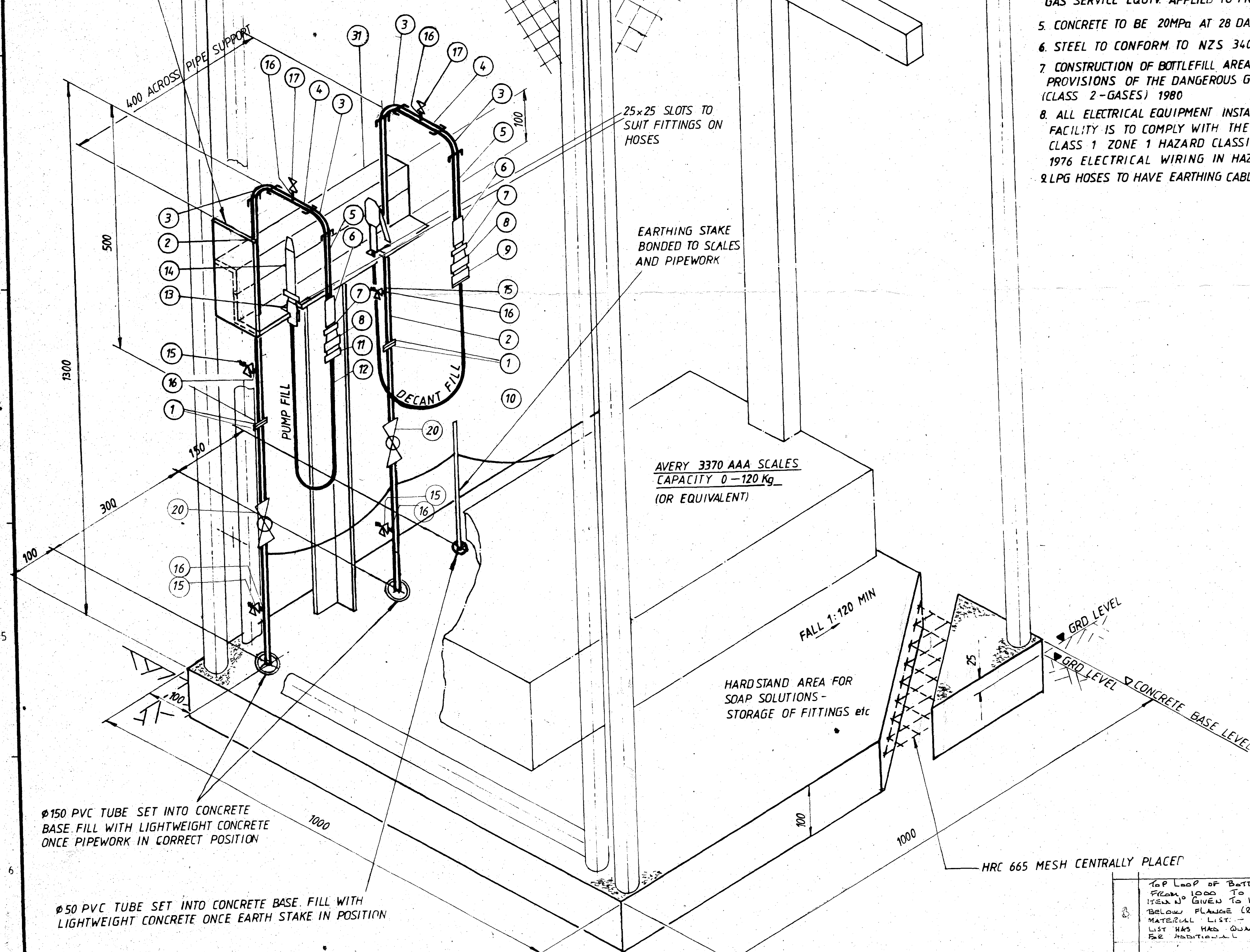


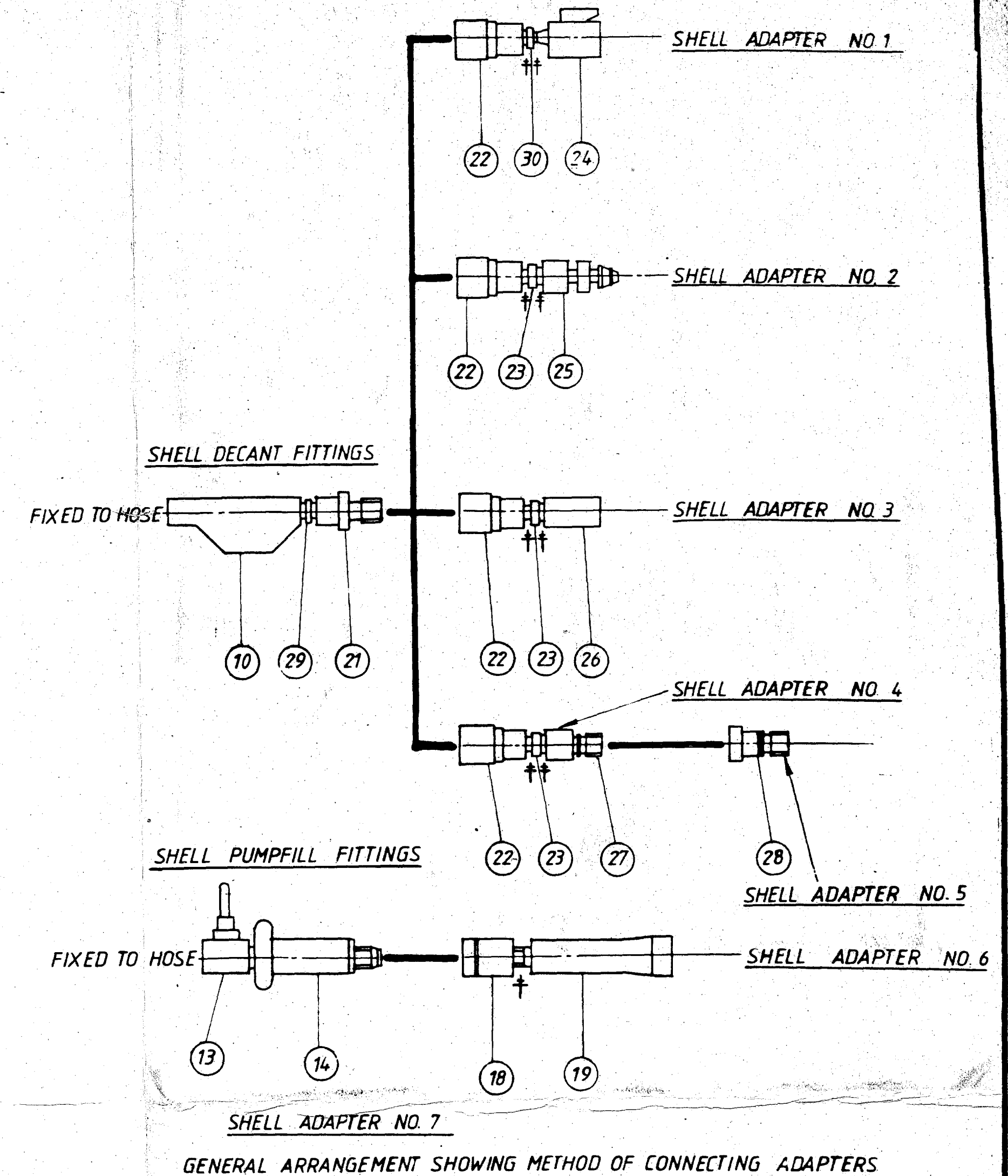
BOTTLEFILL COMPOUND TO BE CONSTRUCTED OF  
 Ø50 OD GALV. PIPE - 40 NB AND CYCLONE GALV.  
 CHAIN MESH SIMILAR TO TANK COMPOUND  
 DRAWING NO 900 P 196 AND SPECIFICATION  
 241B AND SITE LAYOUT DRAWING

MOUNTING PLATE FOR ON/OFF  
 SWITCH SEE PLATE DETAIL  
 DRG 900 P 267



#### NOTES

1. ALL ADAPTERS (INCLUDING HOSES) WILL BE SUPPLIED READY MADE
2. ADAPTER CONTRACTOR SHALL FIT ALL HOSE EARTHING WIRES
3. PARTS MARKED \* ARE ADAPTER CONTRACTOR SUPPLY AND CONTRACTOR SHALL CHECK ALL THREAD SIZES
4. POL FITTINGS SHALL BE PERMANENTLY FIXED INTO FEMALE PART (e.g. BY SILVER SOLDERING) ALL OTHER ADAPTER THREADS SHALL BE SEALED AND 'LOKTITE' OR GAS SERVICE EQUIV. APPLIED TO PREVENT TAMPERING
5. CONCRETE TO BE 20MPa AT 28 DAYS TO NZS 2806
6. STEEL TO CONFORM TO NZS 3402 P GRADE 275
7. CONSTRUCTION OF BOTTLEFILL AREA IS TO SATISFY THE PROVISIONS OF THE DANGEROUS GOODS REGULATIONS (CLASS 2 - GASES) 1980
8. ALL ELECTRICAL EQUIPMENT INSTALLED IN THE BOTTLEFILL FACILITY IS TO COMPLY WITH THE REQUIREMENTS OF CLASS 1 ZONE 1 HAZARD CLASSIFICATION OF MP 6105 1976 ELECTRICAL WIRING IN HAZARDOUS LOCATIONS
9. LPG HOSES TO HAVE EARTHING CABLES INCLUDED



ITEM	DESCRIPTION	PART NO.	QUANTITY
31	PIPE SUPPORT (50x50x5 ANGLE)		1
30	Ø8xØ6 HEX REDUCING NIPPLE (1/4" x 1/8")		1
29	Ø8 HEX NIPPLE (1/4")		1
28	PRIMUS/CADAC ADAPTER	RINNAI 430014	1
27	PRIMUS ADAPTER	REGO 7659N	1
26	OLD STYLE ADAPTER	RINNAI PA1	1
25	COMPANION ADAPTER	REGO 7659C	1
24	KOSAN ADAPTER	RINNAI 430005	1
23	POL ADAPTER	REGO 2906A	3
22	CONNECTOR	REGO 7141F	4
21	CONNECTOR	REGO 7141M	1
20	Ø25 SOCKET WELD BALL VALVE (MOT approved)		2
19	HIGH CAPACITY CONNECTOR	REGO 7193L-10	1
18	ADAPTER	REGO 5760 A	1
17	Ø8 BLEED VALVE AND CAP	REGO 1224W	2
16	Ø8 SOCKET NPT (30001b)		6
15	Ø8 HYDROSTATIC RELIEF VALVE NPT	REGO 3127T	4
14	HIGH CAPACITY CONNECTOR	REGO 7193D-10	1
13	SHUTOFF VALVE	REGO 7553TB	1
12	LPG HOSE APPROX 750 LG (Ø15 NPT MALE BOTH ENDS)		1
11	Ø20xØ15 SCREWED REDUCING BUSH NPT		1
10	FILLER GUN DECANTING KIT	REGO 7659	1
9	Ø20 ADAPTER	REGO 5761D	1
8	Ø20 EXCESS FLOW VALVE NPT	REGO 3272G	2
7	Ø25xØ20 SCREWED REDUCING BUSH NPT		2
6	Ø25 NPT SOCKET (30001b)		2
5	Ø25x150 LG STUB END API 5L GRADE B SCHED 80 NPT (SEAMLESS)		2
4	Ø25x150 LG STUB END API 5L GRADE B SCHED 80 (SEAMLESS)		2
3	Ø25 SOCKET WELD ELBOW 90°		4
2	Ø25x LONG API 5L GRADE B SCHED 40 PIPE (SEAMLESS)		2
1	Ø25 ASA 300 SLIP ON FLANGE		4

#### Shell Companies in New Zealand

96 The Terrace Wellington

LPG STANDARD  
 BOTTLEFILL COMPOUND FOUNDATION AND PIPEWORK  
 (SMALL)



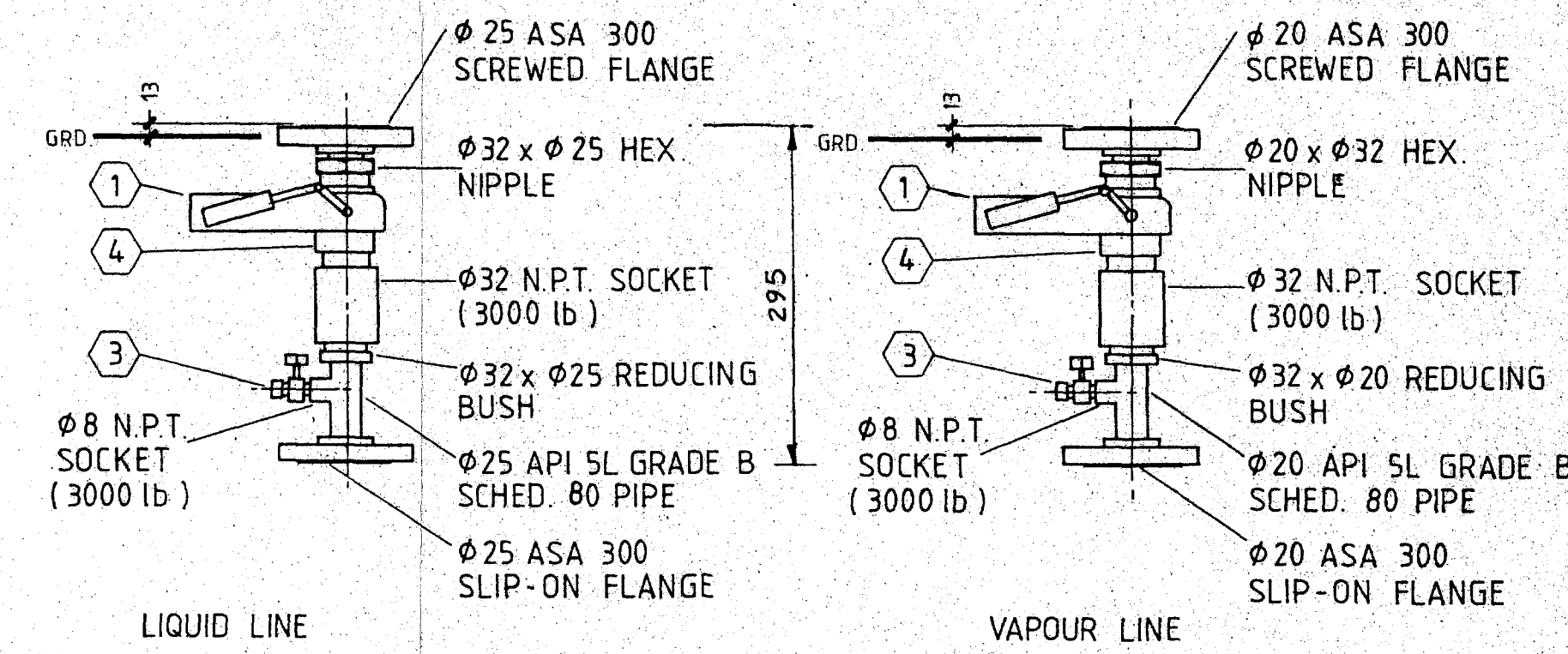
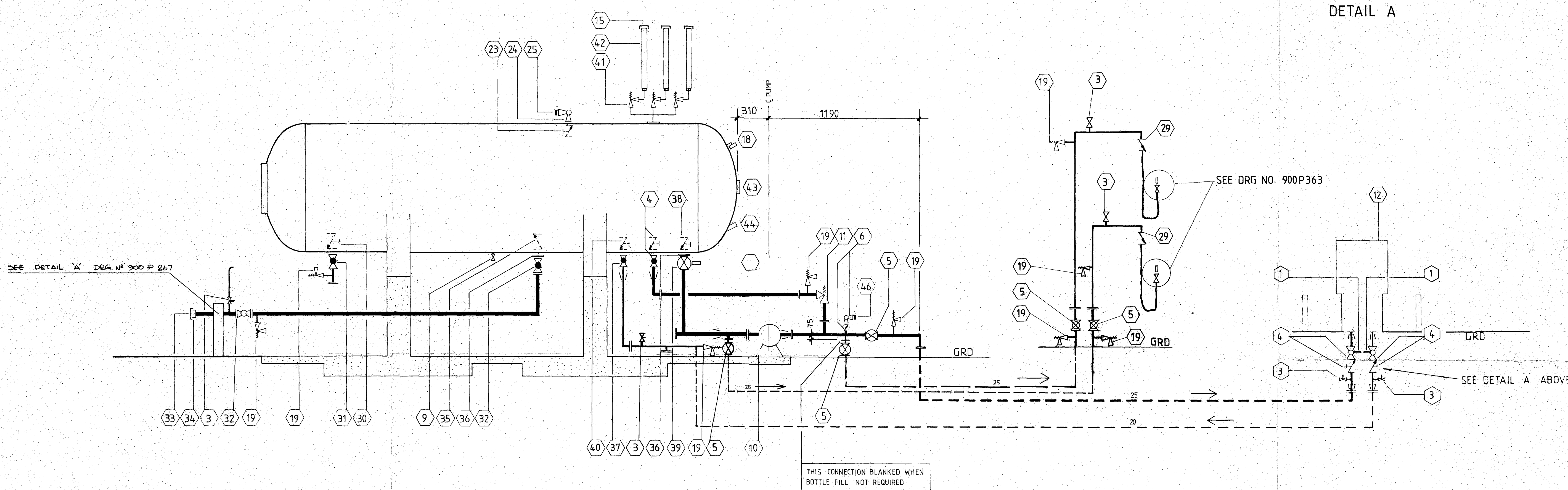
drawn L CAMPBELL	date 6/8/84	drawing number 900 P 363
checked Gron	date	issue 1
scale NTS	engineering manager W.D. Saddle	

TOP LOOP OF Bottle Fill Lines Raised 300  
 FROM 1000 TO 1300  
 ITEM 20 GIVEN TO VALVE & RELIEF VALVE & SOCKET  
 BELOW FLANGE (REF NPL). ITEM 20 ADDED TO  
 MATERIAL LIST. ITEM 1 IS #16 IN MATERIAL  
 LIST HAS HAD QUANTITY INCREASE TO ENTER  
 FOR ADDITIONAL ITEMS.

A - ITEM 4 WAS SCHED 40

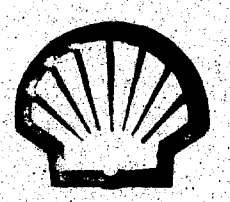
20/9/84



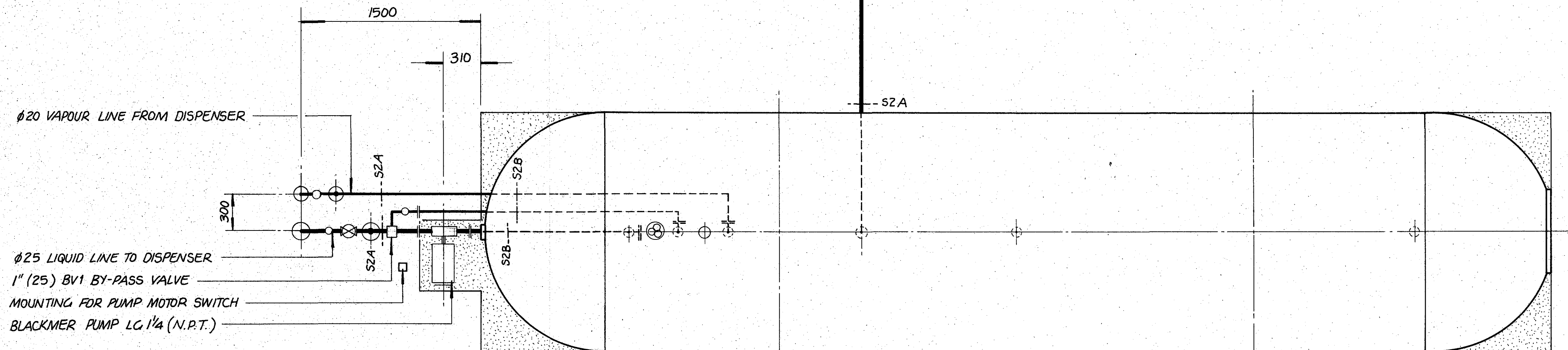


40	1 1/4" N.P.T. EXCESS FLOW VALVE	REGO A3282 C	41	100MM FLANGED SAFETY RELIEF VALVE (ASA 300)	REGO 8573 M225
39	50MM FLANGE BALL VALVE (BS 1560) WITH ACTUATOR	WORCESTER AF 52	42	3" N.P.T. FLARE TUBE 2000 LG	
38	2" N.P.T. EXCESS FLOW VALVE	REGO A3500 L4	43	FLOAT GAUGE	MAGNATEL 6342 / 8
37	1 1/4" N.P.T. GLOBE VALVE	REGO A7509 BP	44	THERMOMETER WELL	PLUG
36	50MM PLATE FLANGE DRILLED AND TAPPED (ASA 300)	SPECIAL	46	3/4" N.P.T. PLUG	
35	2" N.P.T. CHECK VALVE	REGO A3400 L4			
34	2 1/4" ACME TANK FILLING ADAPTOR	REGO A5767 F			
33	2 1/4" ACME DUST COVER AND CHAIN	REGO A3184 - 90			
32	50MM FLANGED GLOBE VALVE (ASA 300)	REGO A7513 FP			
31	1" N.P.T. GLOBE VALVE	REGO A7507 AP			
30	1 1/4" N.P.T. EXCESS FLOW VALVE	REGO A8013 DA			
29	3/4" N.P.T. EXCESS FLOW VALVE	REGO A3272 G			
25	1 1/4" N.P.T. PLUG		12	DISPENSER (TYPE TO BE ADVISED)	SEE SITE PLAN
24	1 1/4" N.P.T. ANGLE VALVE	REGO A7510 BP	11	1" N.P.T. BY-PASS VALVE	BLACKMER BV 1
23	1 1/4" N.P.T. EXCESS FLOW VALVE	REGO A8525	10	PUMP N.P.T.	BLACKMER LG 1
			9	1/4" N.P.T. ULLAGE VALVE	REGO 3165
19	1/4" HYDROSTATIC RELIEF VALVE (312 PSIG)	REGO 3127 T	6	3/4" N.P.T. TRANSFER / EXCESS FLOW VALVE	REGO 7550 PX
	1/4" N.P.T. PRESSURE GAUGE 0 - 2500 kPa	REGO 948 U	5	1" SOCKET WELD BALL VALVE	TO BS 3351
			4	1 1/4" N.P.T. THREADED INTERNAL VALVE	FISHER C208 - 10-050
15	P.V.C. RAIN CAP		3	1/4" N.P.T. BLEED VALVE & CAP	REGO 1224 W
			1	AIR CYLINDER	McEWANS M 778 / 40
					MANUFACTURERS FIG N°
	DESCRIPTION	MANUFACTURERS FIG N°	ITEM N°	DESCRIPTION	MANUFACTURERS FIG N°

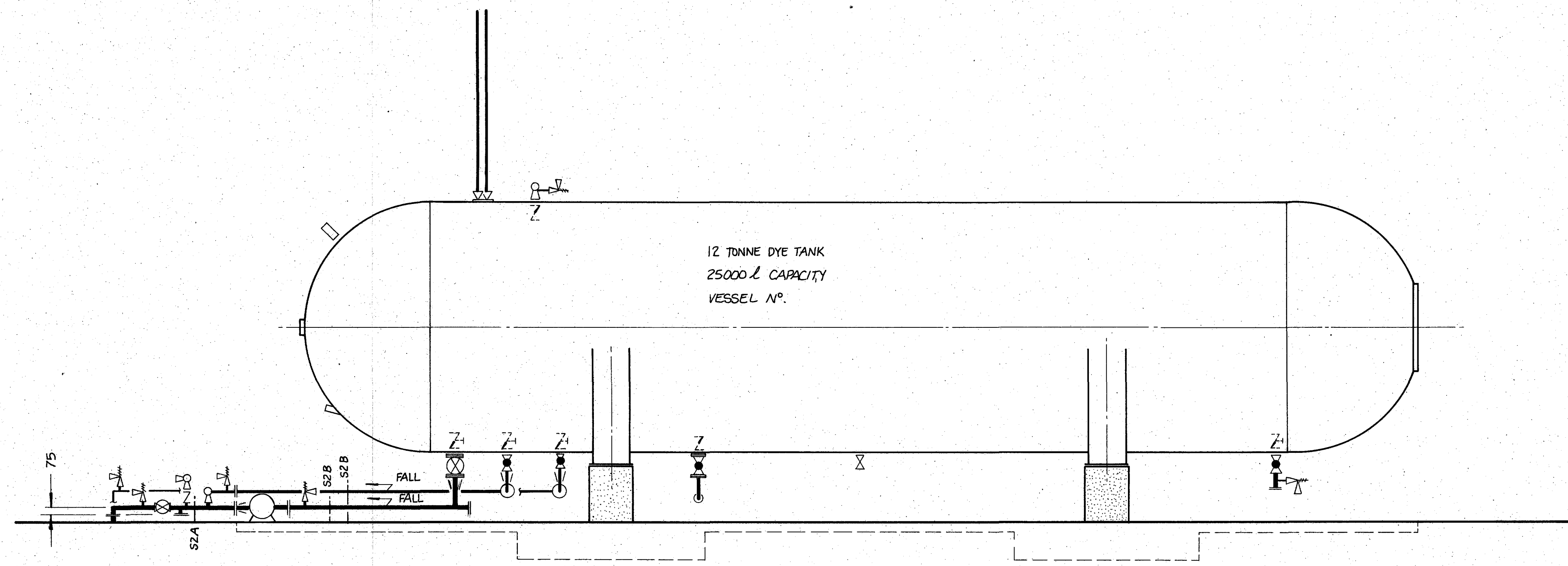
A REDUCER WAS IN VERTICAL LEG OF LIQUID OUT LINE		11/84
Issue		date
<b>Shell Companies in New Zealand</b> 96 The Terrace Wellington		
<b>LPG STANDARD</b> STANDARD SCHEMATIC FOR 12 TONNE L.P.G. DYE TANK		
drawn	R A Cairgou	date JUL 84
checked		date
scale	N A	engineering
drawing number		date
900 P 360		A





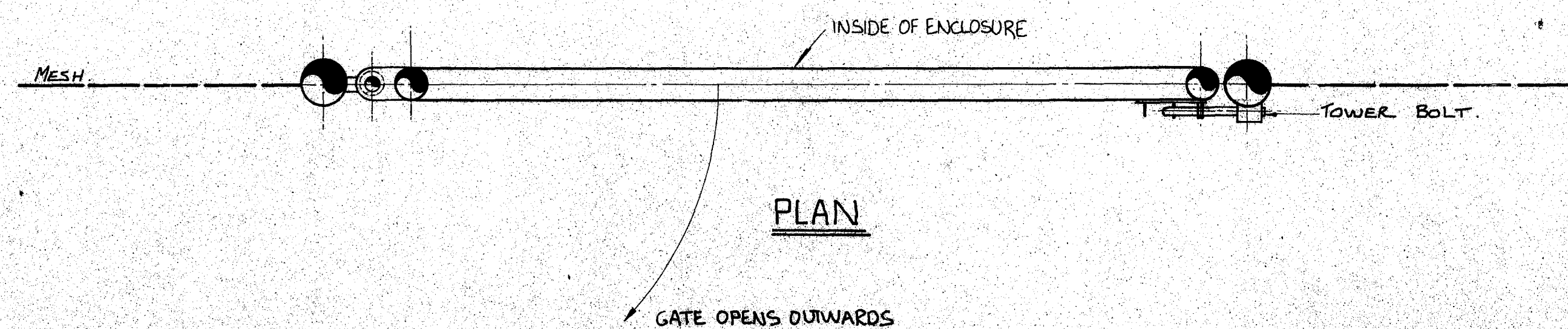
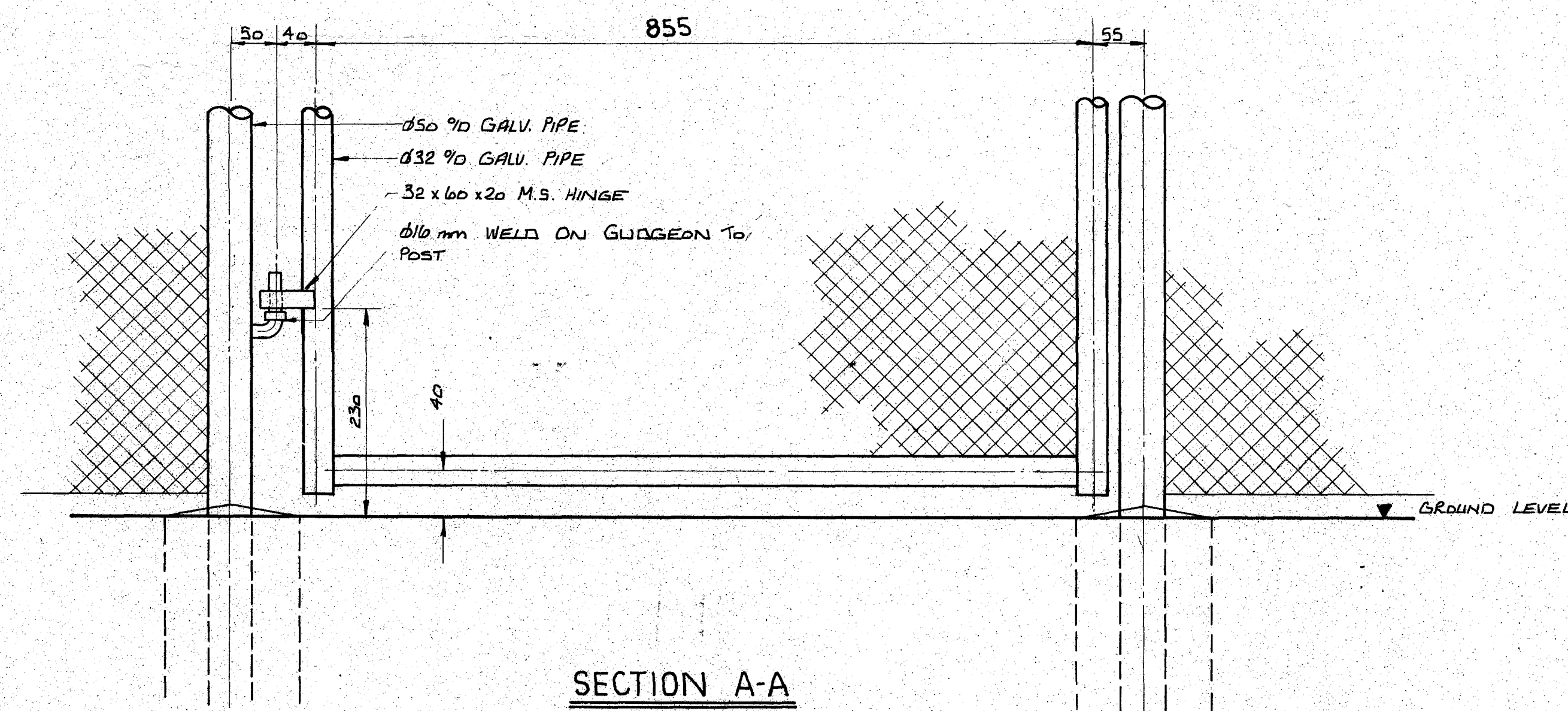
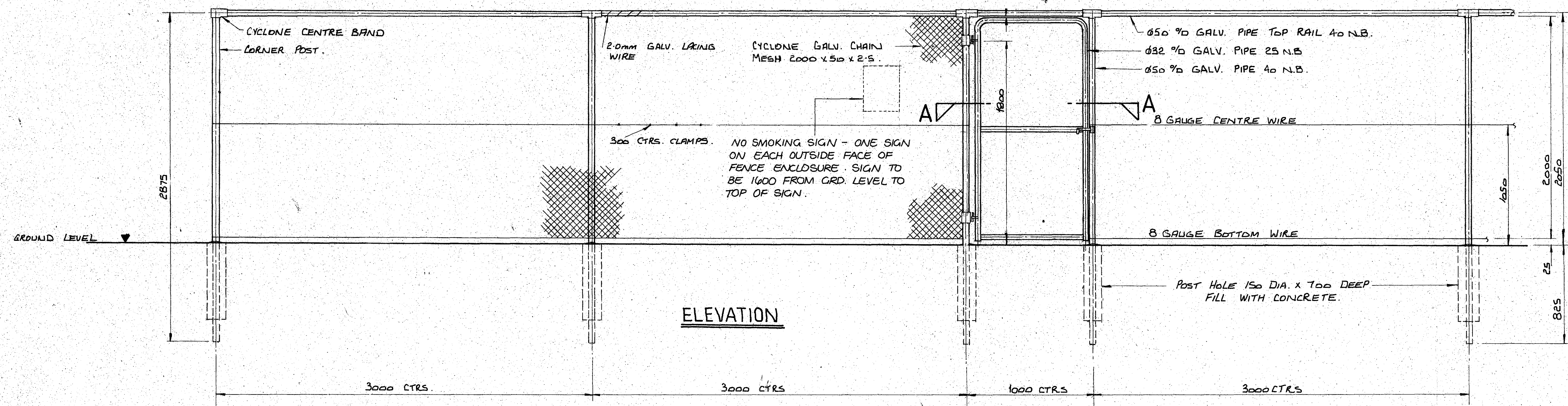


AREA WITHIN CONFINES OF FENCE  
TO BE OF INCOMBUSTIBLE MATERIAL  
i.e. STONE CHIPS ON CLAY

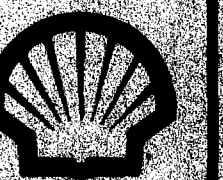


issue		amendments		date	
<b>Shell Companies in New Zealand</b> 96 The Terrace Wellington					
L.P.G. STANDARD : PIPING LAYOUT FOR 12 TONNE DYE VESSEL					
drawn	R. A. CAIGOU	date	20.7.84	drawing number	
checked	<i>[Signature]</i>	date		900 P 359	
scale	1:25	<i>[Signature]</i> engineering manager			issue

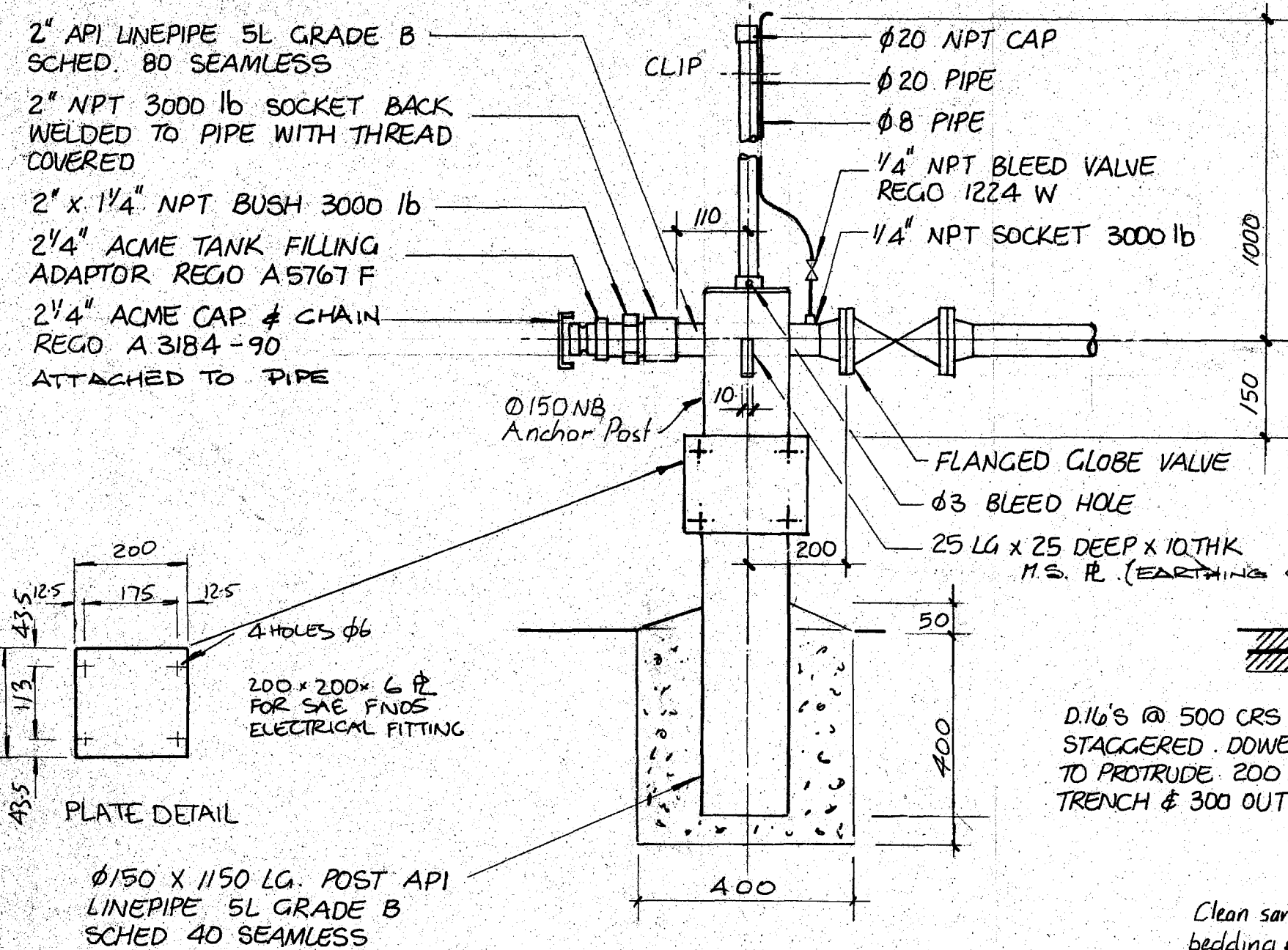




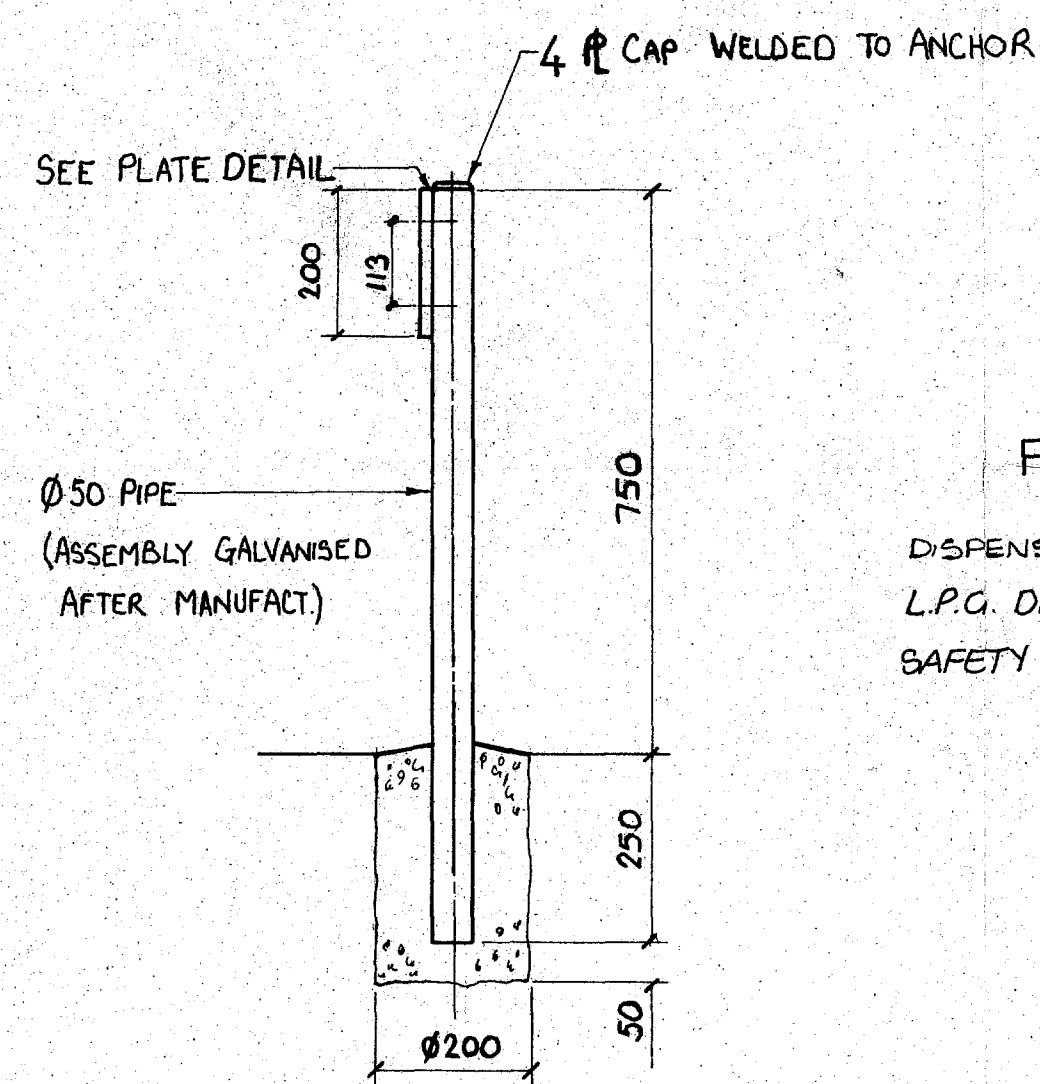
D	ADDED NO SMOKING SIGN.	14.2.84
C	GATE DIMENSION CHANGED FROM 1000 TO 855	
B	DIRECTION OF OPENING GATE SHOWN.	
A	RE-DRAWN WITH MAJOR MODS.	11-6-81
ISSUE	amendments	date
<b>Shell Companies in New Zealand</b> 96 The Terrace, Wellington		
<b>L.P.G. STANDARD</b> STD. FENCE AND GATE FOR L.P.G. TANK ENCLOSURE		
drawn	R.A. CAIGOU	date 11-6-81
checked	<i>[Signature]</i>	date 9-7-81
scale	1:20 1:5	engineering manager
drawing number	900 P 196	issue A B O D



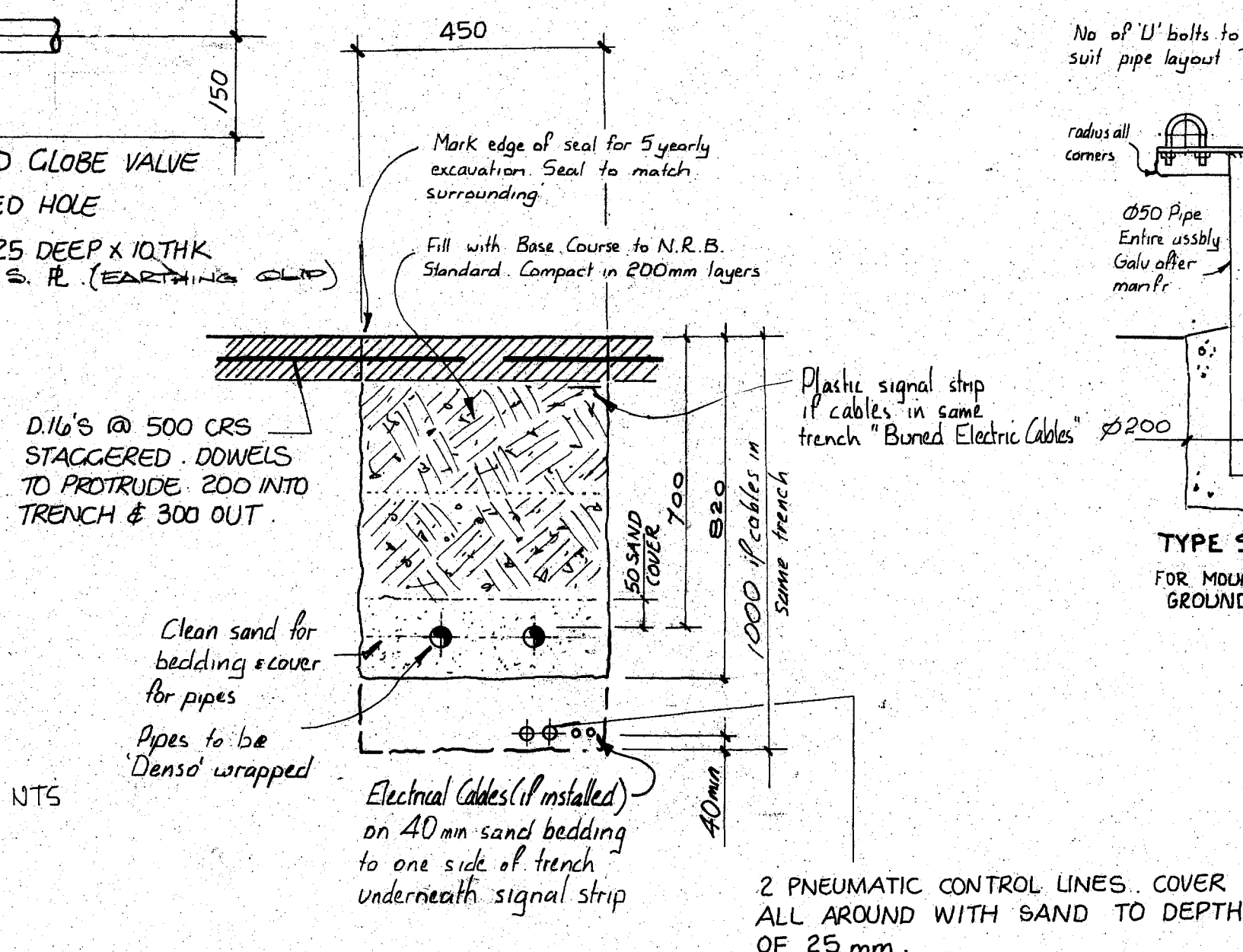




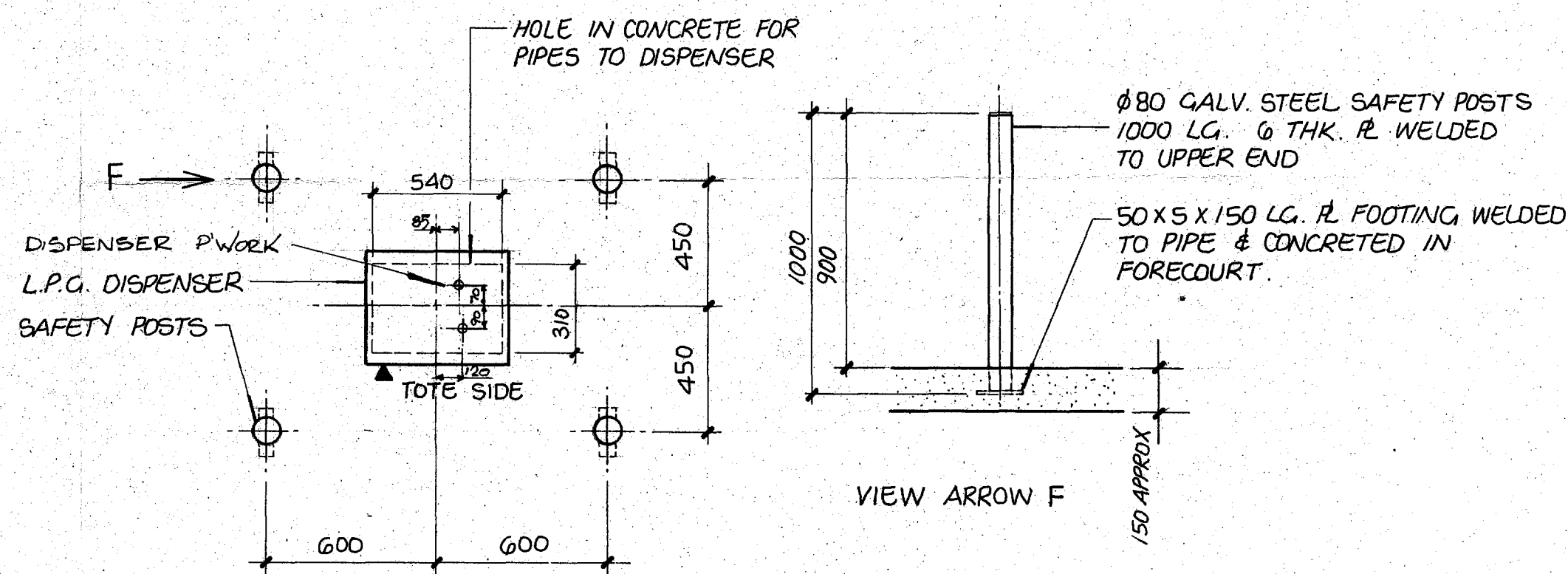
DETAIL 'A' ANCHOR & FILL POINT DETAIL NTS



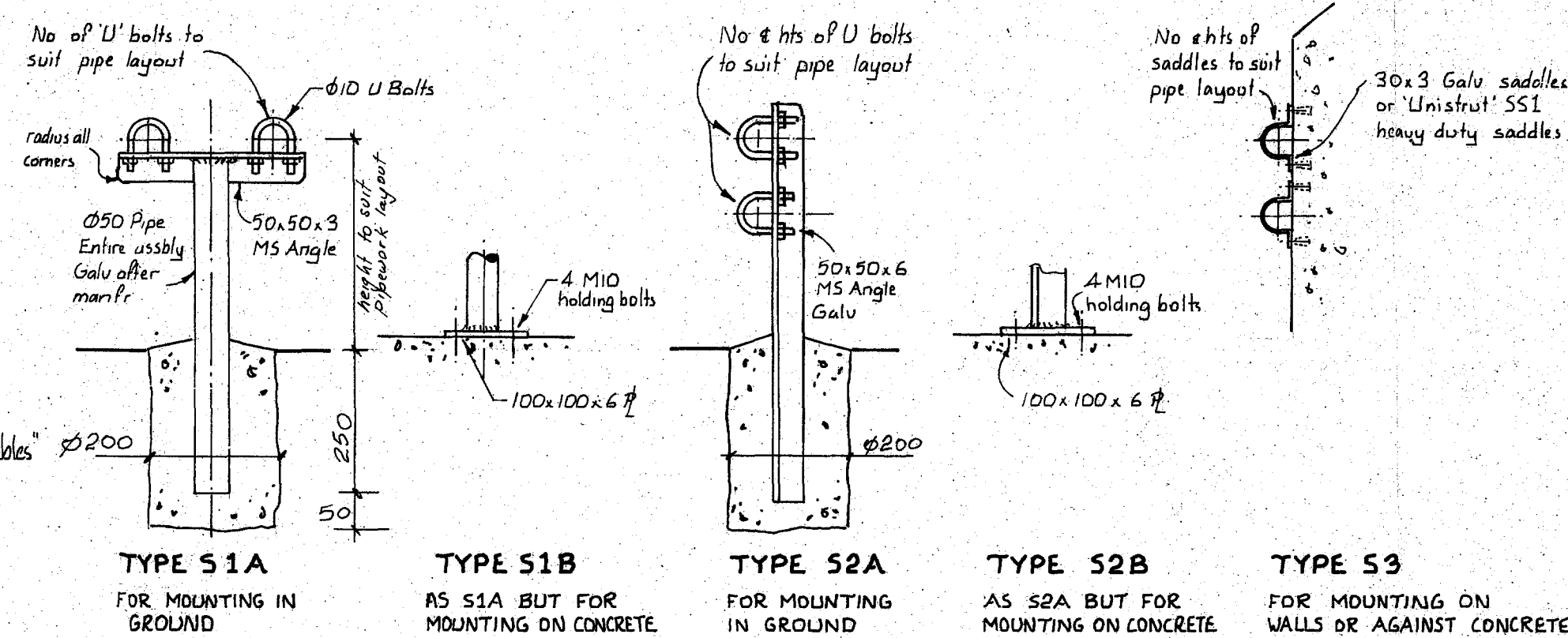
DETAIL D - ELECTRICAL FITTING POST



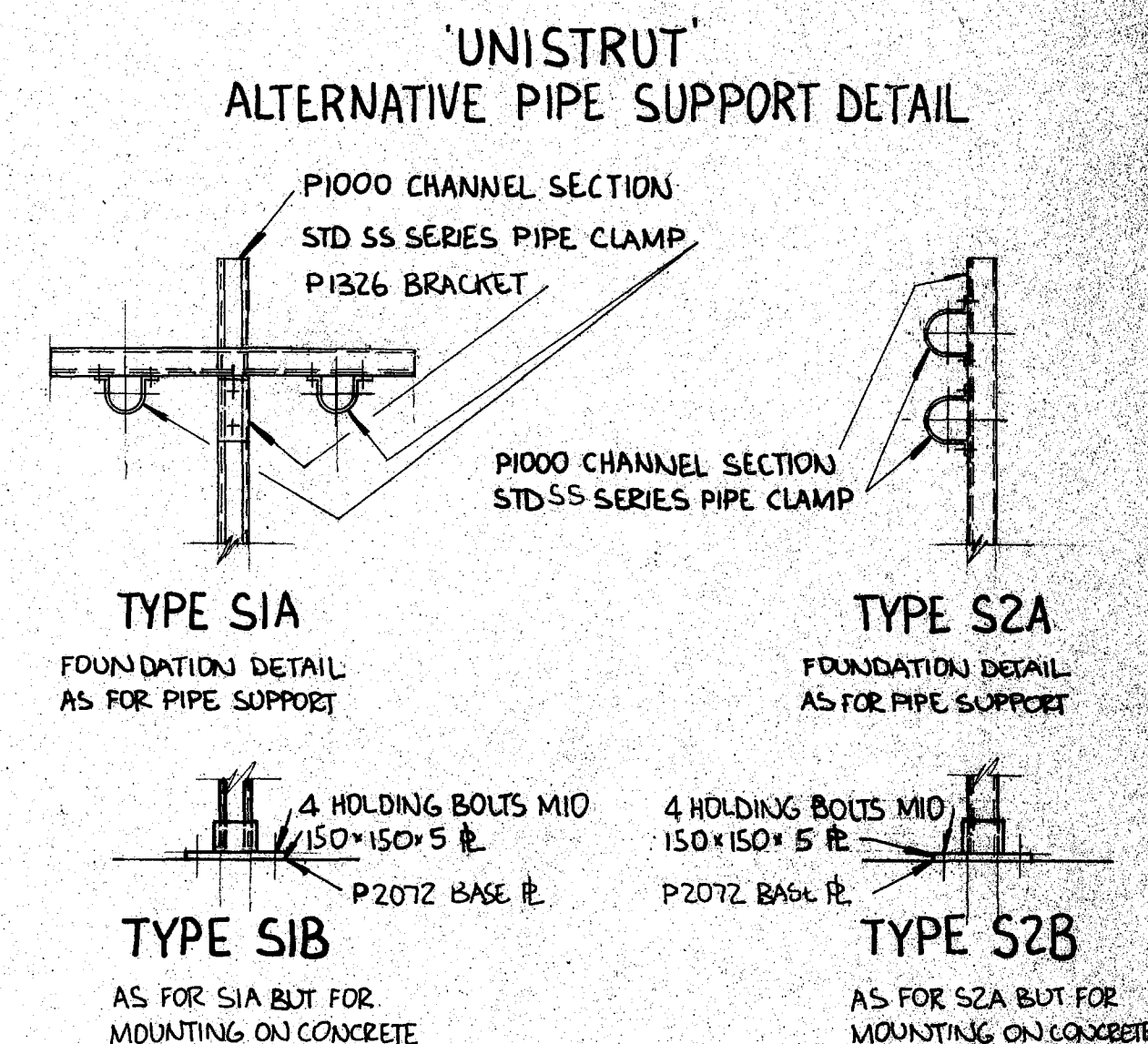
DETAIL 'B' TRENCH DETAIL



DETAIL F - PLAN OF DISPENSER  
SAFETY POSTS



DETAIL 'C' PIPE SUPPORTS



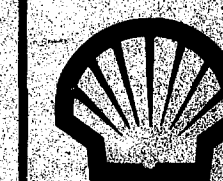
DETAIL 'CI'

L	PIPE LOCATION ADDED TO DISPENSER	18.5.84
K	GENERAL MODIFICATIONS	14.5.84
J	ADDED DETAIL F. DELETED DETAIL E	29.3.84
H	DETAIL E added	15.7.83
G	DETAIL 'A' REVISED	26.3.83
F	DETAIL 'B' MODIFIED FOR POSSIBLE ELECTRICAL CABLE INSTALLATION	23.3.83
E	DETAIL D ADDED	1.12.82
D	DEPTH OF TRENCH INCREASED BY 200mm. 700mm PIPE COVER SHOWN	20.6.82
C	ASAISO FLANGE IN ANCHOR DETAIL WAS ASA 300 & ELECTRICAL PL ADDED	8.4.82
B	DETAIL CI ADDED	5.11.81
A	COPPER BOND LUG ADDED TO DETAIL A	15.10.81
ISSUE	amendments	date

## Shell Companies in New Zealand

96 The Terrace Wellington

L.P.G. STANDARD  
PIPEWORK STANDARD DETAILS

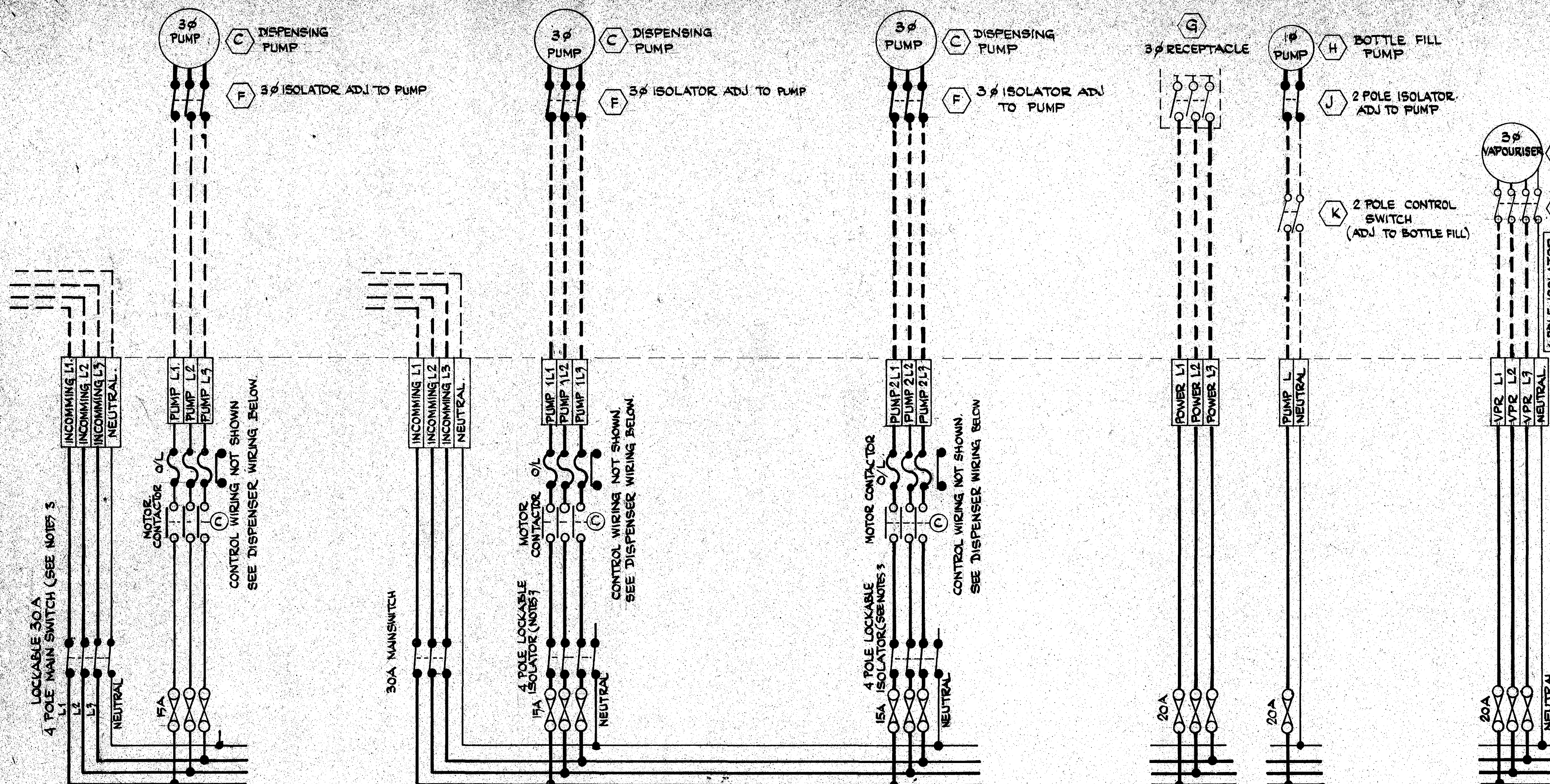


drawn  
**Don Robertson**  
checked  
*Anthony*  
scale

date  
**15.9.81**  
date  
**19/7/83**

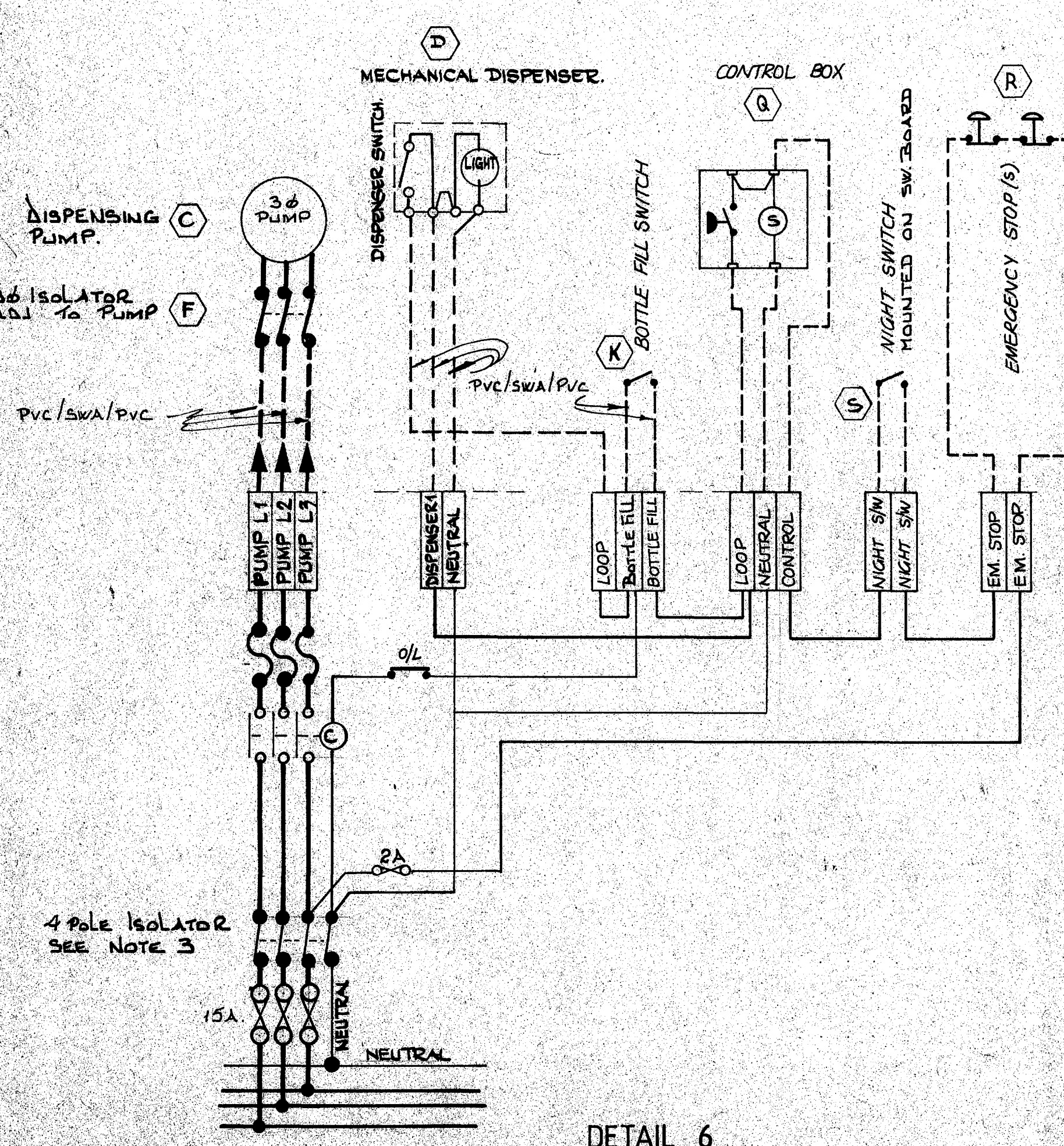
drawing number  
**900 P 267**  
K L  
engineering manager



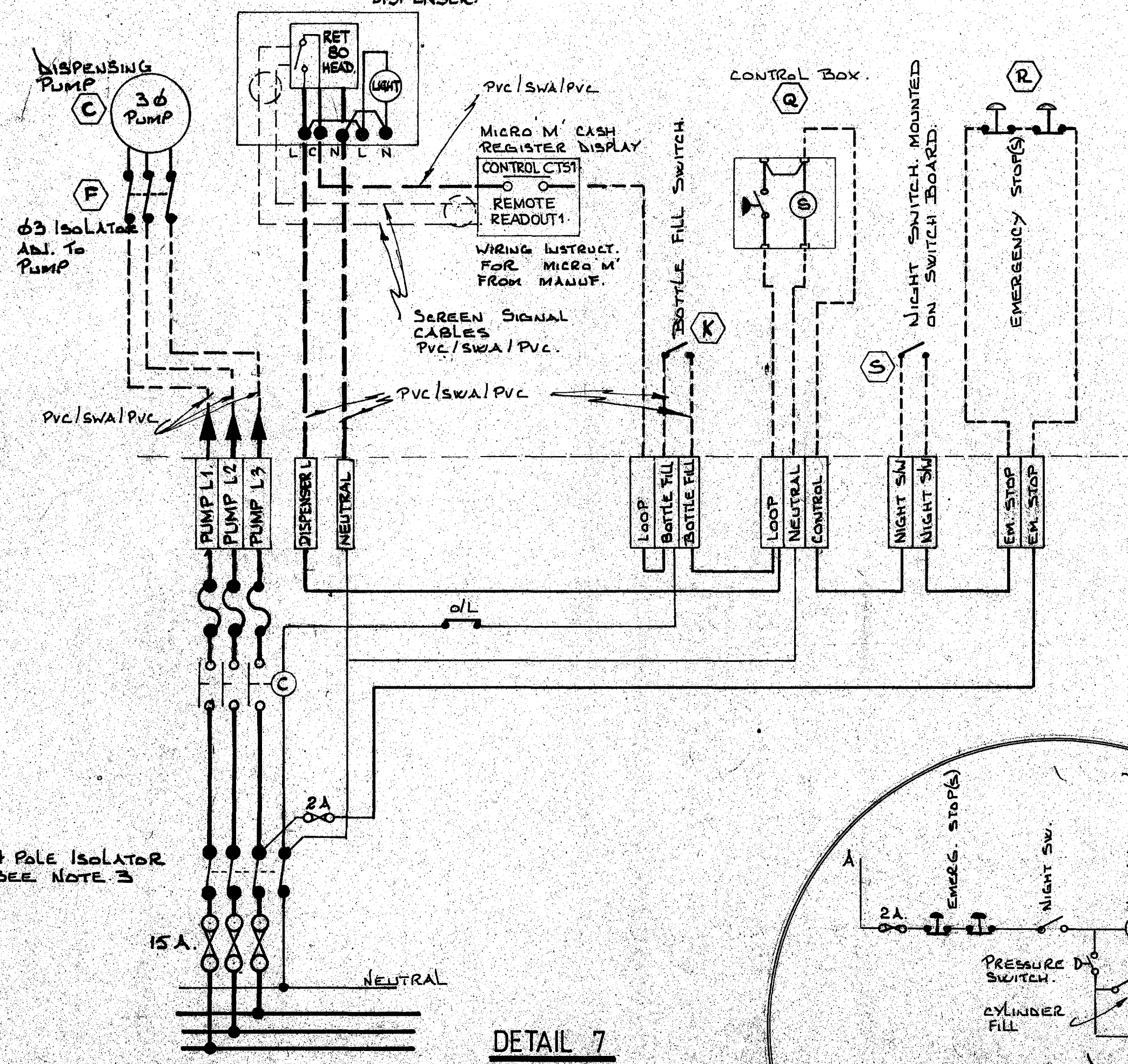


**DETAIL 1**  
SINGLE PUMP DISPENSING INSTALLATION.

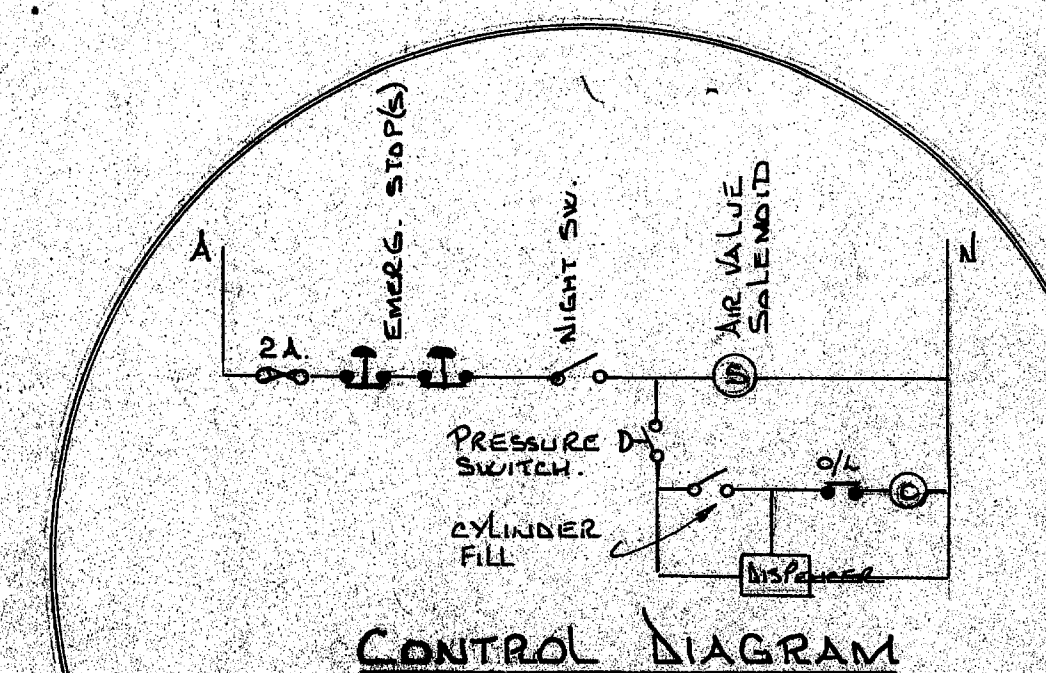
**DETAIL 2**  
MULTIPLE PUMP (TWO SHOWN) DISPENSING INSTALLATION.



**DETAIL 6**  
MECHANICAL DISPENSER WIRING



**DETAIL 7**  
RETRON 80 WITH MICRO M.



**CONTROL DIAGRAM**

- NOTES**
1. ALL ELECTRICAL WIRING & EQUIPMENT SHALL COMPLY WITH THE ELECTRICAL WIRING REGULATIONS 1976 & ALL CURRENT AMENDMENTS.
  2. ALL WIRING IN HAZARDOUS ZONES AS DEFINED IN MP105:1976 "ELECTRICAL WIRING IN HAZARDOUS LOCATIONS" SHALL COMPLY WITH MP105 REQUIREMENTS FOR CLASS 1 ZONE 1.
  3. MP105 REQUIRES THE NEUTRAL CONDUCTOR TO BE ISOLATED ALONG WITH THE LINE CONDUCTORS, (SHELL CO. METHOD PREFERRED) OR REMOVABLE LINK ON THE NEUTRAL. ALTERNATIVE TO ISOLATORS AND FUSES IS, TO PROVIDE CIRCUIT BREAKERS.
  4. WHERE A NEW MAINS SUPPLY IS TO BE INSTALLED THE MAIN SWITCH SHALL BE 4 POLE AND LOCKABLE (I.E. NEUTRAL IS BROKEN).
  5. ISOLATORS SHALL BE RATED FOR OCCASIONAL MOTOR STARTING DUTY.
  6. EXTERNAL WIRING SHALL BE GENERALLY RUN IN SERVICES TRENCH BELOW AND AS FAR AS PRACTICABLE FROM THE PIPEWORK.

SCHEDULE OF ELECTRICAL EQUIPMENT. (ITEMS NOT REQUIRED MAY BE DELETED)					
ITEM	QTY	HAZARD ZONE	POWER	MANUFACTURER & MODEL	NOTES
A SINGLE PUMP SWITCHBOARD.	1	SAFE	30A 3φ	ELECTRICAL CONTRACTOR.	
B MULTIPLE PUMP SWITCHBOARD	1	SAFE	30A 3φ	ELECTRICAL CONTRACTOR.	
C 3φ DISPENSING PUMP		CLASS 1 ZONE 1	400V 3φ		SHELL CO. SUPPLY.
D MECHANICAL DISPENSER		CLASS 1 ZONE 1	230V 1φ		SHELL CO. SUPPLY.
F 3φ PUMP ISOLATOR (ADJ. PUMP)		CLASS 1 ZONE 1	400V, 3φ, 15A.	SAE FNS 51-1 OR CROUSE HINDS DSA 10/0 & DSA 9 - A203	SHELL CO. SUPPLY.
G 3φ FLAMEPROOF POWER RECEPTACLE	1	CLASS 1 ZONE 1	400V, 3φ, 20A	S.A.E. F.N.O. 5.	SHELL CO. SUPPLY.
H 1φ BOTTLE FILL PUMP.		CLASS 1 ZONE 1	230V, 1φ		SHELL CO. SUPPLY.
J 1φ ISOLATOR.		CLASS 1 ZONE 1	230V, 1φ, 20A	S.A.E. FNS 15-1 OR CROUSE HINDS DSA 9-109 & DSA 10/0	SHELL CO. SUPPLY.
K 1φ CONTROL SWITCH		CLASS 1 ZONE 1	230V, 1φ, 20A	S.A.E. F.N.S. 15-1 OR CROUSE HINDS DSA 9-109 & DSA 10/0	SHELL CO. SUPPLY.
L DISPENSER.		CLASS 1 ZONE 1	230V, 1φ		SHELL CO. SUPPLY.
M MICRO-M-REMOTE READOUT CONSOLE	1	SAFE	230V, 1φ	PRODUCTION ENGINEERING CO.	SHELL CO. SUPPLY.
N VAPOURISER		CLASS 1 ZONE 1	400V 3φ K.W.	SAM DICK POWER	SHELL CO. SUPPLY.
P 4 POLE ISOLATOR (ADJ. VAPOURISER)		CLASS 1 ZONE 1	400 3φ # N 20A.	SAE FNS 51-1 OR CROUSE HINDS DSA 10/0 & DSA 9 - A203	SHELL CO. SUPPLY.
Q EMERGENCY SHUT OFF CONTROL BOX	1	SAFE	230 V 1φ	M'EWANS	SHELL CO. SUPPLY.
R EMERGENCY STOP BUTTON	1 or 2	SAFE	230 V	TELEMECAVNIQUE	SHELL CO. SUPPLY.
S NIGHT SWITCH.	1	SAFE	230 v	ELECTRICAL CONTRACTOR	

KEY			
=====	100V IN BOARD	=====	LOW VOLTAGE IN BOARD
-----	" " FIELD	-----	" " " FIELD
-----	230V IN BOARD	-----	" " " FIELD
-----	" " FIELD	-----	NORMALLY OPEN CONTACTS
-----		-----	" " CLOSE "

900E 261	O	AMENDED DISPENSER WIRING. ADDED ITEM R. NOTE COL. AMENDED.	10.8.84.
"	N	ADDED PNEUMATIC SYSTEM	21.6.84.
"	M	ADDED PRESSURE OPERATED SW. @	17.5.84.
"	L	MINOR MODS. TO ELECTRICAL SCHEDULE (MANUF. & MODEL)	9.5.84.
900E 261	K	AMENDED SCHEDULE OF ELECTRICAL EQUIP. DELETED LCM 4 WIRING DIAGRAM	30.4.84.
900E 261	J	REDRAWN.	1.2.84.
900E 261	H	ADDED BOTTLE FILL CONNECTIONS	1.11.83.
"	G	MINOR REVISIONS.	22.7.83.
"	F	REVISED.	23.7.83.
"	E	BOTTLE FILL SWITCH ADDED TO LCM 4 ELECTRONIC DISPENSER WIRING	20.10.82.
"	D	VAPOURISER ITEM N & P ADDED.	27.7.82.
"	C	(L) RETRON 80 DISPENSER & MICRO M ADDED.	23.7.82.
900E 261	B	REDRAWN FOR "ELECTRONIC DISPENSER" & PROVISION FOR ISOLATION ADJ. TO PUMP	19.1.82.
DRAWING ISSUE		amendments	date

**Shell Companies in New Zealand**

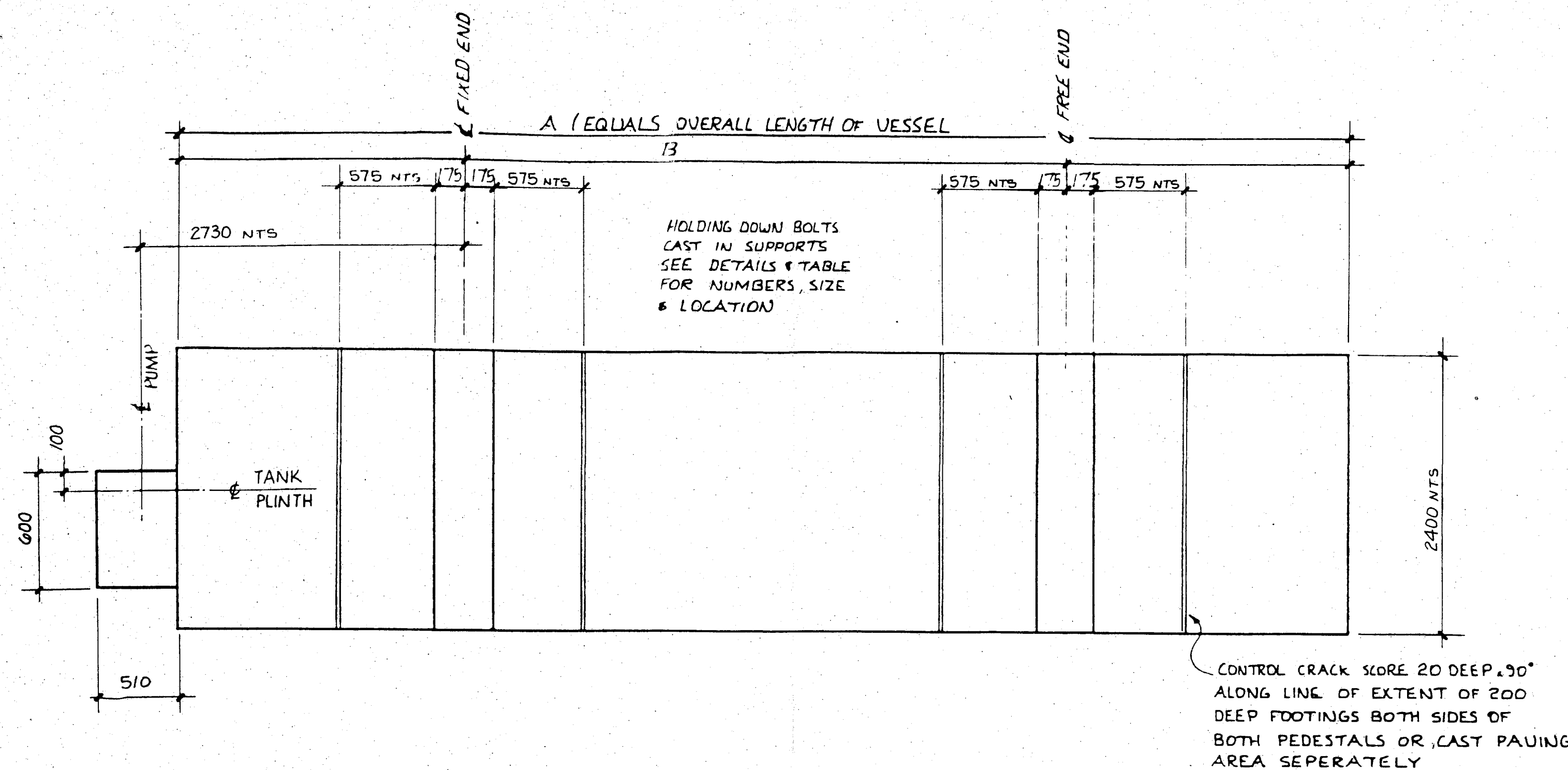
96 The Terrace Wellington

**L.P.G. STANDARD**  
ELECTRICAL SCHEMATIC

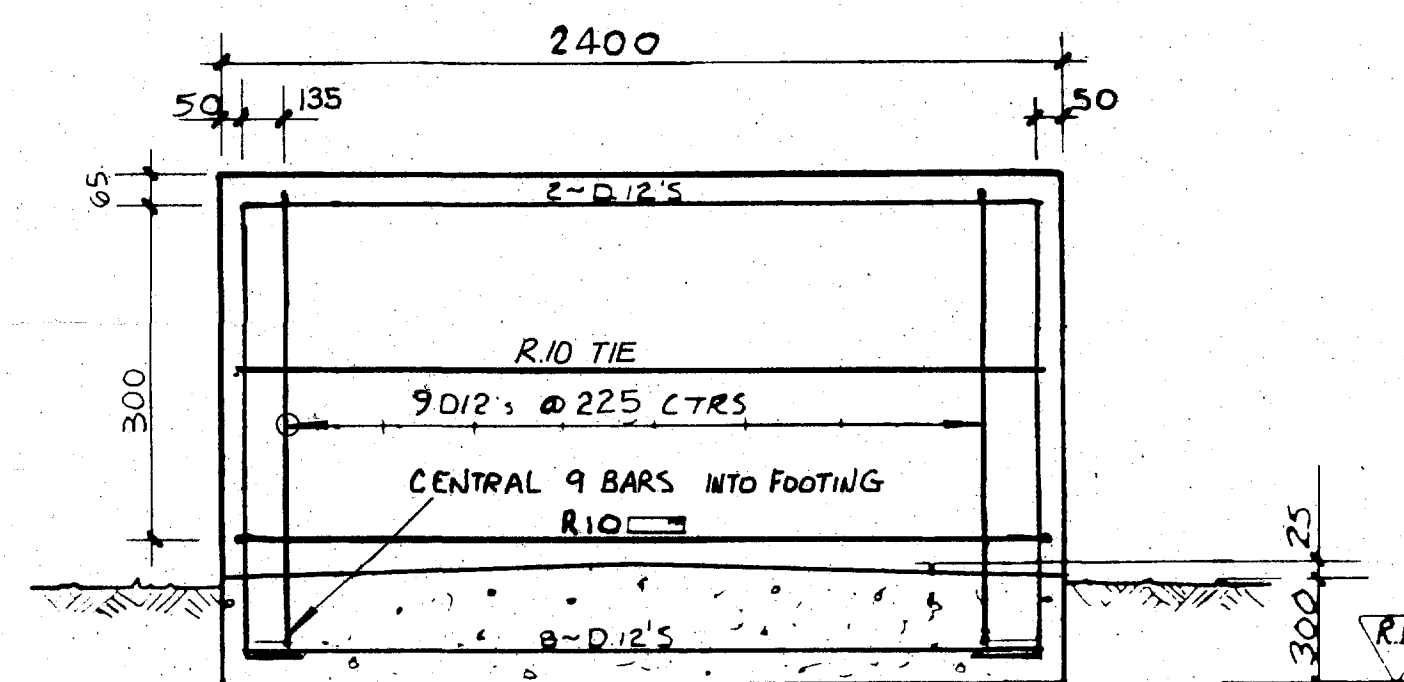
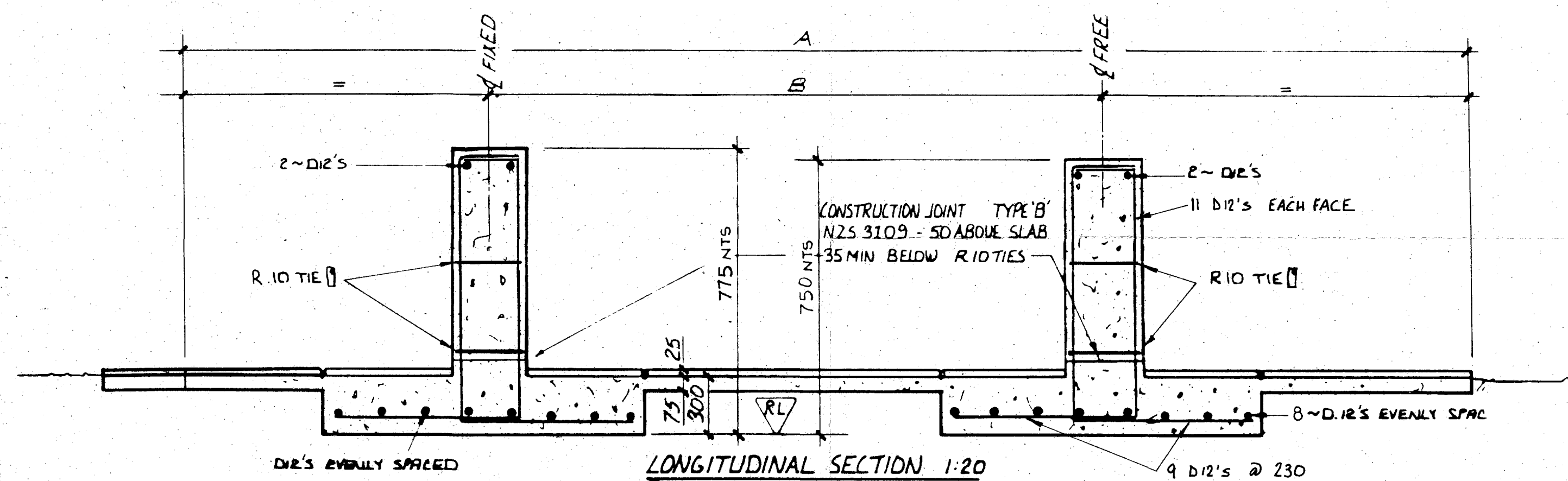
drawn: A.R.G. THOMSON date: 1.2.84.  
checked: [signature] date: 2.4.84.  
scale: [signature] engineering manager

drawing number: 900 E 261  
ISSUE: [signature]





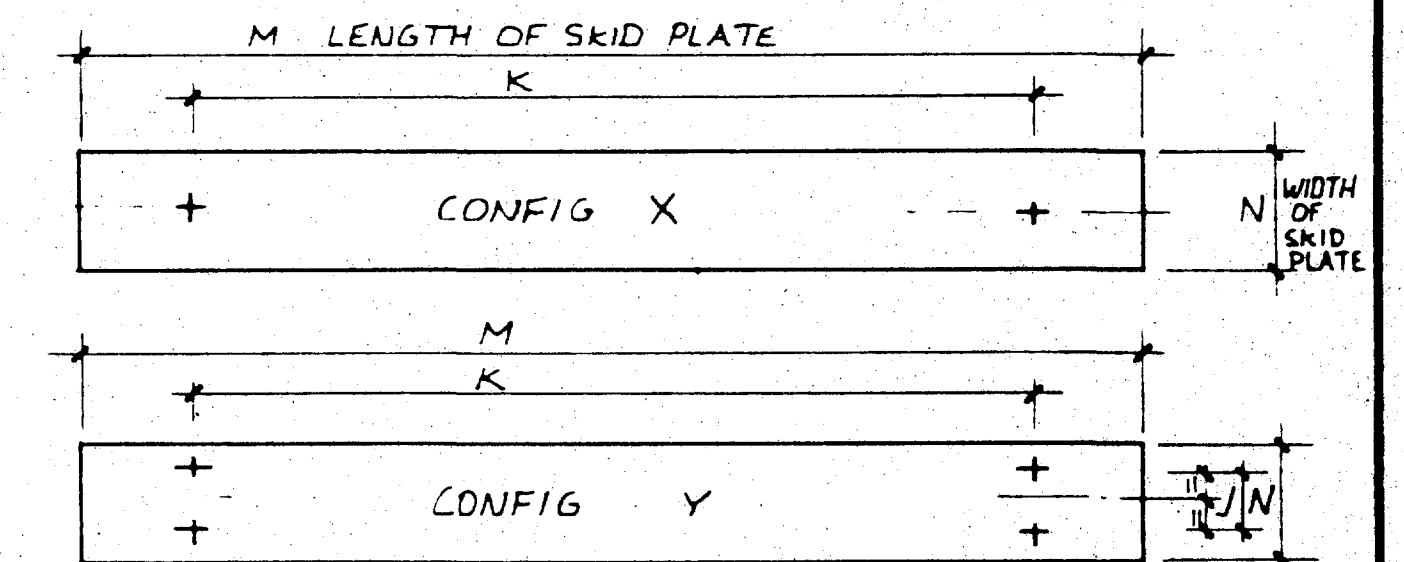
PLAN & LOCATION OF PUMP BASE  
DESIGNER TO SHOW LOCATION & SIZE OF PUMP BASE



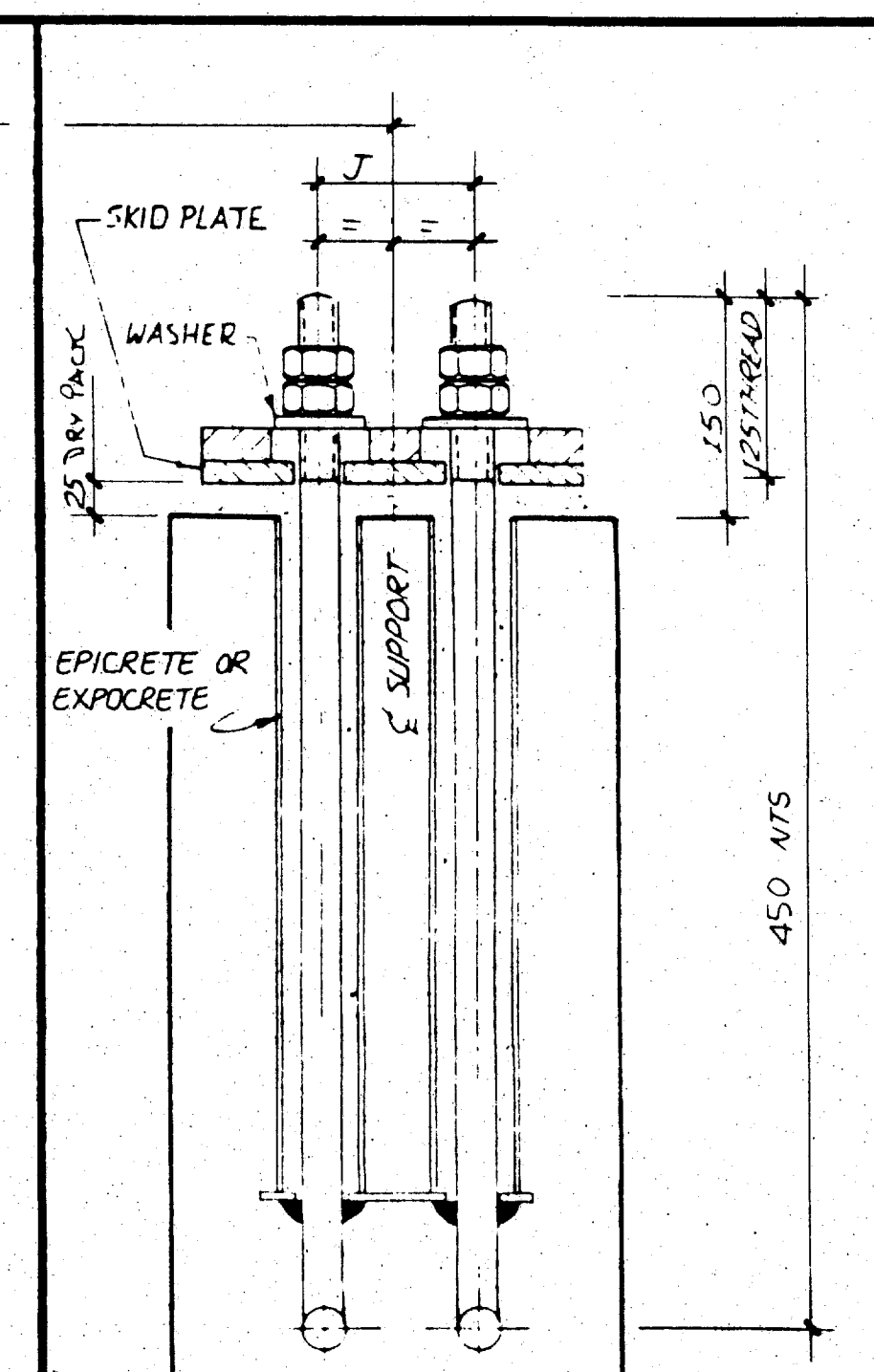
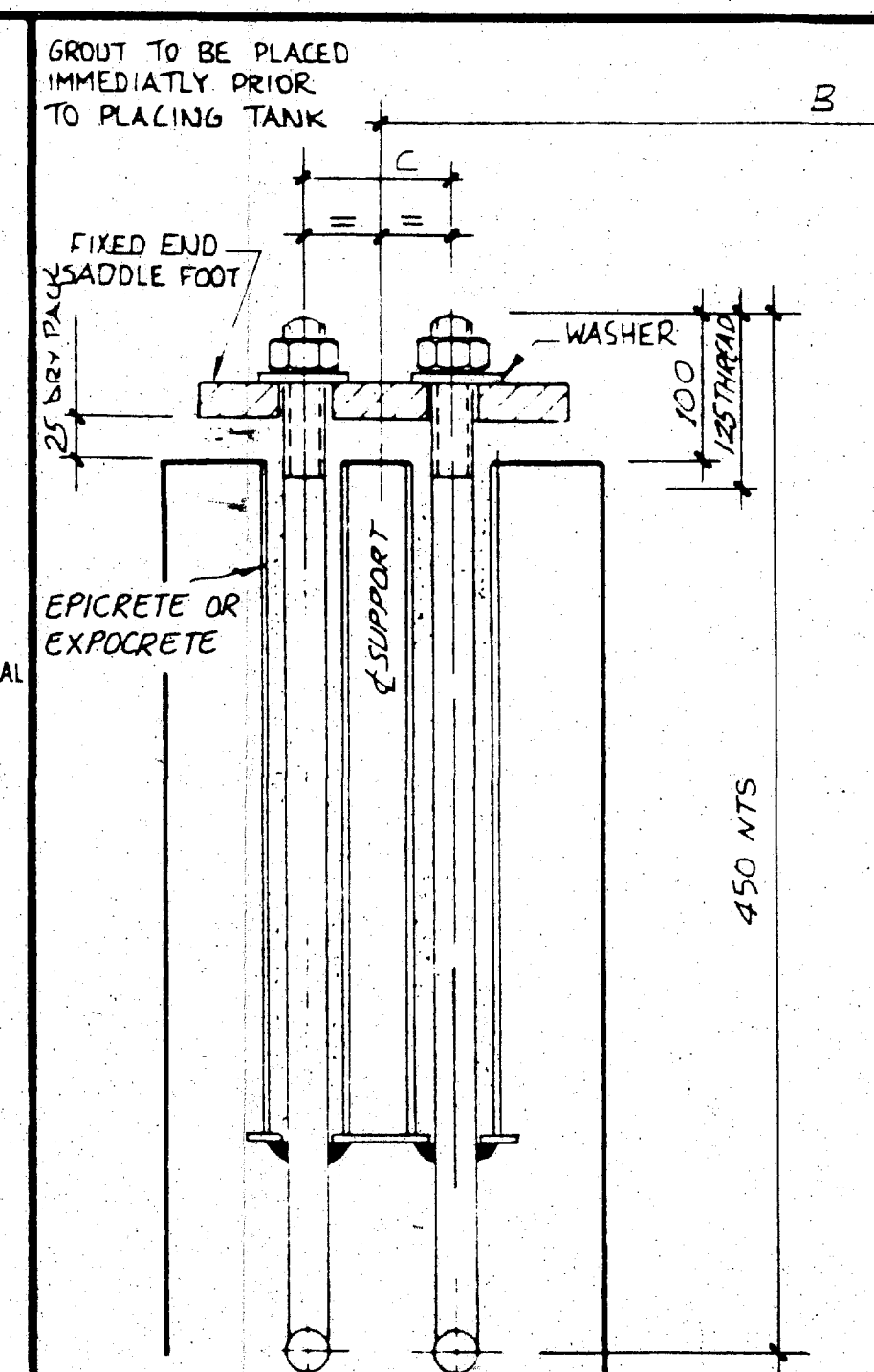
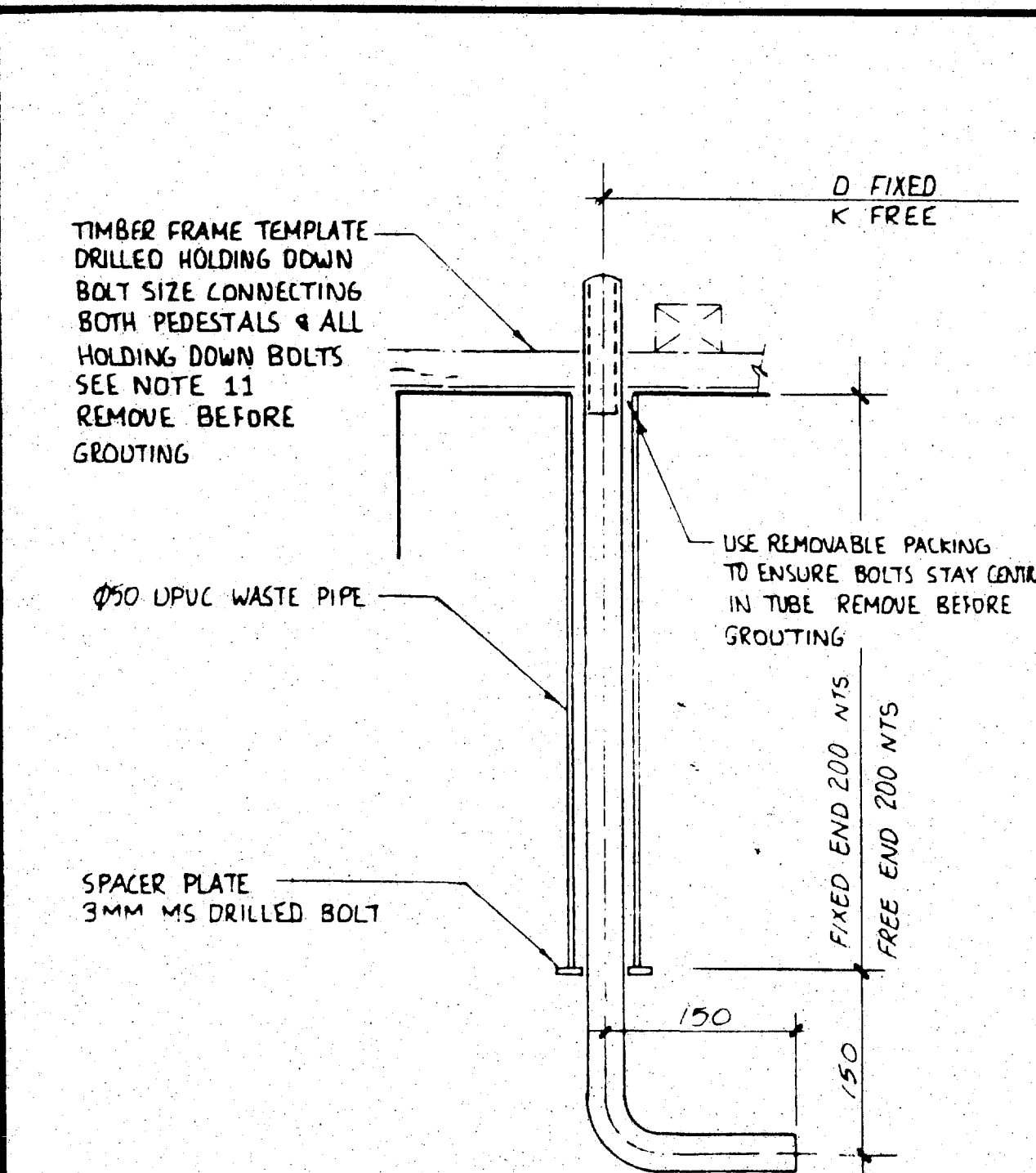
SECTION OF SUPPORT PEDESTAL

- NOTES**
- THIS FOUNDATION ONLY FOR VESSELS OF 12 TONNE NOMINAL LPG CAPACITY OR LESS
  - VESSEL MANUFACTURERS MAY MODIFY THEIR DESIGNS BETWEEN ORDERS ALTERING REQUIRED FOUNDATION OR HOLDING DOWN ARRANGEMENTS THEREFORE DIMENSIONS MUST BE ENTERED FROM A MANUFACTURERS CERTIFIED DRAWING FOR THE ACTUAL VESSEL
  - DESIGNER TO ENTER VESSEL MANUFACTURER & SERIAL NO IN THE TITLE BLOCK
  - THIS FOUNDATION DRAWING IS TO BE USED ONLY FOR VESSEL IN TITLE BLOCK
  - CONCRETE TO BE 20MPa AT 28 DAYS TO NZS 2086
  - STEEL TO CONFORM TO NZS 3402P GRADE 275
  - GROUT TO BE NON-SHRINK GROUT, EPICRETE 255 OR EXPOCRETE S
  - CONSTRUCTION TO BE IN ACCORDANCE WITH NZS 3109 1980 SPECIFICATION FOR CONCRETE CONSTRUCTION
  - COVER TO REINFORCING TO BE 75mm TO UNDERSIDE OF FOUNDATION BASE ELSEWHERE COVER TO BE 35mm
  - DESIGN BEARING STRENGTH OF SOIL TO BE NOT LESS THAN 50KPa FOR GRAVITY LOADING & NOT LESS THAN 120KPa FOR SEISMIC LOADING TO MEET DESIGN CONDITIONS OF FOUNDATION
  - THE HOLDING DOWN BOLTS SHALL BE ACCURATELY POSITIONED IN THE PEDESTALS USING A TIMBER FRAME TEMPLATE DRILLED HOLDING DOWN BOLT SIZE & CONNECTING BOTH PEDESTALS & ALL HOLDING DOWN BOLTS CHECK THAT DIAGONALS ARE EQUAL
  - DRY PACK CEMENT MORTAR TO BE NO LEANER THAN 1:2 CEMENT CONSOLIDATED BY TAMPING WITH A BLUNT RAMMER. ALL SPACE TO BE COMPLETELY FILLED. FINISH WITH A SMOOTH CHAMFER EDGE
  - FREE END HOLDING DOWN BOLTS CONFIGURATION & SKID PLATE SKID PLATE TO BE 10M.S. R. GALV. AFTER MANUFACTURE 1" REQD HOLES TO BE DRILLED CLEARANCE FIT FOR HOLDING DOWN BOLTS SPRAY SUDING R & U/SIDE OF TANK SUPPORT (FREE END) WITH SHELL ENSIS FLUID M.D. WATER DISPLACEMENT IN AEROSOL CANS APPLY CONNECTING SURFACES WITH SHELL ENSIS COMPOUND LA (ANTI CORROSION)

FIXED END HOLDING DOWN BOLTS CONFIGURATION



FREE END HOLDING DOWN BOLTS CONFIGURATION



GENERAL DETAIL OF HOLDING DOWN BOLTS ON LONGITUDINAL SECTION OF SUPPORT PIER PRIOR TO PLACING GROUT  
NOTE: THERE MAY BE 1 or 2 HOLDING DOWN BOLTS IN GROUP  
SEE DIMENSION TABLE

FIXED END GENERAL DETAIL ARRGT SECTION THROUGH SUPPORT  
SEE TABLE FOR NO & SIZE OF BOLTS  
NOTE FOR CONFIG X HOLDING DOWN BOLTS ONLY

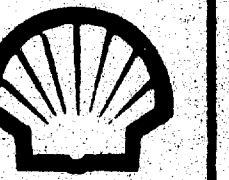
FREE END GENERAL DETAIL ARRGT SECTION THROUGH SUPPORT  
SEE TABLE FOR NO & SIZE OF BOLTS  
NOTE FOR CONFIG Y HOLDING DOWN BOLTS ONLY

DIMENSIONS				
OVERALL LENGTH OF FOUNDATION (EQUALS OVERALL LENGTH OF VESSEL)	A	9010	DISTANCE APART OF $\phi$ 'S OF SUPPORTS	B 4000
FIXED END			FREE END	
NUMBER OF HOLDING DOWN BOLTS		2	NUMBER OF HOLDING DOWN BOLTS	2
SIZE OF HOLDING DOWN BOLTS		M32 x 450 x 150	SIZE OF HOLDING DOWN BOLTS	M 32 x 450 x 150
CONFIGURATION OF HOLDING DOWN BOLTS		S	CONFIGURATION OF HOLDING DOWN BOLTS	X
SPACING OF BOLTS ON SUPPORT PARALLEL TO TANK AXIS (ENTER O FOR CONFIG S)	C	O	SPACING OF BOLTS ON SUPPORT PARALLEL TO TANK AXIS (ENTER O FOR CONFIG X)	J O
SPACING BETWEEN M. 32 BOLTS ON SUPPORT	D	1900	SPACING BETWEEN M. 32 BOLTS ON SUPPORT	K 1900
REDUCED LEVEL OF U/SIDE FOUNDATION SEE SITE PLAN FOR LOCATION & RL OF BENCH MARK	RL		SKID PLATE SUPPLIED BY	DYE
LOCATION & SIZE OF PUMP FOUNDATION (600 LONG FOR ONE PUMP 1500 LONG FOR TWO)		600 x 510 x 75 DEEP	SKID PLATE HOLES DRILLED (HOLDING DOWN BOLT $\phi$ + 5mm)	DRILL $\phi$ 37
MAY BE CAST WITH TANK BASE & SEPARATED BY CONTROL CRACK OR CAST SEPARATELY		DESIGNER TO ENTER LOCATION & SIZE ON PLAN ABOVE	OVERALL LENGTH OF SKID PLATE (EQUALS OVERALL LENGTH OF SLIDING SUPPORT FOOT)	M 2100
			OVERALL WIDTH OF SKID PLATE (EQUALS OVERALL WIDTH OF SLIDING SUPPORT FOOT)	N 300

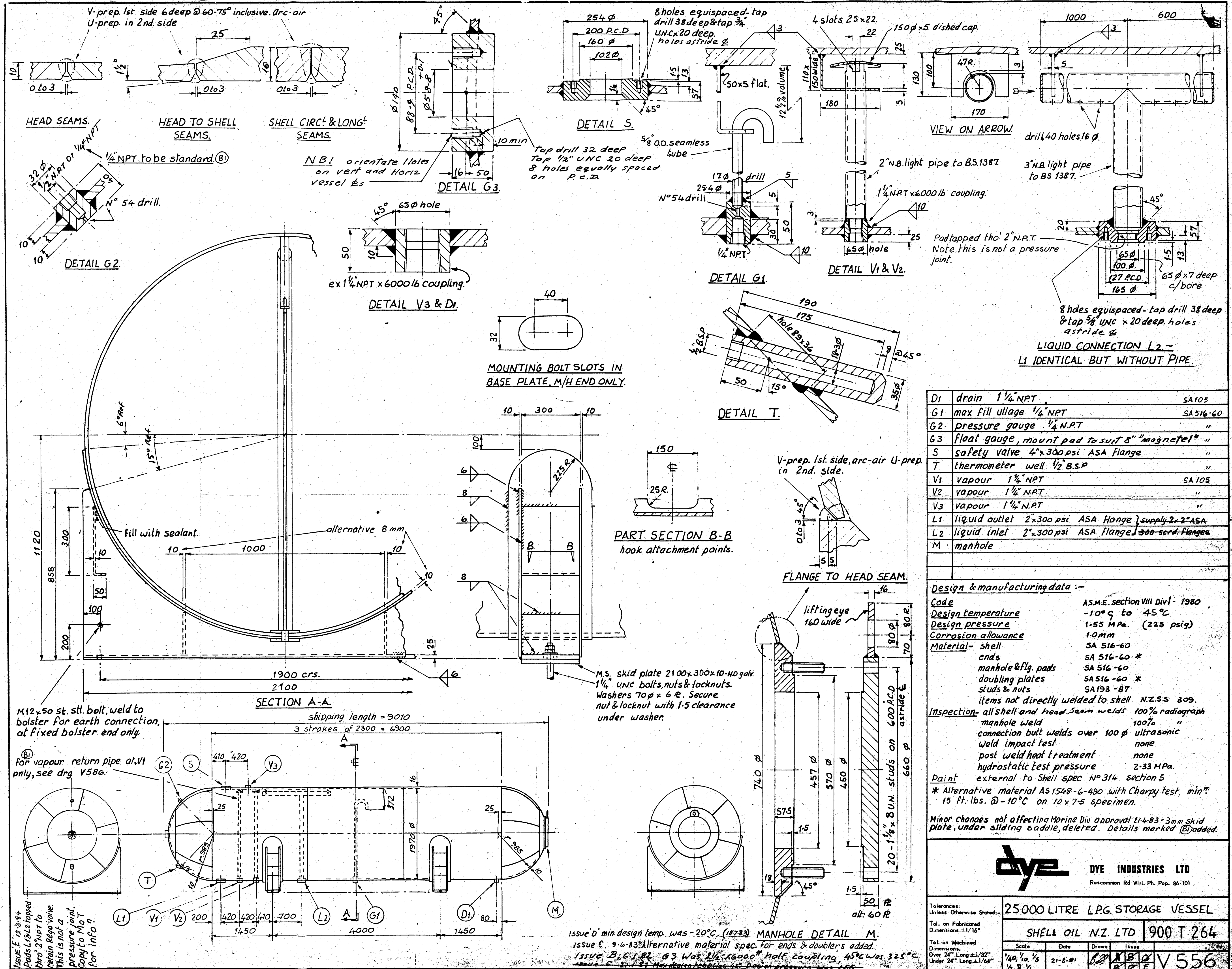
**Shell Companies in New Zealand**  
96 The Terrace Wellington

**LPG STANDARD**  
FOUNDATION, HOLDING DOWN BOLTS & SKID PLATE FOR 12 T  
NOM. VESSEL MANUFACTURER: DYE  
SIZE VESSEL NO

drawn: R A CAIGOU date: JUL 84  
checked: AS SHOWN date: 1.1.84  
structural check: [Signature]  
drawing number: 900 C 361



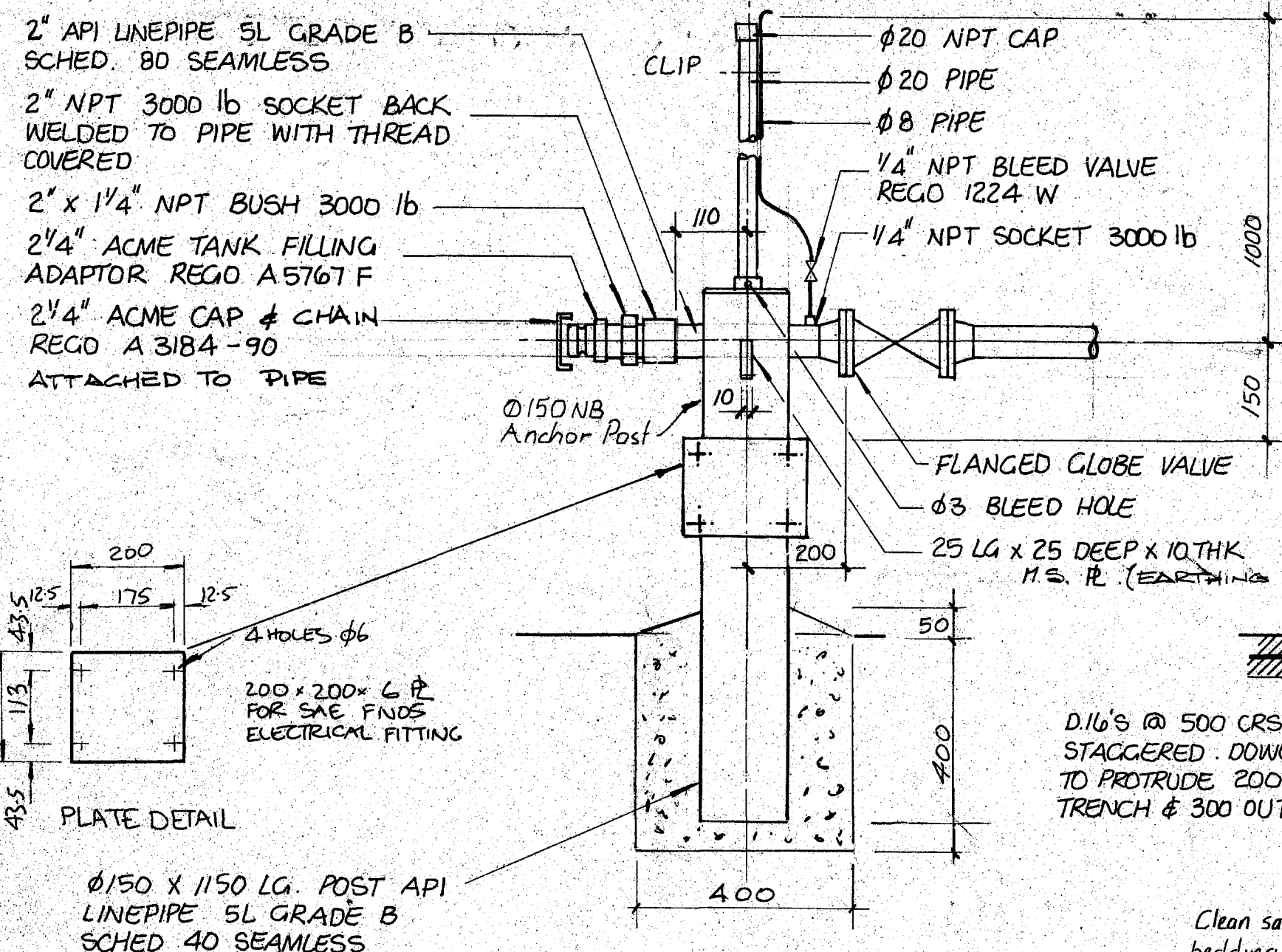




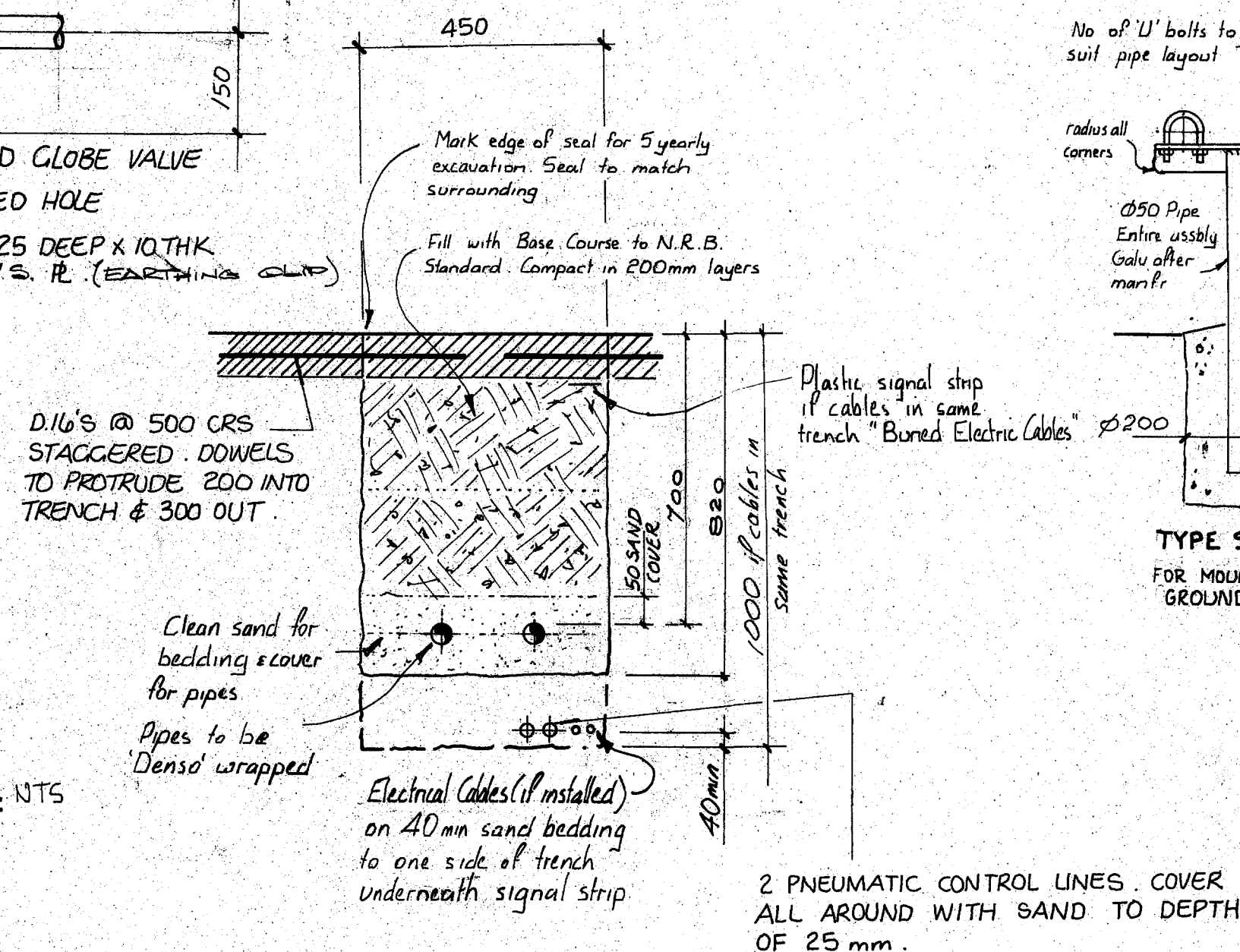




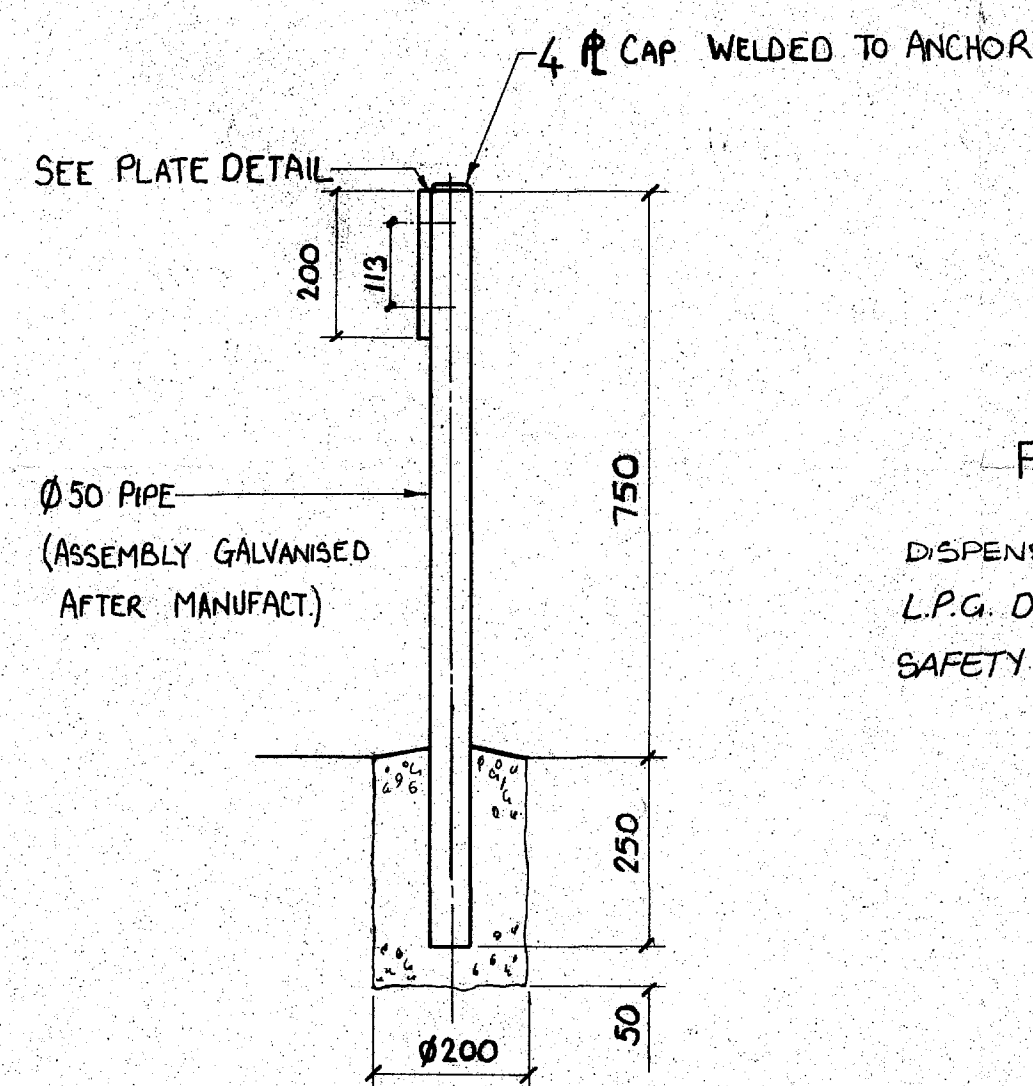




DETAIL 'A' ANCHOR & FILL POINT DETAIL NTS

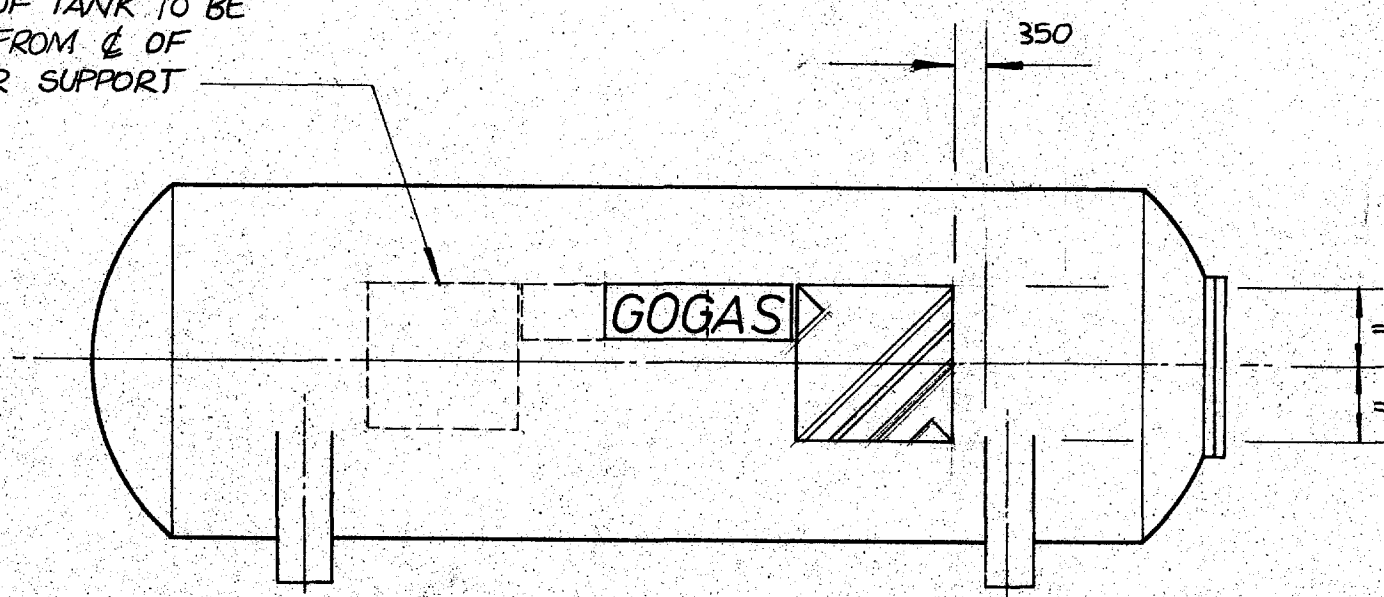


DETAIL 'B' TRENCH DETAIL

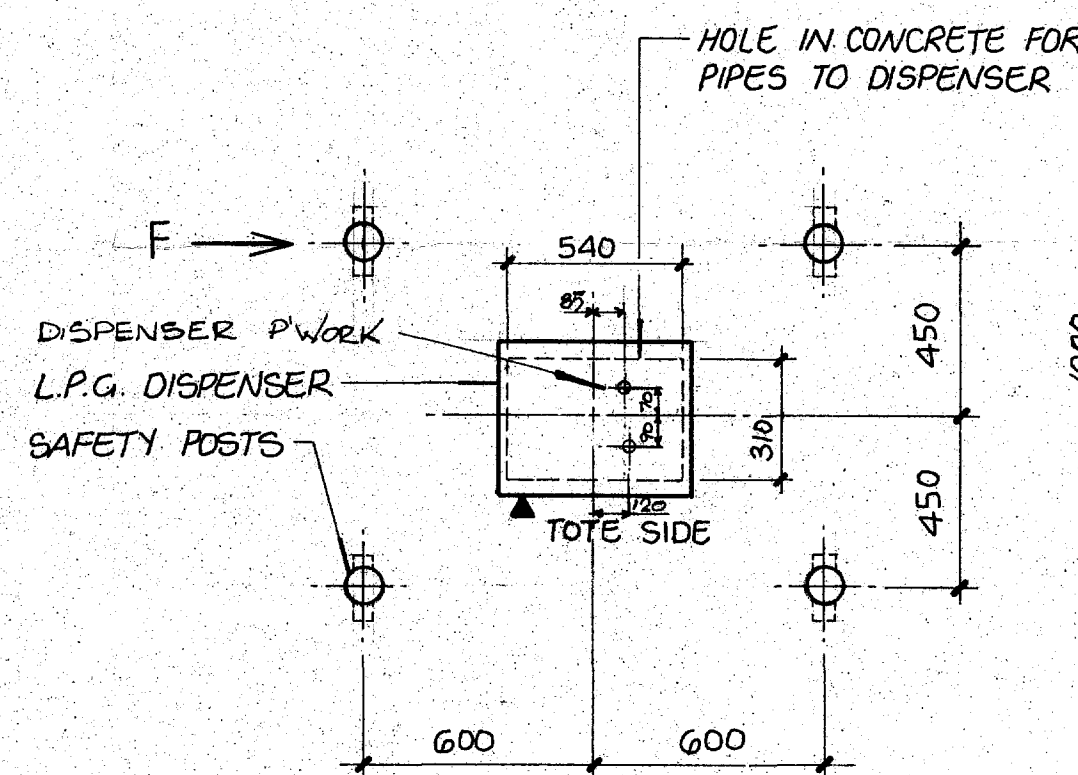


DETAIL D - ELECTRICAL FITTING POST

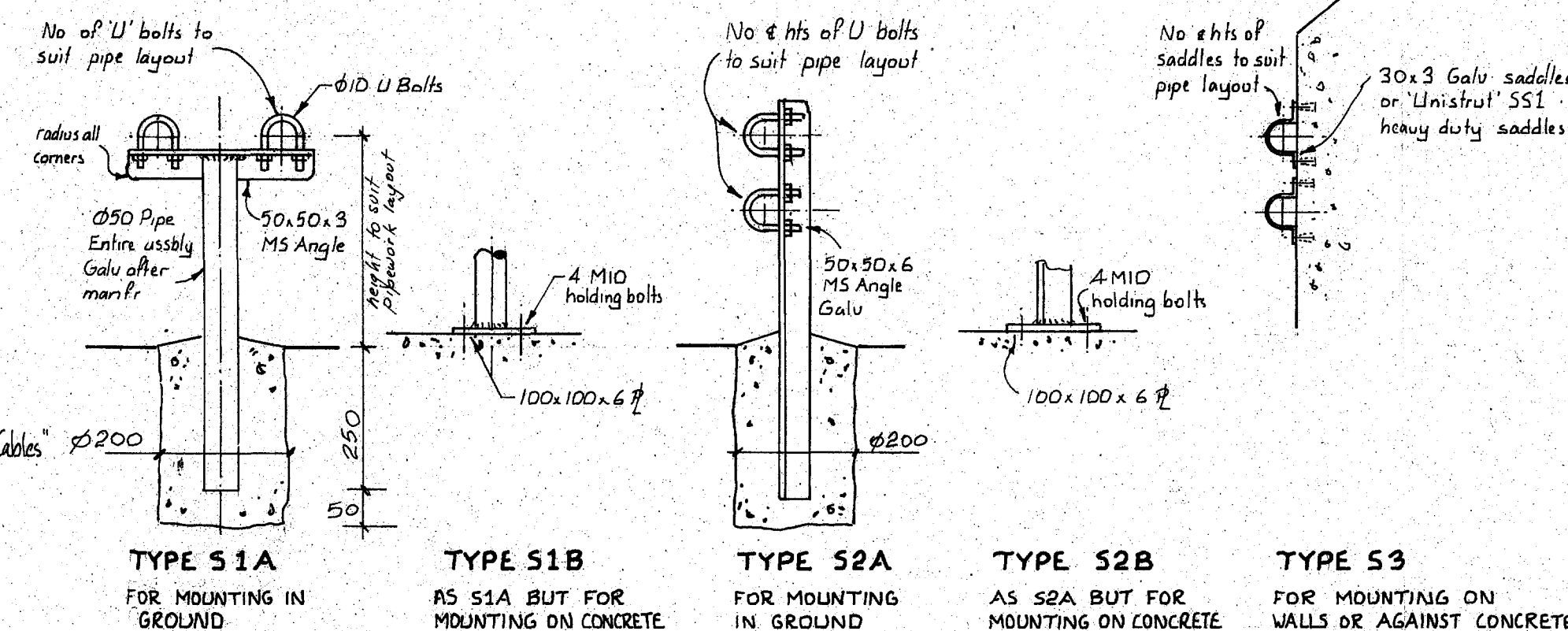
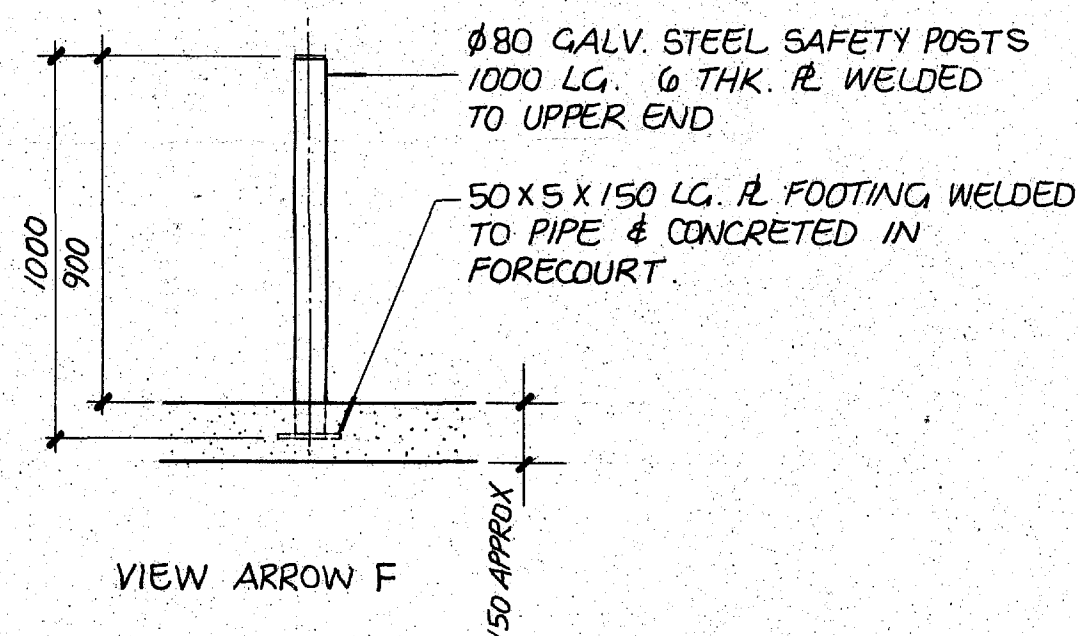
LABEL ON REVERSE  
SIDE OF TANK TO BE  
350 FROM C OF  
OTHER SUPPORT



POSITION OF TANK LABELS

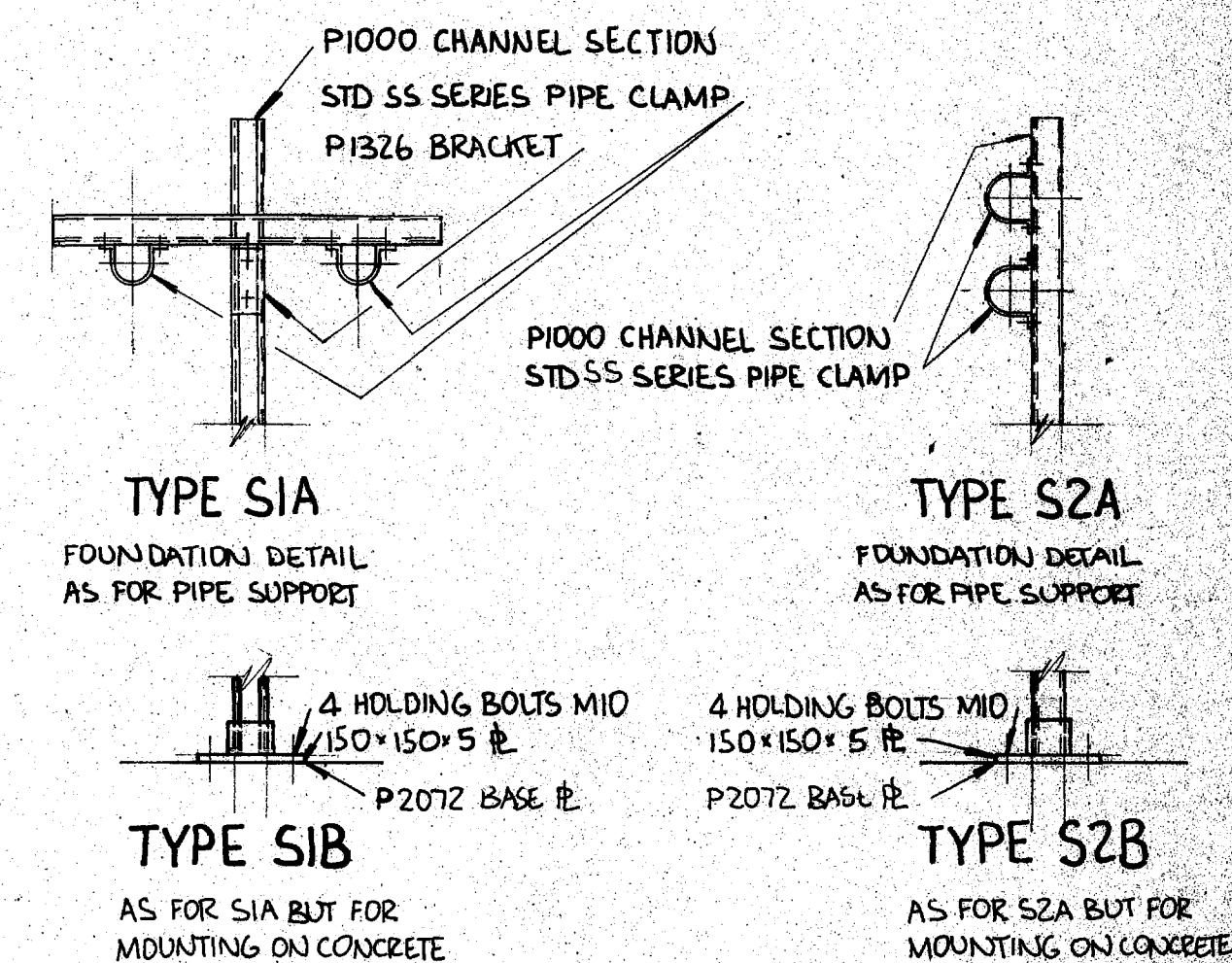


DETAIL F - PLAN OF DISPENSER  
SAFETY POSTS



DETAIL 'C' PIPE SUPPORTS

'UNISTRUT'  
ALTERNATIVE PIPE SUPPORT DETAIL



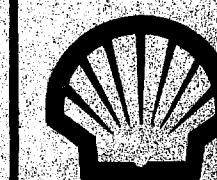
DETAIL 'C1'

M	ADDED POSITION OF TANK LABELS	16.11.84
L	PIPE LOCATION ADDED TO DISPENSER	18.5.84
K	GENERAL MODIFICATIONS	14.5.84
J	ADDED DETAIL F. DELETED DETAIL E	29.3.84
H	DETAIL E added	15.7.83
G	DETAIL 'A' REVISED	26.3.83
F	DETAIL 'B' MODIFIED FOR POSSIBLE ELECTRICAL CABLE INSTALLATION	23.3.83
E	DETAIL D ADDED	1.12.82
D	DEPTH OF TRENCH INCREASES BY 280mm. 700mm PIPE COVER SHOWN	30.4.82
C	ASAISO FLANGE IN ANCHOR DETAIL WAS ASA 300 & ELECTRICAL PL ADDED	8.4.82
B	DETAIL C1 ADDED	5.11.81
A	COPPER BOND LUG ADDED TO DETAIL A	15.10.81
ISSUE	amendments	date

Shell Companies in New Zealand

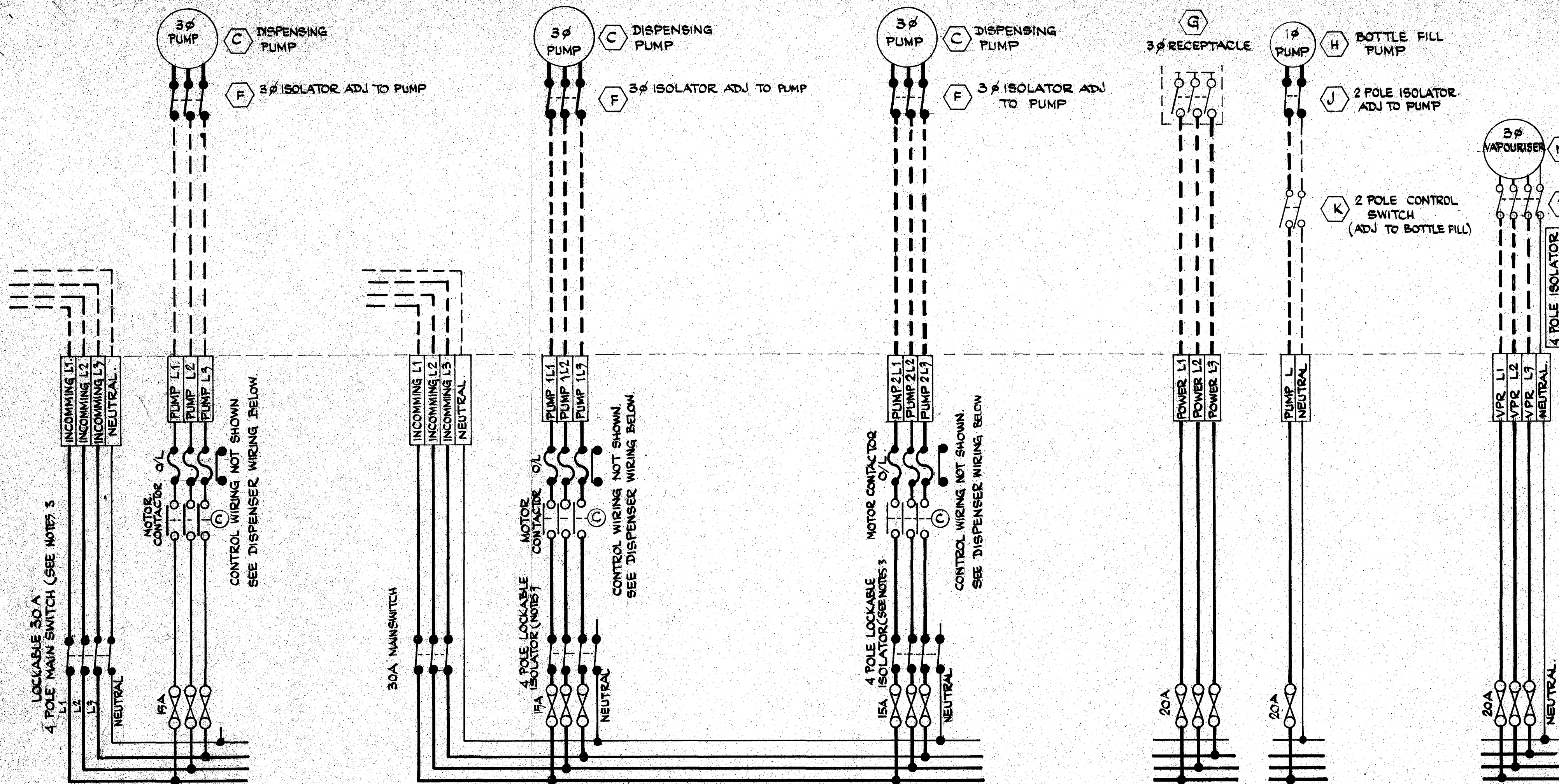
96 The Terrace Wellington

L.P.G. STANDARD  
PIPEWORK STANDARD DETAILS



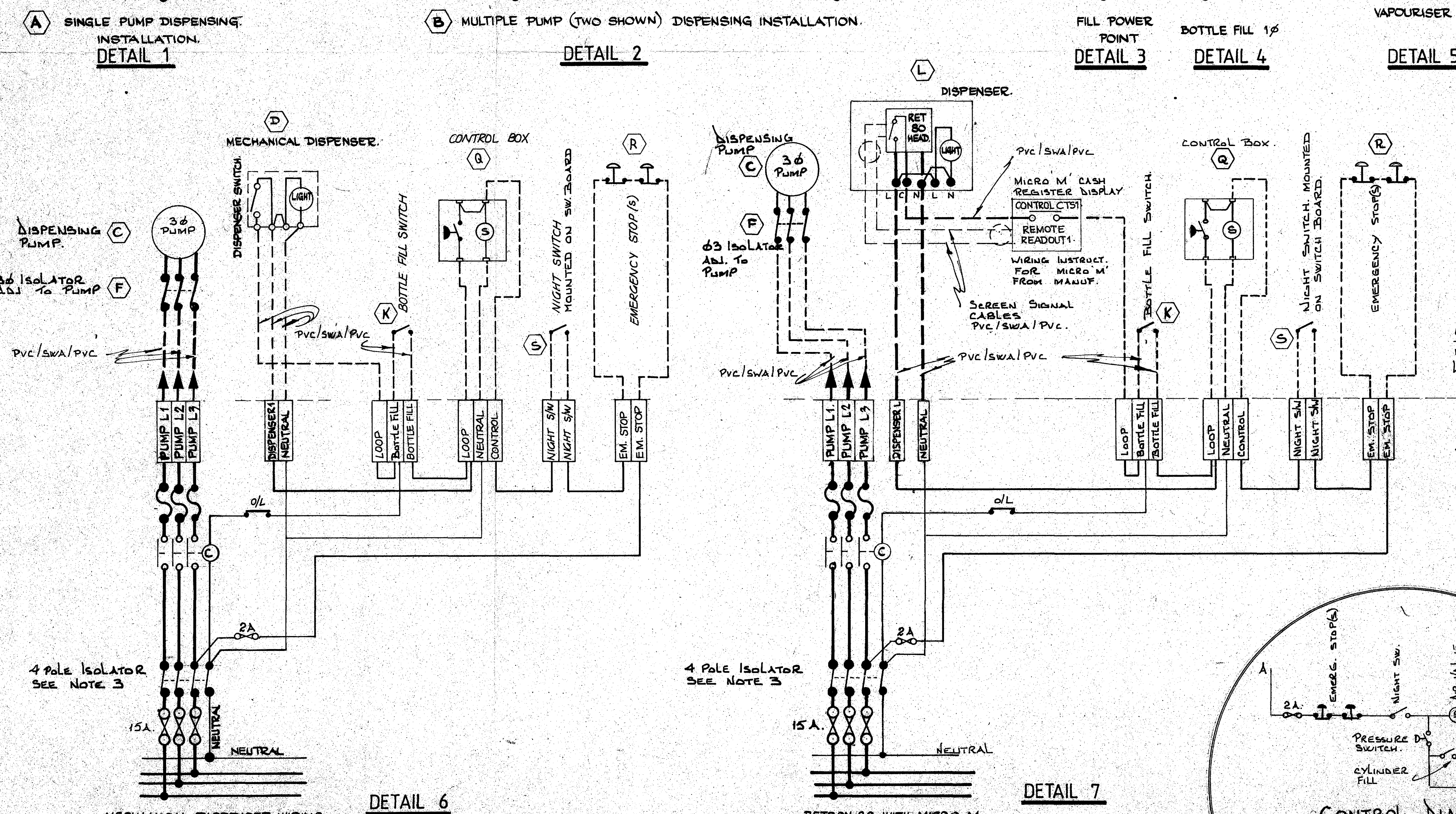
drawn Don Robertson	date 15.9.81	drawing number 900 P 267
checked [Signature]	date 19/7/83	issue K & M
scale	1/4 engineering manager	





- NOTES**
1. ALL ELECTRICAL WIRING & EQUIPMENT SHALL COMPLY WITH THE ELECTRICAL WIRING REGULATIONS 1976 & ALL CURRENT AMMENDMENTS.
  2. ALL WIRING IN HAZARDOUS ZONES AS DEFINED IN MP6105: 1976 "ELECTRICAL WIRING IN HAZARDOUS LOCATIONS" SHALL COMPLY WITH MP6105 REQUIREMENTS FOR CLASS 1 ZONE 1.
  3. MP6105 REQUIRES THE NEUTRAL CONDUCTOR TO BE INSTALLED ALONG WITH THE LINE CONDUCTORS, (SHELL CO. METHOD PREFERRED) OR REMOVABLE LINK ON THE NEUTRAL. ALTERNATIVE TO ISOLATORS AND FUSES IS TO PROVIDE CIRCUIT BREAKERS.
  4. WHERE A NEW MAINS SUPPLY IS TO BE INSTALLED THE MAIN SWITCH SHALL BE 4 POLE AND LOCKABLE (I.E. NEUTRAL IS BROKEN).
  5. ISOLATORS SHALL BE RATED FOR OCCASIONAL MOTOR STARTING DUTY.
  6. EXTERNAL WIRING SHALL BE GENERALLY RUN IN SERVICES TRENCH BELOW AND AS FAR AS PRACTICABLE FROM THE PIPEWORK.

SCHEDULE OF ELECTRICAL EQUIPMENT. (ITEMS NOT REQUIRED MAY BE DELETED)					
ITEM	QTY	HAZARD ZONE	POWER	MANUFACTURER & MODEL	NOTES
A SINGLE PUMP SWITCHBOARD	1	SAFE	30A 3φ	ELECTRICAL CONTRACTOR	
B MULTIPLE PUMP SWITCHBOARD	1	SAFE	30A 3φ	ELECTRICAL CONTRACTOR	
C 3φ DISPENSING PUMP		CLASS 1 ZONE 1	400V 3φ		SHELL CO. SUPPLY
D MECHANICAL DISPENSER		CLASS 1 ZONE 1	230V 1φ		SHELL CO. SUPPLY
F 3φ PUMP ISOLATOR (ADJ. PUMP)		CLASS 1 ZONE 1	400V, 3φ, 15A	SAE FNS 51-1 OR CROUSE HINDS DSAB 1010 & DSA9-A203	SHELL CO. SUPPLY
G 3φ FLAMEPROOF POWER RECEPTACLE	1	CLASS 1 ZONE 1	400V, 3φ, 20A	S.A.E. F.N.O.S.	SHELL CO. SUPPLY
H 1φ BOTTLE FILL PUMP		CLASS 1 ZONE 1	230V, 1φ		SHELL CO. SUPPLY
J 1φ ISOLATOR		CLASS 1 ZONE 1	230V, 1φ, 20A	S.A.E. FNS 15-1 OR CROUSE HINDS DSA 9-169 & DSAB 1010	SHELL CO. SUPPLY
K 1φ CONTROL SWITCH		CLASS 1 ZONE 1	230V, 1φ, 20A	S.A.E. F.N.S. 15-1 OR CROUSE HINDS DSA 9-169 & DSAB 1010	SHELL CO. SUPPLY
L DISPENSER		CLASS 1 ZONE 1	230V, 1φ		SHELL CO. SUPPLY
M MICRO-M-REMOTE READOUT CONSOLE	1	SAFE	230V, 1φ	PRODUCTION ENGINEERING CO.	SHELL CO. SUPPLY
N VAPOURISER		CLASS 1 ZONE 1	400V 3φ K.W.	SAM DICK POWER	SHELL CO. SUPPLY
P 4 POLE ISOLATOR (ADJ. VAPOURISER)		CLASS 1 ZONE 1	400 3φ N 20A	SAE FNS 51-1 OR CROUSE HINDS DSAB 1010 & DSA9-A203	SHELL CO. SUPPLY
Q EMERGENCY SHUT OFF CONTROL BOX	1	SAFE	230 V 1φ	MEWANS	SHELL CO. SUPPLY
R EMERGENCY STOP BUTTON	1 or 2	SAFE	230 V	TELEMECANIQUE	SHELL CO. SUPPLY
S NIGHT SWITCH	1	SAFE	230 V	ELECTRICAL CONTRACTOR	



**KEY**

—	400V IN BOARD	—	LOW VOLTAGE IN BOARD
---	" FIELD	---	" FIELD
---	230V IN BOARD	---	NORMALLY OPEN CONTACTS
---	" FIELD	---	" CLOSE

900E261	O	AMMENDED DISPENSER WIRING. ADDED ITEM R. NOTE COL. AMMENDED.	10.9.84
"	N	ADDED PNEUMATIC SYSTEM	21.6.84
"	M	ADDED PRESSURE OPERATED SW. (Q)	17.5.84
"	L	MINOR MODS. TO ELECTRICAL SCHEDULE (MANUF. & MODEL)	9.5.84
900E261	K	AMMENDED SCHEDULE OF ELECTRICAL EQUIP. DELETED LCM4 WIRING DIAGRAM	30.4.84
900E261	J	REDRAWN.	1.2.84
900E261	H	ADDED BOTTLE FILL CONNECTIONS	1.11.83
"	G	MINOR REVISIONS	22.7.83
"	F	Q REVISED.	23.3.83
"	E	BOTTLE FILL SWITCH ADDED TO LCM4 ELECTRONIC DISPENSER WIRING	20.12.82
"	D	VAPOURISER & ITEM N & P ADDED	2.7.82
"	C	(L) RETRON 80 DISPENSER & MICRO M ADDED	23.3.82
900E261	B	REDRAWN FOR "ELECTRONIC DISPENSER & PROVISION FOR ISOLATION ADJ. TO PUMP	19.1.82
DRAWING	900E	amendments	date

**Shell Companies in New Zealand**  
96 The Terrace Wellington

**L.P.G. STANDARD ELECTRICAL SCHEMATIC**

drawn **A.R.Q. THOMSON** date **1.2.84**  
checked **A.R.Q. Thomson** date **2.4.84**  
scale **1:1** engineering manager **P.O. Siddle**

drawing number **900 E 261**  
issue **1 of 1**

