

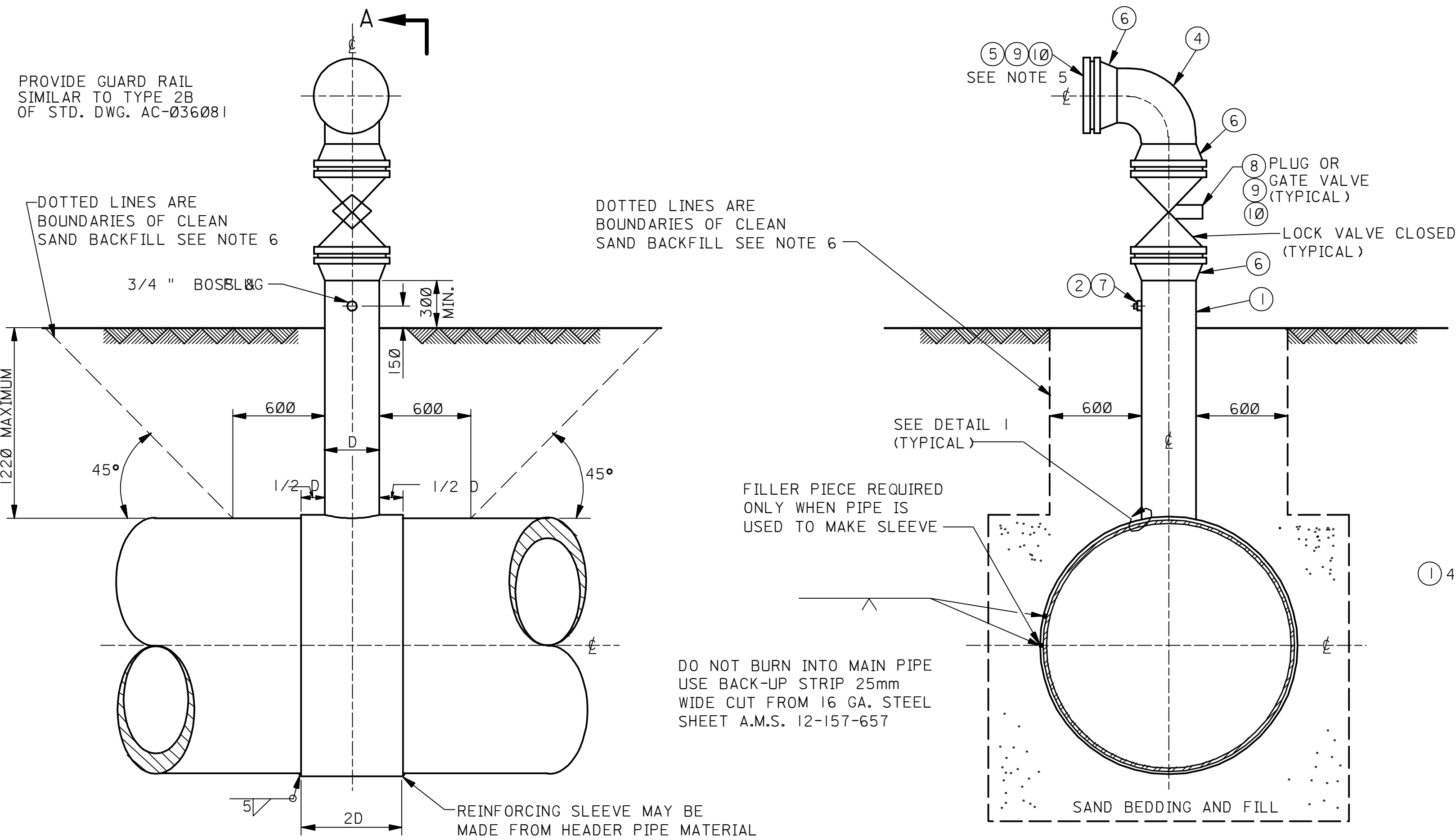
PLANT NO.	INDEX	DRAWING NUMBER	SHT. NO.	REV. NO.
9906	L	AA-036886	001	11

PRESSURE RATING OF FLANGES IN PIPELINES

	CLASS 150 R.F., A.N.S.I.				CLASS 300 R.F., A.N.S.I.				CLASS 600 R.F., A.N.S.I.				CLASS 900 R.J., A.N.S.I.				CLASS 1500 R.J., A.N.S.I.				CLASS 2500 R.J., A.N.S.I.			
	CODE NO.	A.M.S. NO.	DESCRIPTION	A.M.S. NO.	DESCRIPTION	A.M.S. NO.	DESCRIPTION	A.M.S. NO.	DESCRIPTION	A.M.S. NO.	DESCRIPTION	A.M.S. NO.	DESCRIPTION	A.M.S. NO.	DESCRIPTION	A.M.S. NO.	DESCRIPTION	A.M.S. NO.	DESCRIPTION					
4" DRAIN	1	01-167-390	PIPE: STEEL; API 5-L GRADE "B" 4" x 0.237" W.T.	01-167-390	PIPE: STEEL; API 5-L GRADE "B" 4" x 0.237" W.T.	01-167-390	PIPE: STEEL; API 5-L GRADE "B" 4" x 0.237" W.T.	01-167-390	PIPE: STEEL; API 5-L GRADE "B" 4" x 0.237" W.T.	01-167-390	PIPE: STEEL; API 5-L GRADE "B" 4" x 0.237" W.T.	01-167-410	PIPE: STEEL; API 5-L GRADE "B" 4" x 0.337" W.T.	01-167-410	PIPE: STEEL; API 5-L GRADE "B" 4" x 0.337" W.T.	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD					
	2	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD					
	3																							
	4	02-277-227	ELBOW WELDING STD.: 90 DEG; L.R., 4"	02-277-227	ELBOW WELDING STD.: 90 DEG; L.R., 4"	02-277-227	ELBOW WELDING STD.: 90 DEG; L.R., 4"	02-277-227	ELBOW WELDING STD.: 90 DEG; L.R., 4"	02-277-227	ELBOW WELDING STD.: 90 DEG; L.R., 4"	02-277-638	ELBOW WELDING STD.: 90 DEG; L.R., 4" x 0.337" W.T.	02-277-638	ELBOW WELDING STD.: 90 DEG; L.R., 4" x 0.337" W.T.				ELBOW WELDING STD.: 90 DEG; L.R., 4" x 0.674" W.T.					
	5	02-376-914	FLANGE: BLIND, R.F. CLASS 1500; 4"	02-377-046	FLANGE: BLIND, R.F. CLASS 300; 4"	02-377-216	FLANGE: BLIND, R.F. CLASS 600; 4"	02-377-648	FLANGE: BLIND, R.F. CLASS 900; 4"	02-377-648	FLANGE: BLIND, R.F. CLASS 1500; 4"								FLANGE: BLIND, R.F. CLASS 2500; 4"					
	6	02-394-639	FLANGE: WELDING NECK ; R.F. CLASS 150; 4"; 4.03" BORE	02-395-018	FLANGE: WELDING NECK ; R.F. CLASS 300; 4"; 4.03" BORE	02-395-450	FLANGE: WELDING NECK ; R.F. CLASS 600; 4"; 3.828" BORE	02-396-117	FLANGE: WELDING NECK ; R.F. CLASS 900; 4"; 3.828" BORE	02-396-117	FLANGE: WELDING NECK ; R.F. CLASS 1500; 4"; 3.83" BORE	02-396-253	FLANGE: WELDING NECK ; R.F. CLASS 1500; 4"; 3.83" BORE	02-396-253	FLANGE: WELDING NECK ; R.F. CLASS 1500; 4"; 3.83" BORE				FLANGE: WELDING NECK ; R.F. CLASS 2500; 4"; 3.152" BORE					
	7	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE					
	8	04-207-354	VALVE: GATE; FLOD; R.F.; CLASS 150; 4"	04-207-356	VALVE: GATE; FLOD; R.F.; CLASS 300; 4"	04-206-822	VALVE: GATE; FLOD; R.F.; CLASS 600; 4"	04-206-831	VALVE: GATE; FLOD; R.F.; CLASS 900; 4"	04-206-831	VALVE: GATE; FLOD; R.F.; CLASS 1500; 4"	04-206-835	VALVE: GATE; FLOD; R.F.; CLASS 1500; 4"	04-206-835	VALVE: GATE; FLOD; R.F.; CLASS 1500; 4"				VALVE: GATE; FLOD; R.F.; CLASS 2500; 4"					
	OR	04-616-205	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 150; 4"	04-616-209	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 300; 4"	04-616-205	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 600; 4"	04-616-225	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 900; 4"	04-616-225	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 1500; 4"	04-616-233	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 1500; 4"	04-616-233	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 1500; 4"				VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 2500; 4"					
	9	06--	GASKET: CLASS 150; 4"	06--	GASKET: CLASS 300; 4"	06--	GASKET: CLASS 600; 4"	06-147-760	GASKET: CLASS 900; 4"	06-147-760	GASKET: CLASS 1500; 4"	06-143-764	GASKET: CLASS 1500; 4"	06-143-764	GASKET: CLASS 1500; 4"				GASKET: CLASS 2500; 4"					
10	10-354-372	BOLT: STUD; 5/8" x 3 1/2" ; 8 REQ'D PER JOINT	10-354-448	BOLT: STUD; 3/4" x 4 1/2" ; 8 REQ'D PER JOINT	10-354-372	BOLT: STUD; 7/8" x 5 1/2" ; 8 REQ'D PER JOINT	10-354-372	BOLT: STUD; 1 1/8" x 7" ; 8 REQ'D PER JOINT	10-354-372	BOLT: STUD; 1 1/8" x 7" ; 8 REQ'D PER JOINT	10-355-781	BOLT: STUD; 1 1/4" x 10" ; 8 REQ'D PER JOINT	10-355-781	BOLT: STUD; 1 1/4" x 10" ; 8 REQ'D PER JOINT	10-355-781	BOLT: STUD; 1 1/2" x 11" ; 8 REQ'D PER JOINT	10-355-781	BOLT: STUD; 1 1/2" x 11" ; 8 REQ'D PER JOINT						
6" DRAIN	1	01-167-545	PIPE: STEEL; API 5-L GRADE "B" 6" x 0.280" W.T.	01-167-545	PIPE: STEEL; API 5-L GRADE "B" 6" x 0.280" W.T.	01-167-545	PIPE: STEEL; API 5-L GRADE "B" 6" x 0.280" W.T.	01-167-545	PIPE: STEEL; API 5-L GRADE "B" 6" x 0.280" W.T.	01-167-545	PIPE: STEEL; API 5-L GRADE "B" 6" x 0.280" W.T.	01-167-565	PIPE: STEEL; API 5-L GRADE "B" 6" x 0.432" W.T.	01-167-565	PIPE: STEEL; API 5-L GRADE "B" 6" x 0.432" W.T.	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD					
	2	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD					
	3																							
	4	02-277-233	ELBOW WELDING STD.: 90 DEG; L.R. 6"	02-277-233	ELBOW WELDING STD.: 90 DEG; L.R. 6"	02-277-233	ELBOW WELDING STD.: 90 DEG; L.R. 6"	02-277-642	ELBOW WELDING STD.: 90 DEG; L.R. 6"	02-277-642	ELBOW WELDING STD.: 90 DEG; L.R. 6"	02-277-737	ELBOW WELDING STD.: 90 DEG; L.R. 6" x 0.562" W.T.	02-277-737	ELBOW WELDING STD.: 90 DEG; L.R. 6" x 0.562" W.T.	02-277-738	ELBOW WELDING STD.: 90 DEG; L.R. 6" x 0.864" W.T.	02-277-738	ELBOW WELDING STD.: 90 DEG; L.R. 6" x 0.864" W.T.					
	5	02-376-920	FLANGE: BLIND, R.F. CLASS 1500; 6"	02-377-051	FLANGE: BLIND, R.F. CLASS 300; 6"	02-377-220	FLANGE: BLIND, R.F. CLASS 600; 6"	02-377-652	FLANGE: BLIND, R.F. CLASS 900; 6"	02-377-652	FLANGE: BLIND, R.F. CLASS 1500; 6"								FLANGE: BLIND, R.F. CLASS 2500; 6"					
	6	02-394-845	FLANGE: WELDING NECK ; R.F. CLASS 150; 6"; 6.065" BORE	02-395-021	FLANGE: WELDING NECK ; R.F. CLASS 300; 6"; 6.065" BORE	02-395-452	FLANGE: WELDING NECK ; R.F. CLASS 600; 6"; 6.065" BORE	02-396-122	FLANGE: WELDING NECK ; R.F. CLASS 900; 6"; 6.065" BORE	02-396-122	FLANGE: WELDING NECK ; R.F. CLASS 1500; 6"; 6.065" BORE	02-396-265	FLANGE: WELDING NECK ; R.F. CLASS 1500; 6"; 6.065" BORE	02-396-265	FLANGE: WELDING NECK ; R.F. CLASS 1500; 6"; 6.065" BORE				FLANGE: WELDING NECK ; R.F. CLASS 2500; 6"; 6.065" BORE					
	7	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE					
	8	04-206-838	VALVE: GATE; FLOD; R.F.; CLASS 150; 6"	04-206-840	VALVE: GATE; FLOD; R.F.; CLASS 300; 6"	04-206-851	VALVE: GATE; FLOD; R.F.; CLASS 600; 6"	04-206-858	VALVE: GATE; FLOD; R.F.; CLASS 900; 6"	04-206-858	VALVE: GATE; FLOD; R.F.; CLASS 1500; 6"	04-206-861	VALVE: GATE; FLOD; R.F.; CLASS 1500; 6"	04-206-861	VALVE: GATE; FLOD; R.F.; CLASS 1500; 6"				VALVE: GATE; FLOD; R.F.; CLASS 2500; 6"					
	OR	04-616-256	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 150; 6"	04-616-264	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 300; 6"	04-616-268	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 600; 6"	04-616-274	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 900; 6"	04-616-274	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 1500; 6"	04-616-280	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 1500; 6"	04-616-280	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 1500; 6"				VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 2500; 6"					
	9	06--	GASKET: CLASS 150; 6"	06--	GASKET: CLASS 300; 6"	06--	GASKET: CLASS 600; 6"	06-143-774	GASKET: CLASS 900; 6"	06-143-774	GASKET: CLASS 1500; 6"	06-143-775	GASKET: CLASS 1500; 6"	06-143-775	GASKET: CLASS 1500; 6"				GASKET: CLASS 2500; 6"					
10	10-354-442	BOLT: STUD; 3/4" x 4" ; 8 REQ'D PER JOINT	10-354-454	BOLT: STUD 3/4" x 5" ; 12 REQ'D PER JOINT	10-354-648	BOLT: STUD; 1" x 6 1/2" ; 12 REQ'D PER JOINT	10-355-694	BOLT: STUD; 1 1/8" x 7 1/2" ; 12 REQ'D PER JOINT	10-355-694	BOLT: STUD; 1 1/8" x 7 1/2" ; 12 REQ'D PER JOINT	10-355-889	BOLT: STUD; 1 3/8" x 10 1/2" ; 12 REQ'D PER JOINT	10-355-889	BOLT: STUD; 1 3/8" x 10 1/2" ; 12 REQ'D PER JOINT	10-355-889	BOLT: STUD; 1 3/8" x 10 1/2" ; 12 REQ'D PER JOINT	10-355-889	BOLT: STUD; 1 3/8" x 10 1/2" ; 12 REQ'D PER JOINT						
8" DRAIN	1	01-167-630	PIPE: STEEL; API 5-L GRADE "B" 8" x 0.322" W.T.	01-167-630	PIPE: STEEL; API 5-L GRADE "B" 8" x 0.322" W.T.	01-167-630	PIPE: STEEL; API 5-L GRADE "B" 8" x 0.322" W.T.	01-167-650	PIPE: STEEL; API 5-L GRADE "B" 8" x 0.500" W.T.	01-167-650	PIPE: STEEL; API 5-L GRADE "B" 8" x 0.500" W.T.	01-167-665	PIPE: STEEL; API 5-L GRADE "B" 8" x 0.718" W.T.	01-167-665	PIPE: STEEL; API 5-L GRADE "B" 8" x 0.718" W.T.	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD					
	2	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD					
	3																							
	4	02-277-239	ELBOW WELDING STD.: 90 DEG; L.R. 8"	02-277-239	ELBOW WELDING STD.: 90 DEG; L.R. 8"	02-277-239	ELBOW WELDING STD.: 90 DEG; L.R. 8"	02-277-646	ELBOW WELDING STD.: 90 DEG; L.R. 8"	02-277-646	ELBOW WELDING STD.: 90 DEG; L.R. 8"	02-277-740	ELBOW WELDING STD.: 90 DEG; L.R. 8" x 0.718" W.T.	02-277-740	ELBOW WELDING STD.: 90 DEG; L.R. 8" x 0.718" W.T.	02-277-741	ELBOW WELDING STD.: 90 DEG; L.R. 8" x 1.064" W.T.	02-277-741	ELBOW WELDING STD.: 90 DEG; L.R. 8" x 1.064" W.T.					
	5	02-376-926	FLANGE: BLIND, R.F. CLASS 1500; 8"	02-377-057	FLANGE: BLIND, R.F. CLASS 300; 8"	02-377-224	FLANGE: BLIND, R.F. CLASS 600; 8"	02-377-656	FLANGE: BLIND, R.F. CLASS 900; 8"	02-377-656	FLANGE: BLIND, R.F. CLASS 1500; 8"								FLANGE: BLIND, R.F. CLASS 2500; 8"					
	6	02-394-851	FLANGE: WELDING NECK ; R.F. CLASS 150; 8"; 7.981" BORE	02-395-031	FLANGE: WELDING NECK ; R.F. CLASS 300; 8"; 7.981" BORE	02-395-456	FLANGE: WELDING NECK ; R.F. CLASS 600; 8"; 7.981" BORE	02-396-128	FLANGE: WELDING NECK ; R.F. CLASS 900; 8"; 7.981" BORE	02-396-128	FLANGE: WELDING NECK ; R.F. CLASS 1500; 8"; 7.981" BORE	02-396-269	FLANGE: WELDING NECK ; R.F. CLASS 1500; 8"; 7.981" BORE	02-396-269	FLANGE: WELDING NECK ; R.F. CLASS 1500; 8"; 7.981" BORE				FLANGE: WELDING NECK ; R.F. CLASS 2500; 8"; 7.981" BORE					
	7	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE	02-455-404	BOSS: WELDING; 3/4" PIPE SIZE					
	8	04-206-862	VALVE: GATE; FLOD; R.F.; CLASS 150; 8"	04-206-865	VALVE: GATE; FLOD; R.F.; CLASS 300; 8"	04-206-876	VALVE: GATE; FLOD; R.F.; CLASS 600; 8"	04-206-883	VALVE: GATE; FLOD; R.F.; CLASS 900; 8"	04-206-883	VALVE: GATE; FLOD; R.F.; CLASS 1500; 8"	04-206-884	VALVE: GATE; FLOD; R.F.; CLASS 1500; 8"	04-206-884	VALVE: GATE; FLOD; R.F.; CLASS 1500; 8"				VALVE: GATE; FLOD; R.F.; CLASS 2500; 8"					
	OR	04-616-295	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 150; 8"	04-616-303	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 300; 8"	04-616-308	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 600; 8"	04-616-311	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 900; 8"	04-616-311	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 1500; 8"	04-616-312	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 1500; 8"	04-616-312	VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 1500; 8"				VALVE: LUBRICATED PLUG, FLOD; R.F. CLASS 2500; 8"					
	9	06--	GASKET: CLASS 150; 8"	06--	GASKET: CLASS 300; 8"	06--	GASKET: CLASS 600; 8"	06-143-780	GASKET: CLASS 900; 8"	06-143-780	GASKET: CLASS 1500; 8"	06-143-781	GASKET: CLASS 1500; 8"	06-143-781	GASKET: CLASS 1500; 8"				GASKET: CLASS 2500; 8"					
10	10-354-442	BOLT: STUD; 3/4" x 4" ; 8 REQ'D PER JOINT	10-354-547	BOLT: STUD 7/8" x 5 1/2" ; 12 REQ'D PER JOINT	10-355-694	BOLT: STUD; 1 1/8" x 7 1/2" ; 12 REQ'D PER JOINT	10-355-875	BOLT: STUD; 1 3/8" x 9" ; 12 REQ'D PER JOINT	10-355-875	BOLT: STUD; 1 3/8" x 9" ; 12 REQ'D PER JOINT	10-355-889	BOLT: STUD; 1 3/8" x 10 1/2" ; 12 REQ'D PER JOINT	10-355-889	BOLT: STUD; 1 3/8" x 10 1/2" ; 12 REQ'D PER JOINT	10-355-889	BOLT: STUD; 1 3/8" x 10 1/2" ; 12 REQ'D PER JOINT	10-355-889	BOLT: STUD; 1 3/8" x 10 1/2" ; 12 REQ'D PER JOINT						
12" DRAIN	1	01-167-785	PIPE: STEEL; API 5-L GRADE "B" 12" x 0.375" W.T.	01-167-785	PIPE: STEEL; API 5-L GRADE "B" 12" x 0.375" W.T.	01-167-785	PIPE: STEEL; API 5-L GRADE "B" 12" x 0.375" W.T.	01-167-827	PIPE: STEEL; API 5-L GRADE "B" 12" x 0.562" W.T.	01-167-827	PIPE: STEEL; API 5-L GRADE "B" 12" x 0.562" W.T.	01-167-842	PIPE: STEEL; API 5-L GRADE "B" 12" x 0.812" W.T.	01-167-842	PIPE: STEEL; API 5-L GRADE "B" 12" x 0.812" W.T.	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD					
	2	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD	02-120-276	PLUG: PIPE 3/4" DIA. HEX. HEAD					
	3																							
	4	02-277-251	ELBOW WELDING STD.: 90 DEG; L.R. 12"	02-277-251	ELBOW WELDING STD.: 90 DEG; L.R. 12"	02-277-251	ELBOW WELDING STD.: 90 DEG; L.R. 12"	02-277-664	ELBOW WELDING STD.: 90 DEG; L.R. 12"	02-277-664	ELBOW WELDING STD.: 90 DEG; L.R. 12"	02-277-751	ELBOW WELDING STD.: 90 DEG; L.R. 12" x 1.000" W.T.	02-277-751	ELBOW WELDING STD.: 90 DEG; L.R. 12" x 1.000" W.T.	02-277-752	ELBOW WELDING STD.: 90 DEG; L.R. 12" x 1.516" W.T.	02-277-752	ELBOW WELDING STD.: 90 DEG; L.R. 12" x 1.516" W.T.					
	5	02-376-938	FLANGE: BLIND, R.F. CLASS 1500; 12"	02-377-067	FLANGE: BLIND, R.F. CLASS 300; 12"	02-377-232	FLANGE: BLIND, R.F. CLASS 600; 12"	02-377-664	FLANGE: BLIND, R.F. CLASS 900; 12"	02-377-664	FLANGE: BLIND, R.F. CLASS 1500; 12"								FLANGE: BLIND, R.F. CLASS 2500; 12"					

NOTES

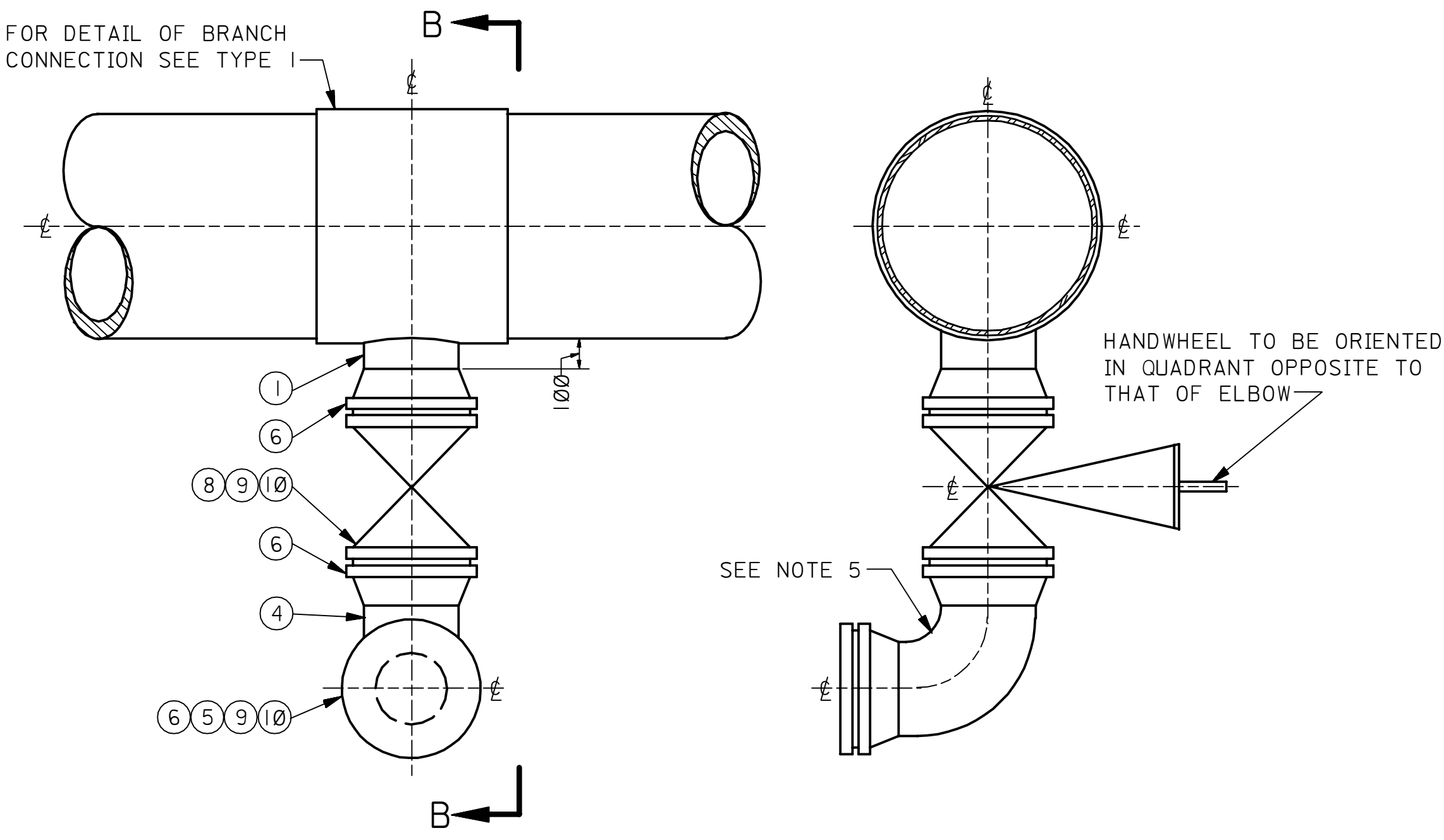
1. PLACE A KILOMETER MARKER (STD. DWG. D-036978 ADJACENT TO EACH DRAIN.
2. DRAIN SIZES:
FOR PIPELINES 8" TO 20" D=4"
FOR PIPELINES 20" AND OVER D=6"
DRAINS USED AS BYPASSES AROUND VALVES ARE NORMALLY ONE SIXTH OF THE PIPELINE DIAMETER.
3. PROVIDE ALL REINFORCING SLEEVES WITH A 3mm DIA VENT HOLE PLUGGED WITH HEAVY GREASE.
4. TYPE I DRAINS DO NOT REQUIRE VALVE BOXES WHEN INSTALLED ON BURIED PIPELINES WITH ANCHORS AT ENDS.
5. DRAIN OUTLET TO BE ORIENTED SOUTHWARD OR DOWNHILL A MINIMUM OF 45 DEGREES ANGLE AWAY FROM PIPELINE.
6. SPACE AROUND TYPE I DRAIN PIPING SHALL BE BACK FILLED WITH CLEAN SAND WITHIN THE DOTTED LINE BOUNDARIES. DRIFT SAND FOUND IN SANDDUNES AND SAND MOUNDS IS SUITABLE FOR THIS FILL. THE SURFACE SHALL BE STABILIZED WITH WEATHERED CRUDE. STABILIZING WITH MARL OR ROCK MATERIALS IS NOT PERMITTED.
7. TYPE I DRAINS FOR LIQUID LINES SHALL HAVE A FULL OPENING VALVE AND CONNECTION NOZZLE TO PERMIT INSERTION OF A DIP TUBE OF NEXT SMALLER NOMINAL SIZE FOR PUMPING OUT REMAINING LIQUID TO LEVEL NEAR BOTTOM OF THE LINE.
8. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.



SECTION A-A



DETAIL I



SECTION B-B

TYPE 2

FOR ABOVE GROUND LINES

TYPICAL INSTALLATION DRAWING					
11	06-12-86	RLO	REDRAWN AND DESIGNATED TYPICAL INSTALL. DWG.		
REV. NO.	DATE	BY	DESCRIPTION	CHKD	CERT, APPD.
FOR ARABIAN AMERICAN OIL COMPANY					
DRAWN BY _____ KPH		CHECKED BY _____		SCALE: _____ NONE	
DATE STARTED _____		DATE COMPLETED _____		02-07-61	
OPR'G. DEPT. _____			ENG. DEPT. _____		
APP'D. FOR CONST. _____			CERTIFIED DATE _____		
THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL, UNITS, CERTIFIED AND DATED					
PIPELINE DRAINS					
DETAILS					
STD. DWG.				METRIC	
PLANT NO.	INDEX	DRAWING NUMBER		SHT. NO.	REV. NO.
990	L	AA-036886		001	11
ARABCO 4-2615 011-84					
CAD					