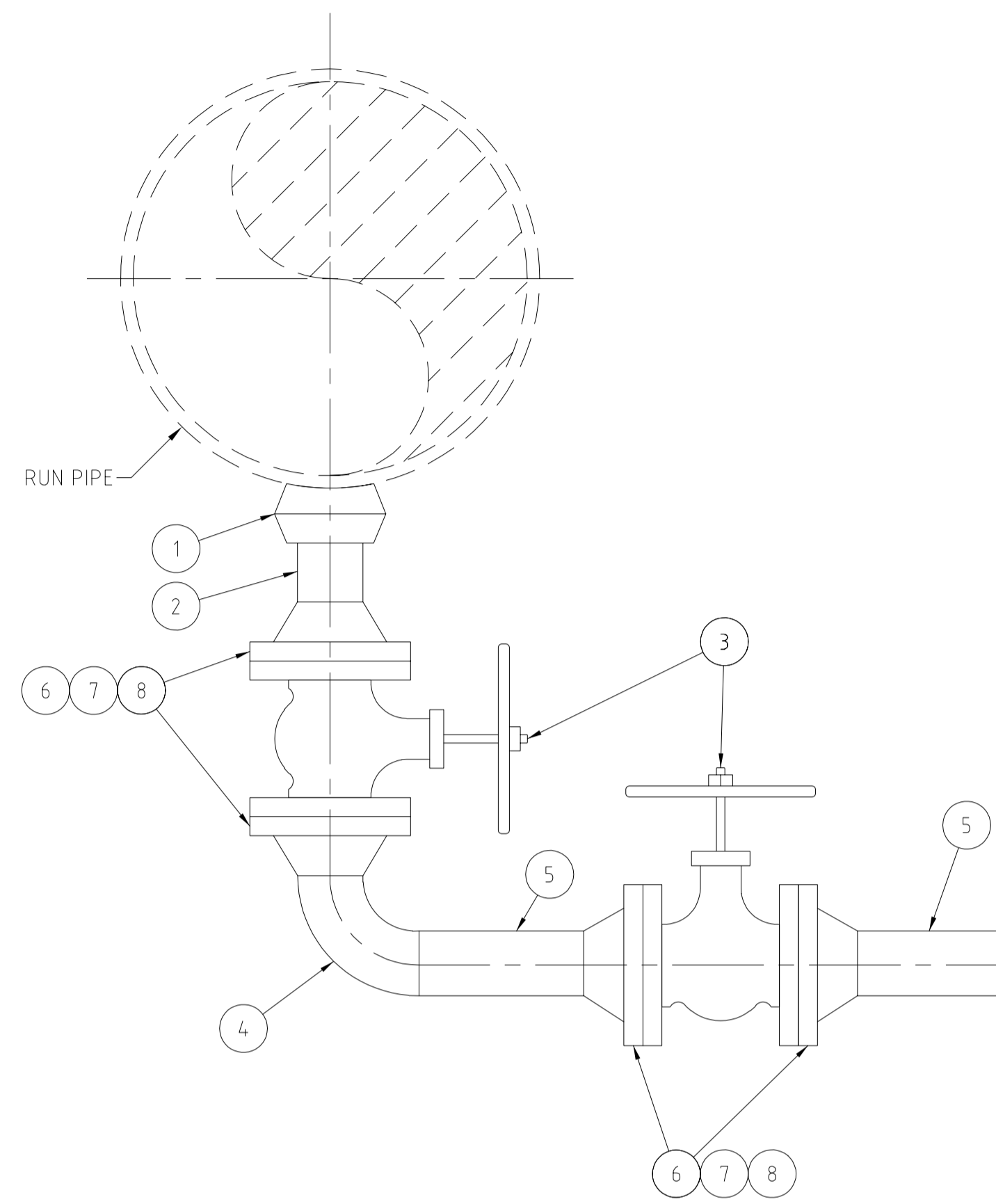
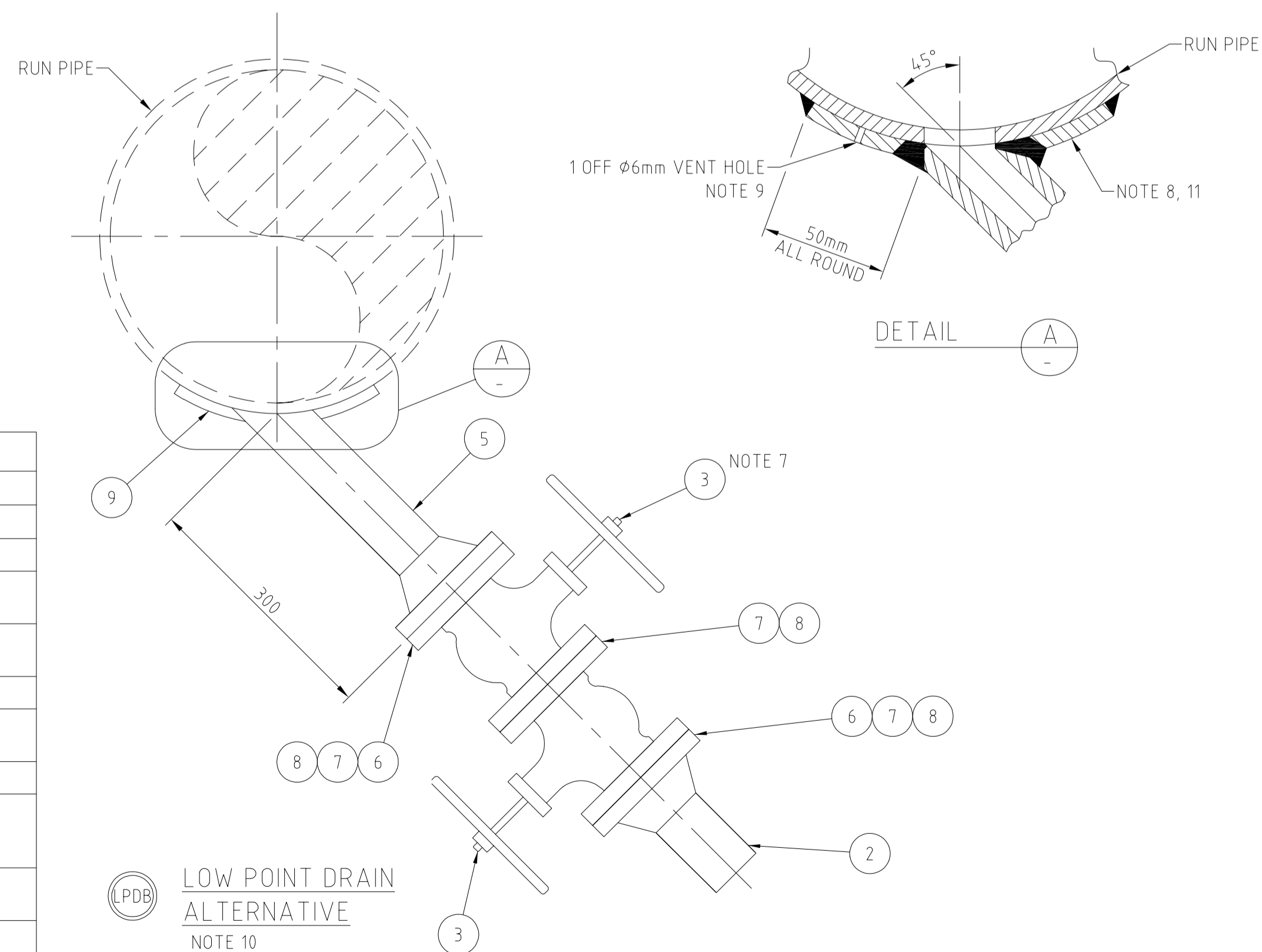


LPD LOW POINT DRAIN



LPDA LOW POINT DRAIN ALTERNATIVE
NOTE 5




LPDB LOW POINT DRAIN ALTERNATIVE
NOTE 10

NOTES:

1. FOR GENERAL NOTES AND LEGEND REFER TO DRAWING
2. REFER TO RELEVANT PIPING LAYOUT DRAWING FOR PIPE SPECIFICATION/CLASS OF TAPPING AND RUN PIPE
3. QUANTITIES LISTED ARE REFERENCED FROM REQUIRED COMPONENTS FOR EACH ASSEMBLY AS SHOWN ON THIS DRAWING ONLY. OPTIONAL COMPONENTS TO SUIT SPECIFIC LOCATIONS HAVE NOT BEEN INCLUDED.
4. EDGE OF PENETRATION HOLE INTO RUN PIPE MUST BE CLEAN AND SQUARE OR ROUNDED SLIGHTLY, FREE FROM BURRS, WIRE EDGES OR OTHER IRREGULARITIES.
5. ALTERNATE DESIGN WHERE GROUND CLEARANCE DOES NOT ALLOW INSTALLATION OF STANDARD DESIGN.
6. REFER TO PIPE SPECIFICATIONS AND VALVE DATASHEETS FOR FULL DETAILS.
7. GATE VALVE HANDLE ORIENTATION INDICATIVE ONLY. ORIENTATE ON SITE TO PROVIDE ADEQUATE ACCESS TO VALVE HANDLES. VALVE HANDLES MAY BE OFFSET AS REQUIRED.
8. AN APPROVED FITTING MAY BE USED AS AN ALTERNATIVE TO THE 45° STUB-ON.
9. VENT HOLE IN REINFORCEMENT PAD ONLY.
10. FOR USE ON BRINE LINES ONLY.
11. CUT REINFORCING PAD FROM HEADER PIPE OR SIMILAR THICKNESS PLATE. MATERIAL API-5L Gr. B OR APPROVED EQUIVALENT.

BILL OF MATERIALS (NOTE 3, 6)						
ITEM	QUANTITY			SIZE (DN)	MATERIAL	DESCRIPTION
	LPD	LPDA	LPDB			
1	1	1	-	50	ASTM A105	Weldolet, SCH80 (DN RUN PIPE x DN50 SCH80)
2	2	1	1	50	API-5L Gr. B OR APPROVED EQUIVALENT	PIPE NIPPLE, SMLS, PBE, SCH80, 100mm LONG
3	2	2	2	50	-	GATE VALVE, RF, CL300, REFER DATASHEET
4	-	1	-	50	ASTM A234-WPB	ELBOW, SCH80, 90°, LR
5	-	2	1	50	API-5L Gr. B OR APPROVED EQUIVALENT	PIPE NIPPLE, SMLS, PBE, SCH80, LENGTH TO SUIT
6	2	4	2	50	ASTM A105	FLANGE, WN RF, CL300
7	3	4	3	50	316SS/CS	GASKET, CL300, 3mm THK, WITH TYPE 316 METAL WINDING AND INNER RING, CS CENTERING RING AND FLEXIBLE GRAPHITE FILLER MATERIAL.
8	3 SETS	4 SETS	3 SETS	-	ASTM A193-B7/ ASTM A194-2H	BOLT SET, STUD BOLT W/2 HEAVY HEX NUTS, UNC, 5/8"x95mm, 8/FLG
9	-	-	1	-	SAME AS RUN PIPE	REINFORCEMENT PAD CUT FROM RUN PIPE (OR APPROVED FITTING)

Firm Name and Address	
	
Project Name	
CONNECTION OF MAKE UP WELLS OW-53B, OW-53C AND OW-53D AT OLKARIA GEOTHERMAL PROJECT	
Drawing Title	
STANDARD DETAILS LOW DRAIN POINTS CLASS 150/300 CARBON STEEL PIPING	
Drawing No.	
OW-53-SFD-EB-DRG-015	
Date	
24/03/2019	
Scale	
As noted	