove and replace concrete sidewalk). Barricading sidewalk closure required (subsidiary).

RN 11 Remove and replace driveway to nearest joint, 274 SF, contractor shall abut driveway to existing pavement with thickened edge. Install expansion joint at connection. Adjust elevation as needed to match existing grade (subsidiary of remove and replace concrete driveway). Barricading driveway closure required (subsidiary).

RN 12 Remove and replace 7" PCC pavement (with integral curb and gutter) to nearest joint, 159 SY, contractor shall connect to existing pavement with #5 x 1'-6" tie bars at 4'-0" centers (drilled and epoxied), 30 EA. Barricading street closure required (subsidiary).

RN 13 Construct 72" manhole, 6.4 VF, connect to existing, contractor to verify flowline, (sheet build tables on sheet 6)

RN 14 Construct Type I curb inlet, 1 EA, (see build tables on sheet 6)

RN 15 Construct 15" RCP, 208 LF, (see build tables on sheet 6)

RN 16 Install sodding, 152 SY, adjust sprinklers (by others) 2 EA

RN 17 Existing street light pole and base to be relocated by others, 1 EA

3 RN 18 MUD water line in near proximity - use extreme caution when constructing pipe. Contractor shall coordinate water service crossing with MUD, typical. MUD will adjust water line services as needed, 1 EA (by others). Contractor shall take care to protect water main and polyethylene wrap from damage.

RN 19 Remove and replace concrete sidewalk to nearest joint, 679 SF, contractor shall abut sidewalk to existing pavement with thickened edge. Install expansion joint at connection. Adjust elevation as needed to match existing grade (subsidiary of remove and replace concrete sidewalk). Barricading sidewalk closure required (subsidiary).

RN 20 Saw cut full depth, 4 LF

3 ~~RN 21 Adjust water main, 1 EA (by others)~~

RN 22 MUD gas line in near proximity - extreme caution when constructing pipe. Contractor shall coordinate gas service crossing with MUD, typical. MUD will adjust gas line services as needed, 1 EA (by others), 3 Total this page. Contractor shall take care to protect gas main and polyethylene wrap from damage.

RN 23 Install Bentomat clay liner, 10 LF. Contractor to fully wrap around 15" RCP pipe at water main crossing and extend 4' along storm pipe in both directions. Bentomat liner will be supplied by MUD.

LEGEND

- Curb Inlet
- Manhole
- Communication Line (Telephone, TV)
- Gas Line
- Power Line (Underground)
- Water Line
- Storm Sewer
- Sanitary Sewer
- Storm Sewer Pipe Network
- Existing Contours
- Proposed Contours
- Wattles
- Limits of Construction
- Remove and Replace Existing Sidewalk
- Remove and Replace Existing Curb Ramp with Detectable Warning Panel
- Remove and Replace Existing Curb Ramp and Imprinted Surfacing
- Remove and Replace Existing Driveway
- Remove and Replace Existing 7" PCC Street Pavement with Integral Curb and Gutter
- Sod Disturbed Area

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ANDRESEN MEADOWS
STORM SEWER EXTENSION - N 179TH STREET
SID 555
DOUGLAS COUNTY, NEBRASKA

STORM - PLAN - N HWS CLEVELAND BOULEVARD & N 179TH STREET

PROFESSIONAL CIVIL ENGINEER
TERESA M. WOOTEN
E-15787
2/14/2025
STATE OF NEBRASKA

No.	Description	Date
1	Adjusted pipe depth at curb inlet & manhole. Added Bentomat liner.	2/14/2025

Proj No: P2011.112.009
Date: 9/5/2023
Designed By: JJN
Drawn By: JJN
Scale: AS SHOWN
Sheet: 5 of 8

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CONSTRUCT STORM SEWER MANHOLE

ID	City GIS No.	Storm Sta.	Dia.	Details	Coordinates	V.F.	Remarks
M1	1237522	0+00.01	72 "	RIM = 1139.39 INV IN = 1135.75 (15") INV IN = 1133.03 (36") INV OUT = 1133.02 (36")	N: 550794.90 E: 2686831.21	6.4	Construct MH over existing storm pipe. Bottom shall match flow line.

CONSTRUCT REINFORCED CONCRETE PIPE

ID	START STRUCTURE	END STRUCTURE	Dia.	Class	Length	Slope	Remarks
P1	C1	M1	15"	III	208.00	0.41%	Install Bentomat clay liner and fully wrap around RCP extending 4' in both directions at water main crossing. Construct storm pipe joints as far away from water conflict as possible.

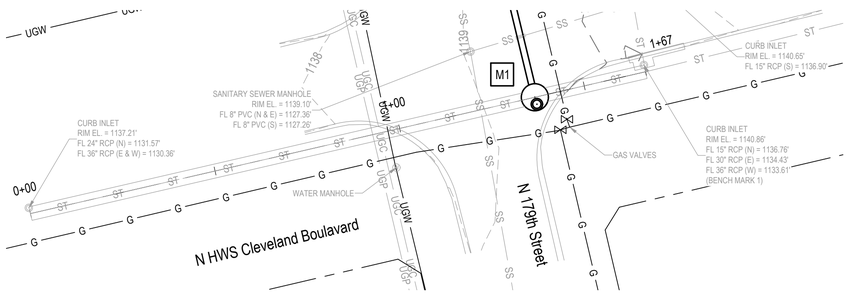
CONSTRUCT CURB INLET

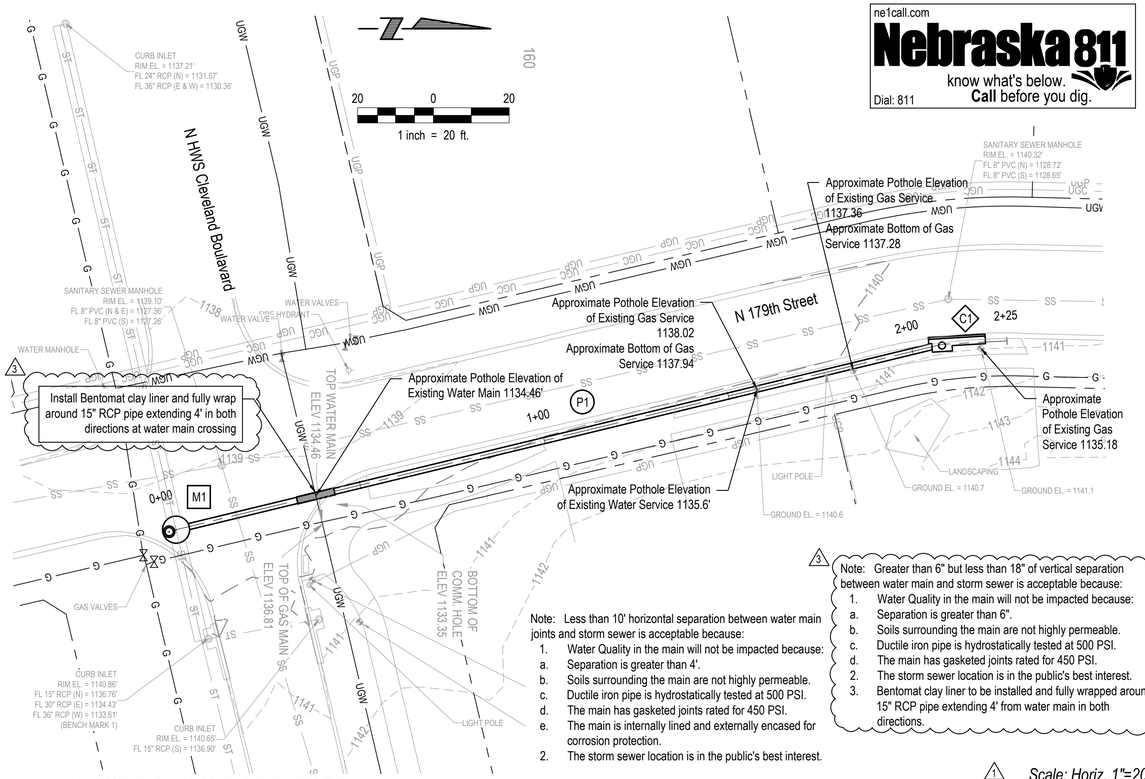
ID	City GIS No.	Storm Sta.	Type	Details	Coordinates	Remarks
C1	1237523B	2+08.00	I	RIM = 1140.60 INV OUT = 1136.60 (15")	N: 550997.06 E: 2686782.27	

N

20 0 20

1 inch = 20 ft.





Note: Less than 10' horizontal separation between water main joints and storm sewer is acceptable because:

a. Separation is greater than 4'.
b. Soils surrounding the main are not highly permeable.
c. Ductile iron pipe is hydrostatically tested at 500 PSI.
d. The main has gasketed joints rated for 450 PSI.
e. The main is internally lined and externally encased for corrosion protection.

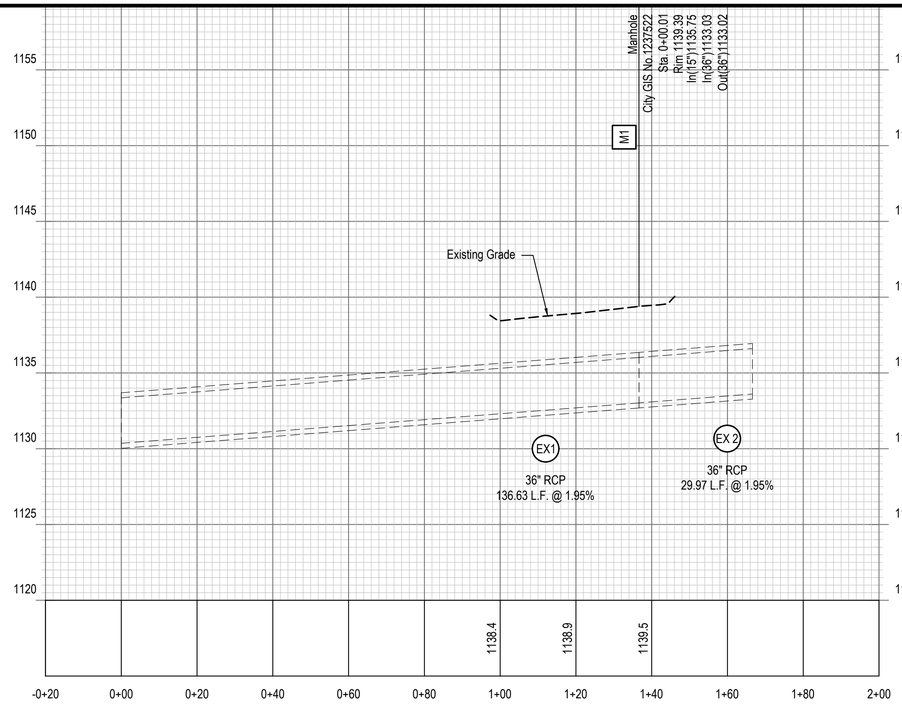
2. The storm sewer location is in the public's best interest.

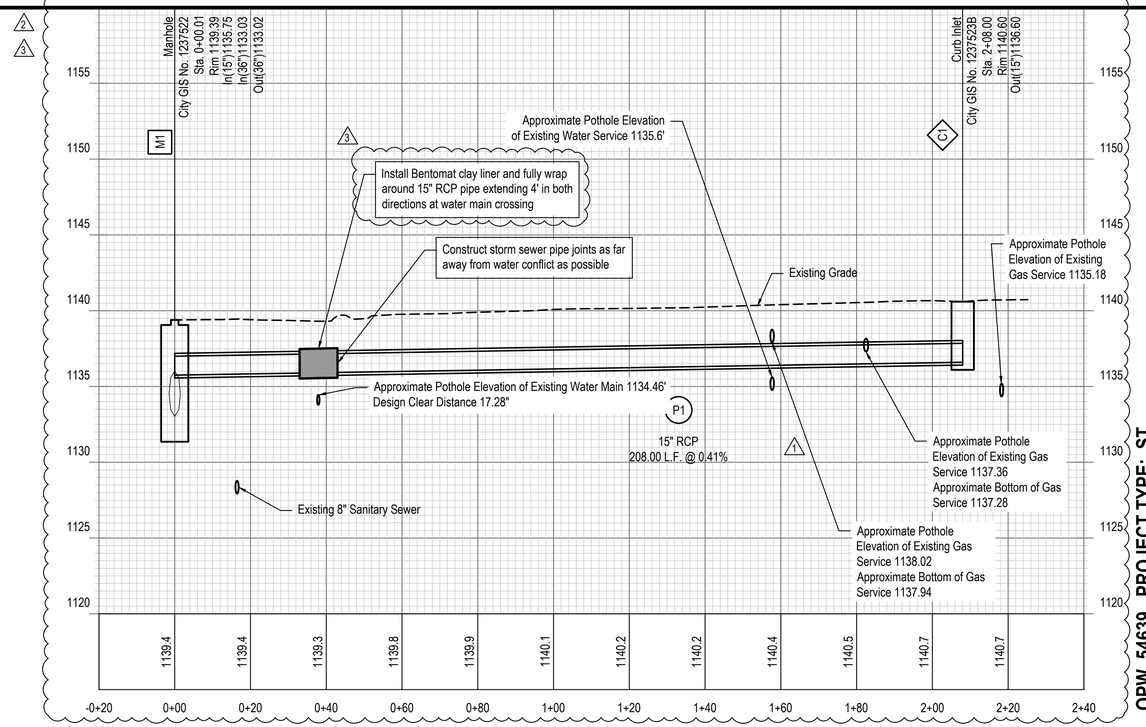
3 Note: Greater than 6" but less than 18" of vertical separation between water main and storm sewer is acceptable because:

a. Separation is greater than 6".
b. Soils surrounding the main are not highly permeable.
c. Ductile iron pipe is hydrostatically tested at 500 PSI.
d. The main has gasketed joints rated for 450 PSI.
2. The storm sewer location is in the public's best interest.
3. Bentomat clay liner to be installed and fully wrapped around 15" RCP pipe extending 4' from water main in both directions.

1 *Scale: Horiz. 1"=20'*
Vert. 1"=5'

N HWS CLEVELAND BOULEVARD





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SID 555
DOUGLAS COUNTY, NEBRASKA

STORM - PROFILE - N HWS CLEVELAND BOULEVARD & N 179TH STREET

PROFESSIONAL CIVIL ENGINEER
TERESA M. WOOTEN
E-15787
2-14-2025
STATE OF NEBRASKA

Revisions			
No.	Date	Description	
A	10/16/2023	Adjusted pipe depth at curb inlet	JJN
1	5/21/2024	Potholing information	JJN
2	2/14/2025	Adjusted pipe depth at curb inlet & manhole. Added Bentomat liner.	AS
3			

Proj No:	P2011.112.009
Date:	9/5/2023
Designed By:	JJN
Drawn By:	JJN
Scale:	AS SHOWN
Sheet:	6 of 8

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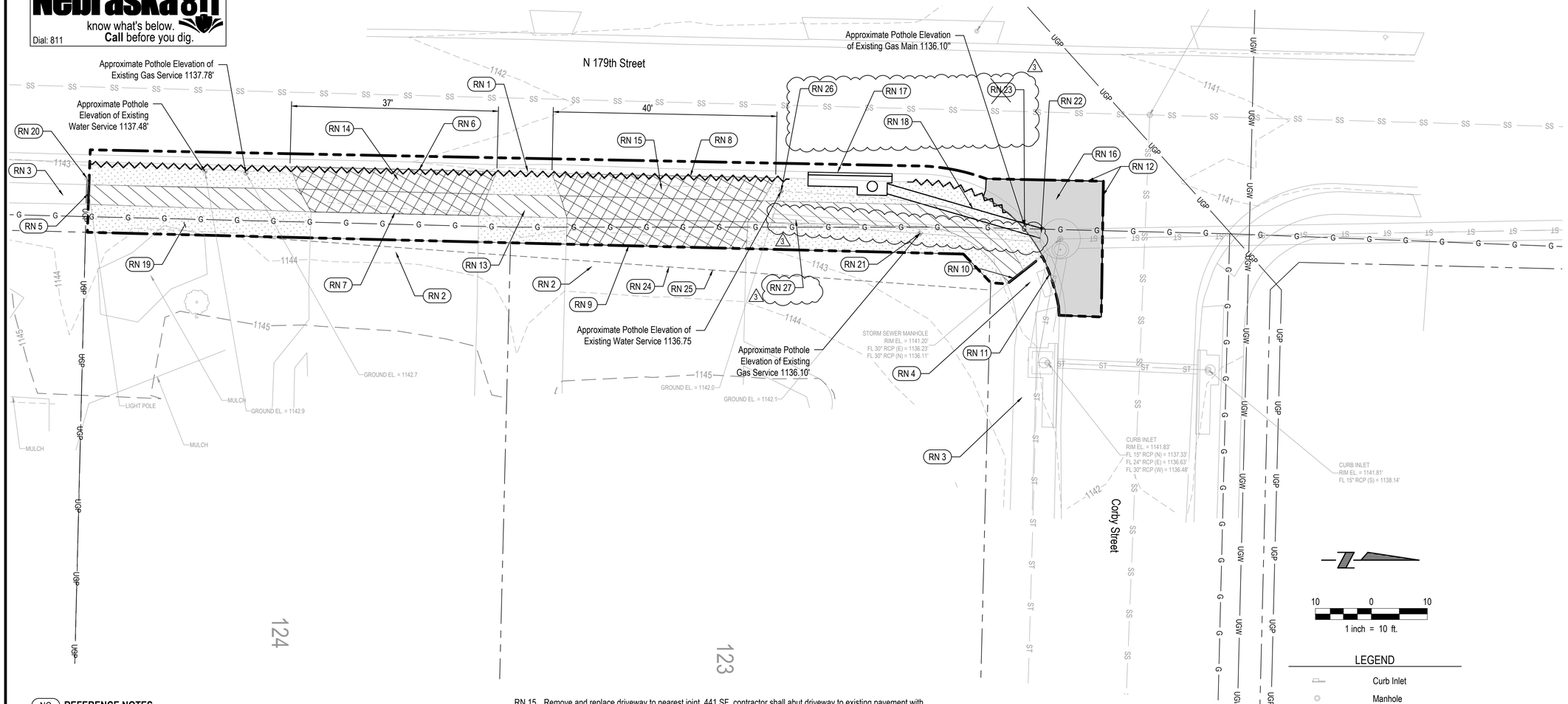

10 0 10
1 inch = 10 ft.

LEGEND

- Curb Inlet
- Manhole
- Communication Line (Telephone, TV)
- Gas Line
- Power Line (Underground)
- Water Line
- Storm Sewer
- Sanitary Sewer
- Storm Sewer Pipe Network
- Existing Contours
- Proposed Contours
- Wattles
- Limits of Construction
- Permanent Storm Sewer Easement & Temporary Grading Easement
- Remove and Replace Existing Sidewalk
- Remove and Replace Existing Driveway
- Remove and Replace Existing 7" PCC Street Pavement with Integral Curb and Gutter
- Sod Disturbed Area

NO REFERENCE NOTES

RN 1 Install straw wattles, 144 LF

RN 2 Existing driveway

RN 3 Existing sidewalk

RN 4 Existing single curb ramp

RN 5 Saw cut full depth, 4 LF

RN 6 Saw cut full depth, 37 LF

RN 7 Saw cut full depth, 30 LF

RN 8 Saw cut full depth, 40 LF

RN 9 Saw cut full depth, 32 LF

RN 10 Saw cut full depth, 4 LF

RN 11 Saw cut full depth, 9 LF

RN 12 Saw cut full depth, 56 LF

RN 13 Remove and replace concrete sidewalk to nearest joint, 400 SF, contractor shall abut sidewalk to existing pavement with thickened edge. Install expansion joint at connection. Adjust elevation as needed to match existing grade (subsidiary of remove and replace concrete sidewalk). Barricading sidewalk closure required (subsidiary).

RN 14 Remove and replace driveway to nearest joint, 268 SF, contractor shall abut driveway to existing pavement with thickened edge. Install expansion joint at connection. Adjust elevation as needed to match existing grade (subsidiary of remove and replace concrete driveway). Barricading driveway closure required (subsidiary).

RN 15 Remove and replace driveway to nearest joint, 441 SF, contractor shall abut driveway to existing pavement with thickened edge. Install expansion joint at connection. Adjust elevation as needed to match existing grade (subsidiary of remove and replace concrete driveway). Barricading driveway closure required (subsidiary).

RN 16 Remove and replace 7" PCC pavement (with integral curb and gutter) to nearest joint, 35 SY, contractor shall connect to existing pavement with #5 x 1'-6" tie bars at 4'-0" centers (drilled and epoxied), 14 EA. Barricading street closure required (subsidiary).

RN 17 Construct Type I curb inlet, 1 EA, (see build tables on sheet 8)

RN 18 Construct 15" RCP, 35 LF, (see build tables on sheet 8). Connect to existing 72" Manhole (subsidiary). Contractor to verify flowline, See Profile sheet 8 for details. (3)

RN 19 Install sodding, 92 SY, adjust sprinklers (by others) 2 EA

RN 20 Existing street light pole is to be undisturbed.

RN 21 MUD gas line in near proximity - extreme caution when constructing pipe. Contractor shall coordinate gas service crossing with MUD, typical. MUD will adjust gas line services as needed, 1 EA (by others). Contractor shall take care to protect gas main and polyethylene wrap from damage. (3)

RN 22 Tap storm manhole, 1 EA

~~RN 23 Adjust gas main, 1 EA (by others)~~ (3)

RN 24 Temporary grading easement - Contractor shall verify with Engineer that all approvals and easements have been finalized prior to construction. (1)

RN 25 Permanent storm easement

RN 26 MUD water line in near proximity - use extreme caution when constructing pipe. Contractor shall coordinate water service crossing with MUD, typical. MUD will adjust water line services as needed, 1 EA (by others). Contractor shall take care to protect water main and polyethylene wrap from damage. (3)

RN 27 Remove 15" RCP, 48 LF, contractor may re-use removed 15" RCP storm sewer pipe if in good condition.

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STORM - PLAN - CORBY STREET & N 179TH STREET

PROFESSIONAL CIVIL ENGINEER
TERESA M. WOOTEN
E-15787
2/14/2025
STATE OF NEBRASKA

No.	Revisions Description	Date
1	Added Easements	10/16/2023
2	Adjusted pipe depth and curb inlet location	2/14/2025

Proj No:	P2011.112.009
Date:	9/5/2023
Designed By:	JJN
Drawn By:	JJN
Scale:	AS SHOWN
Sheet:	7 of 8

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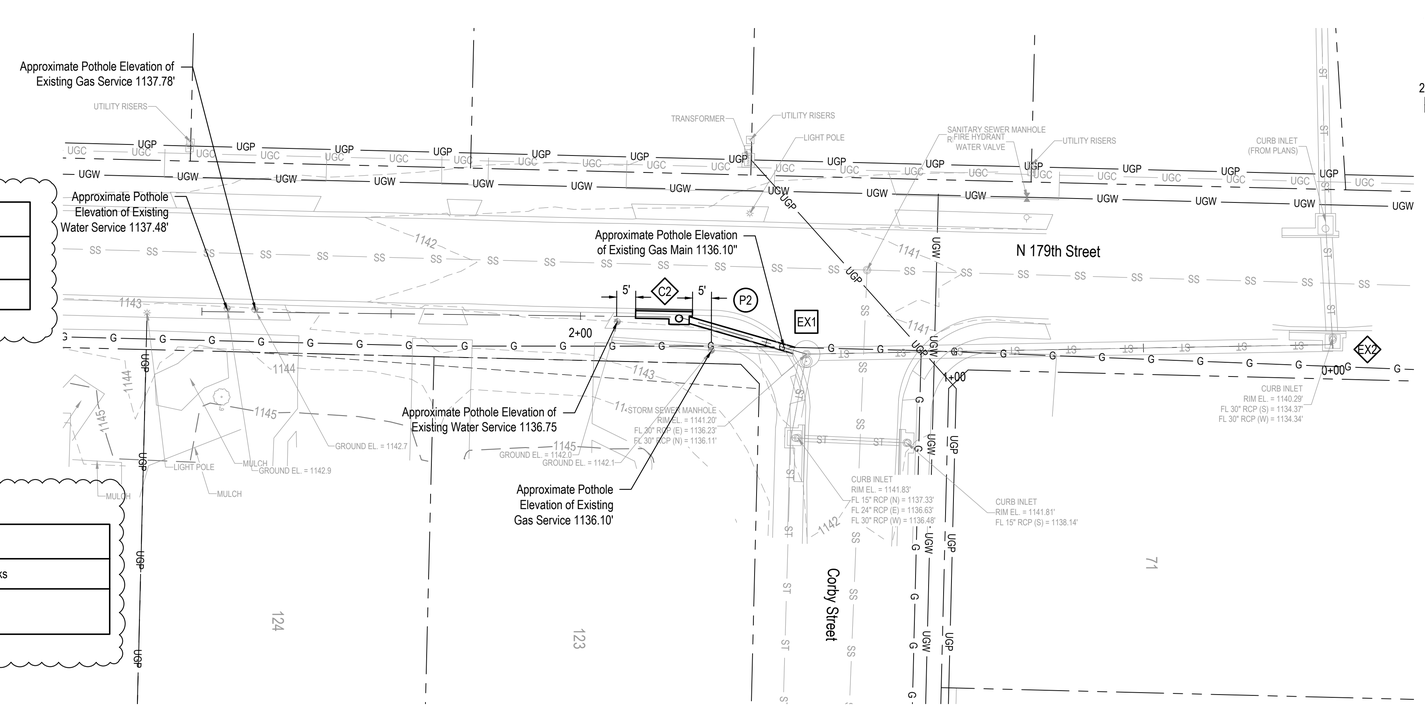
○ CONSTRUCT REINFORCED CONCRETE PIPE							
ID	START STRUCTURE	END STRUCTURE	Dia.	Class	Length	Slope	Remarks
P2	C2	EX1	15"	III	35.00	1.20%	Connect to Existing Manhole

△3

◇ CONSTRUCT CURB INLET						
ID	City GIS No.	Storm Sta.	Type	Details	Coordinates	Remarks
C2	1237521B	1+73.96	I	RIM = 1141.78 INV OUT = 1137.78 (15")	N: 551667.73 E: 2686797.52	



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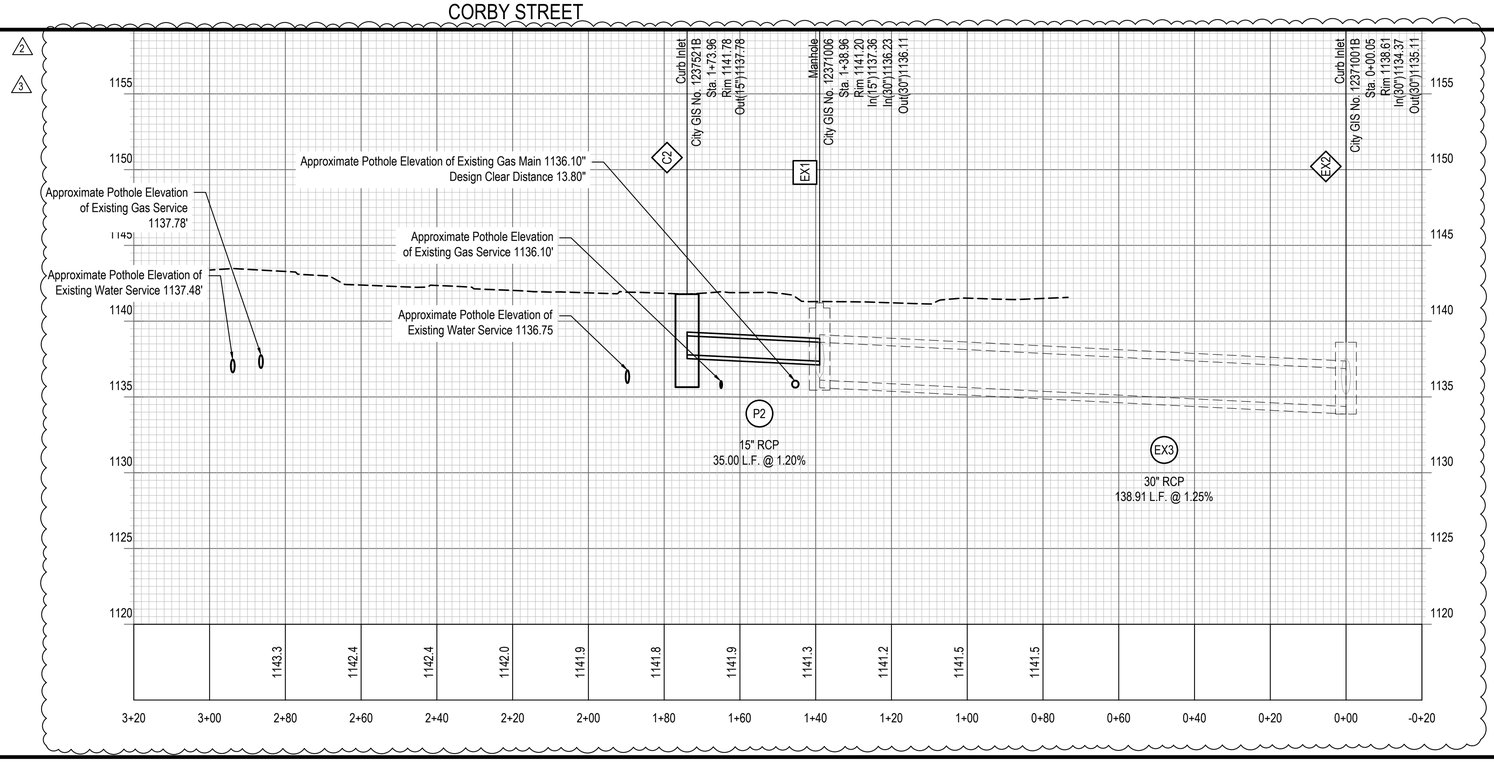
1 inch = 20 ft.

Scale: Horiz. 1"=20'
Vert. 1"=5'

CORBY STREET



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PROFESSIONAL CIVIL ENGINEER
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E-15787
1-14-2025
STATE OF NEBRASKA

Revisions		
△No.	Date	Description
2	5/21/2024	Potholing information
1	2/14/2025	Adjusted pipe depth and curb inlet location

Proj No:	P2011.112.009
Date:	9/5/2023
Designed By:	JJN
Drawn By:	JJN
Scale:	AS SHOWN
Sheet:	8 of 8

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