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Design Submission

21st November 2023

Client: RTW Developments

Consultants: William Saunders

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Project Reference: 12577

Foul Adoptable Pump Station – Boston Road
Gosberton



Submission Ref: Pumping Solutions 5702
Site: Boston Road Gosberton
Submission A: Initial submission for Anglian Water
Submission B: Site Plan discharge pipe rotation changed
Submission C: Pump chamber levels altered
Submission D: Drawing alteration rising main pipework
Submission E: Site Plan, compound orientation changed

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Overview / Summary page

Water Authority	Anglian Water
Design & Construction Guidelines	2.1
Site name	TBC
Site location	Boston Road Gosberton
Location drawing number	12577 - WMS - ZZ - XX - DR - C - 39210 - S8 - P1
Client	RTW Developments
Produced by	William Saunders consultancy / Pumping Solutions
Pump station location	South west corner of site
Anticipated adoption date	TBC
Pump station type	Type 2
Liquid handled	Foul
Unit type	Residential
Number of units	20 houses
Emergency storage volume	1,223 litres
Diameter of wet well	1500mm
Depth of wet well	5.290m
Size of valve chamber	2400 x 1800mm
Depth of valve chamber	1500mm
Wet well cover size	1500 x 900mm
Valve chamber cover size Inlet	2400 x 1800mm
Manhole cover size	Not Applicable
Pump chamber pipework size	80mm
Rising main size / specification	110mm OD SDR11
Rising main length	154.28m
Surge analysis required	No
Compound size	11m x 8.5m
Pumps	Flygt
Pumps size	1.5kW
Head	4.56m
Flow rate	4.91l/s
Retention time full usage	2.89 hours
Retention time half usage	5.78 hours

Overview

The Mechanical & Electrical proposal within this submission is based on Anglian Waters' local practice for submersible pumping stations document dated 22nd June 2020 in accordance with the Sewerage Sector Guidance Appendix C, Design and Construction Guidance approved version 2.1 dated 25th May 2021.

The proposed pump station location and rising main details can be found on drawings provided by William Saunders under separate cover.

Inflow and discharge rates

The pump station is designed to serve the foul flows from 20 residential plots which, based on Anglian Waters' addendum, gives a calculated peak flow of 0.18L/sec. Inflow calculations can be found under Appendix A. The design pump rate has been set at a minimum of 4.80L/sec in line with the Design and Construction Guidance (DCG) clause D6.3.1 which would provide excess of the 0.75m/s minimum velocity (for self-cleaning flow) within the wet well and valve chamber pipework.

Emergency storage calculations

Emergency storage will be provided within the pumping station wet well. Emergency storage of 1.2m³ has been based around the following criteria. Domestic dwellings x 20 x 0.085l/s @ 1DWF x 4hours.

Rising main

The rising main consists of 154.28m of 110mm OD SDR11 pressure pipe with an 89.1mm nominal bore. The rising main descends all the way to the discharge manhole at a fall of 1:300 which conforms to the minimum fall of 1:300 and minimum rise of 1:500 in line with the DCG clause D6.3.3. For further details of the pumping main route and profile we would refer you to the information provided by William Saunders under separate cover. On the basis the pumping main is 154.28 metres long and is less than the 500 metres referred to within DCG clause D6.3.3m, a surge assessment has not been undertaken on the profile. The rising main will be pressure tested to Anglian Water's specification

Pump duty requirements

From the site data available we calculate the pump duty from Bottom Water level (pump chamber) to be 4.91 l/s against a total head of 4.525m for which we have selected submersible sewage pumps from the Flygt range as per appendix C.

Each Pump would be fitted with the Anglian Water Lifting Location System (LLS).

As the motor rating is less than the 7.5kW detailed in DCG clause F2.3.16.2 we do not propose to fit the pumps with a seal leak detection system.

Pump station layout

The pumps pipework and valves would be installed within concrete chambers constructed by others to the layout as shown on William Saunders drawing shown in appendix D.

An appropriately rated ductile iron to PE rising main coupling will be required to connect the pump station pipework to the rising main.

An 80mm valve chamber drain would be installed incorporating a sludge valve connected to a spindle terminating just below the access cover level. This can then be operated with a tee key at cover level.

Retention time and septicity

Based on a half-developed site the retention time within the system is 2.44 hours and for the fully developed site 4.88 hours.

As these are below the 6-hour figure after which septicity is considered to be a problem and as a result, we do not propose to install any permanent or temporary septicity control equipment.

Cabling

Pumps and level control cabling will be wired back to the control panel via an intermediate junction box held within a kiosk as outlined on the William Saunders drawing shown in appendix D as per Anglian Waters' addendum clause F3.4.5.4.1.

As per DCG V2 clause F3.4.4.5.b we propose the use of two 150mm diameter ducts for the pump units and in accordance with DCG V2 clause F3.4.4.5.d we propose the use of one 150mm diameter duct for the ultrasonic level sensor and float switch cables.

We have allowed for sealing the two 150mm pump cable ducts and one 100mm level control cable duct with a Filoform duct seal as per DCG V2 clause F3.4.4.13

Control equipment

Automatic level control would be via a Pulsar ultrasonic level controller augmented by two separate float switches for high level and back up control, all wired back to a multi compartment control panel complying with the latest DCG standards.

The control panel would be installed within a floor fixing GRP kiosk of dimensions 2,500mm wide x 1,750mm high x 750mm deep.

Please refer to Appendix E for our updated Wiring Diagrams and Kiosk Layout to DCG.

Flow and pressure monitoring

As per DCG V2 clause F4.4.1, each non-return valve and the joining tee piece upstream of the isolation valve on each pump riser will be fitted with a ½” BSP tapping point with a quarter turn ball check valve and will be plugged with a cap.

As the flow rate is less than 70 L/sec as per the DCG V2 clause D7.6.1, we do not propose to fit a flow meter.

Telemetry

Telemetry must be arranged between the developer and Anglian Water.

Access covers

Inlet chamber

675mm x 675mm D400 access cover will be installed

Wet well

1500mm x 900mm Steelway Prolift FACTA B access cover will be installed incorporating internal fall protection. Valve Chamber 2400 x 1800 Steelway Prolift FACTA B access cover will be installed incorporating internal fall protection.

Lifting equipment

1 x 65mmØ minimum nominal bore cast in type davit socket supplied for 500kg SWL. See appendix D

Access ladder

A stainless steel ladder has been proposed within the valve chamber complete with a retractable hand hold as outlined on the drawing in appendix D

Baffle plate

A steel baffle plate would be fitted over the 150mmØ incoming sewer in the wet well.

A nylon rope would be fitted to lift the baffle plate to clear any material/debris trapped between the plate and inlet pipe. The rope would be attached to a stainless steel parking bracket anchored to the concrete edge of the clear opening.

Appendix A: System Calculations

Date:	02/06/2023	Designed	BS EN 12056-2	4000l/d per property
Quote No:	5702		Anglian water - local practice	2.35 people per property x 125l/d x 25%
Customer:	RTW Developments			
Site:	Gosberton			
Specification:	Anglian SFA 8			

Type of inflow:

Foul / Storm	Foul	if storm	0 m ² area
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incoming Flows:

a)	SFA =	4000 litres/day/dwelling x	20 Dwellings	0.925925926 l/s (6DWF)
b)	Anglian LP	367.18 litres/day/dwelling x	20 Dwellings	0.0849953 l/s (1DWF)

Pump flow

4.91l/s

Rising Main

Length	154.28	110mm SDR 11	89mm ID	Velocity	0.78 m/s
				Friction loss	1.87 m/h
				Static	2.655 m/h
				Total head	4.525

4 Hours storage	1223.93 Litres
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Pump chamber

CL	3.65
IL	-0.415
Base	-1.64
Diameter	1.5

Pump duty

5.41l/s	5.48
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Appendix B: Storage Calculations

Chamber Sizing Calculation

Chamber Details

Depth of Chamber	Dia of Chamber	Invert Level	Storage Capacity Avl in ltrs
5.29	1.5	4.065	2165

Pump 1 start level 1m

Pump stop level 0.5m

Pump 2 Start level 1.1m

High level 1.2m

Volnme pumped per pump cycle 883ltr

Property Details

Qty	Qty Dwellings	Ltrs / Dwelling	Storage capacity Reqd
	20	367.18	1223.933333
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
Total	20		1223.933333

179.8 seconds per pump cycle

142m 90mm rising main holds 680 ltr

Every pump cycle clears all foul water in rising main

Pump will run 8.3 times per 24 hours

4 Hours Storage

Calculation for volume Anglian Water - Local practice

2.35 people per property x 125l/d x 20 x 25%

Appendix C: Pump Data

DX 3069 LT 3~ 412

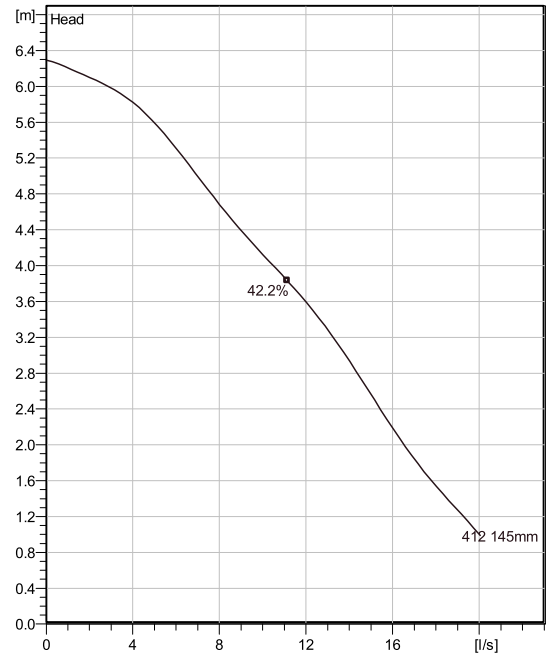
Portable pumps with vortex impellers ideal for applications in which the water or liquid contains concentrations of abrasives when clogging problems can occur.



Technical specification



Curves according to: Water, pure [100%], 277 K, 999.9 kg/m³, 1.5692 mm²/s



Nominal (mean) data shown. Under- and over-performance from this data should be expected due to standard manufacturing tolerances. Please consult your local Flygt representative for performance guarantees.

Configuration

Motor number D3069.090 13-08-4BB-W 1.5KW	Installation type X - Optional installation, Wet or Dry
Impeller diameter 145 mm	Discharge diameter 80 mm

Pump information

Impeller diameter 145 mm
Discharge diameter 80 mm
Inlet diameter 80 mm
Maximum operating speed 1370 1/min
Number of blades 6
Throughlet diameter 80 mm
Max. fluid temperature 40 °C

Materials

Impeller Grey cast iron
Stator housing material Grey cast iron

Project Xylect-21478203
Block

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Created on 11/22/2023 **Last update** 11/22/2023

DX 3069 LT 3~ 412

Technical specification



Motor - General

Motor number D3069.090 13-08-4BB-W 1.5KW	Phases 3~	Rated speed 1370 1/min	Rated power 1.5 kW
Approval UKEx	Number of poles 4	Rated current 4.4 A	Stator variant 4
Frequency 50 Hz	Rated voltage 400 V	Insulation class F	Type of Duty S1
Version code 090			

Motor - Technical

Power factor - 1/1 Load 0.76	Motor efficiency - 1/1 Load 65.4 %	Total moment of inertia 0.01 kg m ²	Starts per hour max. 15
Power factor - 3/4 Load 0.66	Motor efficiency - 3/4 Load 65.2 %	Starting current, direct starting 16 A	
Power factor - 1/2 Load 0.52	Motor efficiency - 1/2 Load 60.4 %	Starting current, star-delta 5.34 A	

Project Xylect-21478203
Block

Created by Becky Gadsden
Created on 11/22/2023 **Last update** 11/22/2023

DX 3069 LT 3~ 412

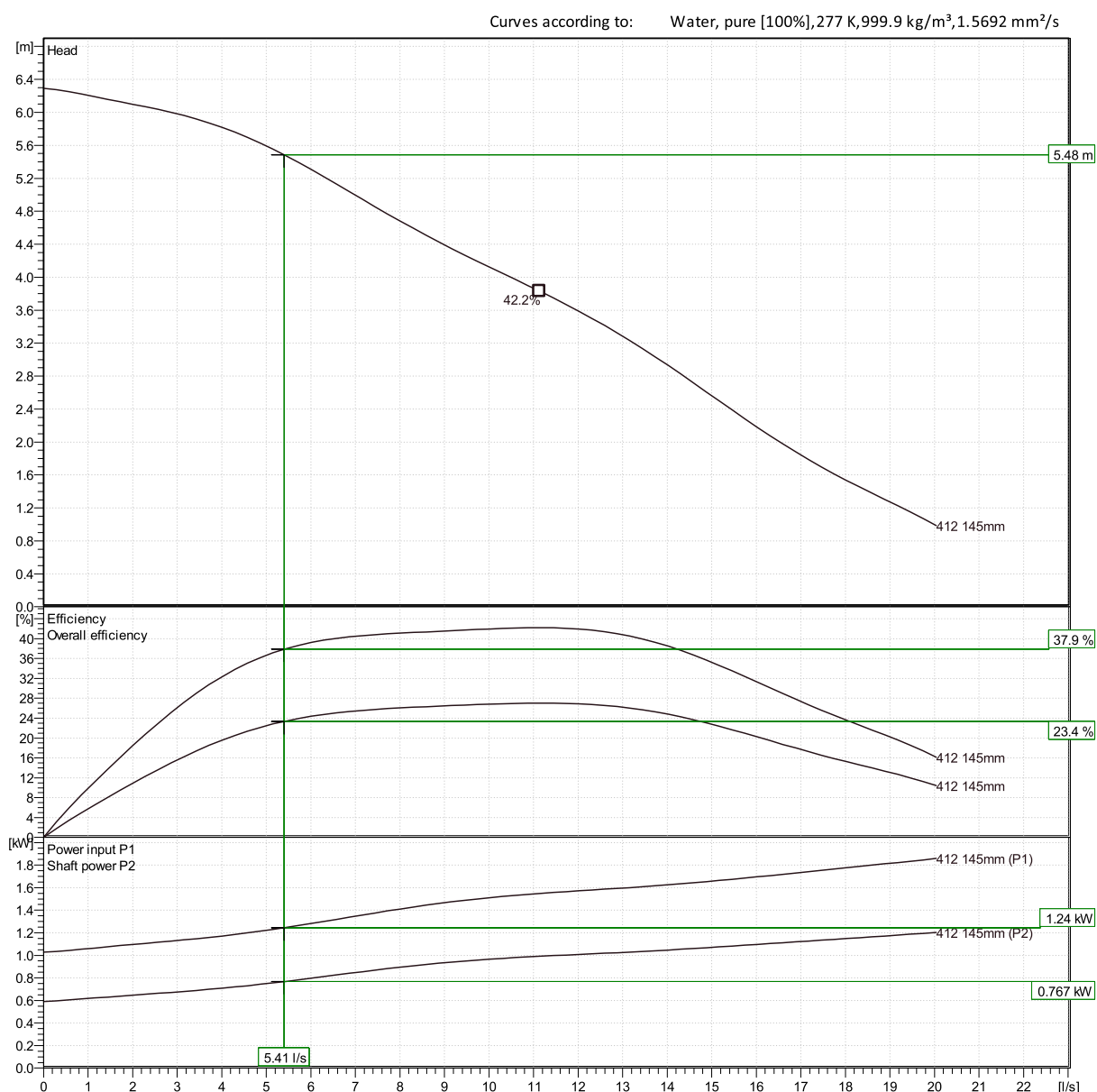
Performance curve



Duty point

Flow
5.41 l/s

Head
5.48 m



Nominal (mean) data shown. Under- and over-performance from this data should be expected due to standard manufacturing tolerances.
Please consult your local Flygt representative for performance guarantees.

Curve: ISO 9906

Project Xylect-21478203
Block

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Created on 11/22/2023 Last update

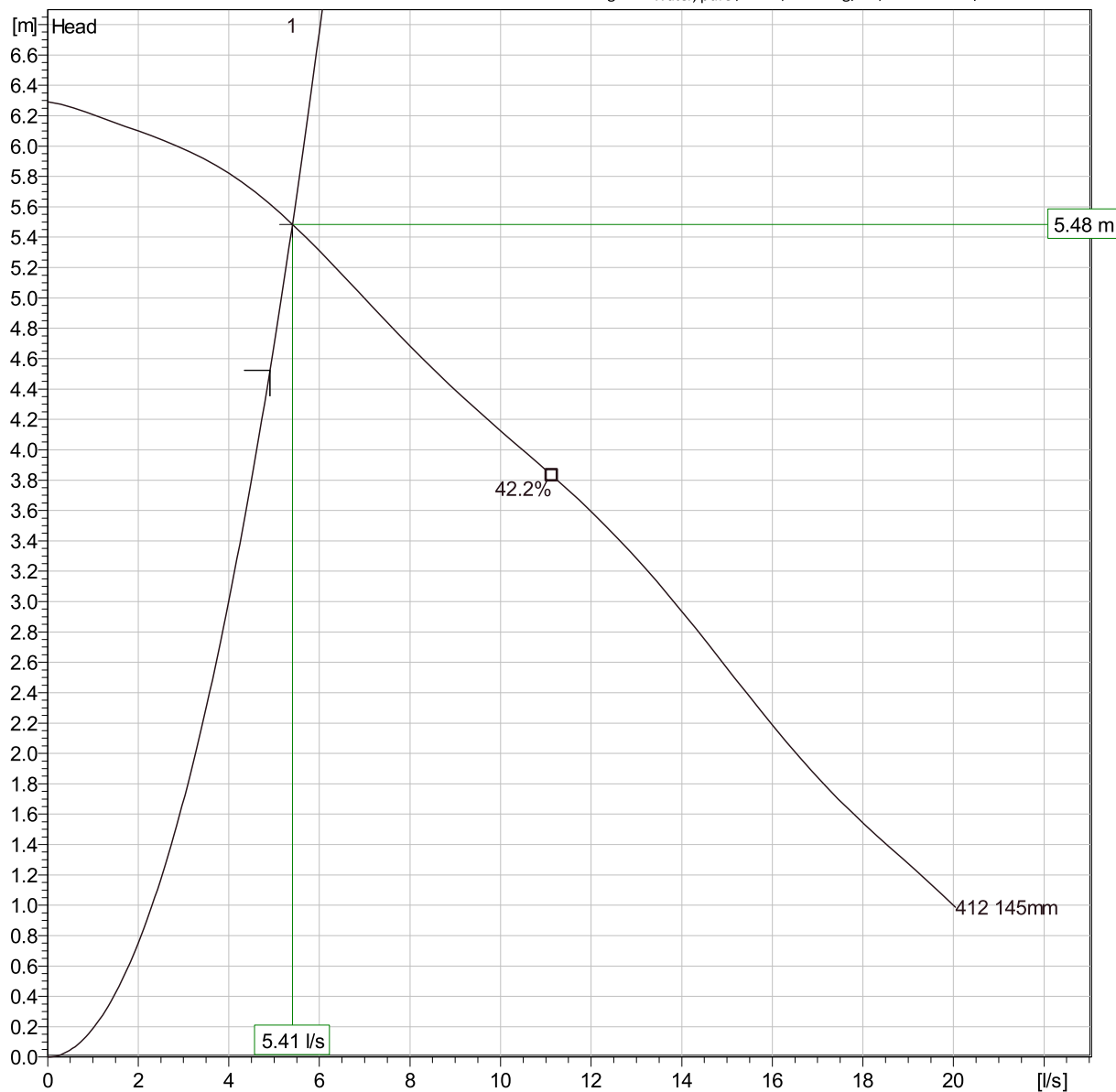
11/22/2023

DX 3069 LT 3~ 412

Duty Analysis



Curves according to: Water, pure, 277 K, 999.9 kg/m³, 1.5692 mm²/s



Operating characteristics

Pumps / Systems	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr.eff.	Specific Energy	NPSHre
1	5.41 l/s	5.48 m	0.767 kW	5.41 l/s	5.48 m	0.767 kW	37.9 %	0.0639 kWh/m	

Project Xylect-21478203
Block

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Created on 11/22/2023

Last update

11/22/2023

Adoptable Manhole Schedule - S104 Surface Water Sewer							
MH Ref:	Cover Level	Invert Level	Pipe Size	Depth to Soffit	MH Type	MH Size	MH Cover
S1	2.850	1.705	450	0.695	Type C	1200x900	D400
S2	2.794	1.685	450	0.659	Type C	1200x900	D400
S3	2.671	1.652	450	0.569	Type C	1200x900	D400
S4	2.650	1.632	450	0.568	Type C	1200x900	D400
S5	2.646	1.618	450	0.578	Type C	1200x900	D400
S6	2.646	1.584	450	0.612	Type C	1200x900	D400
S7	2.646	1.561	450	0.635	Type C	1200x900	D400
S8	2.646	1.515	450	0.681	Type C	1200x900	D400
S9	2.646	1.477	450	0.719	Type C	1200x900	D400
S10	2.646	1.439	450	0.757	Type C	1200x900	D400
S11	2.646	1.401	450	0.795	Type C	1200x900	D400
S12	2.646	1.360	450	0.836	Type C	1200x900	D400
S13	2.950	1.427	450	1.073	Type C	1200x900	D400
S14	2.795	1.392	450	0.953	Type C	1200x900	D400
S15	2.653	1.352	450	0.851	Type C	1200x900	D400
S16	2.646	1.328	450	0.868	Shallow Special	1500	D400
S17	2.850	1.315	450	1.085	Shallow Special	1500	D400
S18	3.165	1.252	450	1.463	Control	2100	D400

Adoptable Pipeline Schedule - S104 Surface Water							
Pipe Ref:	Upstream IL	Downstream IL	Pipe dia	Distance	Pipe gradient 1:X	Pipe gradient %	Pipe material
1.000	1.705	1.685	450	8.136	406.8	0.25%	Plastic
1.001	1.685	1.652	450	13.267	402.0	0.25%	Perforated
1.002	1.652	1.632	450	8.057	402.9	0.25%	Plastic
1.003	1.632	1.618	450	5.527	394.8	0.25%	Perforated
1.004	1.618	1.584	450	13.439	395.3	0.25%	Plastic
1.005	1.584	1.561	450	9.281	403.5	0.25%	Perforated
1.006	1.561	1.515	450	18.259	396.9	0.25%	Perforated
1.007	1.515	1.477	450	15.000	394.7	0.25%	Perforated
1.008	1.477	1.439	450	15.000	394.7	0.25%	Perforated
1.009	1.439	1.401	450	15.000	394.7	0.25%	Perforated
1.010	1.401	1.360	450	16.522	403.0	0.25%	Perforated
1.011	1.360	1.328	450	7.067	220.8	0.45%	Perforated
2.000	1.427	1.392	450	13.974	399.3	0.25%	Perforated
2.001	1.392	1.352	450	16.090	402.3	0.25%	Perforated
2.002	1.352	1.328	450	9.797	408.2	0.24%	Plastic
1.012	1.328	1.315	450	5.188	399.1	0.25%	Plastic
1.013	1.315	1.275	450	16.442	411.1	0.24%	Plastic
1.014	1.275	1.252	450	8.775	381.5	0.26%	Plastic
1.015	1.252	1.222	450	12.044	401.5	0.25%	Plastic

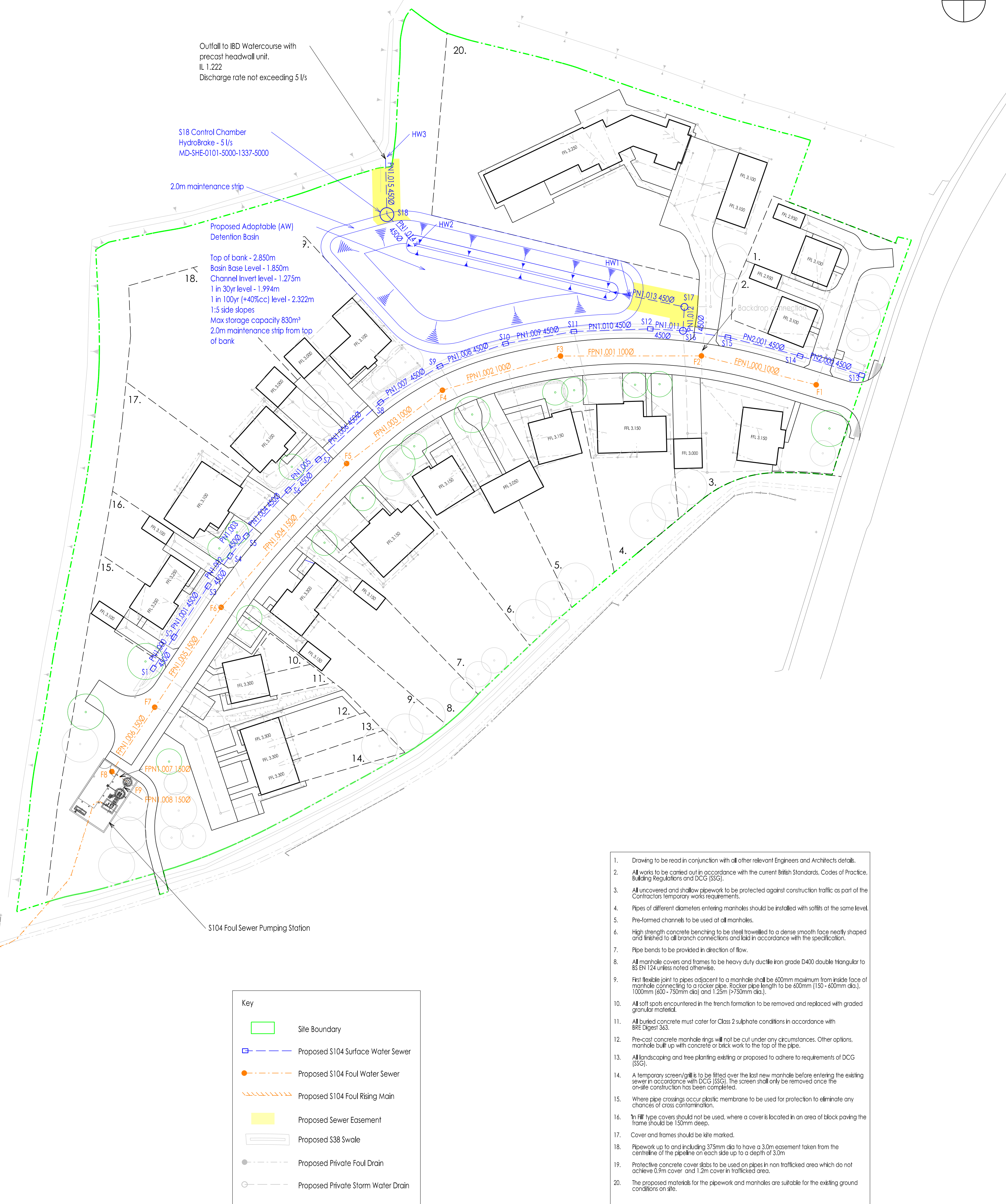
Plastic pipes must comply with criteria set out in E2.21 of DCG

Adoptable Manhole Schedule - S104 Foul Sewer							
MH Ref:	Cover Level	Invert Level	Pipe Size	Depth to Soffit	MH Type	MH Size	MH Cover
F1	3.139	1.915	100	1.124	Type C	1350	D400
F2	2.965	1.359	100	1.506	Type B	1350	D400
F3	2.965	0.978	100	1.887	Type B	1350	D400
F4	2.965	0.646	100	2.219	Type B	1350	D400
F5	2.965	0.270	150	2.545	Type B	1350	D400
F6	3.010	-0.005	150	2.865	Type B	1350	D400
F7	3.250	-0.180	150	3.280	Type A	1350	D400
F8	3.490	-0.295	150	3.635	Type A	1200	D400
F9	3.650	-0.375	150	3.875	Type A	1200	D400
F10	2.850	1.122	150	1.578	Type B	1200	D400

Adoptable Pipeline Schedule - S104 Foul Water							
Pipe Ref:	Upstream IL	Downstream IL	Pipe dia	Distance	Pipe gradient 1:X	Pipe gradient %	Pipe material
1.000	1.915	1.359	100	25.566	46.0	2.17%	Plastic
1.001	1.359	0.978	100	30.458	79.9	1.25%	Plastic
1.002	0.978	0.646	100	26.563	80.0	1.25%	Plastic
1.003	0.646	0.320	100	26.069	80.0	1.25%	Plastic
1.004	0.270	-0.005	150	41.235	149.9	0.67%	Plastic
1.005	-0.005	-0.180	150	25.914	148.1	0.68%	Plastic
1.006	-0.180	-0.295	150	16.730	145.5	0.69%	Plastic
1.007	-0.295	-0.375	150	4.080	51.0	1.96%	Plastic
1.008	-0.375	-0.415	150	2.100	52.5	1.90%	Plastic
1.009	2.510	1.192	80	154.28	117	0.65%	PUMPING MAIN
1.010	1.122	1.074	150	5.811	121.1	0.83%	Plastic

Plastic pipes must comply with criteria set out in E2.21 of DCG

Appendix D Site Plan



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Contractors must verify all dimensions, levels and co-ordinates of the site before commencing any work or making any shop drawings: no dimensions to be taken from drawing.

*ALL S104 WORKS DESIGNED IN ACCORDANCE WITH THE DESIGN & CONSTRUCTION GUIDANCE (DCG) WHICH IS PART OF THE SEWERAGE SECTOR GUIDANCE (SSG).

P5	F8/F9 CL's, FPN1.009 U/S IL revised	JW	PAE	27/09/23
P4	Revised to suit comments from AW	JW	PAE	15/09/23
P3	Diameters F1.000 - F1.003 corrected, S19 increased to 2.1m dia	JW	PAE	12/07/23
P2	Foul sewer revised	JW	PAE	24/05/23
P1	Initial issue	CM	PAE	31/03/23
Rev	Description	Dm	Vfd	Date
As outlined in section 2.3 of the CIB Industry Guidance to Designers, insignificant risks can usually be ignored, as can risks arising from routine construction activities, unless the design compounds or significantly alters these risks. In accordance with CDM Regulations 8, 9 and 11, any significant risks relating to the design features shown on this drawing have been identified and are annotated thus:				
☒ No significant risks have been identified.				
☐ Significant risks have been identified - refer to notes on drawing for information on residual risks and any control measures to be employed.				
Refer to the current Designer's Risk Assessment sheets for further details.				
Designer's Signature		CM	Date 03/23	

Drawing Status
REGULATORY APPROVAL

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Project	
Proposed Residential Development, Boson Road, Gosberton, Lincolnshire	
Client RTW Construction and Developments Ltd	
Title S104 Layout	
WmS Project Ref. 12577	Drawn CM
Date 13/03/23	Scale 1:500 @ A1
Drawing/Document Reference	
Project Originator Zone Level Type Role Number Status Rev.	
12577 - WMS - ZZ - XX - DR - C - 39201 - S8 - P5	

1500mm x 900mm Steelway Brickhouse FACTA B Prolift Access Cover Complete With Torsion Spring Assisted Lift, 'Stamp-Lock' Locking Mechanism Recessed Padlock Box, Self-Locating Stays, Internal Hinged Safety Grid And Demountable Barrier System

Float Switch Bracket

Ø100mm Air Vent

Ultrasonic Transducer

▽ 3.650m Cover Level

600
3 of Ø100mm Cable Ducts

Compound Drain

Pump Lifting System

Stainless Steel Baffle Plate

Ø150mm Incoming Sewer

5290

▽ -0.415m Inlet

High Level Alarm Float Switch

Back Up Float Switch

Pumps On Self Locating Quick Release Couplings

▽ -1.64m

Upper Guide Rail Bracket

Flush Mounted Lloyds Rola Davit Socket 500kg SWL Drain Hole To Be Maintained

High Level Spindle Support
Ø25mm Earth Duct

405

1585

2000

100 100

Ø1500

2400mm x 1800mm Steelway Brickhouse FACTA B Prolift Access Cover Complete With Torsion Spring Assisted Lift, 'Stamp-Lock' Locking Mechanism Recessed Padlock Box, Self-Locating Stays, Internal Hinged Safety Grid And Demountable Barrier System

▽ 3.650m Cover Level

300
Trace Wire Duct

1500

▽ 2.510m

▽ 2.15m

360

Air Release Valve

Screed To Fall To Drain

Pipe Supports

Ø80mm Sludge Valve

Ø80mm Valve Chamber Drain Supply

1800

WARNING
Care Must Be Taken In Positioning Drain And Plug To Ensure Clearances From
1. Pipe Supports
2. Access Cover Opening
3. Access Cover Centre Bar
4. That Final Benching Can Be Made To Fall

VIEW ON OVERPUMPING

Ø100mm Female Bauer Connection

Concrete Pipe Supports

Screed To Fall To Drain

Trace Wire Duct

▽ 3.650m Cover Level

300

1500

▽ 2.510m

▽ 2.150m

360

Operational Levels	
3.650m	Cover Level
-0.415m	Invert Level
-1.135m	Giving Pump Stop
-0.635m	Pump 1 Start
-0.535m	Pump 2 Start
-0.435m	High Level
-1.64m	Base Level

NOTES

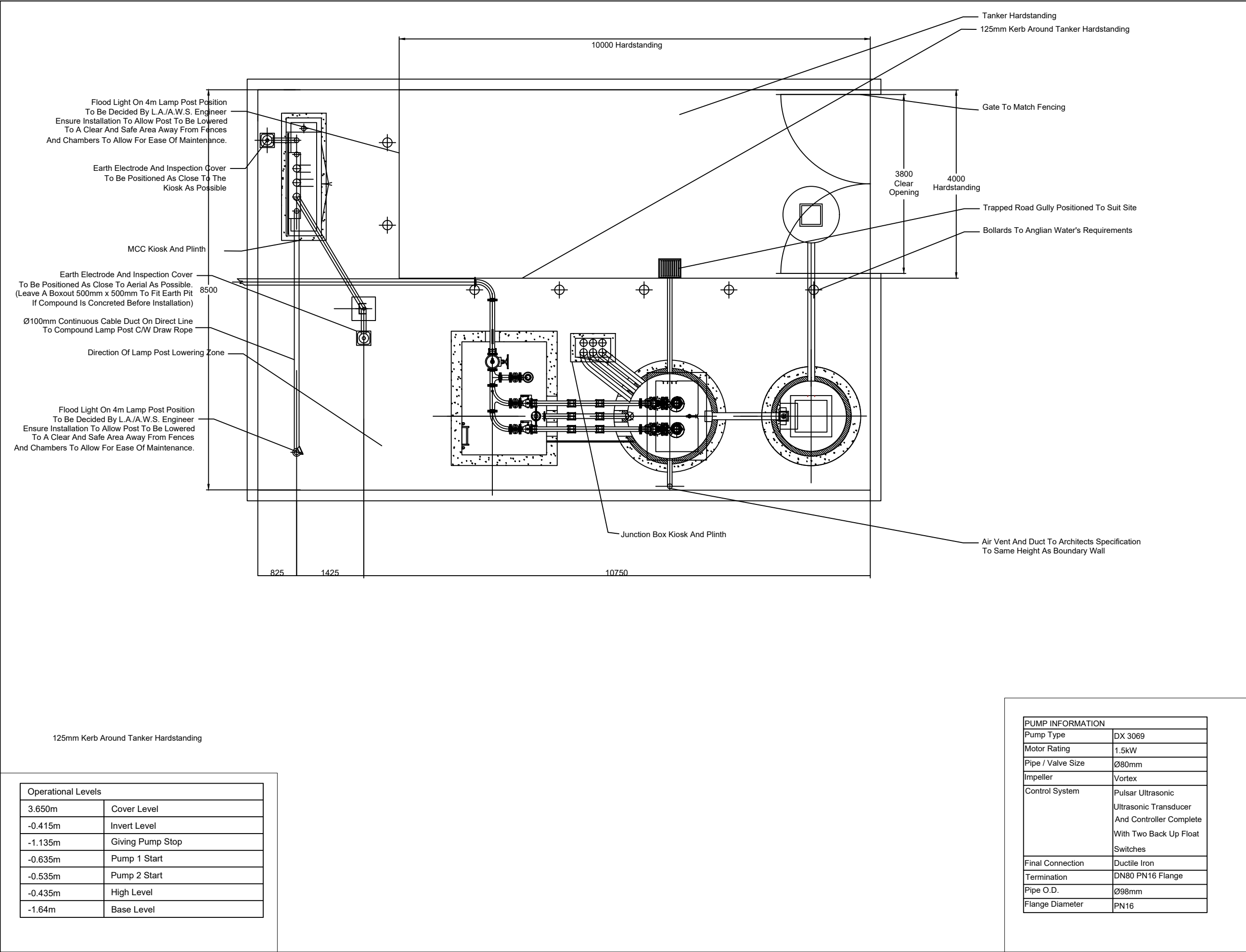
DO NOT SCALE.

- ALL DIMENSIONS IN MILLIMETRES, ALL INVERTS IN METRES AOD, UNLESS OTHERWISE STATED.
- ALL EXTRANEIOUS METAL WORK IS TO BE EQUILATERALLY BONDED WITH SAFETY ELECTRICAL EARTH "DO NOT REMOVE" LABELS FITTED.
- ALL CIVIL WORK BY OTHERS INCLUDING MAKING GOOD AROUND PIPES AFTER INSTALLATION, BENCHING, FIXING ACCESS COVERS AND LAYING CABLE DUCTS.
- STRUCTURAL DETAIL ILLUSTRATIVE ONLY
- BENCHING TO BE FORMED AS LAID DOWN IN 'SEWERAGE SECTOR GUIDANCE'S (SSG) DESIGN AND CONSTRUCTION GUIDANCE V2 (DCG V2)' AND TO LOCAL/ADOPTING AUTHORITY SPECIFICATIONS.
- BENCHING TO BE FORMED AFTER PUMP INSTALLATION.
- ALL DUCTS 100 I.D. MIN. COMPLETE WITH DRAW ROPES AND AVOIDING ACUTE CHANGES OF DIRECTION. SERVICE DUCTS TO SUPPLIERS SPECIFICATIONS
- DIRECTION OF DUCTS SHOWN DIAGRAMMATICALLY - ALL DUCTS TO BE LAID ON MOST DIRECT LINE TO SUIT SERVICE BEING CARRIED.
- SITE PLAN ILLUSTRATIVE IF NO SPECIFIC DETAILS PREVIOUSLY PROVIDED.
- LEVEL CONTROLS SHOWN NOTIONALLY, TO BE POSITIONED AWAY FROM OBSTRUCTIONS, LEVELS READILY ADJUSTABLE AFTER INSTALLATION.
- DRAWINGS ARE INDICATIVE WITH REGARD TO CIVIL WORKS AND SHOULD NOT BE USED FOR CONSTRUCTION.

A	22/07/23	First Issue	S.R.	M.T.	M.T.
REV	DATE	DESCRIPTION	DRN	CHK	APR

FOR APPROVAL

					
PROJECT		Boston Road Gosberton			
TITLE		Foul Water Pump Station Side View			
CLIENT		RTW Developments			
CONTRACT	5702	APR	M.T.	DATE	15/07/2023
SCALE @ AS	1:40	CHK	M.T.	DATE	15/07/2023
		DRN	S.R.	DATE	15/07/2023
DRAWING N°.	5702			SHEET N°.	01
				REVISION	A



NOTES

DO NOT SCALE.

- ALL DIMENSIONS IN MILLIMETRES, ALL INVERTS IN METRES AOD, UNLESS OTHERWISE STATED.
- ALL EXTRANEOUS METAL WORK IS TO BE EQUILATERALLY BONDED WITH SAFETY ELECTRICAL EARTH "DO NOT REMOVE" LABELS FITTED.
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- LEVEL CONTROLS SHOWN NOTIONALLY, TO BE POSITIONED AWAY FROM OBSTRUCTIONS, LEVELS READILY ADJUSTABLE AFTER INSTALLATION.
- DRAWINGS ARE INDICATIVE WITH REGARD TO CIVIL WORKS AND SHOULD NOT BE USED FOR CONSTRUCTION.

E	24/11/23	Hardstanding Alteration	S.R.	M.T.	M.T.
D	20/11/23	Valve Chamber Exit Bend Added	S.R.	M.T.	M.T.
C	17/11/23	Inlet Chamber Added	S.R.	M.T.	M.T.
B	02/11/23	Orientation Changed	S.R.	M.T.	M.T.
REV	DATE	DESCRIPTION	DRN	CHK	APR

FOR APPROVAL



PROJECT

RTW DEVELOPMENTS
GOSBERTON

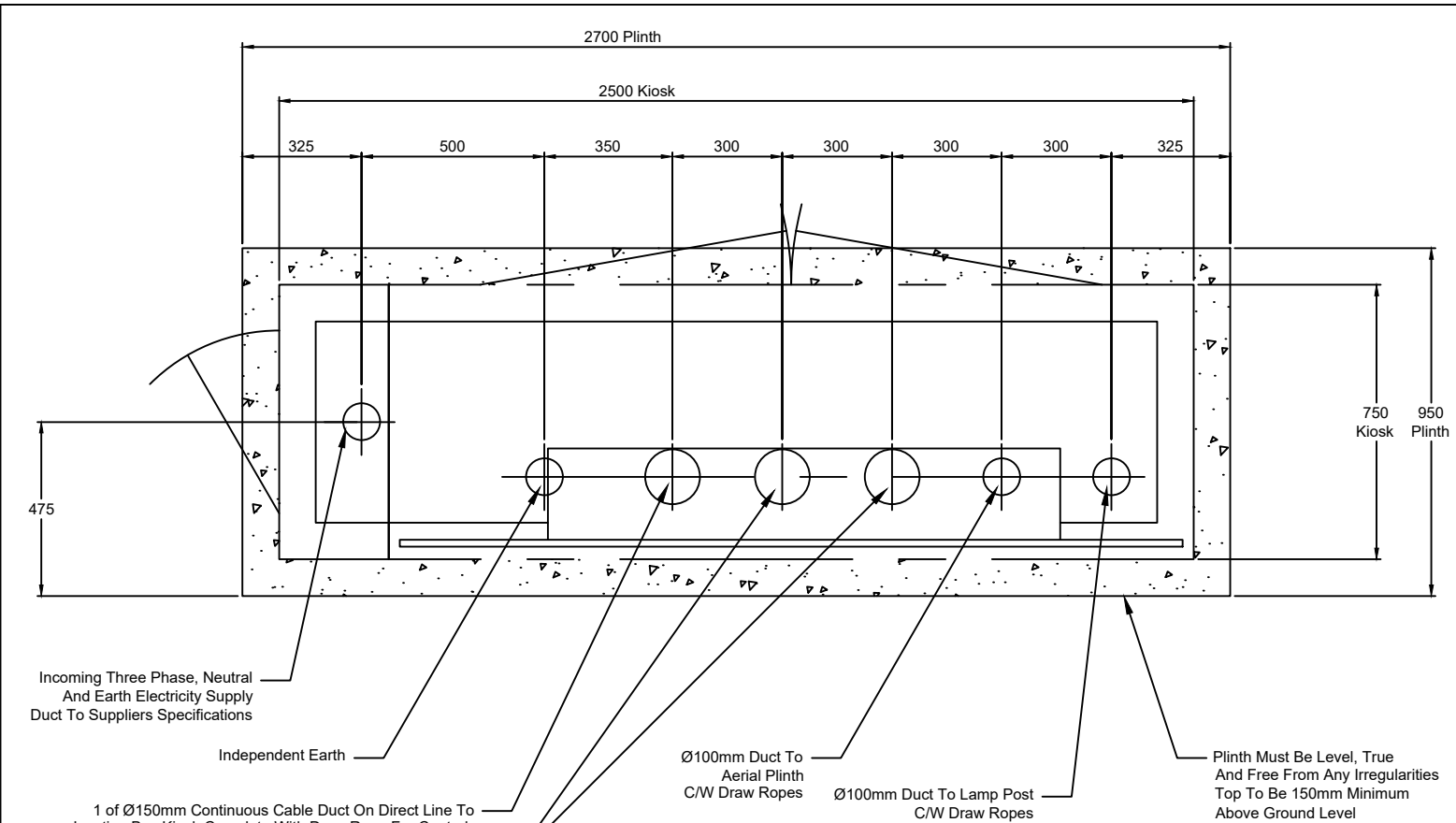
TITLE

Foul Water Pump Station
Compound View

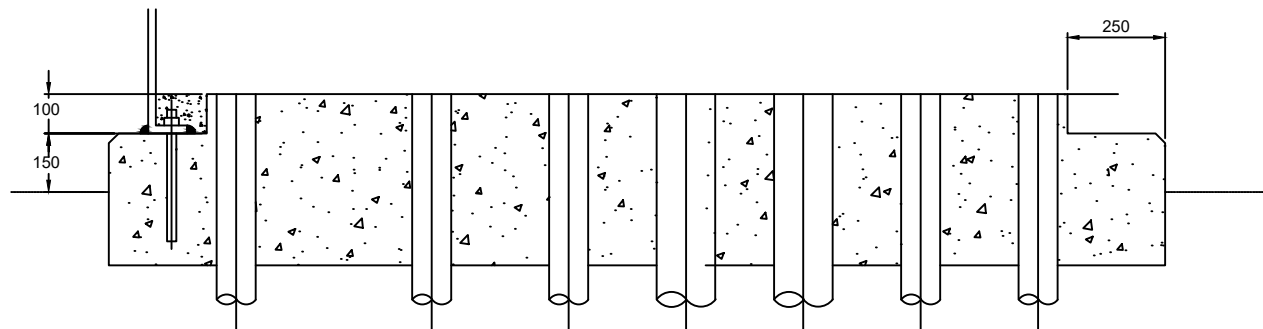
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SCALE @ AS	1:80	CHK	M.T.	DATE	27/11/2023
		DRN	S.R.	DATE	27/11/2023

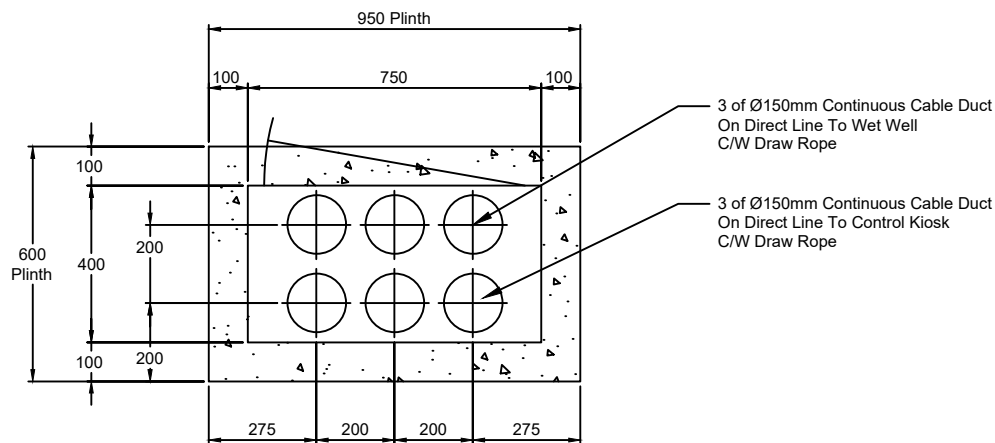
DRAWING N°.	5702_	SHEET N°.	03	REVISION	E
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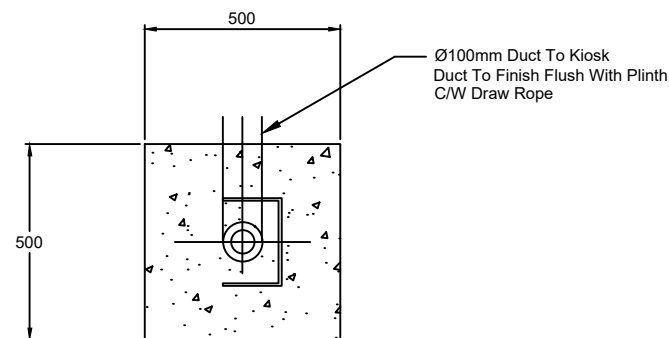
CONTROL KIOSK PLINTH DETAIL
Kiosk Dimensions 1,750mm High x 2,500mm Wide x 750mm Deep



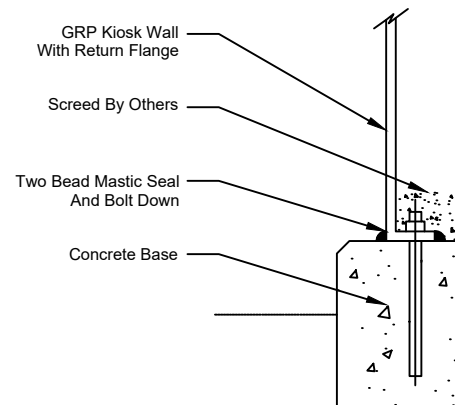
KIOSK BASE DETAILS



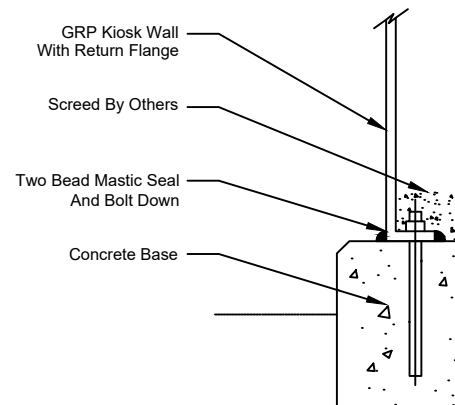
JUNCTION BOX KIOSK PLINTH DETAIL
Kiosk Dimensions 1,250mm High x 750mm Wide x 400mm Deep



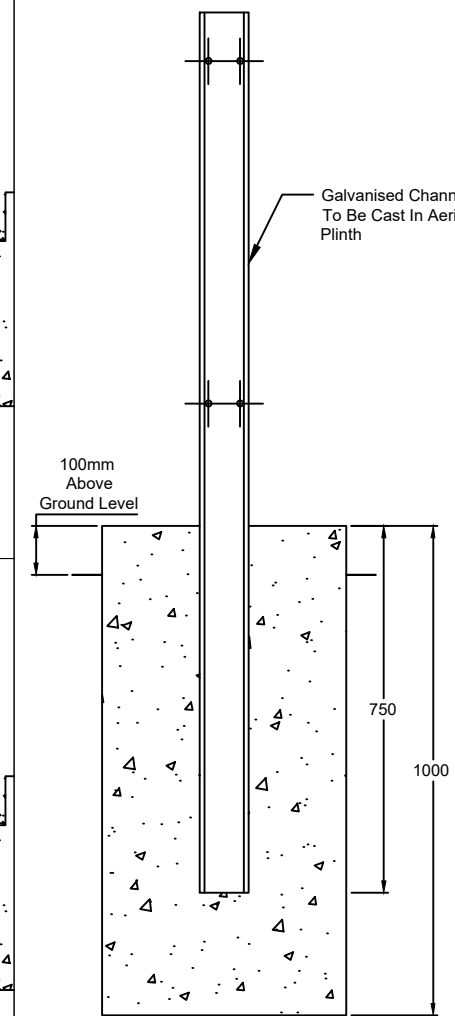
AERIAL DETAIL TOP VIEW



MCC KIOSK REBATE DETAIL



JUNCTION BOX KIOSK REBATE DETAIL



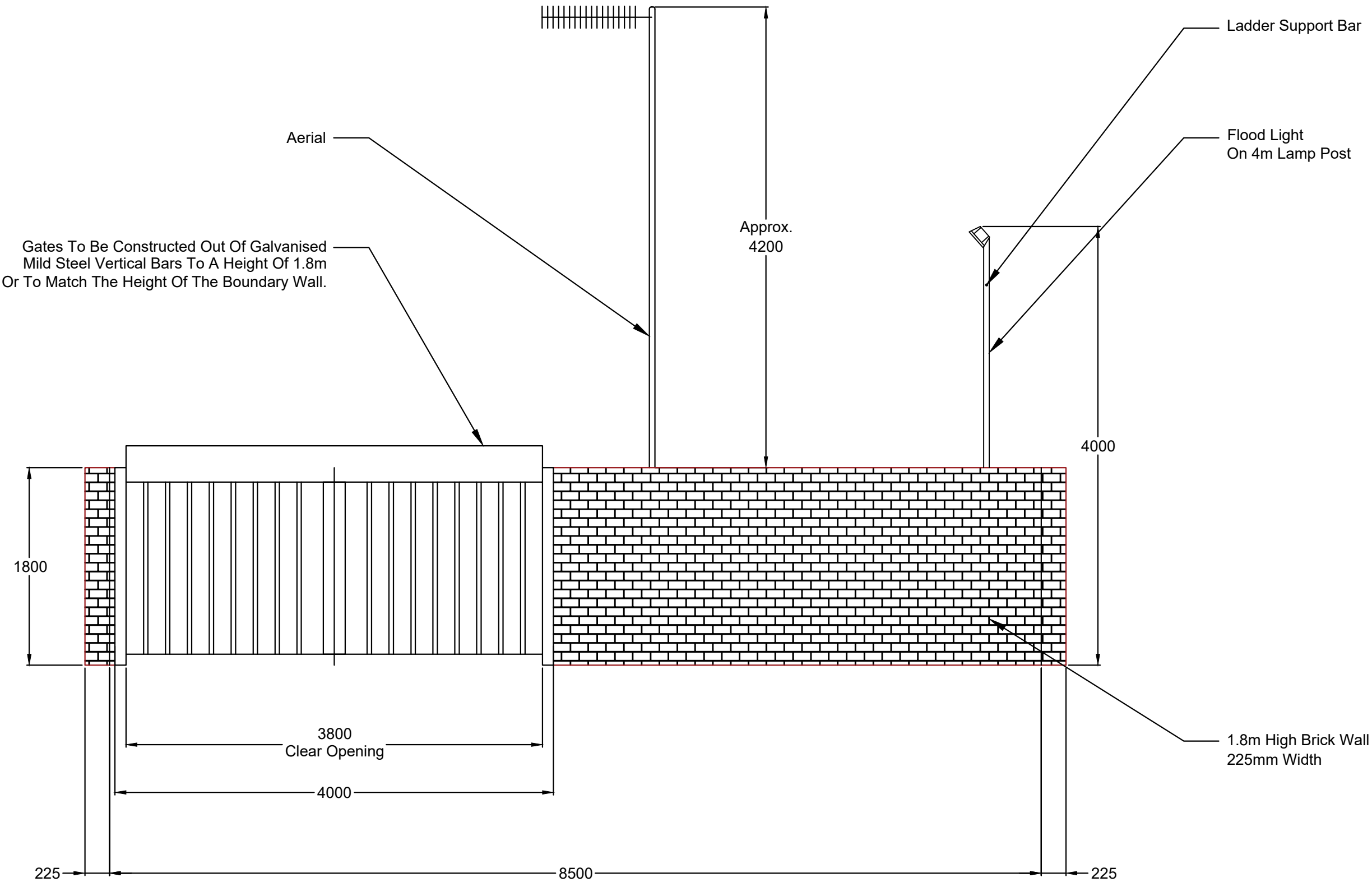
AERIAL DETAIL SIDE VIEW

NOTES

DO NOT SCALE.

- 1 ALL DIMENSIONS IN MILLIMETRES, ALL INVERTS IN METRES AOD, UNLESS OTHERWISE STATED.
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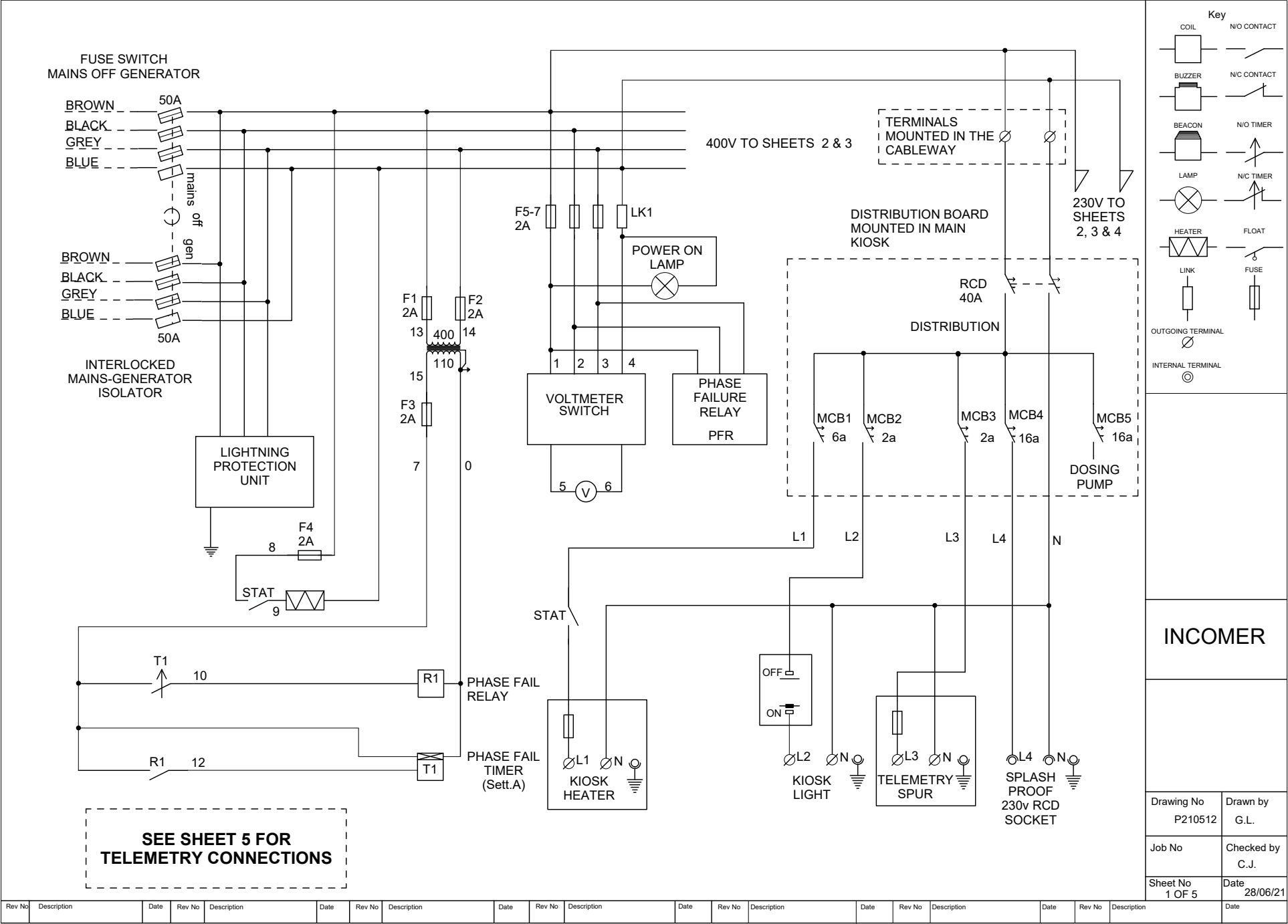
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REV	DATE	DESCRIPTION	DRN	CHK	APR
FOR APPROVAL					
					
PROJECT Boston Road Gosberton					
TITLE Foul Water Pump Station Kiosk & Plinth Details					
CLIENT RTW Developments					
CONTRACT 5702		APR M.T.	DATE 15/07/2023		
SCALE @ AS NTS		CHK M.T.	DATE 15/07/2023		
		DRN S.R.	DATE 15/07/2023		
DRAWING N° 5702				SHEET N° 04	REVISION A

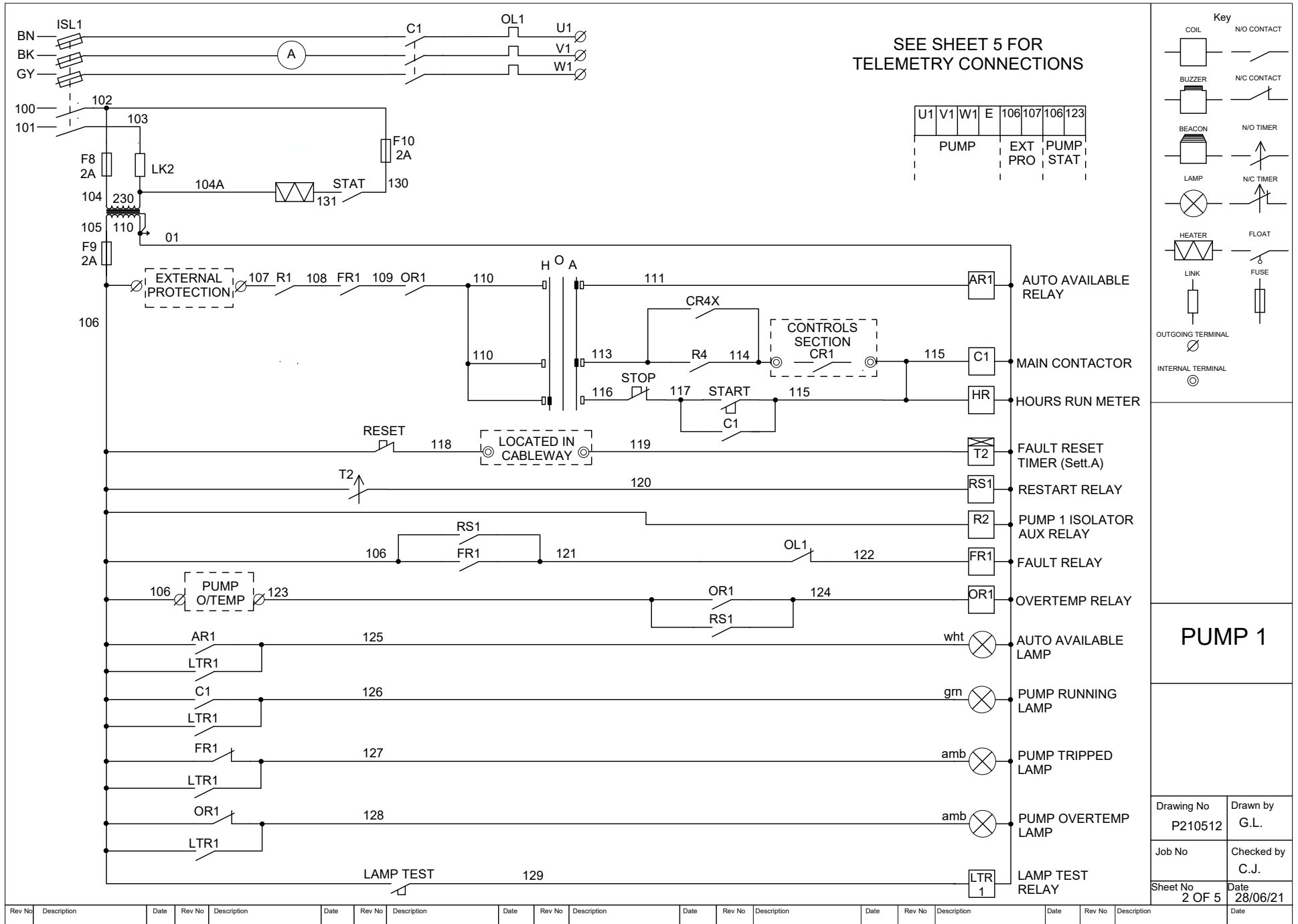


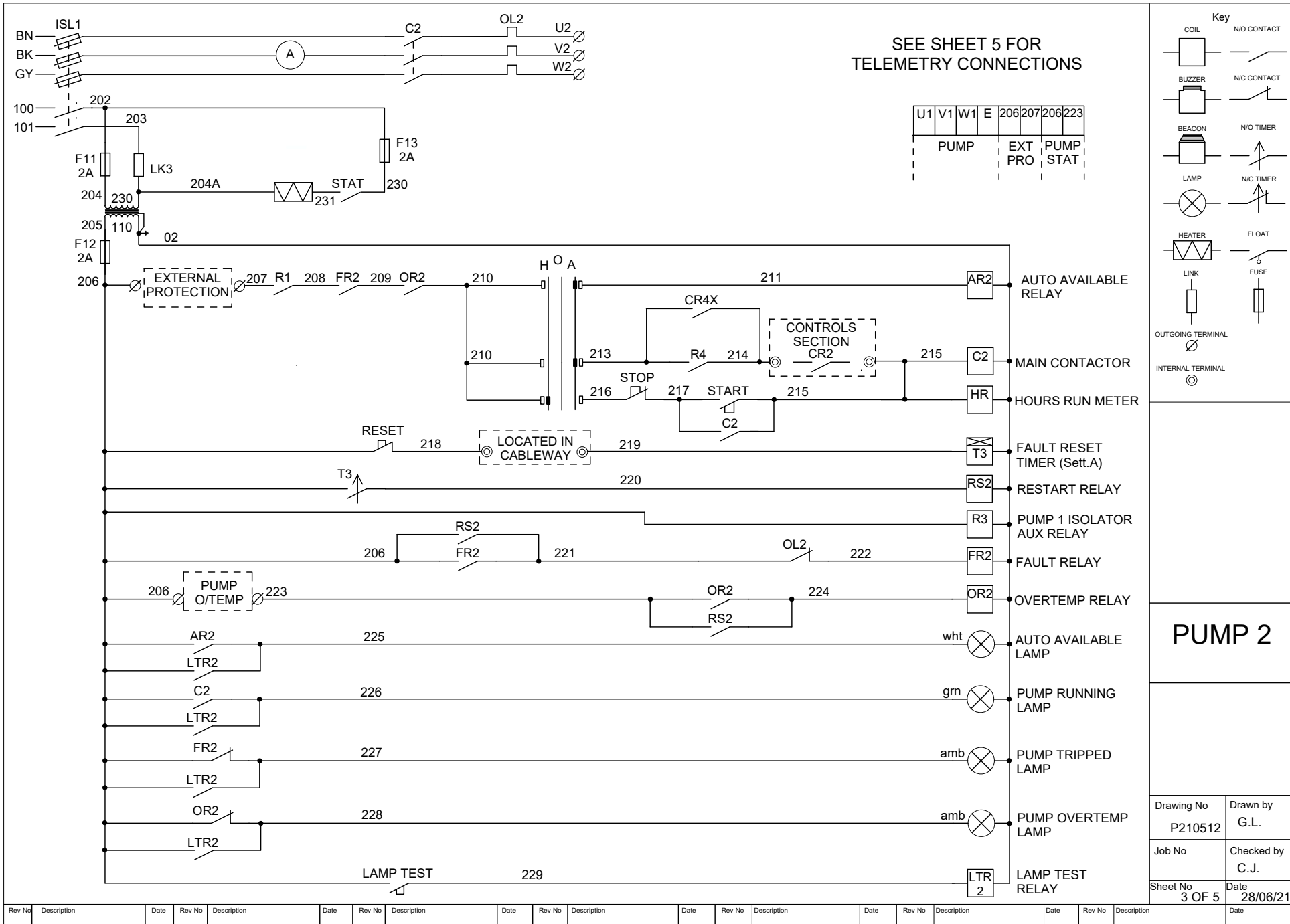
- NOTES
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- 1 ALL DIMENSIONS IN MILLIMETRES, ALL INVERTS IN METRES AOD, UNLESS OTHERWISE STATED.
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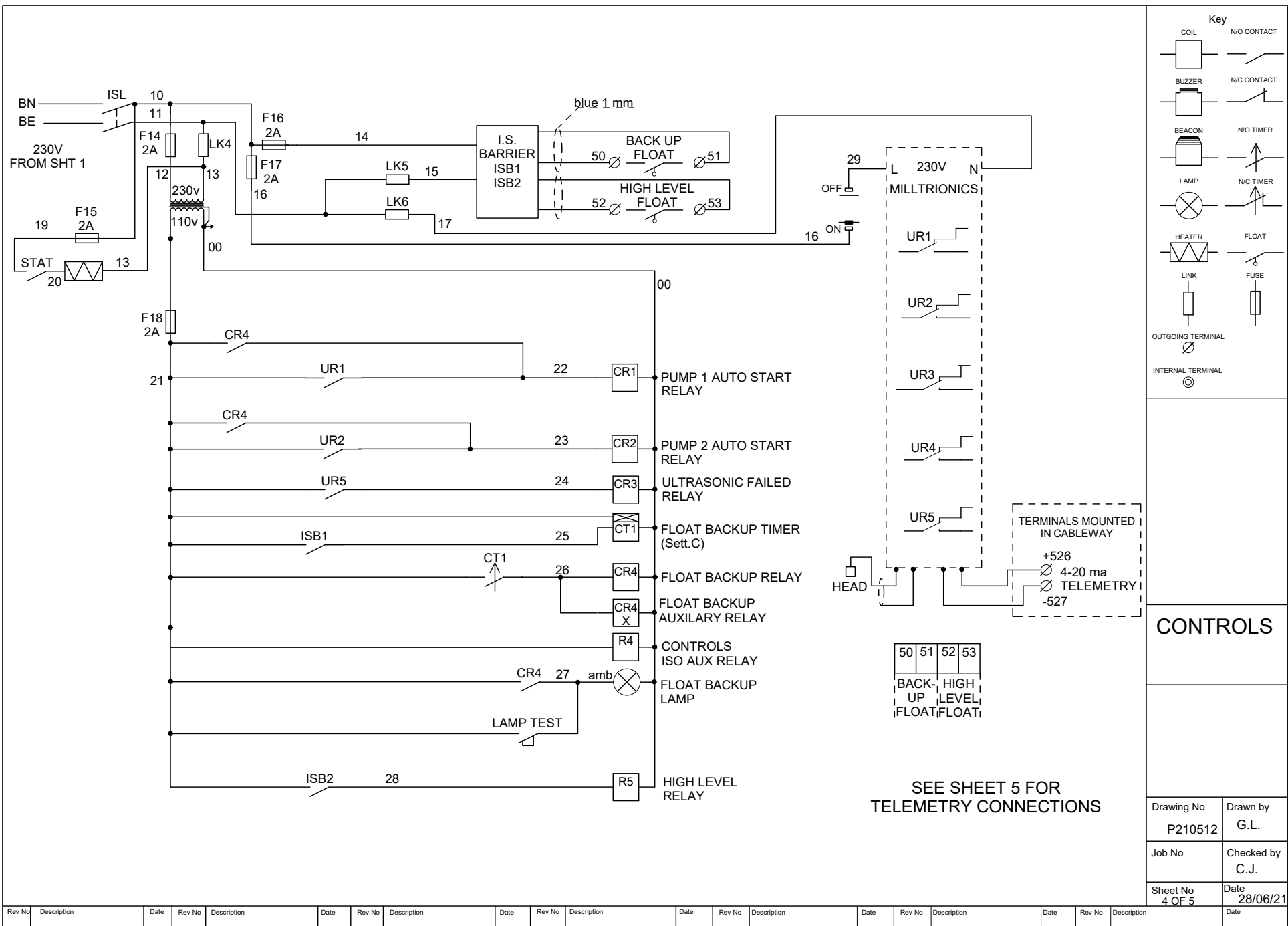
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REV	DATE	DESCRIPTION	DRN	CHK	APR
FOR APPROVAL					
					
PROJECT Boston Road Gosberton					
TITLE Foul Water Pump Station Compound Boundary Details					
CLIENT RTW Developments					
CONTRACT 5702		APR M.T.	DATE 15/07/2023		
SCALE @ A3 1:40		CHK M.T.	DATE 15/07/2023		
		DRN S.R.	DATE 15/07/2023		
DRAWING N°. 5702			SHEET N°. 05		REVISION A

Appendix E: Wiring Diagrams

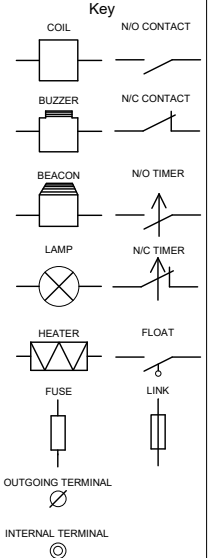
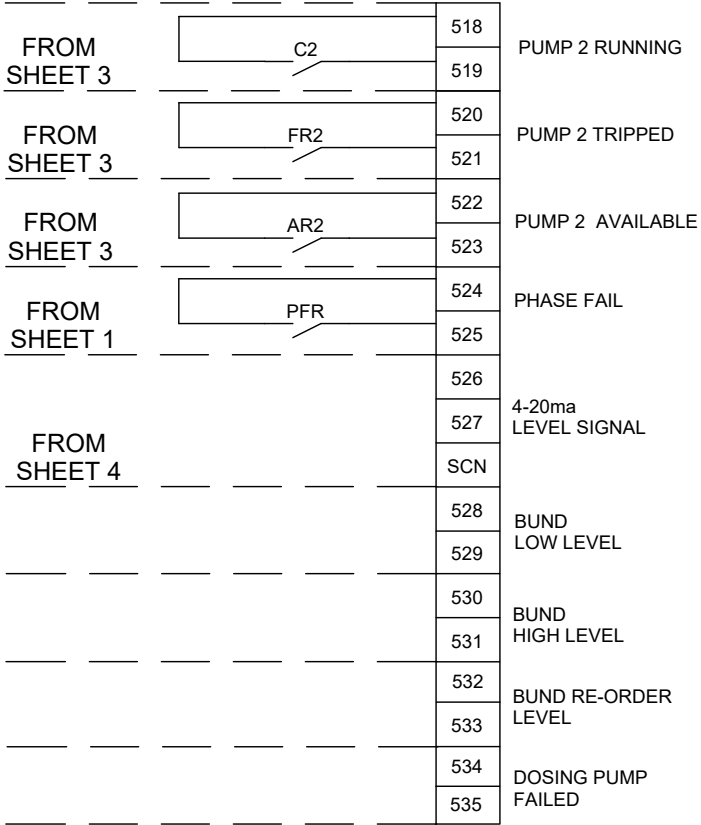
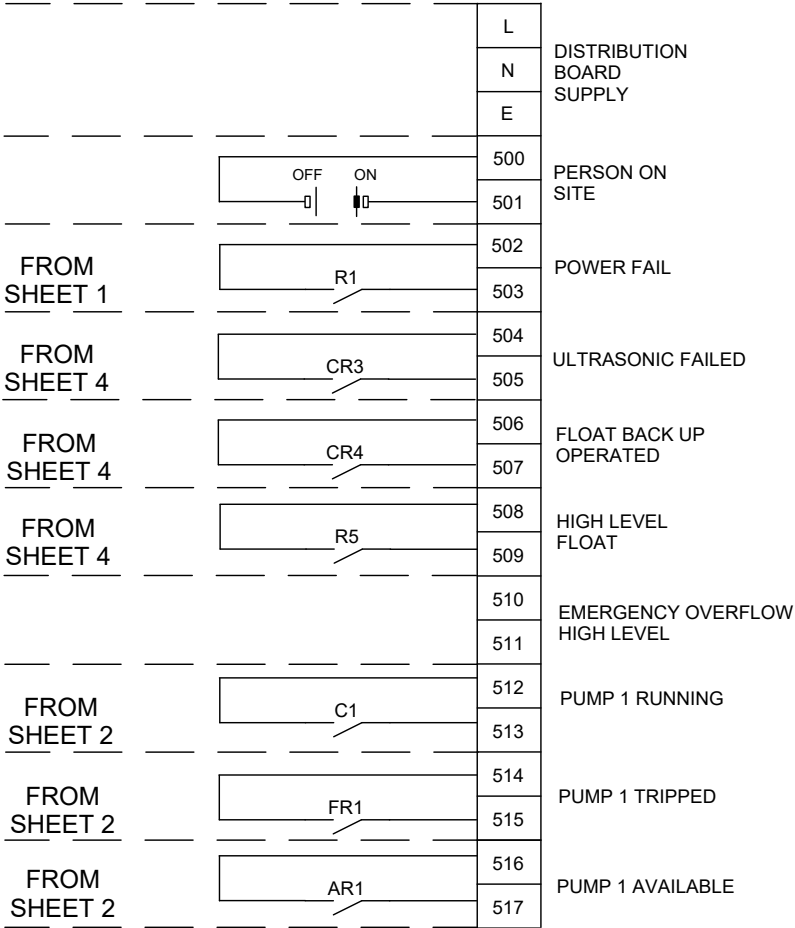








TELEMETRY CONNECTIONS



CABLEWAY

Drawing No P210512	Drawn by G.L.
Job No	Checked by C.J.
Sheet No 5 OF 5	Date 28/06/21

[illegible]