PS-1201629

SUMMARY OF PROPOSED WORK:

1. INSTALL VALVE SET PER DETAIL 1 SHT. 4
2. INSTALL 384' OF 8" L-108.
3. INSTALL 93' OF 24" L-1616-01.
4. INSTALL 31' OF 6" DFM.
5. INSTALL (3) PIPELINE MARKERS SEE DETAIL 10 SHT. 9.
6. INSTALL (1) ETS STATIONS SEE DETAIL 11 SHT. 9.
7. RETIRE 58' OF 16" L-108. (INSTALLED ON GM 38100-1930)
8. RETIRE 37' OF 6" DFM. (INSTALLED ON GM 30613014-2008)
9. RETIRE 3' OF 8" L-1616-01. (INSTALLED ON GM 4946646-1994)
10. CAP 8" TAP VALVE LINE 1616-01. PER DETAIL 2 ON SHT. 5.

CONTACT INFORMATION:

T&R SUPERVISOR ---- GRAY KRAHMER 209-598-1114
CONSTRUCTION SUPERVISOR ---- NICK JORDAN 209-602-4649
PROJECT MANAGER ---- BRAD CARR 916-203-3110
ENGINEER ---- BRAD CARR 916-203-3110
ESTIMATOR / DESIGNER ---- DAVE BREWER 530-354-3301
CORROSION ENGINEER ---- LEE HAYNES 925-519-2021
CORROSION SUPERVISOR ---- RICHARD MARTINEZ 209-639-3608

SEQUENCE OF OPERATIONS

L-108 MP 38.17 MLV AND BRIDLE SET
OPERATING MAP #385160

1. INSTALL VALVE SET PER DETAIL 1
2. INSTALL PIPLINE
3. HYDRO-TEST/X-RAY PIPE
4. INSTALL M-STOP FITTING @ MP: 38.17 (SOUTHERN TIE-IN) PER DETAIL 1 AND ELEV. A ON SHT 6.
5. INSTALL 8" LINE STOPPER ON LINE 1616-01.
6. CONNECT ALL HPR SERVICES BETWEEN MP:38.17 TO 42.7 ON BOTTLES
7. CLOSE NEW MLV 38.17 AND 8" BRIDLE VALVES ALONG WITH BLOW DONW VALVES
8. TAP AND PLUG 16" M-STOPP FITTING.
9. CLOSE MLV 42.7 AND V-2 ON DF3308.
10. BLOW DOWN ISOLATE PORTION OF L-108 BETWEEN MP 38.17 TO 42.7 & BLOW DOWN THROUGH V-B @ MP 42.7.
11. CUT AND CAP L-108 @ 16" M-STOP FITTING AT TIE IN NORTHER FEED OF MLV BRIDLE INTO L-108.
12. CLOSE VALVE V-3 AND V-4.
13. PURGE GAS FROM 16" M-STOP FITTING AT JUMPER LIN THROUGH AND THROUGH GAUGE TAP ON MLV 38.17 AND SAVE-A-VALVE.
14. SOAP TEST @ 100 PSI.
15. EQUALIZE PRESSURE ON 16" M-STOP AND PULL PLUG.
16. EQUALIZE PRESSURE ON 8" PCE ON 1616-01 AND PULL PLUG.
17. RESTORE SYSTEM TO NORMAL OPERATION.

ENVIRONMENTAL ISSUES

☐ NONE APPARENT (IF PROJECT DESIGN CHANGES, CONTACT RESPONSIBLE ENGR)

☐ PERMITS ☐ TAILBOARD * ☒ OTHER TRAINING

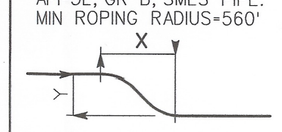
☐ APPLICANT DESIGN/RESPONSIBILITY (CHECK PERMITS BOX IF PERMIT CONDITIONS APPLY TO PG&E ACTIONS)

BY: Signature, name, (Corporate ID), date

* SEE LAND RELEASE TO CONSTRUCTION LETTER

ROPING TABLE

MIN DISTANCE REQUIRED TO ROPE AN OFF-SET OF 8.625" OD x 0.322" WT API-5L, GR B, SMLS PIPE. MIN ROPING RADIUS=560'



Y	X	Y	X
0.5	33.46	4.0	94.57
1.0	47.32	5.0	105.71
1.5	57.95	6.0	115.78
2.0	66.90	7.0	125.02
2.5	74.79	8.0	133.63
3.0	81.92	10.0	149.33
3.5	88.47		

CONSTRUCTION NOTES:

GENERAL REQUIREMENTS:

1. CALL USA AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION (811).
2. LOCATION OF EXISTING SUBSTRUCTURES ARE APPROXIMATE. BEFORE POWER OR HEAVY EQUIPMENT IS USED FOR EXCAVATION, THE EXACT DEPTH AND LOCATION OF SUBSTRUCTURES SHALL FIRST BE DETERMINED BY HAND EXCAVATION, IF NECESSARY.
3. ALL AREAS NOTED WITH RADII LESS THAN 560 FEET REQUIRE SMOOTH FIELD BENDS, EXCEPT WHERE ELBOWS ARE SHOWN. FIELD BEND SHALL BE MADE IN ACCORDANCE WITH GAS STANDARD A-36 SECTION 4-D. ALL FIELD BENDS SHALL BE IDENTIFIED ON AS-BUILT WITH LOCATION AND ANGLE OF BEND. AREAS NOTED WITH RADII GREATER THAN 560 FEET MAY REQUIRE ROPING. SEE ROPING TABLE 1.
4. ALL ANGLES SHOWN IN THE PLAN AND PROFILE ARE APPROXIMATE AND SHALL BE CUT TO SUIT FIELD CONDITION.
5. THIS PIPELINE MUST BE INSTALLED WITH AT LEAST 12 INCHES OF CLEARANCE FROM ANY OTHER UNDERGROUND STRUCTURE NOT ASSOCIATED WITH THE PIPELINE.

NOTE

ALL DESIGN CHANGES REQUIRE APPROVAL BY ENGINEER OF RECORD, WHO STAMPED OR ISSUED ORIGINAL DESIGN DRAWINGS OR UPDATES.

WELDING REQUIREMENTS

ALL ARC WELDING IS TO BE PERFORMED IN ACCORDANCE WITH GAS STANDARD D-22. WHERE PRACTICAL, ALL FITTINGS SHALL BE BACKWELDED. ALL CANS OR SPOOLS SHALL BE A MINIMUM LENGTH OF 24".

WELDING VALVES AND FITTINGS

WHEN VALVES AND FITTINGS ARE WELDED TO EACH OTHER OR TO PIPE, THE JOINT SHALL HAVE A TWO PASS WELD ON THE INSIDE, AS WELL AS THE OUTSIDE WELD, IF THE INTERNAL MISALIGNMENT EXCEEDS $^{3}/_{32}$".

HYDROSTATIC TEST REQUIREMENTS

HYDROSTATIC TESTING SHALL MEET PRESSURE AND DURATION REQUIREMENTS OF GAS STANDARD A-34 AND SHALL BE CONDUCTED IN ACCORDANCE WITH GAS STANDARD A-37.

PAINTING AND COATING REQUIREMENTS

ALL EXPOSED PIPE AND FITTINGS ARE TO BE PAINTED IN ACCORDANCE WITH GAS STANDARD E-30.

ALL COATING ON BURIED PIPE AND FITTINGS ARE TO BE APPLIED IN ACCORDANCE WITH GAS STANDARD E-35.

FOR COATING SELECTIONS ON BURIED PIPE SEE DIRECT BURIAL SELECTIONS TABLE.

COATING REMOVAL

BEFORE REMOVING THE PIPE COATING ON PRE-1972 PIPE (DOES NOT INCLUDE PLASTIC TAPE OR FUSIONBONDED EPOXY COATINGS) THE FOLLOWING STEPS SHALL BE TAKEN:

- FOR ALL NON-EMERGENCY WORK, PRE-1972 PIPE WRAP MUST BE EVALUATED TO DETERMINE IF IT CONTAINS ASBESTOS PRIOR TO REMOVAL.
- FOR EMERGENCY WORK ON PRE-1972 PIPE, ASSUME THE WRAP CONTAINS > 1% ASBESTOS UNTIL THE WRAP CAN BE TESTED.
- OBTAIN SAMPLES OF THE WRAP, AND HAVE SAMPLES TESTED FOR ASBESTOS IN ACCORDANCE WITH S-4711.
- TEST RESULTS ARE TO BE INCLUDED WITH AS-BUILTS.
- FOLLOW PROCEDURE IN S-4711 FOR REMOVAL OF PIPE WRAP.

LEGEND:

- CABLE TV RISER
- MANHOLE DRAIN
- MANHOLE SEWER
- TELEPHONE BOX
- BLOW OFF VALVE
- SEWER CLEANOUT
- WATER METER
- UTILITY RISER
- AIR RELEASE VALVE
- UNDERGROUND TELE. SIGN
- TELEPHONE PAINT MARK
- MANHOLE TELEPHONE
- UNDERGROUND GAS SIGN
- GAS PAINT MARK
- SPOT ELEVATION
- GAS LINE MARKER
- GAS VALVE
- TIE-IN WELD
- PROPOSED GAS LINE
- EXISTING GAS LINE
- ELECTRIC LINE
- EASEMENT BOUNDARY LINE
- COUPON TEST STATION
- ELECTROLYSIS TEST STATION
- POLE-MOUNTED RECTIFIER
- DEEPWELL ANODE
- PIPELINE MARKER
- "H" PIPELINE HORIZONTAL STA
- "P" PIPELINE FOOTAGE
- # B/M ITEM NO.

(NOTE: B/M ITEM NO. FOR FITTINGS SHOWN ON SURVEY PLAN.

B/M ITEM NO. FOR PIPING SHOWN ON PIPELINE STATIONING.)

- SIGN
- GUY
- PANEL BOX
- POWER POLE
- SMUD BOX
- TRAF LIGHT
- PANEL BOX

DIRECT BURIAL COATING SELECTIONS

LISTED IN ORDER OF PREFERENCE

MAIN LINE COATING	FBE
MINOR REPAIRS	PROTAL 7200, POWERCRETE J
TIE-IN WELDS	PROTAL 7200, POWERCRETE J
GIRTH WELDS	PROTAL 7200, POWERCRETE J
BUTT WELDED FITTINGS	PROTAL 7200, POWERCRETE J
VALVE ASSEMBLIES	PROTAL 7200, POWERCRETE J
SHORT SEGMENTS OF PIPE	PROTAL 7200, POWERCRETE J
AIR-TO-SOIL TRANSITIONS	DEVGRIP 238, POWERCRETE J
PRESSURE CONTROL FITTINGS BODY	PROTAL 7200
FLANGE	WAX TAPE

BORED COATING SELECTIONS

LISTED IN ORDER OF PREFERENCE

MAIN LINE COATING	ARC APPLIED OVER FBE
MINOR REPAIRS	PROTAL 7200, POWERCRETE J
GIRTH WELDS	PROTAL 7200, POWERCRETE J

NOTES:

1) CONTACT THE RESPONSIBLE PIPELINE ENGINEER TO REQUEST A VARIANCE FROM THE ABOVE COATING SELECTIONS

2) ALL COATINGS ARE TO BE APPLIED IN ACCORDANCE WITH GS&S E-30 AND E-35

NOTIFIED
U.S.A.

DATE TICKET NO. BY

Installation Tested or Inspected and Noted on Drawing. All Levels Satisfactory per PG&E GS&S 0-16

Qualified Employee Date

Corrosion mechanic's signature is required when a CPA boundary is within the scope of the project

SAFETY

SAFETY PLEDGE

I ALWAYS PUT SAFETY FIRST.
I LOOK FOR AND ACT TO RESOLVE UNSAFE SITUATIONS.
I HELP AND ENCOURAGE OTHERS TO ACT SAFELY.

PG&E

DESIGN & CONSTRUCTION REVIEW FOR INTERNAL CORROSION

DESCRIPTION	ACTION SELECTED	INITIAL	DATE
CORROSION ENGINEER HAS REVIEWED THIS LOCATION AND THERE IS NO KNOWN THREAT OF INTERNAL CORROSION. NO INTERNAL CORROSION DESIGN OR CONSTRUCTION CONSIDERATIONS ARE NECESSARY.	EDMS		
INTERNAL CORROSION MAY BE A THREAT AND THE CONSTRUCTION DESIGNS HAVE BEEN REVIEWED WITH CORROSION ENGINEERING. DOCUMENTATION OF THE REVIEW AND ACTIONS TAKEN ARE IN THE JOB PACKAGE AND INCORPORATED IN THIS DESIGN.			

REGISTERED PROFESSIONAL ENGINEER
GEORGE TASSO KARAZIS
No. M27357
EXP.
MECHANICAL
STATE OF CALIFORNIA

PSRS* 27156

NO.	DATE	DESCRIPTION	GM/SPEC	DWN	CHKD	SUPV	APVD	BY
0	- -	ISSUE FOR CONSTRUCTION	30919862	D5BZ	SEW6			

REVISIONS

APPROVED BY
JN 30919862
SUPV
DSGN D. BREWER
DWN D BREWER
CHKD S. WATERS
OK
DATE 05/30/12
SCALES AS SHOWN

PIPING - CONSTRUCTION NOTES
INSTALL MLV 38.17 AND BRIDLE SET ON L-108 AND 385' OF 8" PIPE TO DFM 1616-01.
LODI, SAN JOAQUIN COUNTY
PACIFIC GAS AND ELECTRIC COMPANY
WALNUT CREEK , CALIFORNIA

MICROFILM
BILL OF MATL SHT 10
DWG LIST
SUPSDS
SUPSD BY
SHEET NO. 2 OF 10 SHEETS
30919862 0

N1808 30919862-FINAL.dgn 7/11/2012 3:13:59 PM d5bz Date-Name_Stamp.tbl