



## VOLUME 2

## Drawings

# CITY OF WARRENTON

## NW 7TH PLACE & N MAIN AVE



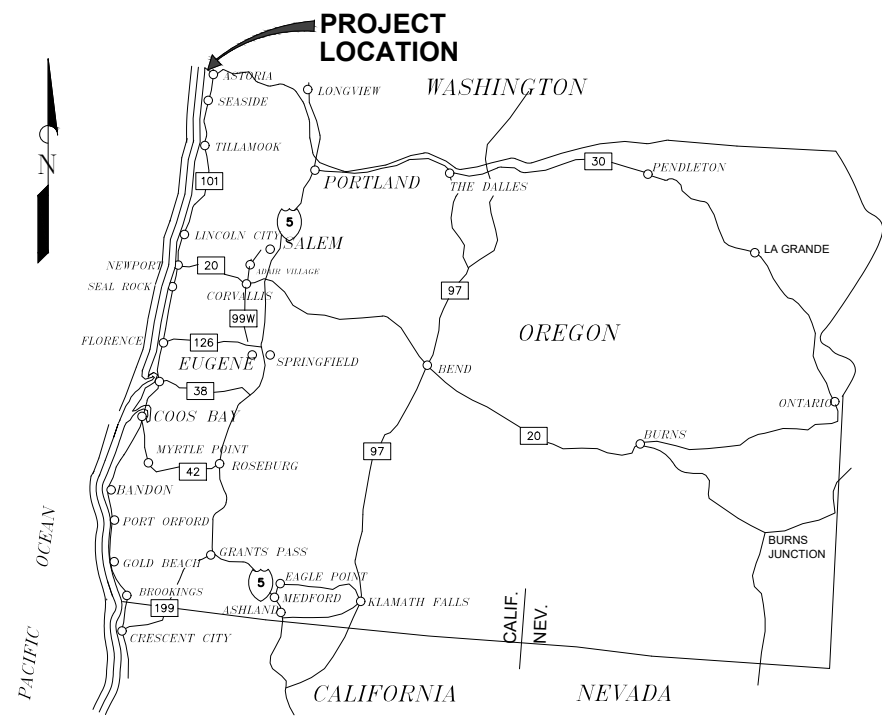
# LOW PRESSURE SEWER LINE

PROJECT NO. 3211-004  
FEBRUARY 2022

PRELIMINARY



541-223-5130  
www.civilwest.com  
200 FERRY ST SW  
ALBANY, OR 97321



LOCATION MAP



VICINITY MAP  
NOT TO SCALE

REV.	DATE	DESCRIPTION	BY

DESIGNED BY: BRJ	DRAWN BY: BRJ	CHECKED BY:
PROJECT NO: 3211-004		

CITY OF WARRENTON NW 7TH PLACE & N MAIN AVE
LOW PRESSURE SEWER LINE
COVER SHEET

DATE: 2/3/22 FILE: O:\CW\_Projects\3211\_Warrenton\_City\_of\3211-004\_Low Pressure Design 7th & Main\04\_Final Design\Drawings\3211-004\_DESIGN.dwg

PRELIMINARY



**GENERAL NOTES**

- ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH 952-001-0090. YOU MAY OBTAIN A COPY OF THE RULES BY CALLING THE CENTER.  
  
NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1987.  
STAT. AUTH.: ORS 757.542 THROUGH ORS 757.562 AND ORS 757.993.
- THE CONTRACTOR SHALL CONTACT 'ONE CALL' FOR UTILITY LOCATES PRIOR TO EXCAVATION. (1-800-332-2344)
- THE EXISTING UTILITY CROSSINGS OF THE PIPELINES ARE SHOWN ACCORDING TO AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL THE UTILITY CROSSINGS ALONG THE LENGTH OF THE PIPELINES AS SPECIFIED. NO GUARANTEE IS MADE THAT ALL OF THE EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING AND PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING HIS OPERATIONS.
- OVERHEAD ELECTRICAL DISTRIBUTION SYSTEMS MAY NOT BE SPECIFICALLY INDICATED ON THE DRAWINGS BUT DO EXIST ALONG THE PIPELINE ROUTES.
- EXISTING WATER METER BOXES AND VALVES MAY NOT BE SPECIFICALLY INDICATED ON THE DRAWINGS BUT DO EXIST ALONG THE PIPELINE ROUTES. CONTRACTOR SHALL LOCATE PRIOR TO THE START OF CONSTRUCTION.
- THE LOCATION AND DEPTH SHOWN ON THESE DRAWINGS FOR THE EXISTING UTILITIES ARE APPROXIMATE ONLY AND BASED ON AS BUILT DRAWINGS, VALVE LOCATIONS AND OTHER INFORMATION. THERE ARE NO TRACER WIRES FOR LOCATING THE MAJORITY OF EXISTING UTILITIES AND EXISTING UTILITIES MAY BE IN CLOSE PROXIMITY TO NEW LPSS ROUTES.
- CONTRACTOR SHALL POTHOLE AND LOCATE EXISTING UTILITIES PRIOR TO PLACEMENT OF NEW LPSS. CONTRACTOR SHALL PROVIDE TEMPORARY CONNECTIONS AS REQUIRED TO MAINTAIN CONTINUED SERVICE TO CUSTOMERS UNTIL COMPLETION OF NEW LPSS.
- THE PIPELINE PROFILES HAVE BEEN MARKED TO INDICATE THE REQUIRED BACKFILL CLASSES (A, B, & E) SEE TECHNICAL SPECIFICATION FOR SPECIFIC BACKFILL MATERIAL REQUIREMENTS.
- WHEN NO RECORD WAS AVAILABLE TO INDICATE THE ELEVATION OF AN EXISTING UTILITY A MINIMUM COVER OF 30-INCHES WAS ASSUMED. THE CONTRACTOR SHALL EXERCISE CAUTION WHILE EXCAVATING NEAR THESE ESTIMATED UTILITY LOCATIONS WHICH ARE INDICATED ON THE PROFILE DRAWINGS.
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PROJECT DESIGN SPECIFICATIONS AND DRAWINGS. THESE DRAWINGS SHALL BE COORDINATED AND USED IN CONJUNCTION WITH THE TECHNICAL SPECIFICATIONS AND APPROVED SUBMITTALS. CONSTRUCTION PERMITS AS REQUIRED FROM CITY OF WARRENTON PUBLIC WORKS DEPARTMENT TO WORK WITHIN THE RIGHT-OF-WAY SHALL BE OBTAINED BY THE OWNER PRIOR TO THE START OF CONSTRUCTION.
- PROPERTY AND RIGHT OF WAY LINES SHOWN IN THIS PLAN SET ARE APPROXIMATE AND BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL OBTAIN TEMPORARY CONSTRUCTION ACCESS OR PERMISSION FROM PRIVATE LAND OWNERS PRIOR TO ENTERING PRIVATE PROPERTY.
- PERMITS ASSOCIATED WITH THE TRENCH DE-WATERING SYSTEM SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO POTHOLE EXISTING UTILITIES TO DETERMINE THEIR EXACT LOCATION AND DEPTH. POTHOLE EXPLORATION SHALL OCCUR A MINIMUM OF SEVEN (7) DAYS PRIOR TO THE COMMENCEMENT OF WORK IN ANY AREA.
- SEWER PIPE SHALL BE HDPE DIPS SDR-11 UNLESS OTHERWISE NOTED.

**SHEET INDEX**

SHEET #	SHEET NAME
<b>GENERAL</b>	
G1	- COVER
G2	- GENERAL NOTES, ABBREVIATIONS, & SHEET INDEX
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G4	- PROJECT OVERVIEW
<b>SEWER</b>	
C101	- 11+00 TO 13+00
C102	- 13+00 TO 15+00
C103	- 15+00 TO 17+00
C104	- 17+00 TO 19+00
C105	- 19+00 TO 21+00
C106	- 21+00 TO 23+00
C107	- 23+00 TO 25+00
C108	- 25+00 TO 27+00
C109	- 27+00 TO 28+81
<b>DETAIL</b>	
D101	- DETAILS
D102	- DETAILS

**GENERAL ABBREVIATIONS**

AC	PAVEMENT	HDPE	HIGH DENSITY POLYETHYLENE PIPE	TOP	TOP OF BANK
BC	BEGIN CURVE	IE	INVERT ELEVATION	TOC	TOP OF CURB
BFV	BUTTERFLY VALVE	IP	IRON PIPE	TRANS.	TRANSITION
BLDG	BUILDING	IV	ISOLATION VALVE	TYP	TYPICAL
BM	BENCH MARK			UNO	UNLESS NOTED OTHERWISE
C/L	CENTERLINE	LIP	LIP OF GUTTER	V	VENT
CO	CLEAN OUT	LT	LEFT	VAC	VACUUM
CPLG	COUPLING	MH	MANHOLE		
CTR	CENTER	MJ	MECHANICAL JOINT	WM	WATER METER
CW	CITY WATER (POTABLE)			WV	WATER VALVE
		NG	NATURAL GAS		
D	DRAIN	PRC	POINT OF REVERSE CURVATURE		
DI	DUCTILE IRON	PVC	POLY VINYL CHLORIDE PIPE		
EC	END CURVE	ROW	RIGHT OF WAY		
EL	ELEVATION	RS	RAW SEWAGE		
EOC	EDGE OF CONCRETE	RT	RIGHT		
EOG	EDGE OF GRAVEL	RW	RAW WATER		
EOP	EDGE OF PAVEMENT				
EX	EXISTING	SD	STORM DRAIN		
		SE	SPOT ELEVATION		
FC	FLUSHING CONNECTION	SS	SANITARY SEWER		
FH	FIRE HYDRANT	STA	STATION		
FLG	FLANGE				
FM	FORCE MAIN	TBC	TOP BACK OF CURB		
		TG	TOP OF GRATE		
GV	GATE VALVE	TOE	TOP OF SLOPE		
HDD	HORIZONTAL DIRECTIONAL DRILLING				

REV.	DATE	DESCRIPTION	BY

DESIGNED BY: BRJ  
DRAWN BY: BRJ  
CHECKED BY:  
PROJECT NO: 3211-004

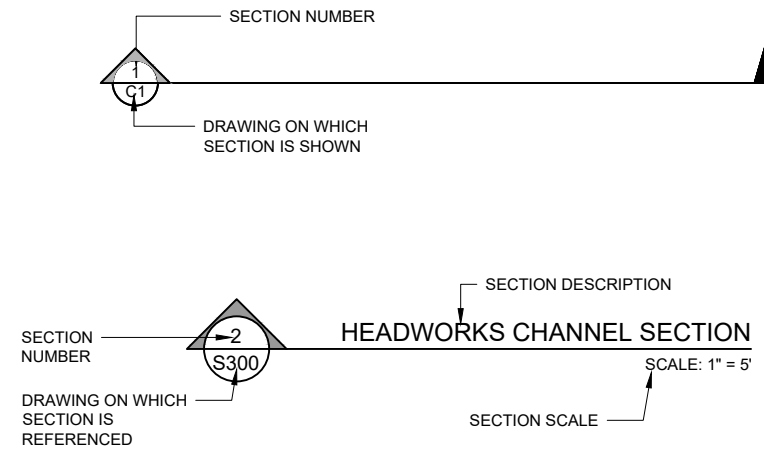
CITY OF WARRENTON  
NW 7TH PLACE & N MAIN AVE

LOW PRESSURE SEWER LINE

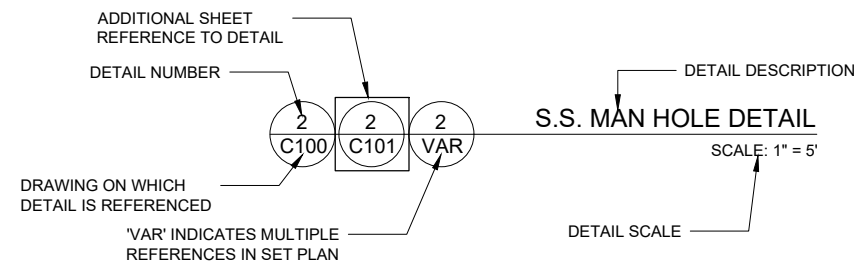
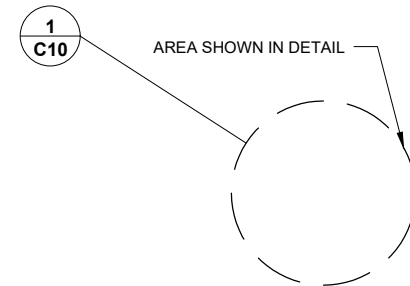
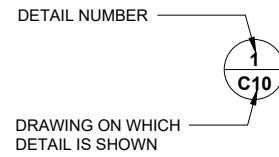
GENERAL NOTES, ABBREVIATIONS, + SHEET INDEX

DATE: 2/3/22 FILE: O:\CW\_Projects\3211 Warrenton, City of\3211-004 Low Pressure Design\Drawings\3211-004 DESIGN.dwg

**SECTION REFERENCING**



**DETAIL REFERENCING**



**EXISTING FEATURE LEGEND**

SYMBOL LEGEND	
SANITARY SEWER MANHOLE	
STORM DRAIN MANHOLE	
CATCH BASIN	
WATER VALVE	
WATER METER	
FIRE HYDRANT	
CLEANOUT	
POWER POLE	
GUY ANCHOR	
POWER PEDESTAL	
TELEPHONE PEDESTAL	
MAIL BOX	
AIR RELEASE VALVE	
BLOW OFF VALVE	
PROFILE SERVICE LATERAL CROSSING	
PROFILE TELEPHONE LINE CROSSING	
PROFILE ELECTRICAL LINE CROSSING	
PROFILE WATERLINE CROSSING	
PROFILE SANITARY SEWER CROSSING	
PROFILE STORM DRAIN CROSSING	
TREE/SHRUB	
STREET SIGN	

**LINETYPE LEGEND**

WATER LINE	
STORM DRAIN	
STORM DRAIN DITCH	
SANITARY SEWER	
PRESSURIZED SEWER	
ELECTRICAL	
OVER HEAD LINE	
TELEPHONE LINE	
GAS LINE	
TREELINE	
EDGE OF PAVEMENT	
EDGE OF CONCRETE	
RIGHT OF WAY	
CONTOURS	

**HATCH LEGEND**

CONCRETE	
PAVEMENT	
GRANULAR MATERIALS SUCH AS CRUSHED ROCK OR GRAVEL	

**NEW FEATURE LEGEND**

SYMBOL LEGEND	
SANITARY SEWER MANHOLE	
FLUSHING CONNECTION	
ISOLATION VALVE (MJ GATE VALVE)	
REDUCER	
CORP STOP (LPS-03)	

LINETYPE LEGEND	
PRESSURIZED SEWER	
SAWCUT	

**HATCH LEGEND**

SAWCUT, REMOVE, AND REPLACE	
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**PRELIMINARY**



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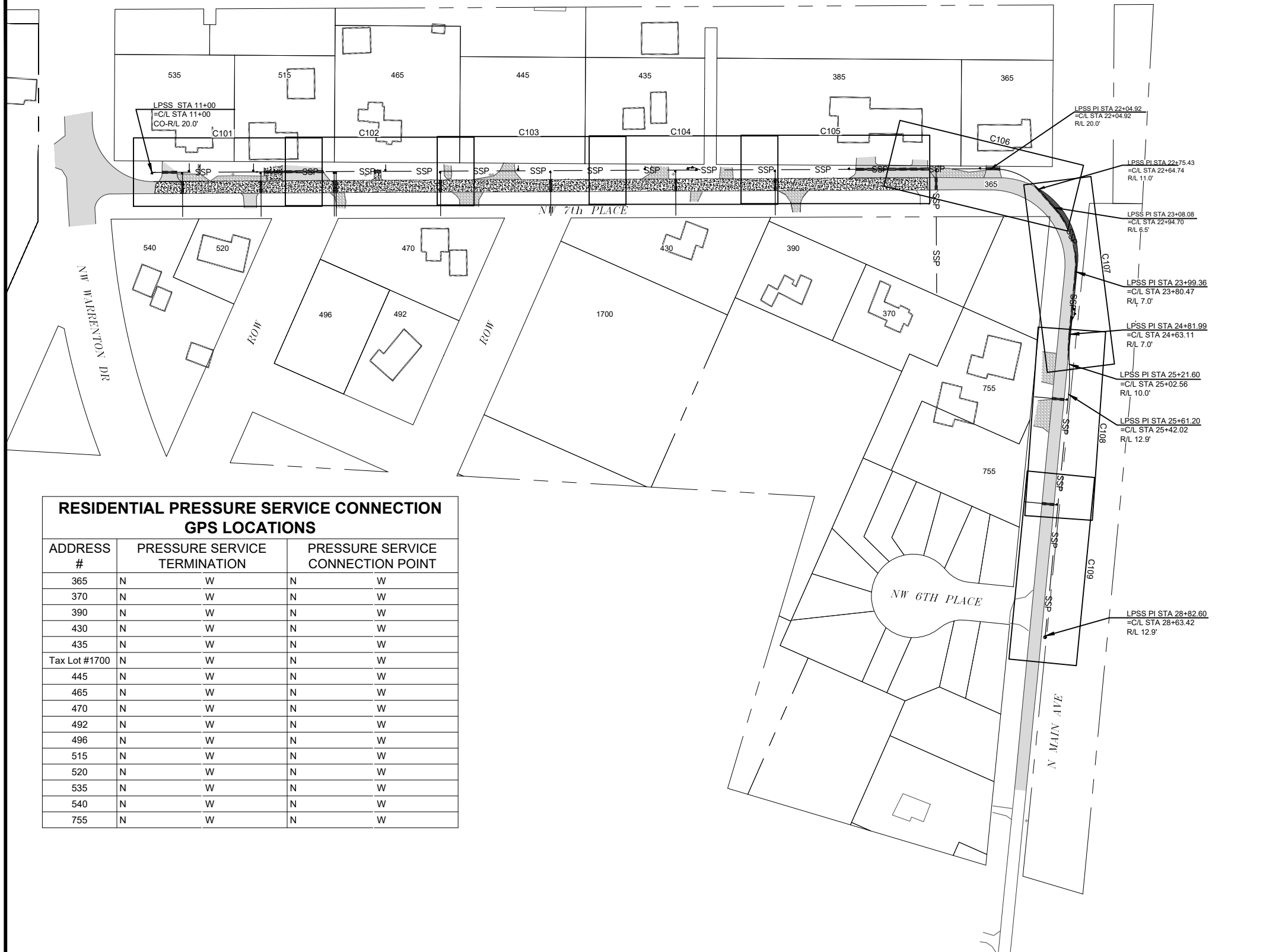
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DESIGNED BY: BRJ	DRAWN BY: BRJ	CHECKED BY: BRJ
PROJECT NO: 3211-004		

CITY OF WARRENTON NW 7TH PLACE & N MAIN AVE
LOW PRESSURE SEWER LINE
SYMBOLS + LEGENDS

DATE: 2/3/22 FILE: O:\CW\_Projects\3211 Warrenton, City of\3211-004 Low Pressure Design\Drawings\3211-004 DESIGN.dwg



**RESIDENTIAL PRESSURE SERVICE CONNECTION GPS LOCATIONS**

ADDRESS #	PRESSURE SERVICE TERMINATION	PRESSURE SERVICE CONNECTION POINT
365	N W	N W
370	N W	N W
390	N W	N W
430	N W	N W
435	N W	N W
Tax Lot #1700	N W	N W
445	N W	N W
465	N W	N W
470	N W	N W
492	N W	N W
496	N W	N W
515	N W	N W
520	N W	N W
535	N W	N W
540	N W	N W
755	N W	N W

**DEMOLITION NOTES:**

- ① SAWCUT AND REMOVE EXISTING
- ② SAWCUT AND REMOVE EXISTING. CONCRETE THICKNESS ±10".
- ③ \_\_\_\_\_
- ④ \_\_\_\_\_
- ⑤ \_\_\_\_\_
- ⑥ \_\_\_\_\_

**IMPROVEMENT NOTES:**

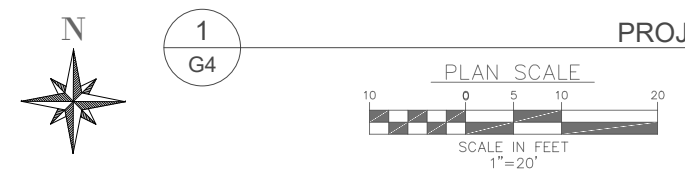
- ⑤③ INSTALL NEW 2" LOW PRESSURE SEWER PIPE (HDPE SDR 11) AND BEDDING PER DETAIL #1 SHOWN ON SHEET D102. INCLUDING FITTINGS AND FIXTURES PER PROJECT PLANS AND SPECIFICATIONS
- ⑤④ INSTALL NEW 3" LOW PRESSURE SEWER PIPE (HDPE SDR 11) AND BEDDING PER DETAIL #1 SHOWN ON SHEET D102. INCLUDING FITTINGS AND FIXTURES PER PROJECT PLANS AND SPECIFICATIONS
- ⑤⑤ INSTALL NEW 1.5" LOW PRESSURE SERVICE LATERAL PER DETAIL #1 SHOWN ON SHEET D101. LATERAL SHALL TERMINATE AT ROW.
- ⑤⑥ INSTALL NEW CLEANOUT PER DETAIL #2 SHOWN ON SHEET D101.
- ⑤⑦ INSTALL NEW MJ GATE VALVE PER DETAIL #2 SHOWN ON SHEET D101.
- ⑤⑧ INSTALL NEW COMBINATION AIR RELEASE VALVE PER DETAIL #2 SHOWN ON SHEET D102.
- ⑤⑨ INSTALL ODOR CONTROL PER DETAIL #3 SHOWN ON SHEET D102.
- ⑥① \_\_\_\_\_
- ⑥② \_\_\_\_\_
- ⑥③ \_\_\_\_\_
- ⑥④ \_\_\_\_\_

**KEY NOTES:**

- ① UTILITY CROSSINGS PRESENT. CONTRACTOR TO CONFIRM LOCATION AND DEPTH BY POT HOLING PRIOR TO DIGGING.
- ② IF EXTERNAL UTILITY CROSSES THROUGH NEW LPSS, RUN LPSS UNDER UTILITY MAINTAINING MINIMUM 6" SEPARATION. INSTALL AIR RELEASE VALVE (SEE IMPROVEMENT NOTES 58 AND 59) IMMEDIATELY PRIOR TO GRADE CHANGE.
- ③ \_\_\_\_\_

**SHEET NOTES:**

- 1. CONTRACTOR SHALL CONTACT "ONE CALL" FOR UTILITY LOCATES PRIOR TO THE START OF ANY EXCAVATION.
- 2. CONTRACTOR SHALL POTHOLE EXISTING CROSSINGS PRIOR TO NEW LOW PRESSURE SEWER LINE CONSTRUCTION TO CONFIRM EXISTING UTILITY DEPTH LOCATIONS.
- 3. TYPICAL ELEVATION FOR NEW LOW PRESSURE SEWER PIPE SHALL BE 4' AT PIPE INVERT. ADJUST DEPTH OF BURY AS REQUIRED TO MAINTAIN CONSTANT GRADE.



**PRELIMINARY**

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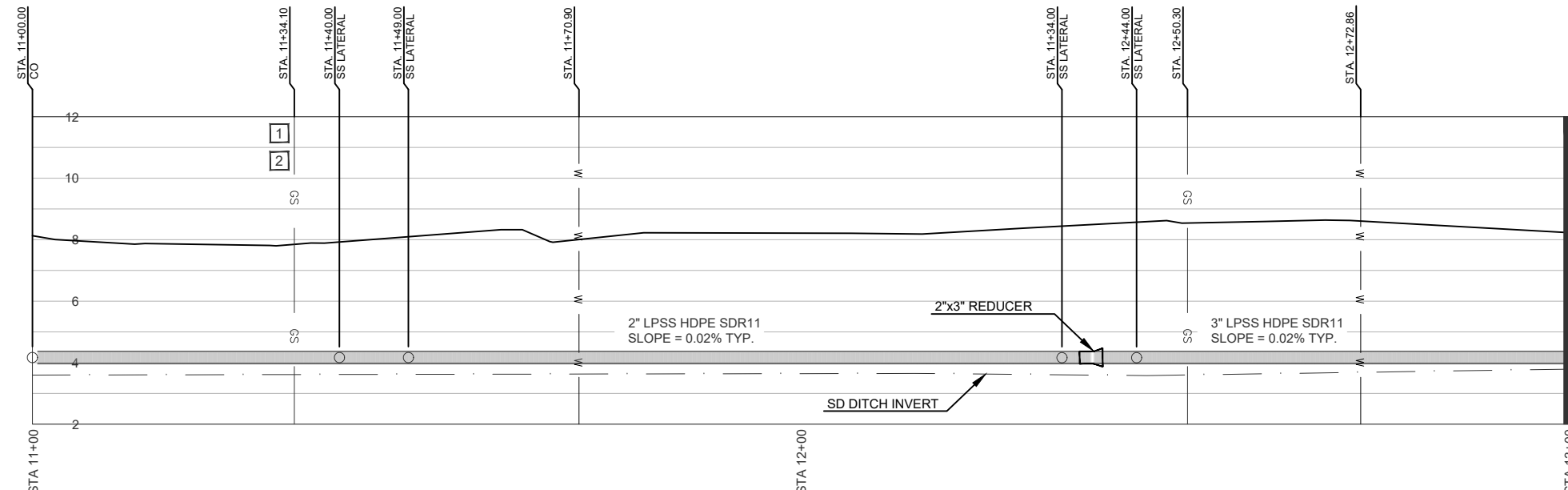
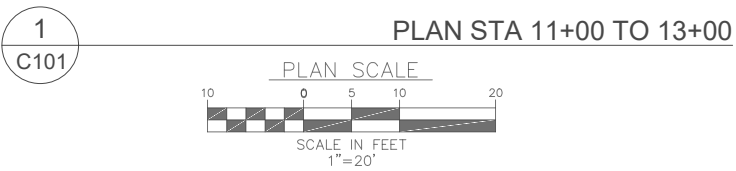
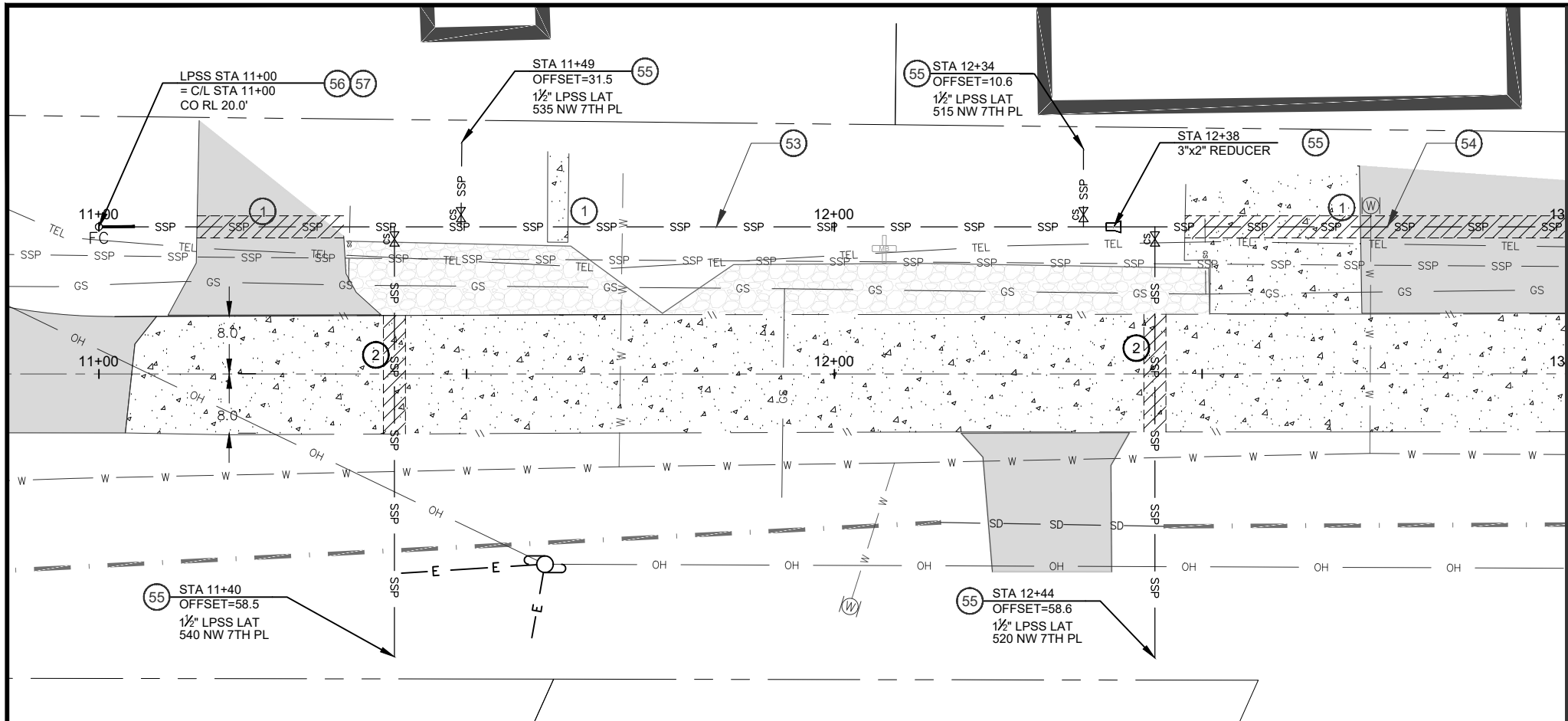
CITY OF WARRENTON  
NW 7TH PLACE & N MAIN AVE

LOW PRESSURE SEWER LINE

PROJECT OVERVIEW

Date: Sheet No:  
**G4**  
**FEBRUARY 2022**

DATE: 2/3/22 FILE: O:\CW\_Projects\3211\_Warrenton\_City\3211-004\_Low Pressure Design\Drawings\3211-004\_DESIGN.dwg



2  
C101  
PROFILE STA 11+00 TO 13+00  
SCALE HORZ 1"=20'  
VERT 1"=5'

SEE SHEET: C102  
LPSS MATCH LINE  
AT STATION: 13+00

SEE SHEET C102  
LPSS MATCHLINE  
AT STATION: 13+00

**DEMOLITION NOTES:**

- 1 SAWCUT AND REMOVE EXISTING
- 2 SAWCUT AND REMOVE EXISTING. CONCRETE THICKNESS ±10".
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_
- 6 \_\_\_\_\_

**IMPROVEMENT NOTES:**

- 53 INSTALL NEW 2" LOW PRESSURE SEWER PIPE (HDPE SDR 11) AND BEDDING PER DETAIL #1 SHOWN ON SHEET D102. INCLUDING FITTINGS AND FIXTURES PER PROJECT PLANS AND SPECIFICATIONS
- 54 INSTALL NEW 3" LOW PRESSURE SEWER PIPE (HDPE SDR 11) AND BEDDING PER DETAIL #1 SHOWN ON SHEET D102. INCLUDING FITTINGS AND FIXTURES PER PROJECT PLANS AND SPECIFICATIONS
- 55 INSTALL NEW 1.5" RESIDENTIAL PRESSURE SERVICE CONNECTION PER DETAIL #1, SHEET D101. LATERAL SHALL TERMINATE 3' FROM ROW.
- 56 INSTALL FLUSHING CONNECTION PER DETAIL #2 SHOWN ON SHEET D101.
- 57 INSTALL NEW MJ GATE VALVE PER DETAIL #2 SHOWN ON SHEET D101.
- 58 INSTALL NEW COMBINATION AIR RELEASE VALVE PER DETAIL #2 SHOWN ON SHEET D102.
- 59 \_\_\_\_\_
- 60 \_\_\_\_\_
- 61 \_\_\_\_\_
- 62 \_\_\_\_\_
- 63 \_\_\_\_\_
- 64 \_\_\_\_\_


**KEY NOTES:**

- 1 UTILITY CROSSINGS PRESENT. CONTRACTOR TO CONFIRM LOCATION AND DEPTH BY POT HOLING PRIOR TO DIGGING. IF EXTERNAL UTILITY CROSSES THROUGH NEW LPSS, RUN LPSS UNDER UTILITY MAINTAINING MINIMUM 6" SEPARATION. INSTALL AIR RELEASE VALVE (SEE IMPROVEMENT NOTES 58) ON UPSTREAM SIDE OF GRADE CHANGE.
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_

**SHEET NOTES:**

- 1. CONTRACTOR SHALL CONTACT "ONE CALL" FOR UTILITY LOCATES PRIOR TO THE START OF ANY EXCAVATION.
- 2. CONTRACTOR SHALL POTHOLE EXISTING CROSSINGS PRIOR TO NEW LOW PRESSURE SEWER LINE CONSTRUCTION TO CONFIRM EXISTING UTILITY DEPTH LOCATIONS.
- 3. TYPICAL ELEVATION FOR NEW LOW PRESSURE SEWER PIPE SHALL BE 4' AT PIPE INVERT. ADJUST DEPTH OF BURY AS REQUIRED TO MAINTAIN CONSTANT GRADE.
- 4. APPROXIMATE DITCH DEPTH MARKS THE APPROXIMATE ELEVATION OF THE INVERT OF THE STORM WATER DITCH SOUTH OF NW 7TH AND WEST OF N MAIN. LATERALS MUST CROSS AT LEAST 1' BELOW THE INVERT ELEVATION.

PRELIMINARY



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Engineering Services, Inc.

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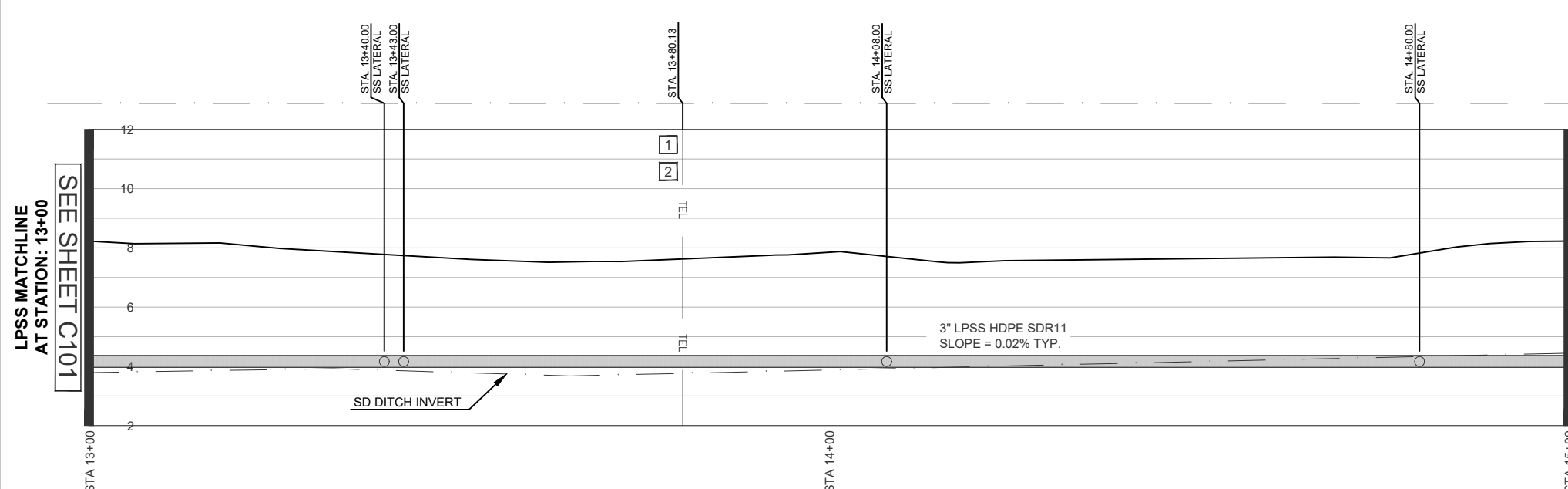
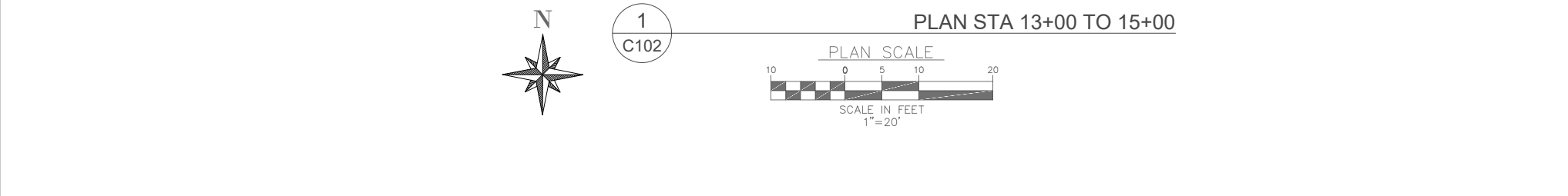
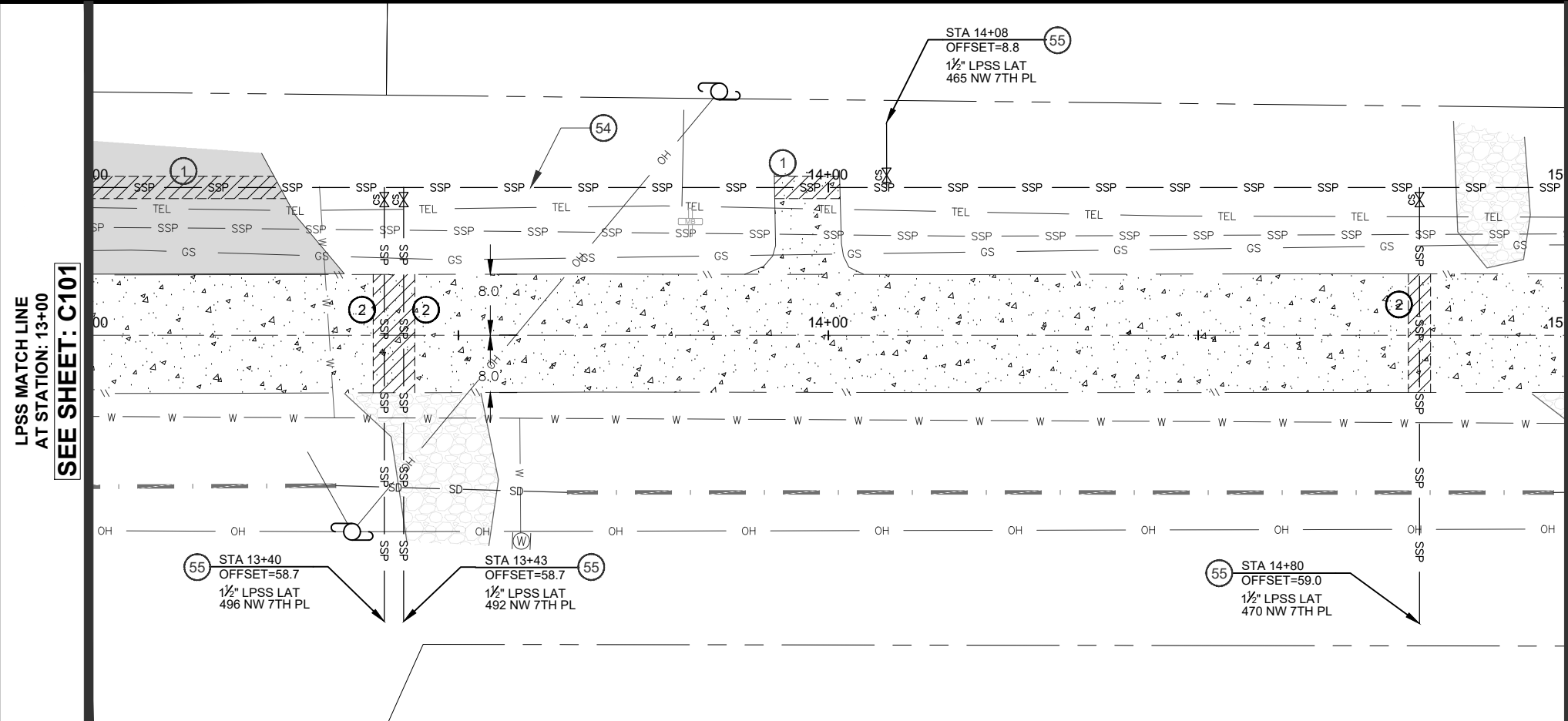
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CHECKED BY: \_\_\_\_\_  
PROJECT NO: 3211-004

CITY OF WARRENTON  
NW 7TH PLACE & N MAIN AVE  
LOW PRESSURE SEWER LINE  
11+00 TO 13+00

C101  
FEBRUARY 2022

DATE: 2/3/22 FILE: O:\CW\_Projects\3211\_Warrennton, City of\3211-004\_Low Pressure Design\Drawings\3211-004\_DESIGN.dwg



2  
C102  
PROFILE STA 13+00 TO 15+00  
SCALE HORZ 1"=20'  
VERT 1"=5'

SEE SHEET: C103  
LPSS MATCH LINE  
AT STATION: 15+00

**DEMOLITION NOTES:**

- 1 SAWCUT AND REMOVE EXISTING
- 2 SAWCUT AND REMOVE EXISTING. CONCRETE THICKNESS ±10".
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_
- 6 \_\_\_\_\_

**IMPROVEMENT NOTES:**

- 53 \_\_\_\_\_
- 54 INSTALL NEW 3" LOW PRESSURE SEWER PIPE (HDPE SDR 11) AND BEDDING PER DETAIL #1 SHOWN ON SHEET D102. INCLUDING FITTINGS AND FIXTURES PER PROJECT PLANS AND SPECIFICATIONS
- 55 INSTALL NEW 1.5" RESIDENTIAL PRESSURE SERVICE CONNECTION PER DETAIL #1, SHEET D101. LATERAL SHALL TERMINATE 3' FROM ROW.
- 56 \_\_\_\_\_
- 57 \_\_\_\_\_
- 58 INSTALL NEW COMBINATION AIR RELEASE VALVE PER DETAIL #2 SHOWN ON SHEET D102
- 59 \_\_\_\_\_
- 60 \_\_\_\_\_
- 61 \_\_\_\_\_
- 62 \_\_\_\_\_
- 63 \_\_\_\_\_
- 64 \_\_\_\_\_

**KEY NOTES:**

- 1 UTILITY CROSSINGS PRESENT. CONTRACTOR TO CONFIRM LOCATION AND DEPTH BY POT HOLING PRIOR TO DIGGING.
- 2 IF EXTERNAL UTILITY CROSSES THROUGH NEW LPSS, RUN LPSS UNDER UTILITY MAINTAINING MINIMUM 6" SEPARATION. INSTALL AIR RELEASE VALVE (SEE IMPROVEMENT NOTES 58) ON UPSTREAM SIDE OF GRADE CHANGE.
- 3 \_\_\_\_\_

**SHEET NOTES:**

- 1. CONTRACTOR SHALL CONTACT "ONE CALL" FOR UTILITY LOCATES PRIOR TO THE START OF ANY EXCAVATION.
- 2. CONTRACTOR SHALL POT HOLE EXISTING CROSSINGS PRIOR TO NEW LOW PRESSURE SEWER LINE CONSTRUCTION TO CONFIRM EXISTING UTILITY DEPTH LOCATIONS.
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PROJECT NO: 3211-004

CITY OF WARRENTON  
NW 7TH PLACE & N MAIN AVE

LOW PRESSURE SEWER LINE

13+00 TO 15+00

Date: \_\_\_\_\_ Sheet No: **C102**  
**FEBRUARY 2022**

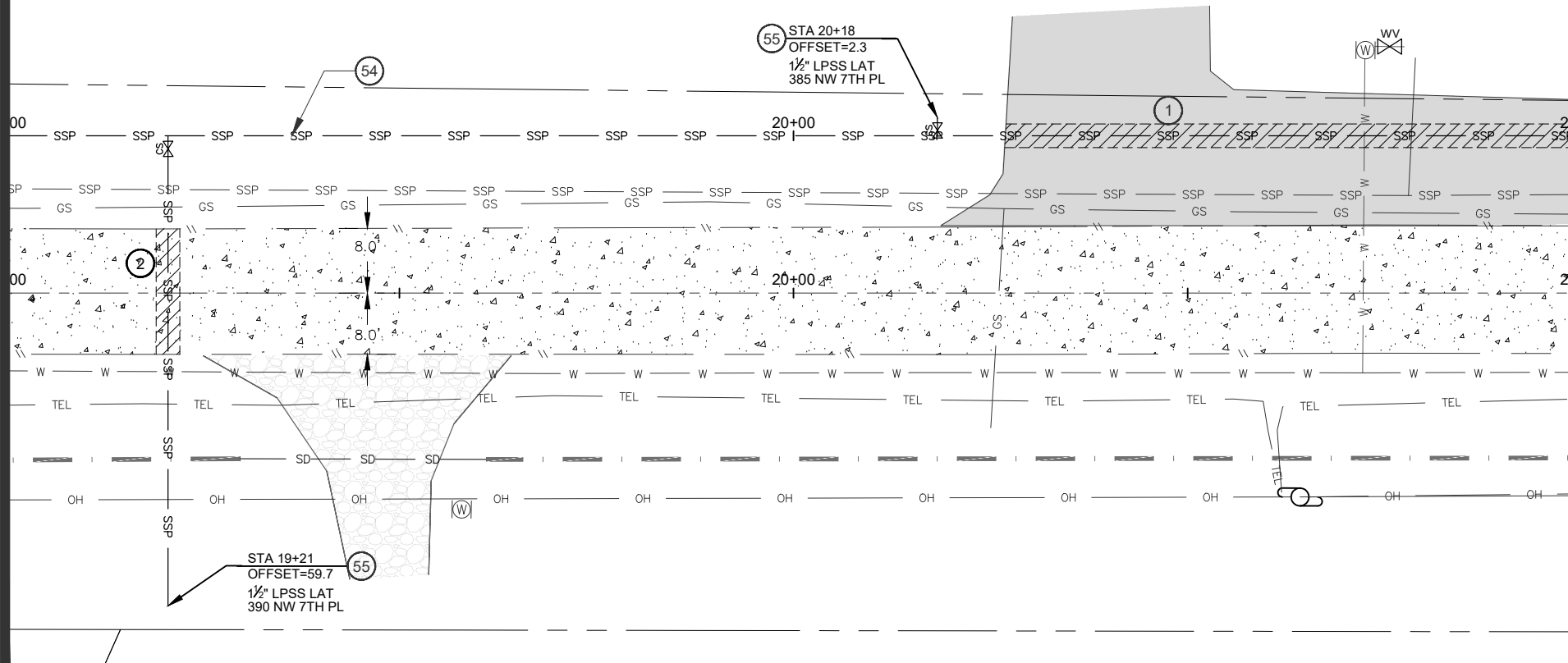




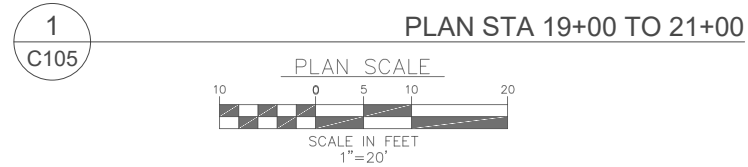


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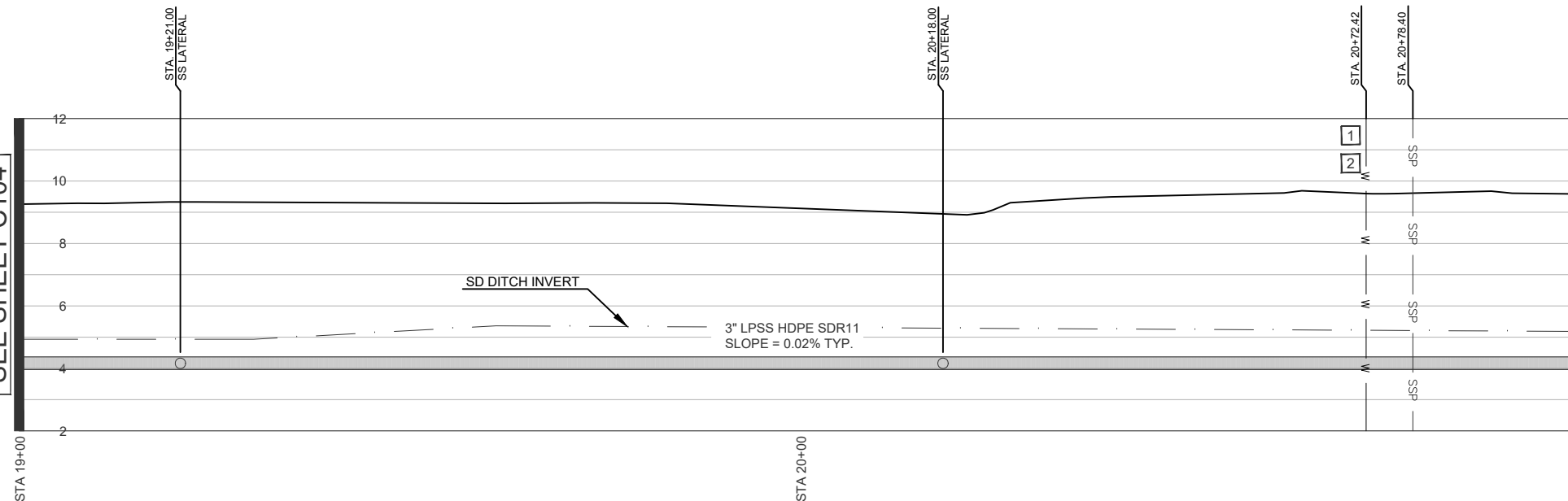
LPSS MATCHLINE  
AT STATION: 19+00  
SEE SHEET: C104



SEE SHEET: C106  
LPSS MATCHLINE  
AT STATION: 21+00



LPSS MATCHLINE  
AT STATION: 19+00  
SEE SHEET C104



SEE SHEET C106  
LPSS MATCHLINE  
AT STATION: 21+00

2  
C105  
PROFILE STA 19+00 TO 21+00  
SCALE HORZ 1"=20'  
VERT 1"=5'

DEMOLITION NOTES:

- 1 SAWCUT AND REMOVE EXISTING
- 2 SAWCUT AND REMOVE EXISTING. CONCRETE THICKNESS ±10".
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_
- 6 \_\_\_\_\_

IMPROVEMENT NOTES:

- 53 \_\_\_\_\_
- 54 INSTALL NEW 3" LOW PRESSURE SEWER PIPE (HDPE SDR 11) AND BEDDING PER DETAIL #1 SHOWN ON SHEET D102. INCLUDING FITTINGS AND FIXTURES PER PROJECT PLANS AND SPECIFICATIONS
- 55 INSTALL NEW 1.5" RESIDENTIAL PRESSURE SERVICE CONNECTION PER DETAIL #1, SHEET D101. LATERAL SHALL TERMINATE 3' FROM ROW.
- 56 \_\_\_\_\_
- 57 \_\_\_\_\_
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- 59 \_\_\_\_\_
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- 63 \_\_\_\_\_
- 64 \_\_\_\_\_

KEY NOTES:

- 1 UTILITY CROSSINGS PRESENT. CONTRACTOR TO CONFIRM LOCATION AND DEPTH BY POT HOLING PRIOR TO DIGGING.
- 2 IF EXTERNAL UTILITY CROSSES THROUGH NEW LPSS, RUN LPSS UNDER UTILITY MAINTAINING MINIMUM 6" SEPARATION. INSTALL AIR RELEASE VALVE (SEE IMPROVEMENT NOTES 58) ON UPSTREAM SIDE OF GRADE CHANGE.
- 3 \_\_\_\_\_

SHEET NOTES:

- 1. CONTRACTOR SHALL CONTACT "ONE CALL" FOR UTILITY LOCATES PRIOR TO THE START OF ANY EXCAVATION.
- 2. CONTRACTOR SHALL POTHOLE EXISTING CROSSINGS PRIOR TO NEW LOW PRESSURE SEWER LINE CONSTRUCTION TO CONFIRM EXISTING UTILITY DEPTH LOCATIONS.
- 3. TYPICAL ELEVATION FOR NEW LOW PRESSURE SEWER PIPE SHALL BE 4' AT PIPE INVERT. ADJUST DEPTH OF BURY AS REQUIRED TO MAINTAIN CONSTANT GRADE.
- 4. APPROXIMATE DITCH DEPTH MARKS THE APPROXIMATE ELEVATION OF THE INVERT OF THE STORM WATER DITCH SOUTH OF NW 7TH AND WEST OF N MAIN. LATERALS MUST CROSS AT LEAST 1' BELOW THE INVERT ELEVATION.

PRELIMINARY



541-223-5130  
www.civilwest.com  
200 FERRY ST SW  
ALBANY, OR 97321

REV.	DATE	DESCRIPTION	BY

DESIGNED BY: BRJ  
DRAWN BY: BRJ  
CHECKED BY: BRJ  
PROJECT NO: 3211-004

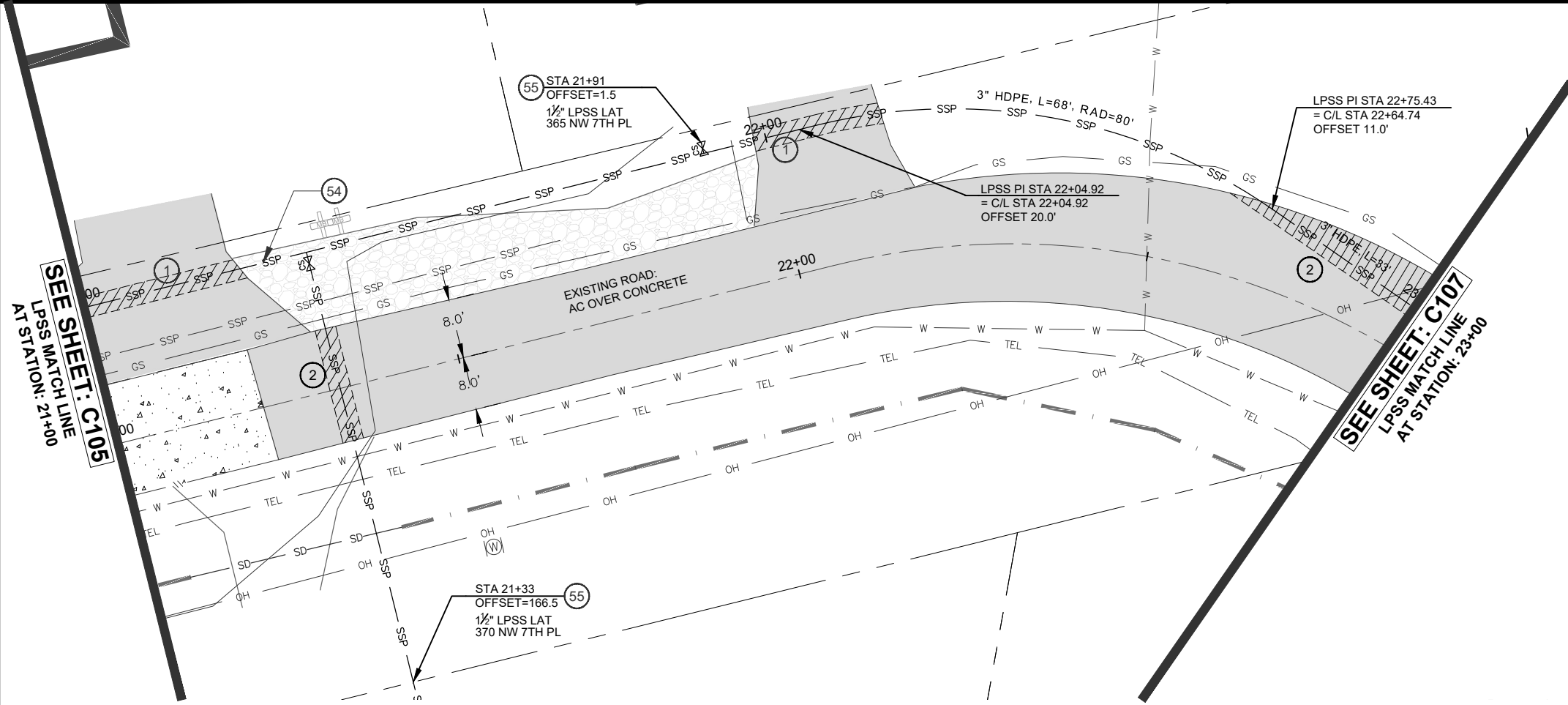
CITY OF WARRENTON  
NW 7TH PLACE & N MAIN AVE

LOW PRESSURE SEWER LINE

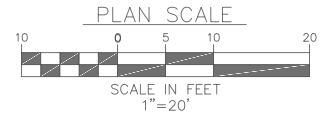
19+00 TO 21+00

Date Sheet No. **C105**  
**FEBRUARY 2022**

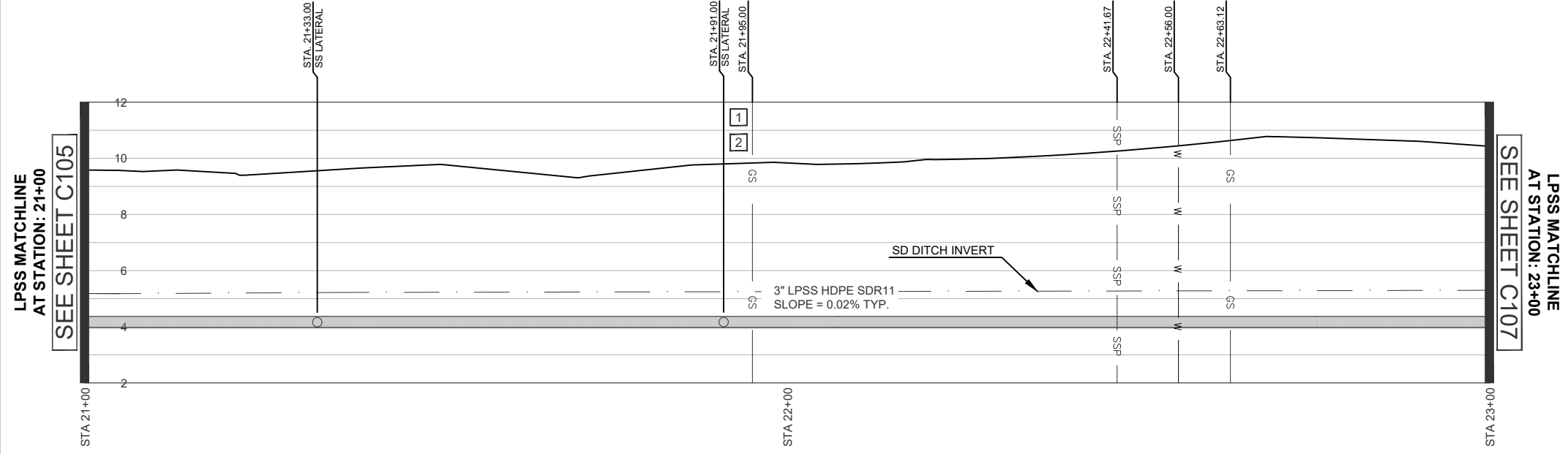
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1  
C106



PLAN STA 21+00 TO 23+00



2  
C106

PROFILE STA 21+00 TO 23+00

SCALE HORZ 1"=20'  
VERT 1"=5'

**DEMOLITION NOTES:**

- 1 SAWCUT AND REMOVE EXISTING
- 2 SAWCUT AND REMOVE EXISTING. CONCRETE THICKNESS ±10".
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_
- 6 \_\_\_\_\_

**IMPROVEMENT NOTES:**

- 53 \_\_\_\_\_
- 54 INSTALL NEW 3" LOW PRESSURE SEWER PIPE (HDPE SDR 11) AND BEDDING PER DETAIL #1 SHOWN ON SHEET D102. INCLUDING FITTINGS AND FIXTURES PER PROJECT PLANS AND SPECIFICATIONS
- 55 INSTALL NEW 1.5" RESIDENTIAL PRESSURE SERVICE CONNECTION PER DETAIL #1, SHEET D101. LATERAL SHALL TERMINATE 3' FROM ROW.
- 56 \_\_\_\_\_
- 57 \_\_\_\_\_
- 58 INSTALL NEW COMBINATION AIR RELEASE VALVE PER DETAIL #2 SHOWN ON SHEET D102.
- 59 \_\_\_\_\_
- 60 \_\_\_\_\_
- 61 \_\_\_\_\_
- 62 \_\_\_\_\_
- 63 \_\_\_\_\_
- 64 \_\_\_\_\_

**KEY NOTES:**

- 1 UTILITY CROSSINGS PRESENT. CONTRACTOR TO CONFIRM LOCATION AND DEPTH BY POT HOLING PRIOR TO DIGGING.
- 2 IF EXTERNAL UTILITY CROSSES THROUGH NEW LPSS, RUN LPSS UNDER UTILITY MAINTAINING MINIMUM 6" SEPARATION. INSTALL AIR RELEASE VALVE (SEE IMPROVEMENT NOTES 58) ON UPSTREAM SIDE OF GRADE CHANGE.
- 3 \_\_\_\_\_

**SHEET NOTES:**

- 1. CONTRACTOR SHALL CONTACT "ONE CALL" FOR UTILITY LOCATES PRIOR TO THE START OF ANY EXCAVATION.
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PRELIMINARY



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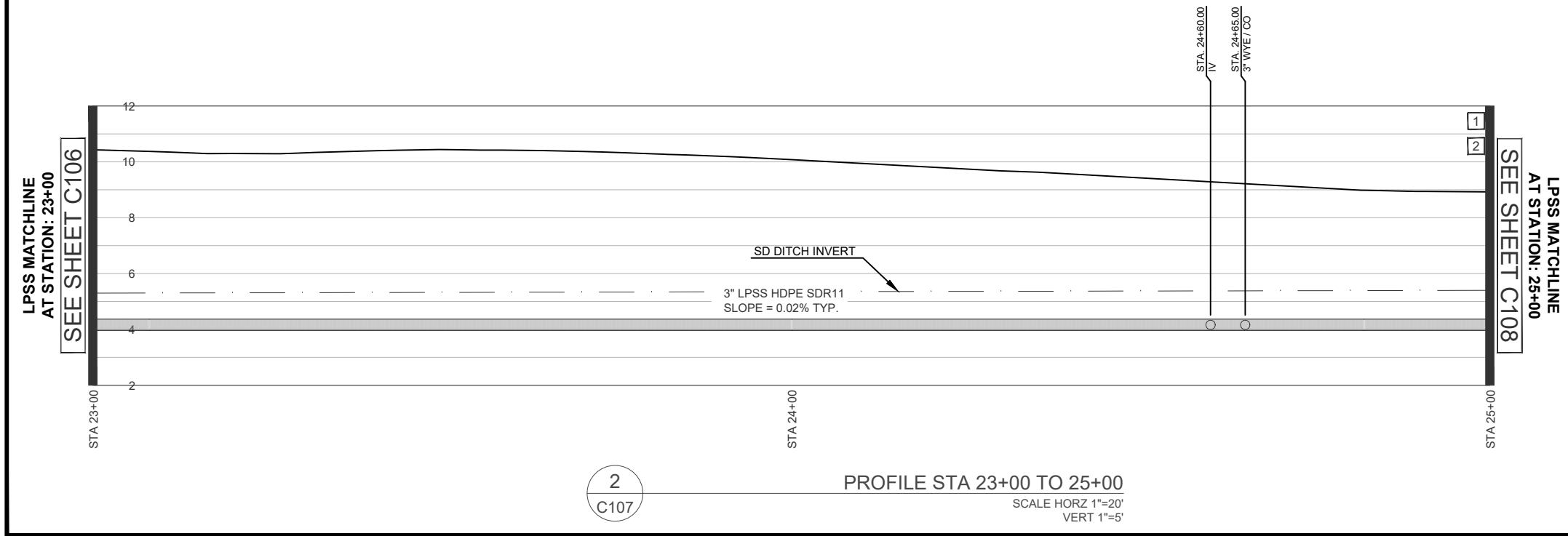
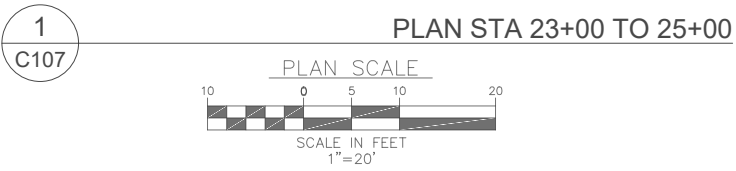
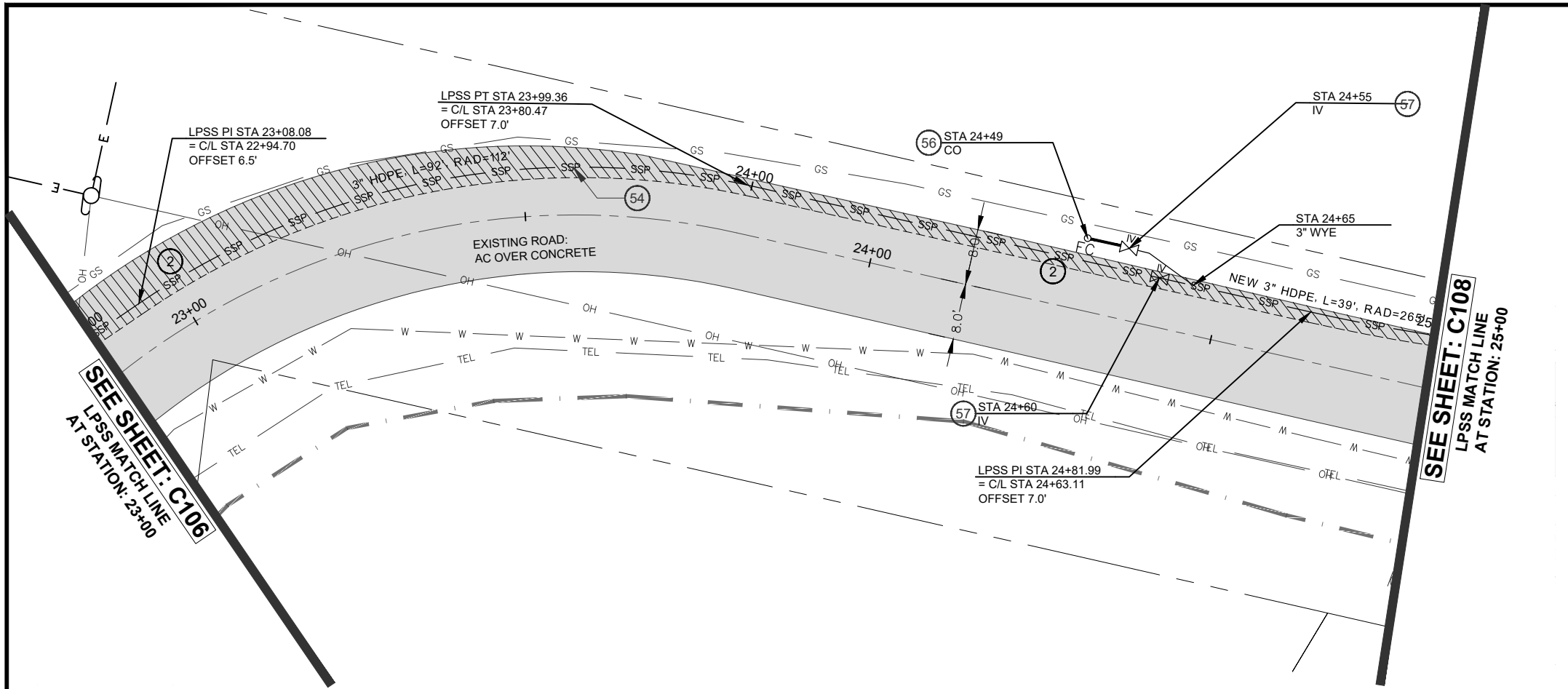
REV.	DATE	DESCRIPTION	BY

DESIGNED BY: BRJ  
DRAWN BY: BRJ  
CHECKED BY:  
PROJECT NO: 3211-004

CITY OF WARRENTON  
NW 7TH PLACE & N MAIN AVE  
LOW PRESSURE SEWER LINE  
21+00 TO 23+00

Date Sheet No:  
**C106**  
FEBRUARY 2022

DATE: 2/3/22 FILE: O:\CW\_Projects\3211\_Warrenton\_City\3211-004\_Low Pressure Design\Drawings\DWG\3211-004\_DESIGN.dwg



**DEMOLITION NOTES:**

- 1 SAWCUT AND REMOVE EXISTING
- 2 SAWCUT AND REMOVE EXISTING. CONCRETE THICKNESS ±10\"/>
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_
- 6 \_\_\_\_\_

**IMPROVEMENT NOTES:**

- 53 \_\_\_\_\_
- 54 INSTALL NEW 3" LOW PRESSURE SEWER PIPE (HDPE SDR 11) AND BEDDING PER DETAIL #1 SHOWN ON SHEET D102. INCLUDING FITTINGS AND FIXTURES PER PROJECT PLANS AND SPECIFICATIONS
- 55 INSTALL NEW 1.5" RESIDENTIAL PRESSURE SERVICE CONNECTION PER DETAIL #1, SHEET D101. LATERAL SHALL TERMINATE 3' FROM ROW.
- 56 INSTALL FLUSHING CONNECTION PER DETAIL #2 SHOWN ON SHEET D101.
- 57 INSTALL NEW MJ GATE VALVE PER DETAIL #2 SHOWN ON SHEET D101.
- 58 INSTALL NEW COMBINATION AIR RELEASE VALVE PER DETAIL #2 SHOWN ON SHEET D102.
- 59 \_\_\_\_\_
- 60 \_\_\_\_\_
- 61 \_\_\_\_\_
- 62 \_\_\_\_\_
- 63 \_\_\_\_\_
- 64 \_\_\_\_\_

**KEY NOTES:**

- 1 UTILITY CROSSINGS PRESENT. CONTRACTOR TO CONFIRM LOCATION AND DEPTH BY POT HOLING PRIOR TO DIGGING. IF EXTERNAL UTILITY CROSSES THROUGH NEW LPSS, RUN LPSS UNDER UTILITY MAINTAINING MINIMUM 6" SEPARATION. INSTALL AIR RELEASE VALVE (SEE IMPROVEMENT NOTES 58) ON UPSTREAM SIDE OF GRADE CHANGE.
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_

**SHEET NOTES:**

- 1. CONTRACTOR SHALL CONTACT "ONE CALL" FOR UTILITY LOCATES PRIOR TO THE START OF ANY EXCAVATION.
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**PRELIMINARY**

**Civil West**  
Engineering Services, Inc.  
200 FERRY ST SW  
ALBANY, OR 97321  
541-223-5130  
www.civilwest.com

REV.	DATE	DESCRIPTION	BY

DESIGNED BY: BRJ	DRAWN BY: BRJ	CHECKED BY: _____
PROJECT NO: 3211-004		

CITY OF WARRENTON  
NW 7TH PLACE & N MAIN AVE

LOW PRESSURE SEWER LINE

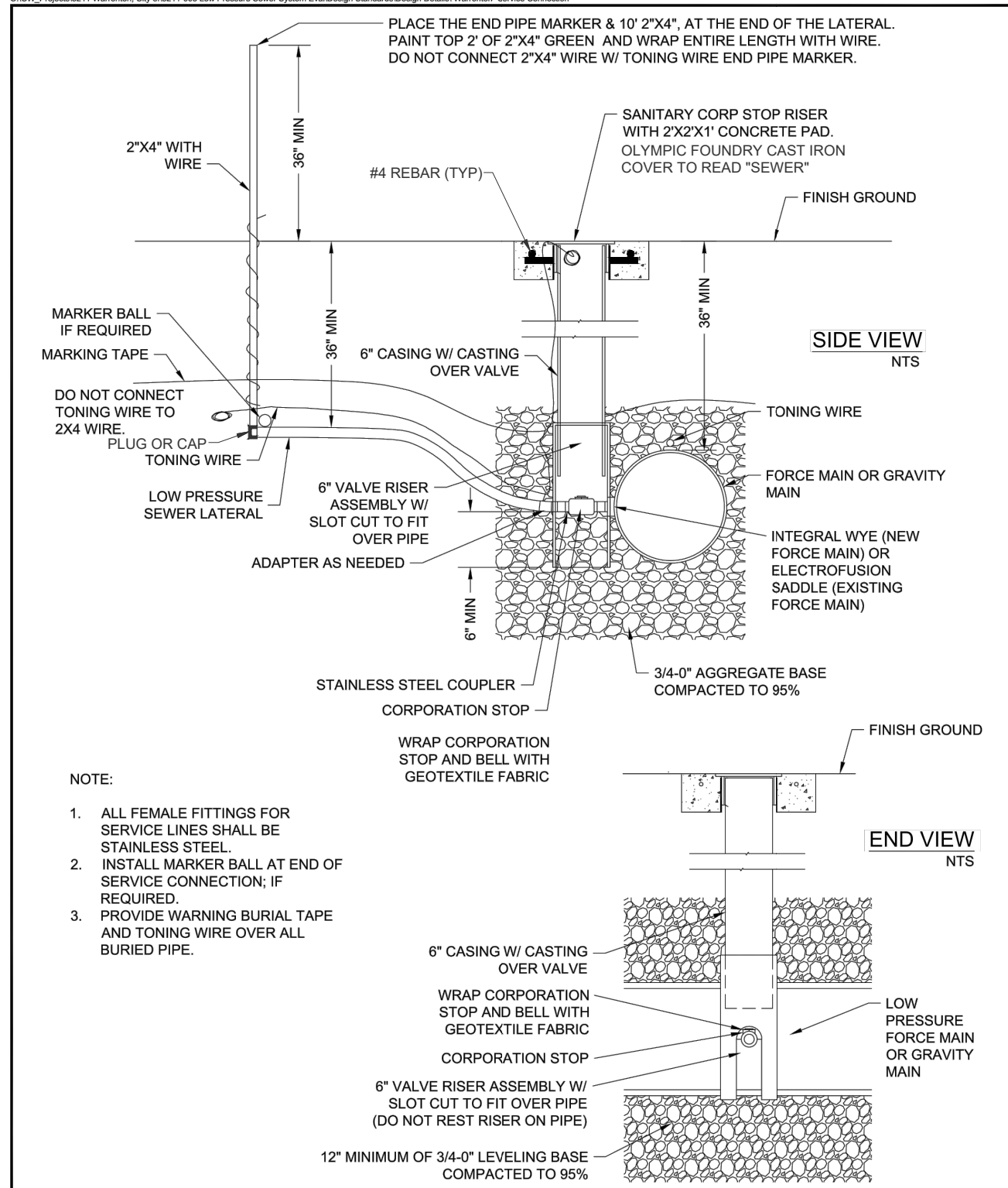
23+00 TO 25+00

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Sheet No. **C107**  
Date **FEBRUARY 2022**







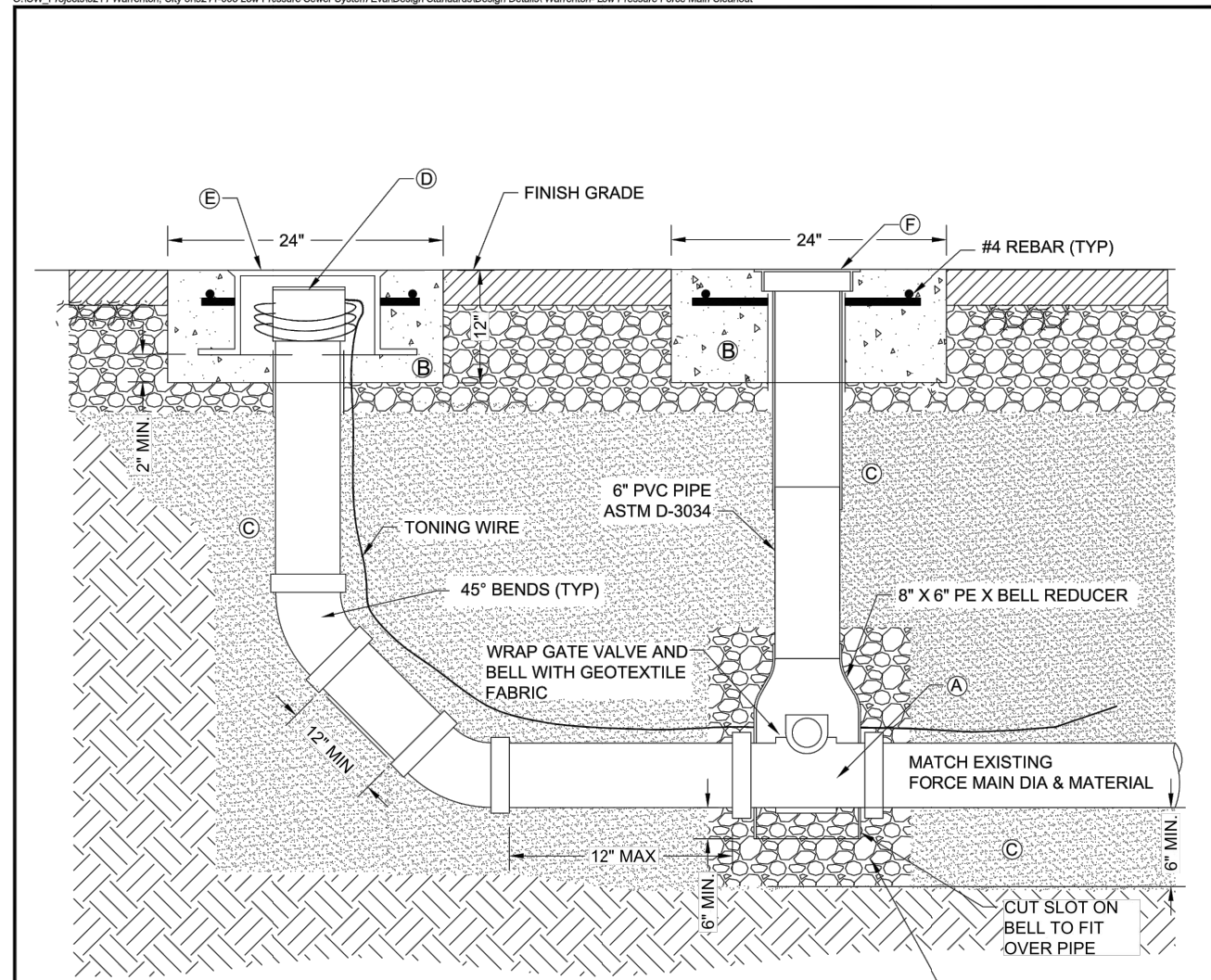
CITY OF WARRENTON  
225 SOUTH MAIN STREET  
WARRENTON, OREGON 97146  
(503) 861-2233

## RESIDENTIAL PRESSURE SERVICE CONNECTION

SHEET NO.

LPS-03

APPROVED: DRAFT



### KEYED NOTES:

- A. MJ GATE VALVE (AWWA C515) W/ NON RISING STEM W/ 2" SQUARE STAINLESS STEEL OPERATOR W/ RESTRAINED JOINTS (EACH SIDE).
- B. CONCRETE COLLAR TO BE INSTALLED WHEN LOCATED OUTSIDE OF PAVED AREAS W/ 50# FELT BETWEEN PIPE AND CONCRETE.
- C. BEDDING & BACKFILL TO CONFORM WITH MATERIALS. SPECIFIED IN THE SEWER LINE EXTENSION PLANS.
- D. INSTALL CAM LOCK WITH DUST CAP.
- E. STANDARD ADJUSTABLE CLEANOUT CAST IRON FRAME AND COVER MANUFACTURED BY EAST JORDAN IRON WORKS OR APPROVED EQUAL.
- F. VALVE BOX SHALL BE OLYMPIC FOUNDRY CAST IRON COVER TO READ "SEWER".

### NOTE:

VALVE AND CLEANOUT SHALL BE THE SAME SIZE OR LARGER THAN THE FORCE MAIN.

ADD "CAUTION SEWER LINE" BURIAL TAPE TO ALL BURIED SEWER PIPE



CITY OF WARRENTON  
225 SOUTH MAIN STREET  
WARRENTON, OREGON 97146  
(503) 861-2233

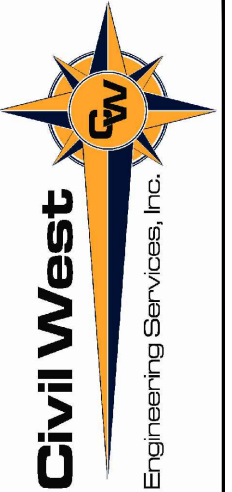
## FORCE MAIN FLUSHING CONNECTION

SHEET NO.

LPS-04

APPROVED: DRAFT

PRELIMINARY



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ALBANY, OR 97321

REV.	DATE	DESCRIPTION	BY

DESIGNED BY: BRJ	DRAWN BY: BRJ	CHECKED BY: MDW
PROJECT NO: 3211-004		

CITY OF WARRENTON  
NW 7TH PLACE & N MAIN AVE

LOW PRESSURE SEWER LINE

DETAIL

D101

FEBRUARY 2022

DATE: 2/3/22 FILE: O:\CW\_Projects\3211 Warrenton, City of\3211-004 Low Pressure Design\Drawings\3211-004 DESIGN.dwg

rd300.dgn 20-JUL-2020

"A" (in)	"B" (in)	"C" (in)	"D" (in)
4	10	4	8
6	10	4	8
8	10	6	10
10	10	6	10
12	12	6	10
15	12	6	10
18	16	6	12
21	16	6	12
24	18	6	12
30	18	6	12
36	24	6	14
42	24	6	14
48	24	6	14
54	24	6	14
60	24	6	14
66	24	6	14
72	24	6	14

For pipes over 72" diameter, see general note 3.

DIAMETER	MIN. SPACE BETWEEN PIPES
Up to 48"	24"
48" to 72"	One half (1/2) dia. of pipe

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

- Surfacing of paved areas shall comply with street cut Std. Dwg. RD302.
- For pipe installation in embankment areas where the trench method will not be used and the pipe is  $\geq 30"$  diameter, increase dimension "B" to nominal pipe diameter.
- Pipes over 72" diameter are structures, and are not applicable to this drawing.
- See Std. Dwg. RD336 for tracer wire details (When required).

Calc. Book No. N/A SDR DATE 14-JUN-2014

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS  
TRENCH BACKFILL, BEDDING,  
PIPE ZONE AND MULTIPLE  
INSTALLATIONS  
2021

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

Effective Date: June 1, 2021 – November 30, 2021 RD300

rd270.dgn 20-JUL-2020

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

- Air release/air vacuum valve shall be size specified in Contract. Piping and valves to be same size as combination air release/air vacuum valve.
- Locate at high point of main.
- Tap top of main.
- Provide insulation and additional depth when specified for freeze protection.
- See project plans for details not shown.

Calc. Book No. N/A SDR DATE 25-JUN-2017

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS  
COMBINATION AIR RELEASE  
AIR VACUUM VALVE ASSEMBLY  
(2" AND SMALLER)  
2021

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

Effective Date: June 1, 2021 – November 30, 2021 RD270

rd338.dgn 20-JUL-2020

MANHOLE WITH PRECAST CONICAL TOP

MANHOLE WITH PRECAST FLAT SLAB TOP

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

- All precast products shall conform to requirements of ASTM C478.
- Standard precast manhole section diameter shall be 48". Use 42" if specified by the Engineer.
- See Std. Dwg. RD345 for pipe to manhole connections.
- See Std. Dwg. RD344 for manhole base section.
- Adjust 24" maximum.
- All connecting pipes shall have a tracer wire, or approved alternate.
- See Std. Dwg. RD336 for manhole steps.
- See Std. Dwg. RD336 for details not shown.
- See Std. Dwg. RD356 for manhole covers and frames, manhole adjustment rings, etc. the Engineer.
- Max. pipe diameter varies with pipe material.
- See Std. Dwg. RD342 for shallow manholes.
- Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.
- This detail limited to interior drop of 24". See Std. Dwg. RD330 or RD332 for drop manhole details for drops in excess of 24".

Calc. Book No. N/A SDR DATE 21-JUN-2019

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS  
STANDARD  
SANITARY SEWER MANHOLE  
2021

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

Effective Date: June 1, 2021 – November 30, 2021 RD338

PRELIMINARY



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200 FERRY ST SW  
ALBANY, OR 97321

REV.	DATE	DESCRIPTION	BY

DESIGNED BY: BRJ  
DRAWN BY: BRJ  
CHECKED BY: MDW  
PROJECT NO: 3211-004

CITY OF WARRENTON  
NW 7TH PLACE & N MAIN AVE

LOW PRESSURE SEWER LINE

DETAILS

Sheet No. D102  
FEBRUARY 2022