



8113 WEST GRANDRIDGE BOULEVARD, KENNEWICK, WASHINGTON 99336-7166

March 10, 2017

Alan Rathbun  
Director, Pipeline Safety  
Utilities & Transportation Commission  
1300 S. Evergreen Park Dr. S.W  
PO Box 47250  
Olympia, WA 98504-7250

**RECEIVED**  
State of Washington  
**MAR 10 2017**  
UTC  
Pipeline Safety Program

**Subject: Relocation of a Six Inch Transmission Line in Zillah, WA**

Dear Mr. Rathbun:

Cascade Natural Gas Corporation (CNGC) is providing this proposed construction report in accordance with WAC 480-93-160. The purpose of this report is to inform the commission about the proposed construction of a 400 foot section of steel transmission pipeline in Zillah, WA. Construction is scheduled to begin on April 24, 2017.

CNGC addresses the proposed route and the specifications of the pipeline according to the terms of WAC 480-93-160 below:

- a) Tentative to the proximity request submitted by CNGC, approximately 400 feet of 6 inch transmission pipeline will be constructed to replace an existing 6 inch transmission line. The proposed pipeline will be constructed in parallel to the existing pipeline and will be installed in the existing right of way. The existing pipeline will be retired and abandoned in place.

The project will be located approximately two miles north of the City of Zillah along Cheyne Road. Yakima County will be performing road improvements that will change the grade of the project site. It has been determined that for the length of the proposed road improvement, the existing 400 foot section of transmission pipeline will need to be replaced in order to maintain a minimum cover of 36 inches, as required by 49 C.F.R 192.327 (a).

- b) Please reference the attached engineering drawings for the proposed methods of construction and class location.
- c) There will be no valves, regulators or any other auxiliary equipment installed as part of the proposed construction.

- d) The MAOP for the pipeline being constructed will match that of the existing line at 400 psig.
- e) There is an 8 inch irrigation line that runs parallel to Highland Drive. CNGC is required to maintain five feet of clearance from the line. CNGC will install the proposed pipeline by way of horizontal directional drilling in order to meet the minimum clearance requirement.
- f) The proposed pipeline will be cathodically protected in accordance with CNGC Company Procedure (CP) #755 – Corrosion Control Operation and Maintenance. Cathodic protection will be applied to the pipeline within 90 days of installation. All pipe installed will be coated with a fusion bonded epoxy coating and all field applied wrap will be done in accordance with CNGC CP #710 – Coating and Painting Standards. Pipeline installed by horizontal directional drilling will have an abrasion resistant over-coating. The pipeline will be inspected for coating holidays using electronic holiday detection equipment per CNGC CP #712 – Holiday Detection.
- g) All welding performed will be in accordance with the standards established in CNGC CP #760 – Welding Standards. Cascade will radiographically examine 100 percent of all girth welds.
- h) If a horizontal field bend is required, the field bend will be limited to less than 20 degrees. Bends greater than 20 degrees will require an elbow fitting. The pipeline installed by horizontal directional drilling will have a minimum radius bend of 600 feet.

For further details on this project please reference the attached engineering drawings. Please contact Chris Grissom at 509-531-6427 with questions or comments.

Respectfully Submitted,

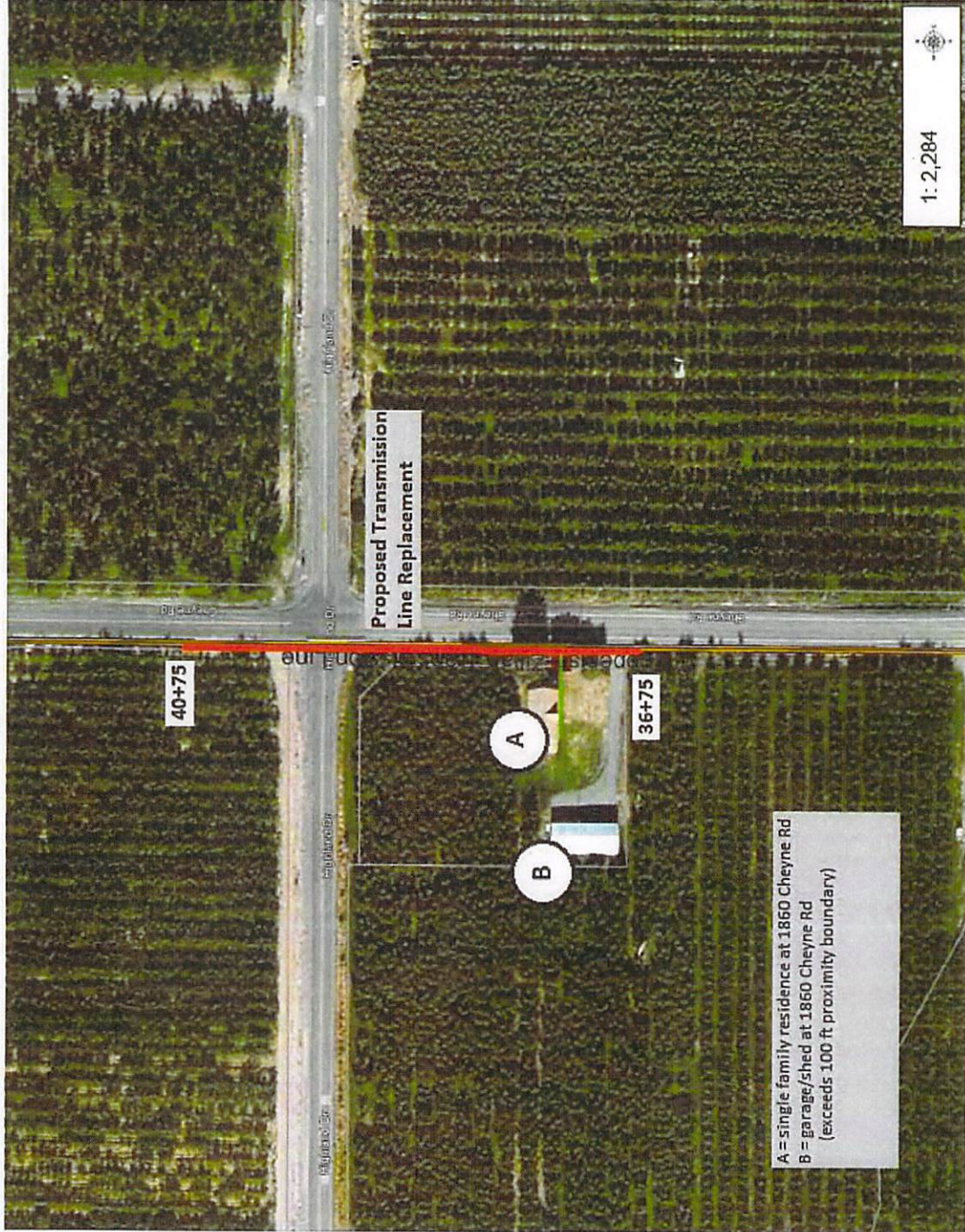


Chris Grissom  
Manager of Standards & Compliance  
Cascade Natural Gas Corporation





# Toppenish-Zillah Transmission Line Relocate - Project Route Figure 1



1:2,284

## Legend

- Regulator Station
- Town Border Station
- Compressor
- Gas Valve
  - ⚡ Closed
  - ⚡ Open
  - ⚡ Unknown
- ⚡ Odorizer
- ⚡ Controllable Fitting
- ⚡ Non-Controllable Fitting
  - End Cap
  - Insulated Coupling
  - Reducer
  - Transition
- ▲ Pressure Monitoring Device
- Transmission Main
  - 4"
  - 6"
  - 8"
  - 10"
  - 12"
  - 16"
  - 20"
- ▬ Proposed Replacement Section

## Notes

Toppenish-Zillah Transmission Line Relocate - Project Route Figure 1

This map is a user generated static output from the CNG GIS Silverlight mapping website and is for reference only. It is not to be relied upon for construction purposes. It is provided for planning purposes only. FIELD LOCATES ARE REQUIRED FOR LOCATION OF GAS FACILITIES

0.1 Miles

0.1 Miles

0.04

0

0.1

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
© Cascade Natural Gas Company





NO	REVISION	BY	DATE
DATE			
Approved For Construction		DATE	
DATE			
DATE			
DATE			



OLD PATH: J WORKLANE  
 SCALE: NONE  
 OLD # 4-A  
 DATE: 3/8/17  
 ENGINEER: T HENDERSON  
 DESIGN NUMBER: J. GORDON  
 TOWN: WOLF CREEK # 315709  
 WORK ORDER NUMBER: 2088021150  
 DRAWING NO: 2088021150

M1  
 2 OF 4

CALL BEFORE YOU DIG!  
 UTILITY INFORMATION  
 LOCATION CENTER  
 811

CONTRACTOR TO VERIFY SIZE, TYPE AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY PROJECT ENGINEER IMMEDIATELY IF CONFLICTS ARISE.

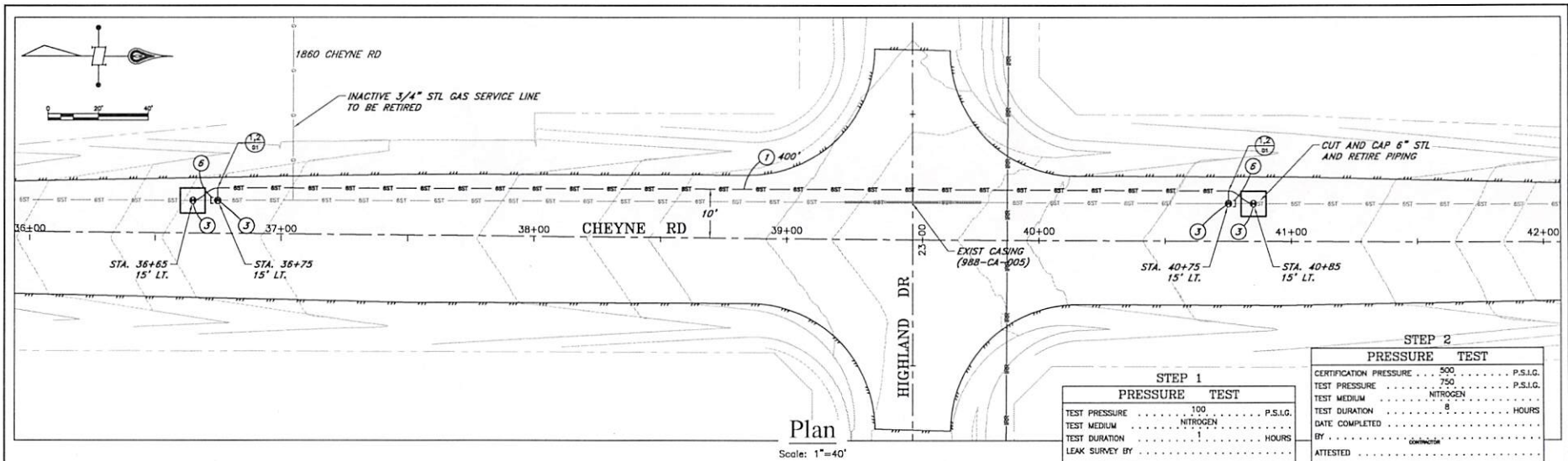
PRELIMINARY

NOT REQUIRMENT.  
 100% NOT  
 GENERAL NOTE:  
 PRELINE SEGMENT IS A CLASS 1 LOCATION.  
 ENGINEERING HAS PERFORMED THE COLLAPSE PRESSURE CALCULATION AND IT IS ACCEPTABLE TO PRESSURE TEST AGAINST THE BOTTOM ZILM/TORRENSION 48 LINE  
 DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 TITLE: \_\_\_\_\_  
 APPROVAL EXPRES: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 PRESSURE TEST GUIDANCE  
 DO NOT EXCEED 825 PSIG ON THE PRESSURE TEST.  
 OUTLINE STOPPERS CONNECTED TO THE 6 INCH ORIGINAL

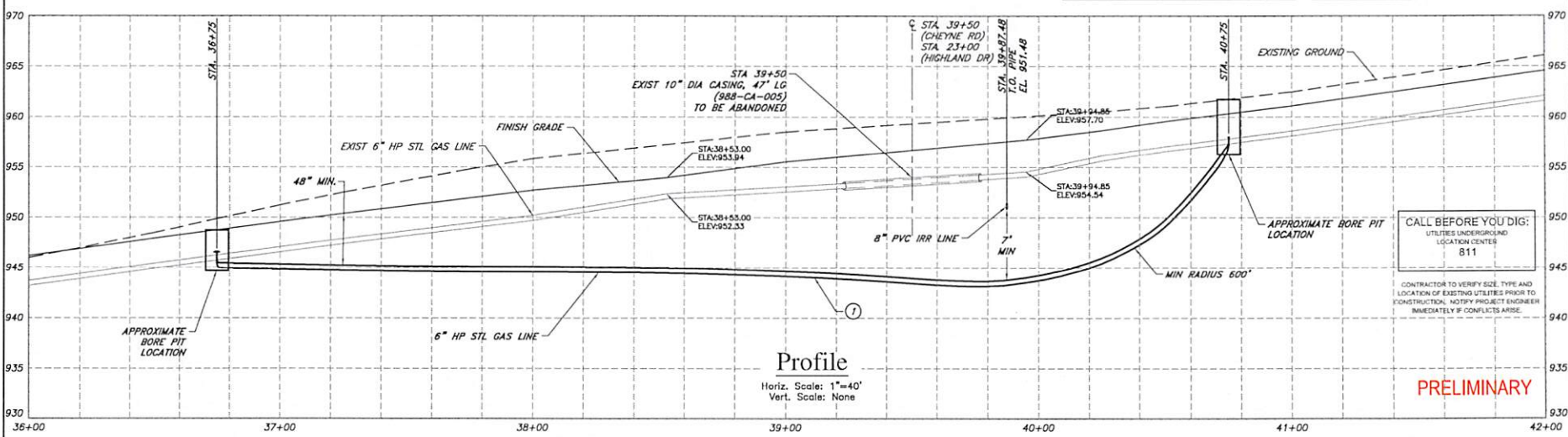
- ALL WORK SHALL BE IN ACCORDANCE WITH CASCADIA NATURAL GAS CORPORATION PROCEDURES AND ALL YAKOMA COUNTY STANDARDS. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL SAFETY STANDARDS AND REQUIREMENTS AS SET FORTH BY OSHA, MSHA, AND THE STATE OF WASHINGTON DEPARTMENT OF LABOR AND INDUSTRIES.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE YAKOMA COUNTY STANDARDS.
- ALL APPROVALS AND PERMITS REQUIRED BY THE YAKOMA COUNTY SHALL BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL PUBLIC INFRASTRUCTURE CONSTRUCTION DEFICIENCIES FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE BY YAKOMA COUNTY.
- CONTRACTOR SHALL TAKE ANY NECESSARY MEANS TO KEEP FROM TRACKING MUD AND DEBRIS OUT ONTO THE EXISTING STREETS, AND SHALL ALSO KEEP MUD AND ANY OTHER DEBRIS FROM THE SITE FROM ENTERING THE EXISTING PUBLIC STORM DRAINAGE SYSTEM.
- SURFACE TREATMENT FOR THE PROPOSED SITE RESTORATION OUTSIDE OF THE YAKOMA COUNTY ROADWAY SHALL BE HYDROSEEDING.
- A RECONSTRUCTION MEETING SHALL BE HELD WITH THE YAKOMA COUNTY PRIOR TO THE START OF CONSTRUCTION. A MINIMUM OF 48 HOURS NOTICE SHALL BE GIVEN TO THE YAKOMA COUNTY.
- CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. CONTRACTOR SHALL VERIFY THE LOCATION PRIOR TO CONSTRUCTION BY CALLING 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.
- A TRAFFIC CONTROL PLAN SHALL BE IN ACCORDANCE WITH MUTCD STANDARDS OR AS SPECIFIED BY THE CITY/COUNTY ENGINEER. ALL IMPACTS TO LOCAL TRAFFIC SHALL BE COORDINATED WITH THE YAKOMA COUNTY AT LEAST ONE WEEK PRIOR TO ANY IMPACT.
- IF IS CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL EMERGENCY SERVICES (FIRE, POLICE, ETC.) IF APPROVED OR SPECIFIED BY THE YAKOMA COUNTY.
- CONTRACTOR SHALL RESTORE WORK AREA TO SAME OR BETTER CONDITION UNLESS OTHERWISE APPROVED OR SPECIFIED BY THE YAKOMA COUNTY.
- CONTRACTOR IS PERMITTED TO WORK WITHIN THE CITY/COUNTY RIGHT-OF-WAY OR YAKOMA CITY/COUNTY PROPERTY. IT IS CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF THE RIGHT-OF-WAY.
- CONTRACTOR SHALL NOTIFY AND WORK WITH ALL AFFECTED PROPERTY OWNERS. CASCADIA SHALL PROVIDE THE YAKOMA COUNTY WITH EMERGENCY TELEPHONE NUMBERS AT THE TIME OF THE PRE-CONSTRUCTION MEETING AND SHALL SUPPLY A FORMBANK ON-SITE AT ALL TIMES.
- YAKOMA COUNTY UTILITY SERVICE LINES BROKEN ON PRIVATE PROPERTY SHALL BE REPAIRED IMMEDIATELY BY CONTRACTOR. YAKOMA SERVICE LINES BROKEN IN THE CITY/COUNTY RIGHT-OF-WAY SHALL BE REPAIRED BY THE YAKOMA COUNTY, AND CONTRACTOR WILL BE BILLED FOR THE REPAIR WORK.
- ALL ASPHALT RESTORATION SHALL BE TO YAKOMA CO. STANDARDS AND WILL CONSIST OF HOT MIX ASPHALT TO A MIN. THICKNESS OF 4 INCHES WITH 1 FT TEE OUT ON EACH SIDE OF TRENCH.

**Cheyne Rd Material List**

ITEM	QTY	PART NO	DESCRIPTION	PO Number
1	560	PTR-651532	50-40 min. PSL, ENW	
2	40	PTR-652532	6" X 280' GOLF X-52, 475' PSL, ENW, TRC coated steel line pipe, 14-16 mils, A70	
3	4	SA-658	6" Number 140 with bottom end Manometer Ftg. #1-17281 (220 lbs)	
4	8	SA-6132	6" Standard Weight Weld End Cap Grade 152	
5	4	SA-6132N	6" 45' Standard Weight Weld End Cap Grade 152, 38 Rods	
6	8	SA-150	1" 8" Weld Studs	
7	8	SA-210	1" Saw-to-Yoke Nipple Ftg. #1-17491 with steel cap (1440 lbs), 1"x3"	
8	2	H-103	Conduits that contain 68 with 10' leads	
9	10	H-132	4" x 50' red Polyguard 80-6	
10	11	H-623	6.625" X 18' CANADIA SWIMMING SWIM. GTS-PT63 170-450 BK	
11	15	H-627	manhole 28 (8"x48 hole) CANADIA	
12	1	H-628	Partworking tool	
13	1	H-628	CANADIA weight casting XL, WRC-XL, B 100-18 07	
14	20	H-628	Number Ftg Plug Line Stopper Fitting 1/2", 6-8 in min wall solid design	
15	2	H-628	Number Ftg Plug Line Stopper Fitting 1/2", 6-8 in min wall solid design	
16	2	Special Order	Number Ftg Plug Line Stopper Fitting 1/2", 6-8 in min wall solid design	
17	1	H-782	Twistin Box Primer Brown (below ground)	
18	10	H-780	4" X 100' Ball Twistin #1 Wax-Tape (below ground)	
19	4	RE-652532	6" 45' Standard Weight Weld End Cap Grade 152	
20	4	EL-652532	4" 90' Standard Weight Weld End Cap Grade 152	
21	40'	PG-652532	4" X 0.2137" Grade X-52, 475' A70 52 bore steel pipe	



STEP 1 PRESSURE TEST		STEP 2 PRESSURE TEST	
CERTIFICATION PRESSURE	100 P.S.I.G.	CERTIFICATION PRESSURE	500 P.S.I.G.
TEST PRESSURE	100 P.S.I.G.	TEST PRESSURE	750 P.S.I.G.
TEST MEDIUM	NITROGEN	TEST MEDIUM	NITROGEN
TEST DURATION	1 HOURS	TEST DURATION	8 HOURS
LEAK SURVEY BY		DATE COMPLETED	8
		BY	
		ATTESTED	



NO	REVISION	BY	DATE

Approved For Construction

By: \_\_\_\_\_ Date: \_\_\_\_\_

TITLE: \_\_\_\_\_

Approval Expires: \_\_\_\_\_ Date: \_\_\_\_\_



CAD Tech: J WOKOJANCE	Scale: 1"=40'
CAD Review: N/A	Grid #: 4-A
Engineer: T HENDERSON	Date: 3/8/17
Design Review: J ODGEN	
Parent Work Order #: 315709	
Work Order Number: 240740	
Drawing No: 209880217160	

ZILLAH BIN RELOCATE  
CHEYNE RD AT HIGHLAND DR  
ZILLAH, WA  
YAKIMA  
PLAN AND PROFILE  
11IN R20E

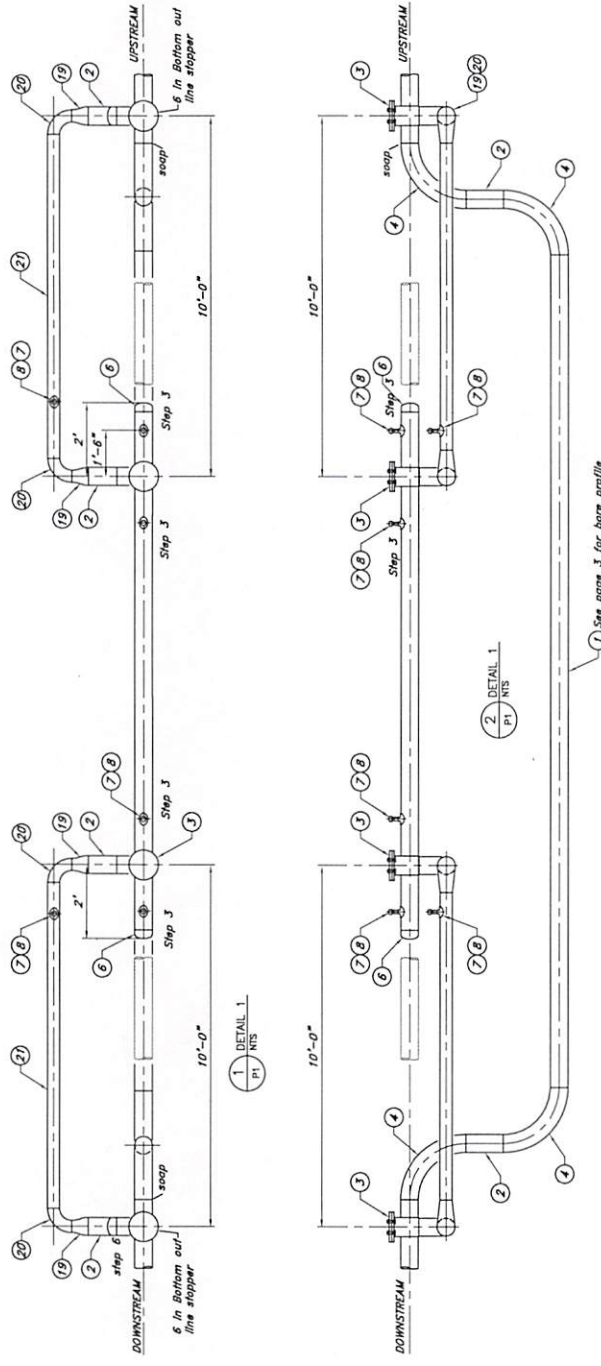
PP1  
3 OF 4

**PRELIMINARY**

CALL BEFORE YOU DIG:  
UTILITIES UNDERGROUND  
LOCATION CENTER  
811

CONTRACTOR TO VERIFY SIZE, TYPE AND  
LOCATION OF EXISTING UTILITIES PRIOR TO  
CONSTRUCTION. NOTIFY PROJECT ENGINEER  
IMMEDIATELY IF CONFLICTS ARISE.





**ENGINEERING INSTRUCTIONS.**

1. INSTALL 1/8" 4IN BYPASS FOR EACH CONNECTION. CHECK BYPASS PRESSURE TEST TO 750 PSIG FOR 8 HR WITH 1 HR 100 PSIG PRETEST.
  2. TAKE BYPASS IS OPERATIONAL. MAKE DIRECTIONAL STOP ON BOTH STOPPERS AND BLOW DOWN 8 IN PIPE BETWEEN STOPPERS.
  3. INSTALL 8IN WELD CAP ON 8IN PIPE BETWEEN STOPPERS NEAR THE STOPPER TOWARD THE MIDDLE.
  4. TEST BORE PIPE AND FITTINGS WITH PUP AND WELD CAP NEAR SOAP TEST TE-IN WELD TO 750 PSIG FOR 8 HOUR TEST.
  5. TE IN BORE PIPE AND FITTINGS. REMOVE STOPPING EQUIPMENT ON BOTTOM OUT THAT IS FARTHEST FROM THE MIDDLE. SOAP TEST TE-IN WELD. CONFIRM PRESSURE ON BORE SEGMENT.
  6. INSTALL STOPPING EQUIPMENT ON BOTTOM OUTS AND RETIRE AND REMOVE BYPASS PIPING. SOAP TEST WELD CAPS.
  7. IN FUTURE, BEFORE IN-LINE INSPECTION, INSTALL WIELLER IN-LINE INSPECTION INSERTS TO ALLOW THE PIG TO PASS THROUGH THE FITTING.
- REQUIRES: 3 STOPPERS OR 2 STOPPERS WITH ADDITIONAL WELD CAP.
- NOTE: ALL UNDERGROUND BARE STEEL PIPE TO BE FIELD WRAPPED DURING INSTALLATION.

**PRELIMINARY**

CALL BEFORE YOU DIG:  
 UTILITY LOCATION CENTER  
 811

CONTRACTOR TO VERIFY SIZE, TYPE AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY PROJECT ENGINEER IMMEDIATELY FOR ANY DISCREPANCY.

NO	REVISION	BY	DATE	Approved For Construction By: _____ Title: _____ Approval Expires: _____ Date: _____	 <i>In the Community to Serve®</i>	CAD Tech: J. WERGLANCE CAD Review: J. WERGLANCE Engineer: T. HENDERSON Design Review: J. COZZEN Permit Work Order #: 315709 Work Order Number: 240740 Drawing No.: 209880217160	ZILLAH 8IN RELOCATE CHETNE RD AT HIGHLAND DR ZILLAH, WA DETAIL SHEET	D1 4 OF 4
						Scale: NONE Job #: 4-4 Date: 3/10/17		