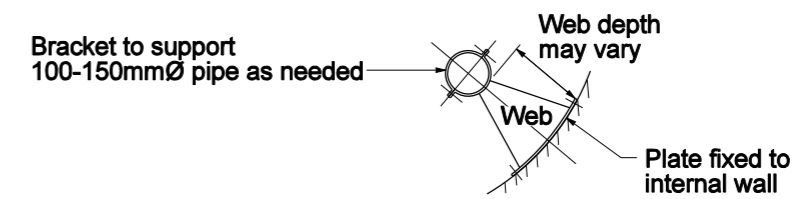
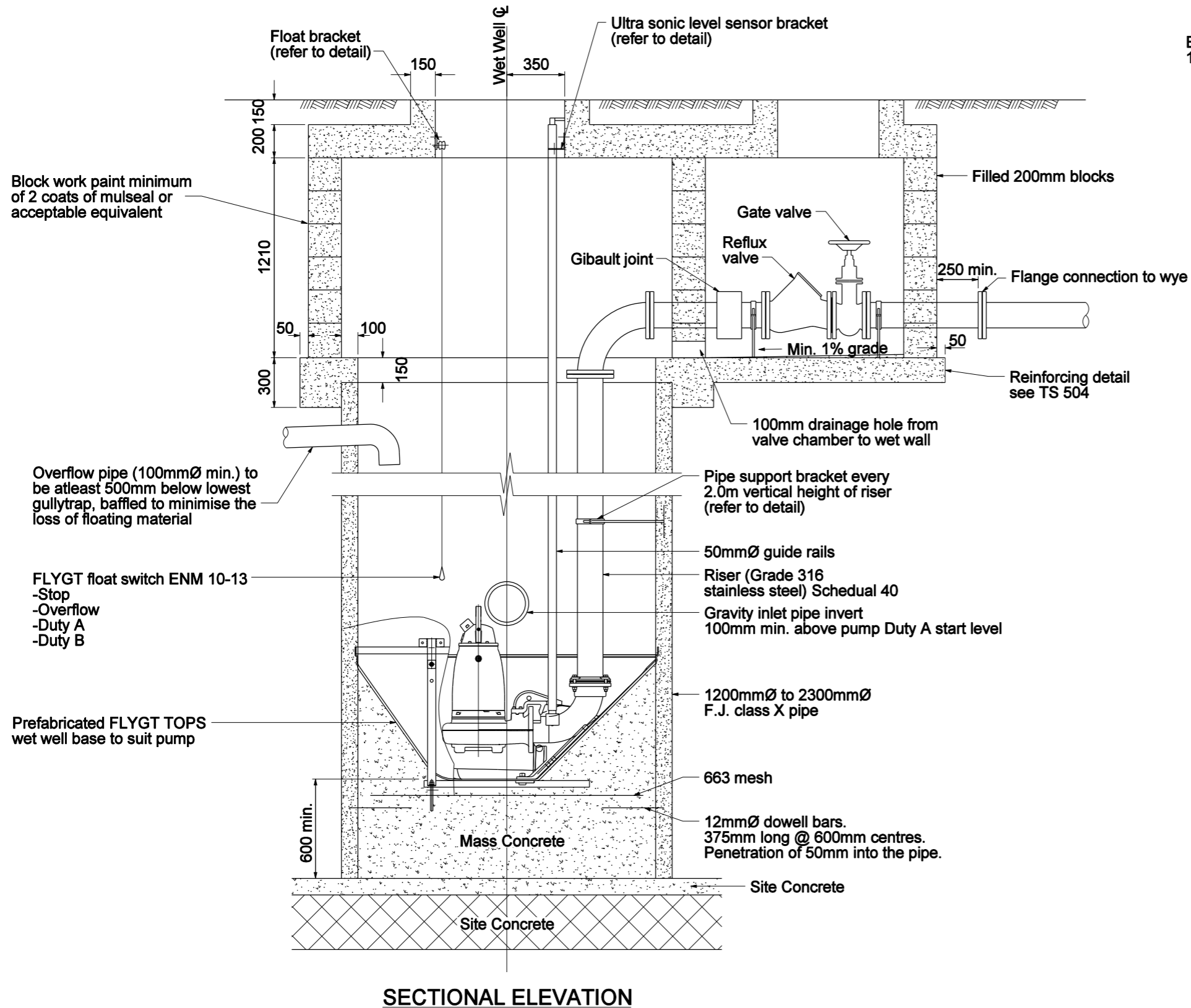


NOTES

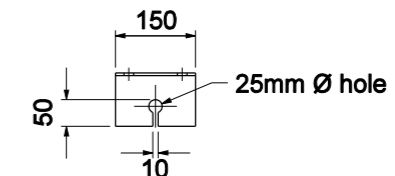
1. The detail on this drawing is typical only.
2. Pump Station offset is measured from the driveway centreline to the centreline of the furthest pump.
3. Area around pump station shall be graded to prevent surface water flowing onto or over pump station cover slabs.
4. Landscaping may be required dependent upon site location and area available.
5. Full fencing is not required if the pump station is located within a reserve and bollards may be used of a design approved by HCC. Otherwise if pump station is located next to residential property, a 1.8m high close boarded timber fence is to be constructed.

SPS CONCRETE - SECTION

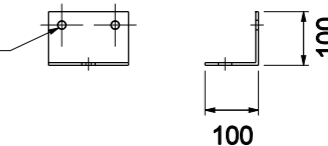


PIPE SUPPORT BRACKET DETAIL

Construct from 5mm stainless steel

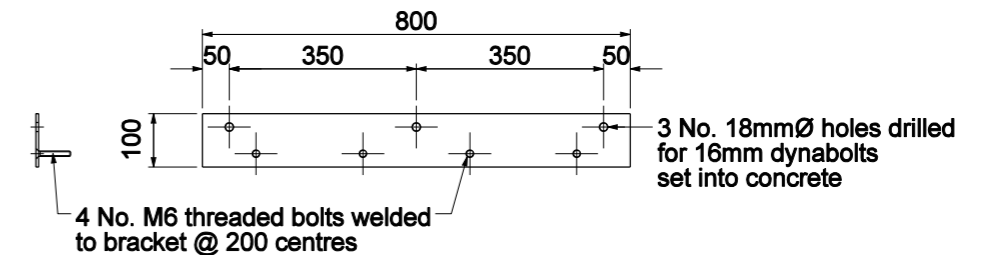


2 No. 18mmØ holes drilled for 16mm dynabolts set into concrete



ULTRASONIC SENSOR BRACKET DETAIL

Construct from 100 x 100 x 6mm E.A. 316 stainless steel

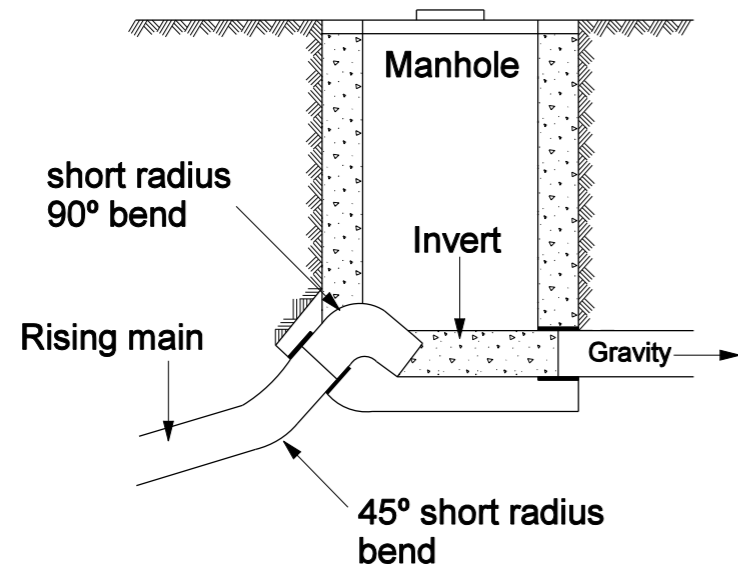


FLOAT BRACKET DETAIL

Construct from 5mm stainless steel

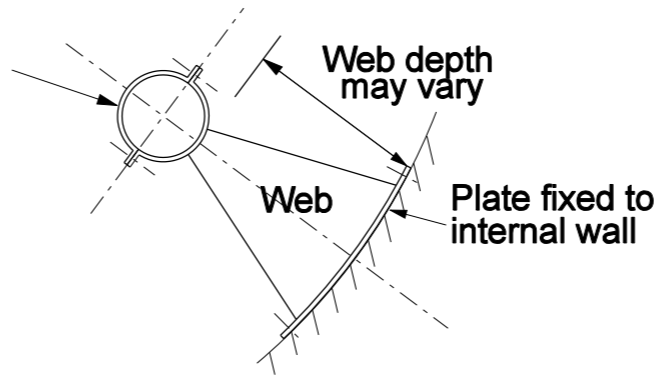
NOTES:

1. Valve chambersized to suit valves. Prior approval of dimensions by HCC Engineer required.
2. Refer to drawing TS 504 for steel reinforcing details.

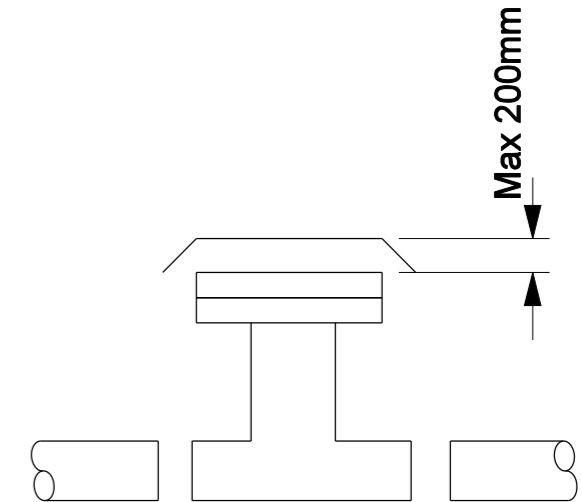


ENTRY INTO RECEIVING MANHOLE

Bracket to support 100 - 150 dia pipe as needed



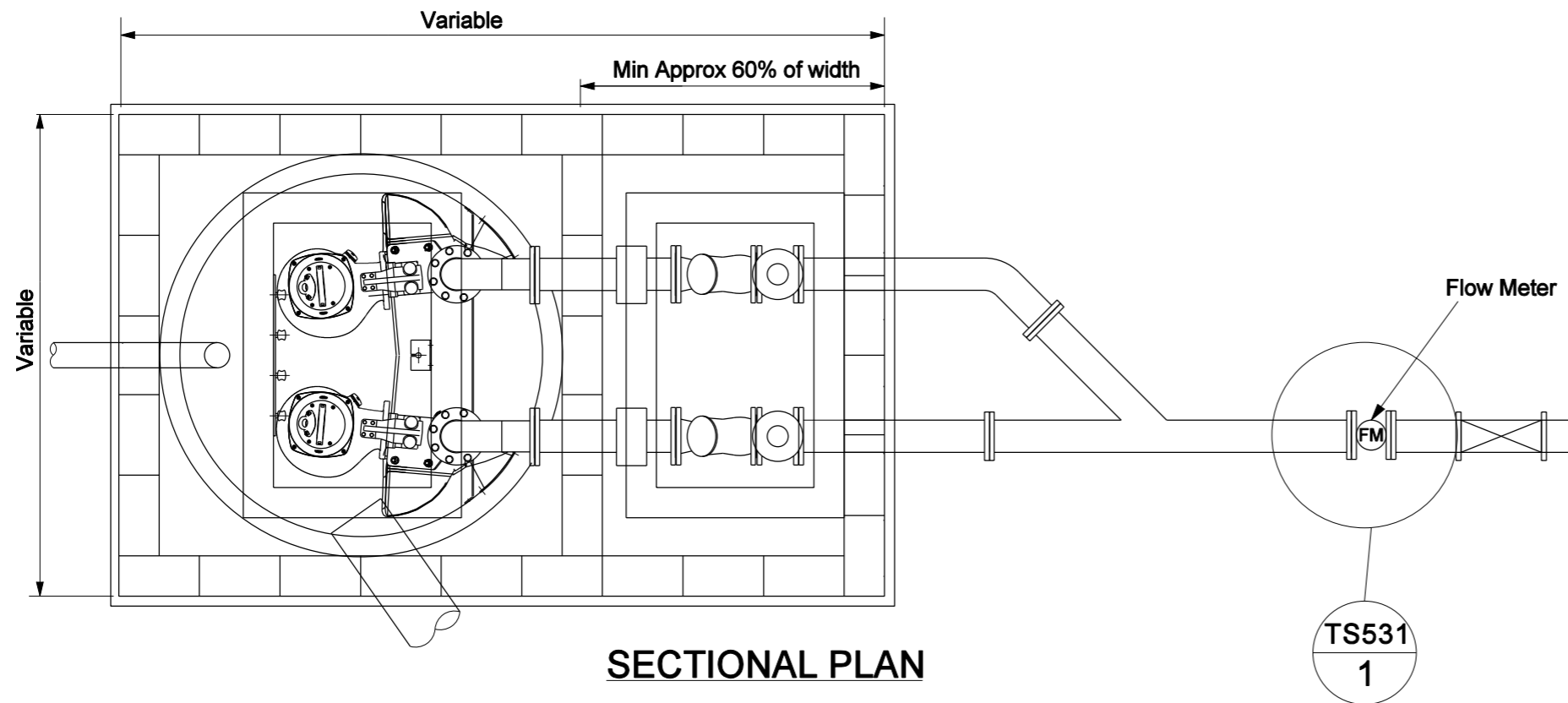
BRACKET DETAIL
Construct from 5 mm stainless steel.



Vertical Equal Tee with branch flanged and blank plate

EMERGENCY DISCHARGE MANHOLE DETAIL

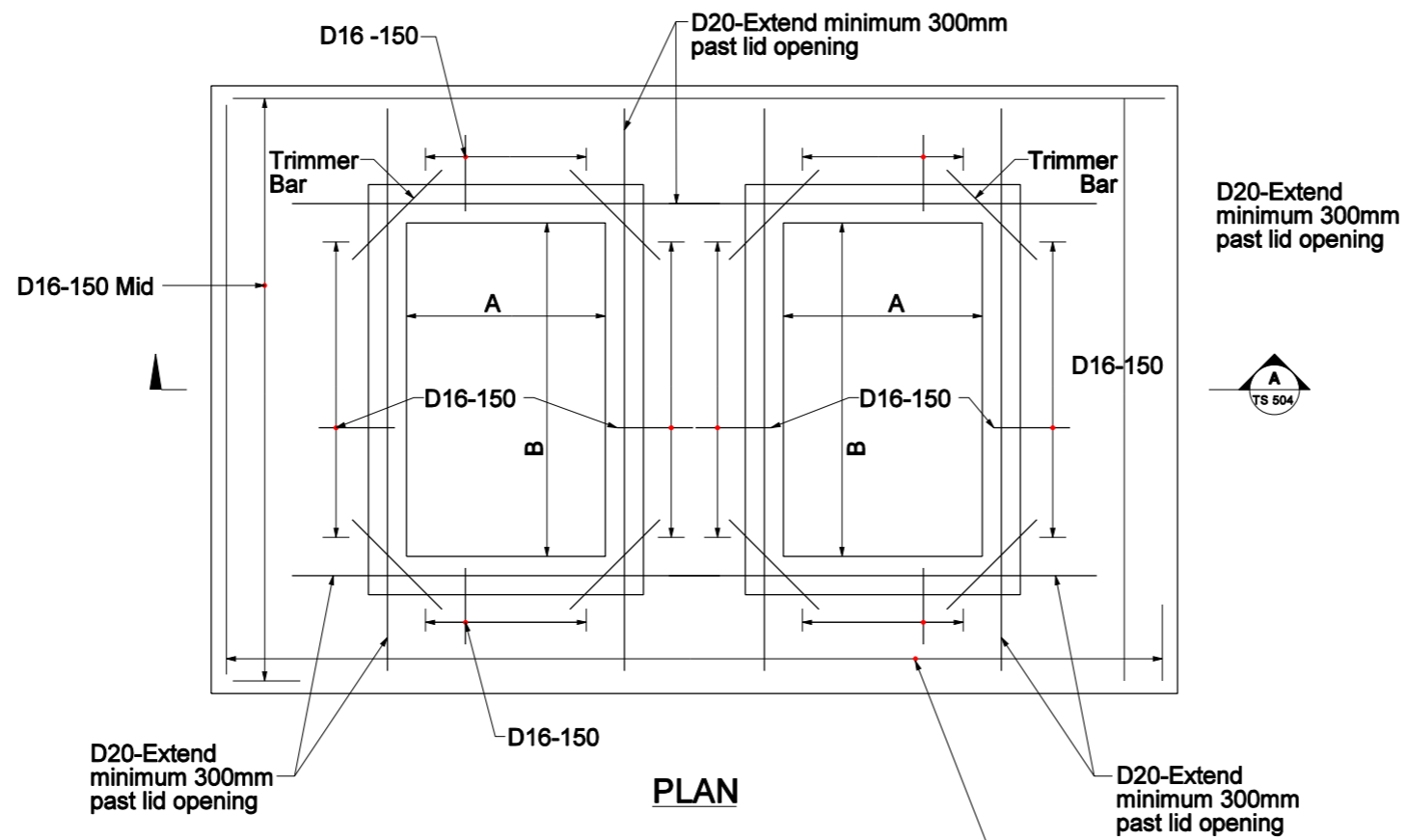
Emergency Discharge Manhole 1050 Ø (See Detail)
Only on pump stations with flow over 20l/s after flow meter



SECTIONAL PLAN

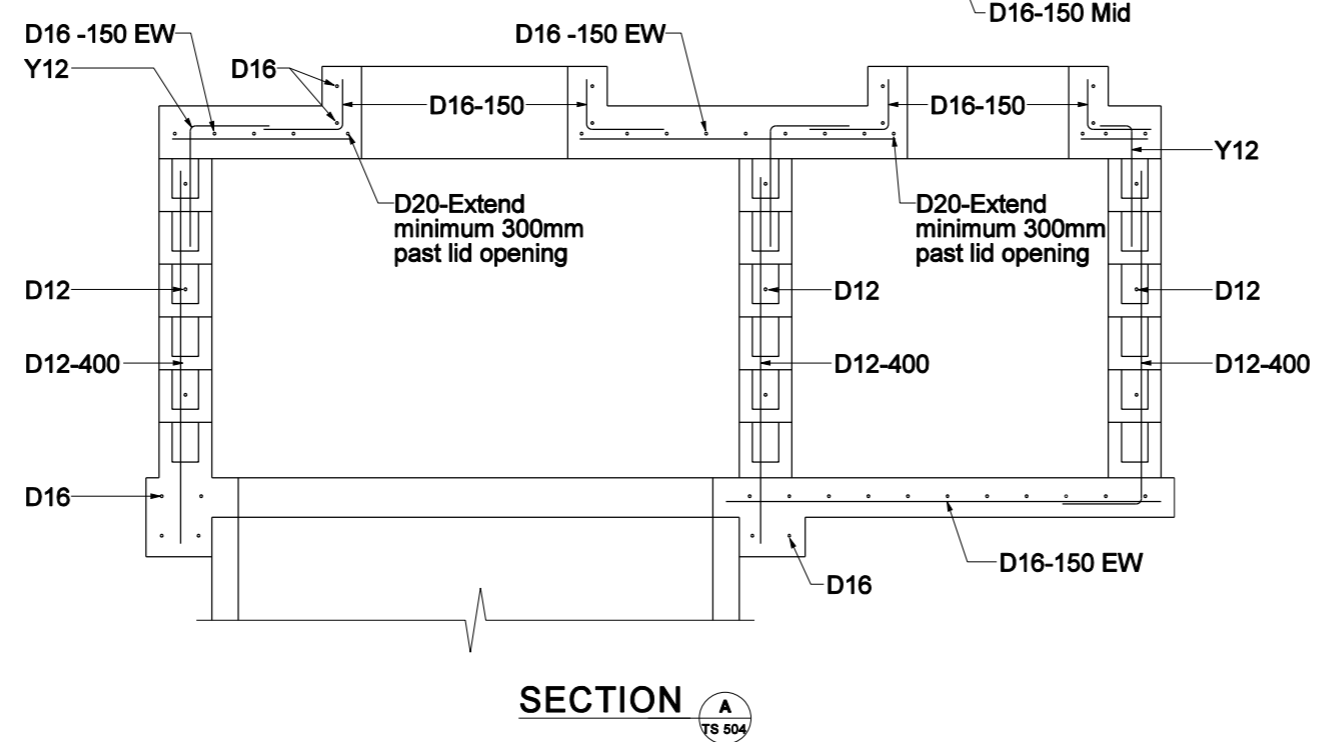
NOTES:

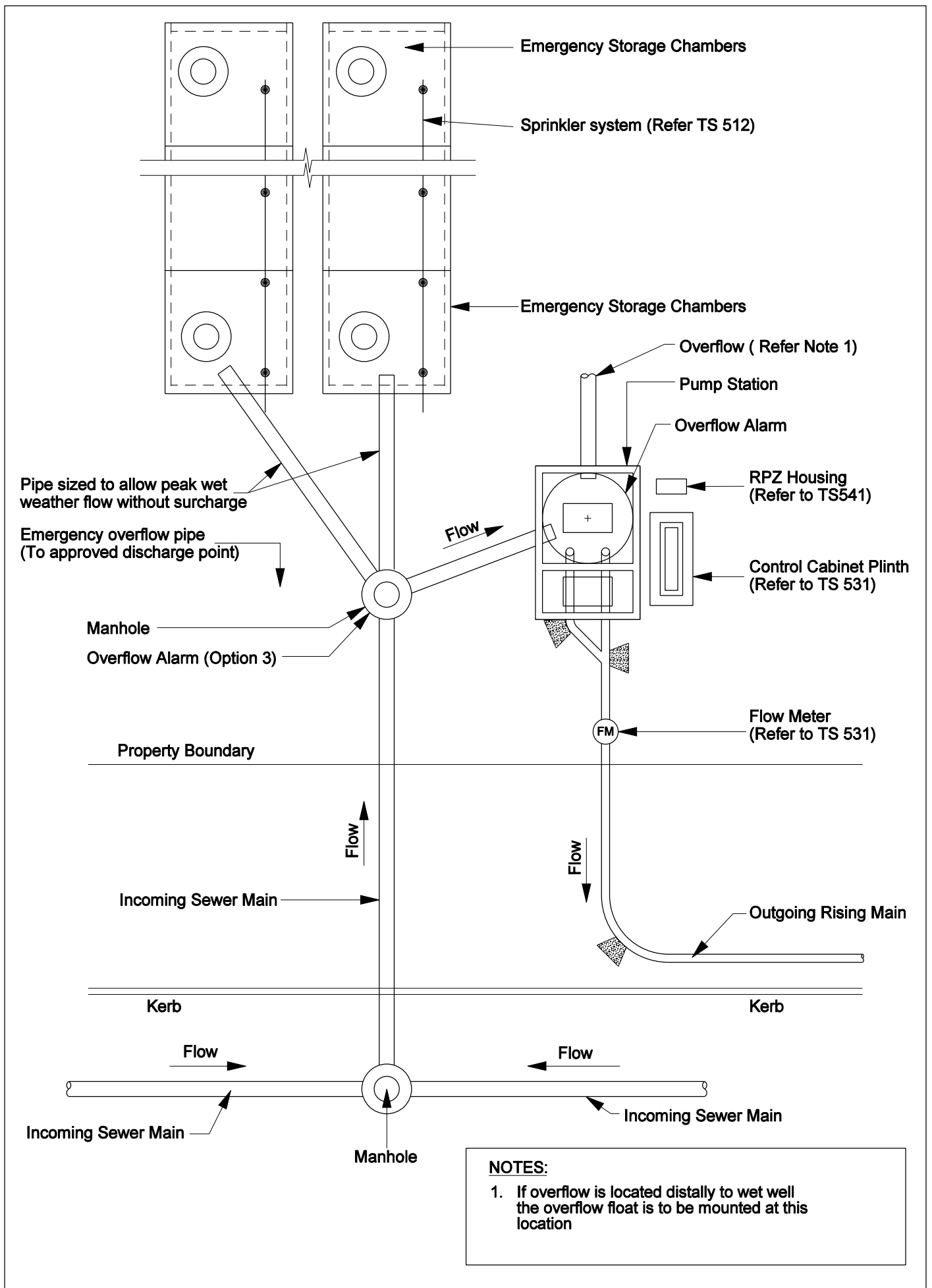
1. Plans shall include a site plan showing all relevant information, including overflow, rising main, services, cabinet location, and hose point.
2. Control cabinet is to be constructed as shown on Plan TS 530.
3. Covers to openings refer plan TS 520, 521, 522.
4. Refer to Pump Specifications in the Development Manual for other relevant information.

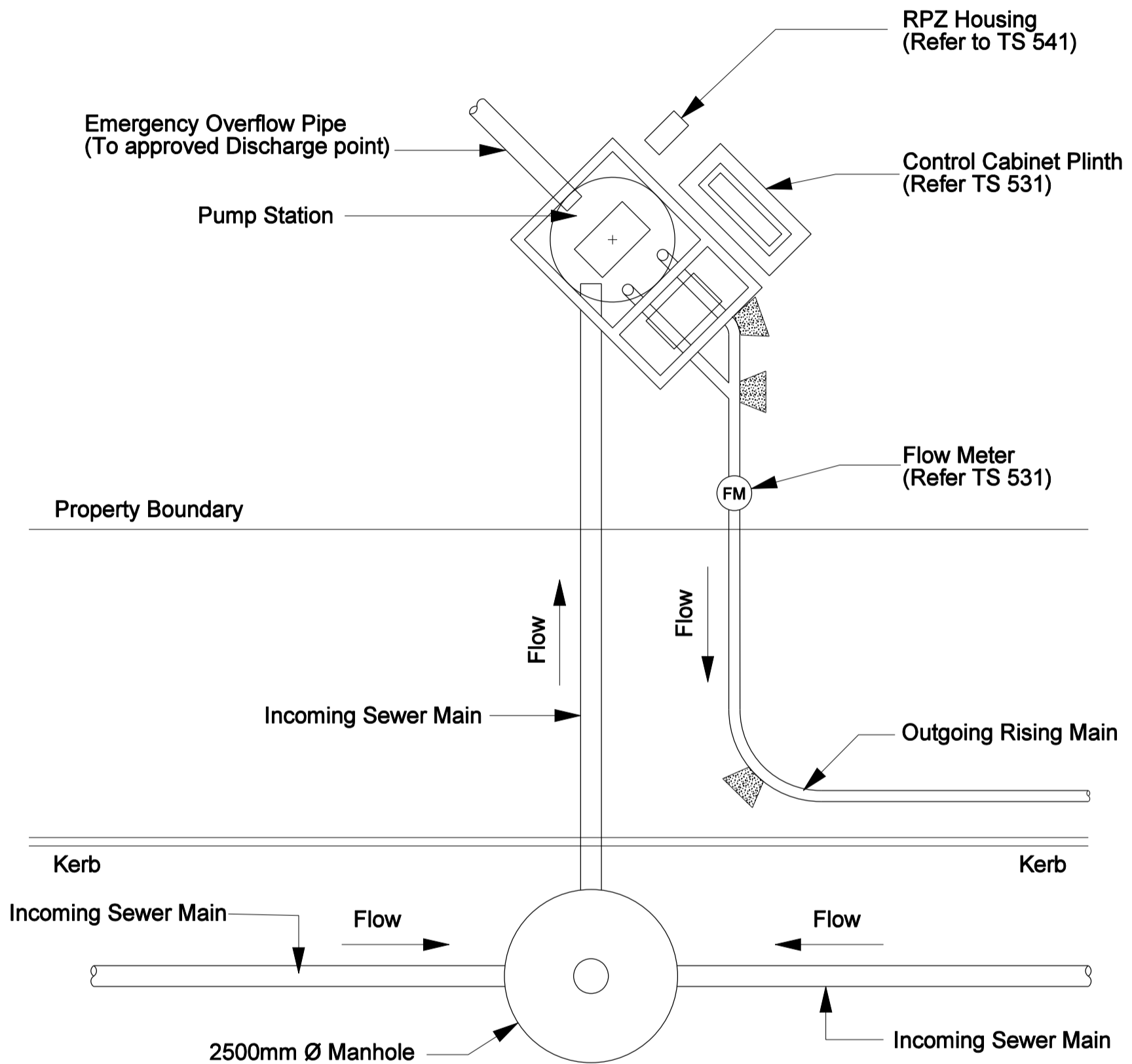


LID OPENING DIMENSIONS		
PUMP TYPE	DIMENSIONS (mm)	
	A	B
3085 & 3102	900	1400
3127 & 3153	980	1600
3171	1100	1600

NOTES:
 1. Minimum lap length 300mm for all steel

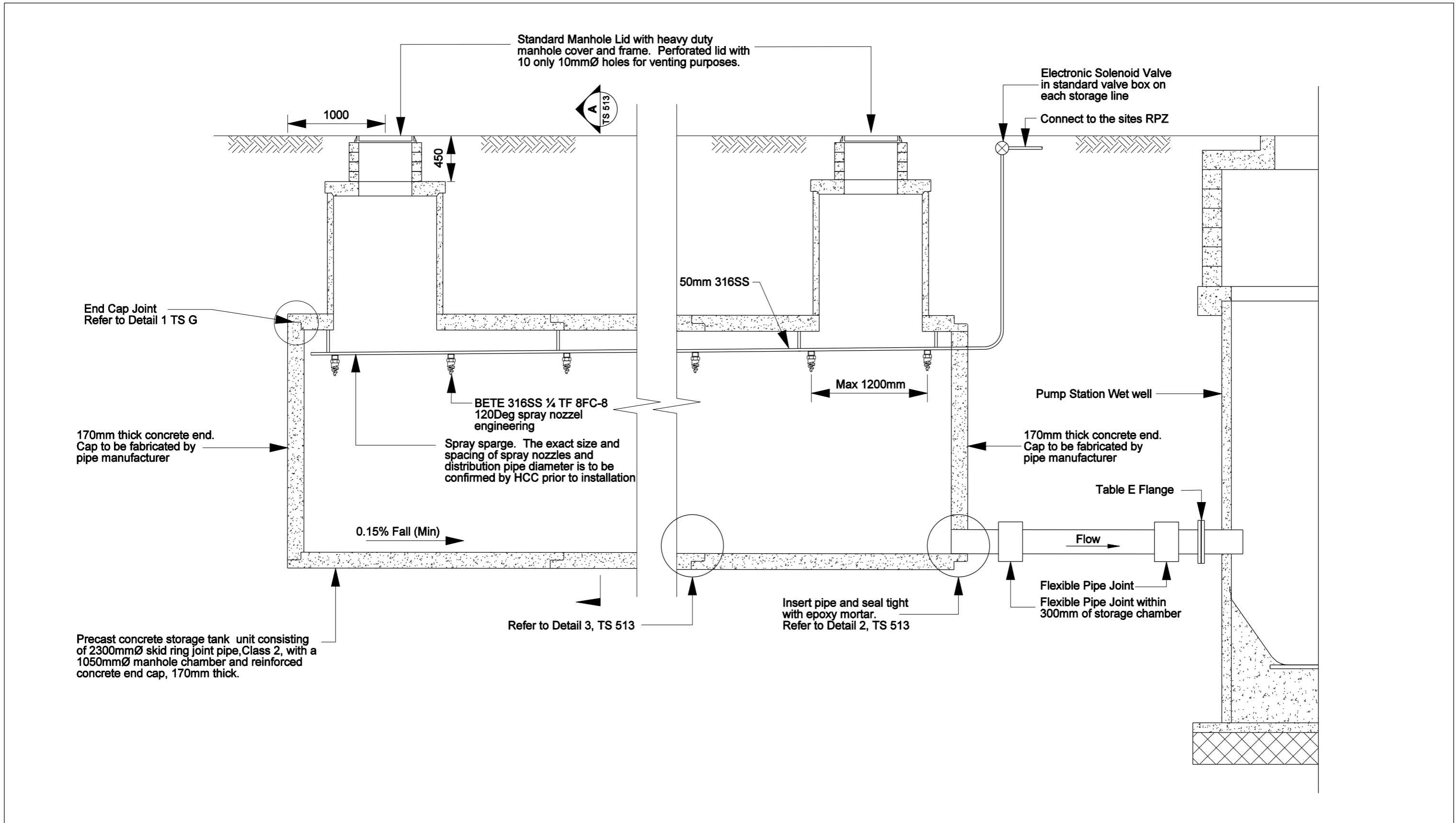


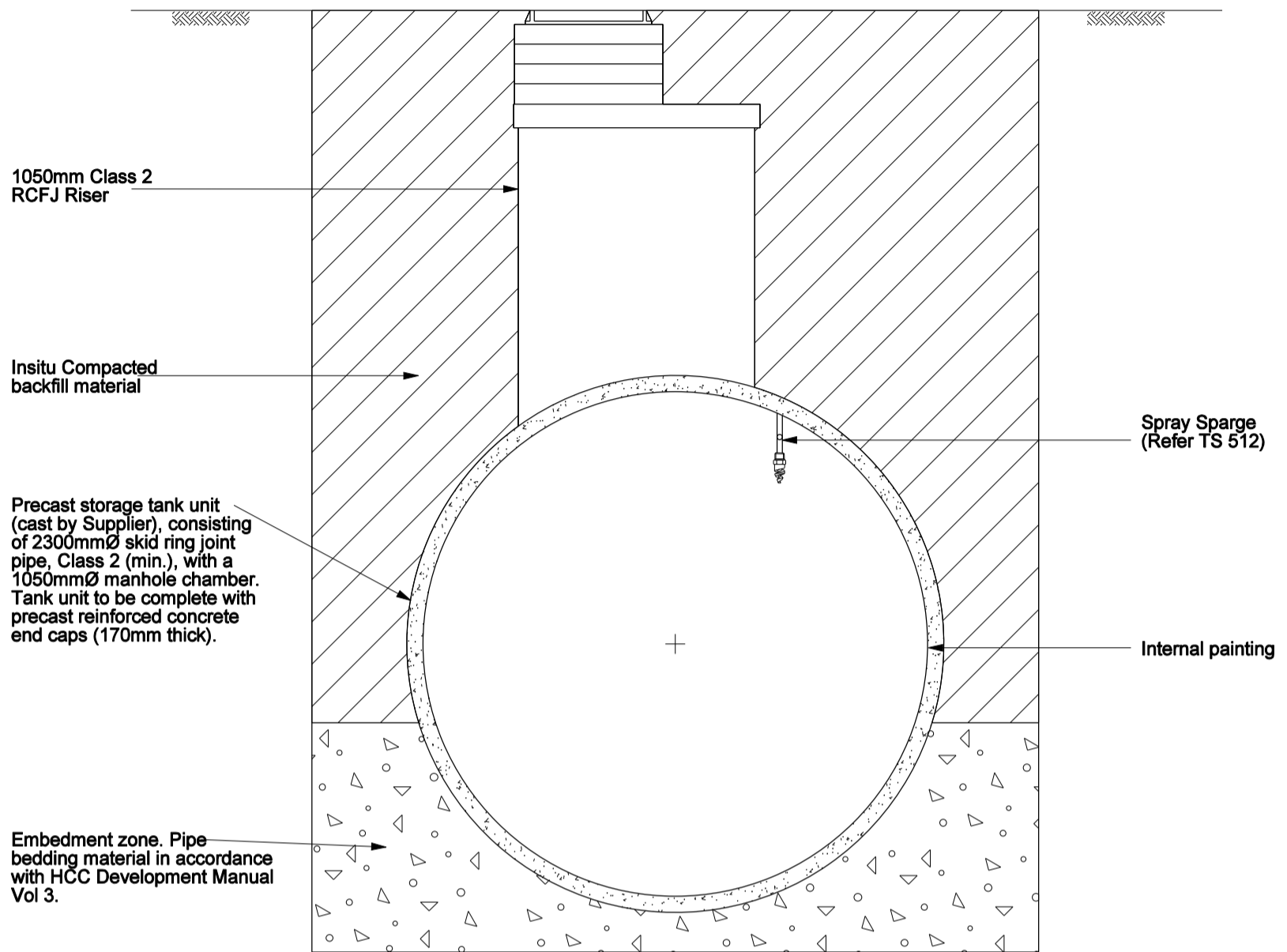




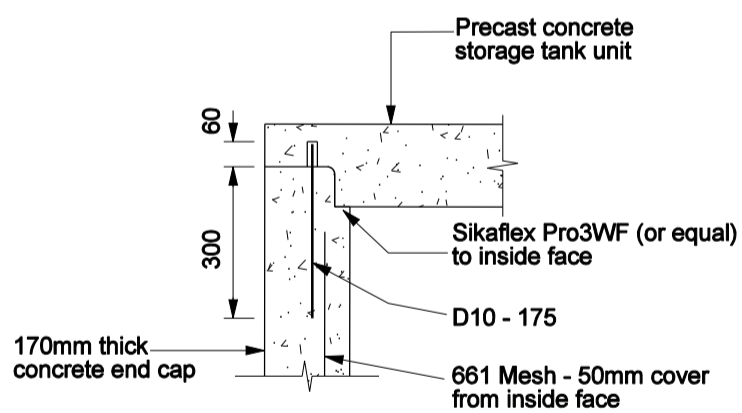
NOTES:

1. If overflow is located distally to wet well the overflow float is to be mounted at this location



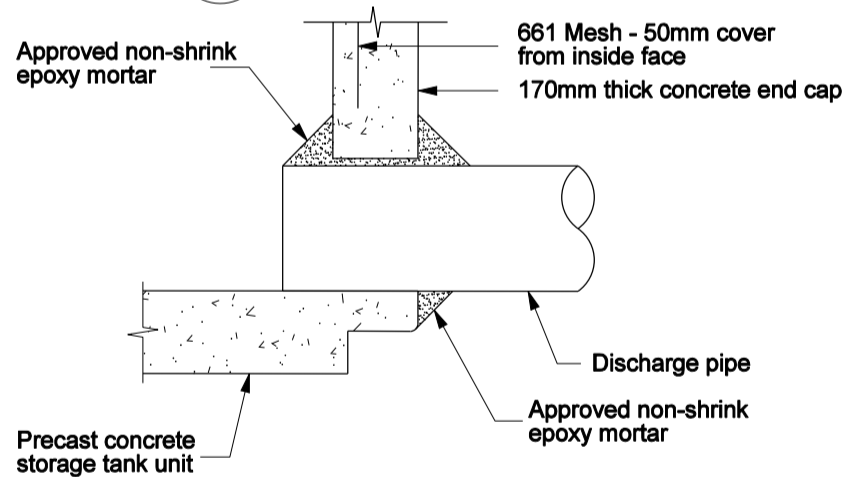


SECTION A
TS 512

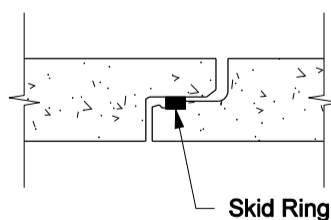


DETAIL 1

(Concrete Strength 35MPa @ 28 Days)

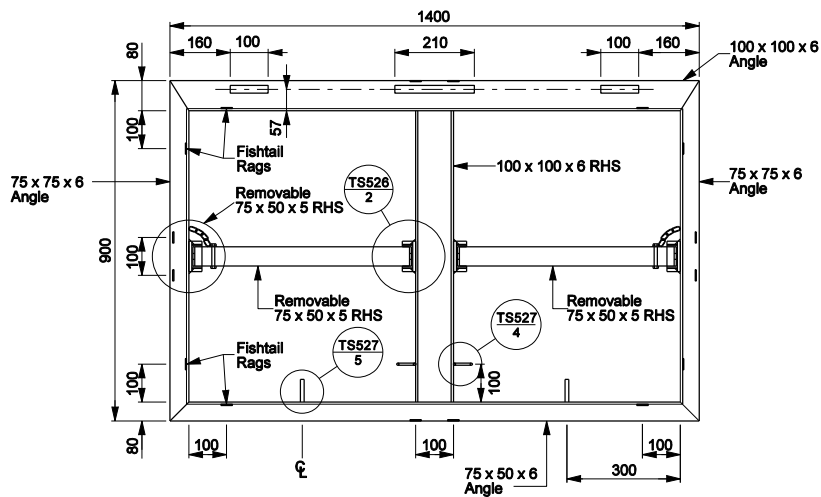


DETAIL 2

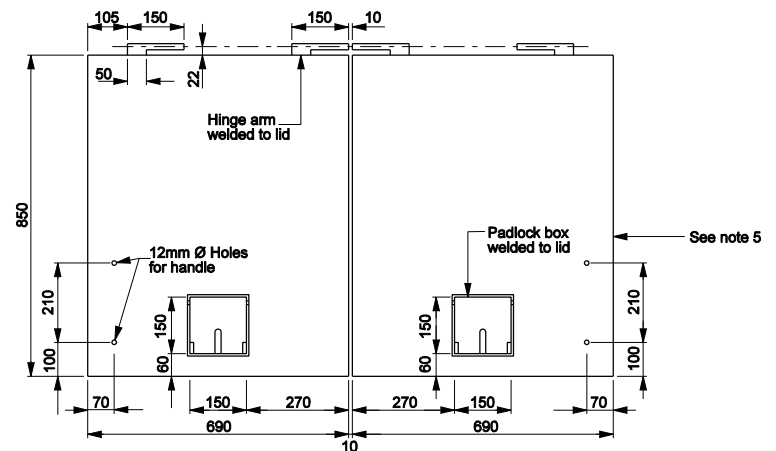


DETAIL 3

(Concrete Strength 35MPa @ 28 Days)



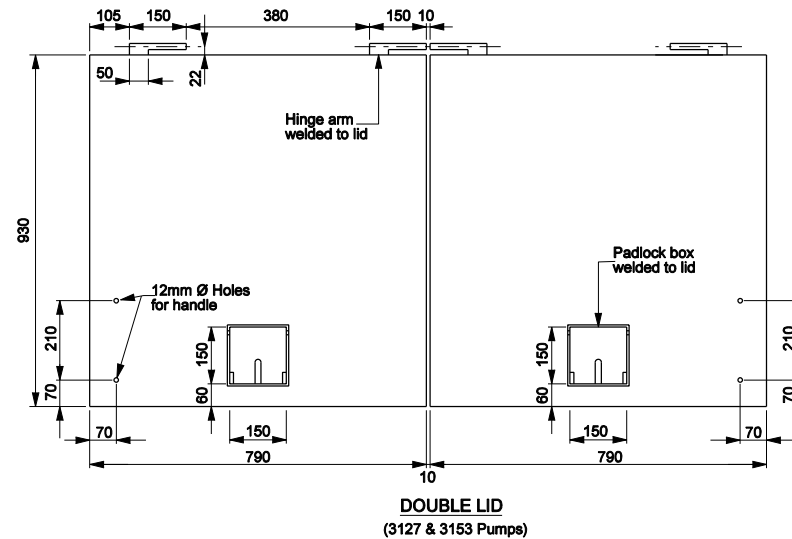
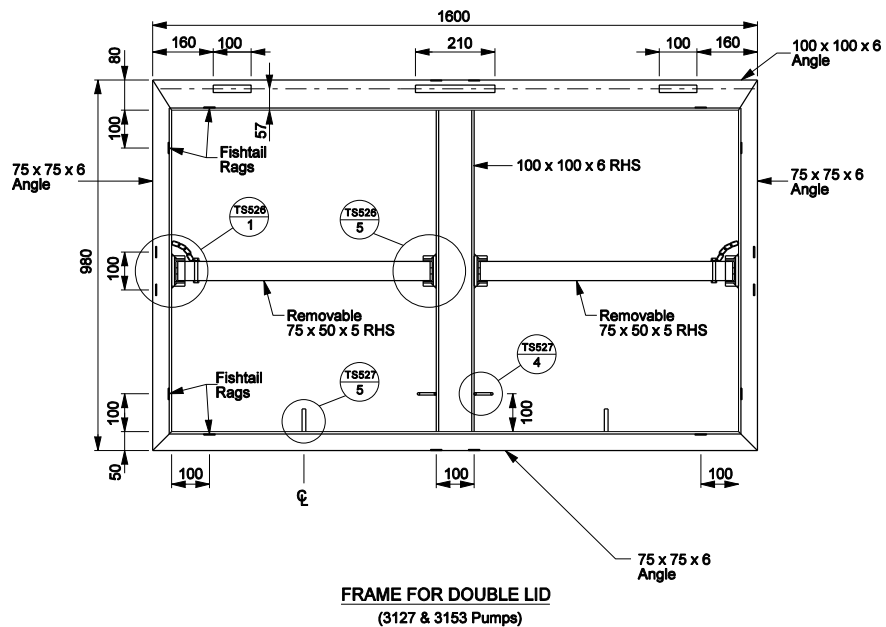
FRAME FOR DOUBLE LID
(3085 & 3102 Pumps)



DOUBLE LID
(3085 & 3102 Pumps)

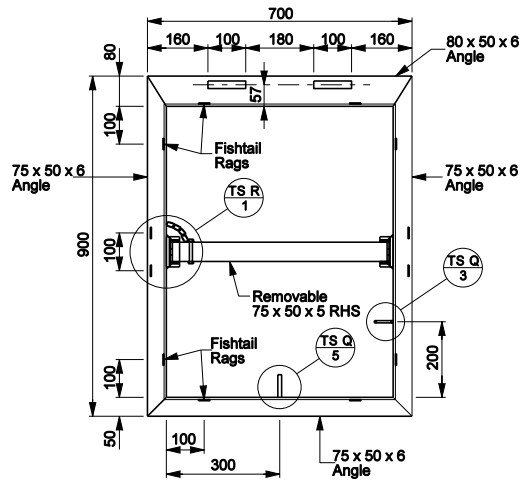
NOTES

1. All dimensions in mm.
2. Refer to Drawings TS 526 and TS 527 for frame details and TS 528 for lid details.
3. All welds to be continuous.
4. Frames to be 316 Stainless Steel.
5. Lids to be 6mm aluminium checker plate.
6. Lids and frames to be matched set.
7. Grouting lugs to be welded to frame 100mm in from each corner as shown in plan view - Refer to Detail TS 528.

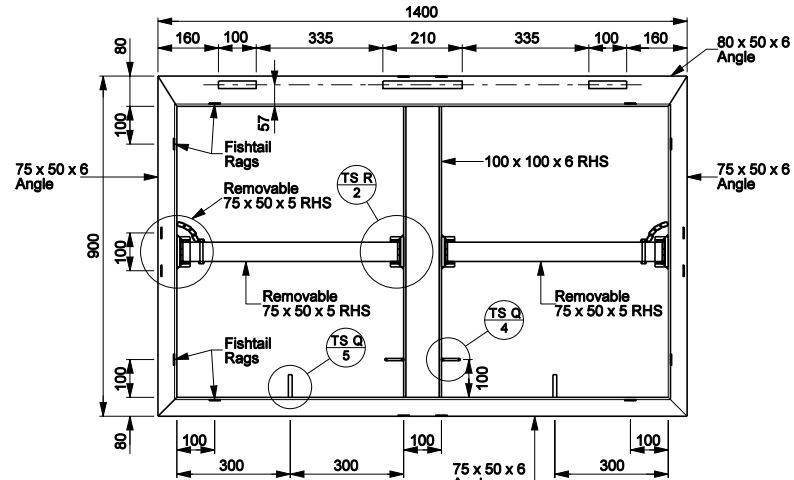


NOTES

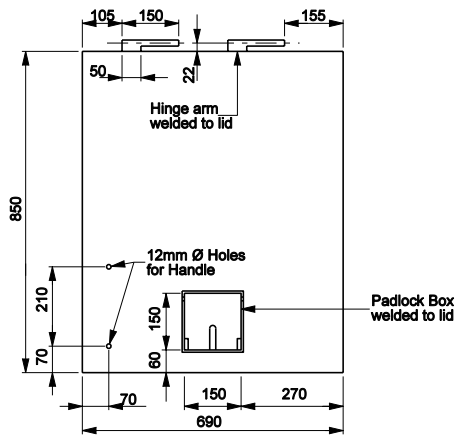
1. All dimensions in mm.
2. Refer to Drawings TS 526 and TS 527 for frame details and TS 528 for lid details.
3. All welds to be continuous.
4. Frames to be 316 Stainless Steel.
5. Lids to be 6mm aluminium checker plate.
6. Lids and frames to be matched set.
7. Grouting lugs to be welded to frame 100mm in from each corner as shown in plan view - Refer to Detail TS 528.



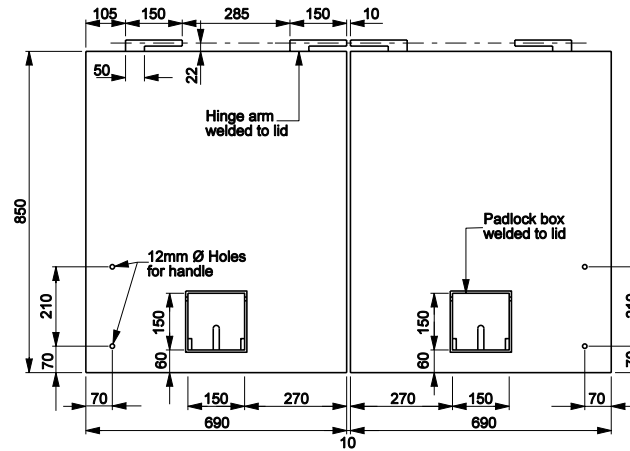
FRAME FOR SINGLE LID
(3085 & 3102 Pumps and Valve Chambers)



FRAME FOR DOUBLE LID
(3085 & 3102 Pumps)



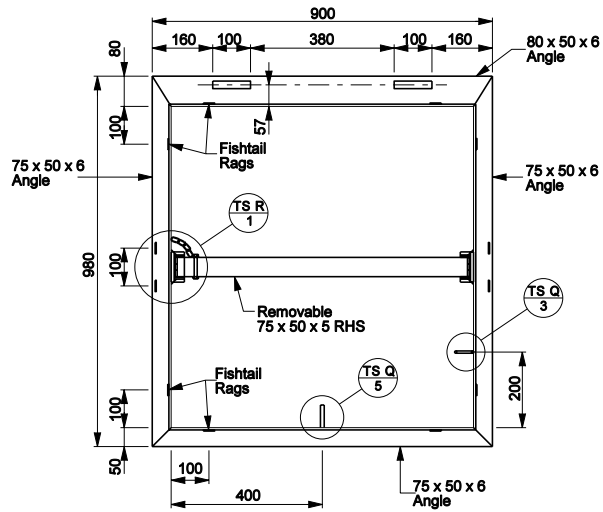
SINGLE LID
(3085 & 3102 Pumps and Valve Chambers)



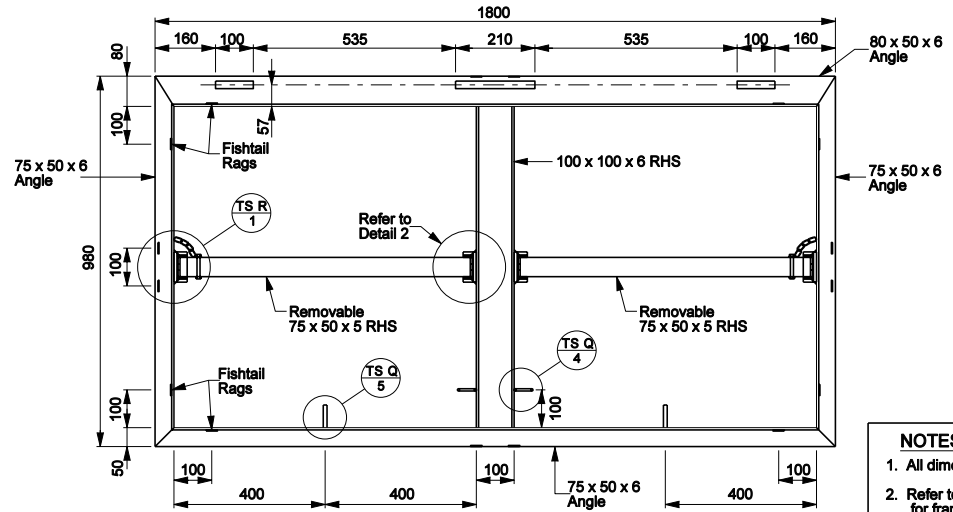
DOUBLE LID
(3085 & 3102 Pumps)

NOTES

1. All dimensions in mm.
2. Refer to Drawings TS Q and TS R for frame details and TS S for lid details.
3. All welds to be continuous.
4. Frames to be 316 Stainless Steel.
5. Lids to be 6mm aluminium checker plate.
6. Lids and frames to be matched set.
7. Use single lid and frame for valve chamber.
8. Grouting lugs to be welded to frame 100mm in from each corner as shown in plan view - Refer to Detail TS R.

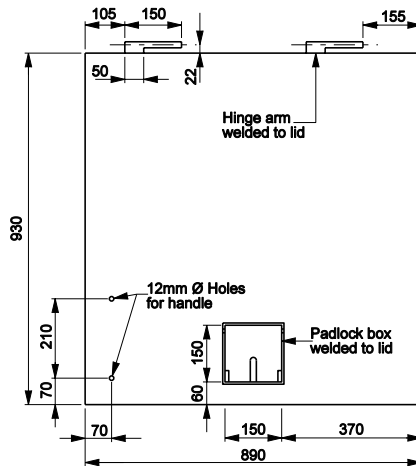


FRAME FOR SINGLE LID
(3127 & 3153 Pumps and Valve Chambers)

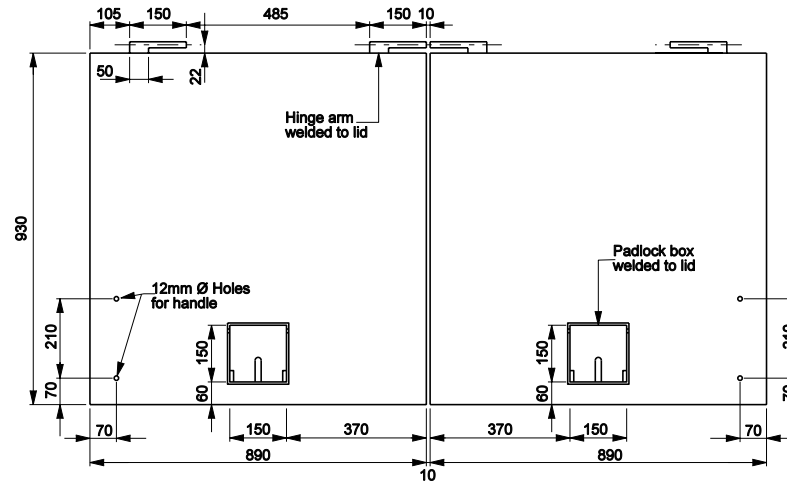


FRAME FOR DOUBLE LID
(3127 & 3153 Pumps)

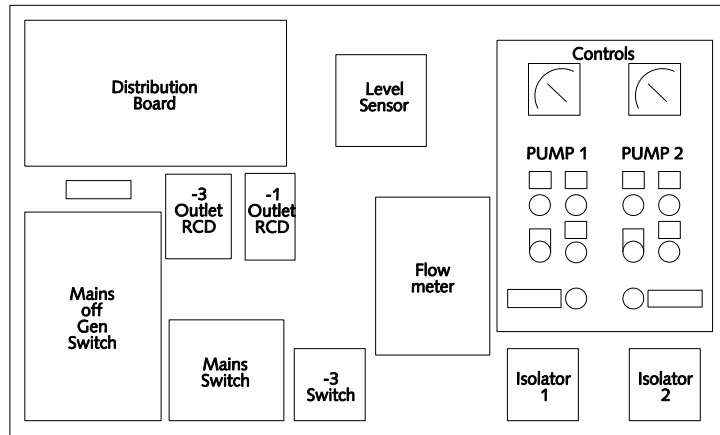
- NOTES**
1. All dimensions in mm.
 2. Refer to Drawings TS Q and TS R for frame details and TS S for lid details.
 3. All welds to be continuous.
 4. Frames to be 316 Stainless Steel.
 5. Lids to be 6mm aluminium checker plate.
 6. Lids and frames to be matched set.
 7. Use single lid and frame for valve chamber.
 8. Grouting lugs to be welded to frame 100mm in from each corner as shown in plan view - Refer to Detail TS R.



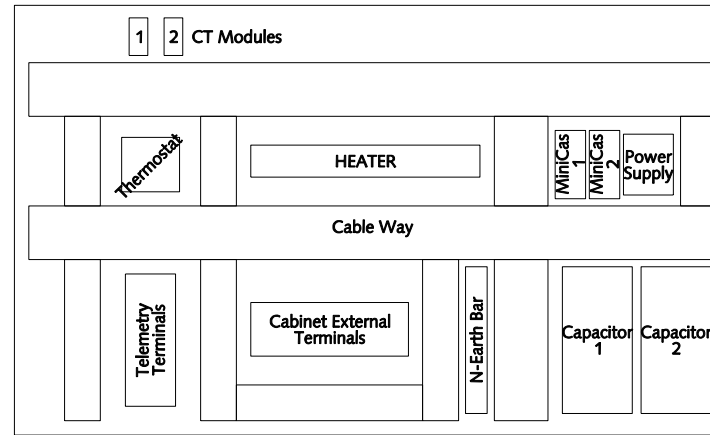
SINGLE LID
(3127 & 3153 Pumps and Valve Chambers)



DOUBLE LID
(3127 & 3153 Pumps)



FRONT LAYOUT



REAR LAYOUT

EQUIPMENT LAYOUT

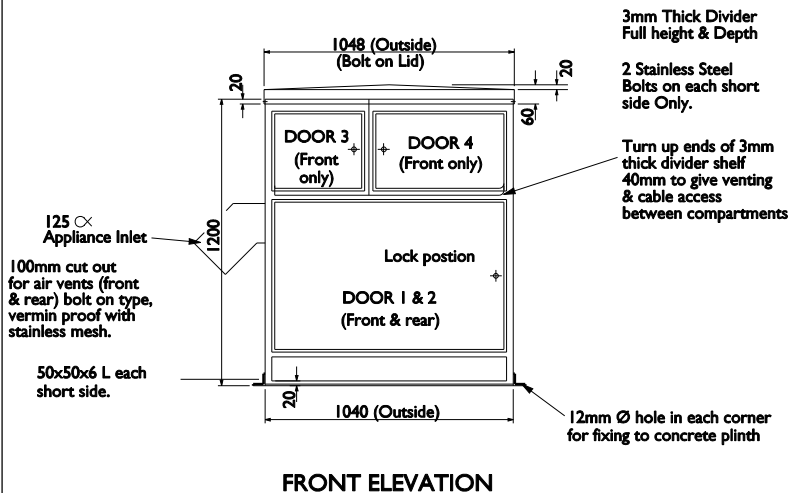
Door Schedule

- Door 1 & 2 Switchboard access
Clear opening 960x615
Door size 986x641
- Door 3 WEL meter
Clear opening 360x296
Door size 386x322
- Door 4 PLC access
Clear opening 540x296
Door size 566x322

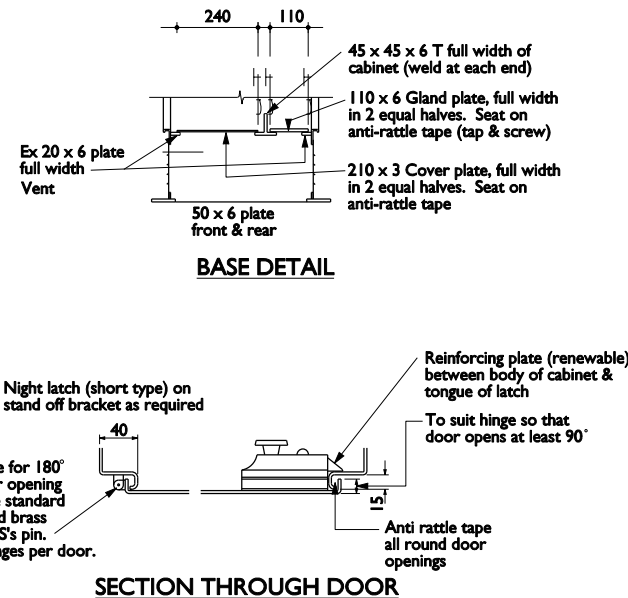
(Door size is outer dimension)
All doors to be created for added strength against flexing
Large doors may need extra bracing on inside of door

Notes

1. Cabinet and doors to be fabricated from 3mm thick aluminium.
2. After fabrication cabinet exterior shall be powder coated in Pacific Gold Orca Deep Brunswick Green code:81879
3. Stitch weld brackets & angles running full width against body of cabinet except base angle & plate which shall be continuously welded.

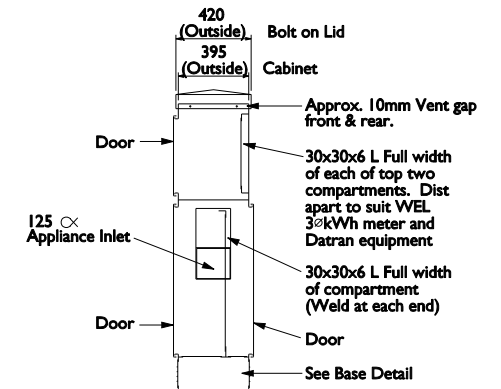


FRONT ELEVATION

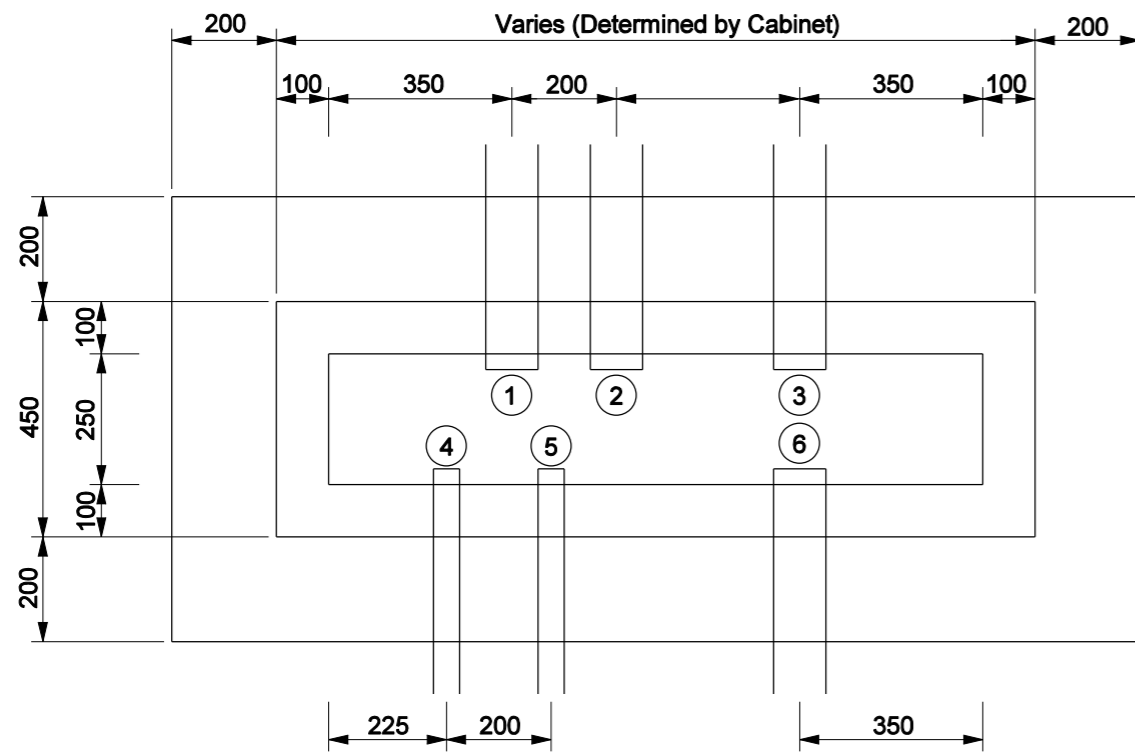


BASE DETAIL

SECTION THROUGH DOOR



SECTION



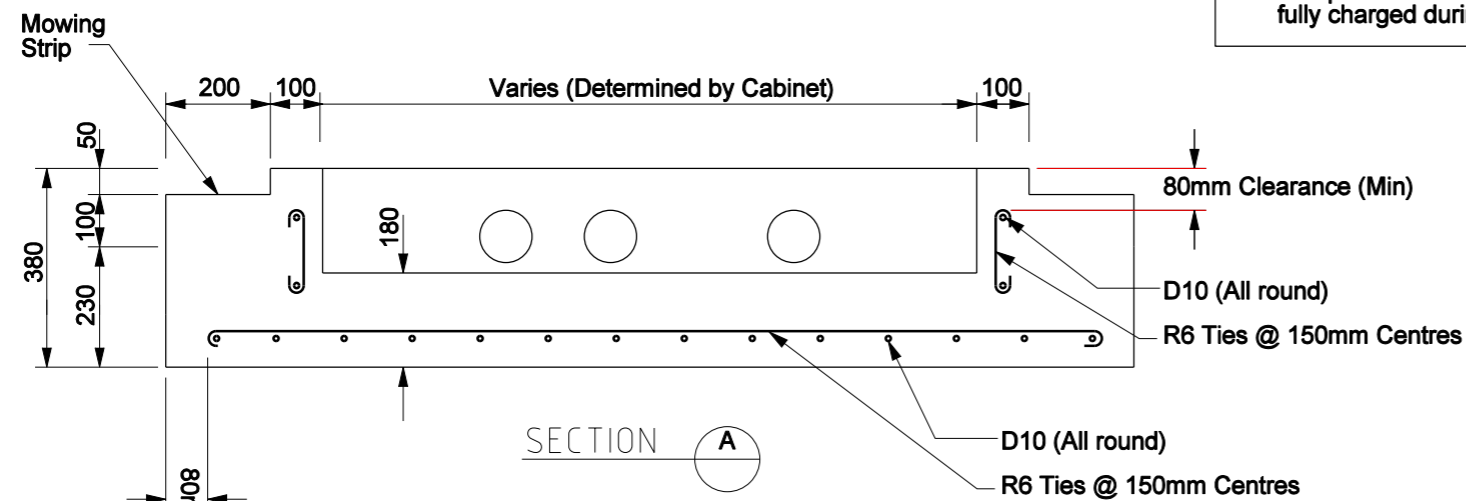
PLAN

CABLE DUCTS

- ① 100mmØ PVC Duct - Pump Power
- ② 100mmØ PVC Duct - Floats/Level Sensors
- ③ 50mmØ PVC Duct - Solenoid Valves (If any sparges installed)
- ④ 50mmØ PVC Duct - Overflow Float (If remotely installed)
- ⑤ 50mmØ PVC Duct - Flow Meter
- ⑥ 100mmØ PVC Duct - Power Inlet

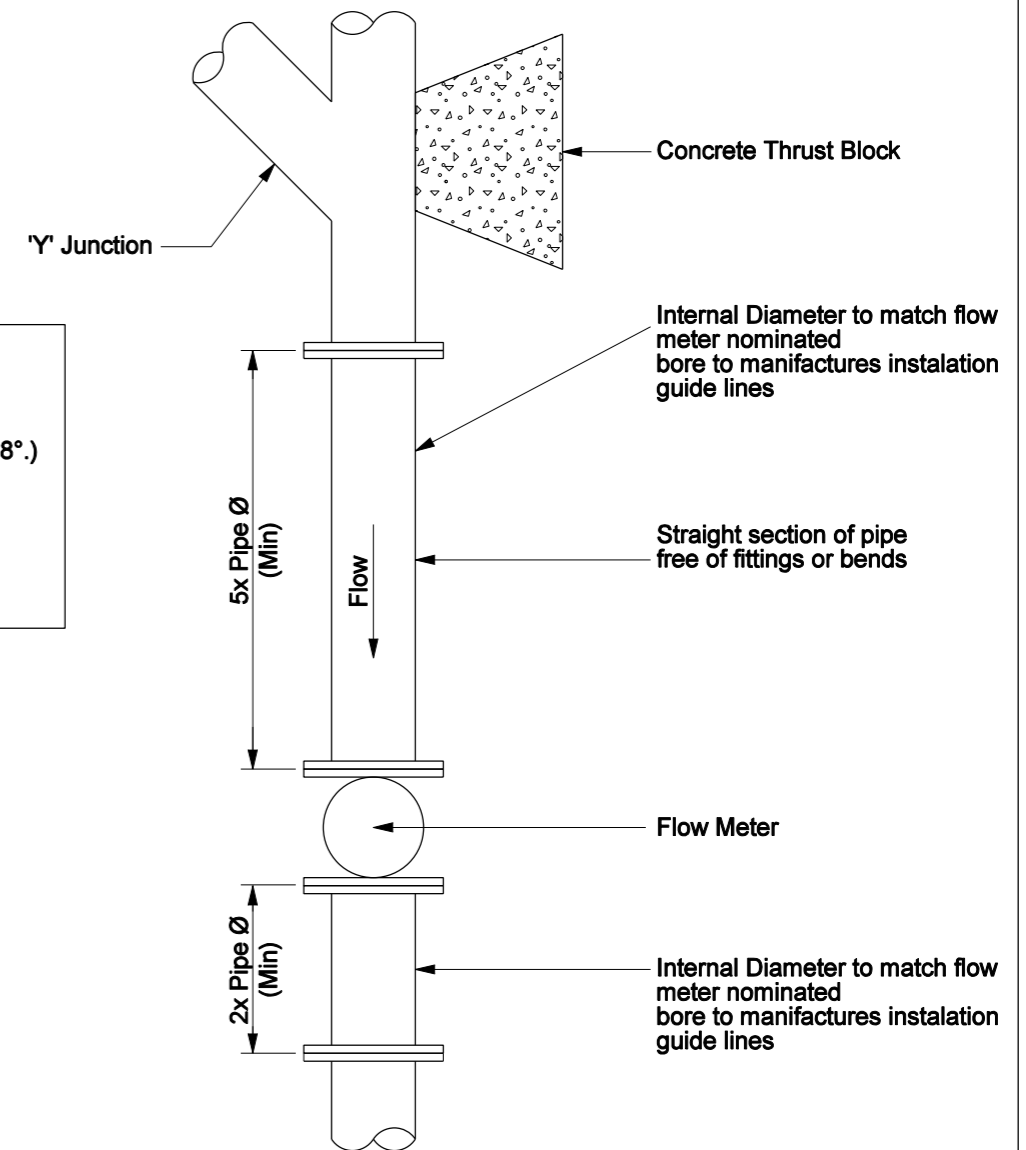
NOTES

1. Internal diameters of pipe and flow meter are to be matched. If this is not possible use an undersize flow meter joined to pipe with reducers. (Reducing angle <math><8^\circ</math>.)
2. Flow meter is to have a calibrated fingerprint by manufacturer before installation.
3. Pump station design must ensure flow meter is fully charged during non-pump operation.

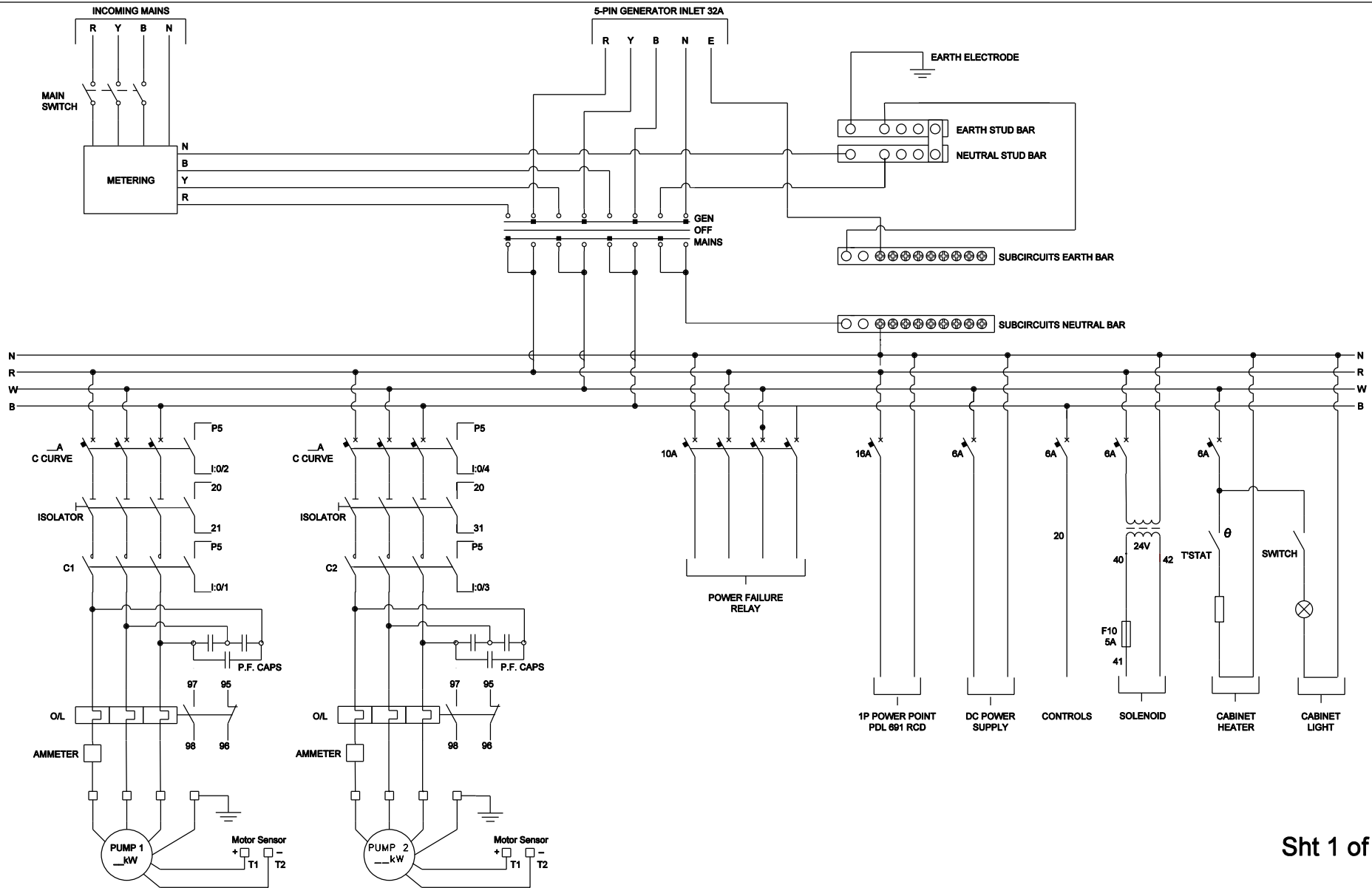


CONCRETE CONTROL CABINET PLINTH

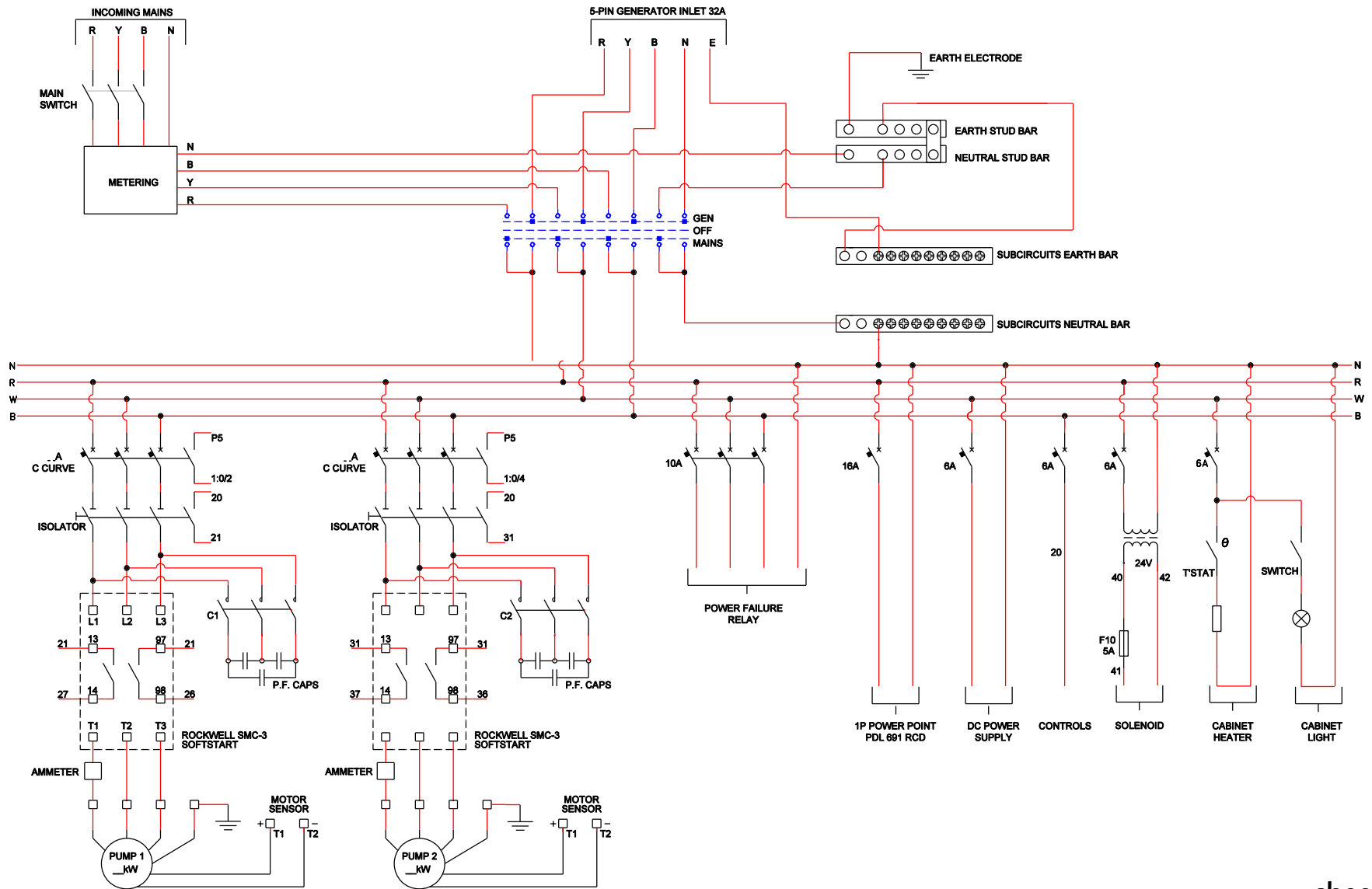
(Concrete Strength 35 MPa @ 28 days)

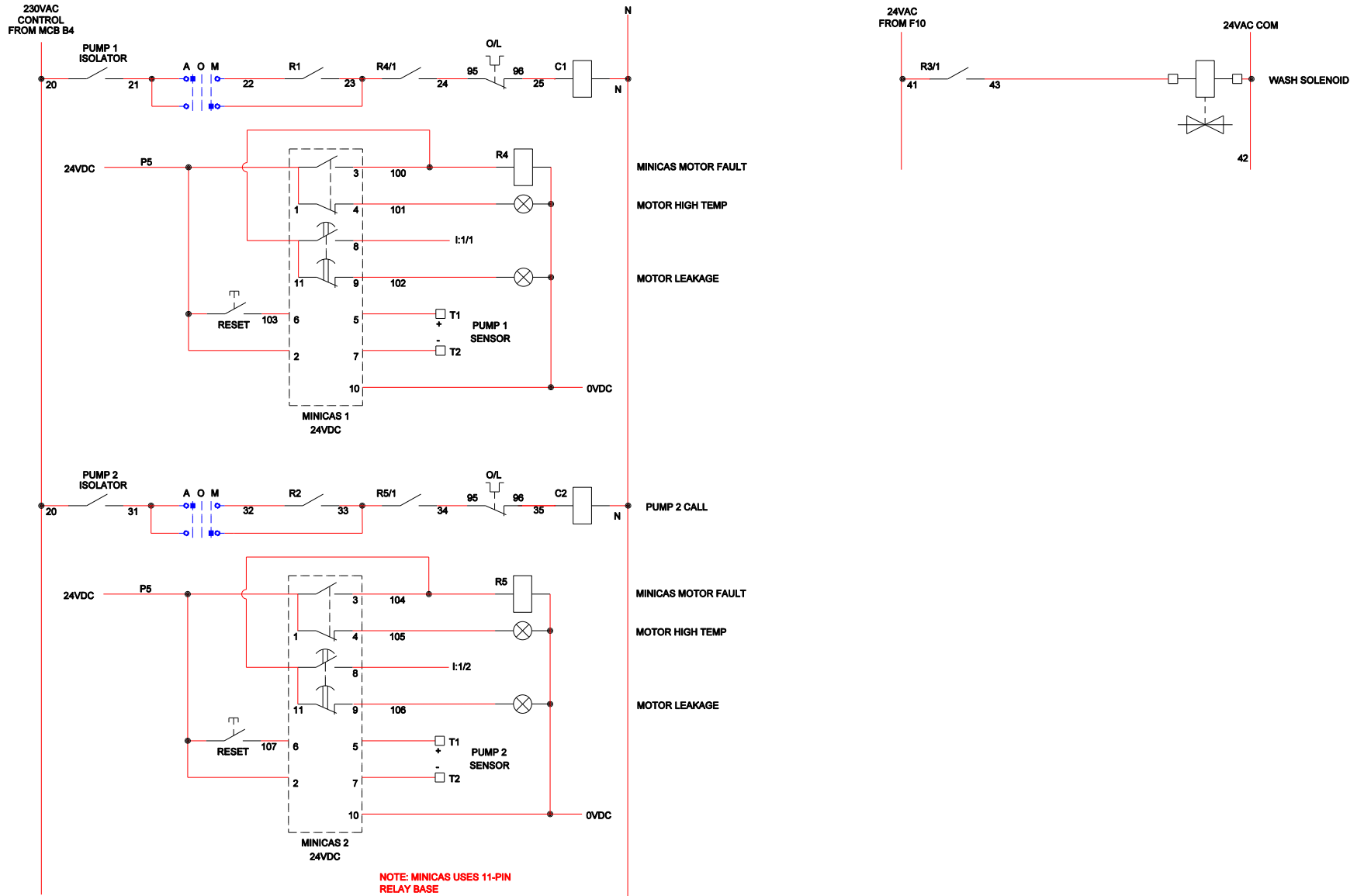


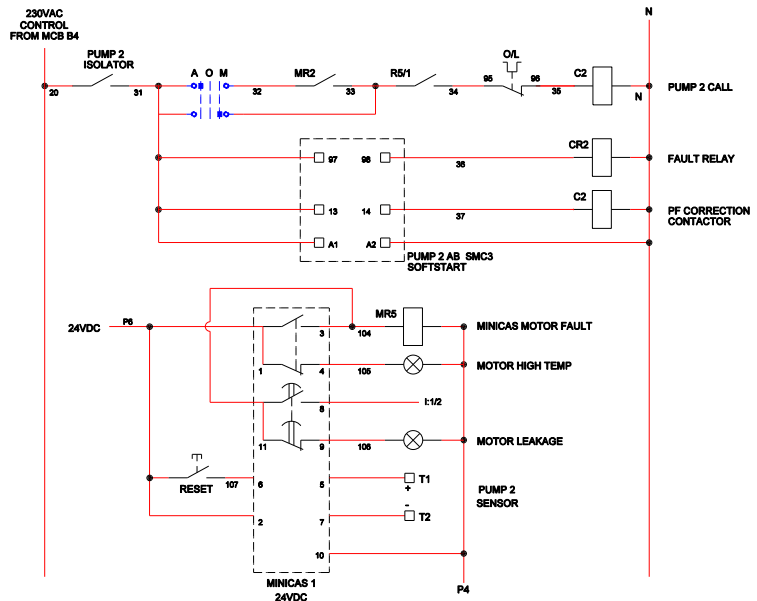
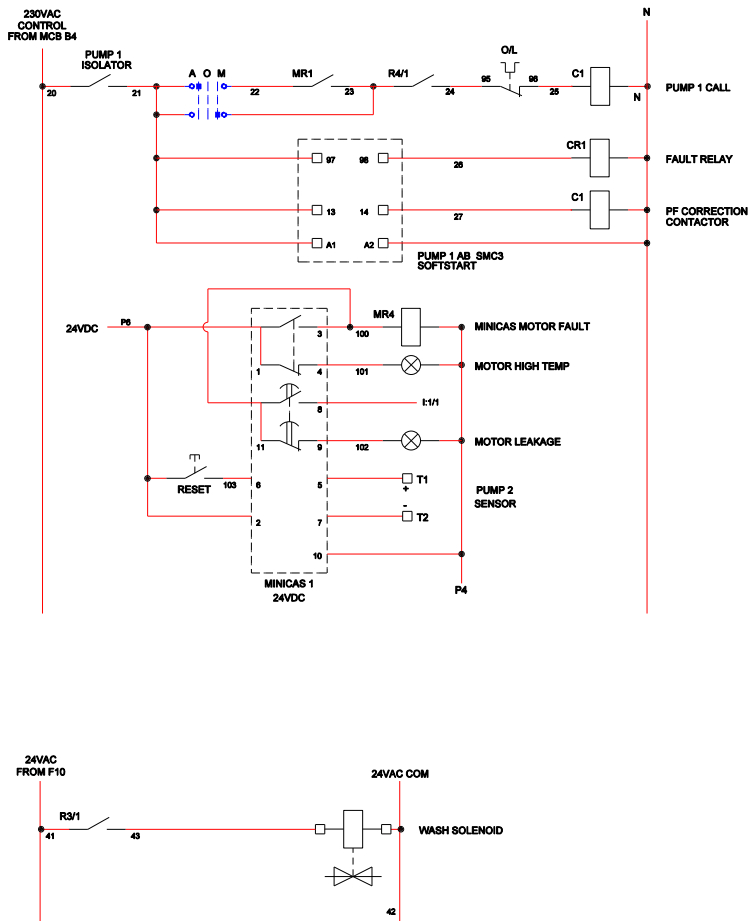
FLOW METER INSTALLATION DETAILS

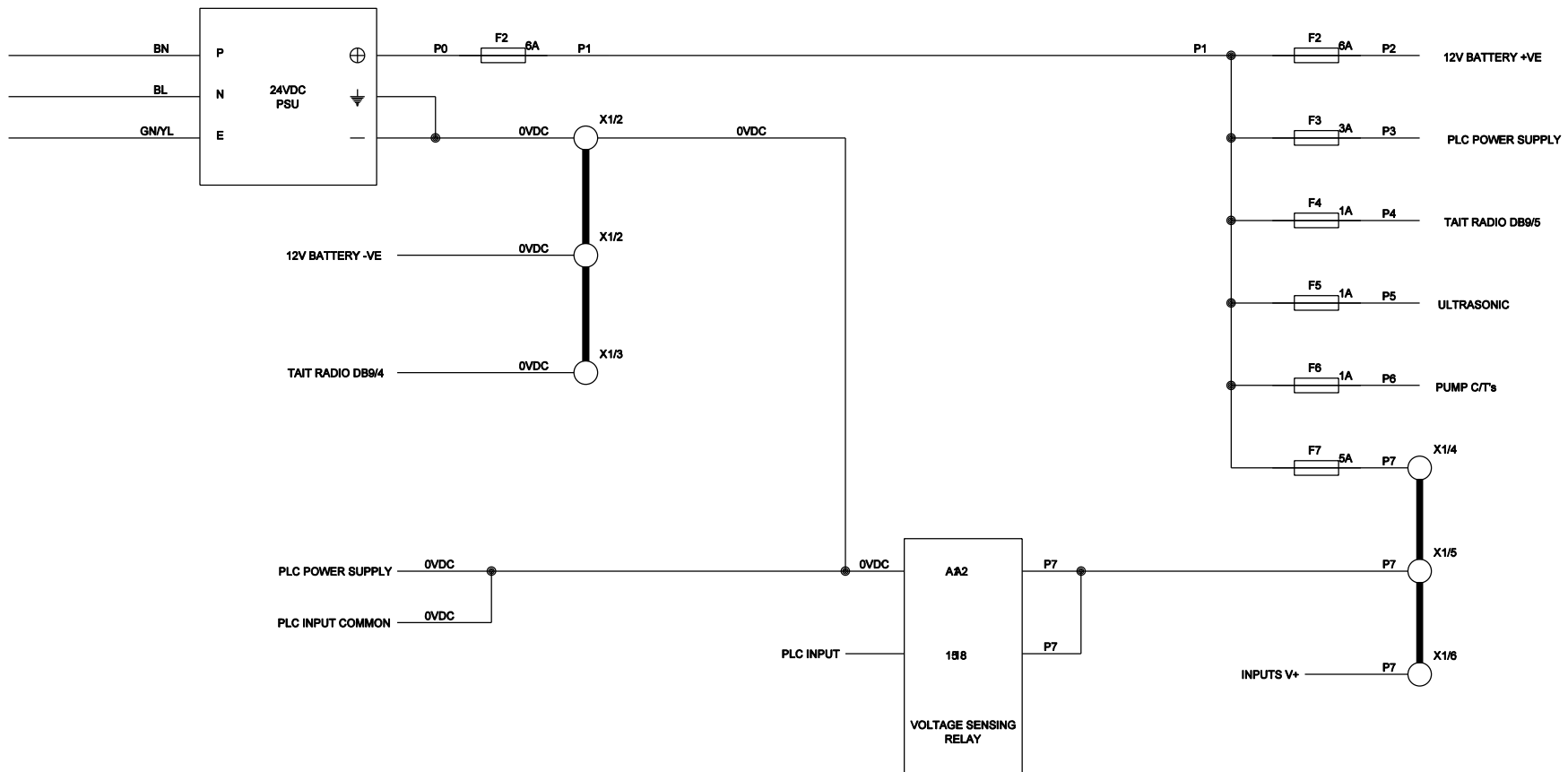


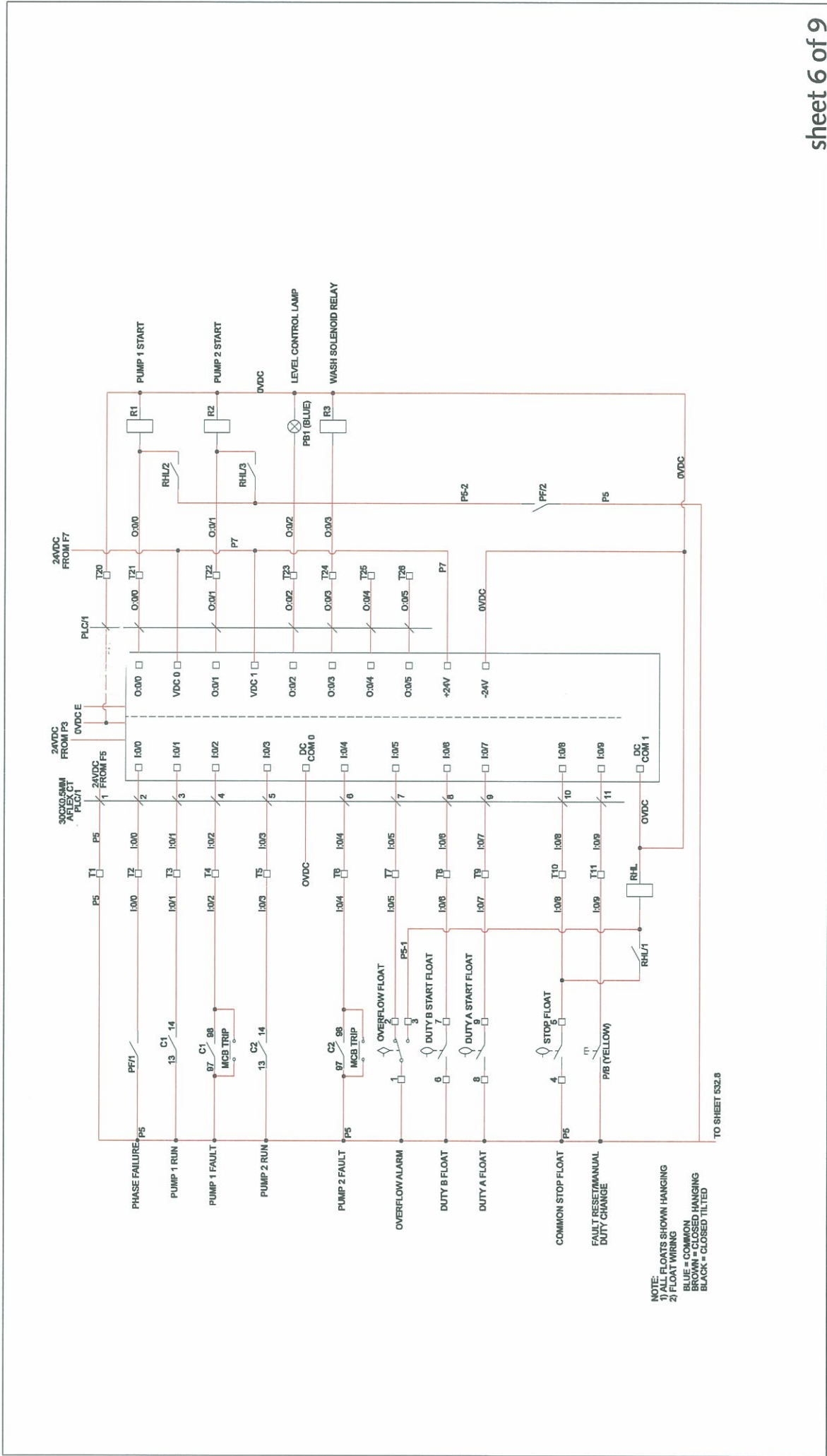
Sht 1 of 9







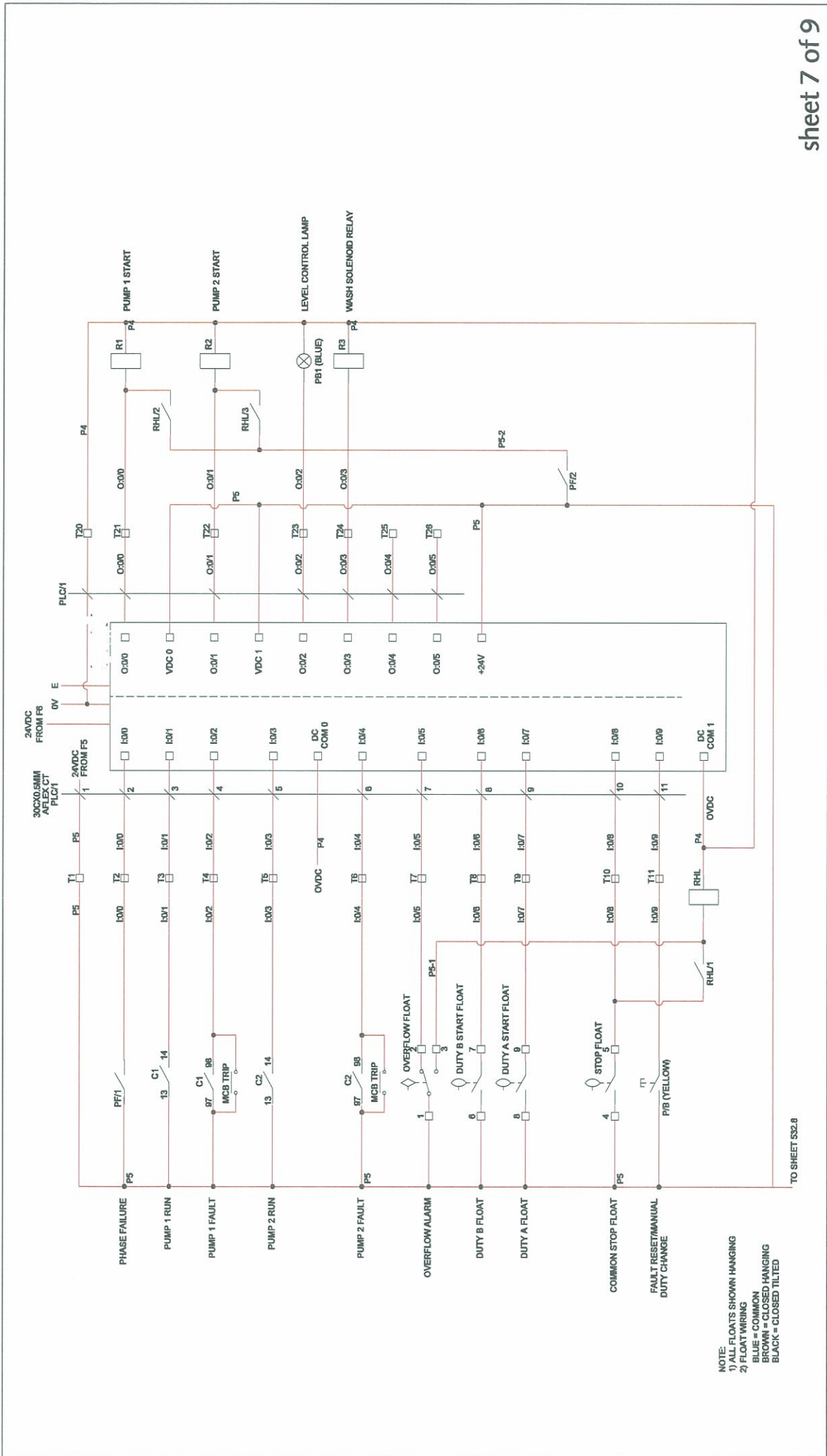




NOTE:
 1) ALL FLOATS SHOWN HANGING
 2) FLOAT WIRING
 BLUE = COMMON
 BROWN = CLOSED HANGING
 BLACK = CLOSED TILTED

TO SHEET 532.8

PLC CONTROLLED PUMP STATION DOL - PLC CONTROL WIRING



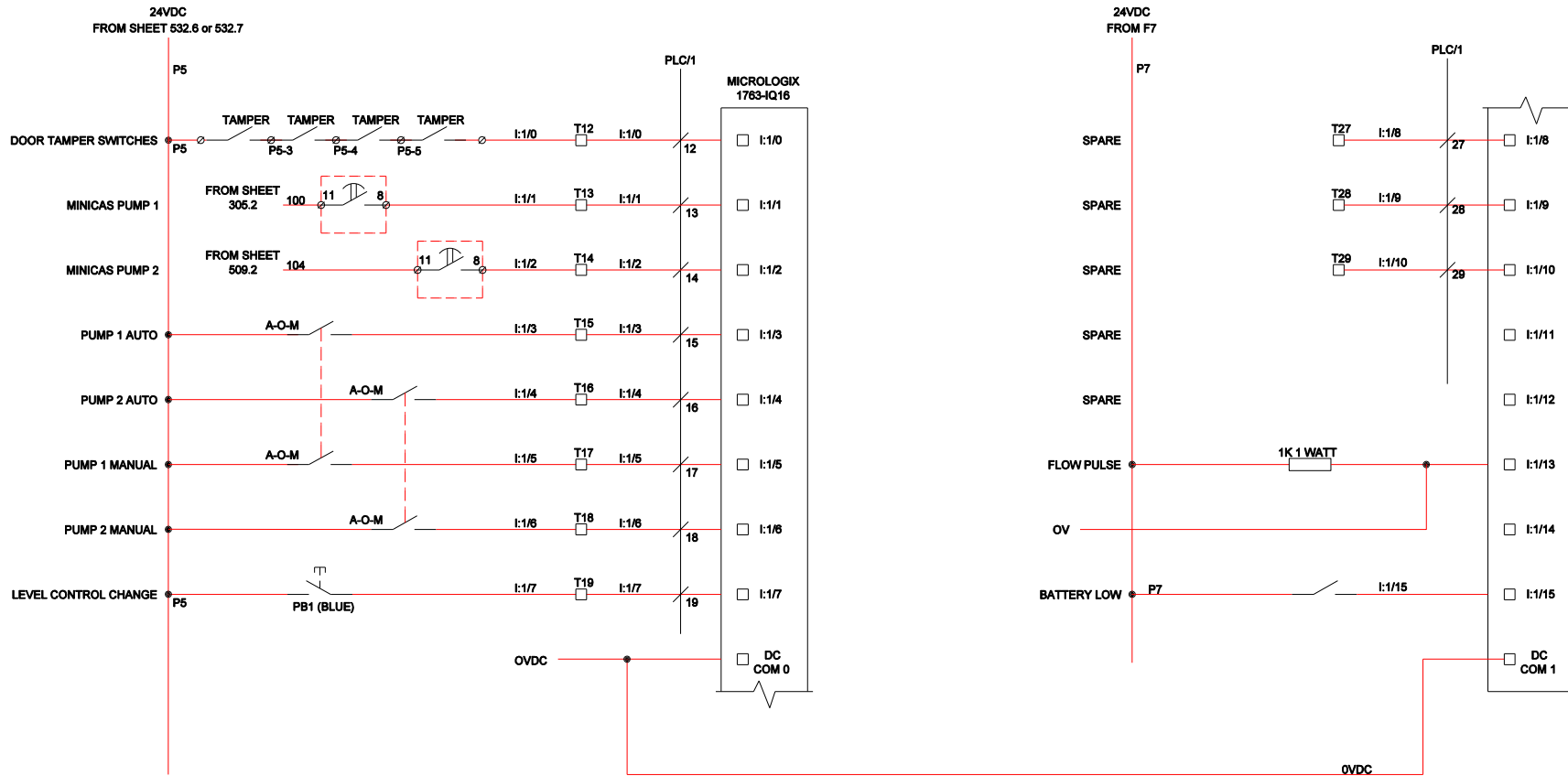
TO SHEET 532.8

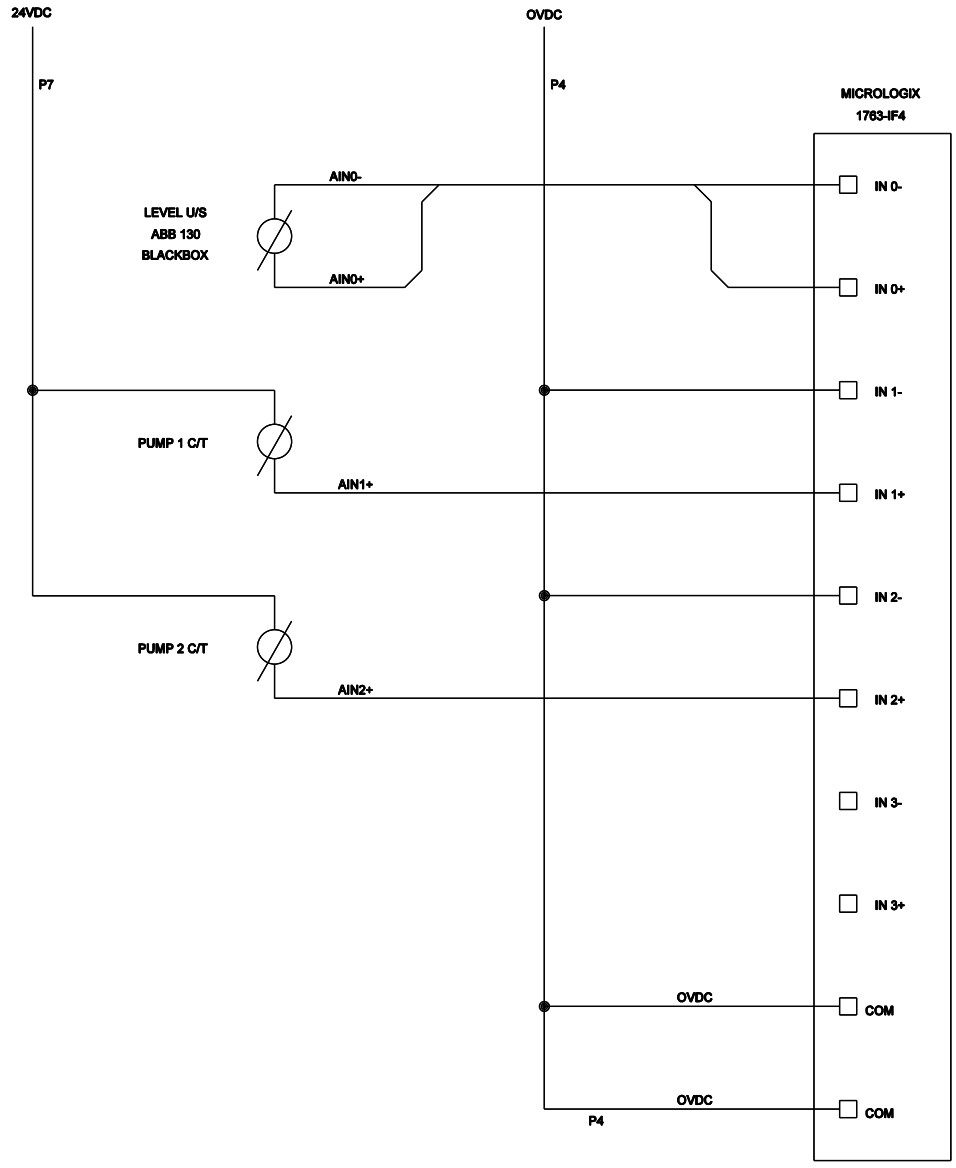
NOTE:
 1) ALL FLOATS SHOWN HANGING
 2) FLOAT WIRING
 BLUE = COMMON
 WHITE = CLOSED HANGING
 BLACK = CLOSED TILTED

Approved by: City Waters Manager
 TS 532.7
 Version: October 2010

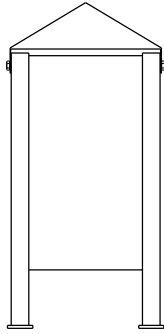
SOFT STARTER PUMP STATION PLC CONTROL WIRING

Path G:\HCCMap\STANDARDS\TECHNICAL SPEC\Drainage\dwgs.dgn

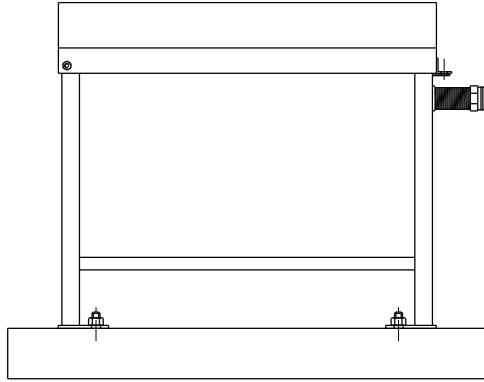




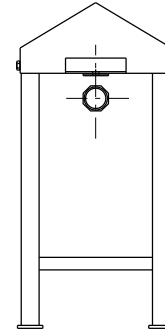
**PLC CONTROLLED PUMP STATION
 DOL SOFT STARTER - PLC ANALOG INPUT
 EXPANSION MODULE WIRING**



LEFT ELEVATION



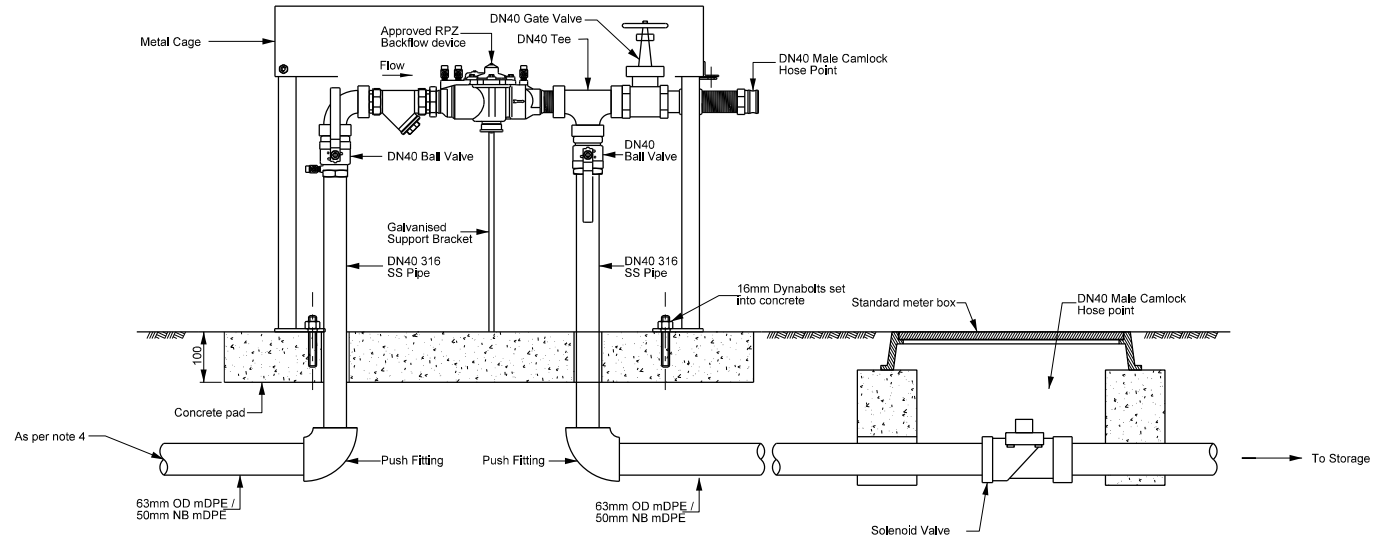
FRONT ELEVATION



RIGHT ELEVATION

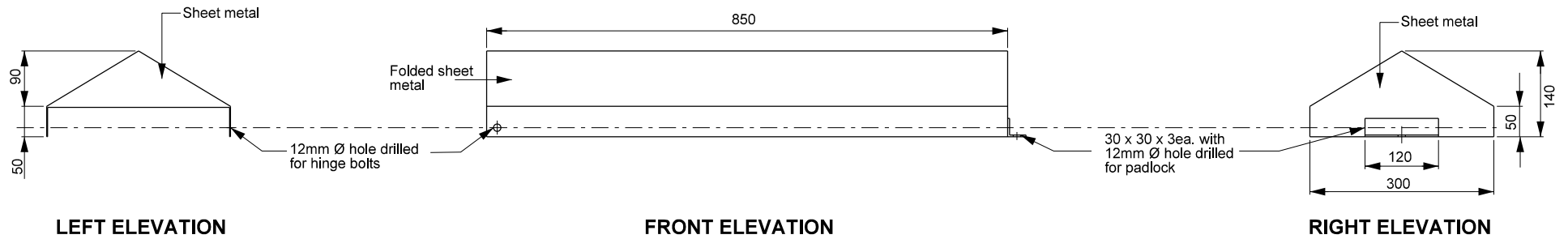
METAL CAGE

Refer Drawing TS 530



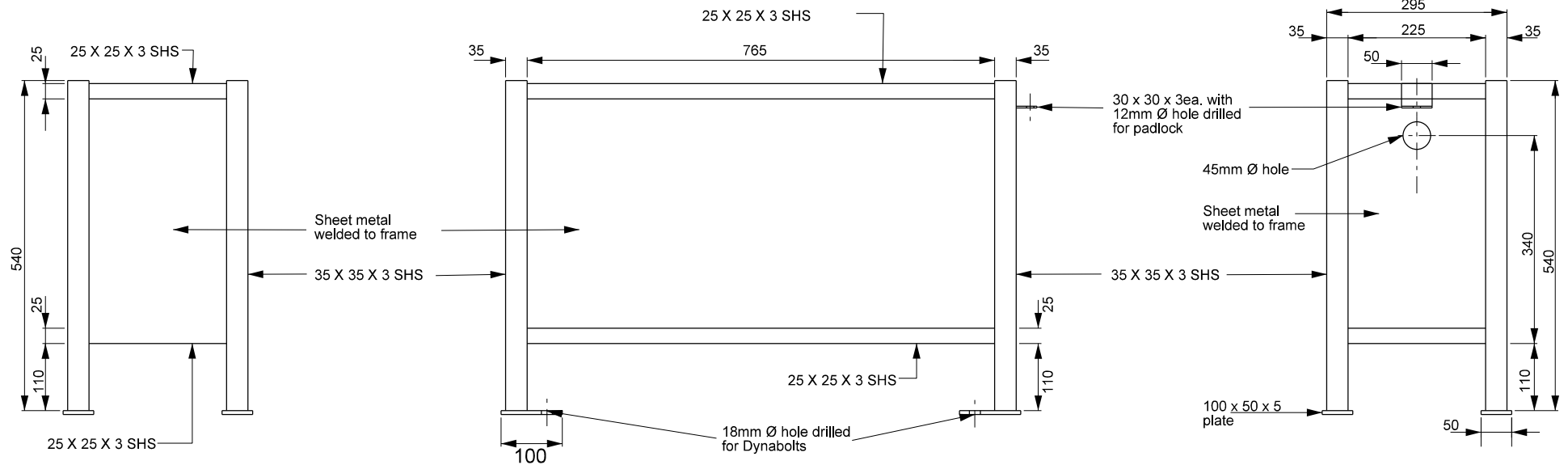
NOTES

1. Position of backflow device cabinet and hose point to be determined on site
2. All material must comply with HCC Development Manual Specification
3. Color - After fabrication cage exterior shall be powder coated pacific gold orica deep brunswick green code:81879
4. Storage >100m³ requires detailed sizing of pipe + RPZ



FRONT ELEVATION

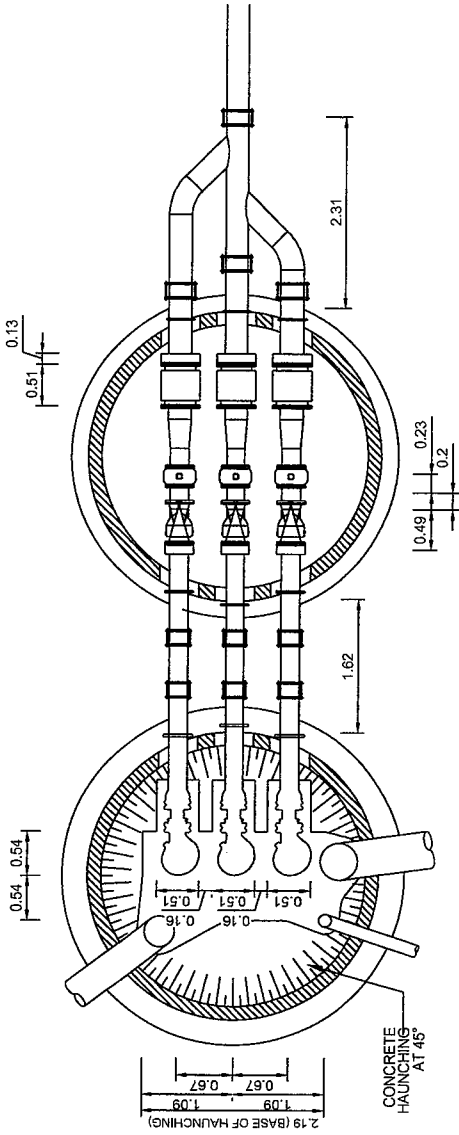
CAGE LID



FRONT ELEVATION

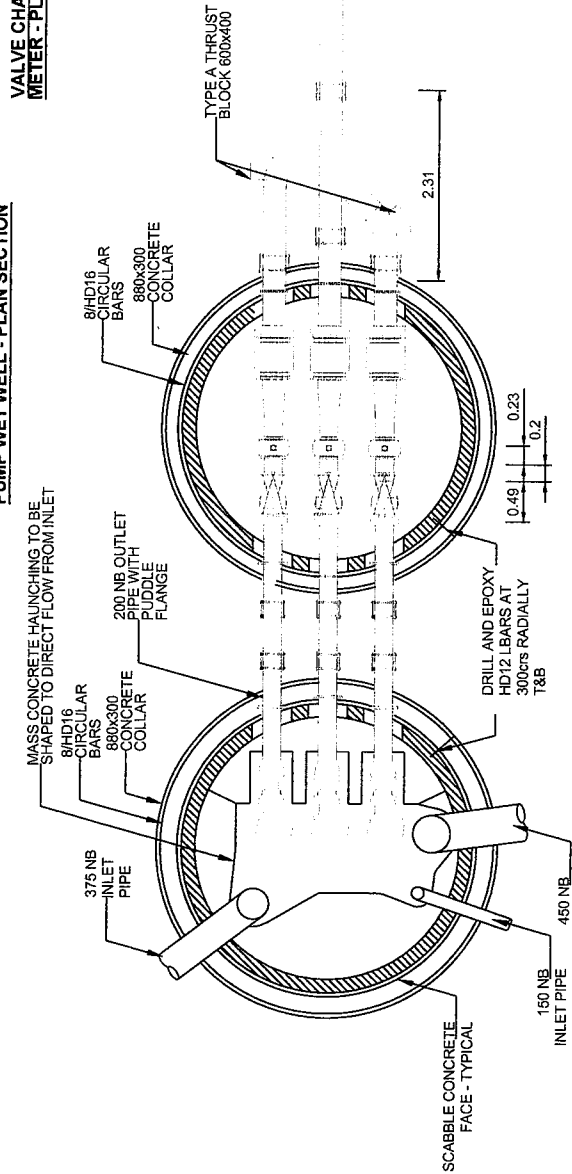
CAGE FRAME

NOTE:
ALL NON-PLASTIC BURIED PIPE WORK AND FITTINGS TO
BE DENSOTAPE WRAPPED.



PUMP WET WELL - PLAN SECTION

VALVE CHAMBER with FLOW METER - PLAN SECTION



VALVE CHAMBER - PLAN SECTION AT COLLAR

PUMP WET WELL - PLAN SECTION AT COLLAR

AMENDMENTS		DATE	BY	REASON
NO.				

NO.	DATE	BY	REASON

TITLES		DETAILS	
DESIGNED		SCALE	1:62.5 (A3)
CHECKED		SHEET NO.	3/7
APPROVED		DRAWING NO.	2154

WASTE WATER PUMP STATION AT ALLEN STREET, MORRINSVILLE

PLAN SECTIONS OF PUMP STATION AND VALVE CHAMBER

NOTES:

- 1. Concrete : $f_c = 40\text{MPa}$
- 2. Reo : $f_y = \text{Grade } 500\text{E}$
- 3. Reo Cover : 30mm Min
- 4. Min Lap Length : $40 \times \text{Bar Dia}$
- 5. Dimensional tolerances : Table 5.1-NZS3109:1997
- 6. Do not re-bend reinforcing steel

MATERIALS

VOL. (m³/unit) =

WT (ton/unit) =

CODE =

REVISIONS

REV # REVISION DESCRIPTION DATE DRAWN:

PO Box 58142, Greenmount, Manukau City,

Tel: 09-274 0316

Fax: 09-274 8393

email: techservice@hynds.co.nz



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PROJECT DESCRIPTION:

**HYNDS STANDARD DRAWING
GREENFIELDS
Ø1800 PUMP STATION & VALVE
CHAMBER COMBO**

SERVICE DETAIL:

**WET WELL & VALVE CHAMBER c/w
RETENTION TANK**

OVERALL GENERAL ARRANGEMENT

REFERENCE/QUOTE NUMBER:

DRAWN: Z.S

SIGNATURE:

DESIGN: AdS

SIGNATURE:

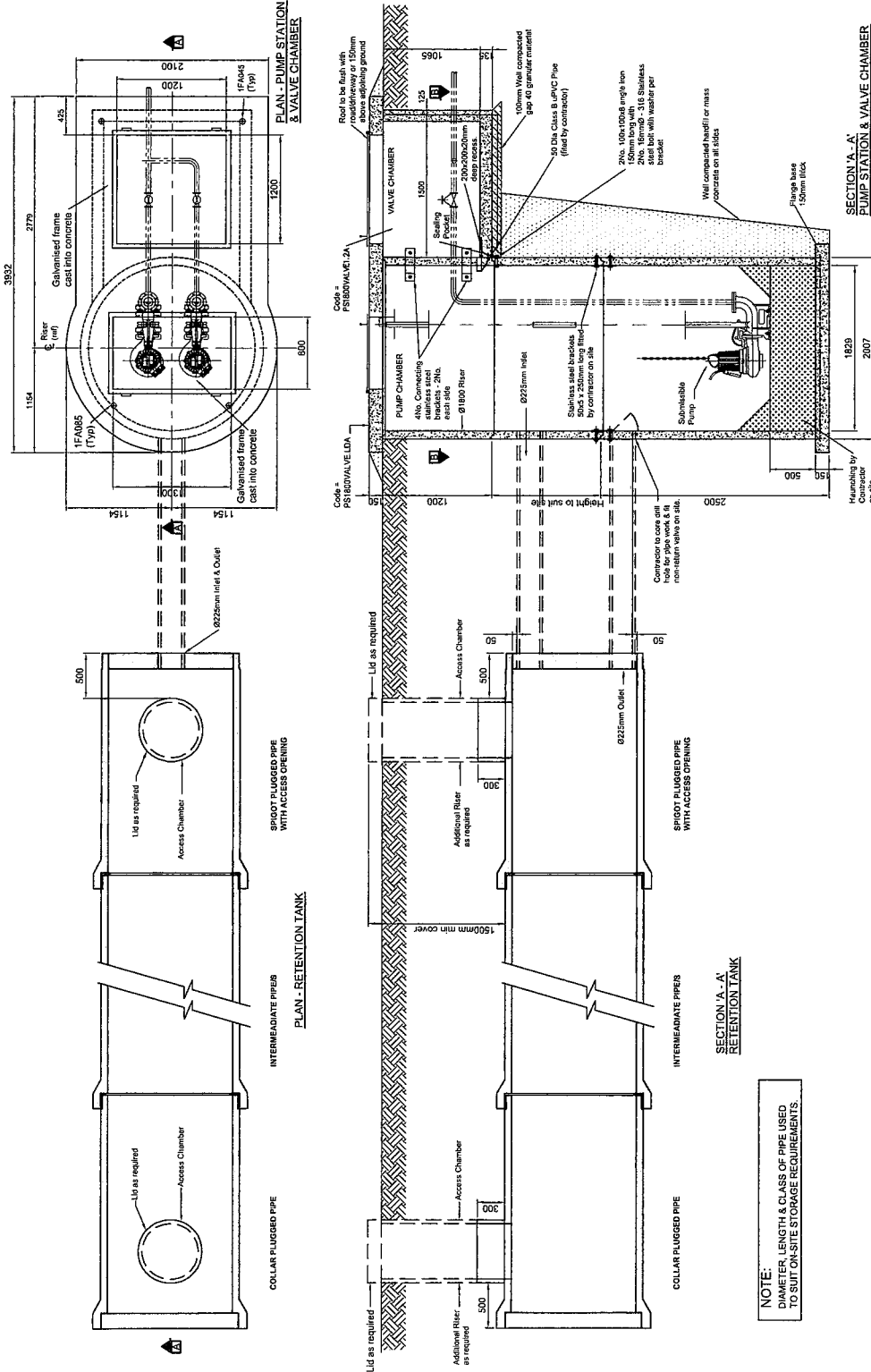
SCALE: N.T.S

Note: Do not scale draw if in doubt ASK!

**MPDC
PS 2**

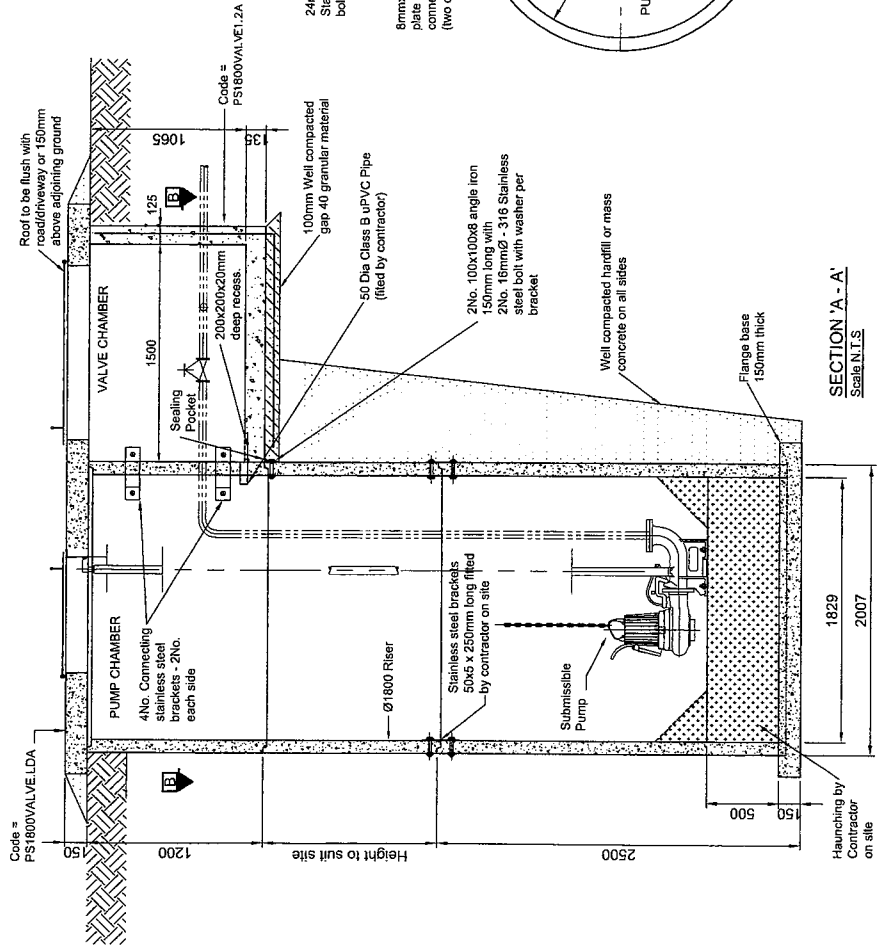
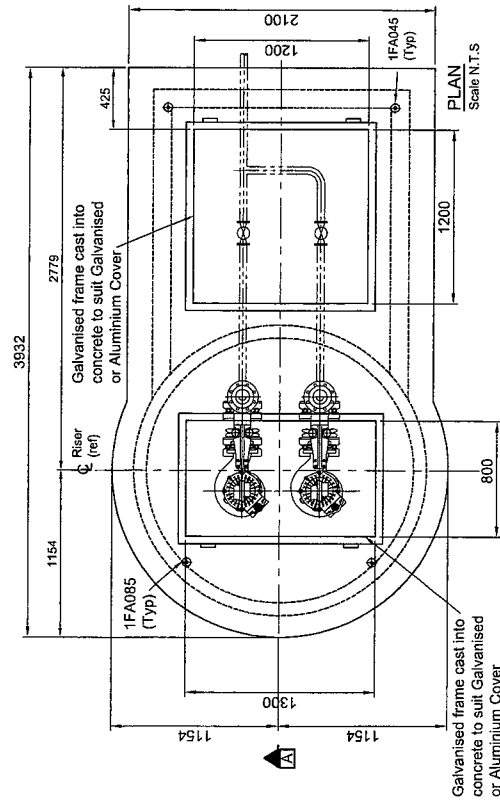
DRAWING NUMBER:

T3014-1

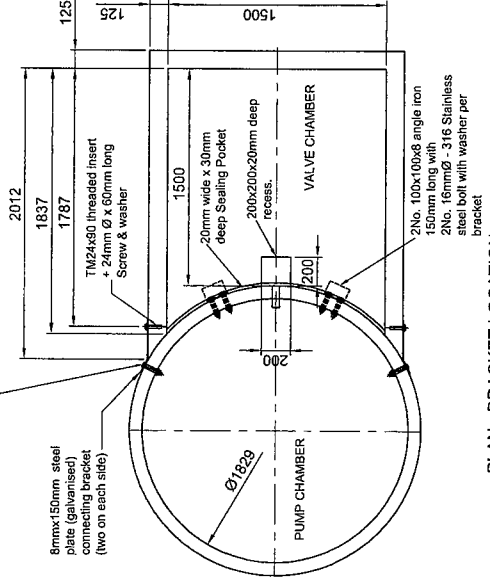
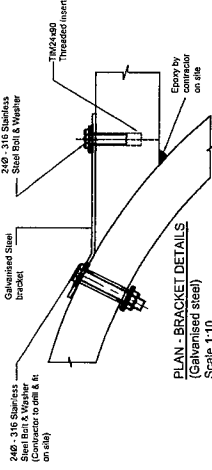


NOTE:
POSITION AND SIZE OF OPENINGS IN THE LID
TO BE CONFIRMED BY THE CLIENT - DRAWING
IS ONLY INDICATIVE.
CONTRACTOR TO MAKE ALL SITE
CONSTRUCTED JOINTS WATER RESISTANT

NOTE:
DIAMETER, LENGTH & CLASS OF PIPE USED
TO SUIT ON-SITE STORAGE REQUIREMENTS.



NOTE:
 POSITION AND SIZE OF OPENINGS IN THE LID ARE TO BE ADVISED BY THE CLIENT - DRAWING IS ONLY INDICATIVE.
 CONTRACTOR TO MAKE ALL SITE CONSTRUCTED JOINTS WATER RESISTANT



- NOTES:**
- Concrete : $f_c = 40\text{MPa}$
 - Reo : $f_y = \text{Grade } 500\text{E}$
 - Reo Cover : 30mm Min
 - Min Lap Length : 40 x Bar Dia
 - Dimensional tolerances : Table 5.1-NZS3109:1997
 - Do not re-bend reinforcing steel

MATERIALS

VOL (m³/unit) =

WT (ton/unit) =

CODE =

REVISIONS

REV#: REVISION DESCRIPTION: DATE: DRAWN:

PO Box 58142, Greenmount, Manukau City.

Tel: 09-274 0316

Fax: 09-274 8383

email: techservice@hynds.co.nz



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PROJECT DESCRIPTION:

HYNDS STANDARD DRAWING
GREENFIELDS
Ø1800 PUMP STATION & VALVE
CHAMBER COMBO

SERVICE DETAIL:

WET WELL & VALVE CHAMBER

GENERAL ARRANGEMENT

REFERENCE/QUOTE

NUMBER:

DRAWN: Z.S

DESIGN: AOS

SIGNATURE:

SIGNATURE:

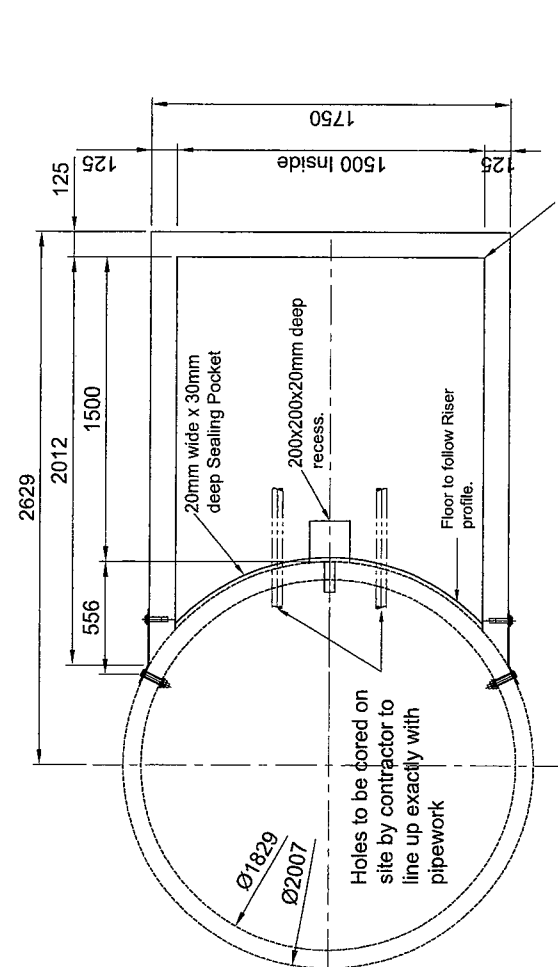
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Note:
 Do not scale dra
 if in doubt ASK!

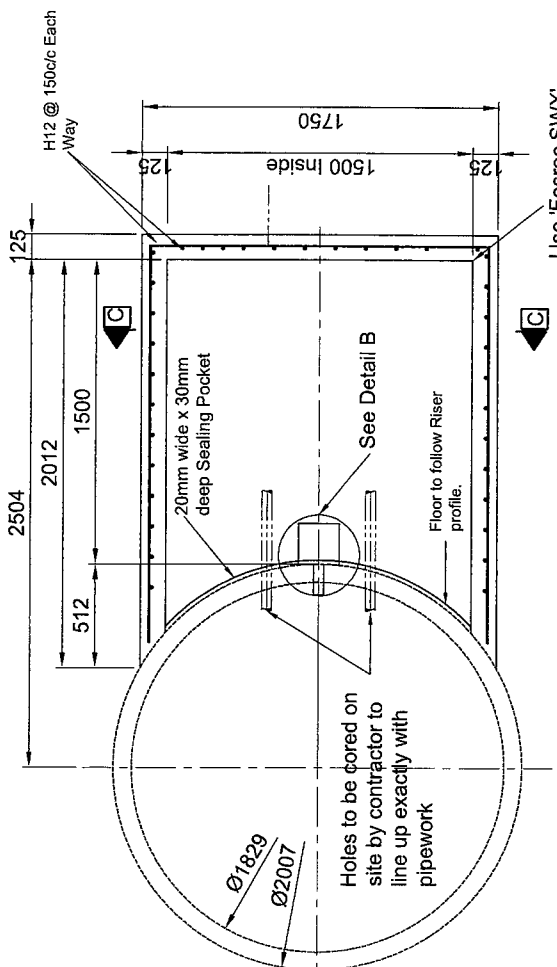
MPDC
PS 3

DRAWING NUMBER:

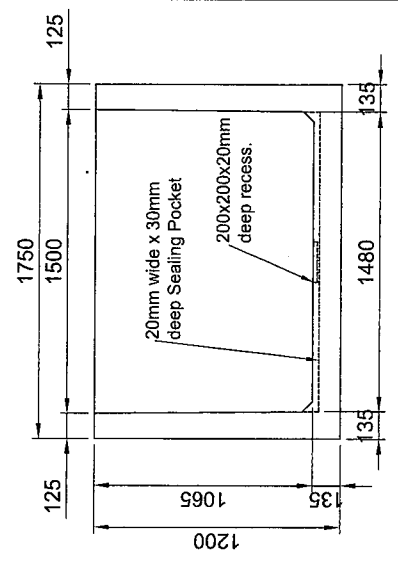
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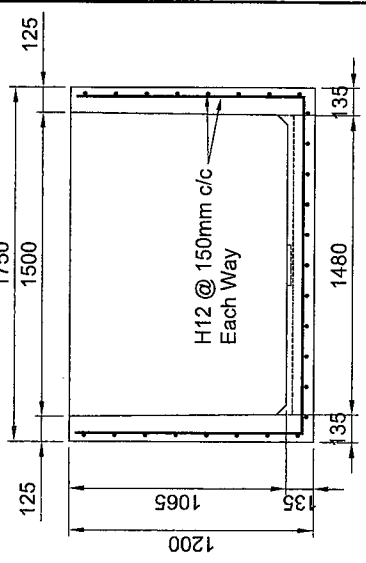
SECTION 'B - B'
Scale 1:25



REO SECTION 'B - B'
Scale 1:25



SECTION 'C - C'
Scale 1:25
Code: PS1800VALVE1.8A



REO SECTION 'C - C'
Scale 1:25
Code: PS1800VALVE1.8A

NOTES:

1. Concrete : $f_c = 40\text{MPa}$
2. Reo : $f_y = \text{Grade } 500\text{E}$
3. Reo Cover : 30mm Min
4. Min Lap Length : 40 x Bar Dia
5. Dimensional tolerances : Table 5.1-NZS3109:1997
6. Do not re-bend reinforcing steel

MATERIALS

VOL. (m³/unit) =

WT (ton/unit) =

CODE =

REVISIONS

REV# / REVISION DESCRIPTION

DATE

DRAWN:

PO Box 58142, Greenmount, Manukau City.
Tel: 09-274 0316
Fax: 09-274 0393
email: techservice@hynds.co.nz

HYNDS

TSOLBIC

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PROJECT DESCRIPTION:

HYNDS STANDARD DRAWING
GREENFIELDS
Ø1800 PUMP STATION & VALVE
CHAMBER COMBO

SERVICE DETAIL:

WET WELL & VALVE CHAMBER

CHAMBER DETAILS

REFERENCE/QUOTE

NUMBER:

DRAWN: Z.S

SIGNATURE:

SCALE: N.T.S

PAPER SIZE: A3

DRAWING NUMBER:

T3014-3

DESIGN: ADS

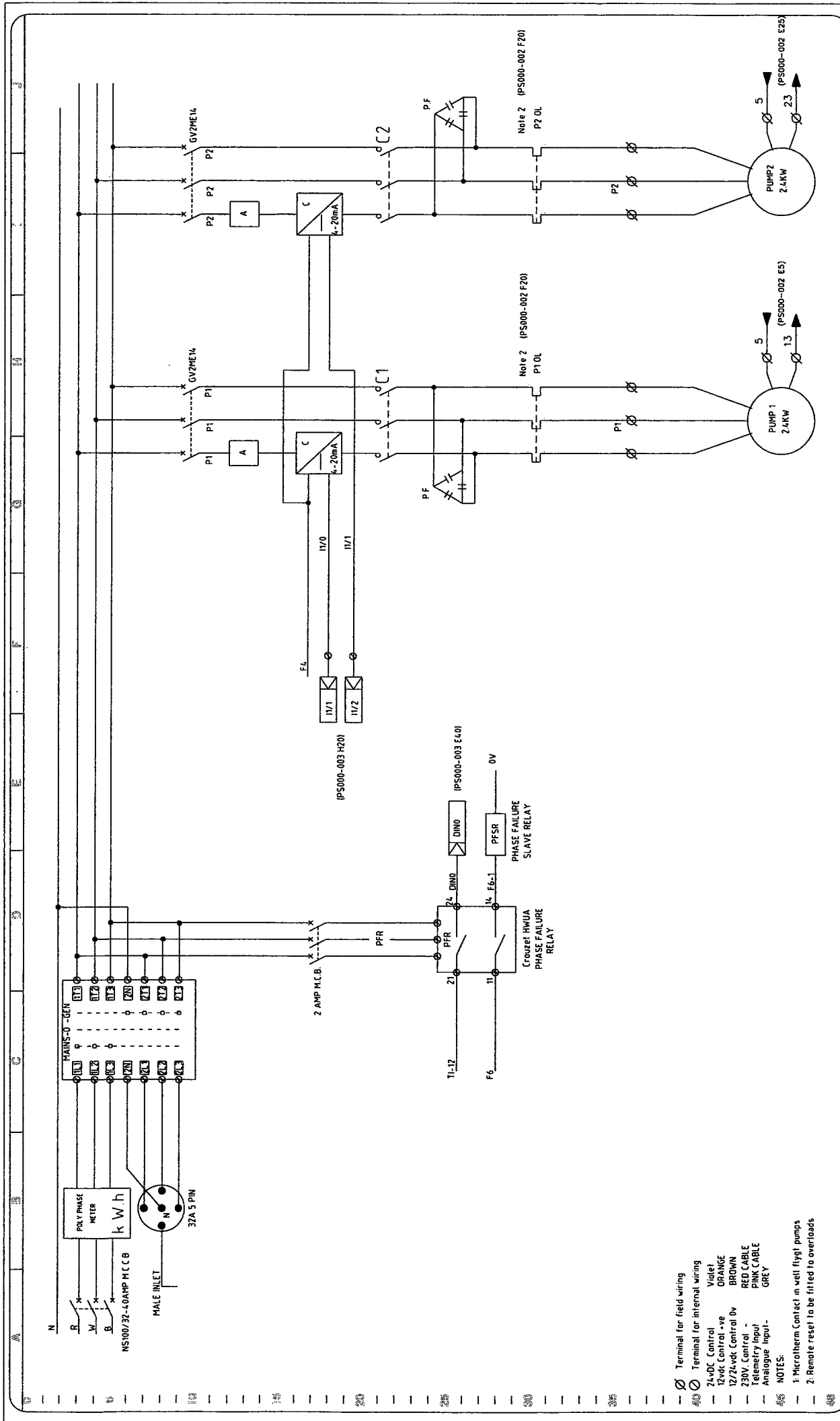
SIGNATURE:

Note:

Do not scale draw

if in doubt ASK!!

MPDC
PS 4



- Ø Terminal for field wiring
 - ⊙ Terminal for internal wiring
 - 24vDC Control Violet
 - 12vdc Control -ve ORANGE
 - 12/24vdc Control 0v BROWN
 - 230V Control - RED CABLE
 - Telemetry Input PINK CABLE
 - Analogue Input - GREY
- NOTES:
 1: Microtherm Contact in well float pumps
 2: Remote reset to be fitted to overloads

city care

2 TRUMAN RD, Te MAUNGA, TAURANGA
 PO BOX 10290, BAYFAIR, MT MAUNGANUI
 Phone 07 927 7100, Fax 07 927 7101

PRINCESS STREET SEWAGE PUMP STATION
 STATION 00
 MOTOR CONTROL

MATAMATA PIAKO DISTRICT COUNCIL
 234-11011 - 2 X 2.4KW

Drawing Originator

DATE	REVISION
21/05/08	First Review
29/05/08	For Construction
23/05/11	As Built

REVISION **C**

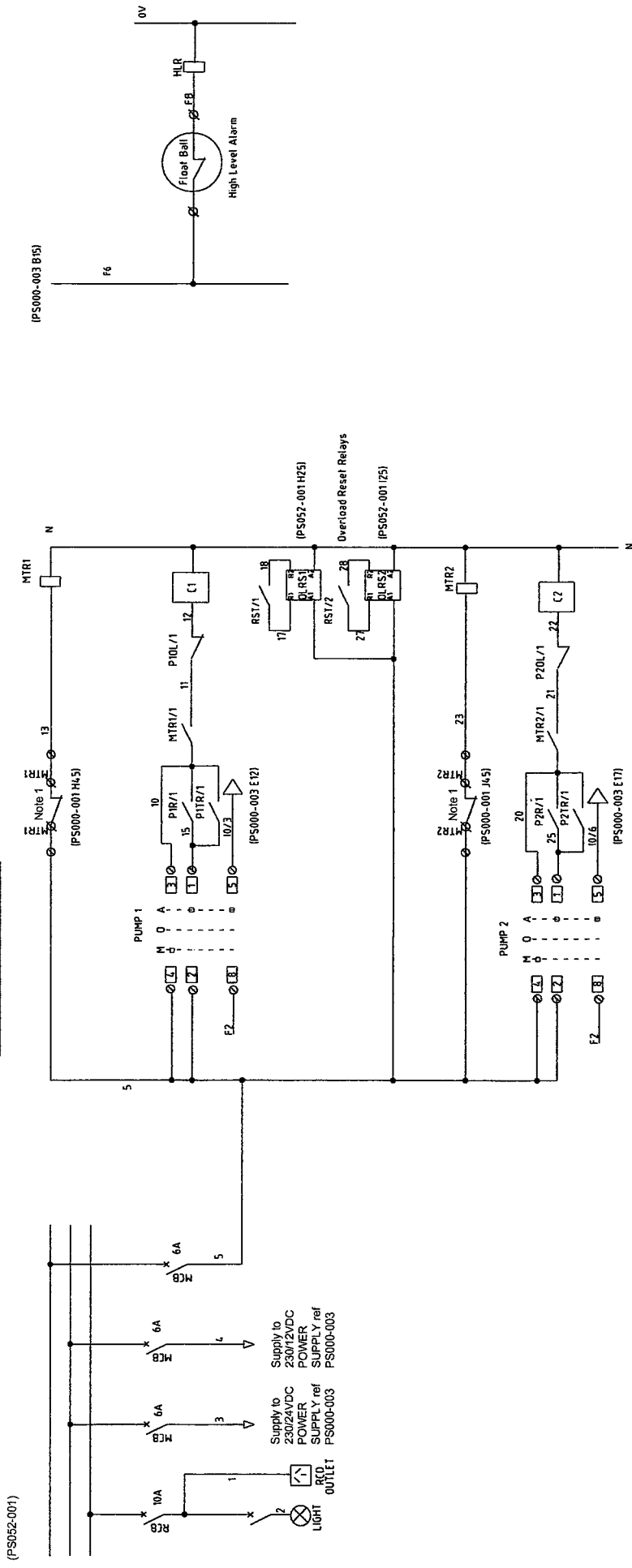
REVISION	DATE
A	
B	
C	
D	
E	

DESIGNED: K.H.
 DRAWN: IM
 APPROVED: 29/05/08

SHEET: 1

MPDC
PS 5

PUMP CONTROLS



- ⊗ Terminal for field wiring
- ⊙ Terminal for internal wiring
- 24VDC Control Violet
- 12Vdc Control +ve ORANGE
- 12/24Vdc Control 0v BROWN
- 230V Control - RED CABLE
- Telemetry Input PINK CABLE
- Analogue Input- GREY


NOTES:
1. Microtherm Contact in well flygt pumps.

SHEET: 2	
MPDC PS 6	
REVISION C	DESIGNED: K.H.
DATE	REVISION
21/05/08	A First Review
29/05/08	B For Construction
23/05/11	C As Built
	D
	E
	APPROVED: IM
	29/05/08

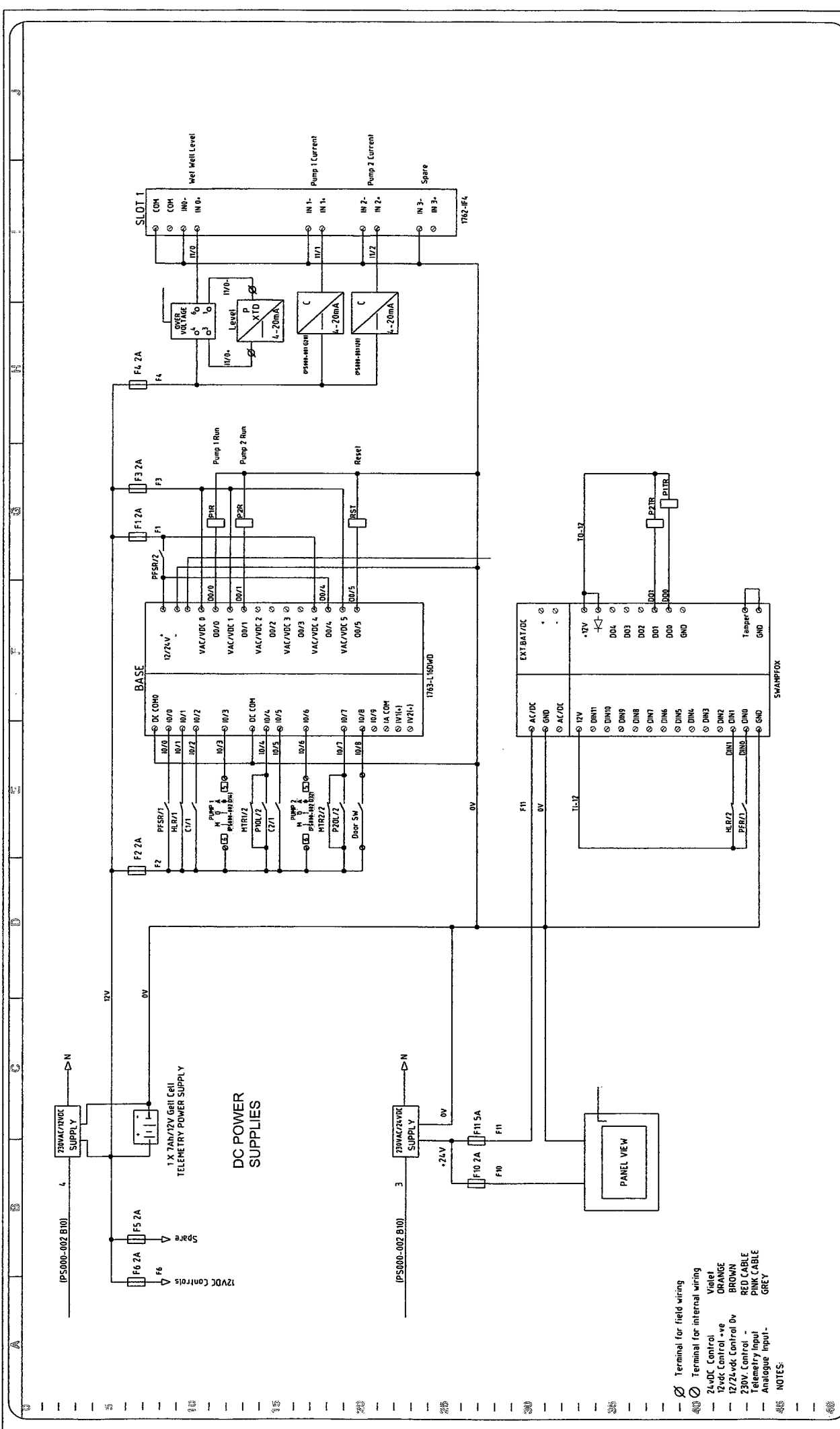
PRINCESS STREET SEWAGE PUMP STATION
STATION 00
MOTOR CONTROL

MATAMATA PIAKO DISTRICT COUNCIL
234-11011 - 2 X 2.4KW

Drawing Originator



2 TRUMAN RD, Te MAUNGA, TAURANGA
PO BOX 10290, BA YFAIR, MT MAUNGANUI
Phone 07 927 7100, Fax 07 927 7101



- ⊗ Terminal for field wiring
- ⊙ Terminal for internal wiring
- Violet
- 24vdc Control
- 12vdc Control -ve
- 12/24-vdc Control 0v
- 230v. Control -
- Telemetry Input
- Analogue Input-

NOTES:

SHEET: 3

MPDC
PS 7

DATE	REVISION
21/05/08	A First Review
29/05/08	B For Construction
23/05/11	C As Built
	D
	E

DESIGNED: K.H.
DRAWN: JM
APPROVED: 29/05/08

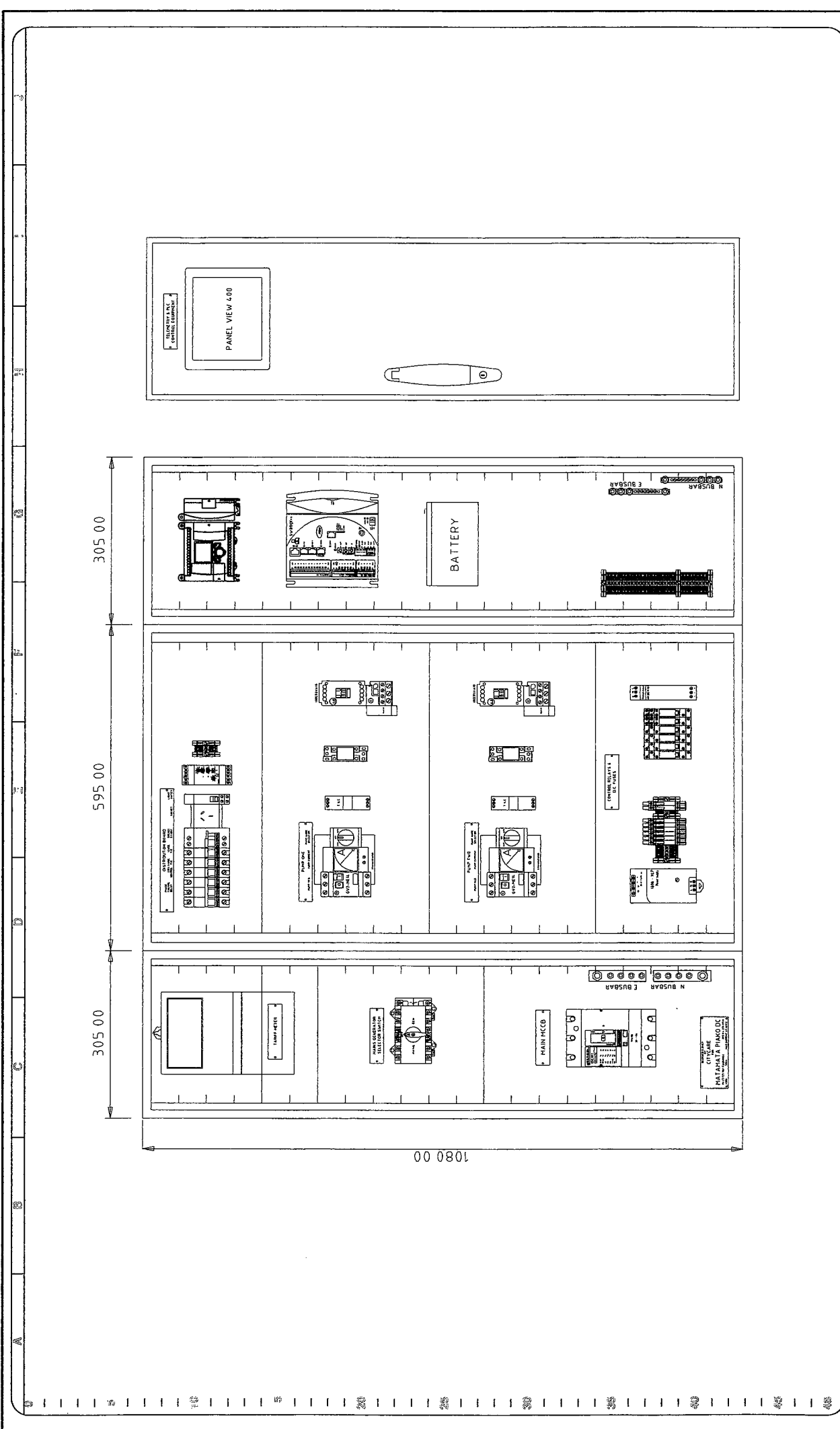
REVISION C

PRINCESS STREET SEWAGE PUMP STATION
STATION 00
TELEMETRY AND CONTROL

MATAMATA PIAKO DISTRICT COUNCIL
234-11011 - 2 X 2.4KW


Drawing Originator

2 TRUMAN RD, Te MAUNGA, TAURANGA
PO BOX 10290, BAYFAIR, MT MAUNGANUI
Phone 07 927 7100, Fax 07 927 7101



REVISION		DATE	REVISION
A		21/05/08	First Review
B		29/05/08	For Construction
C		23/05/11	As Built
D			
E			

SHEET. 4
REVISION C
 DESIGNED: K.H.
 DRAWN: IM
 APPROVED: 29/05/08

Drawing Originator

 2 TRUMAN RD, Te MAUNGA, TAURANGA
 PO BOX 10290, BAYFAIR, MT MAUNGANUI
 Phone 07 927 7100, Fax 07 927 7101

MPDC
PS 8

PRINCESS STREET SEWAGE PUMP STATION
 STATION 00
 CABINET LAYOUT
 MATAMATA PIAKO DISTRICT COUNCIL
 234 11011 - 2 X 2 4KW