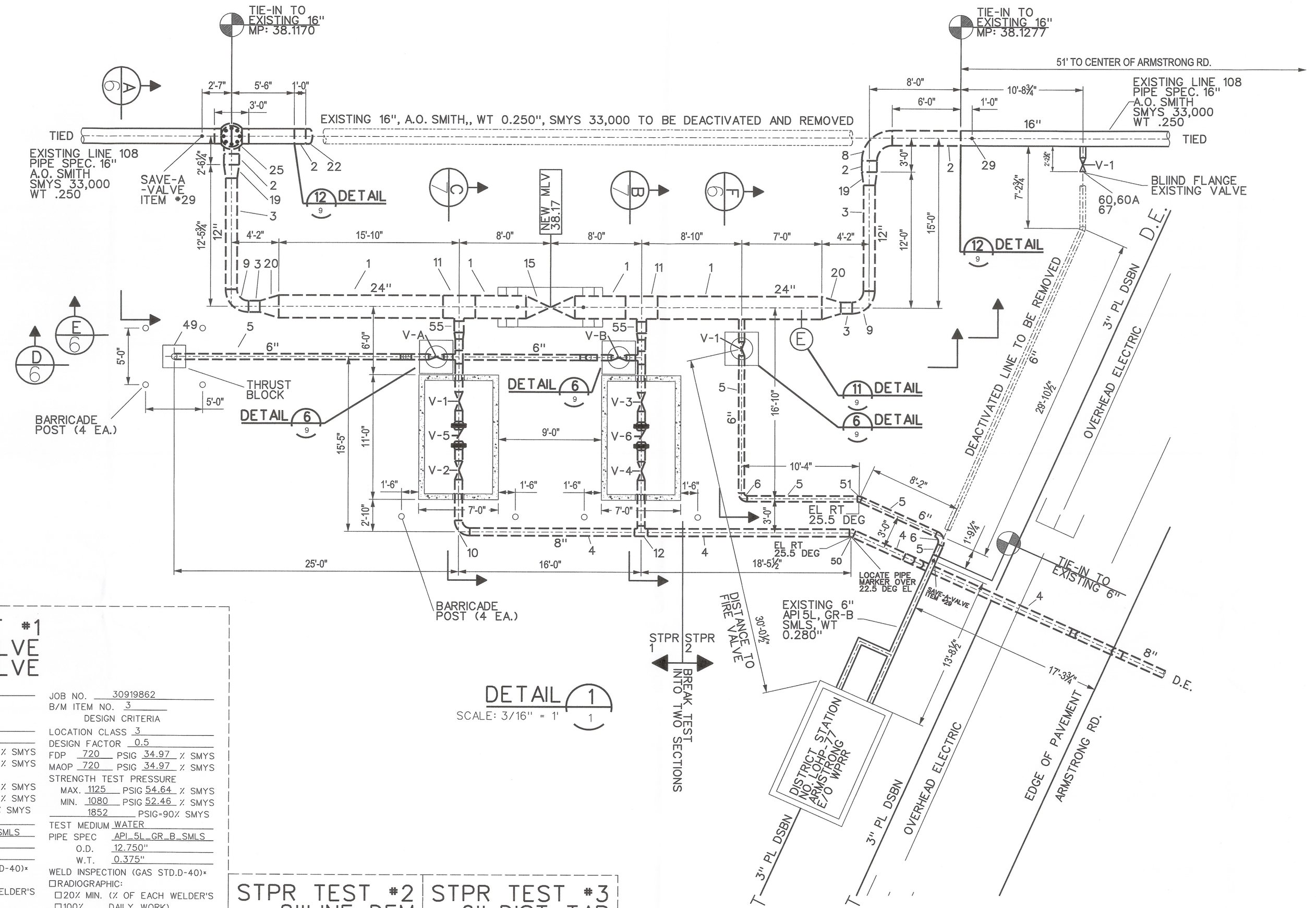

DETAIL 1
SCALE: 3/16" = 1'

STPR TEST #1 MAIN LINE VALVE CHECK VALVE

JOB NO. 30919862
B/M ITEM NO. 1
DESIGN CRITERIA
LOCATION CLASS 3
DESIGN FACTOR 0.5
FDP 720 PSIG 38.40 % SMYS
MAOP 720 PSIG 38.40 % SMYS
STRENGTH TEST PRESSURE
MAX. 1125 PSIG 60.00 % SMYS
MIN. 1080 PSIG 57.60 % SMYS
1687 PSIG=90% SMYS
TEST MEDIUM WATER
PIPE SPEC API 5L, X-60 SAWL
O.D. 24.000"
W.T. 0.375"
WELD INSPECTION (GAS STD.D-40)*
☐RADIOGRAPHIC:
☐20% MIN. (% OF EACH WELDER'S DAILY WORK)
☐100%
*VISUALLY INSPECT 100% OF ALL WELDS THAT ARE NOT RADIOGRAPHICALLY INSPECTED. (THIS REQUIREMENT APPLIES EVEN IF NO RADIOGRAPHIC INSPECTION IS REQUIRED.)

JOB NO. 30919862
B/M ITEM NO. 2
DESIGN CRITERIA
LOCATION CLASS 3
DESIGN FACTOR 0.5
FDP 720 PSIG 43.89 % SMYS
MAOP 720 PSIG 43.89 % SMYS
STRENGTH TEST PRESSURE
MAX. 1125 PSIG 68.57 % SMYS
MIN. 1080 PSIG 65.83 % SMYS
1476 PSIG=90% SMYS
TEST MEDIUM WATER
PIPE SPEC API 5L GR B SMLS
O.D. 16.000"
W.T. 0.375"
WELD INSPECTION (GAS STD.D-40)*
☐RADIOGRAPHIC:
☐20% MIN. (% OF EACH WELDER'S DAILY WORK)
☐100%
*VISUALLY INSPECT 100% OF ALL WELDS THAT ARE NOT RADIOGRAPHICALLY INSPECTED. (THIS REQUIREMENT APPLIES EVEN IF NO RADIOGRAPHIC INSPECTION IS REQUIRED.)

JOB NO. 30919862
B/M ITEM NO. 3
DESIGN CRITERIA
LOCATION CLASS 3
DESIGN FACTOR 0.5
FDP 720 PSIG 34.97 % SMYS
MAOP 720 PSIG 34.97 % SMYS
STRENGTH TEST PRESSURE
MAX. 1125 PSIG 54.64 % SMYS
MIN. 1080 PSIG 52.46 % SMYS
1852 PSIG=90% SMYS
TEST MEDIUM WATER
PIPE SPEC API_5L_GR_B_SMLS
O.D. 12.750"
W.T. 0.375"
WELD INSPECTION (GAS STD.D-40)*
☐RADIOGRAPHIC:
☐20% MIN. (% OF EACH WELDER'S DAILY WORK)
☐100%
*VISUALLY INSPECT 100% OF ALL WELDS THAT ARE NOT RADIOGRAPHICALLY INSPECTED. (THIS REQUIREMENT APPLIES EVEN IF NO RADIOGRAPHIC INSPECTION IS REQUIRED.)

JOB NO. 30919862
B/M ITEM NO. 55
DESIGN CRITERIA
LOCATION CLASS 3
DESIGN FACTOR 0.5
FDP 720 PSIG 30.29 % SMYS
MAOP 720 PSIG 30.29 % SMYS
STRENGTH TEST PRESSURE
MAX. 1125 PSIG 47.33 % SMYS
MIN. 1080 PSIG 45.44 % SMYS
2139 PSIG=90% SMYS
TEST MEDIUM WATER
PIPE SPEC API_5L_GR_B_SMLS
O.D. 10.750
W.T. 0.365"
WELD INSPECTION (GAS STD.D-40)*
☐RADIOGRAPHIC:
☐20% MIN. (% OF EACH WELDER'S DAILY WORK)
☐100%
*VISUALLY INSPECT 100% OF ALL WELDS THAT ARE NOT RADIOGRAPHICALLY INSPECTED. (THIS REQUIREMENT APPLIES EVEN IF NO RADIOGRAPHIC INSPECTION IS REQUIRED.)

JOB NO. 30919862
B/M ITEM NO. 4
DESIGN CRITERIA
LOCATION CLASS 3
DESIGN FACTOR 0.5
FDP 720 PSIG 27.55 % SMYS
MAOP 720 PSIG 27.55 % SMYS
STRENGTH TEST PRESSURE
MAX. 1125 PSIG 43.05 % SMYS
MIN. 1080 PSIG 41.33 % SMYS
2352 PSIG=90% SMYS
TEST MEDIUM WATER
PIPE SPEC API_5L_GR_B_SMLS
O.D. 8.625"
W.T. 0.322"
WELD INSPECTION (GAS STD.D-40)*
☐RADIOGRAPHIC:
☐20% MIN. (% OF EACH WELDER'S DAILY WORK)
☐100%
*VISUALLY INSPECT 100% OF ALL WELDS THAT ARE NOT RADIOGRAPHICALLY INSPECTED. (THIS REQUIREMENT APPLIES EVEN IF NO RADIOGRAPHIC INSPECTION IS REQUIRED.)

JOB NO. 30919862
B/M ITEM NO. 3
DESIGN CRITERIA
LOCATION CLASS 3
DESIGN FACTOR 0.5
FDP 720 PSIG 24.34 % SMYS
MAOP 720 PSIG 24.34 % SMYS
STRENGTH TEST PRESSURE
MAX. 1125 PSIG 38.03 % SMYS
MIN. 1080 PSIG 36.51 % SMYS
2662 PSIG=90% SMYS
TEST MEDIUM WATER
PIPE SPEC API_5L_GR_B_SMLS
O.D. 6.625"
W.T. 0.280"
WELD INSPECTION (GAS STD.D-40)*
☐RADIOGRAPHIC:
☐20% MIN. (% OF EACH WELDER'S DAILY WORK)
☐100%
*VISUALLY INSPECT 100% OF ALL WELDS THAT ARE NOT RADIOGRAPHICALLY INSPECTED. (THIS REQUIREMENT APPLIES EVEN IF NO RADIOGRAPHIC INSPECTION IS REQUIRED.)

STPR TEST #2 8"LINE DFM 1616-01

JOB NO. 30919862
B/M ITEM NO. 4
DESIGN CRITERIA
LOCATION CLASS 3
DESIGN FACTOR 0.5
FDP 720 PSIG 27.55 % SMYS
MAOP 720 PSIG 27.55 % SMYS
STRENGTH TEST PRESSURE
MAX. 1280 PSIG 48.98 % SMYS
MIN. 1080 PSIG 41.33 % SMYS
2352 PSIG=90% SMYS
TEST MEDIUM WATER
PIPE SPEC API_5L_GR_B_SMLS
O.D. 8.625"
W.T. 0.322"
WELD INSPECTION (GAS STD.D-40)*
☐RADIOGRAPHIC:
☐20% MIN. (% OF EACH WELDER'S DAILY WORK)
☐100%
*VISUALLY INSPECT 100% OF ALL WELDS THAT ARE NOT RADIOGRAPHICALLY INSPECTED. (THIS REQUIREMENT APPLIES EVEN IF NO RADIOGRAPHIC INSPECTION IS REQUIRED.)

STPR TEST #3 6" DIST. TAP FOR DR LOHP-77

JOB NO. 30919862
B/M ITEM NO. 5
DESIGN CRITERIA
LOCATION CLASS 3
DESIGN FACTOR 0.5
FDP 720 PSIG 24.34 % SMYS
MAOP 720 PSIG 24.34 % SMYS
STRENGTH TEST PRESSURE
MAX. 1280 PSIG 43.27 % SMYS
MIN. 1080 PSIG 36.51 % SMYS
2662 PSIG=90% SMYS
TEST MEDIUM WATER
PIPE SPEC API_5L_GR_B_SMLS
O.D. 6.625"
W.T. 0.280"
WELD INSPECTION (GAS STD.D-40)*
☐RADIOGRAPHIC:
☐20% MIN. (% OF EACH WELDER'S DAILY WORK)
☐100%
*VISUALLY INSPECT 100% OF ALL WELDS THAT ARE NOT RADIOGRAPHICALLY INSPECTED. (THIS REQUIREMENT APPLIES EVEN IF NO RADIOGRAPHIC INSPECTION IS REQUIRED.)

INSTALLED ON GM:30613014 YR:2008'

EXIST PIPE SPECS
HEADER SIZE: 6.625"
PIPE SPECS: API 5L, GR-B, SMLS
WALL THICKNESS: 0.280"
PRESENT MAOP: 720
% SMYS @ MAOP: 24.33
MAXIMUM ALLOWABLE PRESSURE DURING WELDING (G.S.&S. D-22)

EVALUATE THE FOLLOWING OPERATING PRESSURE LIMITATIONS TO DETERMINE THE MAXIMUM OPERATING PRESSURE PERMITTED DURING WELDING

A) (408 PSIG) WHEN WELDING ON BODY OF THE PIPE, UNLESS,

B) (408 PSIG) WHEN WELDING WITHIN 3" OF THE LONGITUDINAL SEAM (EXCEPT DSAW PIPE), THE CIRCUMFERENTIAL, AND ANY BRANCH WELD, OR WITHIN 3" OF ANY DEFECT (GOUGES, CORROSION, LAMINATIONS, ETC.) IN THE PIPE WHICH EXCEEDS 1/3 OF THE NOMINAL WALL THICKNESS IN DEPTH AND/OR 1/4 OF THE NOMINAL PIPE DIAMETER IN LENGTH.

INSTALLED ON GM:38100 YR:1930

EXIST PIPE SPECS
HEADER SIZE: 16.000"
PIPE SPECS: A.O. SMITH
WALL THICKNESS: 0.250
PRESENT MAOP: 412 (GIS)
% SMYS @ MAOP: 39.95
MAXIMUM ALLOWABLE PRESSURE DURING WELDING (G.S.&S. D-22)

EVALUATE THE FOLLOWING OPERATING PRESSURE LIMITATIONS TO DETERMINE THE MAXIMUM OPERATING PRESSURE PERMITTED DURING WELDING

A) (330 PSIG) WHEN WELDING ON BODY OF THE PIPE, UNLESS,

B) (165 PSIG) WHEN WELDING WITHIN 3" OF THE LONGITUDINAL SEAM (EXCEPT DSAW PIPE), THE CIRCUMFERENTIAL, AND ANY BRANCH WELD, OR WITHIN 3" OF ANY DEFECT (GOUGES, CORROSION, LAMINATIONS, ETC.) IN THE PIPE WHICH EXCEEDS 1/3 OF THE NOMINAL WALL THICKNESS IN DEPTH AND/OR 1/4 OF THE NOMINAL PIPE DIAMETER IN LENGTH.

WELDING INSPECTED PER PG&E GAS STANDARD D-40

VISUAL ☐
MAGNETIC PARTICLE ☐
INSPECTOR
DATE

PS-1201629

CIRCLE OF 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.

PRSR

REGISTERED PROFESSIONAL ENGINEER
GEORGE TASSO KARKAZIS
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 - SECTIONS & DETAILS
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. 4 OF 10 SHEETS
30919862 0

N1808
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