PROJECT VACINITY
Watermain Replacement Project

City of Mandan
East End Water & Sewer
Replacement Project

AREA A

AREA B

AREA C

AREA D

AREA E-1

AREA E-2

AREA E-3

AREA E-4

2nd St. NE

1st St. NE

Main St. E

8th Ave. NE

10th Ave. NE

12th Ave. NE

5th Ave. NE

6th Ave. NE

N

W E

S

01/23/2015

CITY OF MANDAN

"WHERE THE WEST BEGINS"

Line Types

Proposed Watermain

Existing Watermain — W — W —

Existing Sewermain

Existing Storm Sewer

Existing Service Line

Proposed Service Line

Property Lines

Details

Existing Water Valve

Proposed Water Valve

Sanitary Sewer Manhole

Existing Fire Hydrant

Proposed Fire Hydrant

Hymax Connection

Reducer

Tee

45° Elbow

Curb Stop

House Numbers XXX

Existing Pipe Sizes XXX

Construction Notes

THE CITY OF MANDAN SHALL BE RESPONSIBLE FOR:

- All materials for the project will be provided by the City of Mandan and will be complaint with the construction specifications for the project.
- Line and grade will be established by the City of Mandan as indicated on the standard drawings and/or as directed by the city engineer.
- The removal and replacement of asphalt pavement and concrete will be performed by the City of Mandan. The City of Mandan will remove a maximum of 11" of asphalt to facilitate the installation of the water main.
- The City of Mandan will provide pipe bedding material as part of the project.
- The City of Mandan is responsible for first compaction test only.
- Size, number and location of water services will be determined and verified in the field by the City of Mandan.
- All materials delivered on site will be verified by the contractor and the City of Mandan prior to installation.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR:

- Installation of water mains and associated parts shall be done in accordance with the City of Mandan Construction Specifications for the water main installation. (Section 900) All water mains shall be buried to an 8" minimum depth to the top of pipe. All installed water curb stops and water valve boxes shall be adjusted either up or down to the level of the surrounding ground and future finished grade.
- Backfilling of the water main trench for compaction shall be done to the specifications outlined in Section 900 of the City of Mandan Construction Specifications. All re-tests are the contractor's responsibility.
- The contractor will be responsible for locating and preservation of all underground utilities whether they are indicated on the plans or not.
- The contractor shall be responsible to preserve all existing and non-removed curb, gutter, asphalt, sidewalk, lawn, landscaping, and any only existing private or public features of the work area. Any damage or significant alteration as determined by the City of Mandan will be the responsibility of the contractor to replace or retore at his/hers own expense.
- The contractor will have the option to keep the existing water main in service while installing the new main or to hose all affected houses. All hose fed houses shall be done with food safe or food grade approved hosing. Temporary water shut downs will need a 24 hour notice to homeowners and be approved by the City of Mandan.
- Traffic control must be provided by the contractor. The contractor will be responsible to provide all signing necessary to complete this project as spelled out in the manual on Uniform Traffic Control Devices and the Work Area Traffic Control Handbook as distributed by the NDDOT.
- A cost for additional services, installing curb stop and box and installing curb box bust be provided on the bid sheet.
- In the event of the discovery of any lead service lines, the service line must be replaced to the curb stop for the cost indicated for additional services and the owner made aware of the existence of the lead line.
- The contractor will be responsible for the providing the material for blocking that is required by the specifications during the installation of the water main or appurtenances.
- The contractor will be responsible and held accountable for all materials on site. All materials delivered on site will be verified by the contractor and the City of Mandan prior to installation.
- The contractor will be responsible for the protection of all storm water inlets within work area. Protection must be in accordance with BMP's for storm water protection.

DISCLAIMER: All property lines shown are for contractors reference and not to be taken as exact locations.

City of Mandan

CITY OF MANDAN
Where The West Begins

East End Water and Sewer Replacement
Legend & Construction Notes

Sheet #	1 of 9	File Name	East End Water-Sewer 2015.dwg
Date	1/23/2015		
Drawn By	RWG		

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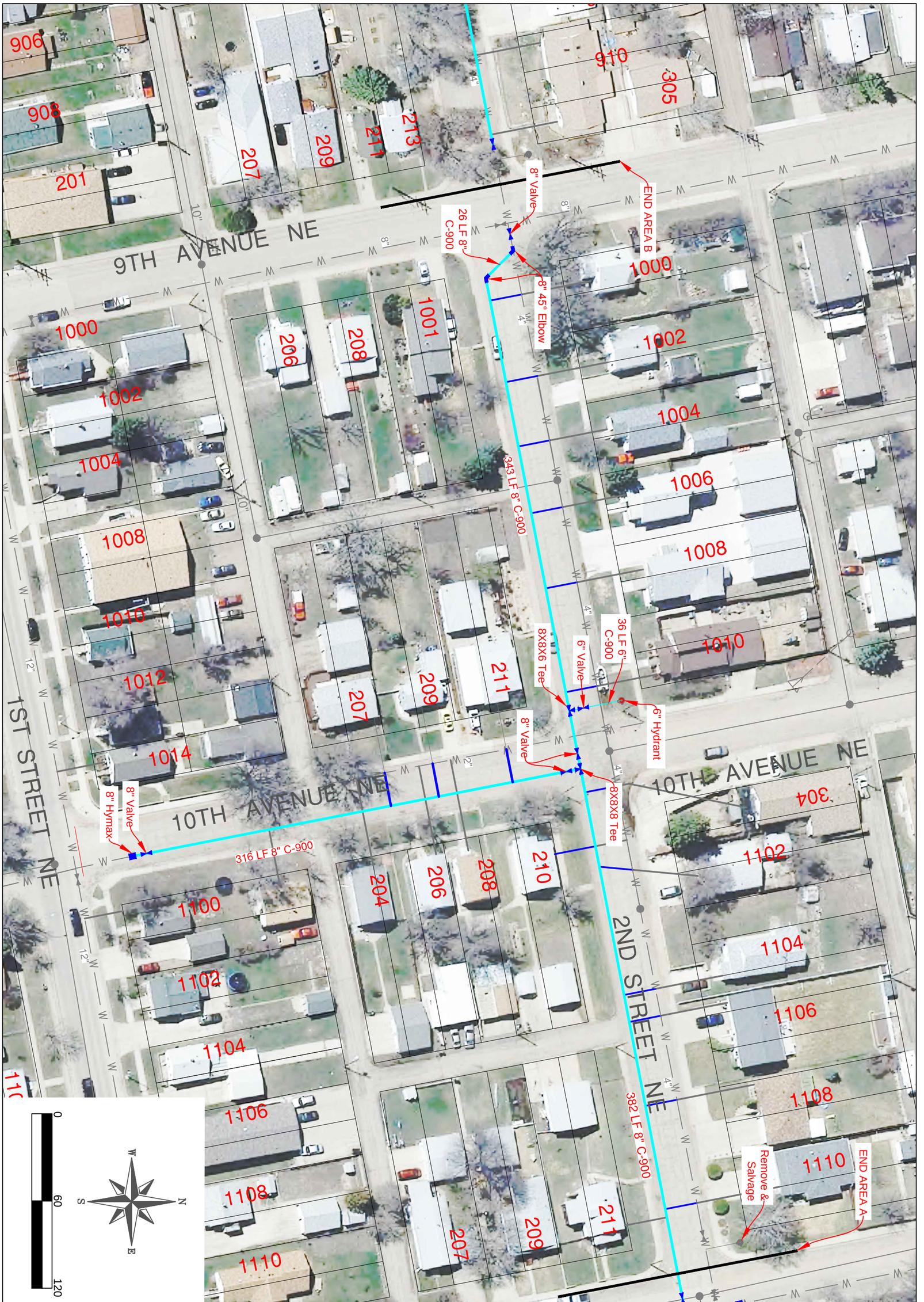
Drawn By	
RWG	
File Name	
East End Water-Sewer 2015.dwg	

East End Water and Sewer Replacement
AREA A

City of Mandan

CITY OF MANDAN
"Where The West Begins"



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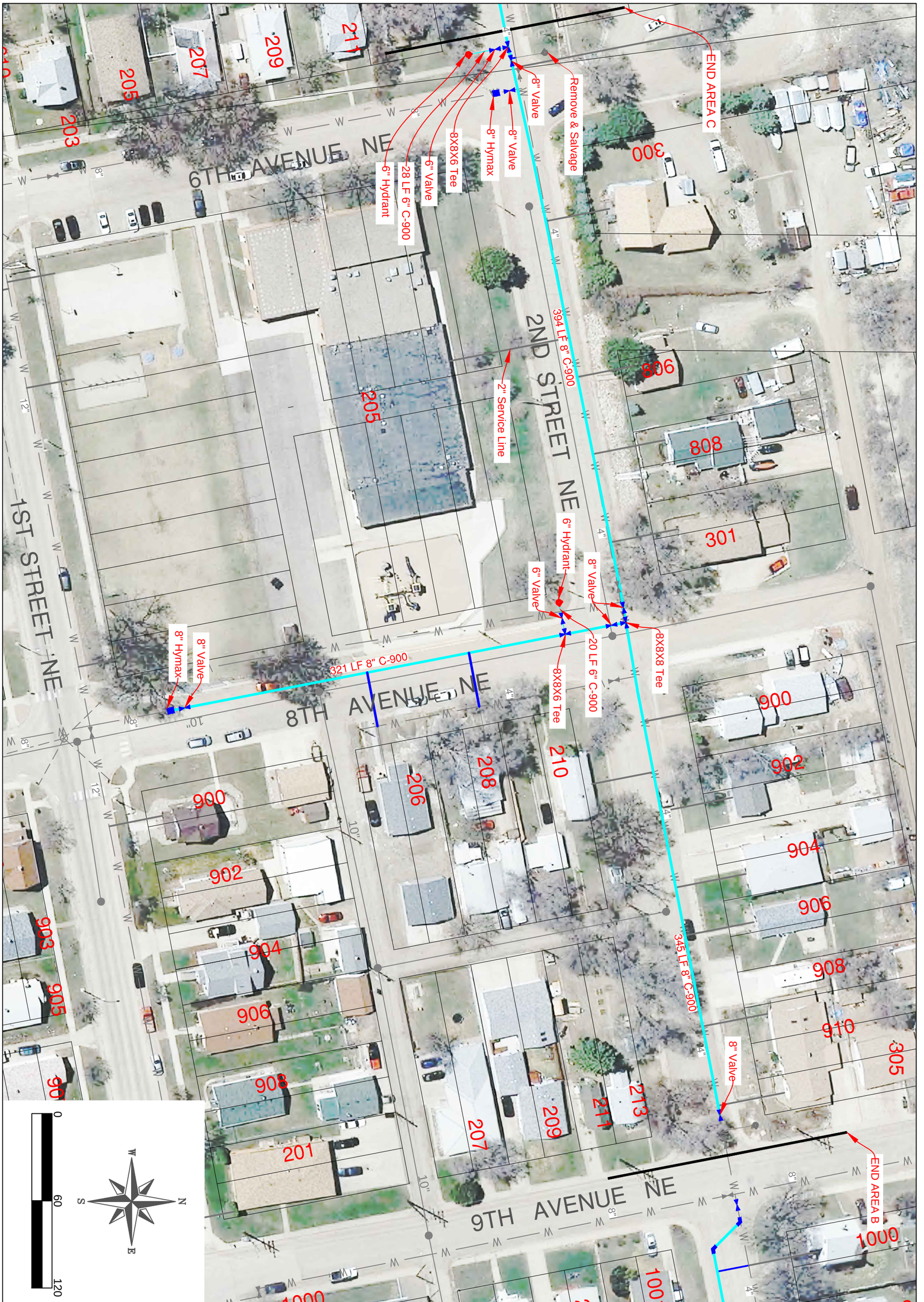
RWG	
File Name	
East End Water-Sewer 2015.dwg	

East End Water and Sewer Replacement
AREA B

City of Mandan

CITY OF MANDAN
"Where The West Begins"



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RWG	
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East End Water-Sewer 2015.dwg	

East End Water and Sewer Replacement
AREA C

City of Mandan

CITY OF MANDAN
"Where The West Begins"

City of Mandan

CITY OF MANDAN
Where The West Begins

East End Water and Sewer Replacement AREA D

END AREA C

6" Hydrant
20 LF 6" C-900
8X4 Reducer
6" Valve
8X8X6 Tee
4" Valve
4" Hymax
4X4X4 Tee
4" Valve
369 LF 8" C-900
8X8X8 Tee
8" Valve
8X8X6 Tee
6" Valve
8" Valve
32 LF 6" C-900
6" Hydrant
361 LF 8" C-900
339 LF 8" C-900
8" 45° Elbow
8" Valve
8" Hymax

2ND STREET NE
4TH AVENUE NE
5TH AVENUE NE
6TH AVENUE NE

N
W
E
S
0
60
120

Sheet #	5 of 9
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8" Hymax

8" Valve

2" Curb Stop

Curb stop to building to be installed by others

27 LF 200 PSI Poly 2" Service Line

299 LF 8" C-900

8" Valve

1ST STREET NE

MAIN STREET E

12TH AVENUE NE

11TH AVENUE NE

13TH AVENUE NE

1202 1204 1206 1208 1300 1302 1311 110 107 106 111 108 1310 1308 1300 E Main St. 1210 E Main St. 1200 E Main St. 1120 Main St.

0 60 120

East End Water and Sewer Replacement AREA E-1

City of Mandan

CITY OF MANDAN "Where The West Begins"

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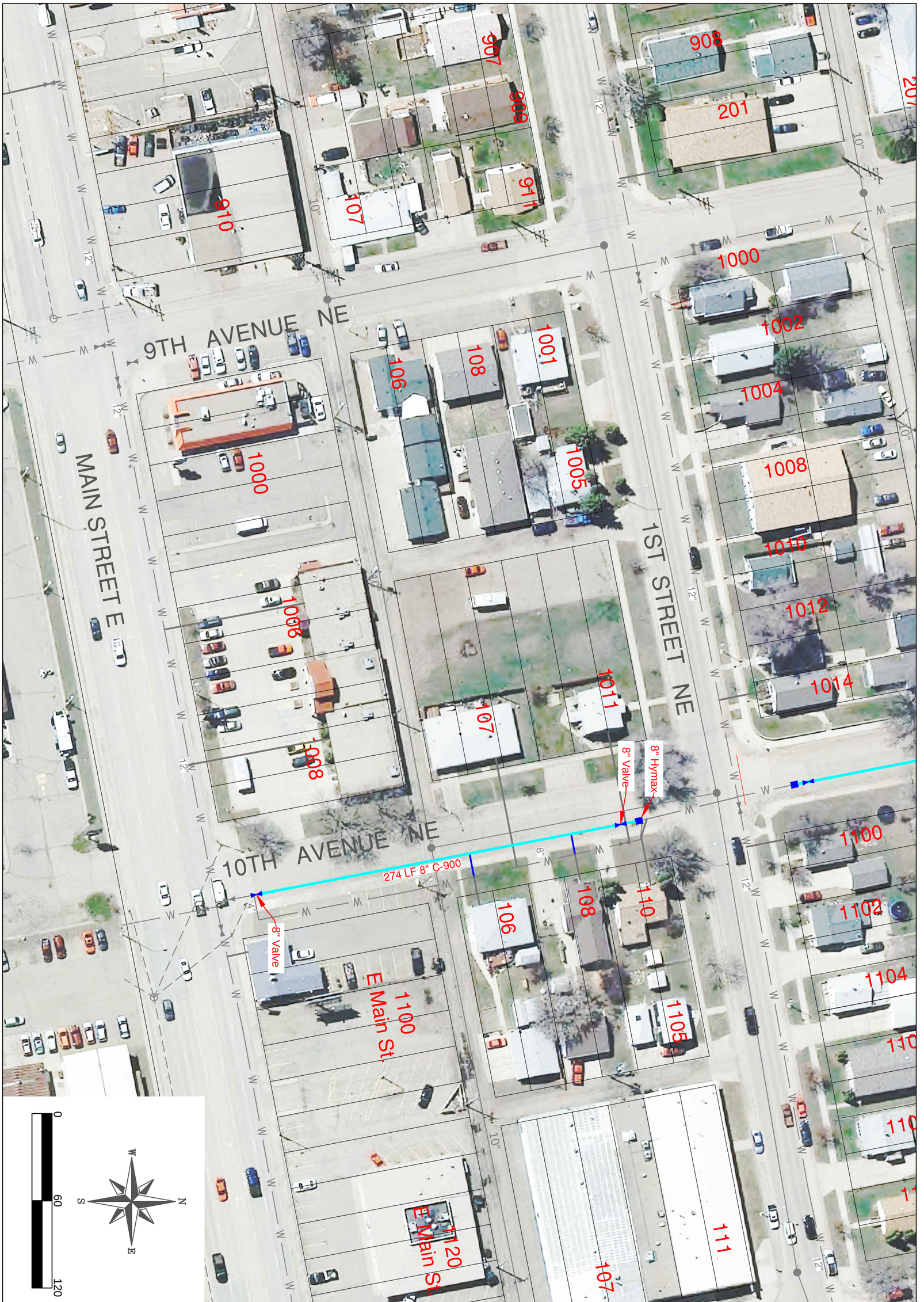
RWG	East End Water-Sewer 2015.dwg



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East End Water-Sewer 2015.dwg	

East End Water and Sewer Replacement
AREA E-2

City of Mandan

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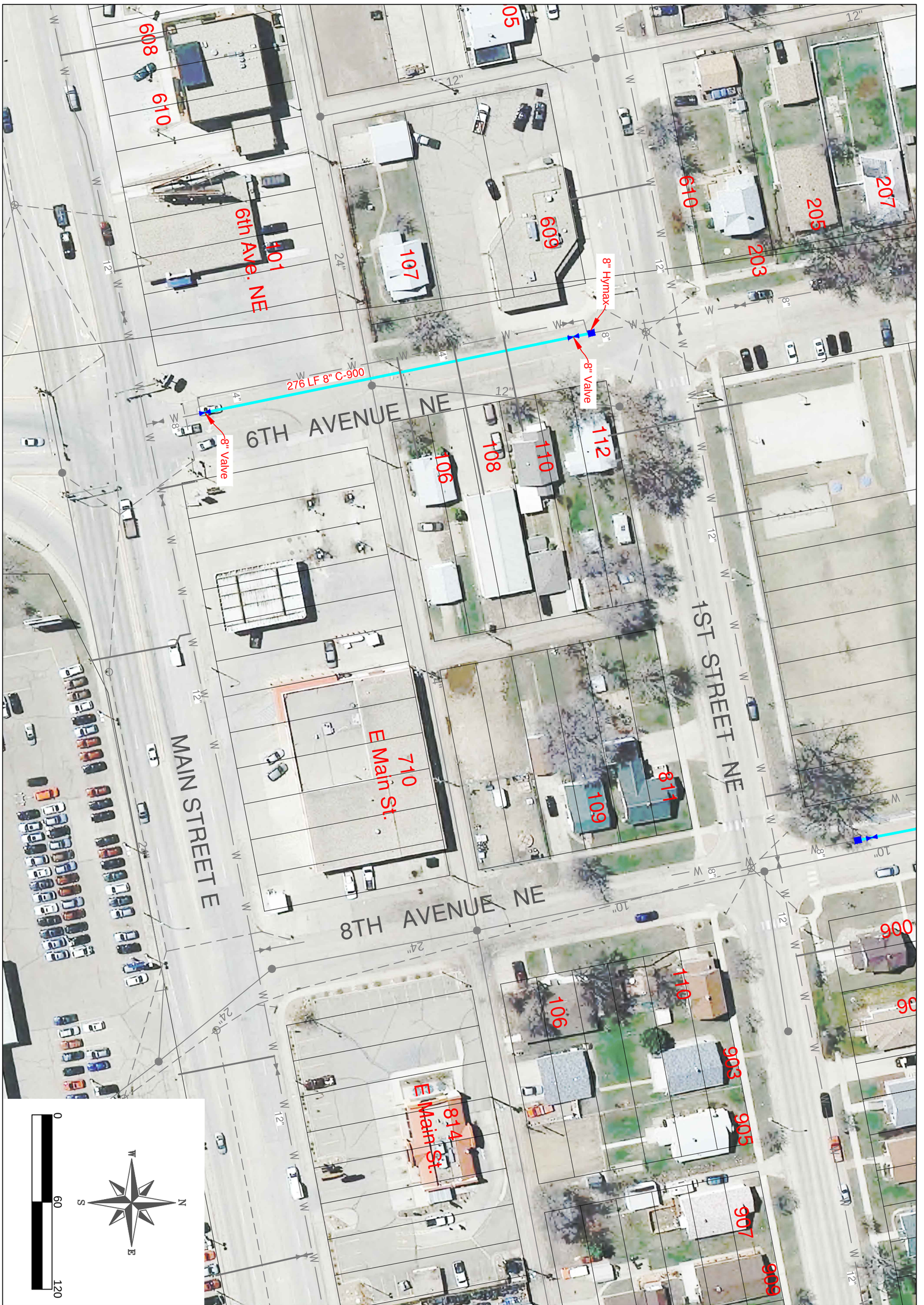
"Where The West Begins"



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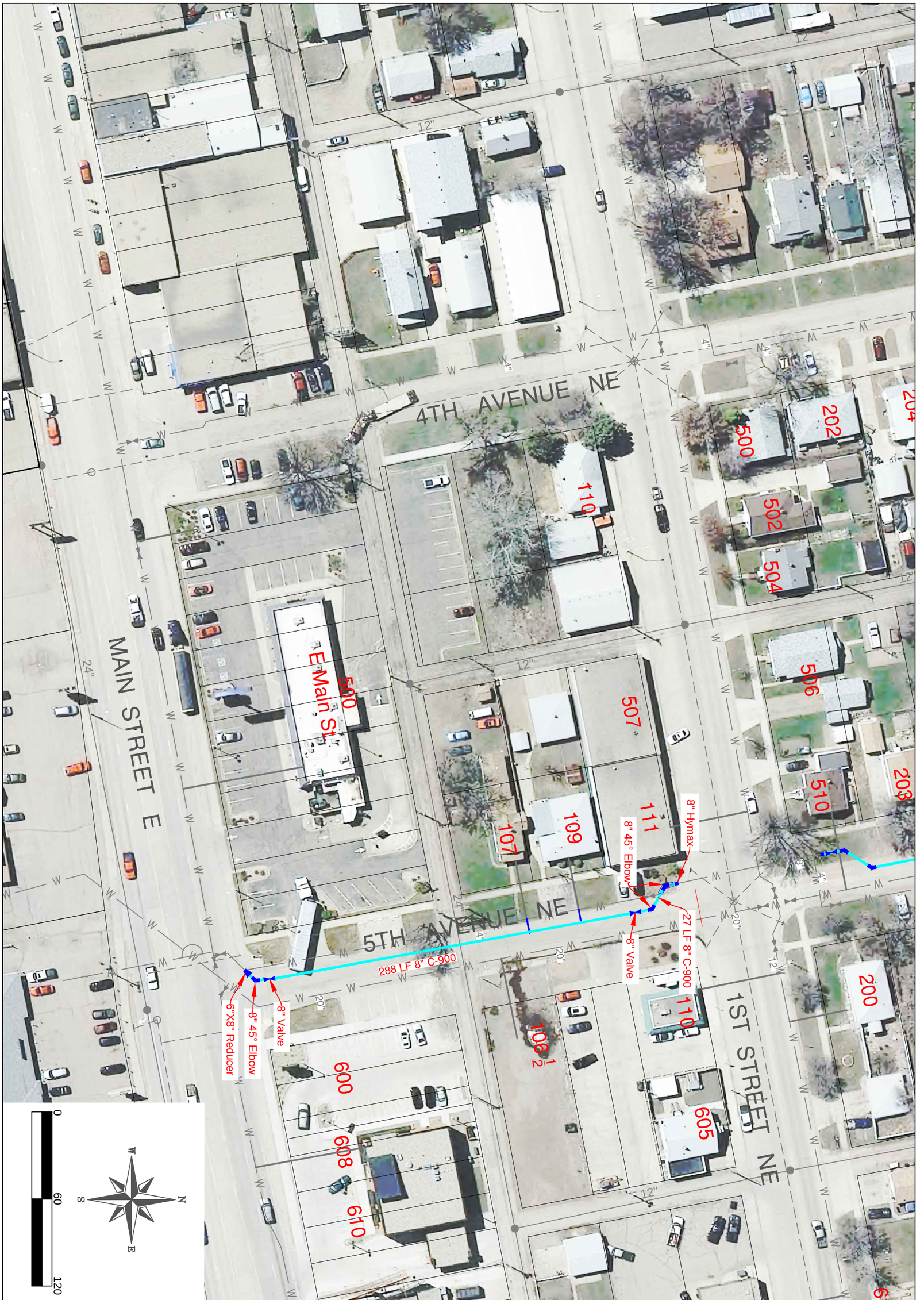
East End Water and Sewer Replacement
AREA E-3

City of Mandan

CITY OF MANDAN
"Where The West Begins"



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East End Water and Sewer Replacement
AREA E-4

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