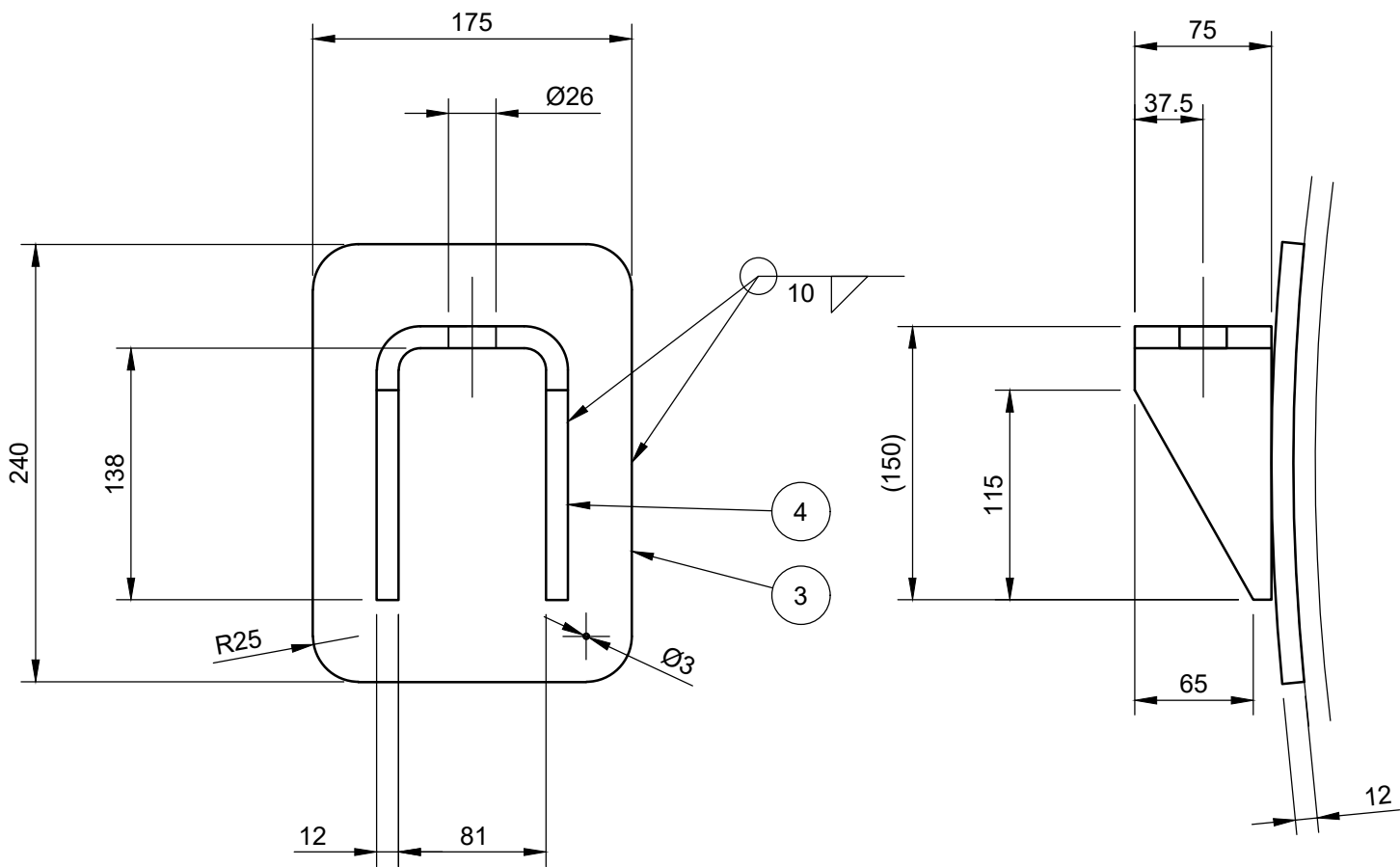
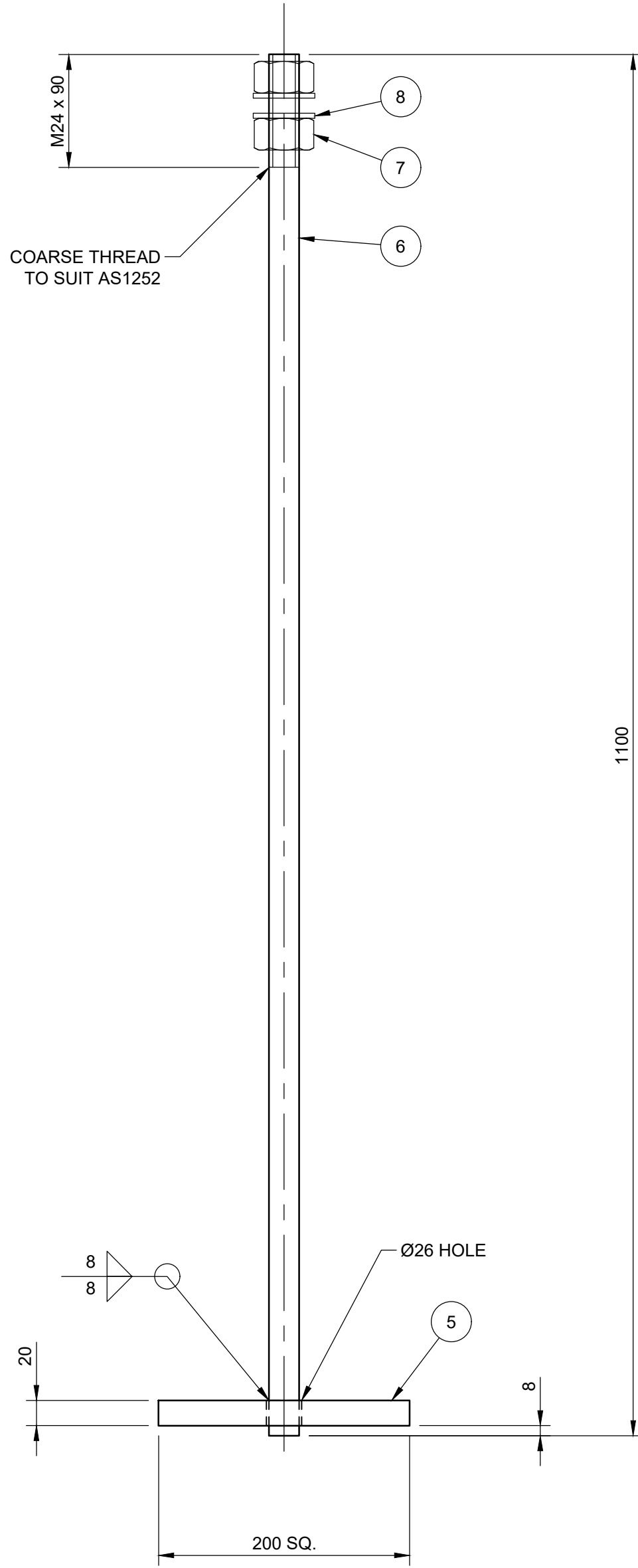


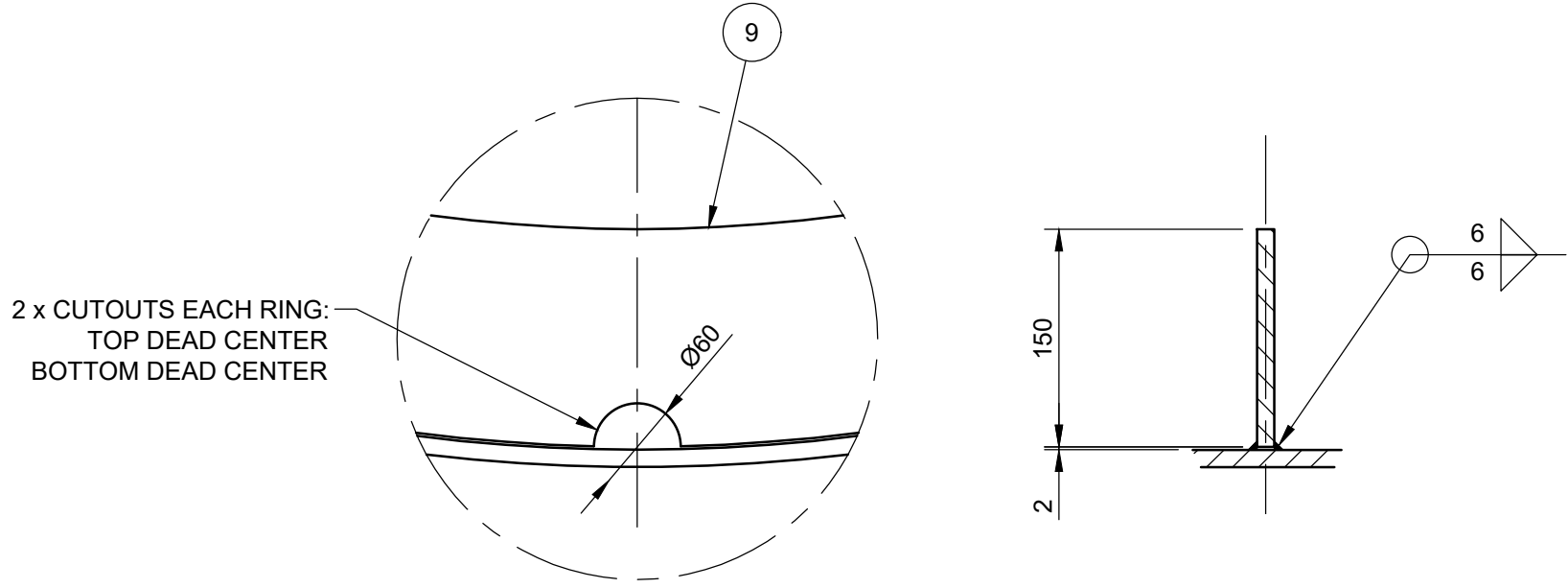
LIFTING LUG
2 REQ'D
SCALE 1:4



H.D. LUG
16 REQ'D
SCALE 1:4



H.D. ROD / ANCHOR
16 REQ'D
SCALE 1:4

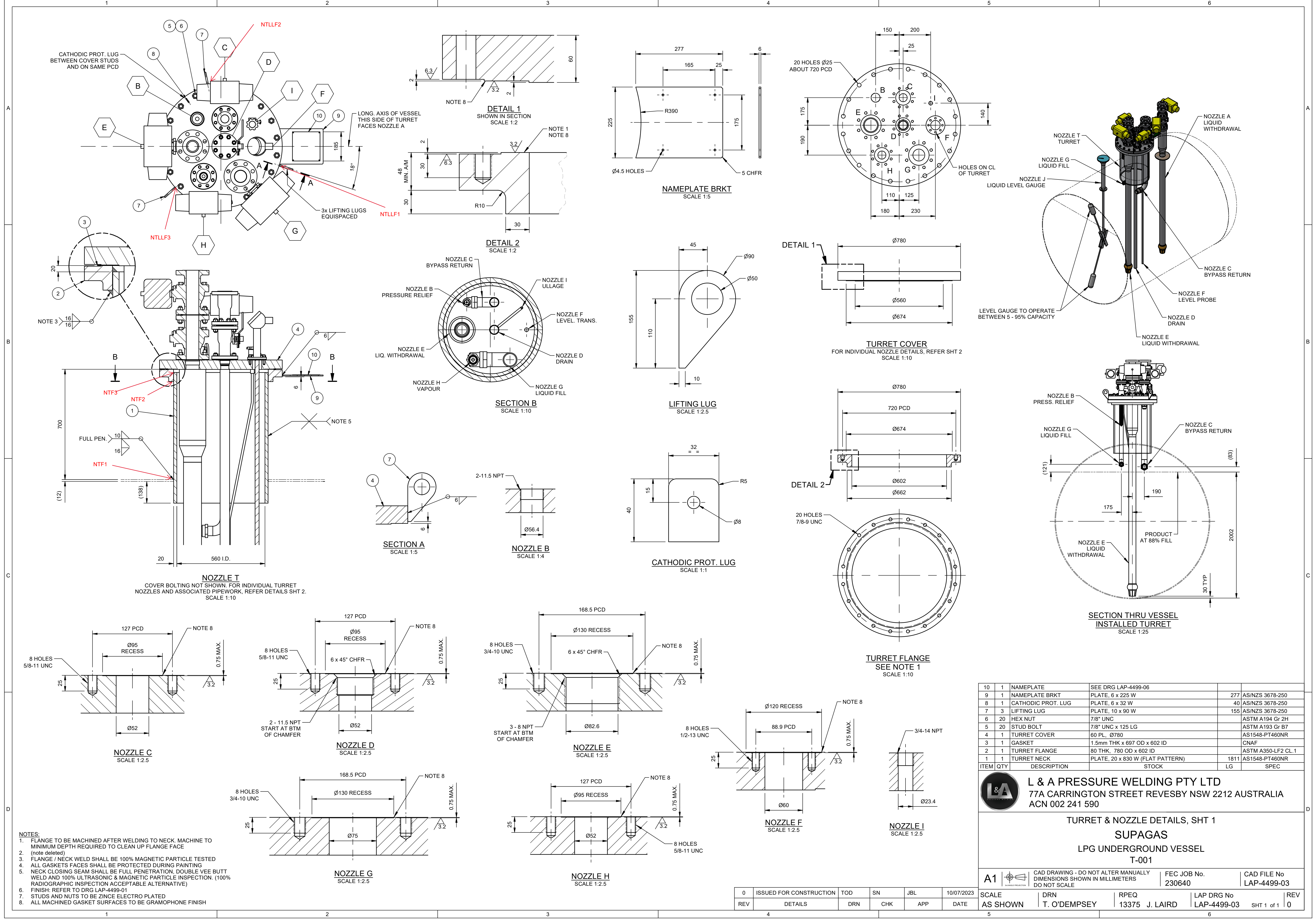


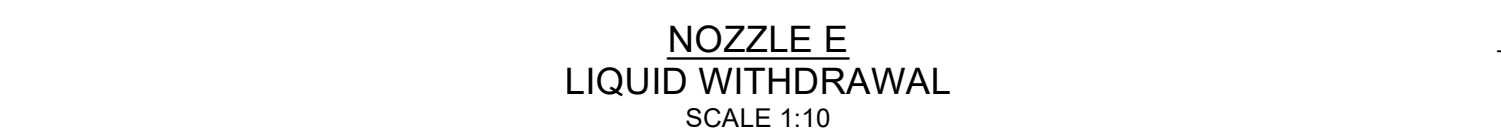
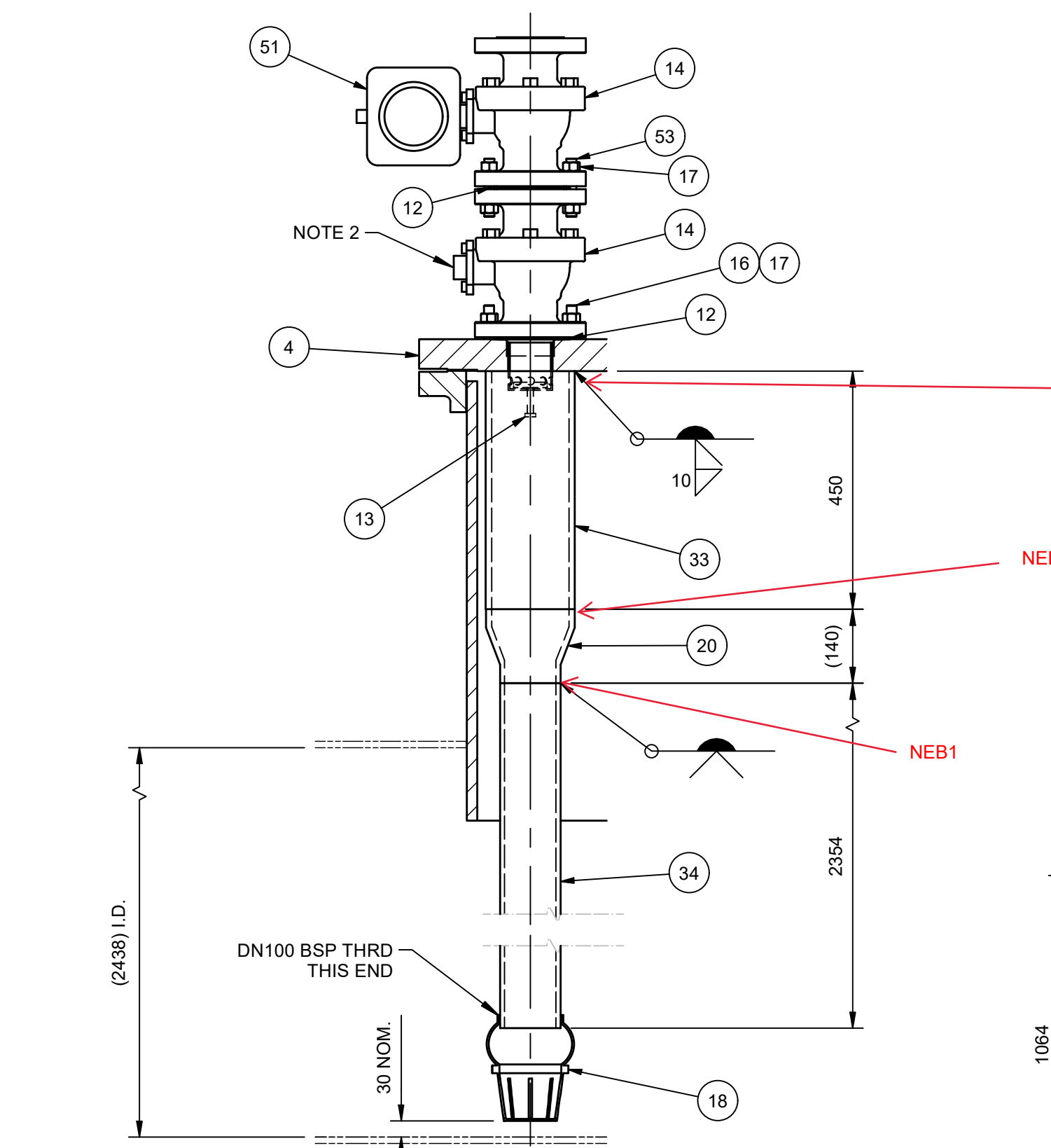
TYP STIFFENER RING
SCALE 1:5

9	STIFF. RING	4	12 PL, 2434 O.D. x 2134 I.D.	AS1548-PT460NR	
8	WASHER	32	M24 FLAT WASHER	AS1252	ZINC. PL.
7	NUT	32	M24 HEX NUT Gr 8.8	AS1252	ZINC. PL.
6	ROD	16	Ø24 RD BAR	AS3679.1-300	
5	ANCHOR PLATE	16	20 PL, 200 x 200	AS3678-250	
4	H.D. LUG	16	12 PL, 366 x 75 (FLAT PATTERN)	AS1548-PT460NR	
3	REINF. PAD	16	12 PL, 240 x 175	AS1548-PT460NR	ROLL TO VESSEL O.D.
2	LIFTING LUG	2	32 PL, 250 x 150	AS3678-250	
1	REINF. PAD	2	20 PL, 450 x 200	AS1548-PT460NR or AS3678-250	ROLL TO VESSEL O.D.
ITEM	DESCRIPTION	QTY	DIMENSIONS	MATERIAL	COMMENTS

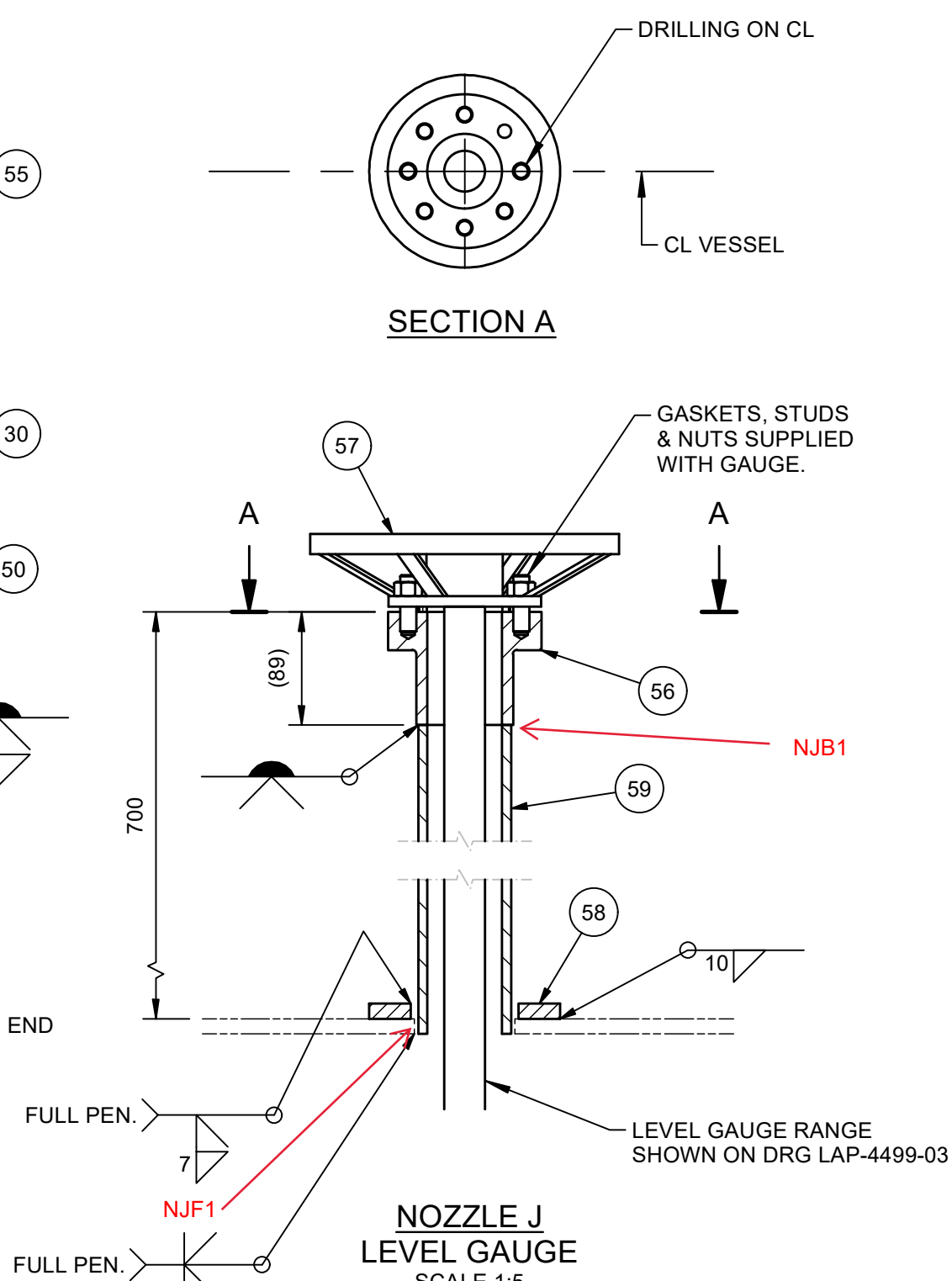
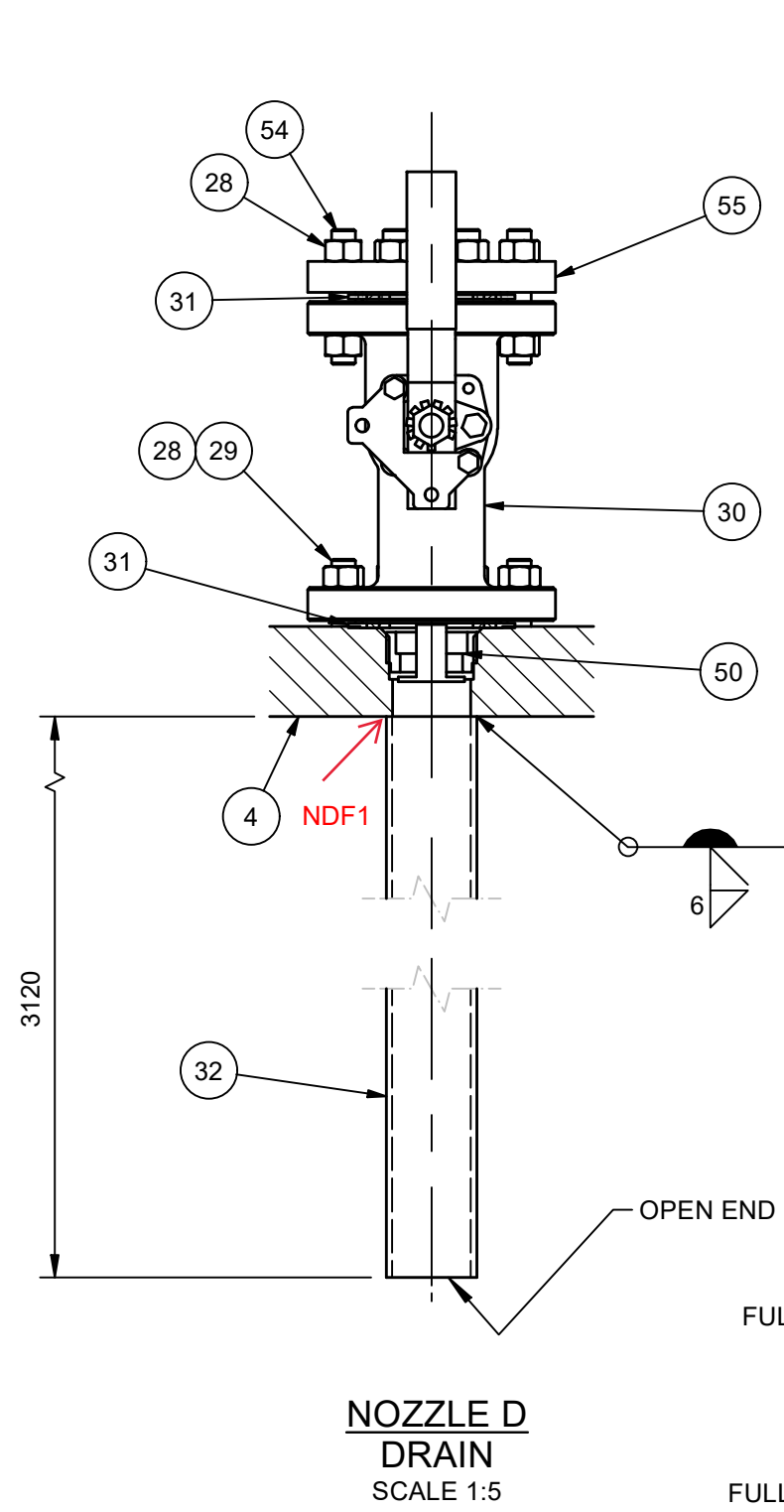
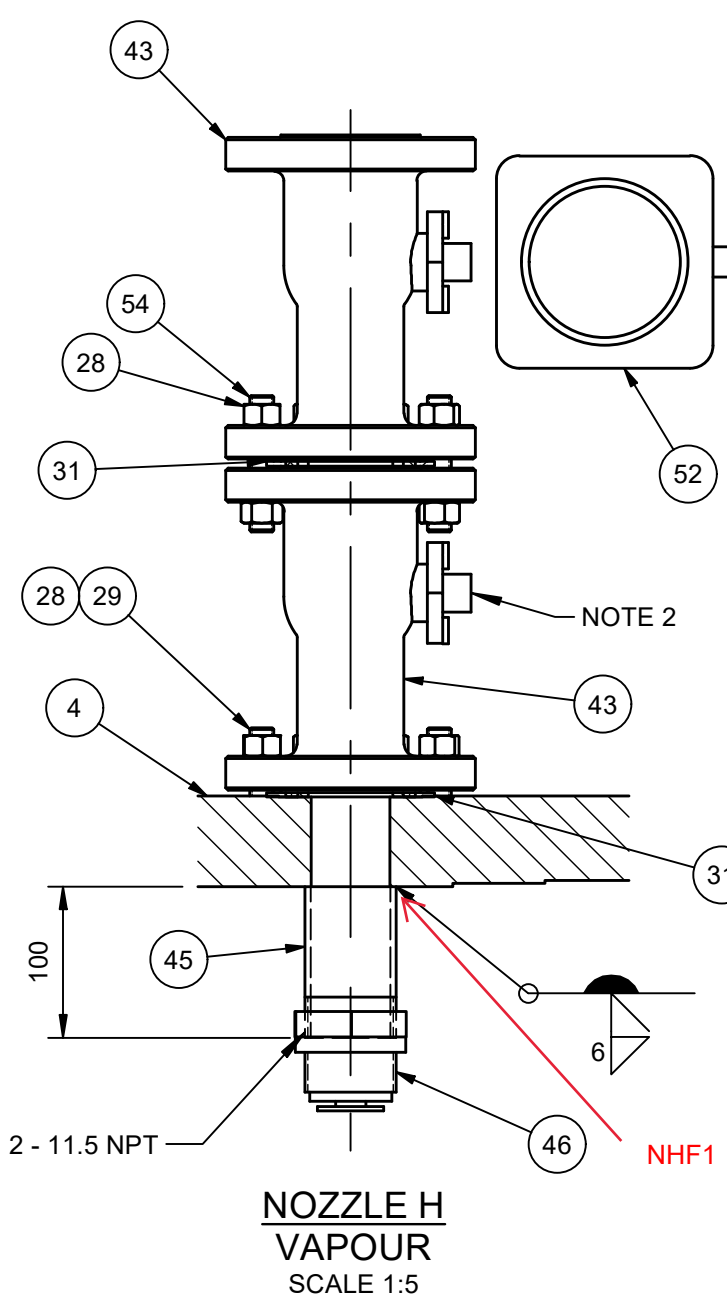
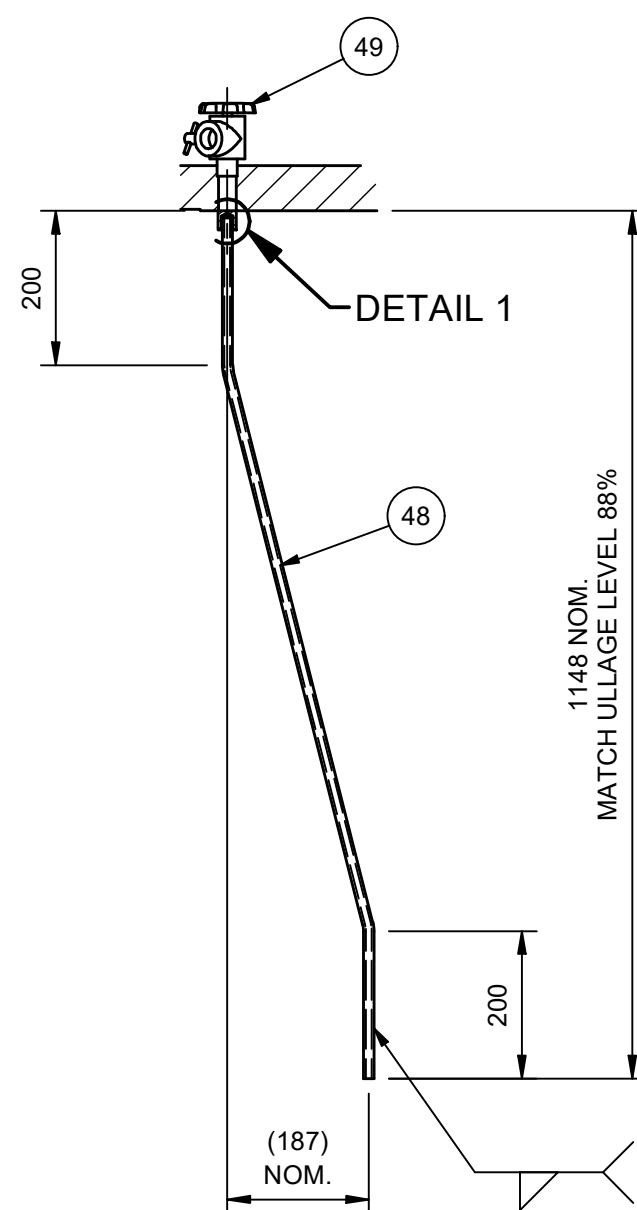
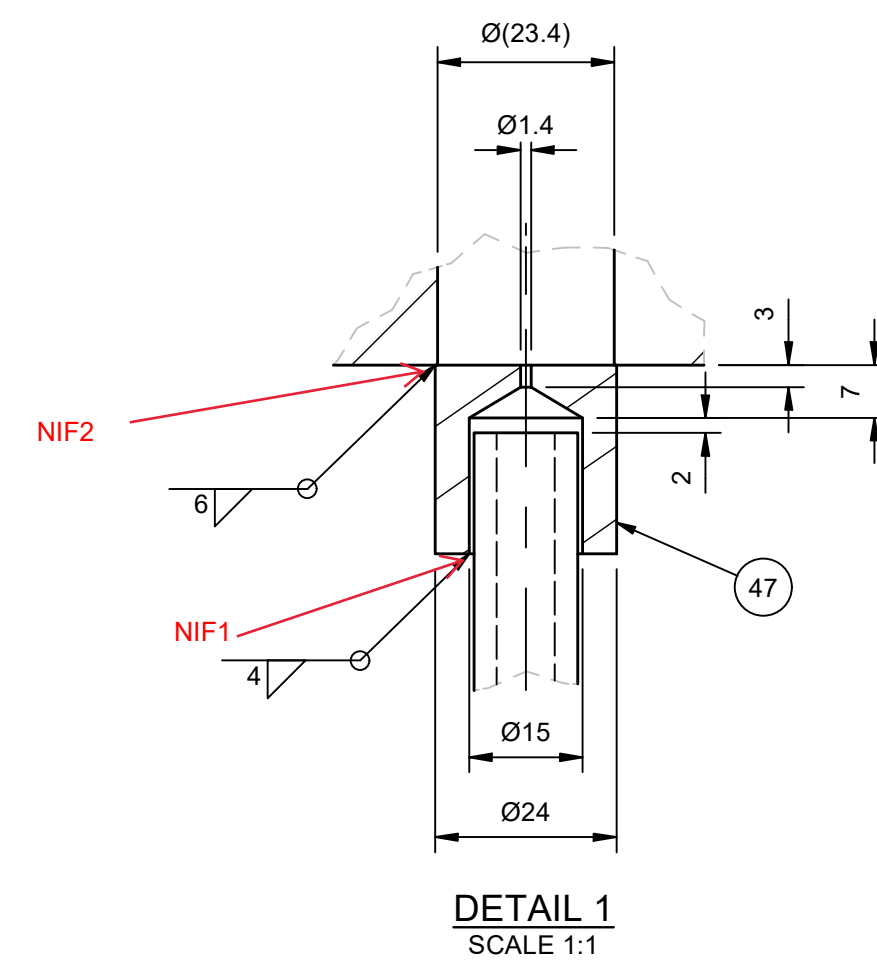
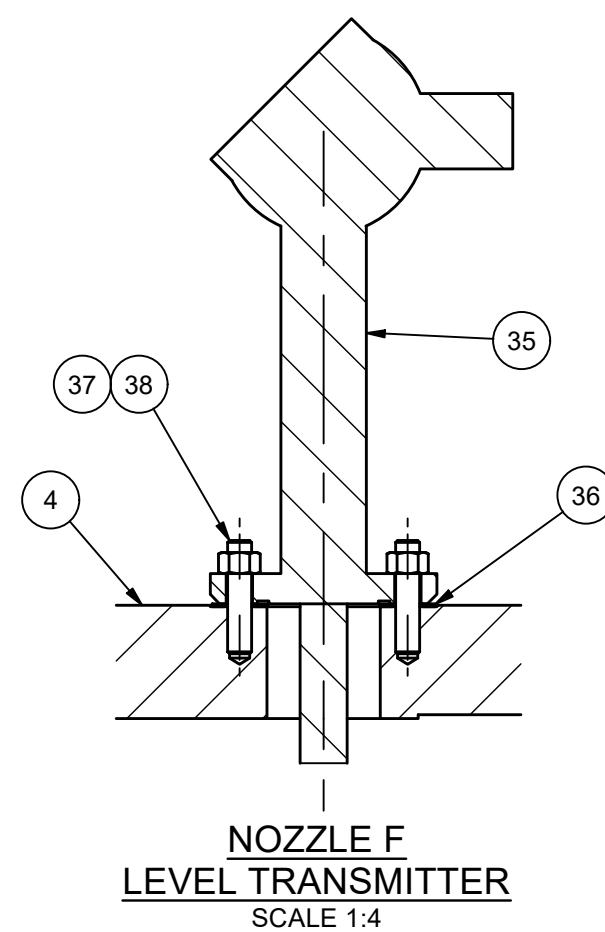
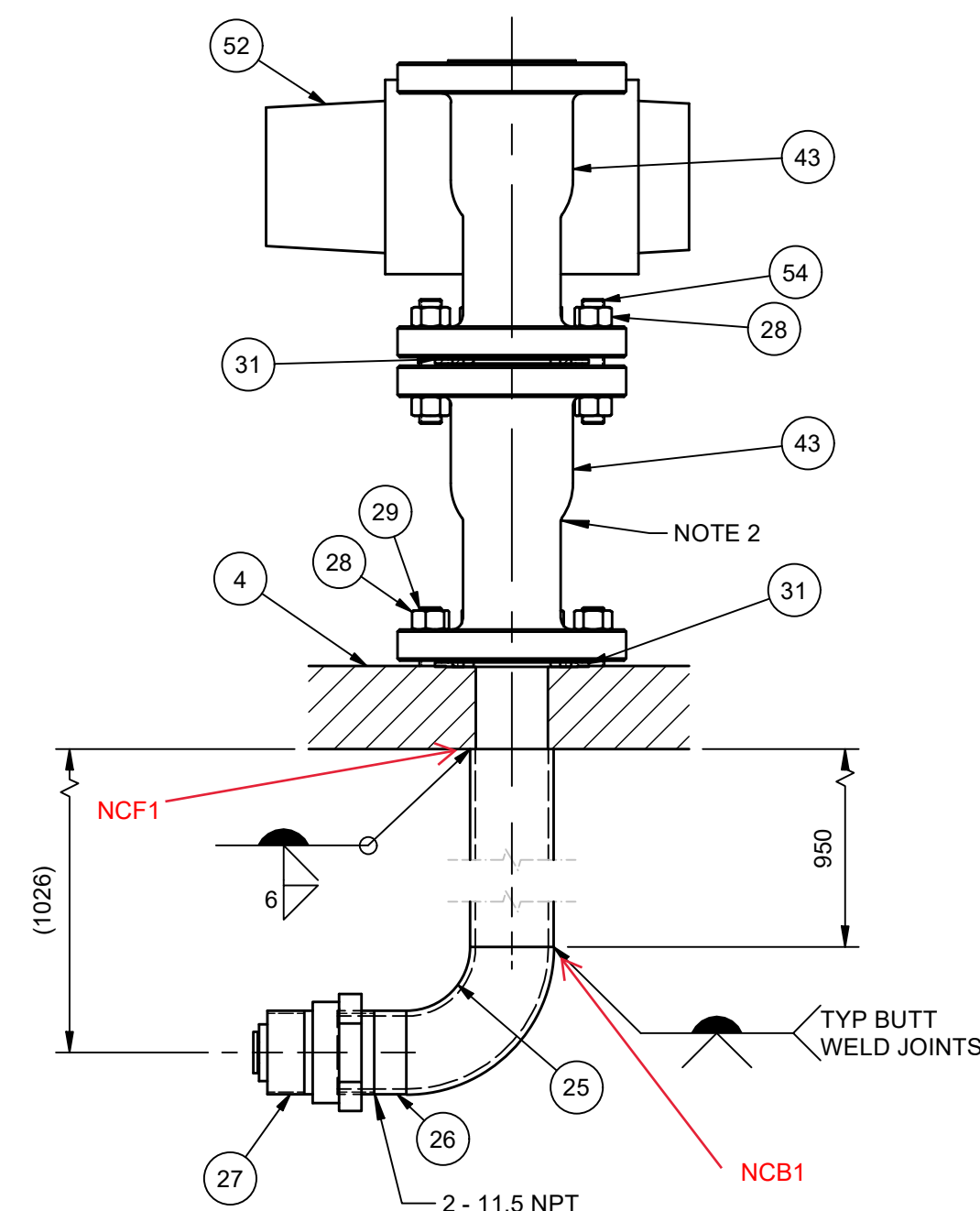
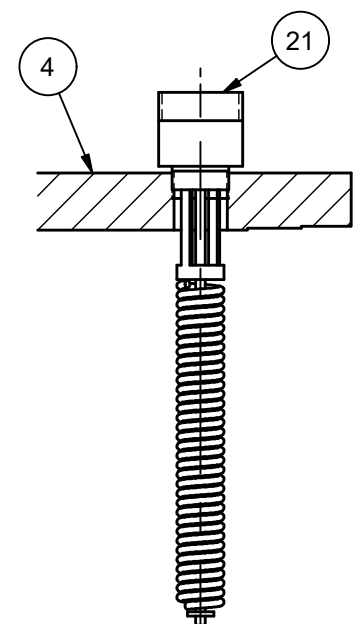
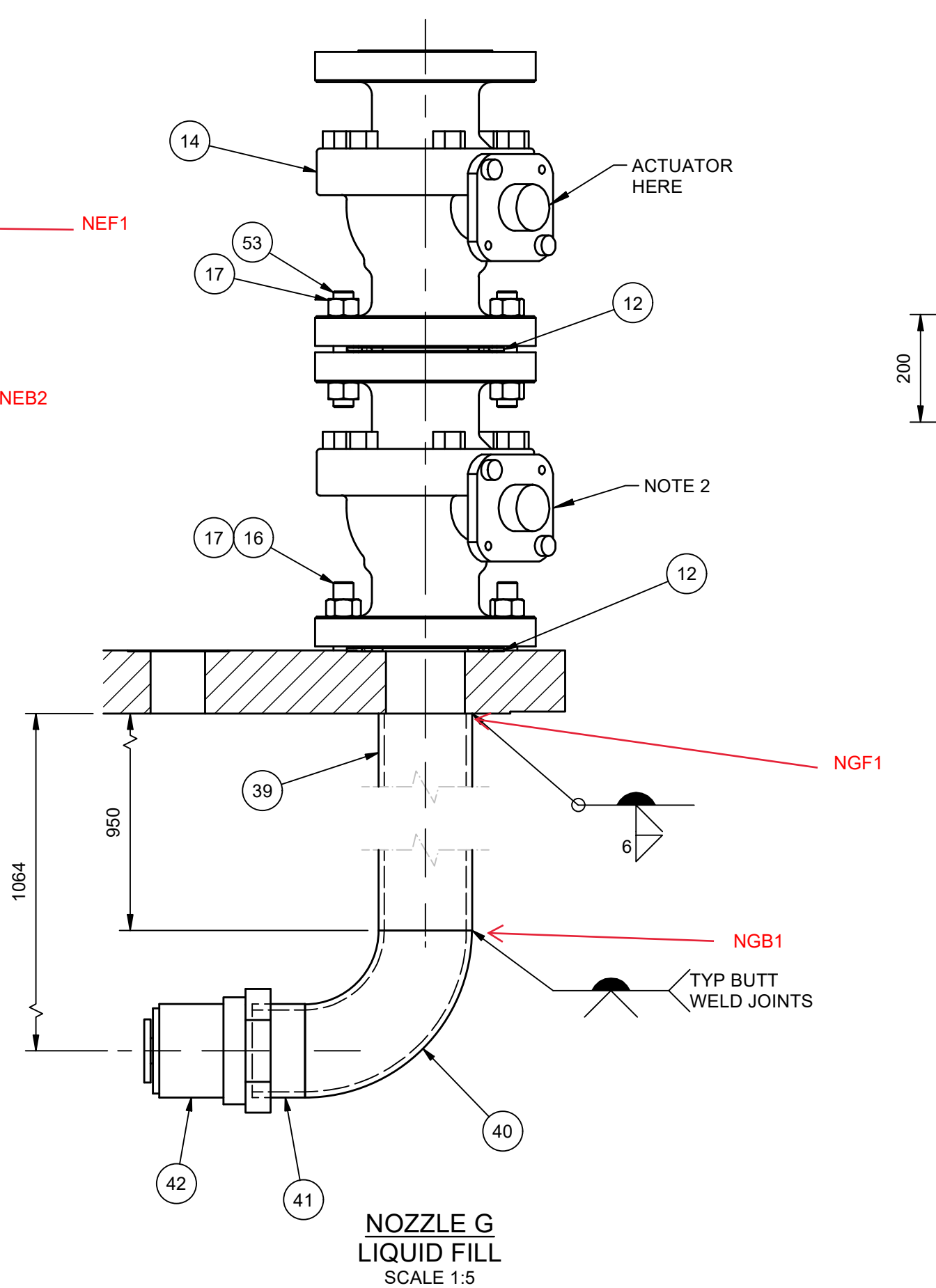
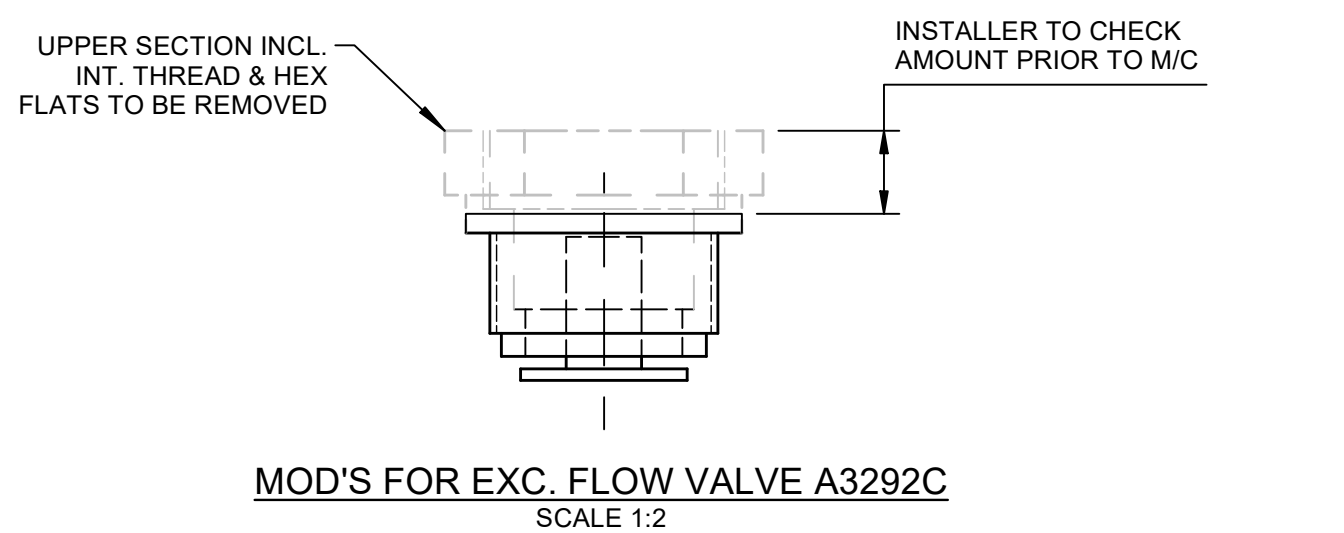
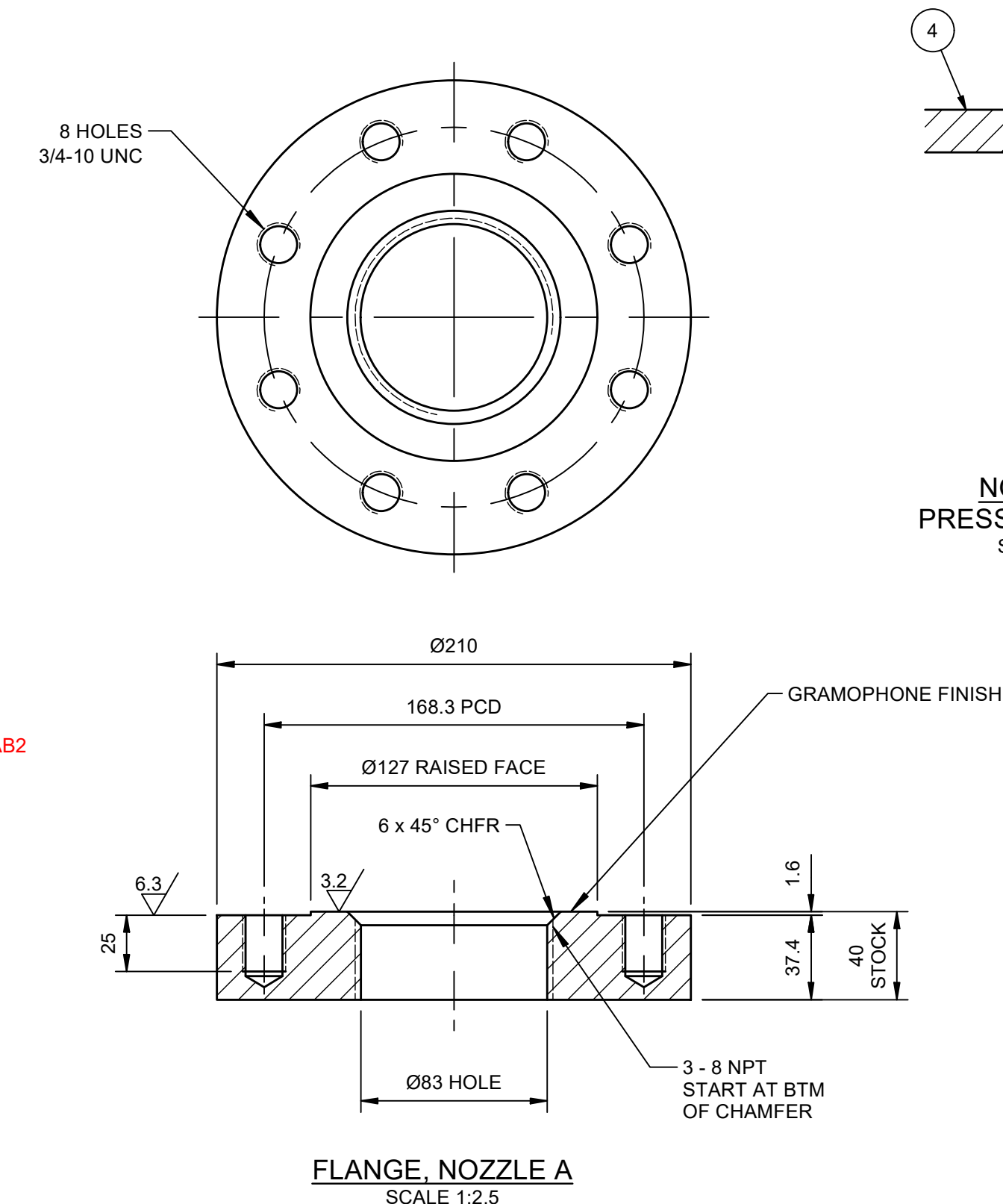
<div><div>L & A</div><div>L & A PRESSURE WELDING PTY LTD 77A CARRINGTON STREET REVESBY NSW 2212 AUSTRALIA ACN 002 241 590</div></div>					
LIFTING LUG, STIFFENER RING & H.D. DETAILS SUPAGAS LPG UNDERGROUND VESSEL T-001					
A1	CAD DRAWING - DO NOT ALTER MANUALLY DIMENSIONS SHOWN IN MILLIMETERS DO NOT SCALE	FEC JOB No. 230640	CAD FILE No: LAP-4499		
SCALE 1:40 UNO	DRN T. O'DEMPSEY	RPEQ 13375 J. LAIRD	LAP DRG No: LAP-4499-02	REV 0	

0	ISSUED FOR CONSTRUCTION	TOD	SN	JBL	10/07/2023
REV	DETAILS	DRN	CHK	APP	DATE





ES:
FOR ORIENTATION OF PIPEWORK, B.O.M. ITEMS NOT LISTED ON THIS DRG AND
TURRET COVER MACHINING DETAILS, REFER TO DRG LAP-4499-03
HANDLES FOR MANUAL VALVES AT NOZZLES C, E, G & H NOT SHOWN THIS DRG
BUT SHALL BE INSTALLED WITH HANDLES CUT SHORT



59	1	PIPE	DN65 SCH 80 SMLS, ASME B36.10M	624	ASTM A106 Gr B
58	1	REINF. PAD	PLATE, 12 x 150 O.D. x 85 I.D.		AS1548-PT460NR
57	1	LEVEL GAUGE	ROCHESTER MODEL 6360		
56	1	ADAPTER FOR LEVEL GAUGE	ROCHESTER PART #0022-00500	-	
55	1	FLANGE, BLIND	DN50 CL300 BL RF FLG, ASME B16.5		ASTM A105
54	24	STUD BOLT	5/8" UNC x 90 LG		ASTM A193 Gr B7
53	24	STUD BOLT	3/4" UNC x 110 LG		ASTM A193 Gr B7
52	2	PNEUM. ACTUATOR	TO SUIT DN50 MARS BALL VALVE		
51	3	PNEUM. ACTUATOR	TO SUIT DN80 MARS BALL VALVE		
50	1	EXCESS FLOW VALVE, MODIFIED	REGO A3292C, 2" NPT (SEE DETAIL)		BRASS
49	1	ANGLE VALVE	REGO A2805C		
48	1	ULLAGE PIPE	DN8 SCH80 SMLS PIPE ASME B16.10	1152	ASTM A106-B
47	1	ULLAGE SOCKET	Ø24 RD. BAR (SEE DETAIL)	25	AS/NZS 3679.1-300
46	1	EXCESS FLOW VALVE	REGO A3292C, 2" NPT		CADIUM / SS
45	1	PIPE	DN50 SCH 40, SMLS ASME B36.10M	100	ASTM A106 Gr B
43	4	BALL VALVE	DN50 CL300 RF FLG, 2 PC, FULL PORT		MARS SERIES 90D
42	1	CHECK VALVE	REGO A3196, 3" NPT		CADIUM / SS
41	1	PIPE	DN80 SCH 40, SMLS ASME B36.10M	50	ASTM A106 Gr B
40	1	ELBOW, LR	DN80 SCH40, 90°, ASME B16.9		ASTM A234-WPB
39	1	PIPE	DN80 SCH 40, SMLS ASME B36.10M	950	ASTM A106 Gr B
38	8	STUD BOLT	1/2" UNC x 60 LG		ASTM A193 Gr B7
37	16	HEX NUT	1/2" UNC		ASTM A194 Gr 2H
36	1	GASKET	TO SUIT BINTECH BI2000 FLANGE		
35	1	LEVEL SENSOR	BINTECH BI2000		
34	1	PIPE	DN100 SCH 80, SMLS ASME B36.10M	2354	ASTM A106 Gr B
33	1	PIPE	DN150 SCH 80, SMLS ASME B36.10M	450	ASTM A106 Gr B
32	1	PIPE	DN50 SCH 40, SMLS ASME B36.10M	3120	ASTM A106 Gr B
31	6	GASKET	DN50 SPIRAL WD, CL300, 316SS RINGS		ASME B16.20
30	1	BALL VALVE, MANUAL	DN50 CL300 RF FLG, 2 PC, FULL PORT		MARS SERIES 90D
29	24	STUD BOLT	5/8" UNC x 70 LG		ASTM A193 Gr B7
28	24	HEX NUT	5/8" UNC		ASTM A194 Gr 2H
27	1	CHECK VALVE	REGO A3186, 2" NPT		CADIUM / SS
26	1	PIPE	DN50 SCH 40, SMLS ASME B36.10M	50	ASTM A106 Gr B
25	1	ELBOW, LR	DN50 SCH40, 90°, ASME B16.9		ASTM A234-WPB
24	1	PIPE	DN50 SCH 40, SMLS ASME B36.10M	950	ASTM A106 Gr B
21	1	PSV	FISHER H284 ~ 225 psi 2" NPT		BRASS / SS
22	1	PIPE	DN150 SCH 80, SMLS ASME B36.10M	450	ASTM A106 Gr B
20	2	REDUCER, CONC	DN150 x DN100 SCH80, ASME B16.9		ASTM A234-WPB
19	1	PIPE	DN100 SCH 80, SMLS ASME B36.10M	2316	ASTM A106 Gr B
18	2	FOOT VALVE	DN100 BAKER'S VBF 94, BSP THRD		BRASS
17	72	HEX NUT	3/4" UNC		ASTM A194 Gr 2H
16	24	STUD BOLT	3/4" UNC x 90 LG		ASTM A193 Gr B7
15	1	REINF. PAD	PLATE, 12 x 300 O.D. x 117 I.D.		AS1548-PT460NR
14	6	BALL VALVE	DN80 CL300 RF FLG, 2 PC, FULL PORT		MARS SERIES 90D
13	2	EXCESS FLOW VALVE	REGO A3500V6		CADIUM / SS
12	6	GASKET	DN80 SPIRAL WD, CL300, 316SS RINGS		ASME B16.20
11	1	FLANGE, NOZZLE A	40 PL. Ø210		AS1548-PT460NR
ITEM	QTY	DESCRIPTION	STOCK	LG	SPEC

 L & A PRESSURE WELDING PTY LTD
77A CARRINGTON STREET REVESBY NSW 2212 AUSTRALIA
ACN 002 241 590

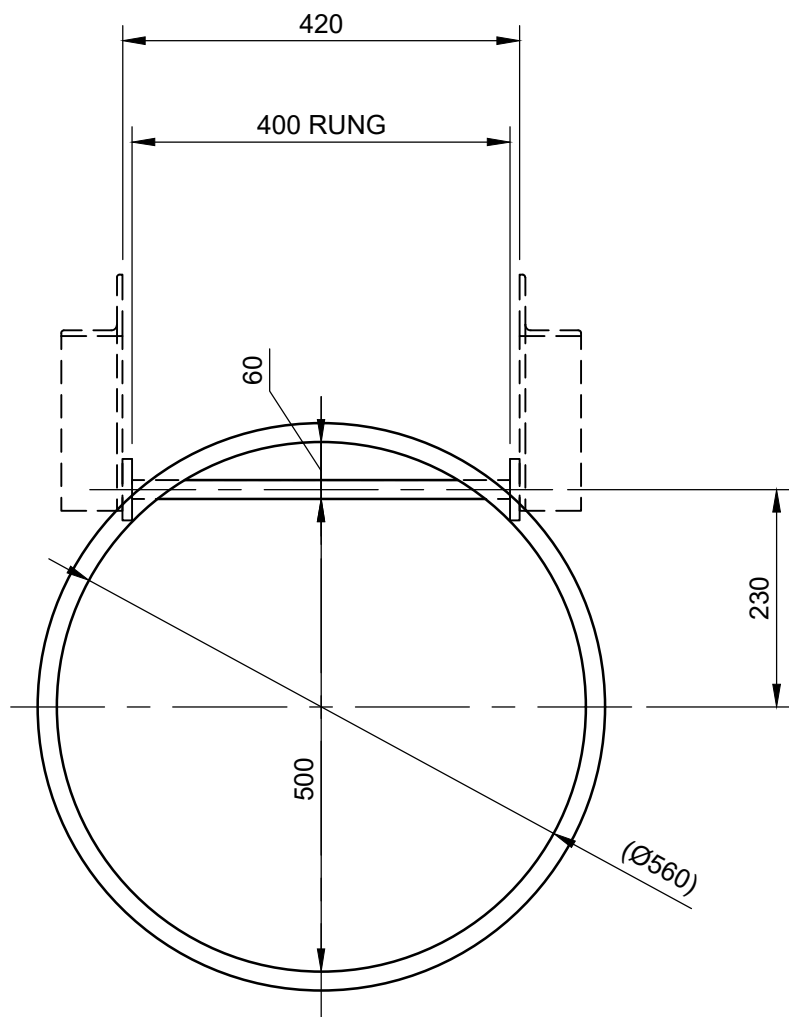
TURRET & NOZZLE DETAILS, SHT 2
SUPAGAS
LPG UNDERGROUND VESSEL
T-001

A1	 <small>FIRST ANGLE PROJECTION</small>	CAD DRAWING - DO NOT ALTER MANUALLY DIMENSIONS SHOWN IN MILLIMETERS DO NOT SCALE	FEC JOB No. 230640	CAD FILE No LAP-4499-04
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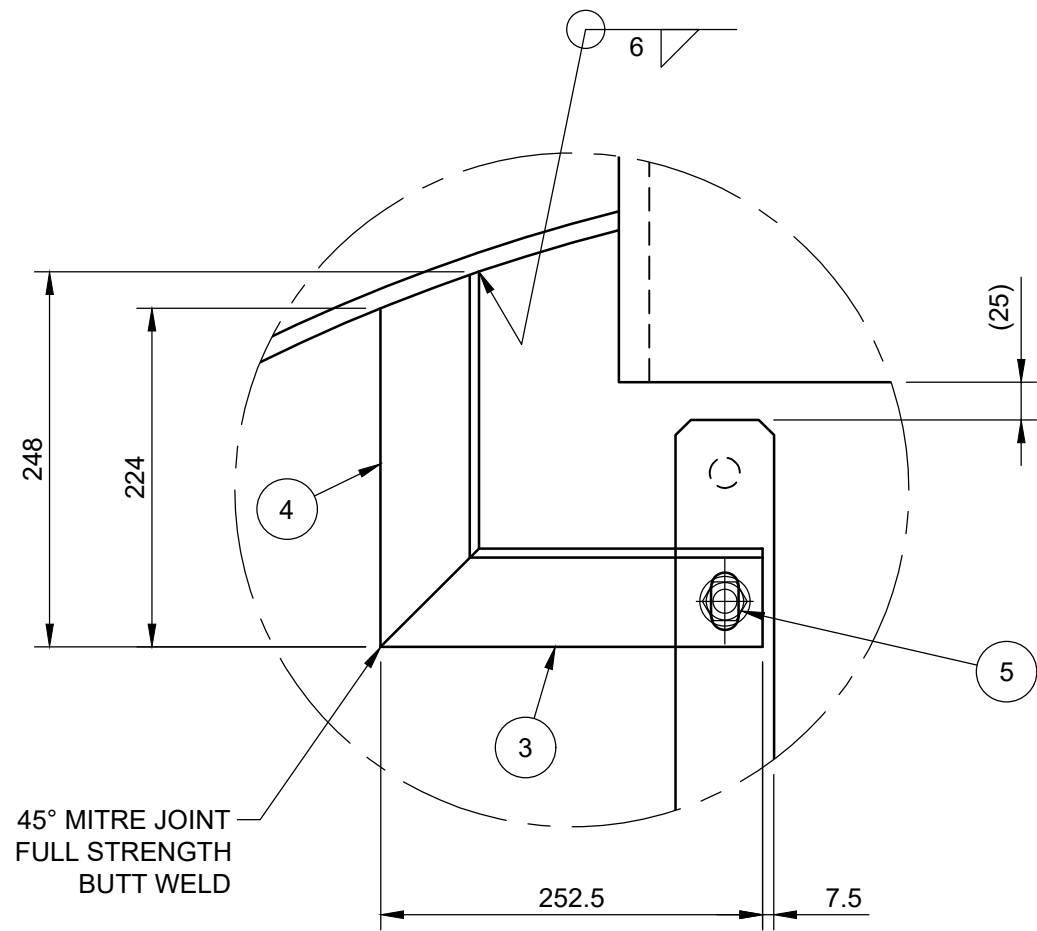
0	ISSUED FOR CONSTRUCTION	TOD	SN	JBL	10/07/2023
REV	DETAILS	DRN	CHK	APP	DATE

3	SCALE	DRN	RPEQ	LAP DRG No	REV
	AS SHOWN	T. O'DEMPSEY	13375 J. LAIRD	LAP-4499-04 SHT 1 of 1	0

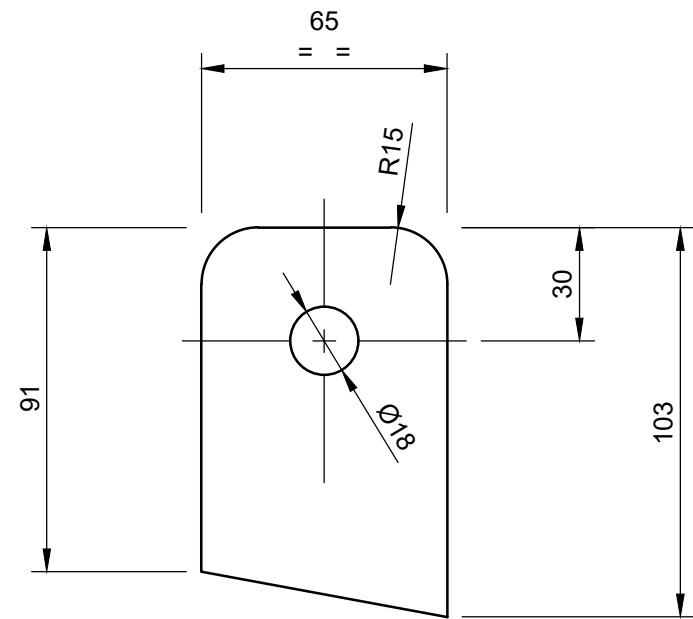
- NOTES:
- ALL WELDING TO AS1554.1 SP
 - REMOVE ALL SHARP EDGES AND WELD SPLATTER



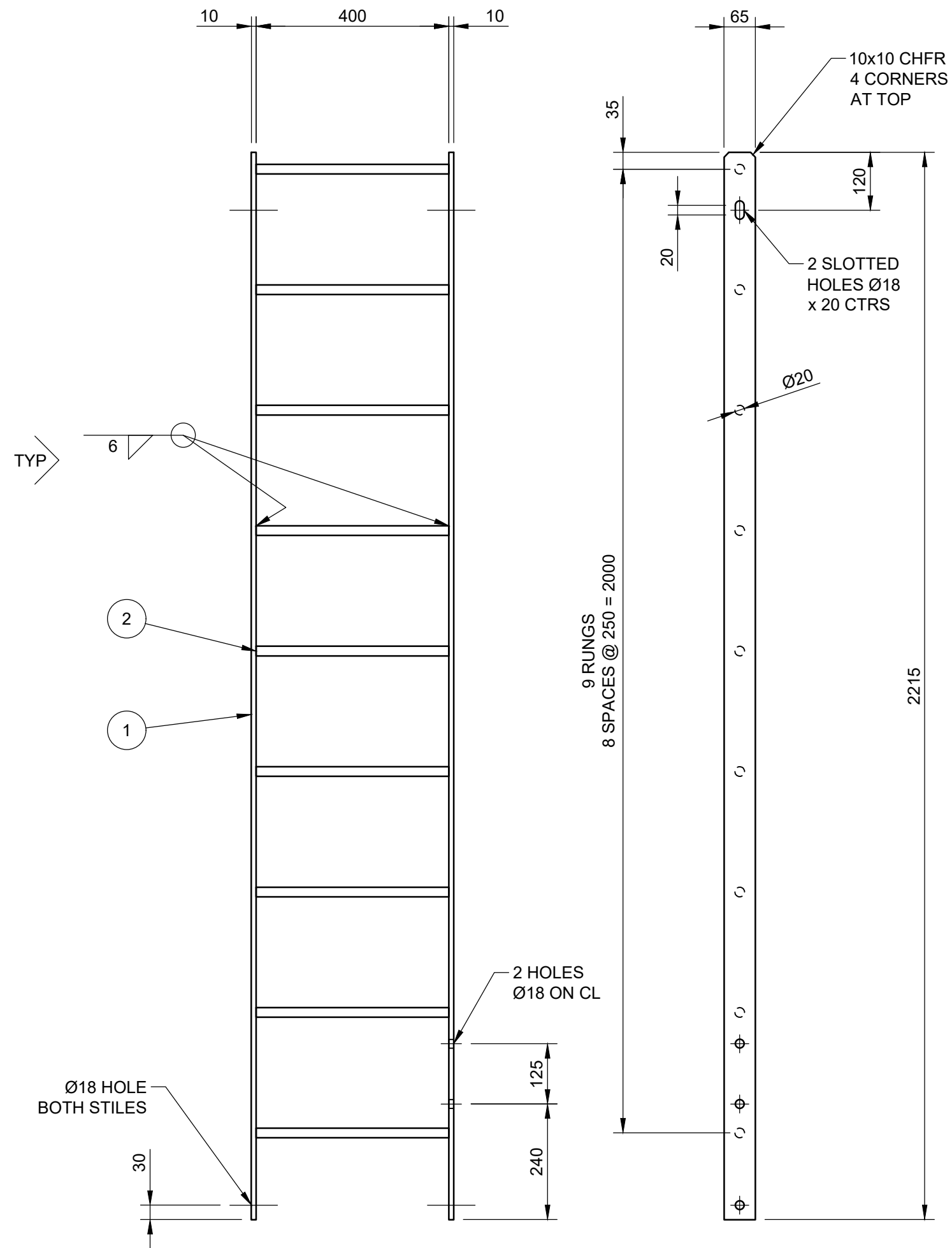
SECTION A
SCALE 1:8



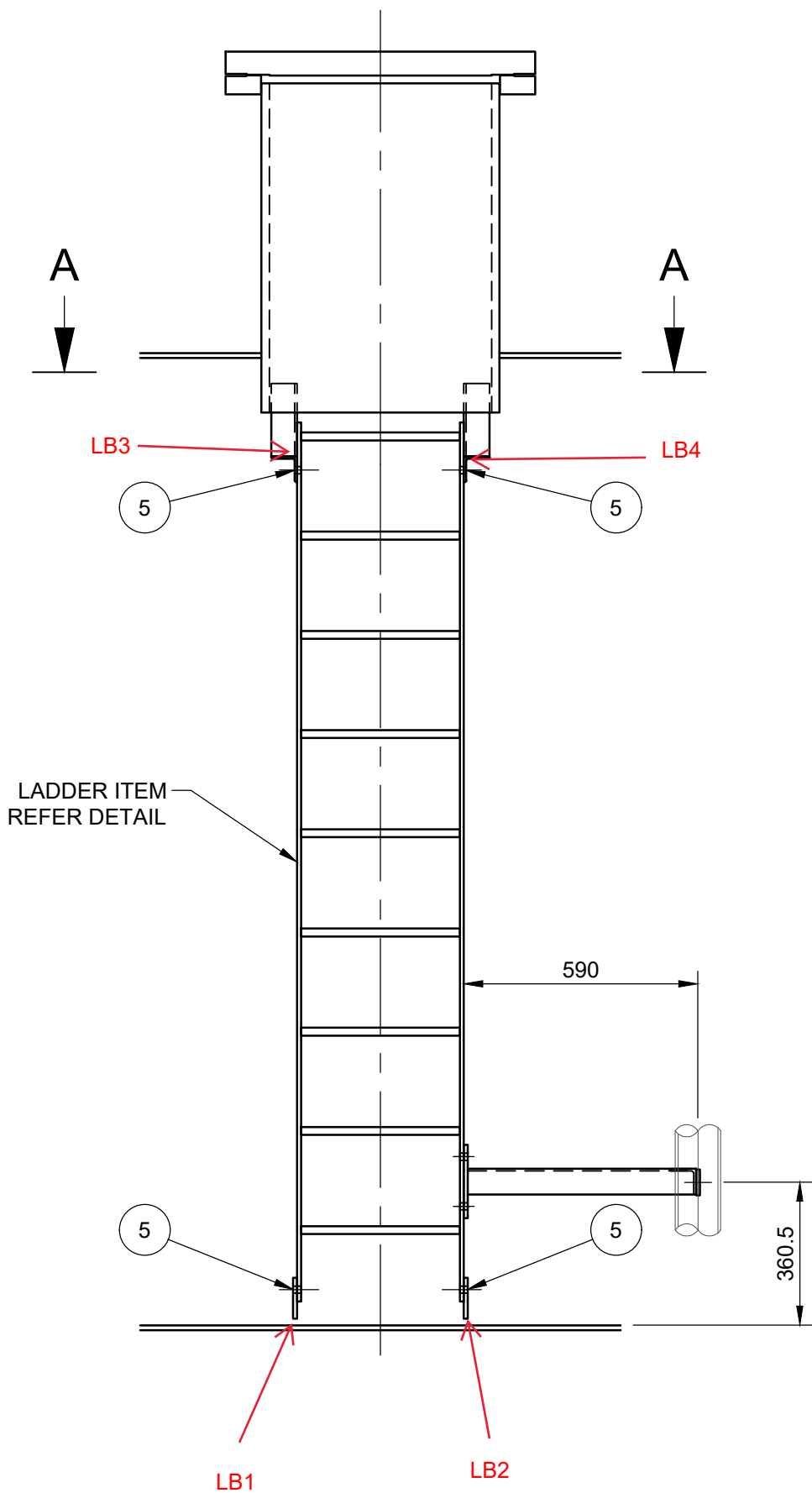
DETAIL 1
SCALE 1:5



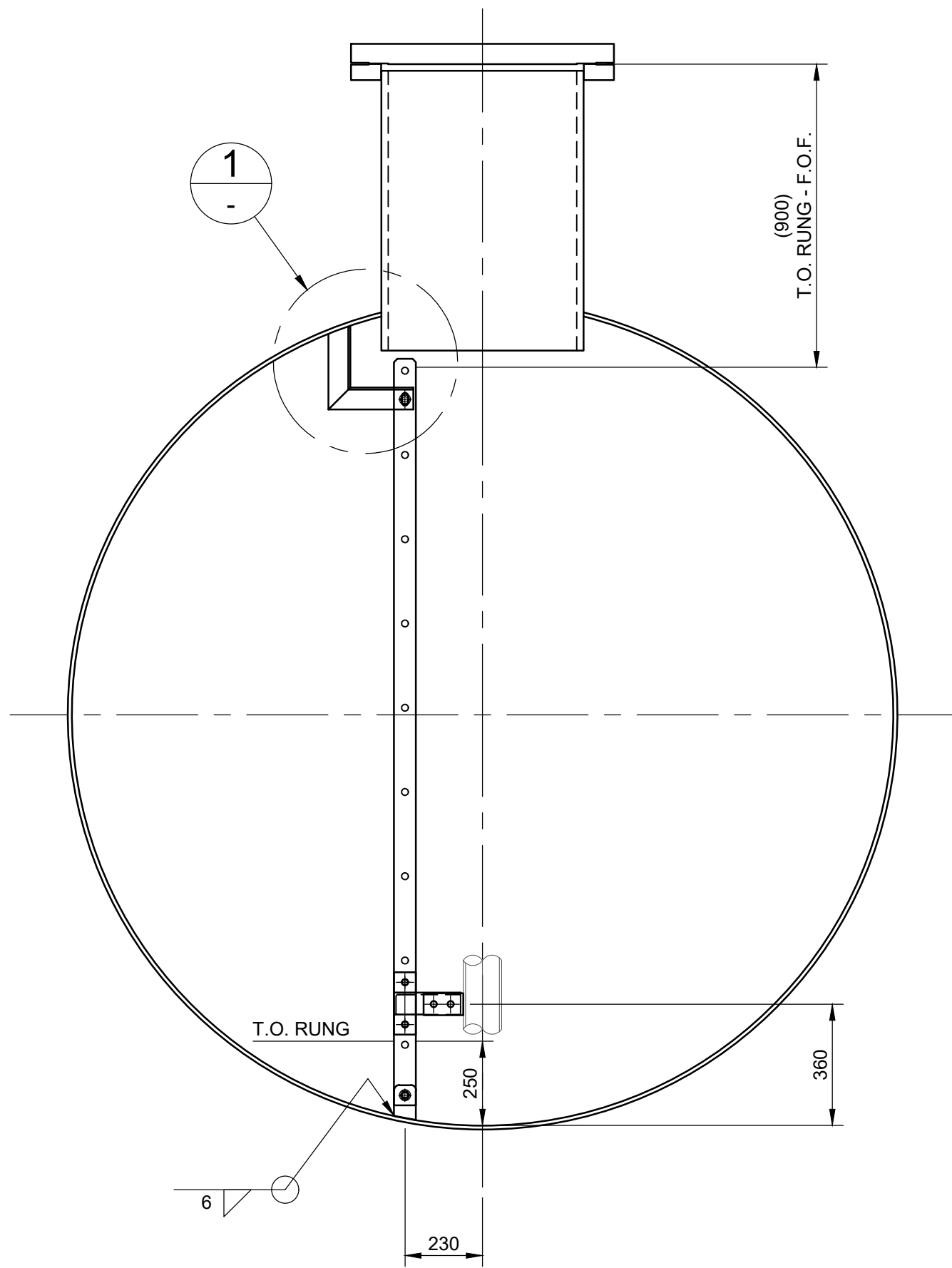
CLEAT
SCALE 1:2



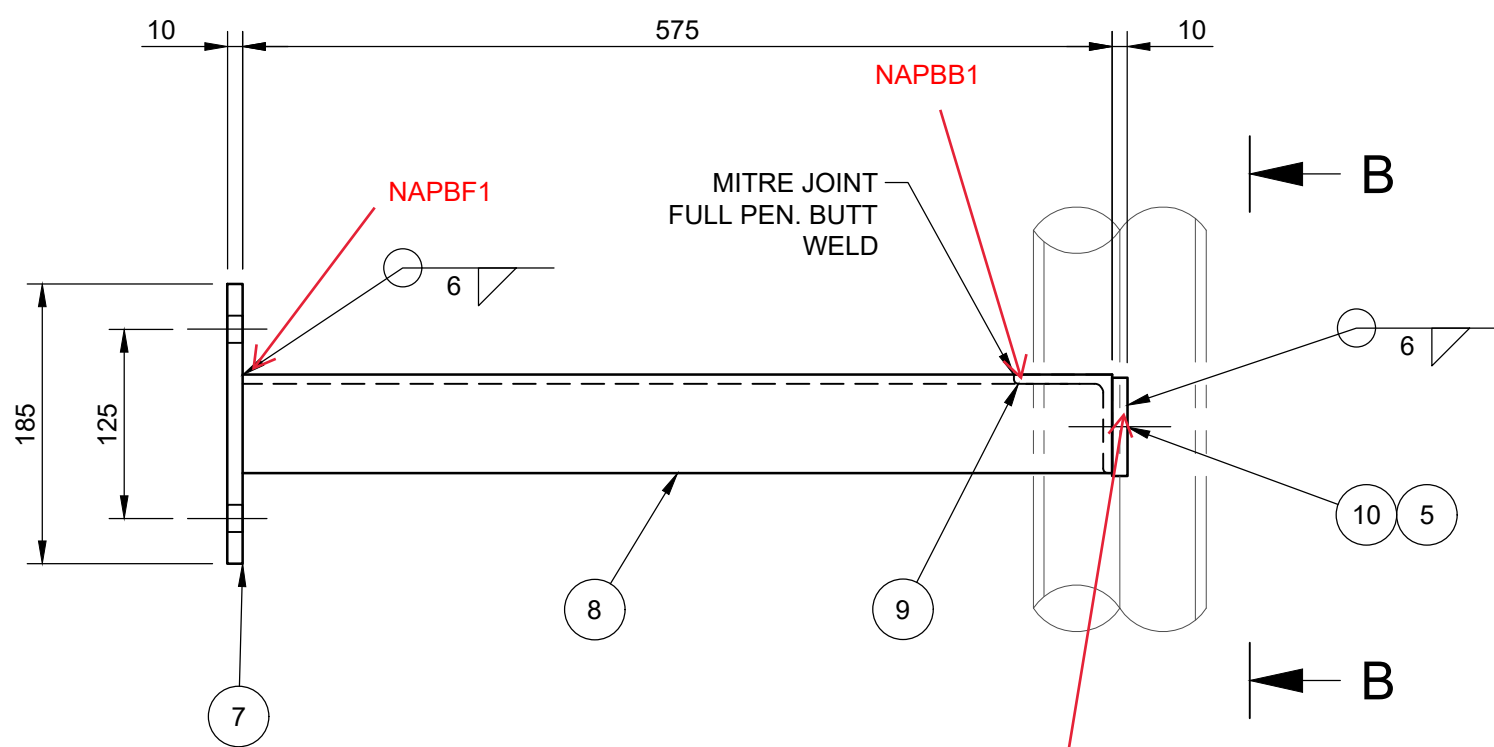
LADDER
SCALE 1:10



LADDER ASSEMBLY
SCALE 1:16



NOZZLE A PIPE BRACE
SCALE 1:5



VIEW B
SCALE 1:5

10	CLEAT	1	65 x 10 FL, 118 LG	AS3679.1-300	
9	BRACE	1	65 x 6 EA, 198 LG	AS3679.1-300	
8	BRACE	1	65 x 6 EA, 575 LG	AS3679.1-300	
7	BOLT PL.	1	65 x 10 FL, 185 LG	AS3679.1-300	
6	CLEAT	2	65 x 10 FL, 103 LG	AS3679.1-300	
5	BOLT / NUT	8	M16 x 45 LG Gr 4.6 BOLT C/W WASHER & NUT	AS1111 / AS1112	
4	BRACKET	2	65 x 6 EA, 248 LG	AS3679.1-300	
3	BRACKET	2	65 x 6 EA, 250 LG	AS3679.1-300	
2	RUNG	9	Ø20 RD BAR, 400 LG	AS3679.1-300	
1	STILE	2	65 x 10 FL BAR, 2258 LG	AS3679.1-300	
ITEM	DESCRIPTION	QTY	DIMENSIONS	MATERIAL	COMMENTS



L & A PRESSURE WELDING PTY LTD
77A CARRINGTON STREET REVESBY NSW 2212 AUSTRALIA
ACN 002 241 590

LADDER DETAILS
SUPAGAS
LPG UNDERGROUND VESSEL
T-001

A1

CAD DRAWING - DO NOT ALTER MANUALLY
DIMENSIONS SHOWN IN MILLIMETERS
DO NOT SCALE

FEC JOB No.
230640

CAD FILE No:
LAP-4499

SCALE 1:40 UNO	DRN T. O'DEMPSEY	RPEQ 13375 J. LAIRD	LAP DRG No: LAP-4499-05	REV 0
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0	ISSUED FOR CONSTRUCTION	TOD	SN	JBL	10/07/2023
REV	DETAILS	DRN	CHK	APP	DATE

1. ALL LETTERING SHALL BE PERMANENT E.G. ENGRAVED & BLACK-INKED OR EMBOSSED (OR EQUIVALENT), MINIMUM 3mm HIGH
2. FOR NAMEPLATE MOUNTING BRACKET REFER TO DRG LAP-4499-03

175

165

Ø4.5


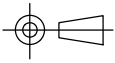
L & A Pressure Welding

EQUIPMENT #	<input type="text" value="T-001"/>
DESCRIPTION	<input type="text" value="LPG U/GROUND VESSEL"/>
DESIGNED TO	<input type="text" value="AS1210-2010 CLASS 1H"/>
DESIGN PRESSURE	<input type="text" value="1550 kPa.g"/>
DESIGN TEMPERATURE	<input type="text" value="0°C to 50°C"/>
CONTENTS	<input type="text" value="L.P.G."/>
CORROSION ALLOW.	<input type="text" value="1.5 mm EXTERNAL"/>
VOLUME - GROSS	<input type="text" value="105 800 L"/>
VOLUME - PRODUCT 88%	<input type="text" value="93 104 L"/>
AS4343 HAZARD LEVEL	<input type="text" value="B"/>
HYDRO. TEST PRESSURE	<input type="text" value="2220 kPa.g"/>
HYDRO. TEST DATE	<input type="text"/>
MANUFAC. SERIAL No.	<input type="text"/>
FINAL INSPECTION BY	<input type="text"/>
FINAL INSPECTION DATE	<input type="text"/>
DESIGN REGIST. No.	<input type="text"/>

175

185

**NO WELDING OR HEATING OF THIS VESSEL
WITHOUT APPROVAL FROM AUTHORITIES.**

1	NAMEPLATE	1	1.6mm SHT, 175 x 185	ASTM A240-316	
ITEM	DESCRIPTION	QTY	DIMENSIONS	MATERIAL	COMMENTS
 L & A PRESSURE WELDING PTY LTD 77A CARRINGTON STREET REVESBY NSW 2212 AUSTRALIA ACN 002 241 590					
NAMEPLATE DETAILS SUPAGAS LPG UNDERGROUND VESSEL T-001					
A1	 CAD DRAWING - DO NOT ALTER MANUALLY DIMENSIONS SHOWN IN MILLIMETERS DO NOT SCALE	FEC JOB No. 230640		CAD FILE No: LAP-4499	
SCALE 1:40 UNO	DRN T. O'DEMPSEY	RPEQ 13375 J. LAIRD	LAP DRG No: LAP-4499-06	REV 0	