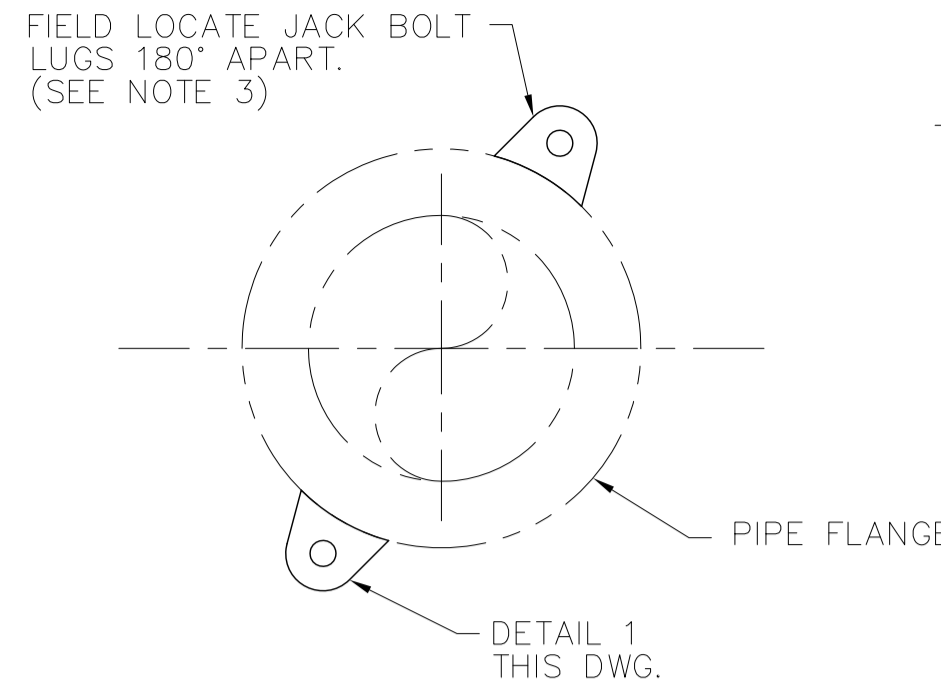
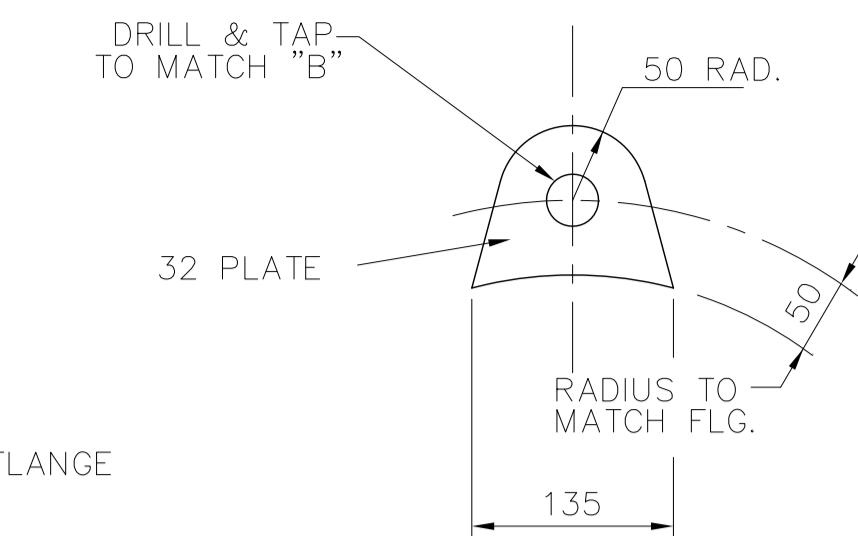
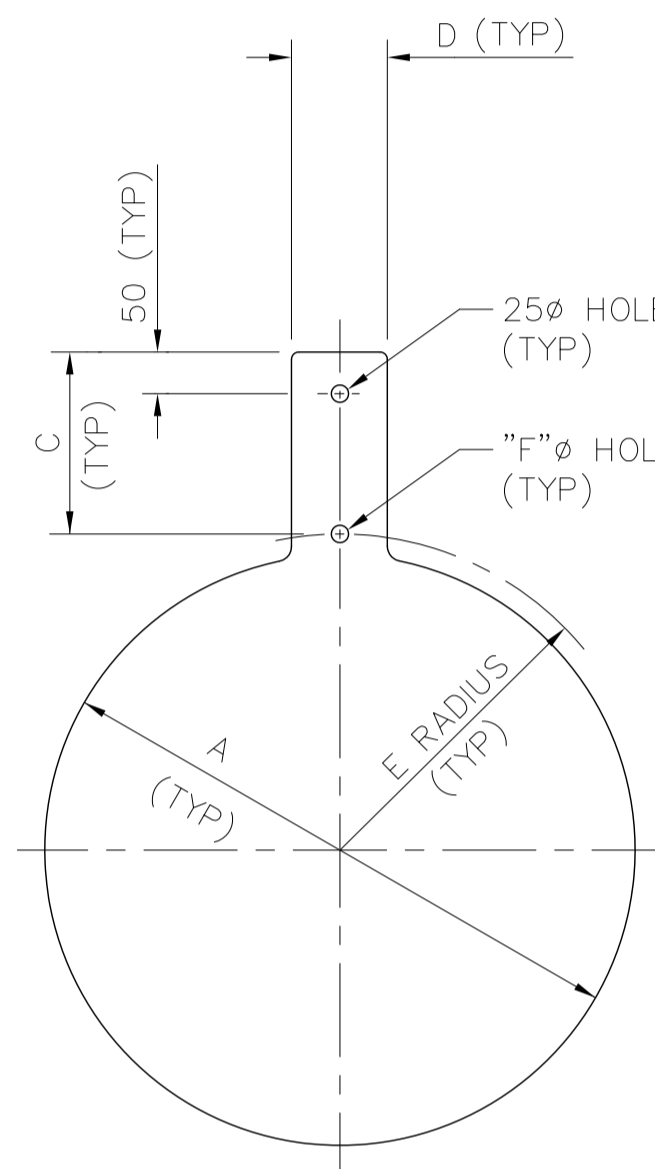


REDUCERS		
ACTUAL PIPE O.D.	LARGE END NOM. SIZE	LENGTH L
168	150	140
219	200	152
273	250	178
324	300	203
356	350	330
406	400	356
457	450	381
508	500	508
559	550	508
610	600	508
660	650	610
711	700	610
762	750	610
813	800	610
864	850	610
914	900	610
965	950	610
1016	1000	610
1067	1050	610
1117	1100	1000
1168	1150	1000
1219	1200	1000
1270	1250	1000
1320	1300	1000
1371	1350	1000
1422	1400	1000
1524	1500	1000
1625	1600	1000
1676	1650	1000
1727	1700	1000
1828	1800	1000
1930	1900	1000
2031	2000	1000

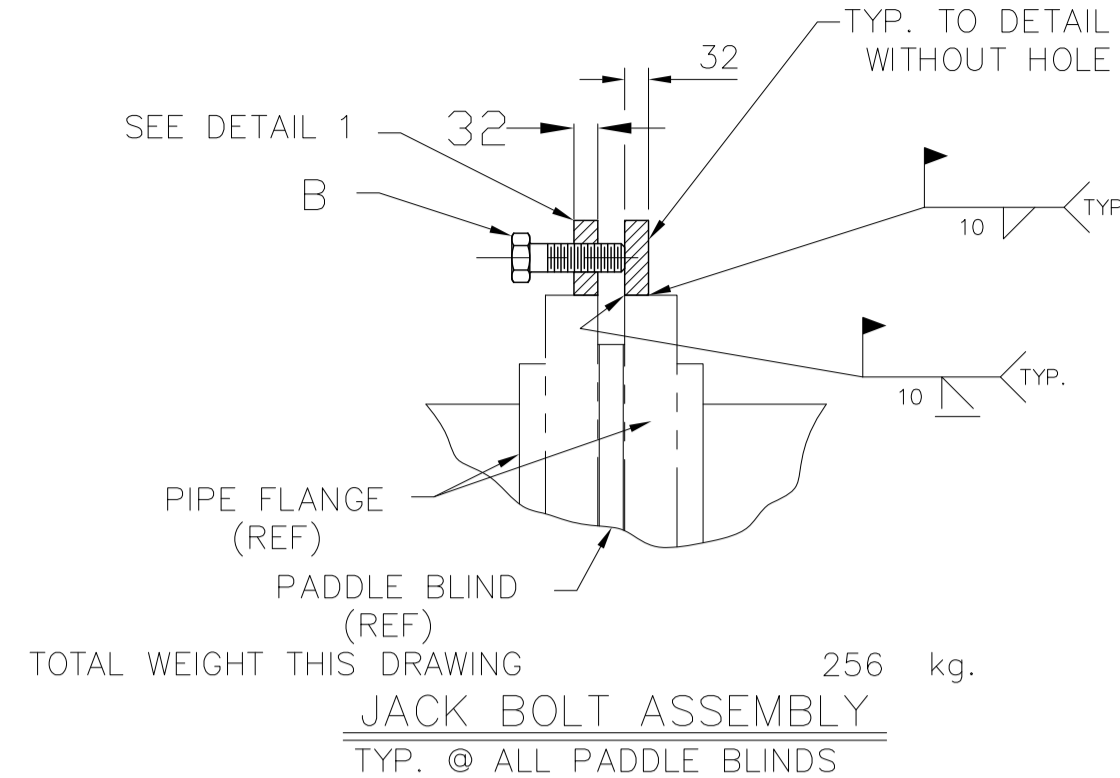
FABRICATED ELBOW AND TEE DIMENSIONS									
PIPE SIZE inches	PIPE SIZE mm	L1	L2	R	A	B	C	D	H
6	150	235	101	229	129	95	60	134	143
8	200	311	132	305	172	126	81	179	178
10	250	387	164	381	214	158	101	223	216
12	300	463	195	457	256	189	122	268	254
14	350	539	227	533	295	221	147	312	280
16	400	616	259	610	337	253	168	357	305
18	450	692	290	686	379	284	189	402	343
20	500	768	322	762	421	316	210	446	381
22	550	844	353	838	463	347	231	491	420
24	600	920	385	914	505	379	252	536	432
26	650	997	416	991	547	410	274	580	490
28	700	1073	448	1067	589	442	295	625	530
30	750	1149	479	1143	631	473	316	670	560
32	800	1225	511	1219	673	505	337	714	600
34	850	1301	543	1295	716	537	358	759	640
36	900	1378	574	1372	757	568	379	803	675
38	950	1454	606	1448	800	600	400	848	715
40	1000	1530	637	1524	842	631	421	893	750
42	1050	1606	669	1600	884	663	442	937	790
44	1100	1682	700	1676	926	694	463	982	830
46	1150	1759	732	1753	968	726	484	1027	860
48	1200	1835	764	1829	1010	758	505	1071	900
50	1250	1911	795	1905	1052	789	526	1116	940
52	1300	1987	827	1981	1094	821	547	1161	980
54	1350	2063	858	2057	1136	852	568	1205	1020
56	1400	2140	890	2134	1178	884	589	1250	1050
58	1450	2216	921	2210	1220	915	610	1294	1090
60	1500	2292	953	2286	1262	947	631	1339	1130
62	1550	2368	984	2362	1305	978	652	1384	1170
64	1600	2444	1016	2438	1347	1010	673	1428	1200
66	1650	2521	1048	2515	1389	1042	694	1473	1240
68	1700	2597	1079	2591	1431	1073	716	1518	1275
70	1750	2673	1111	2667	1473	1105	737	1562	1320
72	1800	2749	1142	2743	1515	1136	758	1607	1350



JACK BOLT ORIENTATION VIEW



DETAIL 1
SCALE : NONE THIS DWG.
JACK BOLT LUG



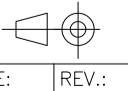


JACK BOLTS FOR PADDLE BLINDS	
PIPE SIZES	B = BOLT SIZE
350-400	1"-8UN x 4" LG.
450-500	1 1/8"-8UN x 4" LG.
550-750	1 1/4"-8UN x 4 1/2" LG.
800-1200	1 1/2"-8UN x 5" LG.
1250-1800	1 3/4"-8UN x 6" LG.

PADDLE BLIND FOR 35 PSIG.								
PIPE SIZE	PLATE THICKNESS	A	B	C	D	E	F	REMARKS
300	10	405	320	230	120	215.9	25	PER ANSI B16.1
350	10	446	360	230	120	238.1	30	
400	12	509	410	230	120	269.9	30	
450	12	544	460	230	120	288.9	32	
500	14	601	510	230	120	317.5	32	
550	14	655	560	230	120	346.1	36	PER MSS SP-44
600	16	712	610	230	120	374.7	36	PER ANSI B16.1
650	20	769	660	230	120	403.2	36	
700	20	827	710	230	120	431.8	36	
750	20	877	760	230	120	457.2	36	
800	20	935	810	230	120	488.9	42	
850	25	986	860	230	120	514.4	42	
900	25	1043	910	230	120	542.9	42	
950	25	1106	960	230	120	574.7	42	
1000	25	1157	1010	230	120	600.1	42	
1050	28	1214	1060	230	120	628.7	42	
1100	28	1271	1110	230	120	657.2	42	
1150	32	1322	1160	230	120	682.6	42	
1200	32	1379	1210	230	120	711.2	42	
1250	32	1430	1260	230	120	739.8	48	
1300	32	1487	1310	230	120	768.4	48	
1350	36	1544	1360	230	120	796.9	48	
1400	36	1601	1410	230	120	825.5	48	PER MSS SP-44
1500	40	1709	1510	230	120	879.5	48	PER ANSI B16.1
1650	45	1881	1660	230	120	965.2	48	PER ANSI B16.1
1800	45	2046	1810	230	120	1047.8	48	PER ANSI B16.1

NOTES:

1. ALL WELDING JOINTS OR ENDS (PIPE OR PLATE) TO BE BEVELED UNLESS OTHERWISE NOTED.
2. SHELL LONGITUDINAL WELD SEAMS TO BE OFFSET AT LEAST 300 mm MINIMUM.
3. JACK BOLT ASSEMBLIES ARE REQUIRED AT ALL PADDLE BLINDS. THEY ARE TO BE FIELD LOCATED & INSTALLED BY PIPING CONTRACTOR.
4. FABRICATED FITTING DIMENSIONS ARE TO BE USED UNLESS DIMENSIONED OTHERWISE ON PIPING DRAWINGS.
5. PADDLE BLINDS TO BE FABRICATED FROM A36 PLATE.

1	May,2021	ISSUED FOR CONSTRUCTION			IFC	A.Farokhipour	R.Alizadeh	P.Sheikhhogloo	
REV.	DATE	DESCRIPTION			PURPOSE OF ISSUE	PREPARE	CHECK	APPROVE	
Project:									
TOOBA GISD MEGA MODULE PROJECT									
Client				Contractor					
				 مهندسی های آبر و سازه و فکور MINES & METALS TECHNOLOGICAL ENGINEERING CO.					
Client's Project	Project Code	Main Contractor	Area Code	Plant Group	Equipment Code	Document Type	Eng. Discipline	Serial No.	
GISD	7-3	119	1002	7	PS	04	Q	140	
designations:									
SIGNATURE		DATE	PADDLE BLINDS & FABRICATED FITTING DETAILED						
DESIGNED	MMTE	May 2021	drawing-No. TGMUG00M3140						
PREPARED	A.Farokhipour	May 2021							
CHECKED	R.Alizadeh	May 2021							
APPROVED	P.Sheikhhogloo	May 2021							
repl. for:				repl. by :				CONT. & PROJ. NO: 99/1369	