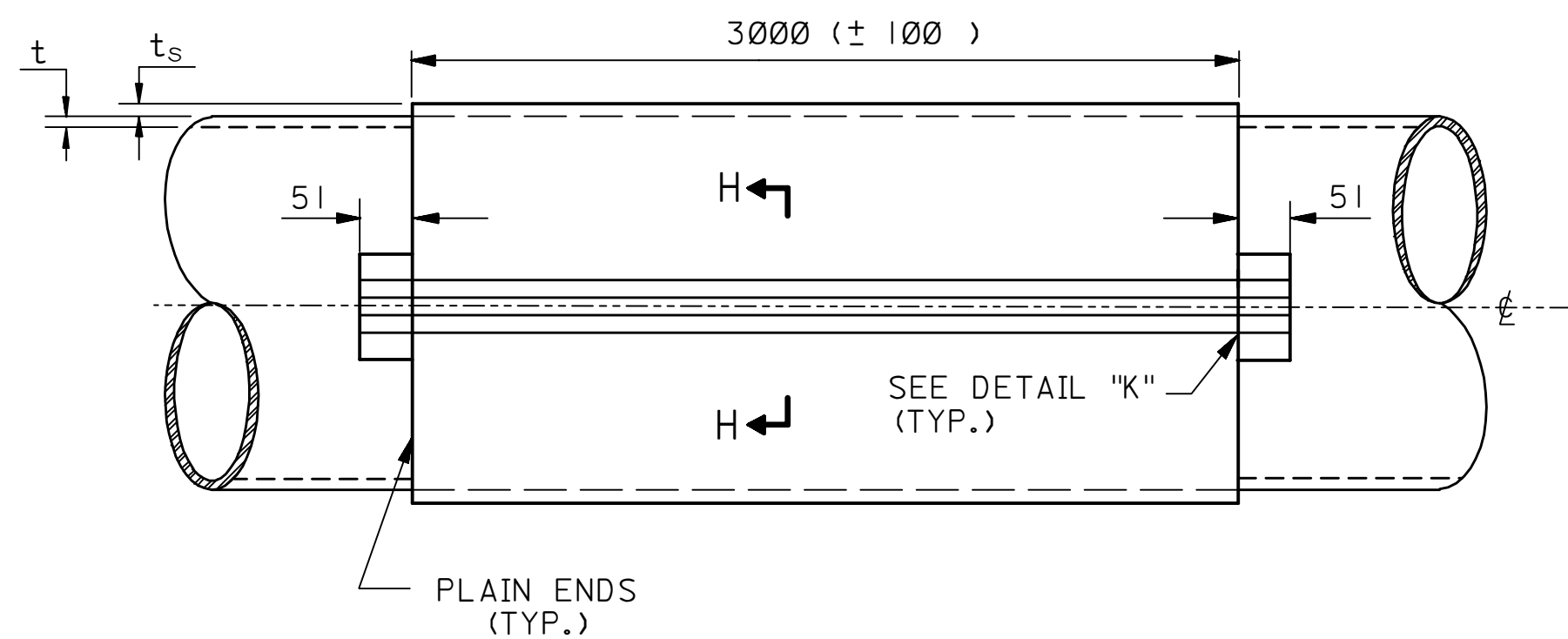


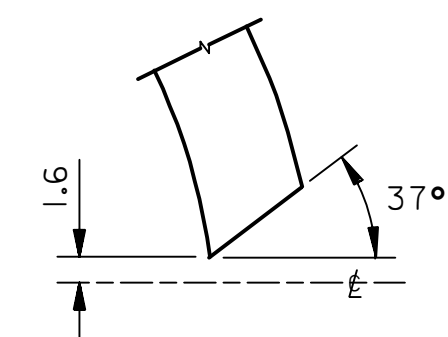
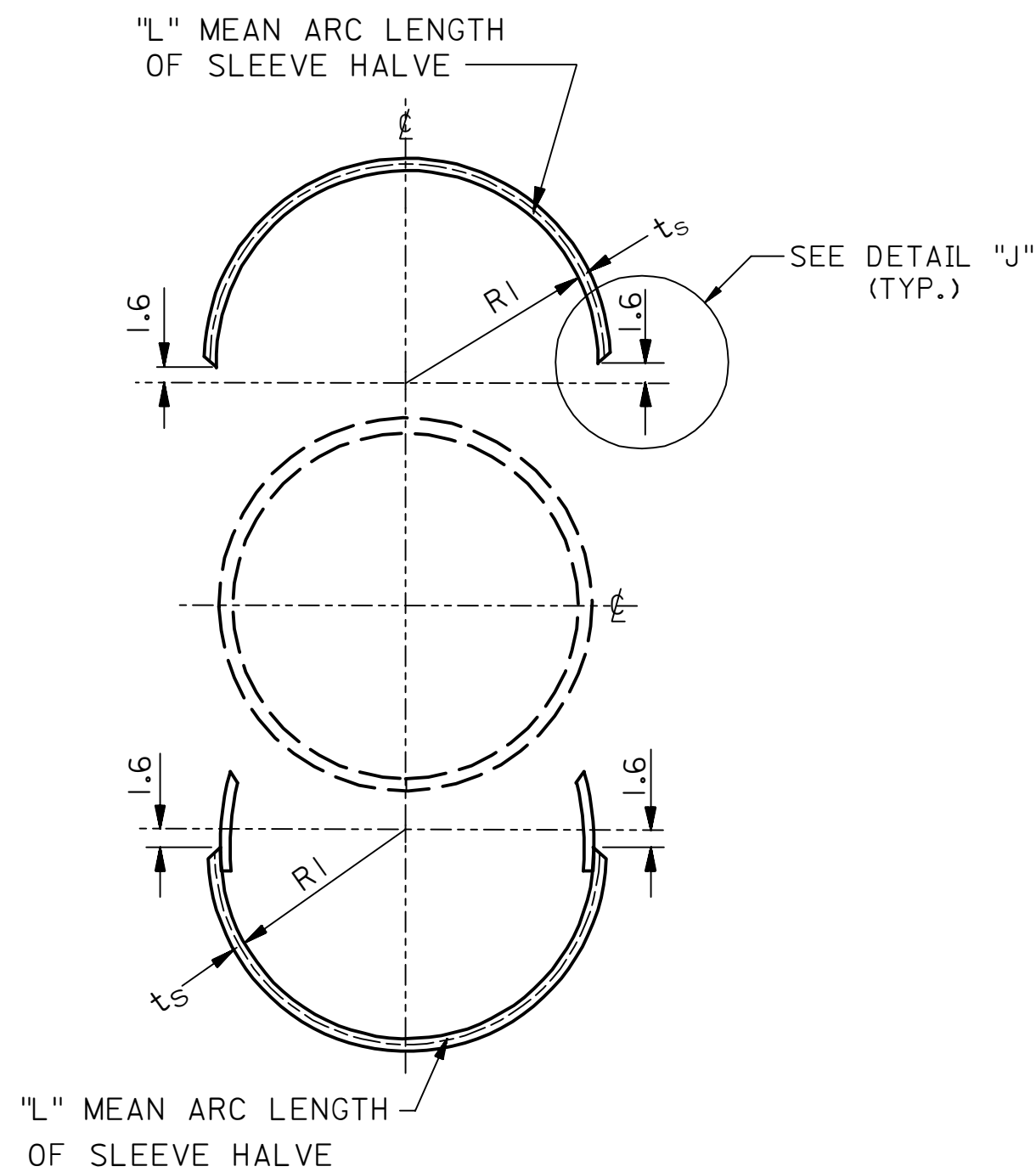
PLANT NO.	INDEX	DRAWING NUMBER	SHT. NO.	REV. NO.
-----------	-------	----------------	----------	----------



LEGEND :

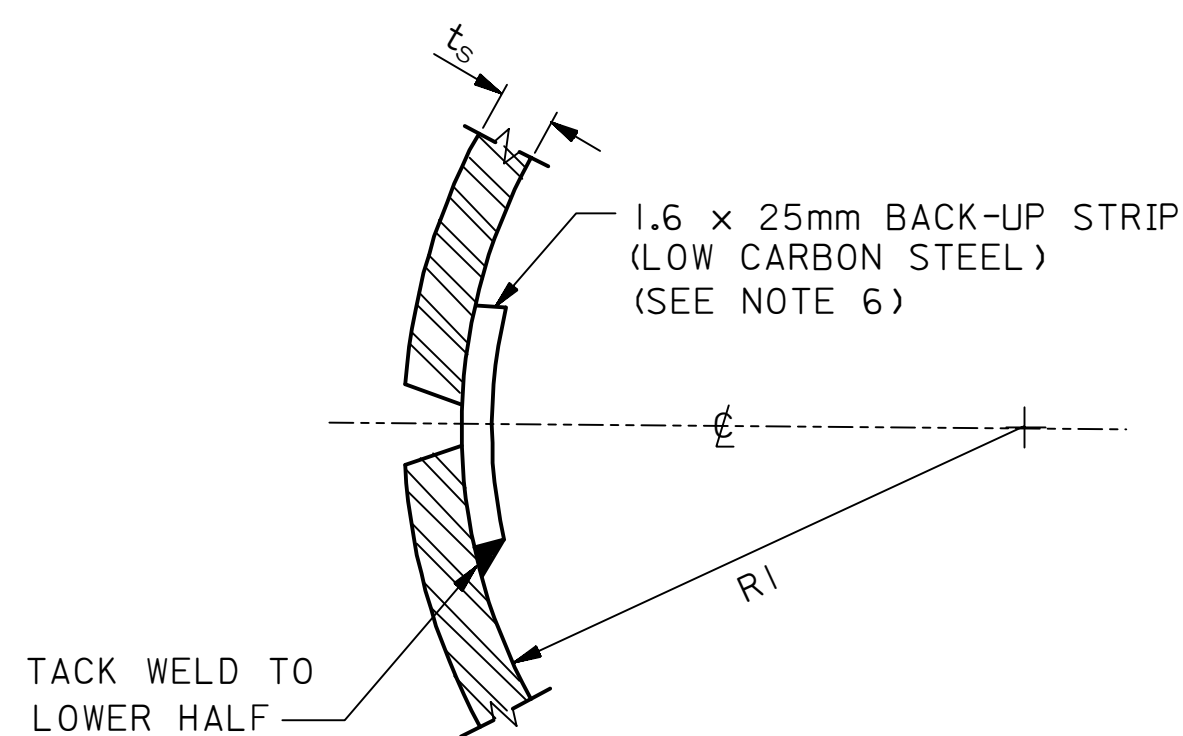
$$t_s = \text{THICKNESS OF SLEEVE}$$

t = THICKNESS OF PIPE

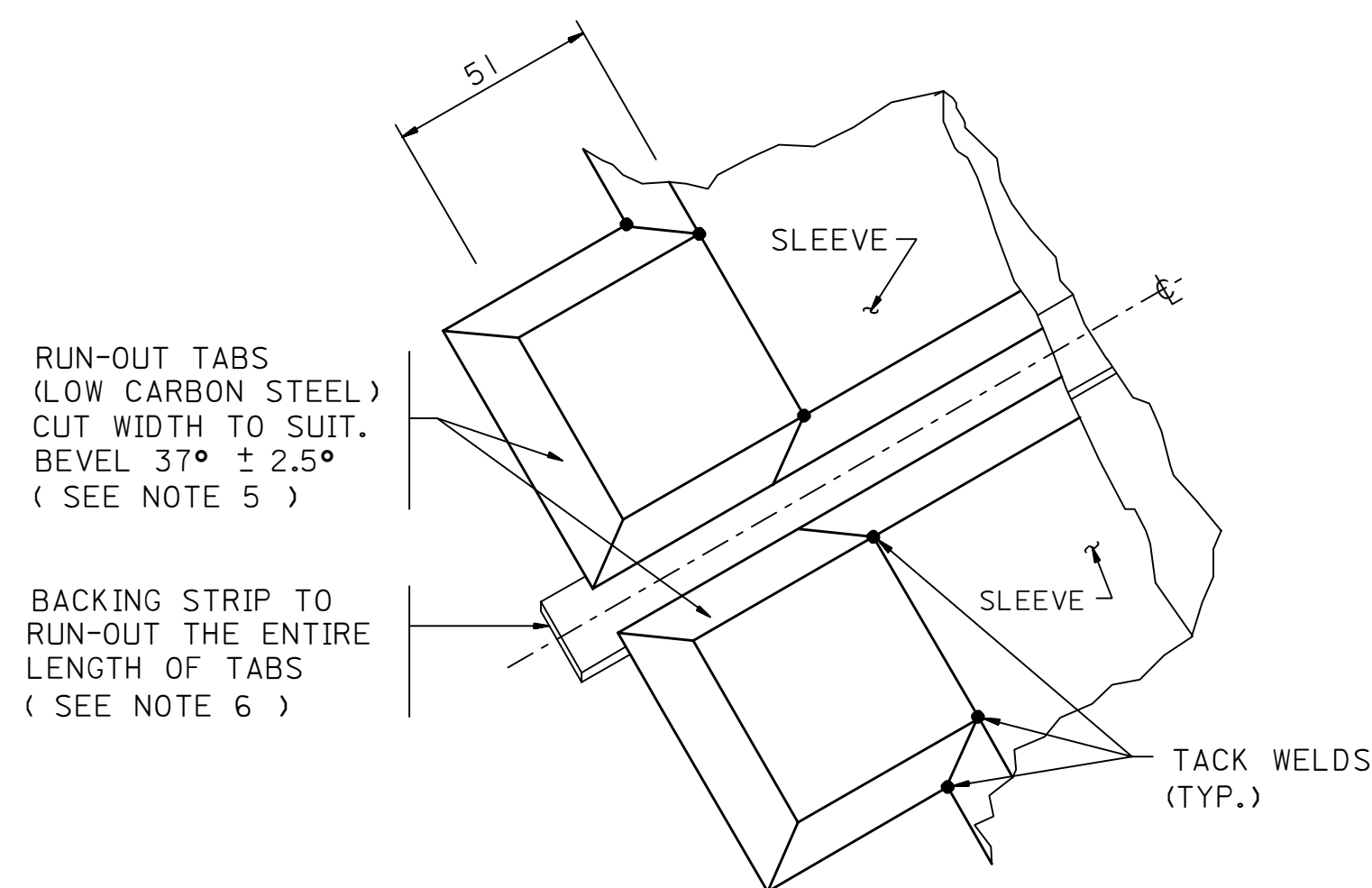


DETAIL "J"

TYPICAL BEVEL W/O LAND
FOR LONGITUDINAL SEAMS



SECTION H-H



DETAIL "K"
RUN-OUT TABS (TYP.)
(SEE NOTE 5)

PIPE DIMENSION		SLEEVE DIMENSION		
NPS	t	t _s	RI	L
6"	12	14	88	296
8"	12.4	14	113	374
10"	12.7	14	140	459
12"	12.9	14	165	537
14"	13	14	181	588
16"	13	14	207	669
18"	15	16	232	751
20"	15	16	257	830
22"	15.1	16	283	911
24"	15.2	16	308	990
26"	15.3	16	334	1072
28"	15.3	16	359	1150
30"	15.4	16	384	1229
31"	15.4	16	397	1269
32"	15.4	16	410	1310
34"	15.4	16	435	1389
36"	15.5	16	461	1472
38"	15.5	16	486	1549
40"	15.5	16	512	1631
42"	15.5	16	537	1709
46"	16.5	17	588	1871
48"	16.5	17	613	1950
56"	20.4	21	715	2276
60"	20.4	21	766	2437

NOTES:

1. SLEEVES SHALL BE MADE IN TWO HALVES. THE LONGITUDINAL WELD JOINT SIDES SHALL BE BEVELED TO 37 deg. +/- 2.5 deg., WITHOUT A LAND.
2. SLEEVE MATERIAL SHALL BE EQUIVALENT TO API 5 GR. X-60 MATERIAL, HAVING A SPECIFIED MINIMUM YIELD STRENGTH (SMYS) OF NOT LESS THAN 413.7 MPa. ASTM A537 CLASS 2 IS ACCEPTABLE. EXPANDED STEEL IS NOT ACCEPTABLE. NO SPECIAL IMPACT TEST REQUIREMENTS ARE NEEDED.
3. THE PIPE SIZE FOR WHICH THE SLEEVE IS INTENDED SHALL BE STENCILED ON THE OUTSIDE SURFACE OF EACH SLEEVE HALF.
4. ALL WELDING AND WELDER QUALIFICATIONS SHALL BE IN ACCORDANCE WITH EITHER ASME SECT. IX OR API 1104.
5. RUN-OUT TABS SHALL BE FABRICATED FROM LOW CARBON STEEL MATERIAL. THEIR THICKNESS SHALL BE EQUAL TO THE SLEEVE THICKNESS. THE WELD JOINT SIDE SHALL BE BEVELED TO 37 deg. +/- 2.5 deg., WITHOUT A LAND. RUN-OUT TABS SHALL BE TACK WELDED INTO PLACE USING LOW HYDROGEN ELECTRODES.
6. BACKING STRIPS SHALL BE FABRICATED FROM LOW CARBON STEEL MATERIAL, NOT TO EXCEED 1.6mm IN THICKNESS x 25mm WIDE. BACKING STRIP LENGTH SHALL EXTEND TO THE ENTIRE LENGTH OF SLEEVE AND RUN-OUT TABS. BACKING STRIPS SHALL BE TACK WELDED INTO PLACE USING LOW HYDROGEN ELECTRODES.
7. ALL DIMENSIONS SHALL BE IN MILLIMETERS (mm), UNLESS NOTED OTHERWISE. EXCEPT FOR THE SLEEVE AND BACKING STRIP THICKNESS, ALL OTHER DIMENSIONAL TOLERANCES SHALL BE +/- 2mm.

REFERENCE DRAWINGS

PACKING DETAILS FOR P/L REPAIR SLEEVES (PRESSURE CONTAINING)	AB-036262 SHT. 003
INSTALLATION OF PIPELINE REPAIR SLEEVES (PRESSURE CONTAINING)	AB-036262 SHT. 001

FORMERLY DWG. AD-036786 SHT. 001

TYPICAL INSTALLATION DRAWING

[illegible]

SAUDI ARABIAN OIL COMPANY

DRAWN BY RL0/ESSD CHECKED BY _____ SCALE _____
DATE STARTED 10-09-95 DATE COMPLETED 10-09-95
OPR'G. DEPT. _____ ENG. DEPT. _____
APP'D FOR CONSTR. _____

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR FOR ORDERING MATERIAL UNTIL CERTIFIED AND DATED	CERTIFIED _____ BY _____ DATE _____
--	--

FABRICATION OF PIPELINE REPAIR SLEEVES
(PRESSURE CONTAINING)

STD. DWG.	METRIC
-----------	--------

PLANT NO.	INDEX	DRAWING NUMBER	SHT. NO.	REV. NO.
990	L	AB-036262	002	01