



ID	ND	TYPE	CATEGORY
15	40	SOCKETWELD	FABRICATION-ITEM
14	40	BUTTWELD	FABRICATION-ITEM
13	50	BUTTWELD	FABRICATION-ITEM
12	50	BUTTWELD	FABRICATION-ITEM
11	100	BUTTWELD	FABRICATION-ITEM
10	100	BUTTWELD	FABRICATION-ITEM
9	50	BUTTWELD	FABRICATION-ITEM
8	50	BUTTWELD	FABRICATION-ITEM
7	50	BUTTWELD	FABRICATION-ITEM
6	100	BUTTWELD	FABRICATION-ITEM
5	50	BUTTWELD	FABRICATION-ITEM
4	50	BUTTWELD	FABRICATION-ITEM
3	50	BUTTWELD	FABRICATION-ITEM
2	50	BUTTWELD	FABRICATION-ITEM
1	50	BUTTWELD	FABRICATION-ITEM

REV.	DESCRIPTION	DATE	DRAWN	CHKD	APPD
0		08/22/24			
1		10/30/24			

SERVICE
PIPE SPEC
MAX PRESSURE
MAX TEMPERATURE
P&ID DWG
INSULATION SPEC
INSULATION THK

BILL OF MATERIALS

ID	QTY	ND	SCH/CLASS	DESCRIPTION
PIPE				
1	2.3M	40	80	PIPE, SEAMLESS, SCH80, PE, ASME B36.10, ASTM A333 GR 6
2	1.6M	50	80	PIPE, SEAMLESS, SCH80, PE, ASME B36.10, ASTM A333 GR 6
3	0.4M	100	80	PIPE, SEAMLESS, SCH80, PE, ASME B36.10, ASTM A333 GR 6
FITTINGS				
4	3	50	80	ELBOW 90 LR, SCH 80, BW, ASME B16.9, ASTM A420 GR WPL6
5	1	40	3000	ELL 90, 3000 LB, SW, ASME B16.11, ASTM A350 GR LF2
6	1	50X40	80	REDUCER (CONC), SCH 80, BW, ASME B16.9, ASTM A420 GR WPL6
7	2	100X50	80	REDUCER (CONC), SCH 80, BW, ASME B16.9, ASTM A420 GR WPL6
8	1	100X50	80	TEE (RED), SCH 80, BW, ASME B16.9, AST, ASTM A420 GR WPL6
FLANGES				
9	1	40	300	FLANGE SW, 300 LB, RF, ASME B16.5, ASTM A350 GR LF2
10	2	50	80	FLANGE WN, SCH80, 300 LB, RF, ASME B16.5, ASTM A350 GR LF2
11	4	50	80	FLANGE WN, SCH 80, 300 LB, RF, ASME B16.5, ASTM A350 GR LF2
FASTENERS				
12	4	20X89	300	BOLT SET, RF, 300 LB, STUD BOLT
13	32	16X89	300	BOLT SET, RF, 300 LB, STUD BOLT
14	1	40	300	GASKET, SWG, 1/8" THK, RF, 300 LB, ASME B16.20, CS/GRAPHITE
15	4	50	300	GASKET, SWG, 1/8" THK, RF, 300 LB, ASME B16.20, CS/GRAPHITE
PIPE SUPPORTS				
16	1	40		U-CLAMP
17	1	50		U-CLAMP
CUT PIECE LIST				
ID	LENGTH	ND	END1	END2
1	1474MM	50	BEVEL	BEVEL
2	43MM	50	BEVEL	BEVEL
3	369MM	100	BEVEL	BEVEL
4	1633MM+200MM=1833MM	40	SQUARE CUT	BEVEL
5	577MM	40	SQUARE CUT	SQUARE CUT

NOTES:

1. ALL TAPPED BRANCHES TO INCLUDE TWO (2) GUSSETS LOCATED 90 DEGREES APART.
2. ALL SUPPORT WELDS SHALL BE CONTINUOUSLY WELDED.
3. MATERIAL TEST REPORTS ARE REQUIRED.
4. CHARPY IMPACT TESTS FOR LOW TEMP. MATERIALS ARE REQUIRED FROM EITHER THE MANUFACTURER OR FABRICATOR.
5. 5% RADIOGRAPHIC EXAMINATION IS REQUIRED FOR EACH WELDER.
6. WELDER LOG SHALL BE PROVIDED FOR INSPECTION.
7. SQUARENESS OF ALL JOINTS SHALL FOLLOW TOLERANCE ALLOWABLE LIMITS.
8. F.W.= FIELD WELD

PROJECT NAME:			
MPE007			
TITLE:			
DRAWING NUMBER:			
60501-2			
LINE NO:	AREA:	UNIT:	TYPE:
60501			
JOB NUMBER:	SCALE:	SHEET:	REV.
	N.T.S.	2 of 2	1