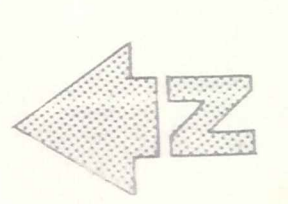




JONES SUBDIVISION  
 Concept roading & sewerage  
 (See Part B of schedule of quantities)



No	Revisions	Date	App'd

Designed	HSDN	Date	10/86	Print Date
Drawn	HSDN		10/86	
Checked				
Approved	<i>[Signature]</i>		5/88	
File	4043/12/10	LB	601	FB

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Client  
**VINCENT COUNTY COUNCIL**

Project  
**BANNOCKBURN SEWERAGE SCHEME**

Sheet Title  
**PLAN OF TRUNK SANITARY SEWER CONSTRUCTION**

Job No  
**13218**

Sheet No  
**1** of 12

Scale 1:2000

NOTE ... Exact location of effluent line subject to new Bannockburn Bridge approach construction



No.	Revisions	Date	Appd.
Designed		Date	Print Date
Drawn			
Checked			
Approved	<i>[Signature]</i>	5/88	
File	1003	2/0	L.B. P.B.

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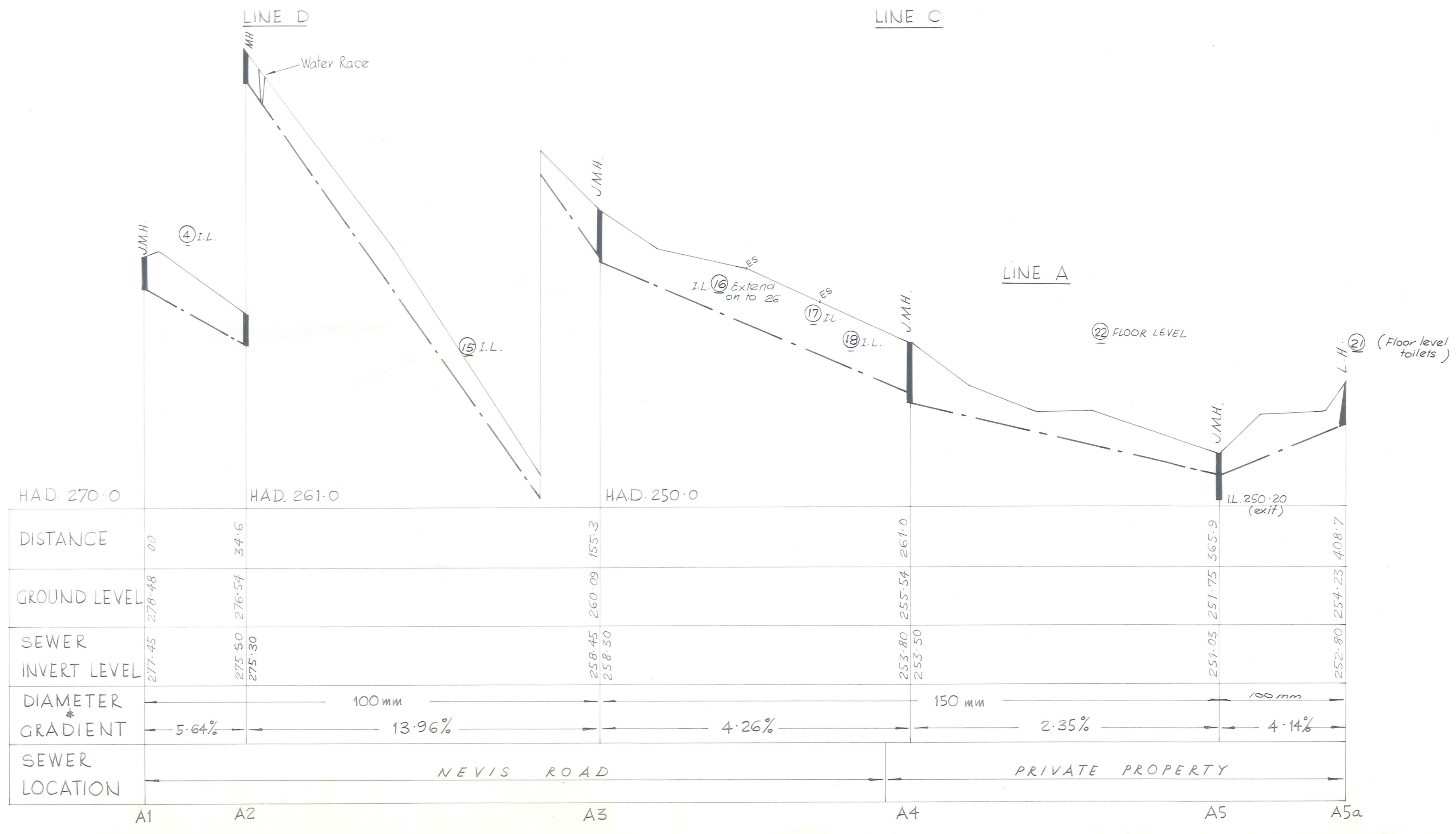
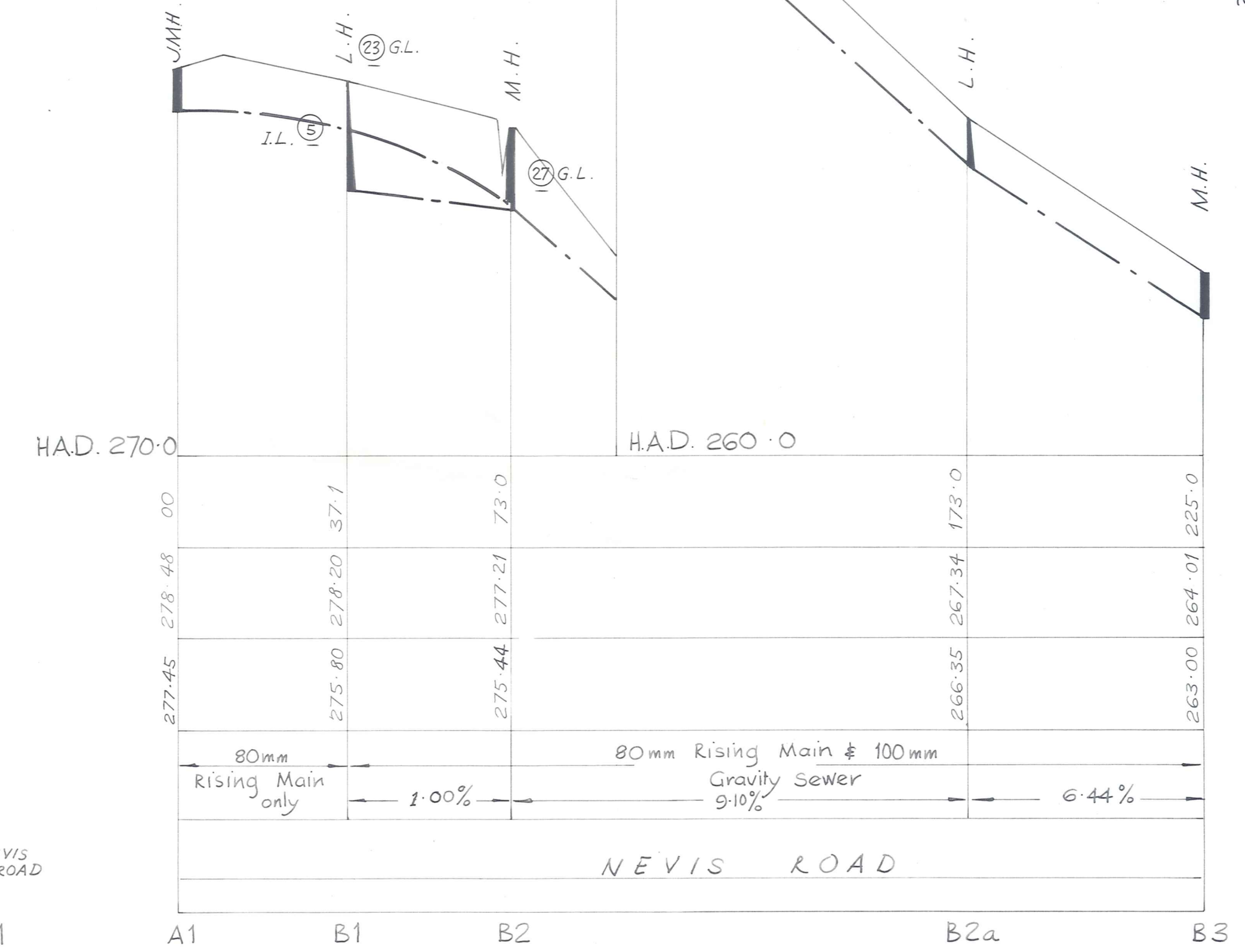
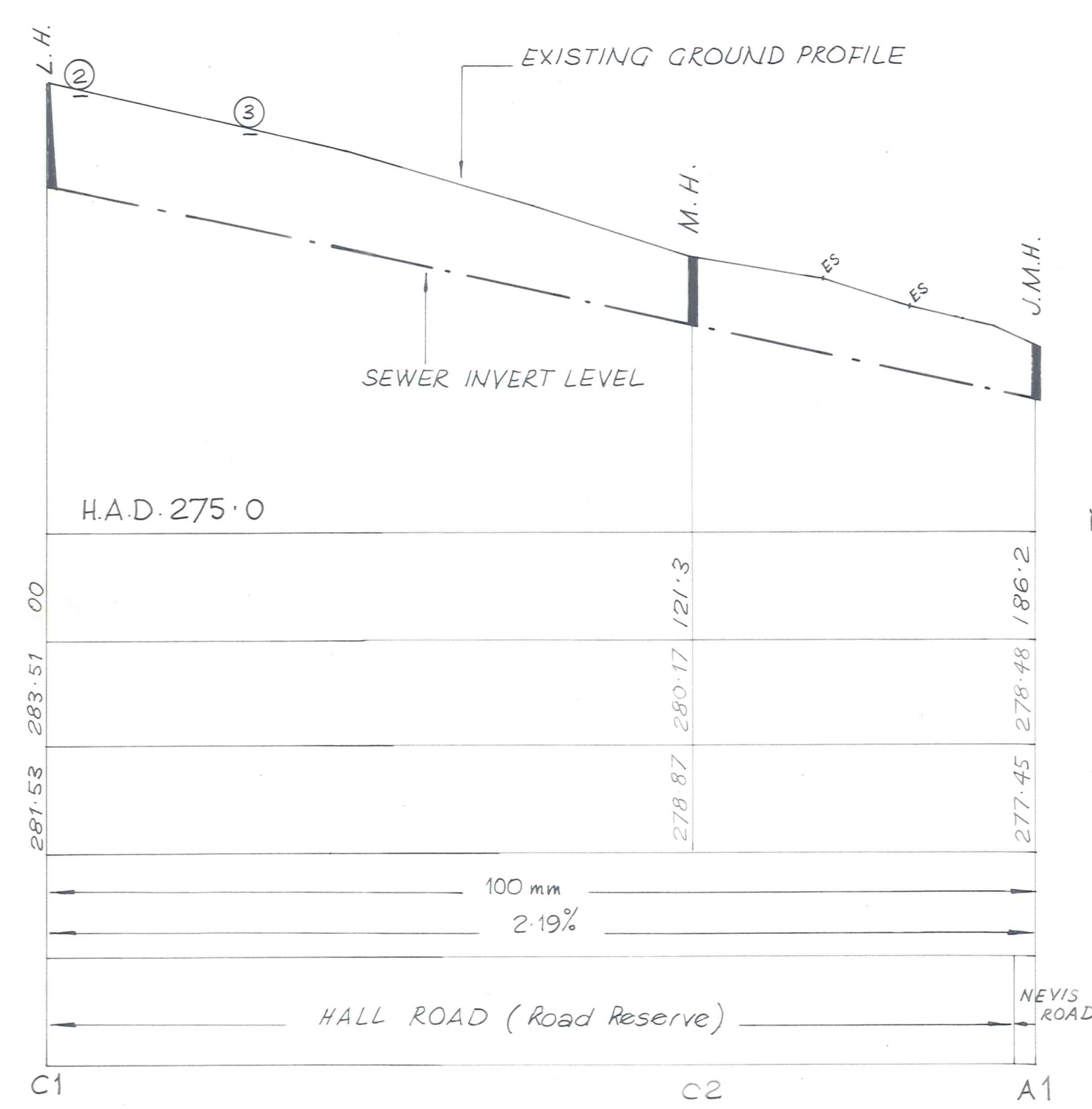
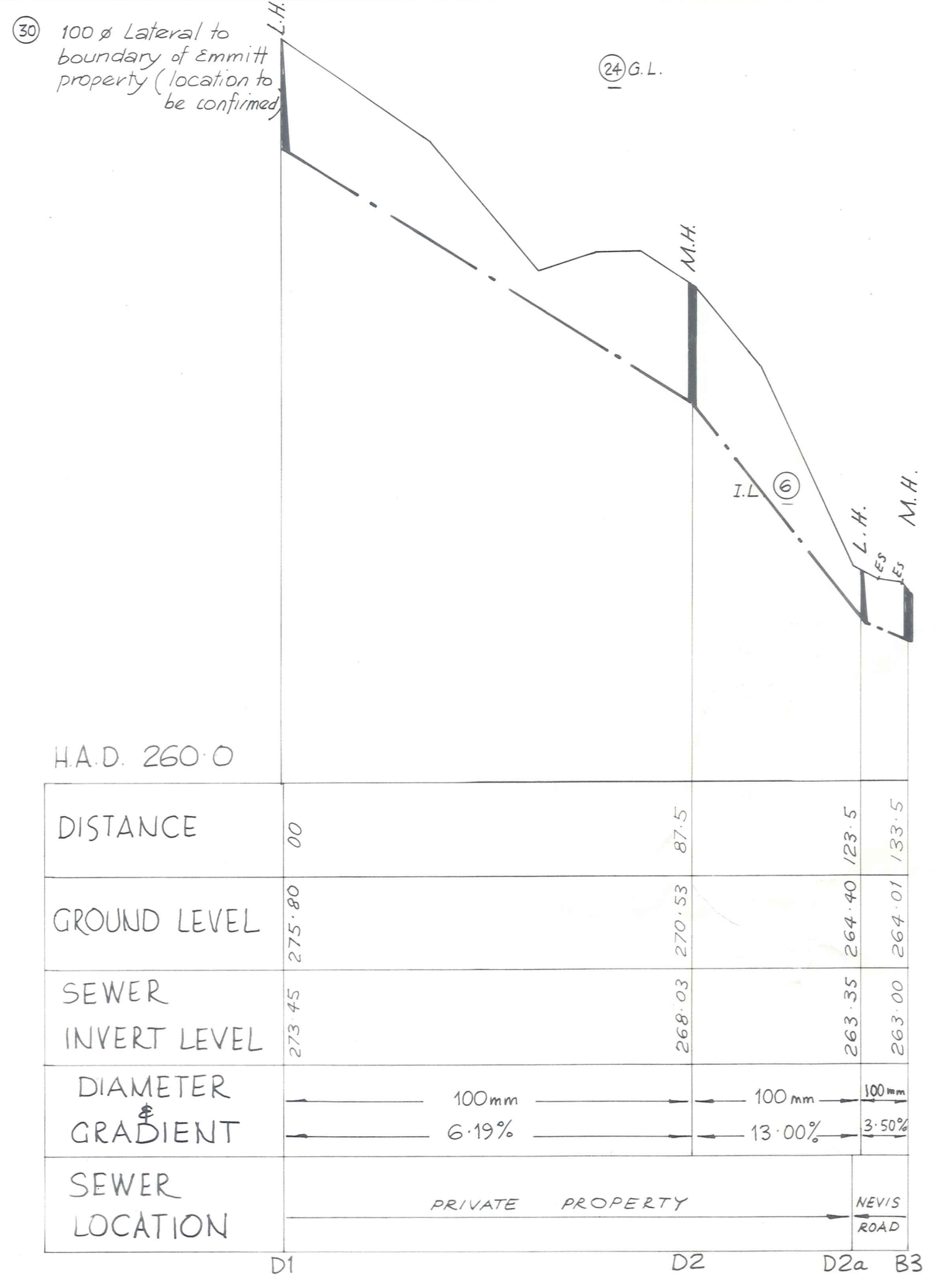
Project: **BANNOCKBURN SEWERAGE SCHEME**

Sheet Title: **PLAN OF GRAVITY TRUNK MAIN LINE A6-A16 & EFFLUENT LINE CONSTRUCTION**

Sheet No.	Revision
<b>13218</b>	<b>2</b>
of	12

Scale 1:2000

1. The location of all household sewer connections shall be confirmed by the Engineer on site, with particular regard to the elevation at existing septic tanks & the length of lateral lines.



LONGITUDINAL SECTIONS

Scale: Horiz - 1:100  
Vert - 1:100

No.	Revisions	Date	Appvd
1	Designed N. JELLEY	Date 3/88	Print Date
2	Checked N. JELLEY	3/88	
3	Approved [Signature]	5/88	
4	File 4043/12/10	L.B. 601	F.B.

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Dunedin Invercargill Alexandra Queenstown

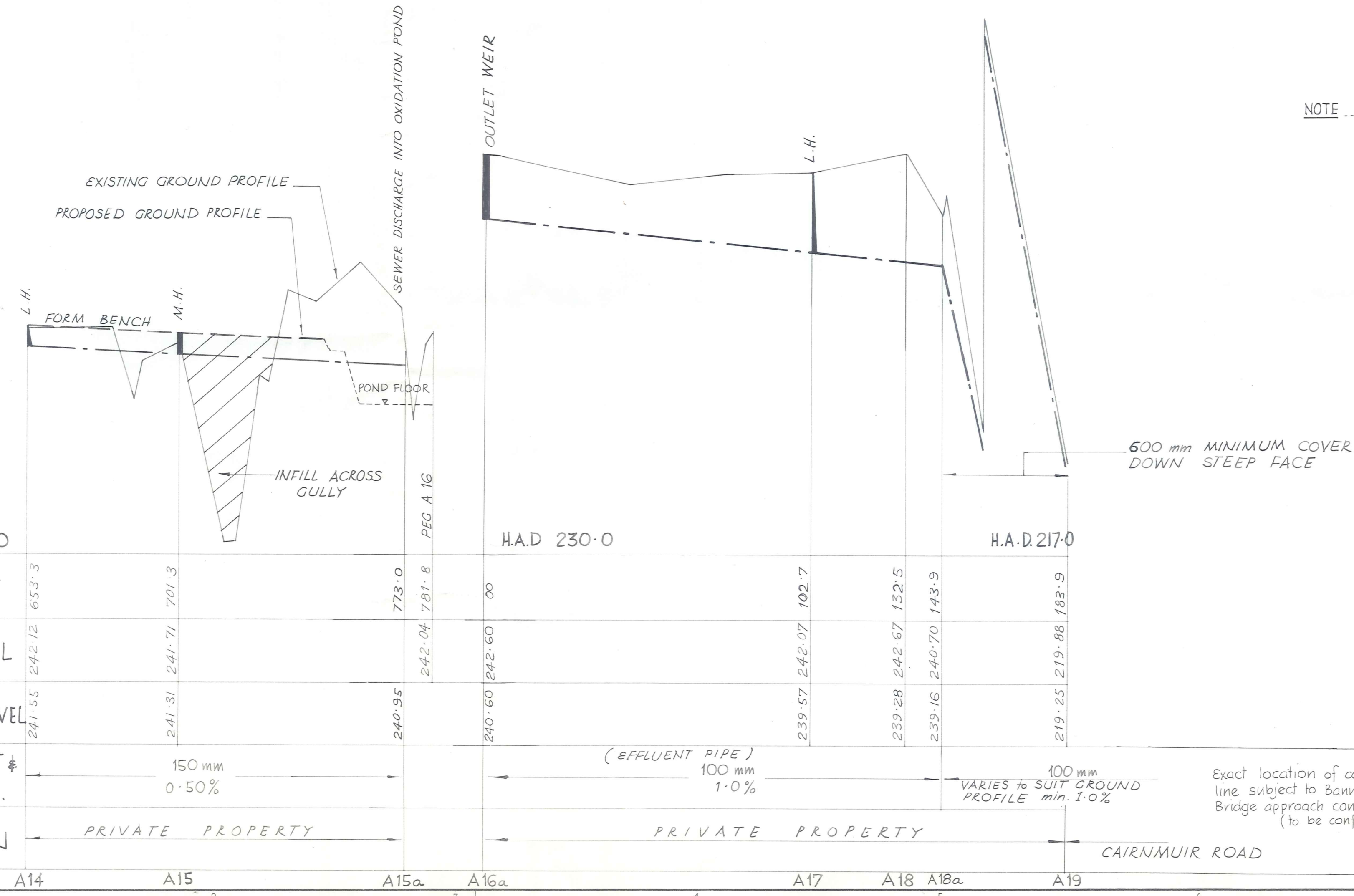
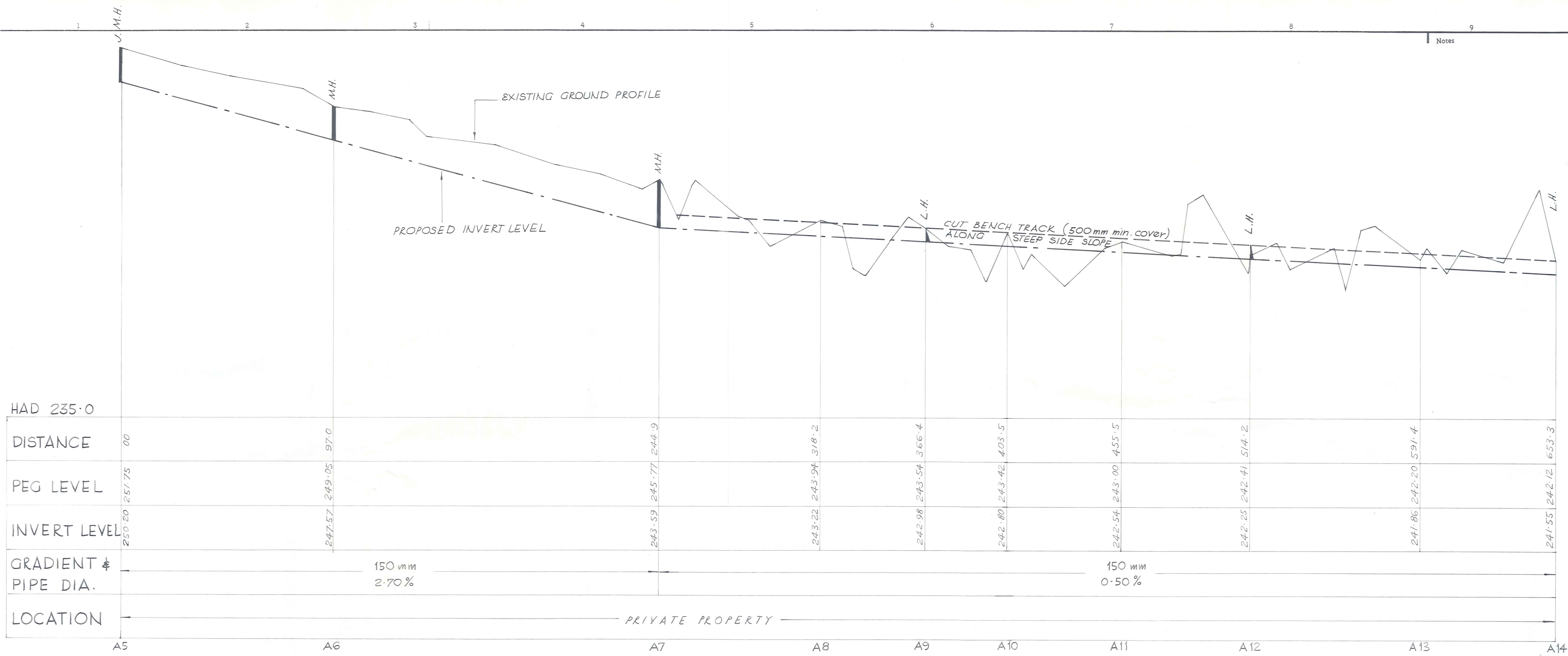
Client:  
**VINCENT COUNTY COUNCIL**

Project:  
**BANNOCKBURN SEWERAGE SCHEME**

Sheet Title:  
**TRUNK MAIN PROFILE LINES A, B, C & D**

Job No. <b>13218</b>	Sheet No. <b>3</b>	Revision <i>[Signature]</i>
	of 12 shts	

ORIGINAL SIZE: mm



NOTE .... Profile between A7 & A15 has been surveyed along traverse lines. The pipeline however shall be constructed on a bench to be formed on the pipeline contour so that minimal earthworks or trenching will be required in order to achieve the 500 mm cover in pipeline between A7 & A15 will have curved horizontal alignment.

LONGITUDINAL SECTIONS

Scale : Vert - 1:100  
 Horiz - 1:1000

No.	Revisions	Date	Appvd
Designed	N. JELLEY	Date 3/88	Print Date
Drawn	MJ CASIDY	3/88	
Checked			
Approved	<i>[Signature]</i>	5/88	
File	4043/12/10	L.B. 601	F.B.

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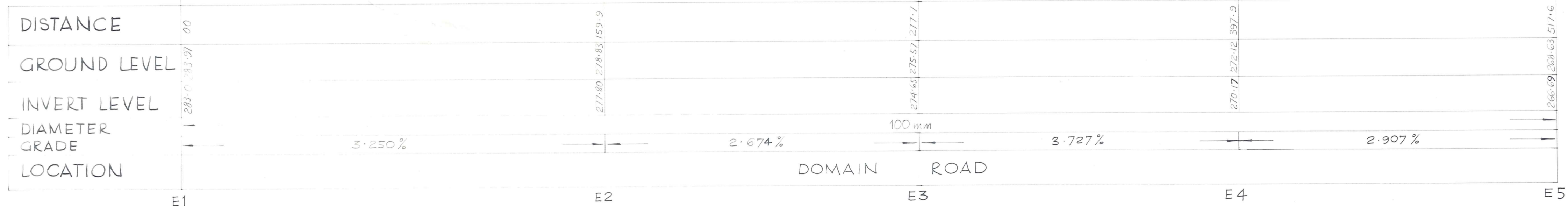
Client  
**VINCENT COUNTY COUNCIL**

Project  
**BANNOCKBURN SEWERAGE SCHEME**

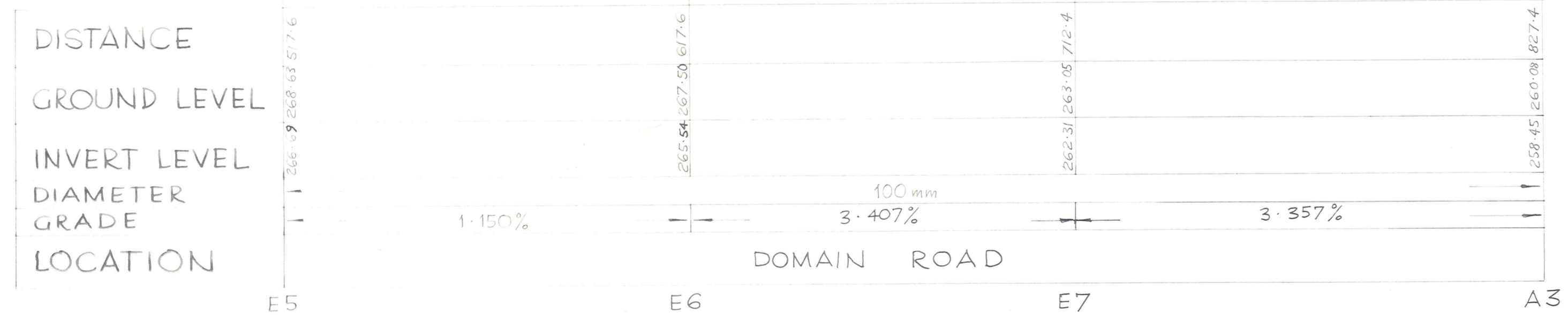
Sheet Title  
**TRUNK MAIN PROFILES LINE A to OXIDATION POND & EFFLUENT PIPELINE**

Job No.	Sheet No.	Revised
<b>13218</b>	<b>4</b>	<i>[Signature]</i>
	of 12 shts	

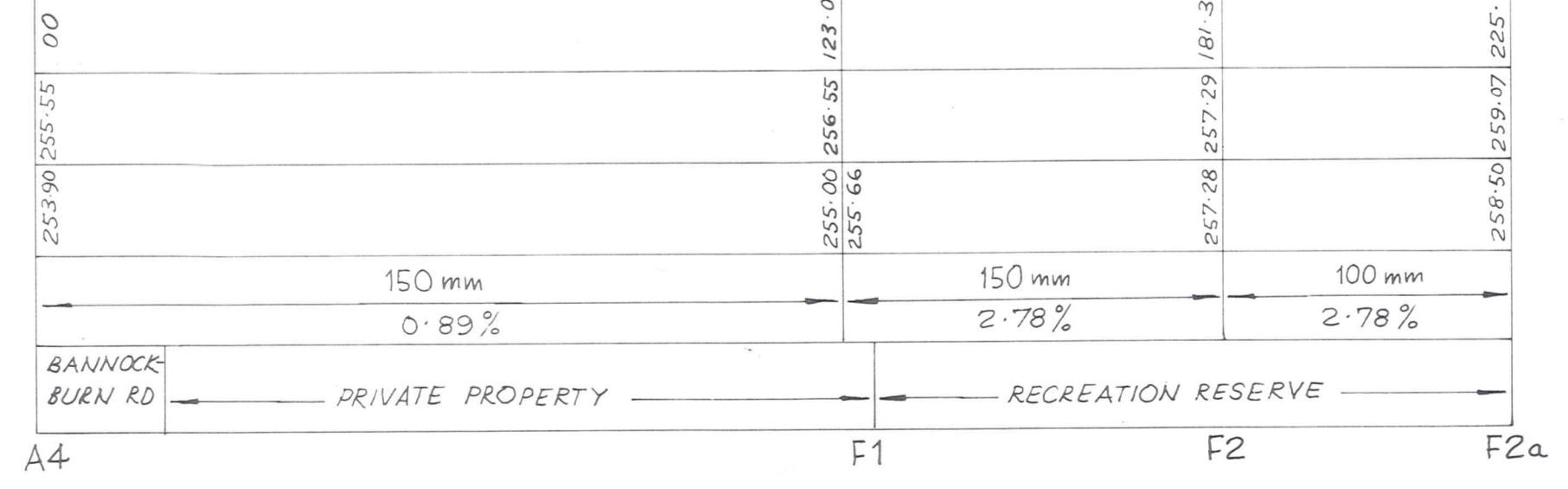
H.A.D. 266.0



H.A.D. 255.0



H.A.D. 250.0



LONGITUDINAL SECTIONS

Scale : Vert 1:100  
Horiz. 1:1000

No.	Revisions	Date	Appvd
1	DESIGNED	9/87	
2	DRAWN	9/87	
3	CHECKED	5/88	
4	APPROVED	5/88	

Designed: N. JELLEY  
 Drawn: M. J. CASSIDY  
 Checked: N. JELLEY  
 Approved: [Signature] 5/88  
 File: 4043/12/10 L.B. 601 F.B.

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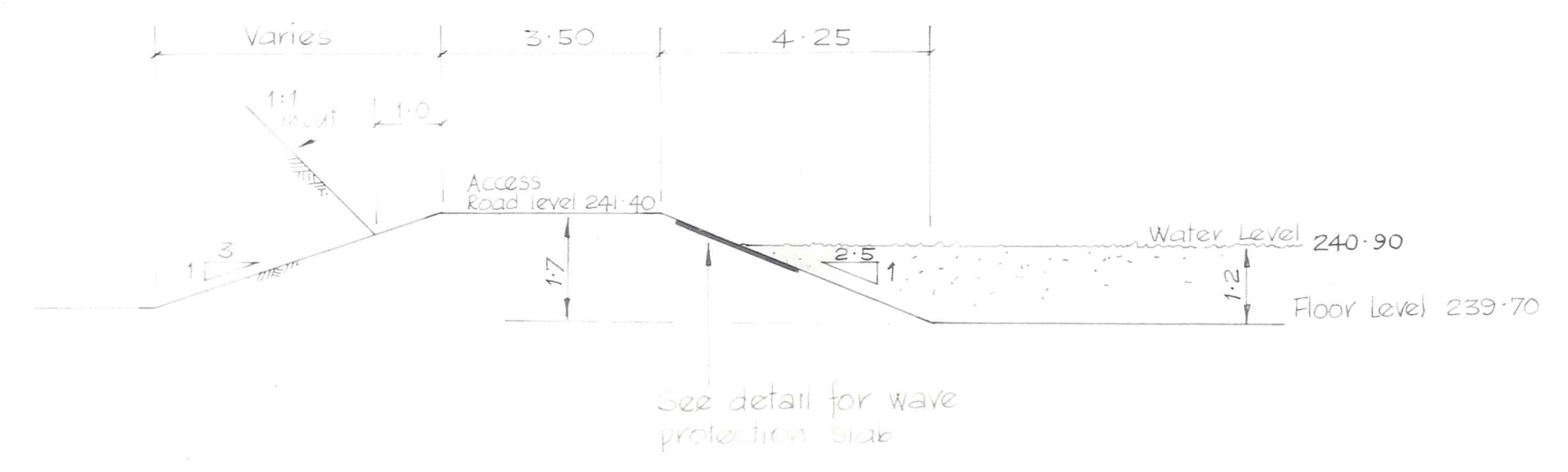
Client  
**VINCENT COUNTY COUNCIL**

Project  
**BANNOCKBURN SEWERAGE SCHEME**

Sheet Title  
**TRUNK MAIN PROFILES LINES E & F**

Job No. **13218**  
Sheet No. **5**  
of **12** sheets

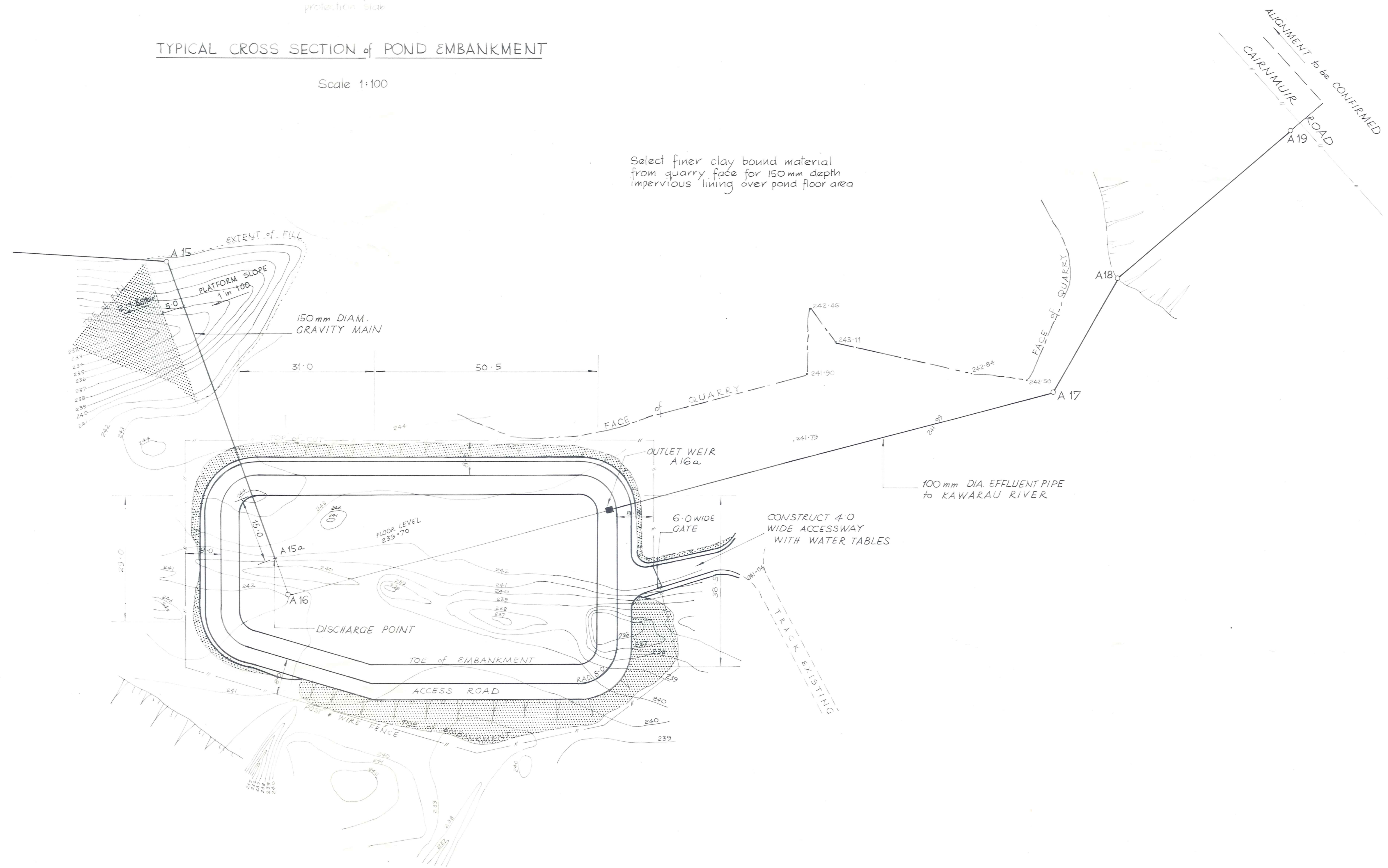
1. Lampholes to be constructed on effluent outlet pipeline at all angles of 30° or greater.



TYPICAL CROSS SECTION of POND EMBANKMENT

Scale 1:100

Select finer clay bound material from quarry face for 150 mm depth impervious lining over pond floor area



OXIDATION POND

Scale 1:500

No.	Revisions	Date	Appvd

Designed	N. JELLEY	Date	9/87	Print Date
Drawn	M. J. CASSEY	Date	MARCH '88	
	N. JELLEY	Date	SEPT '87	
Checked				
Approved	<i>[Signature]</i>	Date	5/88	
File	4043/12/10	L.B.	601	F.B.

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Client  
**VINCENT COUNTY COUNCIL**

Project  
 BANNOCKBURN  
 SEWERAGE SCHEME

Sheet Title  
 OXIDATION POND &  
 TYPICAL CROSS SECTION of  
 POND EMBANKMENT

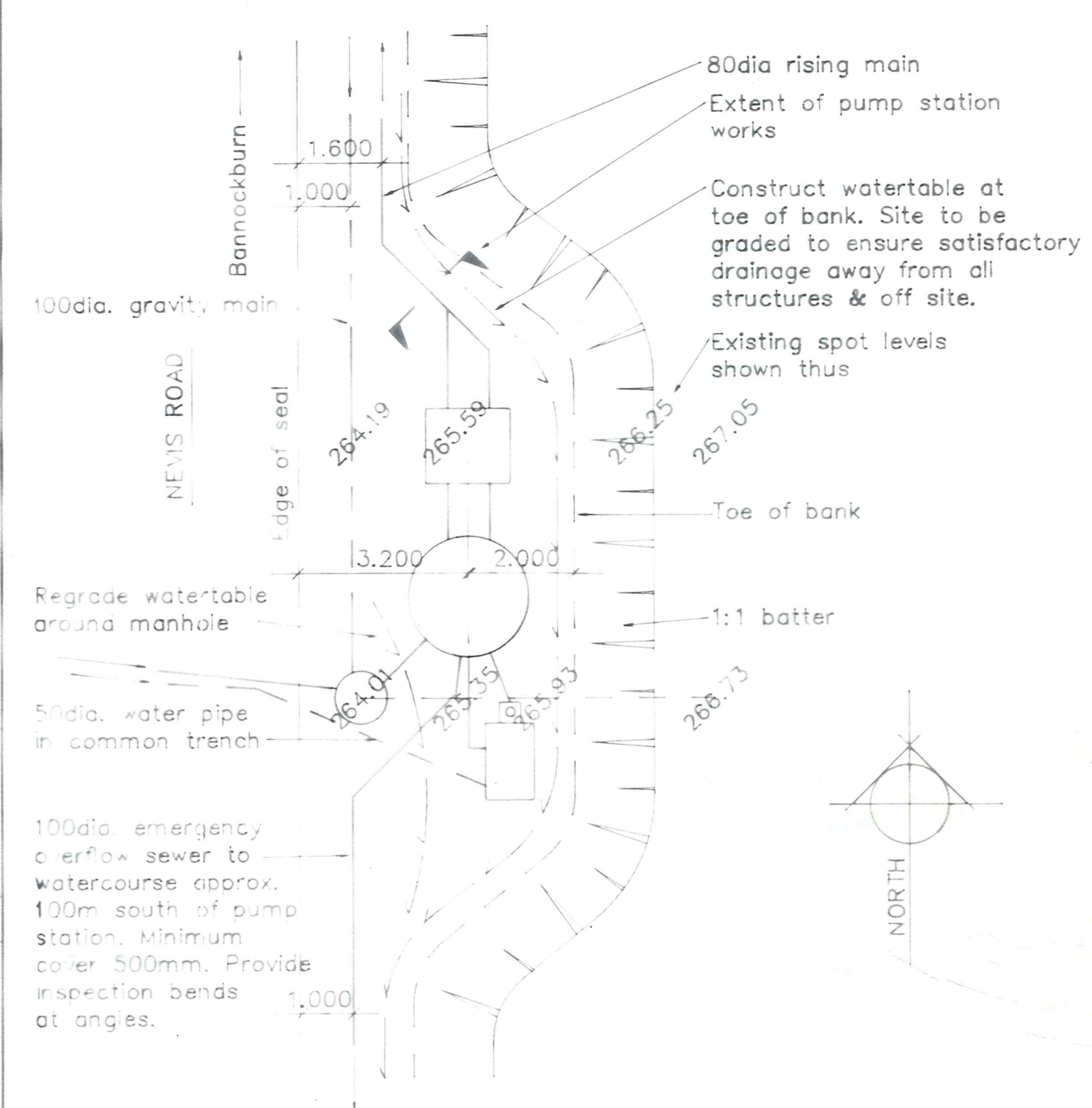
Job No.	13218	Sheet No.	6
			of 12

ORIGINAL SIZE mm









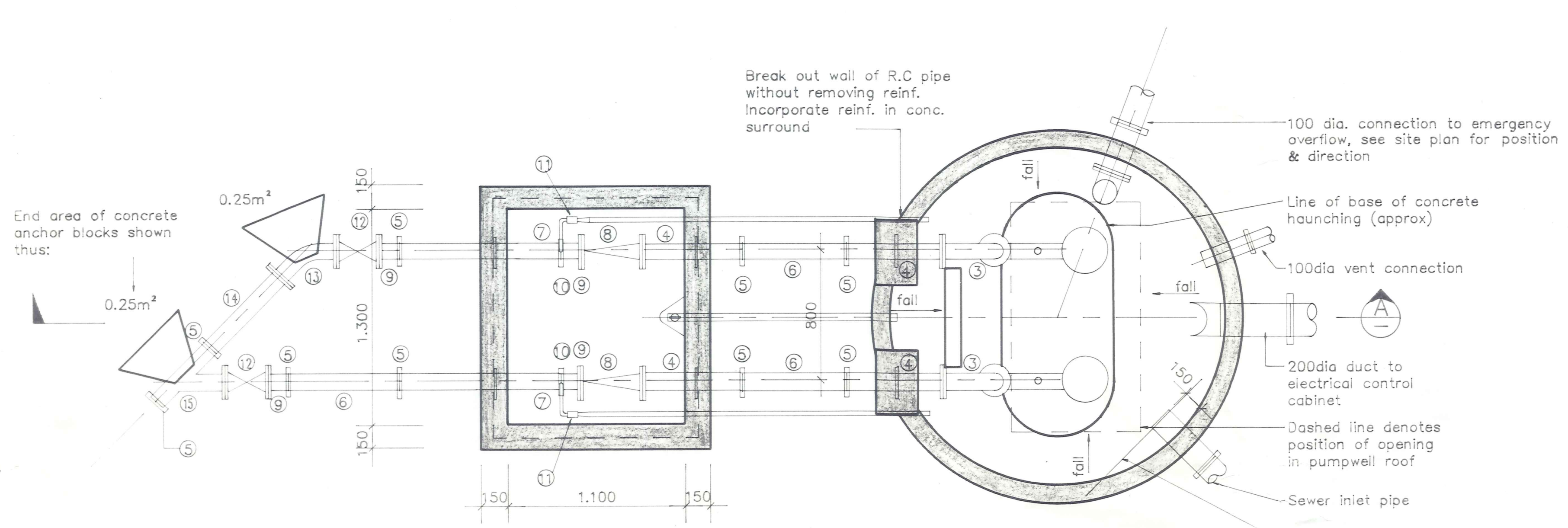
SITE PLAN  
1:100

PUMP STATION	
Pump station internal dia.	2.050m
Pipe description	FJRC pipe CLX
Pump discharge dia.	100mm
Rising main dia.	80mm
Top of slab R.L.	264.10
Pump station invert level	261.70
Approx. existing ground level	varies
Finished ground level	264.05max.
Lowest sewer invert level	262.80
Overflow sewer invert level	263.60
Rising main invert level	262.90
No. of 2.44m pipe lengths	1.0
Storage chamber connection invert	N.A.
Pump 'on' level	262.45
Pump 'off' level	262.15

SCHEDULE OF PUMPWELL DIMENSIONS & LEVELS

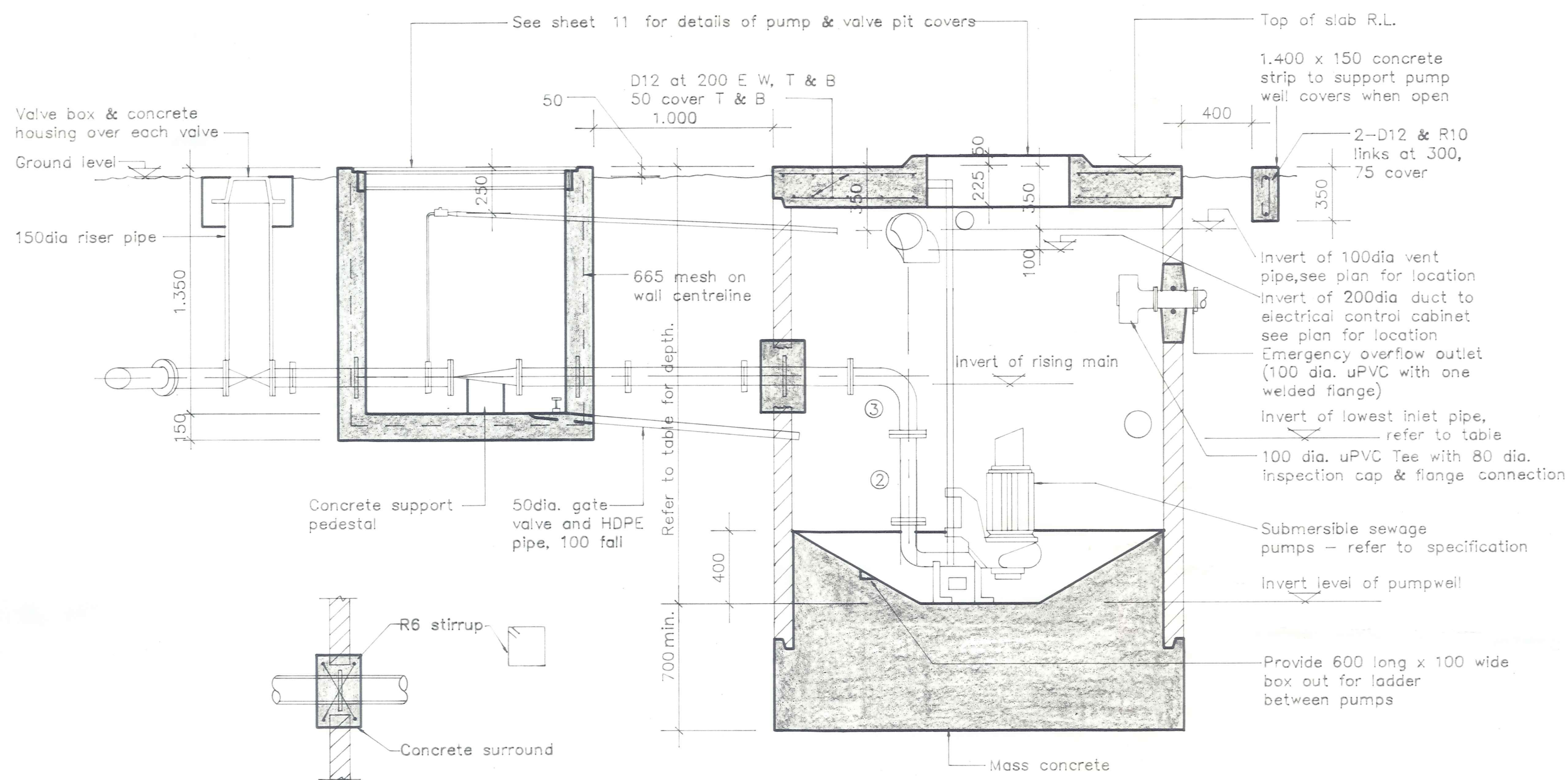
ITEM	No. OFF	DESCRIPTION
1	-	C.I. flanged reducer
2	2	C.I. 80 dia. flanged straight - length to suit. Bottom flange to be to BS:4504 to match pump discharge.
3	2	C.I. 80 dia. flanged 90deg. slow radius bend
4	4	C.I. 80 dia. flanged one end straight - with puddle flange - length to suit
5	9	C.I. 80 dia. gibault joint
6	3	C.I. 80 dia. plain ended straight - length to suit, see plan
7	2	C.I. 80 dia. plain ended straight - with puddle flange - length to suit
8	2	C.I. 80 dia. flanged swing check valve
9	4	C.I. 80 dia. adaptor plain
10	2	C.I. 80 dia. elongated gibault joint - tapped 20 dia.
11	2	Water hammer control device - see sheet 10
12	2	C.I. 80 dia. flanged sluice valve
13	1	C.I. 80 dia. flanged 45° slow radius bend
14	1	C.I. 80 dia. flanged one end straight - length to suit
15	1	C.I. 80 dia. flanged branch, plain ends, 45° "Y" junction

SCHEDULE OF C.I. PIPEWORK



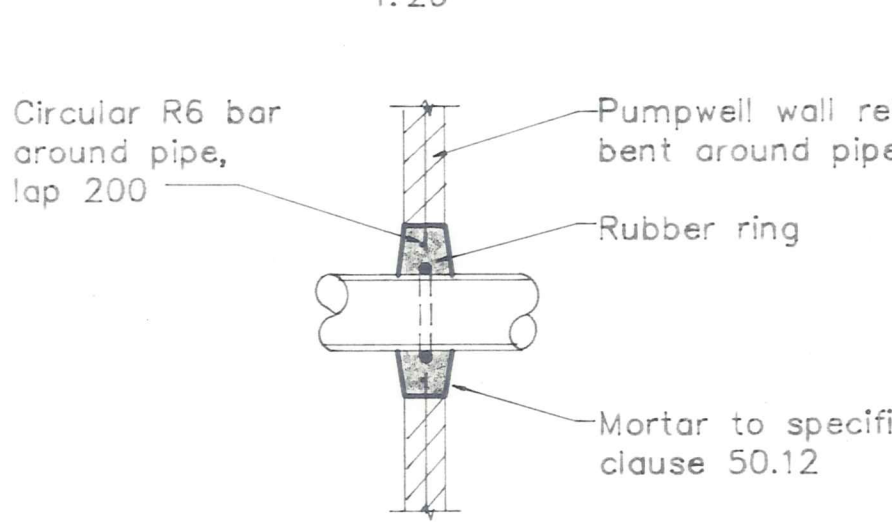
PLAN OF VALVE PIT & PUMPWELL 1:20

Note: Refer to site plans for positions of pipework connections



SECTION A-A  
1:20

RISING MAIN JOINT DETAIL  
1:20



TYPICAL MORTAR JOINT DETAIL  
1:20

NOTE: Detail applies at all pump well penetrations except rising main.

No.	Revisions	Date	Appvd

Designed	DE RALTON	Date	APRIL 88	Print Date
Drawn	CS MURRAY	Date	MAY 88	
Checked				
Approved	(Signature)	Date	5/88	
File	L.B.	Project	BPST-P-	

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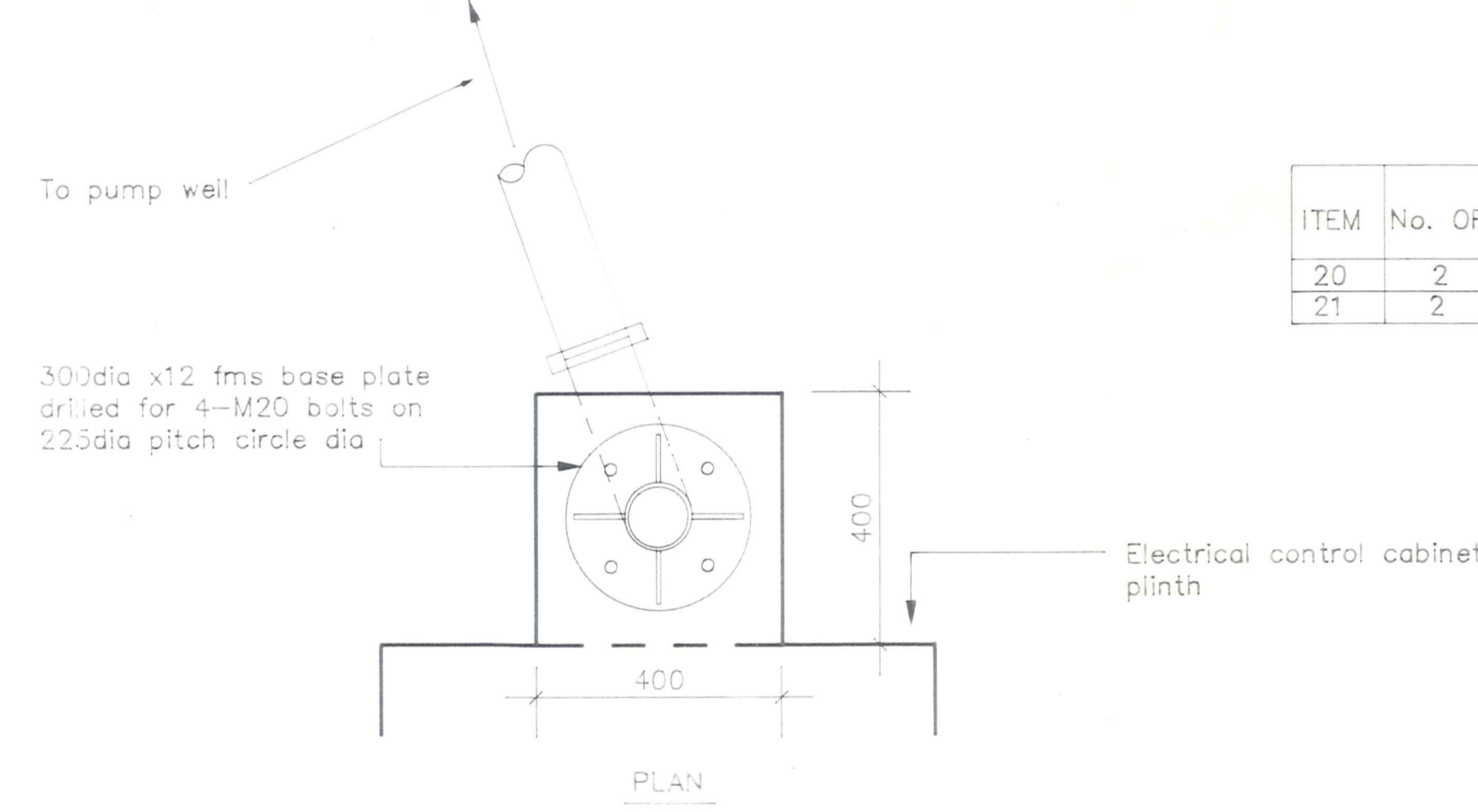
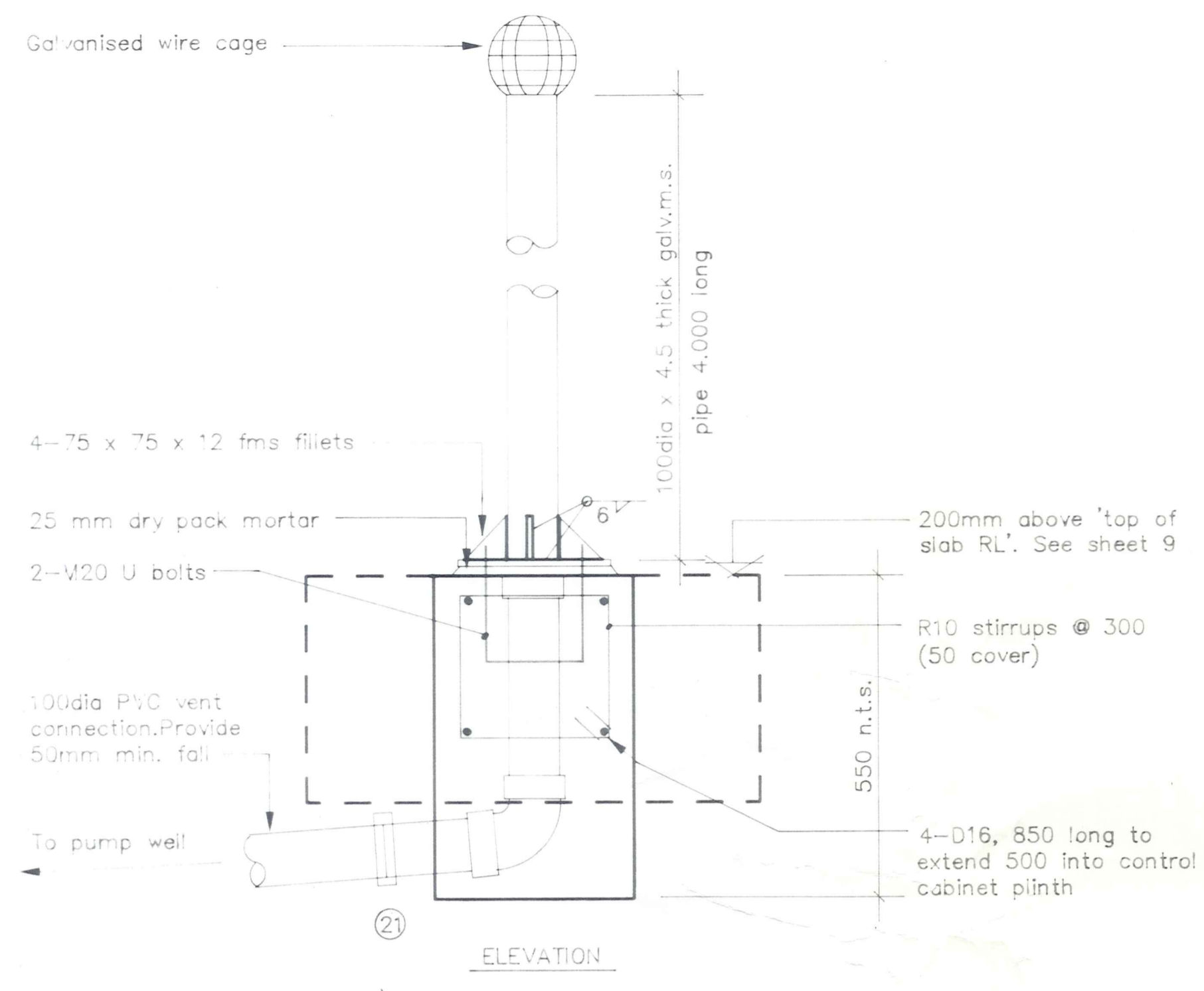
Client  
**VINCENT COUNTY COUNCIL**

Project  
**BANNOCKBURN SEWERAGE SCHEME**

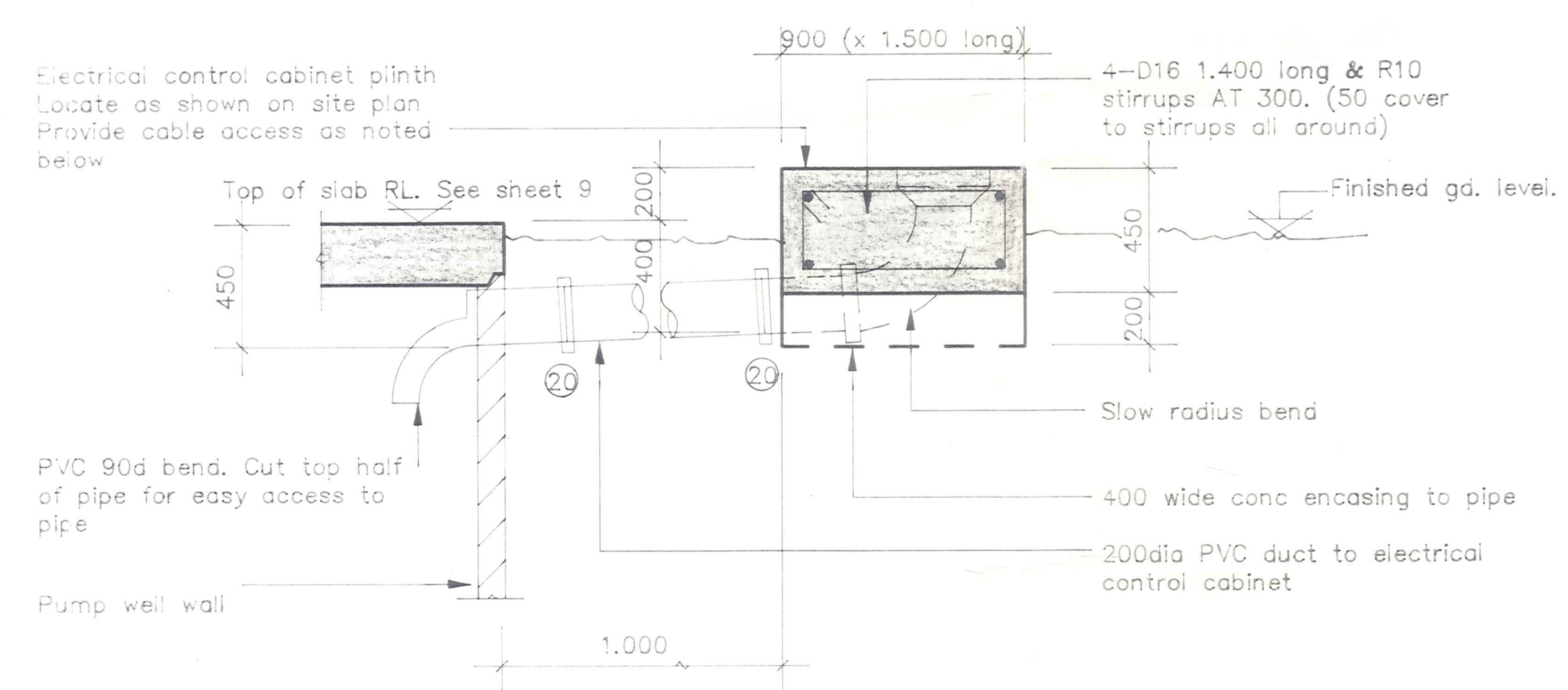
Sheet Title  
**PUMP STATION PUMP WELL & VALVE PIT DETAILS**

Job No.	13218	Sheet No.	9	Revision	

ORIGINAL SIZE mm



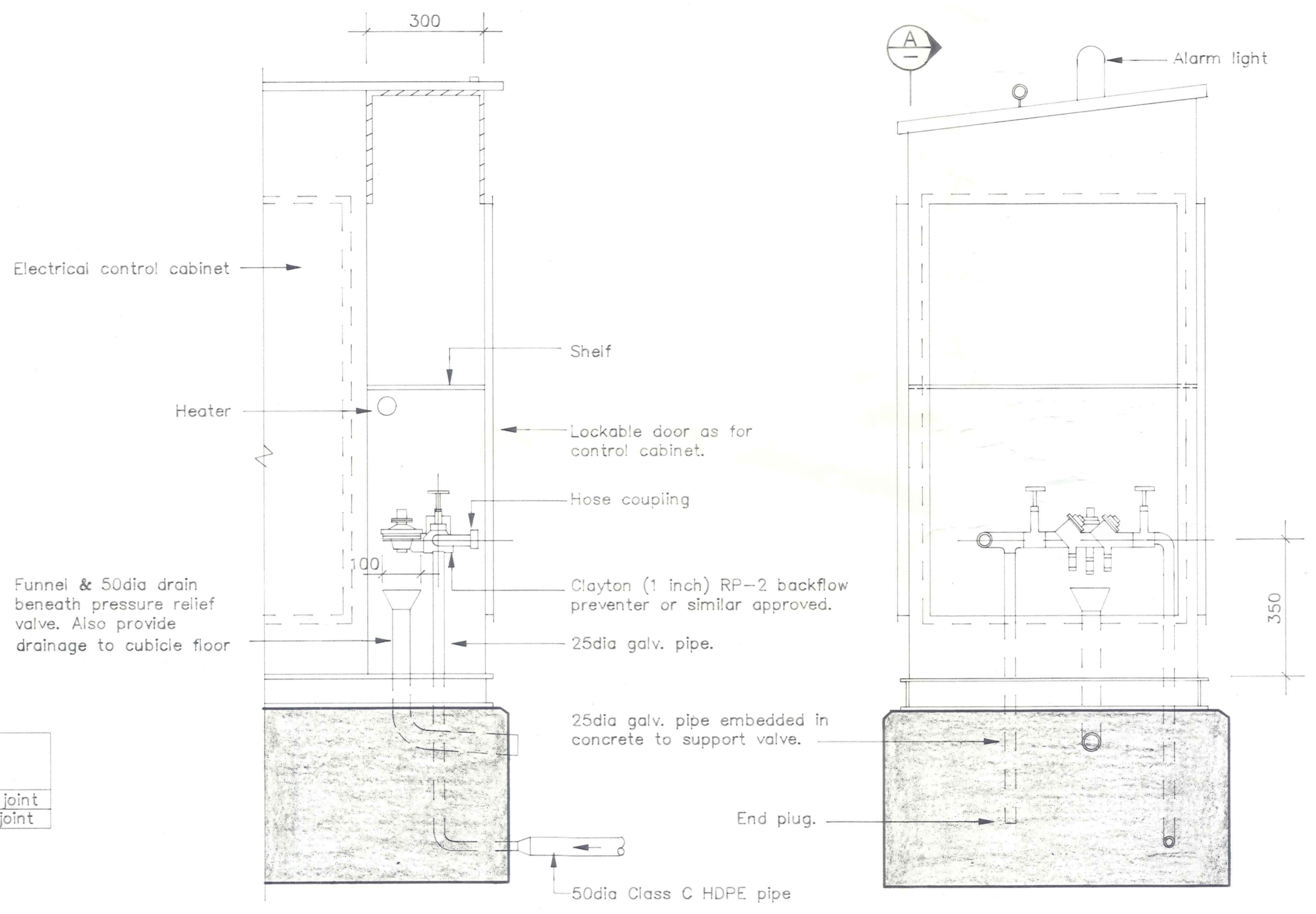
**PUMPING STATION VENT DETAIL**  
1:10



**ELEVATION OF ELECTRICAL CONTROL CABINET PLINTH**  
1:20

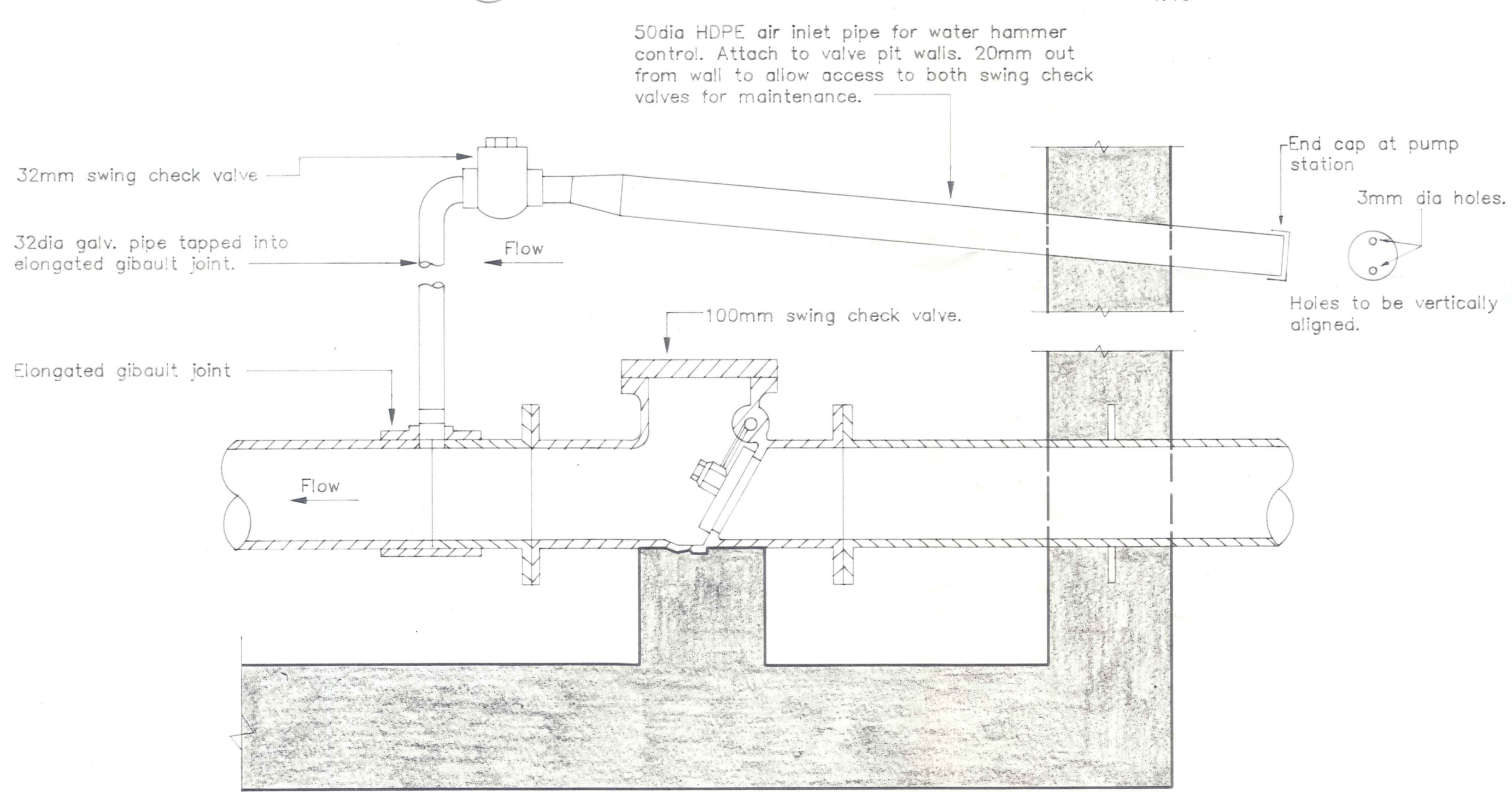
NOTE: Allow to provide 150dia slow radius bend duct in plinth for mains supply cable to Electrical Contractor's requirements.

ITEM	No.	OFF	DESCRIPTION
20	2		200 dia. rubber ring joint
21	2		100 dia. rubber ring joint



**SECTION A**  
1:10

**WATER CUBICLE**  
1:10



**WATER HAMMER CONTROL DEVICE**  
1:5

No.	Revisions	Date	Appd

Designed	DERAULTON	Date	APR '88	Print Date
Drawn	G.S. MURRAY	Date	MAY '88	
Checked				
Approved	J. L. L.	Date	5/88	
File		L.B.		BPST--D1

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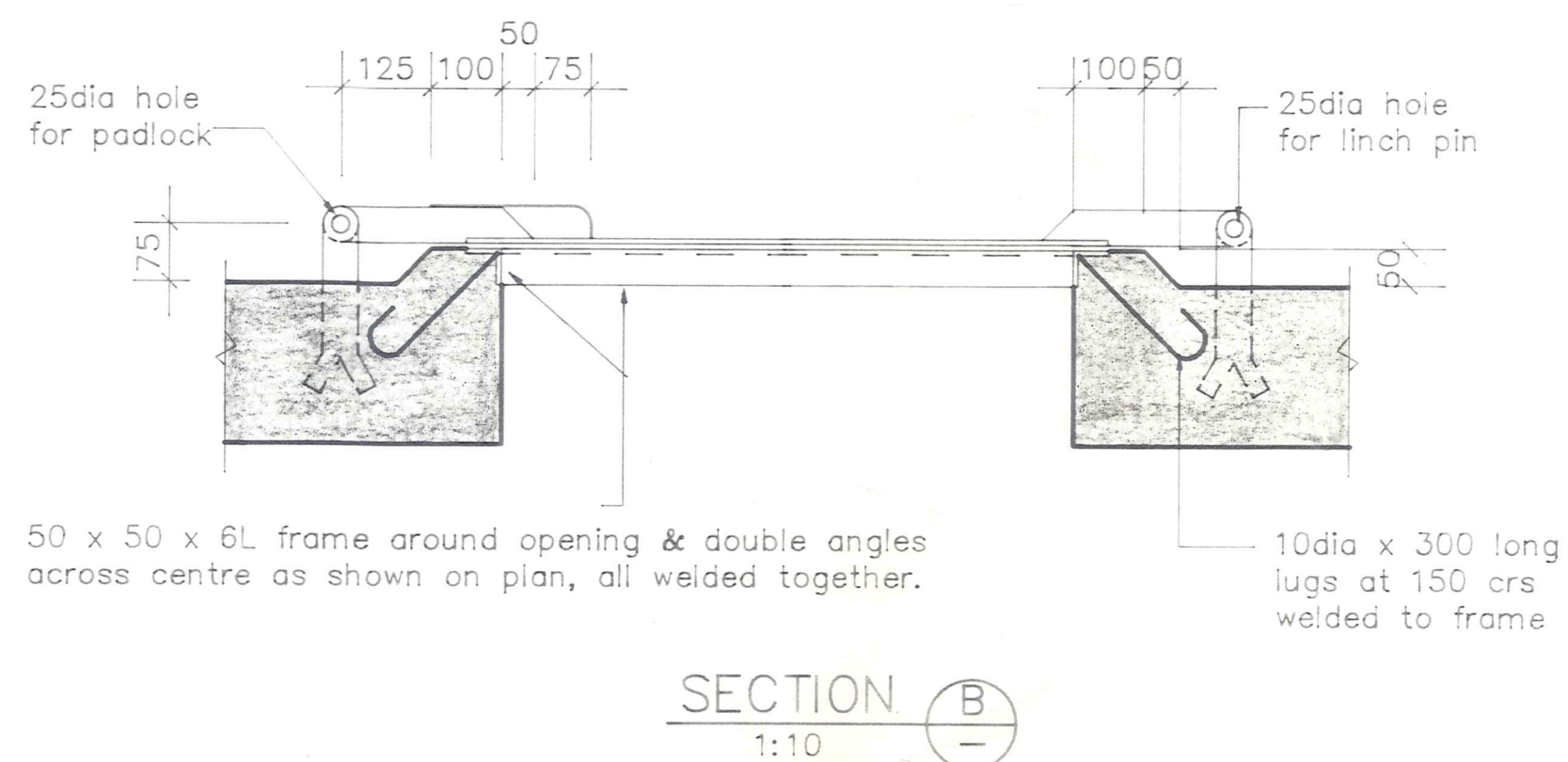
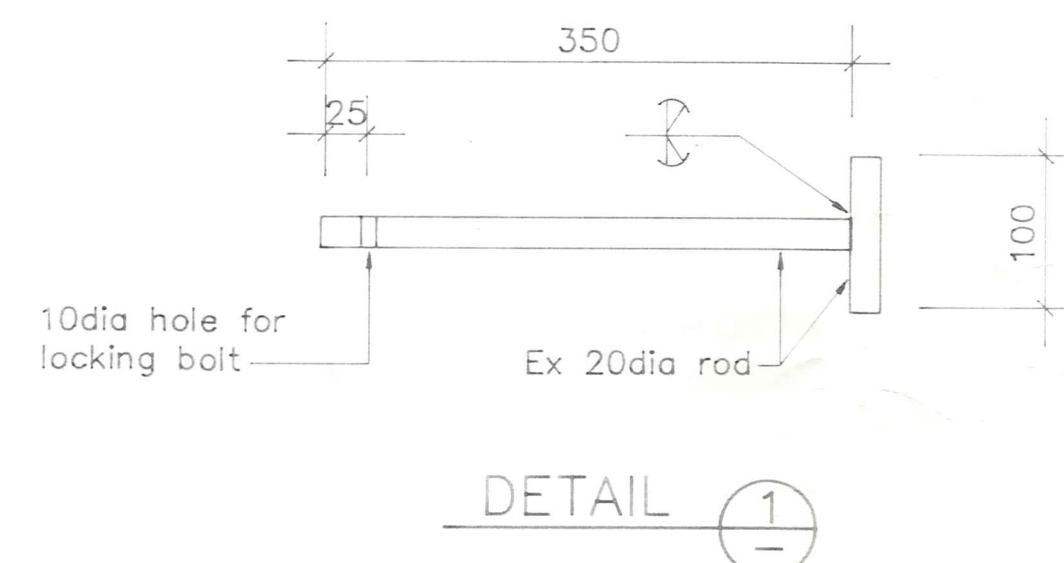
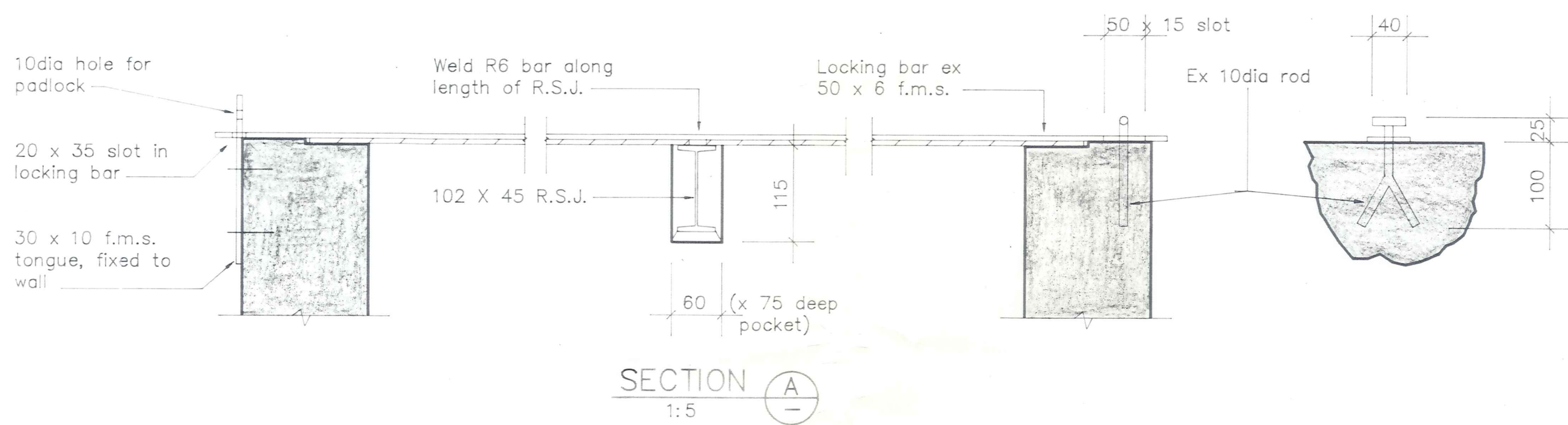
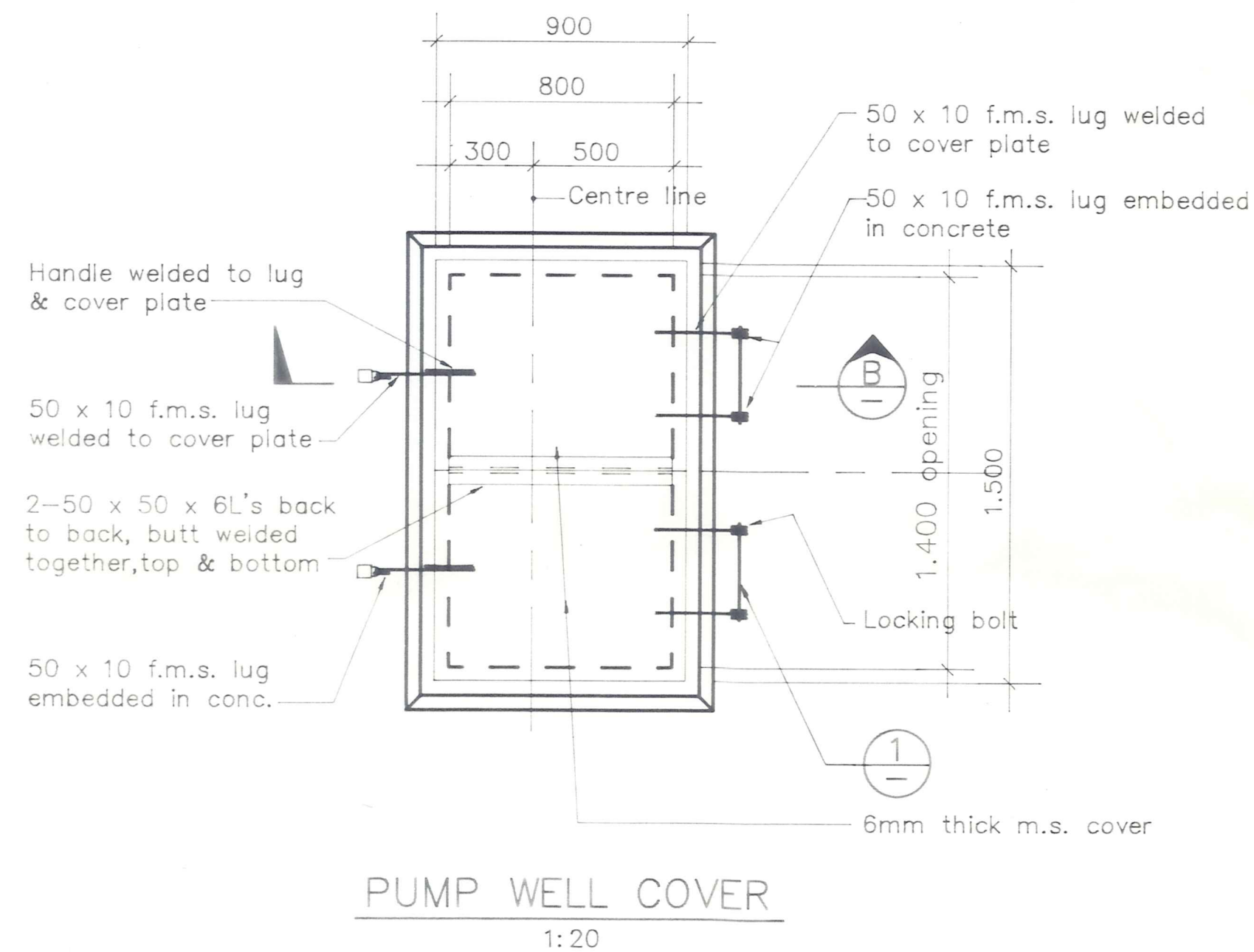
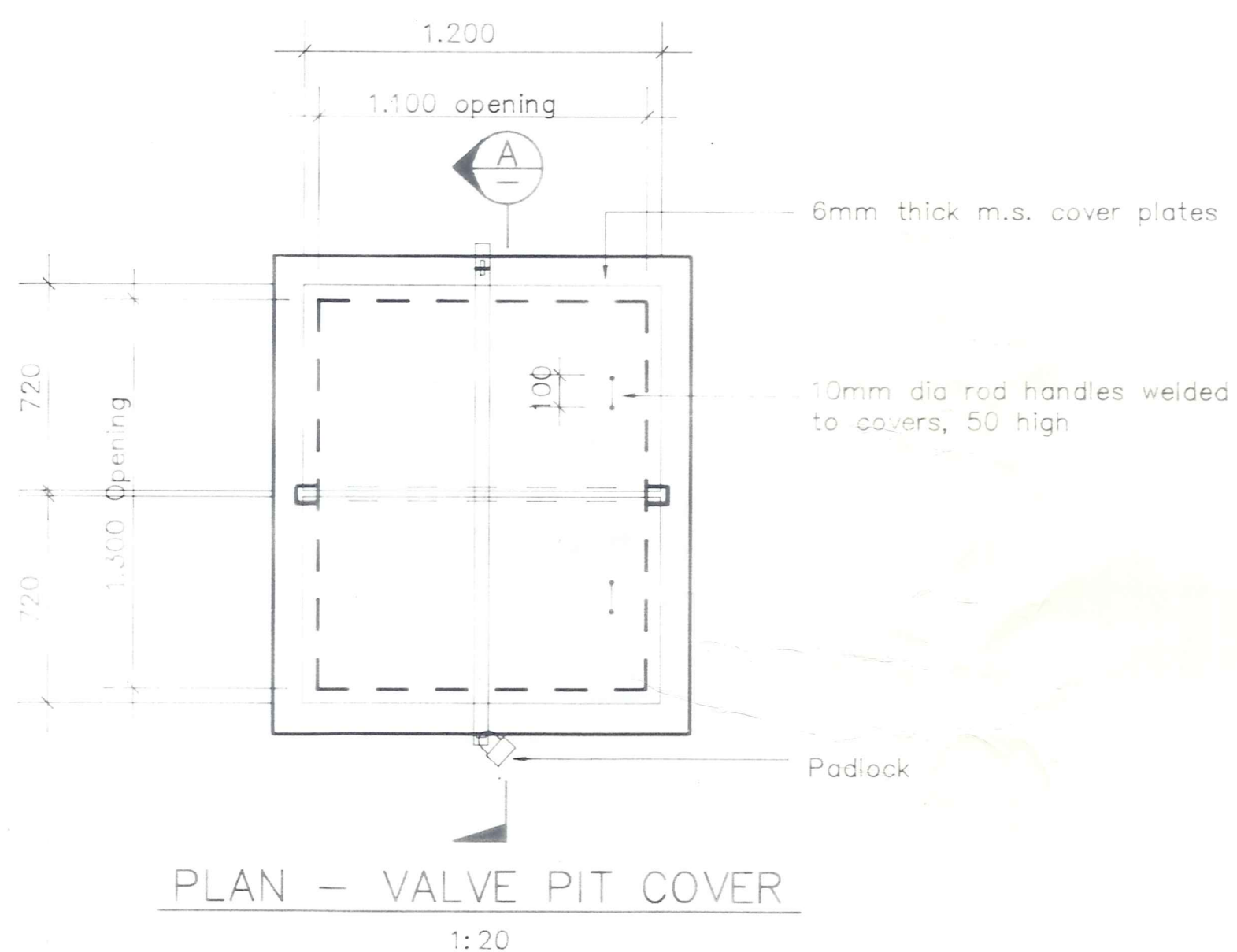
Project  
**BANNOCKBURN SEWERAGE SCHEME**

Sheet Title  
**ELECTRICAL CONTROL CABINET, WATER HAMMER CONTROL DEVICE AND VENT DETAILS**

Job No.	Sheet No.	Rev.
13218	10	

NOTES:

- 1. ALL STEELWORK TO BE HOT DIPPED GALVANISED AFTER FABRICATION
- 2. REMOVE ANY BUCKLES CAUSED DURING GALVANISING
- 3. ALL WELDS TO BE 6mm F.W. ALL AROUND UNLESS OTHERWISE SHOWN



No.	Revisions	Date	Appvd

Designed	D.E. RAILTON	Date	April '88	Print Date	
Drawn	G.S. MURRAY	Date	MAY '88		
Checked					
Approved	<i>G.S. Murray</i>	Date	5/88		
File		L.B.		bPST--D2	

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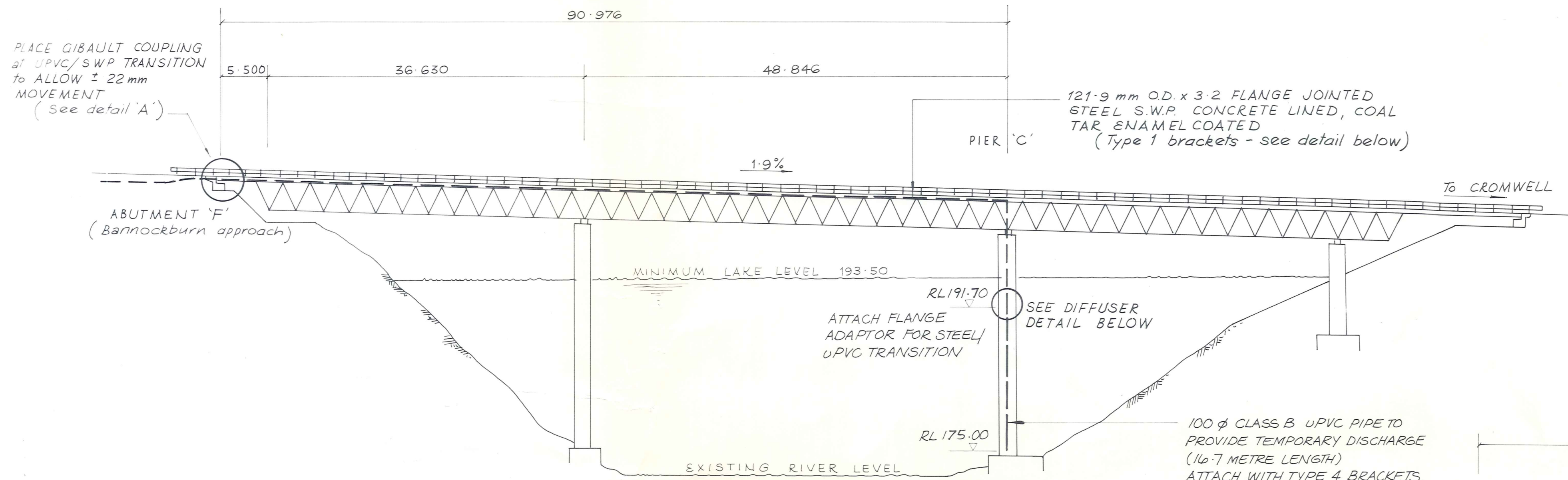
Client  
**VINCENT COUNTY COUNCIL**

Project  
**BANNOCKBURN SEWERAGE SCHEME**

Sheet Title  
**PUMP WELL & VALVE PIT COVERS**

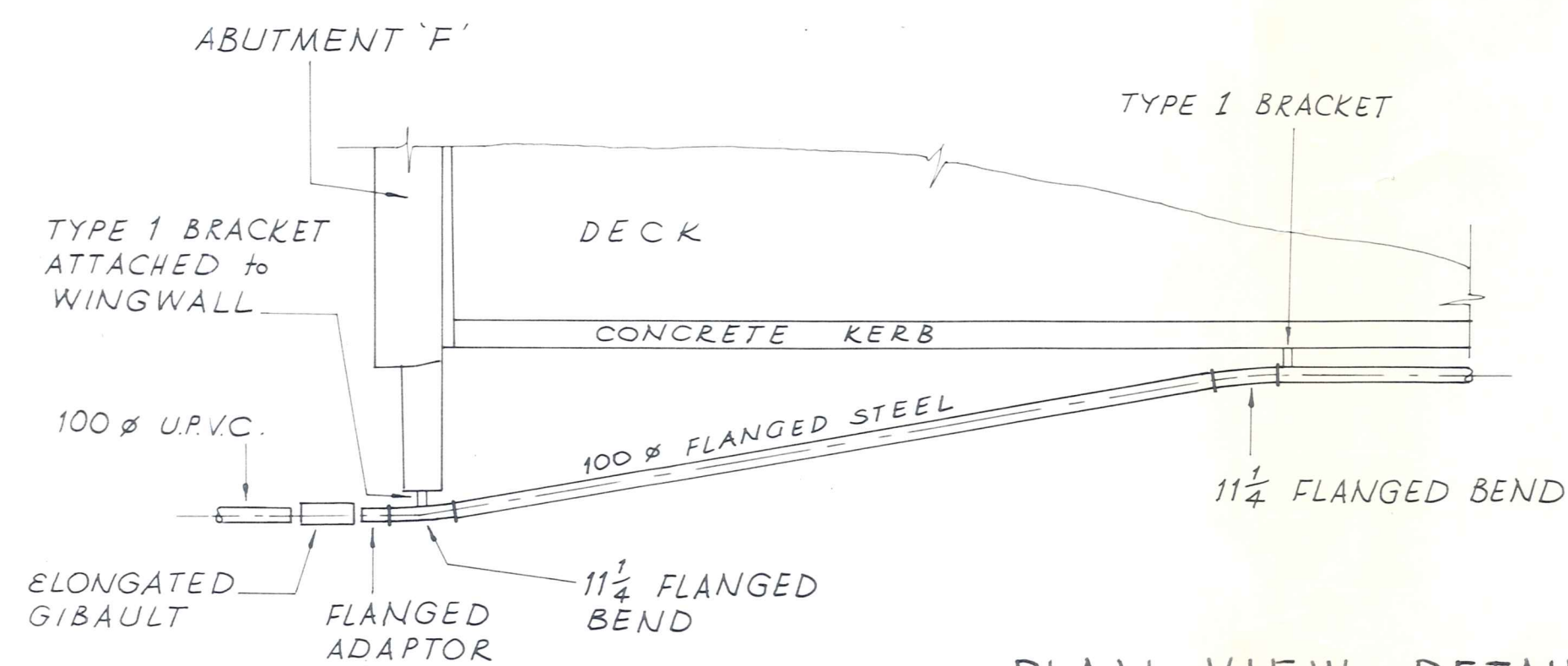
Job No.	Sheet No.	Revision
13218	11 of 12 shts	<i>G.S. Murray</i>

ORIGINAL SIZE: mm  
 0 10 20 30 40 50 100 150 200 300

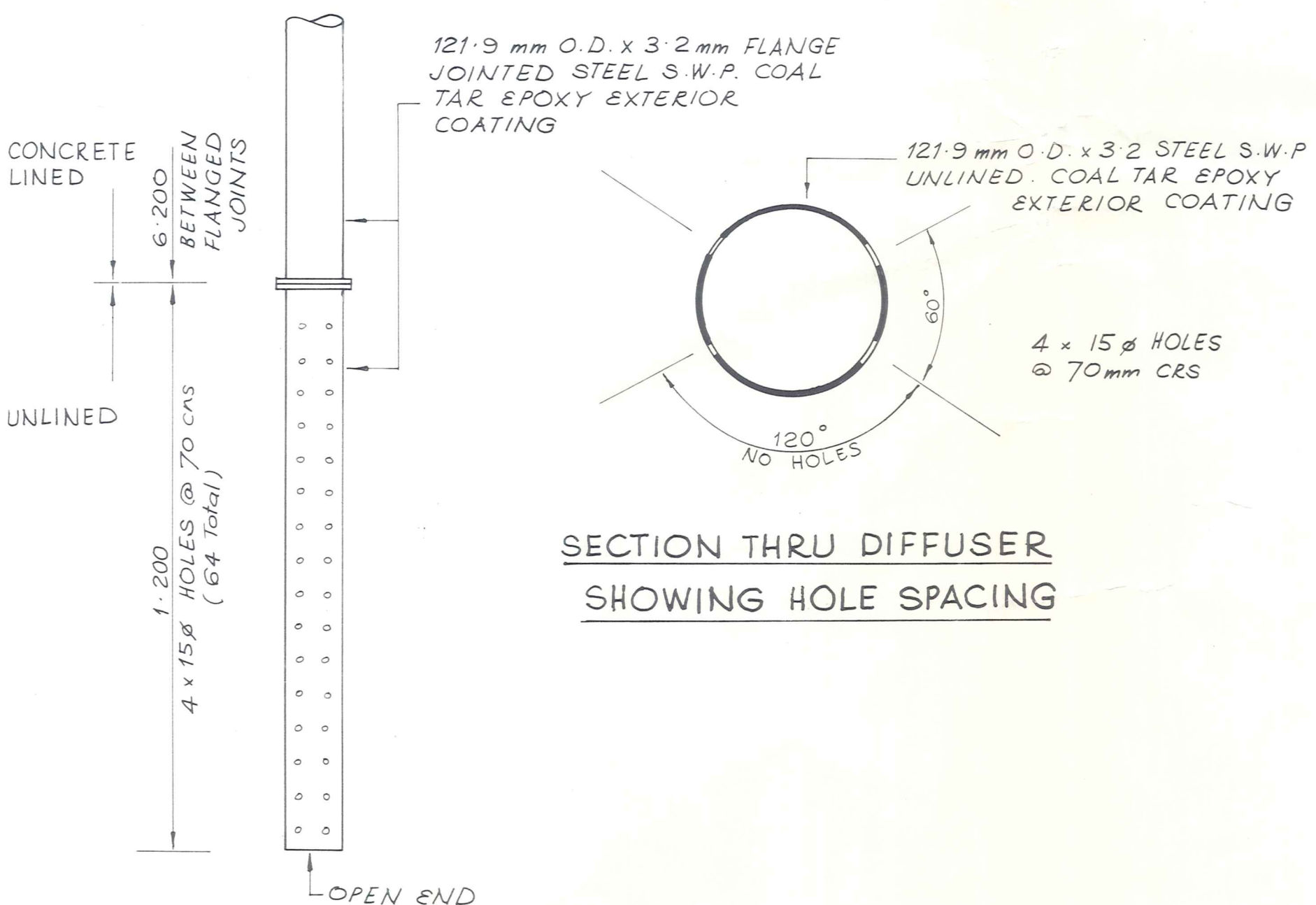


**BANNOCKBURN BRIDGE  
OUTFALL PIPE CROSSING  
AND DISCHARGE**

(DOWN STREAM ELEVATION)  
N.T.S.

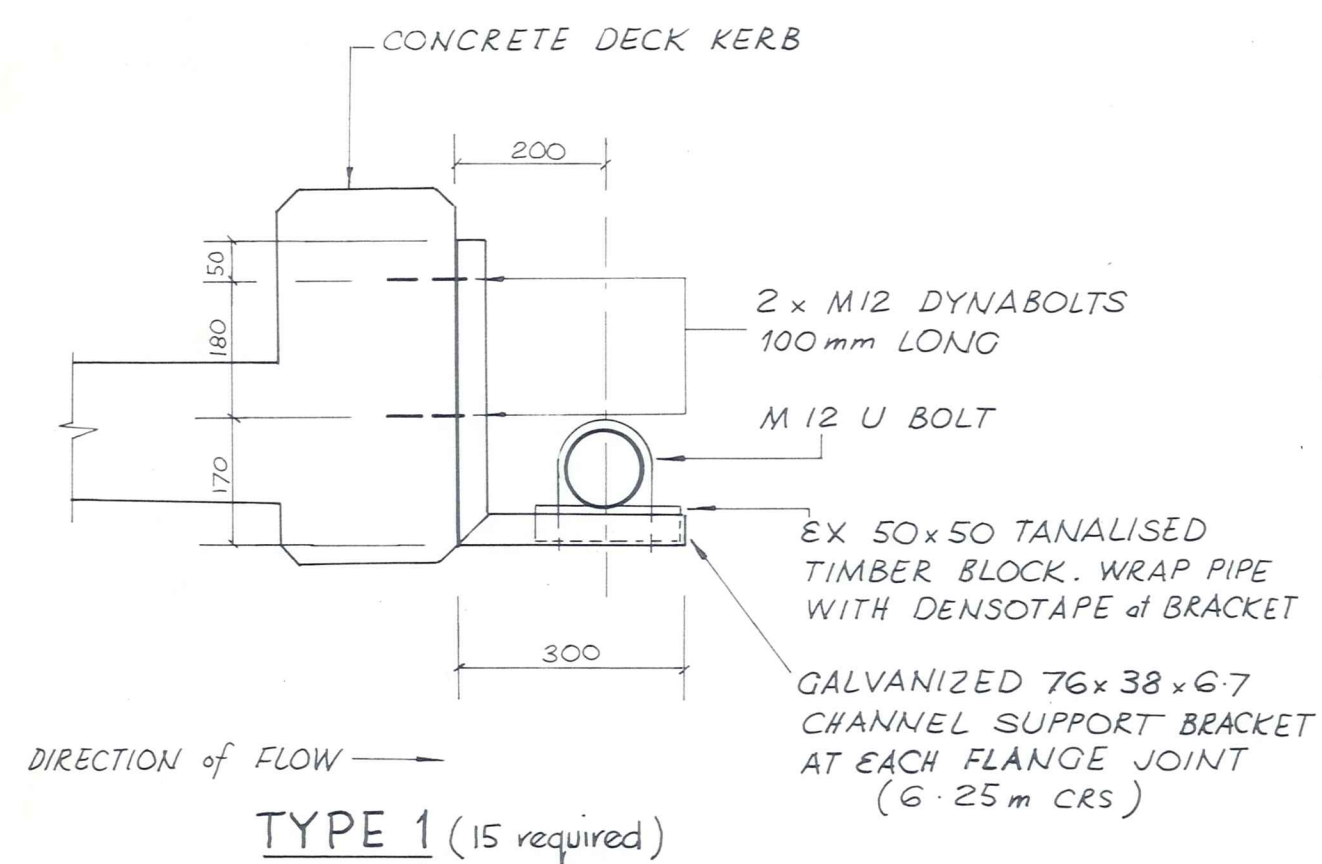


**PLAN VIEW - DETAIL 'A'**  
PIPE FITTINGS IN VICINITY OF BRIDGE ABUTMENT  
Scale 1:50

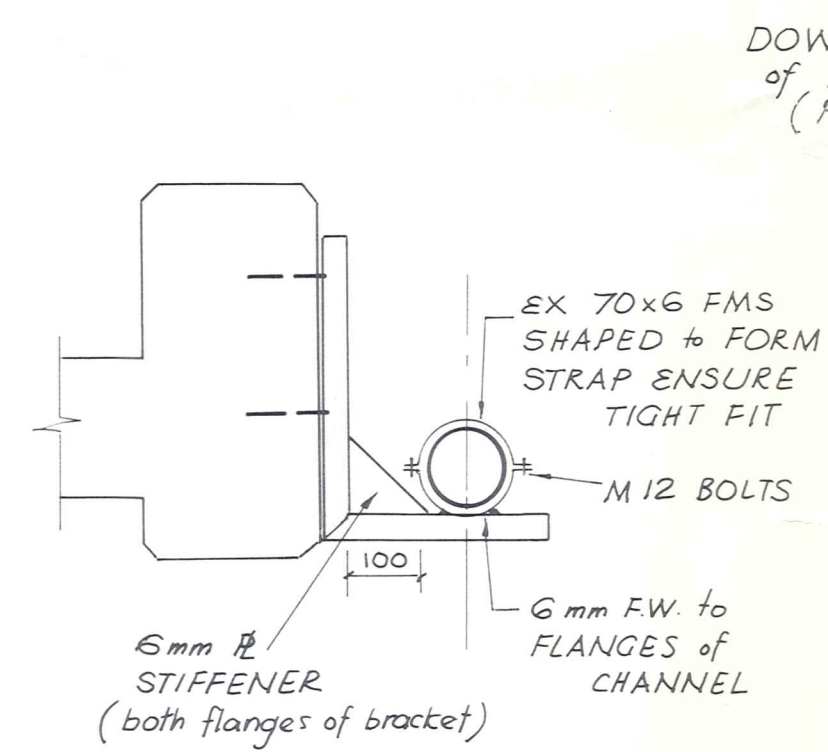


**SECTION THRU DIFFUSER  
SHOWING HOLE SPACING**

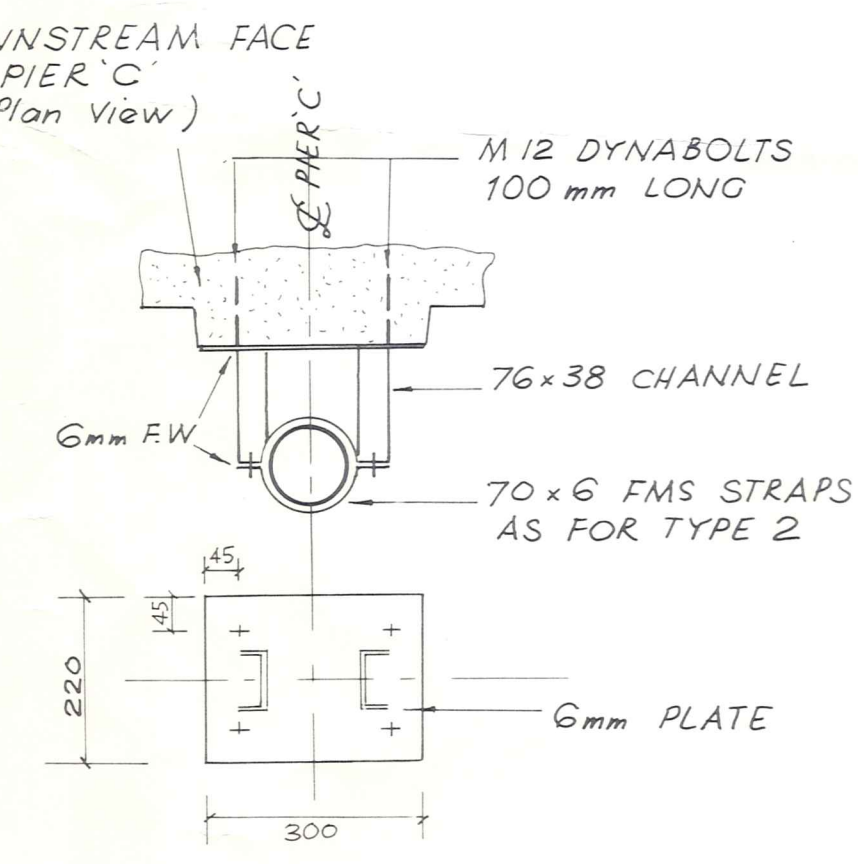
**DETAIL of DIFFUSER** (For Future Connection)  
N.T.S.



**TYPE 1 (15 required)**



**TYPE 2 (1 required)**

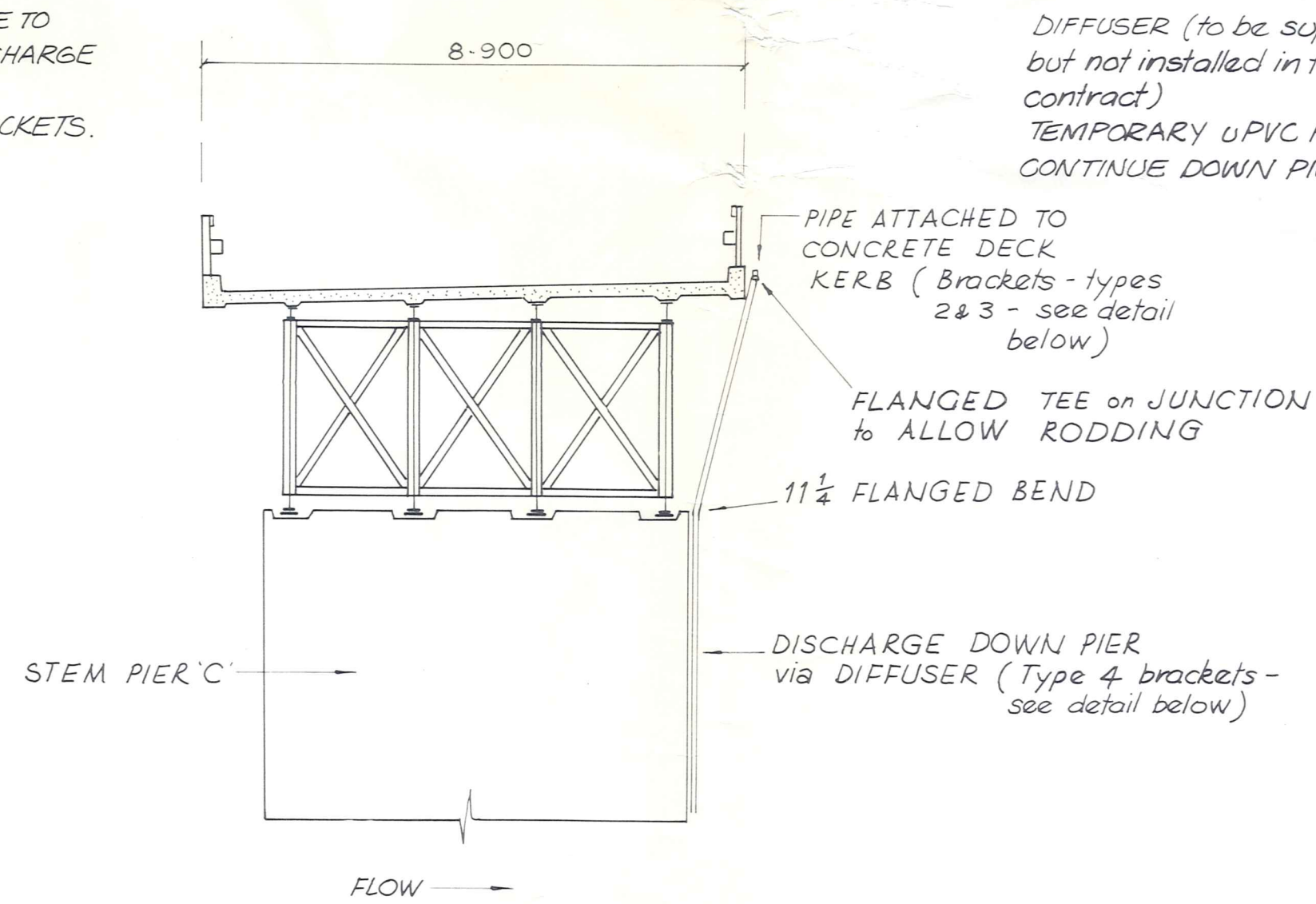


**TYPE 3 (1 required)**

**DETAIL of PIPE ATTACHMENT BRACKETS**

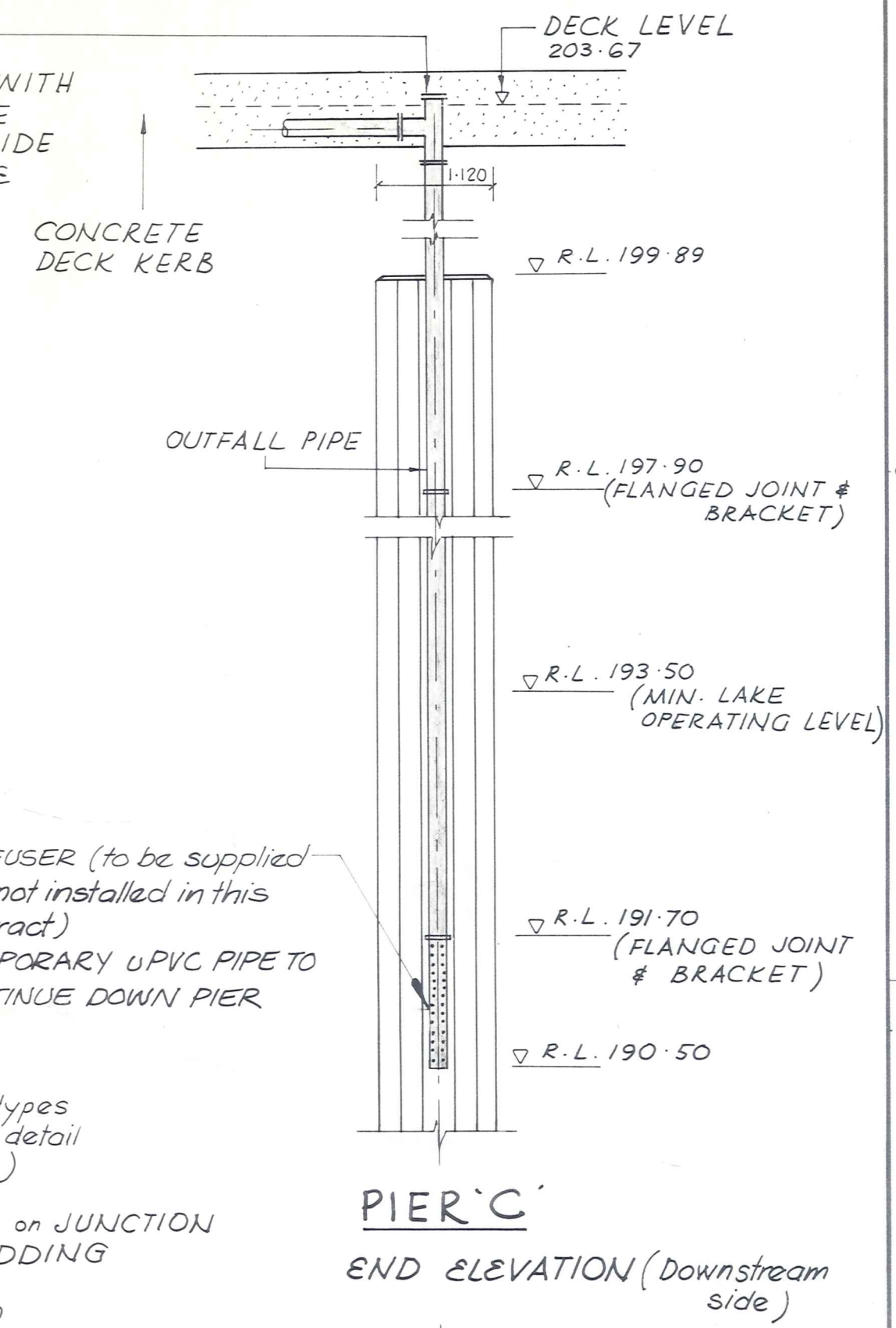
Scale 1:10

NB Type 4 as for Type 3, only provide for oversize strap to allow for movement & wrap pipe with densotape (5 required)



**PIER 'C'**

**SIDE ELEVATION**  
Scale 1:100



**PIER 'C'**

**END ELEVATION (Downstream side)**

**PIER 'C'**

**PLAN**  
Scale 1:50

No.	Revisions	Date	Appvd
1	DESIGNED		
2	DRAWN		
3	CHECKED		
4	APPROVED		

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**VINCENT COUNTY COUNCIL**

**BANNOCKBURN SEWERAGE SCHEME**

**OUTFALL PIPE - BRIDGE CROSSING & DIFFUSER DETAILS**

Job No. **13218** Sheet No. **12** of 12 sheets