P23012 Wingates Plot 3

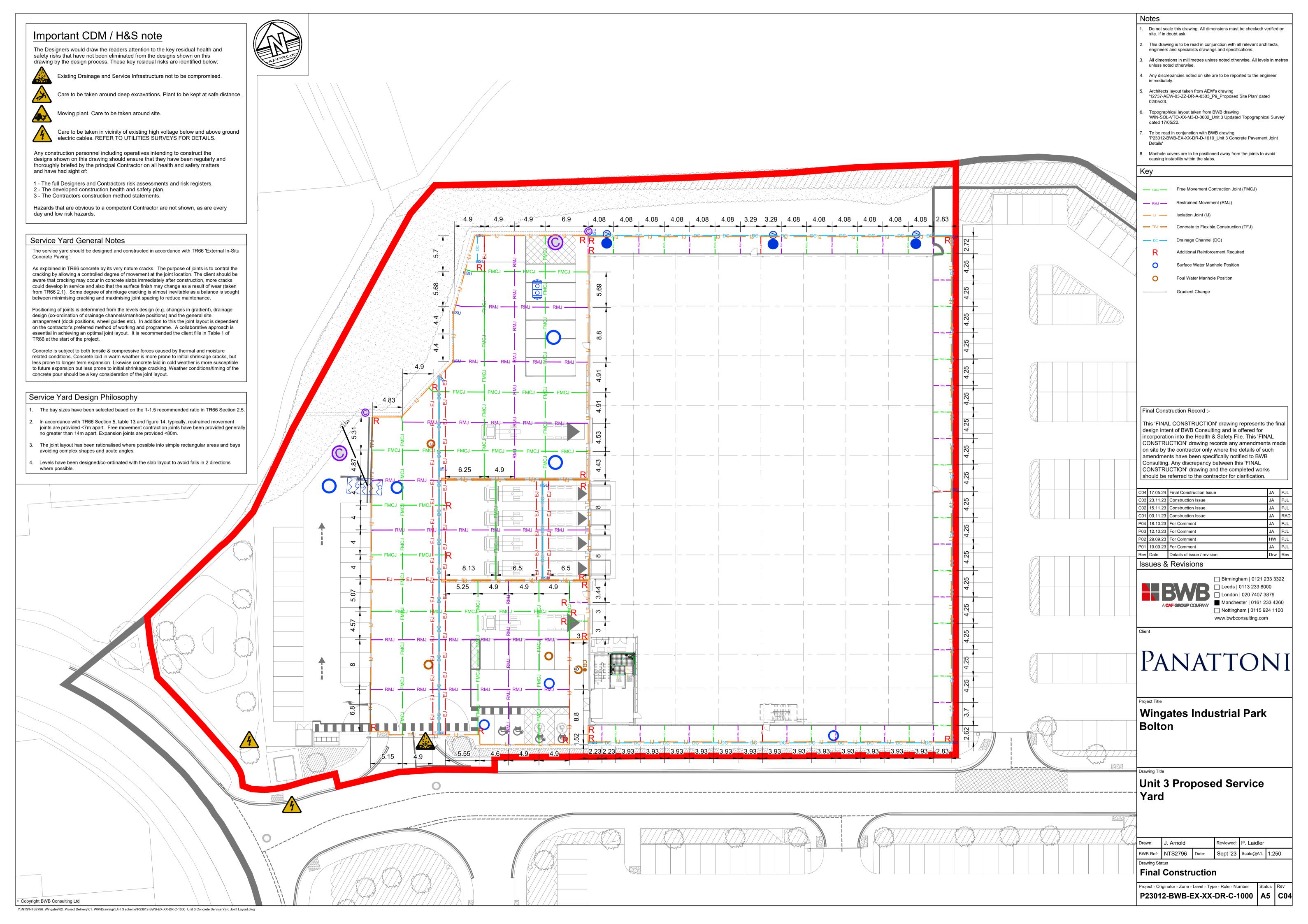
Drawing Register: BWB

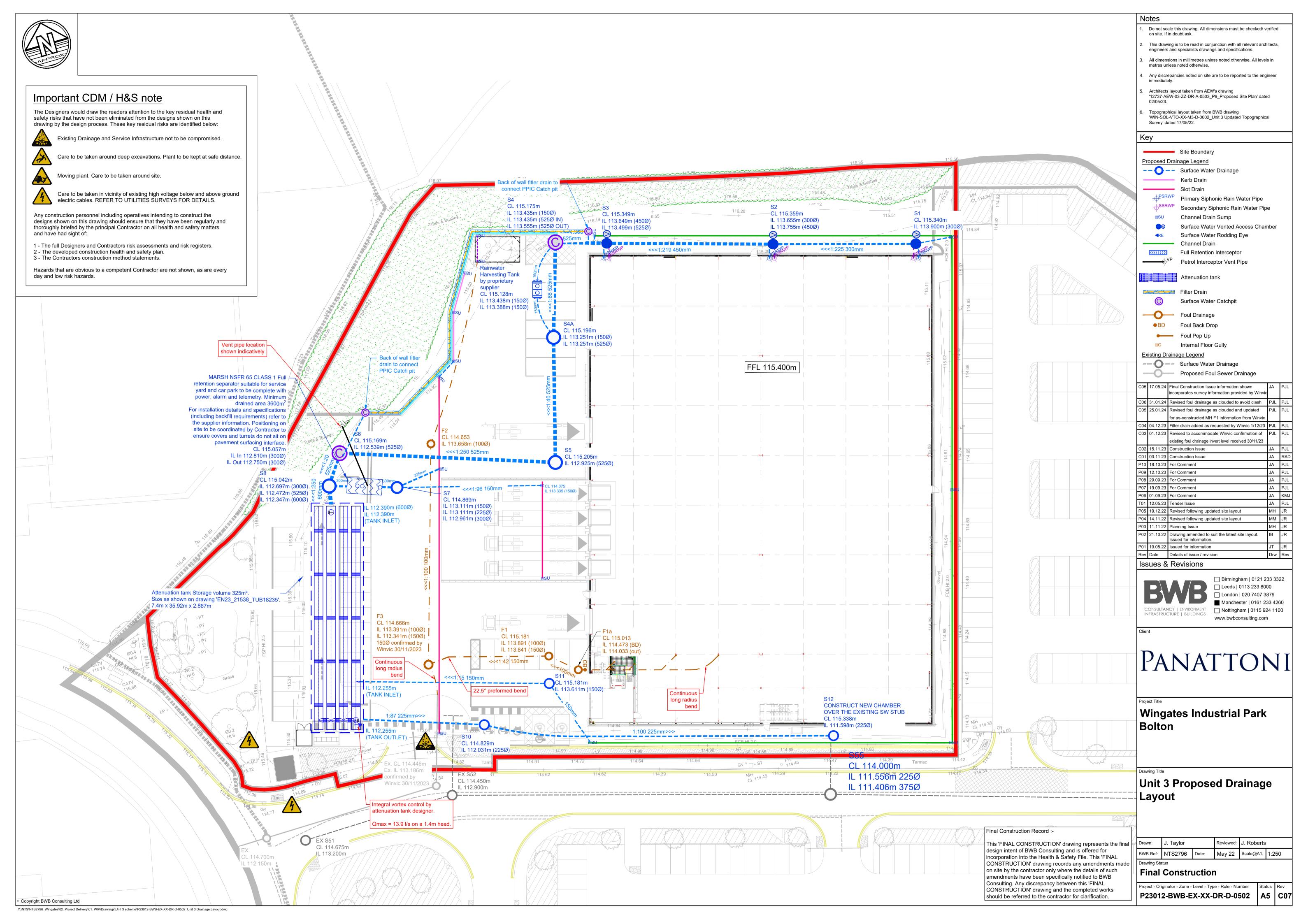
Please note: All drawings listed below are hyperlinked to the drawings listed. Please click on the drawing title to go directly to the drawing of your choice.

Works Completed: Engineers

Final Drawings

Drawing No.	Drawing Title	Rev
P23012-BWB-EX-XX-DR-C-1000	Unit 3 Proposed Service Yard	C04
P23012-BWB-EX-XX-DR-D-0502	Unit 3 Proposed Drainage Layout	C07
P23012-BWB-EX-XX-DR-D-0510	Unit 3 Manhole Schedules	C05
P23012-BWB-EX-XX-DR-D-0561	Unit 3 Drainage Standard Details Sheet 1	C02
P23012-BWB-EX-XX-DR-D-0562	Unit 3 Drainage Standard Details Sheet 2	C02
P23012-BWB-EX-XX-DR-D-0563	Unit 3 Drainage Standard Details Sheet 4	C02
P23012-BWB-EX-XX-DR-D-0564	Unit 3 Drainage Standard Details Sheet 4	C05
P23012-BWB-EX-XX-DR-D-0603	Unit 3 Proposed Levels	C04
P23012-BWB-EX-XX-DR-D-0630	Unit 3 Earthworks Analysis	C02
P23012-BWB-EX-XX-DR-D-0700	Unit 3 Proposed Paving & Surfacing Layout	C02
P23012-BWB-EX-XX-DR-D-0720	Unit 3 Pavement and Kerbs Details-A5	C05
P23012-BWB-EX-XX-DR-D-1010	Unit 3 Concrete Pavement Joint Details-A5	C02
P23012-BWB-EX-XX-DR-D-1100	Unit 3 Kerbing Layout	C03
P23012-BWB-P3-00-DR-S-0301	Office Ground Floor Layout and Details	F01
P23012-BWB-P3-01-DR-S-0702	First Floor Office Slab Reinforcement Details	F01
P23012-BWB-P3-FN-DR-S-0100	Foundation Layout	F01
P23012-BWB-P3-FN-DR-S-0701	Ground Beam Reinforcement Details	F01
P23012-BWB-P3-ZZ-DR-S-0601	Warehouse Sections and Details	F01
P23012-BWB-P3-ZZ-DR-S-0602	Electrical Services RC Pit Plan & Details	F01
P23012-BWB-P3-ZZ-DR-S-0603	GRP Substation Foundation Plan & Details	F01





Surface Water Manhole Schedule

						Pipe:	s Out		Pipes In				
Manhole	Easting	Northing	Cover Level	MH Depth	Manhole	Pipe Out	Pipe Out	Pipes In Invert		Pipes In	Manhole /	Opening Size	COMMENTS / NOTES
Name			(m)	(m)	Diam.,L*W	Invert Level	Diameter	Level	Diameter	Backdrop	Structure Type		
					(mm)	(m)	(mm)	(m)	(mm)	(mm)			
\$1	364934.495	407218.600	115.340	1.440	1200	113.900	300	-	-	-	Type 2	600 x 600	Vented manhole chamber. Vented
													area 80,425mm² based on 2No 160mm
													dia incoming siphonic pipes.
													Manhole cover D400 load class.
\$2	364912.382	407224.724	115.359	1.704	1350	113.655	450	113.755	300	-	Type 2	600 x 600	Vented manhole chamber. Vented
													area 80,425mm² based on 2No 160mm
													dia incoming siphonic pipes.
													Manhole cover D400 load class.
\$3	364886.669	407232.062	115.349	1.850	1500	113.499	525	113.649	450	-	Type 2	600 x 600	Vented manhole chamber. Vented
													area 80,425mm² based on 2No 160mm
													dia incoming siphonic pipes.
													Manhole cover D400 load class.
\$4	364878.772	407234.440	115.175	1.740	1500	113.435	150	113.435	525	-	Catchpit	600 x 600	
100000						113.555	525	-	-				
RWHT	364874.175	407228.821	115.128	N/A	TBC by	113.388	150	113.438	150	-	Rainwater	TBC by	5000 Litre Capacity Rain water
				as 1945 101 as	Supplier		New york And		Sept 1 (2-27 1-267)		Harvesting Tank	supplier	harvesting tank by others.
S4A	364874.365	407219.803	115.196	1.945	1200	113.251	525	113.251	150	-	Type 2	600 x 600	
0.5	0/40/0 000	407000 071	115.005	0.000	1.500	110.005	505	113.251	525	-	T	(00 (00	
\$5 \$7	364869.238	407200.371	115.205	2.280	1500	112.925	525	112.925	525	-	Type 2	600 x 600	
\$6	407200.371	407211.151	115.169	2.630	1500	112.539	525	112.539	525	-	Type 2	600 x 600	
S7	364843.631	407203.347	114.869	1.908	1200	112.961	300	113.111	225 150	-	Туре 2	600 x 600	
FRI	TRC on site by	Contractor to	115.057	TBC by	TBC by	112.750	300	112.810	300	_	Full Retention	TBC by	MARSH NSFR 65 (CLASS 1) Full
LIXI		and turrets do		Supplier	Supplier	112.750	300	112.010	300	_	Interceptor	Supplier	Retention Separator suitable for
		pavement		30001161	30001161						ппскоертог	ooppliel	service yard and car park to be
	surfacing												complete with power, alarm and
	35/146/119	in ondoe.											telemetry. Minimum drained area
													3600m². For installation details and
													specifications (including backfill
													requirements) refer to the supplier
													information. Positioning on site to be
													coordinated by Contractor to ensure
													covers and turrets do not sit on
													pavement surfacing interface.
S8	364833.189	407206.518	115.042	2.695	1500	112.347	600	112.472	525	_	Catch pit	600 x 600	parameter strategy in strategy.
					N 400 000			112.697	300	-	and the second s	2 ar 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
\$11	364858.703	407166.421	115.181	1.570	1200	113.611	150	113.611	150	-	Type 2	600 x 600	
Tank	364827.126	407173.717	114.959	TBC by	TBC by	112.270	600	112.270	600	-	Attenuation Tank	TBC by	Attenuation tank storage volume
				Supplier	Supplier						1	Supplier	325m³ Size as shown on Viacon
								112.270	150	-			drawing 'EN23_21538_TUB18235'
\$10	364846.856	407162.848	114.829	2.798	1200	112.031	225	112.031	225	3	Туре 2	600 x 600	
\$10	TBC on site	TBC on site	115.338	3.740	1200	111.598	225	111.598	225	-		600 x 600	Manhole to be constructed on line of
312	IBC OITSILE	I BC OITSILE	115.550	3.740	1200	111.570	223	111.370	223	-	Туре 2	000 X 000	
					l]			l			existing connection.

Final Construction Record :-

This 'FINAL CONSTRUCTION' drawing represents the final design intent of BWB Consulting and is offered for incorporation into the Health & Safety File. This 'FINAL CONSTRUCTION' drawing records any amendments made on site by the contractor only where the details of such amendments have been specifically notified to BWB Consulting. Any discrepancy between this 'FINAL CONSTRUCTION' drawing and the completed works should be referred to the contractor for clarification.

Foul Drainage Manhole Schedule

Manhole Name	Easting	Northing	Cover Level (m)	MH Depth (m)	Manhole Diam.,L*W (mm)	Pipes Pipe Out Invert Level	Out Pipe Out Diameter (mm)	Pipes In Invert Level	Pipes In Pipes In Diameter (mm)	Pipes In Backdrop (mm)	Manhole / Structure Type	Opening Size	COMMENTS / NOTES
Г1	2/40/2 700	407177 077	115.010	0.000		(m)		(m)			DDIC	(00 (00	La fill a su can us su dus al
Fla	364863.792	407167.276	115.013	0.980	450	114.033	100	114.473	100	440	PPIC	600 x 600	Infill cover required.
F1	364859.819	407170.677	115.181	1.340	1200	113.841	150	113.891	100	-	Type 2	600 x 600	
F2	364850.763	407208.635	114.653	0.995	1200	113.658	100	113.658	100	-	Type 2	600 x 600	
F3	364840.823	407174.56	114.666	1.325	1200	113.341	150	113.341	150	-	Type 2	600 x 600	
								113.391	100	-			
EX	364836.775	407155.461	114.446	1.260	Existing	113.186	Existing	113.186	150	-	Existing	Existing	IL and Cl confirmed by Winvic 30/11/2023

Notes

- Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
 - This drawing is to be read in conjunction with all relevant architects,
- All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.

engineers and specialists drawings and specifications.

- Any discrepancies noted on site are to be reported to the engineer
- immediately. To be read in conjunction with BWB drawing P23012-BWB-EX-XX-DR-D-0502_Unit 3 Proposed Drainage Layout
- For standard details refer to BWB drawing(s)
 P23012-BWB-EX-XX-DR-D-0560, 0561, 0562 and 0563_Unit 3 Drainage Standard Details.
- To be read in conjunction with BWB drawing P23012-BWB-EX-XX-DR-C-0001_Unit 3 Civil Engineering Design
- Prior to the commencement of work the location, size and depth of all existing drains / sewers and services shall be established by the Contractor. Any discrepancies from the information indicated on these drawings shall immediately be brought to the attention of the Architect and / or Engineer.
- All works shall be constructed in accordance with the specification or referenced specifications.
- Refer to associated drainage drawing to confirm all manhole connections not recorded here (e.g. gully connections) prior to construction.
- All pipes shall be laid soffits level and all manhole / inspection chamber invert levels shown are for the outlet pipe (unless specifically shown otherwise). Pipe runs shall be laid to the levels
- 0. Cover levels shown are indicative only and are subject to site adjustment to suit final external works levels. Refer to Highways / Finished Levels model for levels information.
- 1. Unless noted otherwise, covers are to be: Ductile Iron in concrete service yards, tarmacadam or soft
- Infill covers within block, flag or specialist paving and internal to buildings
- 11. Unless noted otherwise covers to be load class:
- B125 internally C250 in landscaping, pedestrian only zones and driveways
- D400 in car parks, access roads (including MEWP zones) E600 in service yards
- 12. All infill covers are to be positioned and orientated to suit the proposed surface paving and to be coordinated with the Architect / Landscape Architect details.
- 13. Coordinates shown are for the intersections of straight incoming and outgoing pipework. Setting out of the manhole chambers are to be adjusted on site to provide sufficient benching as illustrated in the BWB construction details.

Legend

*Subject to chosen vortex control product

^Subject to pump / valve supplier requirements

C05	incorporates survey information provided by Winvio		JA	PJL
C04	31.01.24	Revised foul drainage as highlighted to avoid clash	PJL	PJL
C03	25.01.24	Revised foul drainage as highlighted and updated	PJL	PJL
		for as-constructed MH F1 information from Winvic		
C02	01.12.23	Revised to accommodate Winvic confirmation of	PJL	PJL
		existing foul drainage invert level received 30/11/23		
C01	15.11.23	Construction Issue	JA	PJL
P04	18.10.23	For Comment	JA	PJL
P03	12.10.23	For Comment	JA	PJL
P02	29.09.23	For Comment	HW	PJL
P01	01.09.23	For Comment	JA	KMJ
T01	12.05.23	Tender Issue	JA	PJL
Rev	Date	Details of issue / revision	Drw	Rev

Issues & Revisions



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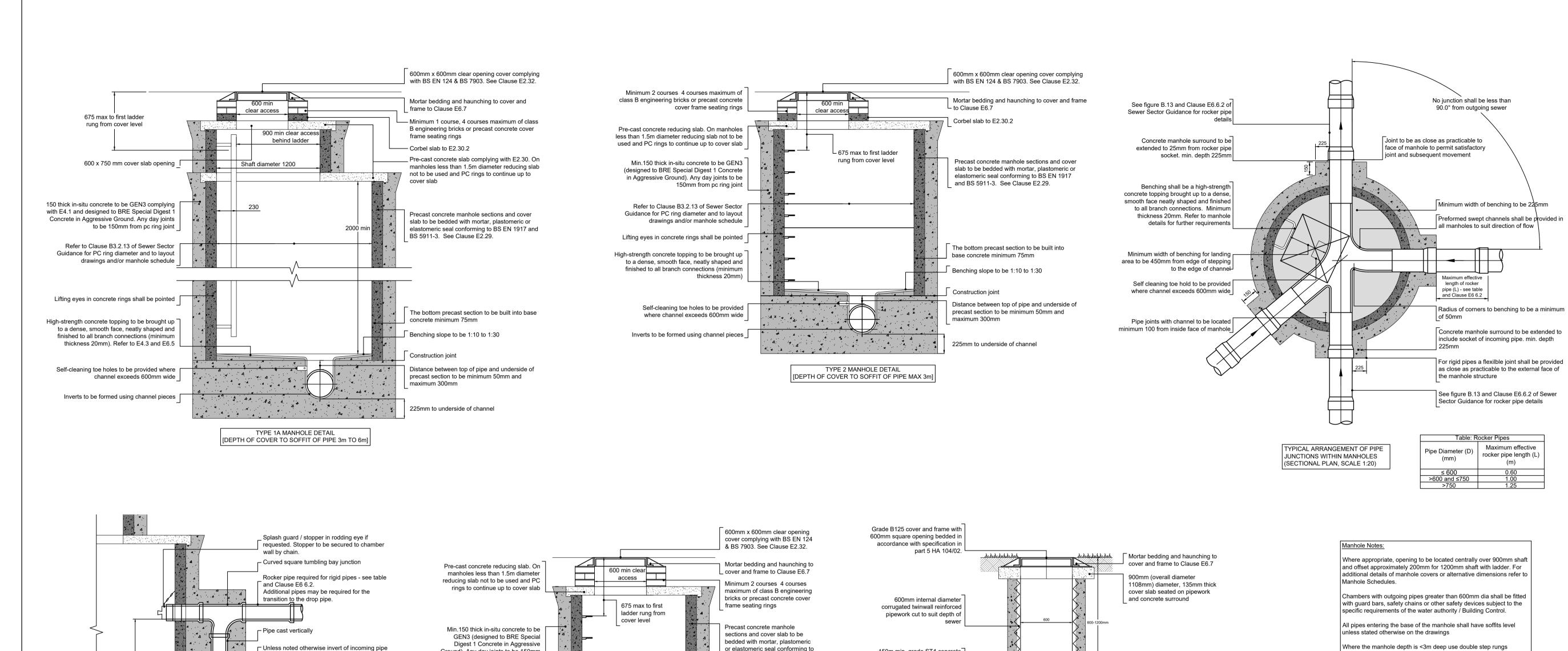
Wingates Industrial Park Bolton

Unit 3 Manhole Schedules

Drawn:	J. Arnold		Reviewed:	P. Laidler	
BWB Ref:	NTS2796	Date:	Apr 23	Scale@A1:	N.T.S.

Final Construction

Project - Originator - Zone - Level - Type - Role - Number P23012-BWB-EX-XX-DR-D-0510 A5 C05



or elastomeric seal conforming to

Clause E2.29.

manhole schedule

mortar to clause 2404

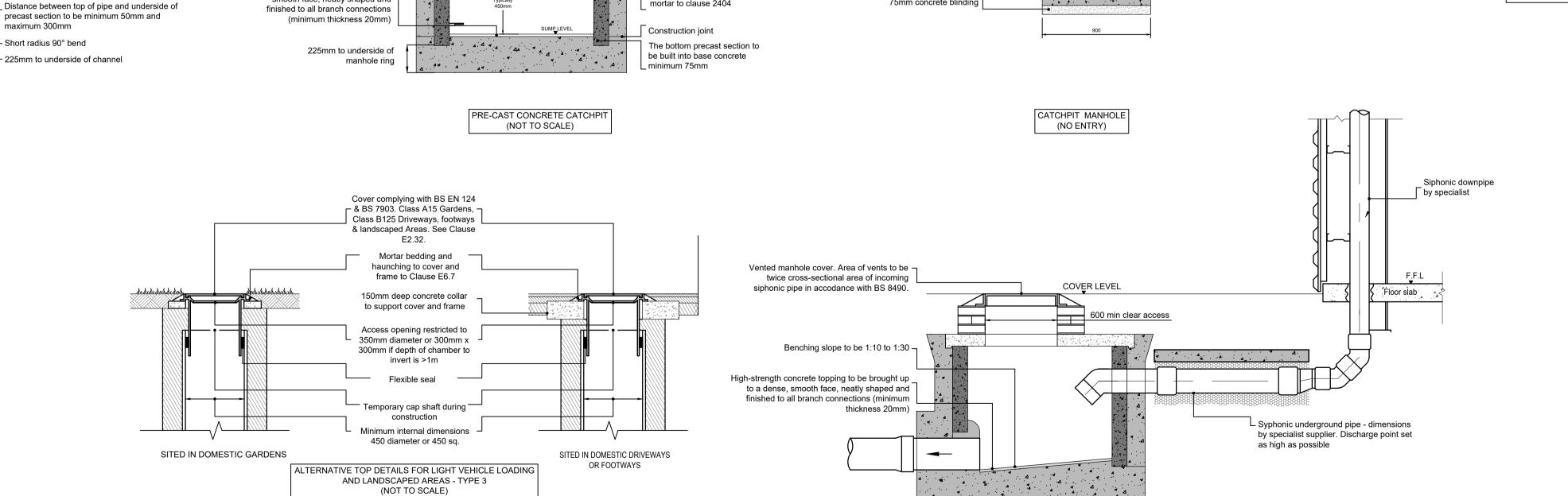
BS EN 1917 and BS 5911-3. See

Refer to Clause B3.2.13 of Sewer

and to layout drawings and/or

Pipe to finish flush with class 1

Sector Guidance for pc ring diameter



150m min. grade ST4 concrete

215mm thick grade ST4 concrete

75mm concrete blinding

surround L

225mm dia. Max. perforated

300mm catchpit sump

carrier drain

TYPICAL SIPHONIC MANHOLE DETAIL

Final Construction Record :-

mplying with Clause E2.33, otherwised use a ladder complying with

Details shown here do not take account of high water tables. Refer to

Coordinates provided for setting out are for intersections of straight

pipe runs. All manhole chambers are to be coordinated on site to

ensure correct landing access is provided in line with the details

BS EN 14396 see Clause E2.37 of Sewer Sector Guidance.

Manhole Schedules for any additional requirements to mitigate

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Notes

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- This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
- All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
- Any discrepancies noted on site are to be reported to the engineer
- This drawing is to be read in conjunction with the latest drainage layout drawing.
- Unless noted otherwise, all clauses relate to Sewer Sector Guidance Notes or Building Regulations Part H.
- To be read in conjunction with BWB drawing P23012-BWB-EX-XX-DR-C-0001_Unit 3 Civil Engineering Notes
- To be read in conjunction with BWB drawing P23012-BWB-EX-XX-DR-D-0502 Unit 3 Drainage Layout

C02 17.05.24		Construction Issue	JA	PJL
C01	15.11.23	Construction Issue		PJL
P01	01.09.23	For Comment	JA	KMJ
T01	12.05.23	Tender Issue	JA	PJL
Rev	Date	Details of issue / revision	Drw	Rev

Issues & Revisions



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Wingates Industrial Park **Bolton**

Unit 3 Drainage Standard Details Sheet 1

Drawn:	J. Arnold		Reviewed:	P. Laidler	
BWB Ref:	NTS2796	Date:	Apr 23	Scale@A1:	NTS

Final Construction

Project - Originator - Zone - Level - Type - Role - Number P23012-BWB-EX-XX-DR-D-0561 A5 C02

to be 1500mm above top of benching

ntegral with manhole surround

concrete minimum 75mm

TYPICAL VERTICAL BACKDROP

DETAIL

(NOT TO SCALE)

Benching slope to be 1:10 to 1:30

The bottom precast section to be built into base

from pc ring joint

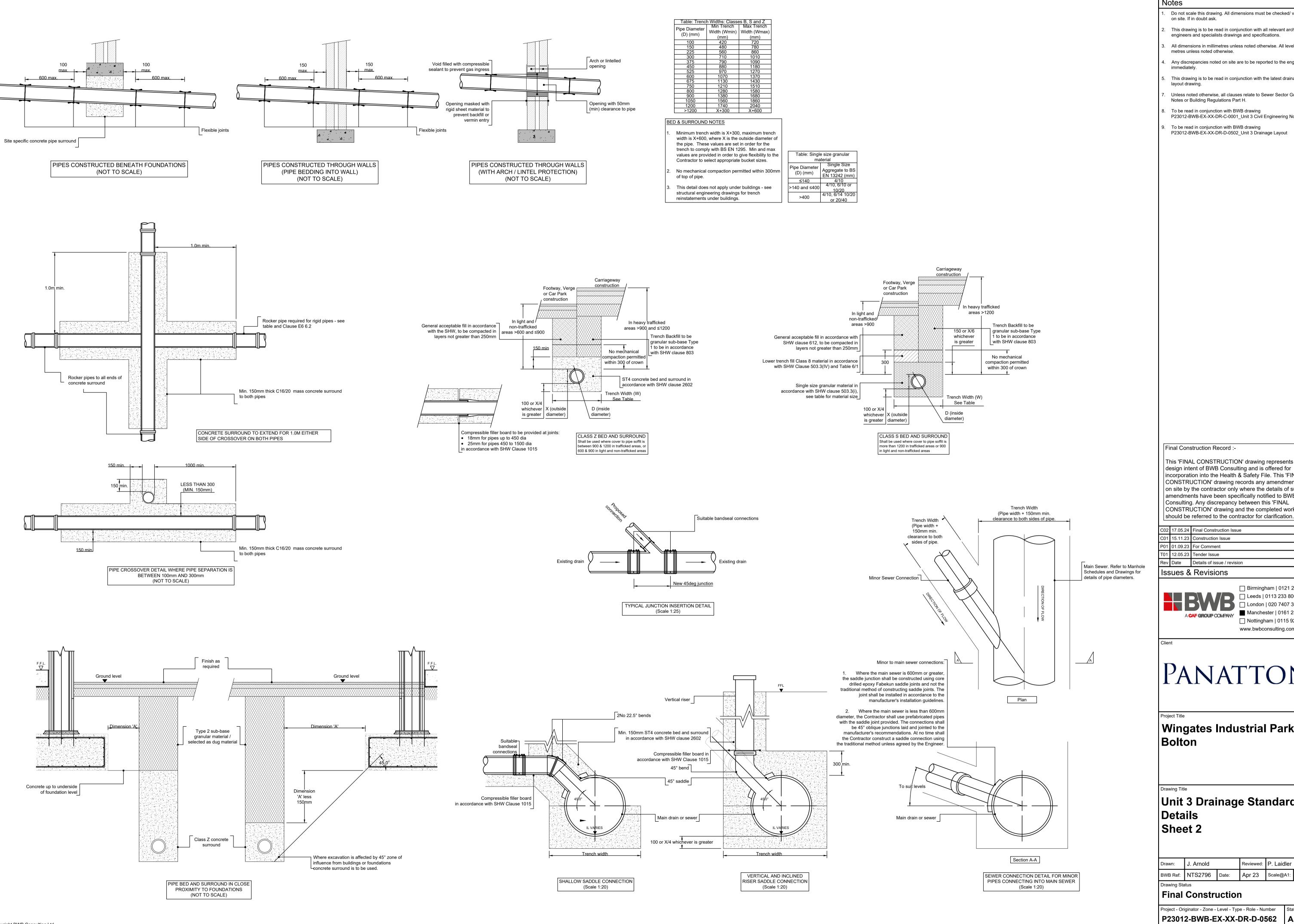
Lifting eyes in concrete

High-strength concrete topping to

smooth face, neatly shaped and

be brought up to a dense,

rings shall be pointed



Notes

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- All dimensions in millimetres unless noted otherwise. All levels in
- metres unless noted otherwise. Any discrepancies noted on site are to be reported to the engineer
- This drawing is to be read in conjunction with the latest drainage
- layout drawing.
- Unless noted otherwise, all clauses relate to Sewer Sector Guidance
- To be read in conjunction with BWB drawing P23012-BWB-EX-XX-DR-C-0001_Unit 3 Civil Engineering Notes
- To be read in conjunction with BWB drawing P23012-BWB-EX-XX-DR-D-0502_Unit 3 Drainage Layout

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C02	17.05.24	Final Construction Issue	JA	PJL			
C01	15.11.23	Construction Issue	JA	PJL			
P01	01.09.23	For Comment	JA	KMJ			
T01	12.05.23	Tender Issue	JA	PJL			
Rev	Date	Details of issue / revision	Drw	Rev			

Issues & Revisions



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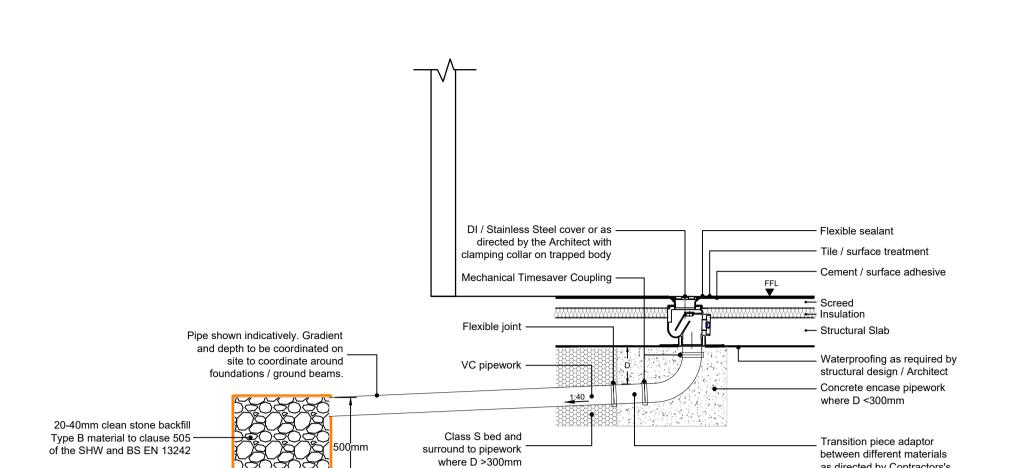
Wingates Industrial Park Bolton

Unit 3 Drainage Standard Details Sheet 2

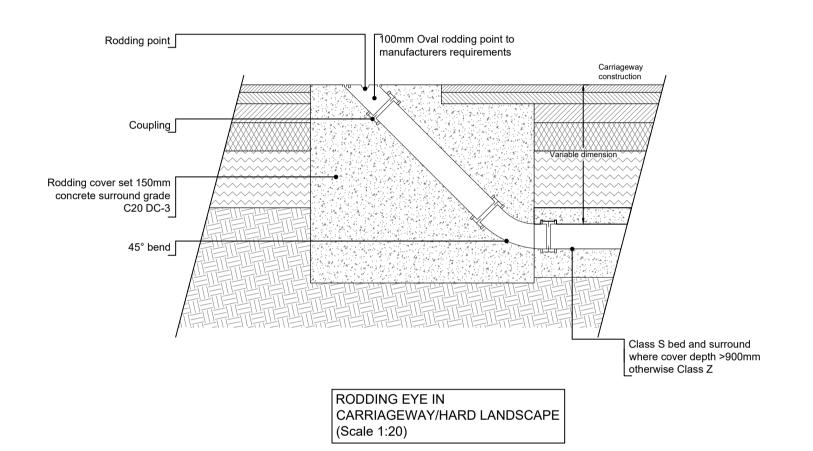
Drawn:	J. Arnold	. Arnold		wed: P. Laidler		
BWB Ref:	NTS2796	Date:	Apr 23	Scale@A1:	N.T.S	
Drawing Sta	itue		-			

Final Construction

Project - Originator - Zone - Level - Type - Role - Number P23012-BWB-EX-XX-DR-D-0562



DI / Stainless Steel cover or as -Flexible sealant directed by the Architect with Tile / surface treatment clamping collar on trapped body Cement / surface adhesive Mechanical Timesaver Coupling -Flexible joint ← Structural Slab Waterproofing as required by structural design / Architect Concrete encase pipework where D <300mm Class S bed and Transition piece adaptor surround to pipework between different materials where D >300mm as directed by Contractors's chosen supplier TRAPPED INTERNAL FLOOR GULLY [TRADITIONAL CONSTRUCTION] (NOT TO SCALE)

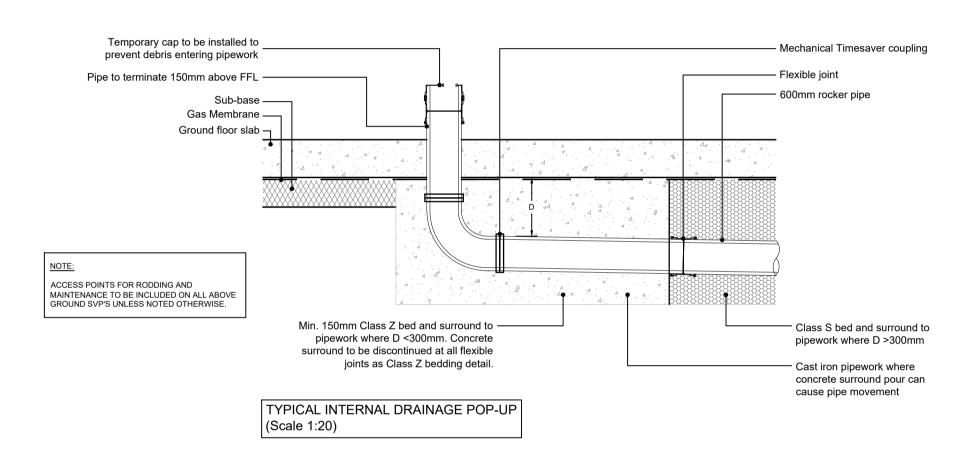


DRY TRAPPED GULLY AND SOAKAWAY

(NOT TO SCALE)

as directed by Contractors's

chosen supplier



TYPICAL INTERNAL DRAINAGE POP-UP

SHOWN AT COLUMN LOCATION

Adaptor to suit waste, soil or rainwater pipe. Detail

shows adaptor proud of an indicative floor slab.

This dimension depends on installation method

crucial for installation of ground floor W.C. pans.

and/or finishes. This dimension is particularly

The adaptor may be buried in some cases.

Telescopic connector if required in areas of

Compressible filler board to be provided where

structural slab is to sit direct on mass concrete

Flexible joint to be located at interface between

600mm Long rocker pipes to be provided where pipe emerges from slab. Rocker pipes to be concrete encased with fibreboard at joints where

crown of pipe is less than 300mm from underside

Short lengths of pipe laid to steep gradients

ensuring acceptable falls

ACCESS POINTS FOR RODDING AND MAINTENANCE TO BE INCLUDED ON ALL ABOVE GROUND SVP'S UNLESS NOTED OTHERWISE.

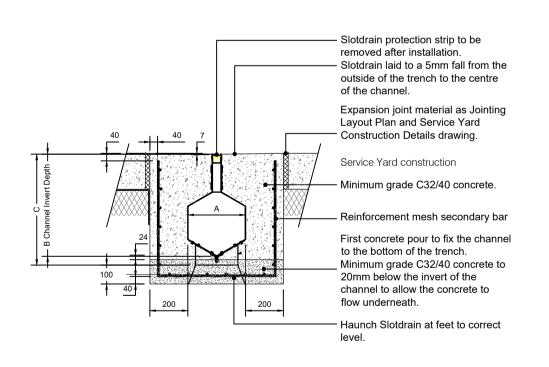
concrete surround and granular backfill

90° rest bend bedded on mortar

settlement / heave*

surround.

NOTE:



					GEN 3 concrete bed and surround.	_	詽	∕₋	Т
CASTSLOT SLOTDRAIN		required it stab and surround are cast in							
WIE	TH 'A'	INVERT 'B'	DEPTH 'C'		seperate operations, for example if a damp		II		$\ $
1	100	308	357		proof membrane and/or insulation is present.		II		Ш
1	150	366	415				II		Ш
(2	225	452	501				II		Ш
0	300	538	587		Sub-base ——		II		Ш
()	350	596	645		Gas Membrane —		II		Ш
4	100	652	712		Ground floor slab — F.F.L.		Ш		Ш
4)	500	768	828			4.	Ш		Ш
6	600	1031	1091			1	II		Ш
					400mm min. for 100 dia pipe 475mm min.for 150dia pipe Allow additional 150mm for telescopic connector where heave / settlement may occur				
						-	-	a*	
DRCE	MENT M				*required where peat /soft ground material is present on site. Contractor to assess ground conditions on site and determine if any further telescopic rest				
Ors.	SECC	NDARY BAR	Ø SECOND	ARY BAR Crs.	bends are required.	4, 1		7	1 4

GATIC CAST SLOT DRAIN
IN SERVICE YARD
(NOT TO SCALE)

	REINFORCEMENT MESH									
MESH	MAIN BAR Ø	MAIN BAR Crs.	SECONDARY BAR Ø	SECONDARY BAR Crs.						
B785	10mm	100mm	8mm	200mm						
B1131	12mm	100mm	8mm	200mm						

THE FITTINGS DETAILS SHOWN ARE INDICATIVE ONLY AND MAY NEED TO BE AMENDED TO SUIT THE ARCHITECT'S SPECIFIC PRODUCT REQUIREMENTS OR THE CONTRACTORS CHOSEN SUPPLIER.

CONSTRUCTION DETAILS SHOWN ARE FOR INFORMATION ONLY. ALL PROPRIETARY PRODUCTS MUST BE INSTALLED IN STRICT ACCORDANCE WITH THE PRODUCT SPECIFIC REQUIREMENTS.

This drawing is to be read in conjunction with the latest drainage layout drawing. Unless noted otherwise, all clauses relate to Sewer Sector Guidance Notes or Building Regulations Part H.

To be read in conjunction with BWB drawing P23012-BWB-EX-XX-DR-C-0001_Unit 3 Civil Engineering Notes

Do not scale this drawing. All dimensions must be checked/ verified

This drawing is to be read in conjunction with all relevant architects,

All dimensions in millimetres unless noted otherwise. All levels in

Any discrepancies noted on site are to be reported to the engineer

engineers and specialists drawings and specifications.

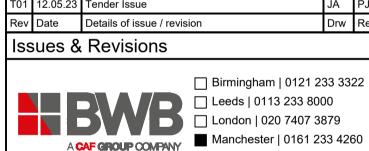
To be read in conjunction with BWB drawing P23012-BWB-EX-XX-DR-D-0502_Unit 3 Drainage Layout

Notes

on site. If in doubt ask.

metres unless noted otherwise.

C02 17.05.24 Final Construction Issue		C01	15.11.23	Construction Issue
	C01 15.11.23 Construction Issue		01 00 23	For Comment
		P01	01.03.23	1 of Collinett



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Wingates Industrial Park Bolton

Unit 3 Drainage Standard Details

Final Construction Record :-

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Sheet 3

Drawn:	J. Arnold		Reviewed:	P. Laidler	
BWB Ref:	NTS2796	Date:	Apr 23	Scale@A1:	N.T.S
D	4				

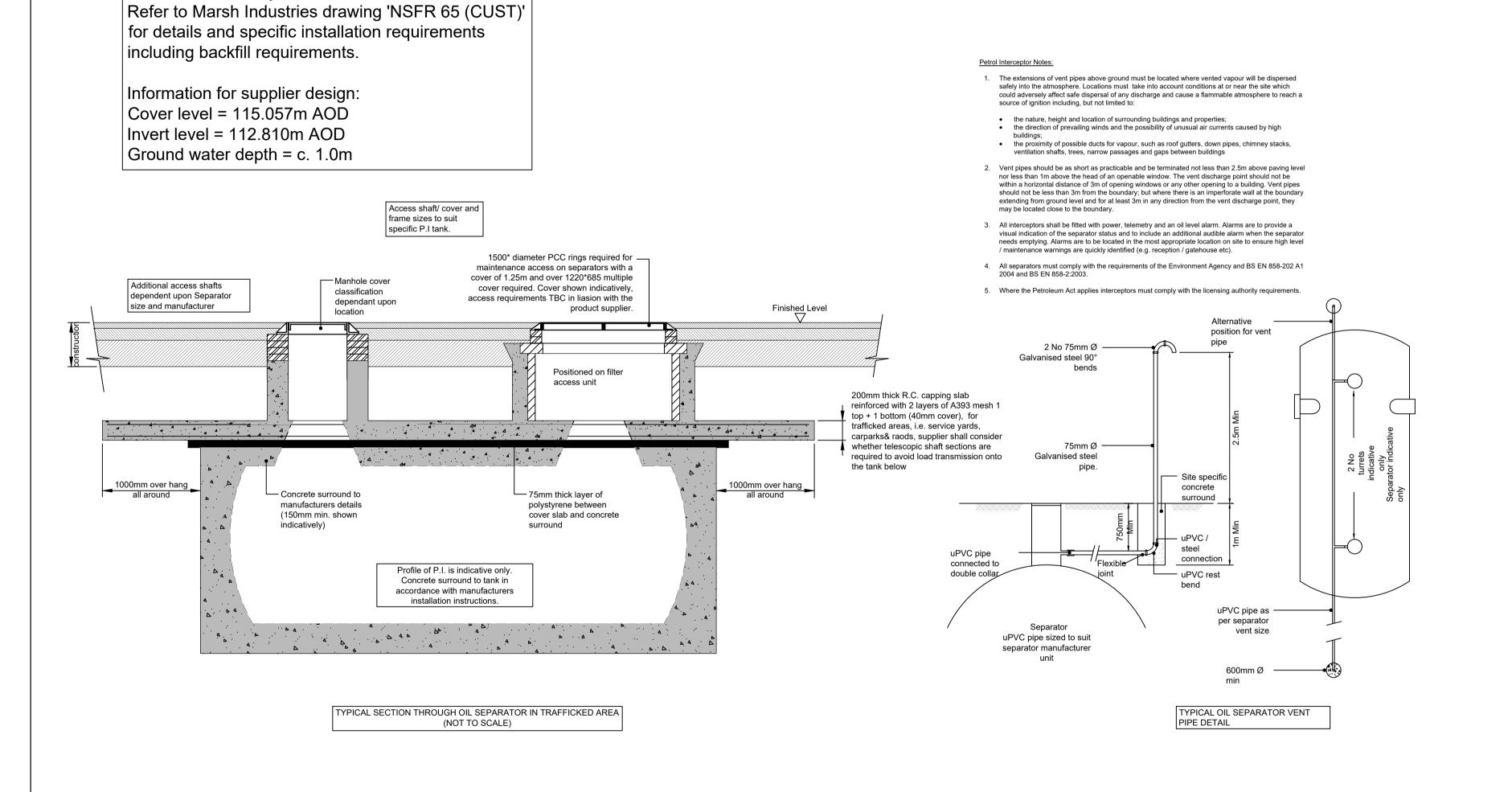
Final Construction

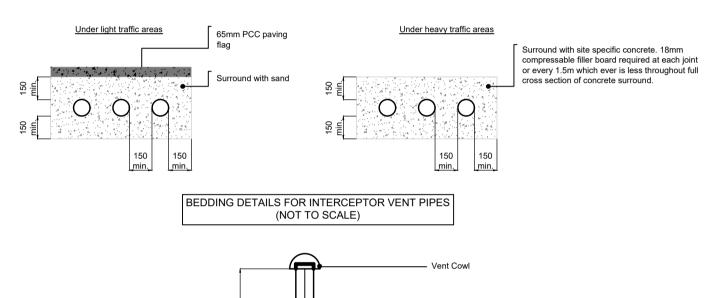
Project - Originator - Zone - Level - Type - Role - Number A5 C02 P23012-BWB-EX-XX-DR-D-0563

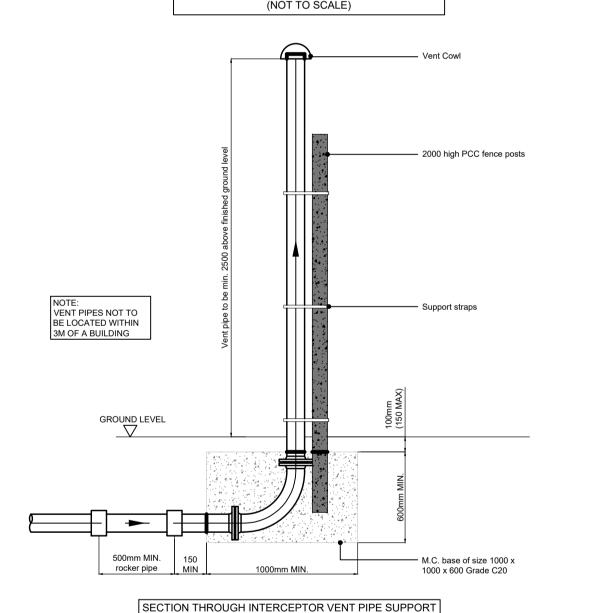
To be wrapped with closed lotrak 300 bonded nonwoven

geotextile.

500mm







(NOT TO SCALE)

C02 17.05.24 Final Construction Issue C01 15.11.23 Construction Issue P01 01.09.23 For Comment T01 12.05.23 Tender Issue Rev Date Details of issue / revision

Issues & Revisions



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Notes

on site. If in doubt ask.

layout drawing.

metres unless noted otherwise.

Notes or Building Regulations Part H.

To be read in conjunction with BWB drawing

To be read in conjunction with BWB drawing

P23012-BWB-EX-XX-DR-D-0502_Unit 3 Drainage Layout

P23012-BWB-EX-XX-DR-C-0001 Unit 3 Civil Engineering Notes

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All dimensions in millimetres unless noted otherwise. All levels in

Any discrepancies noted on site are to be reported to the engineer

This drawing is to be read in conjunction with the latest drainage

Unless noted otherwise, all clauses relate to Sewer Sector Guidance

engineers and specialists drawings and specifications.

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Wingates Industrial Park Bolton

Unit 3 Drainage Standard Details Sheet 4

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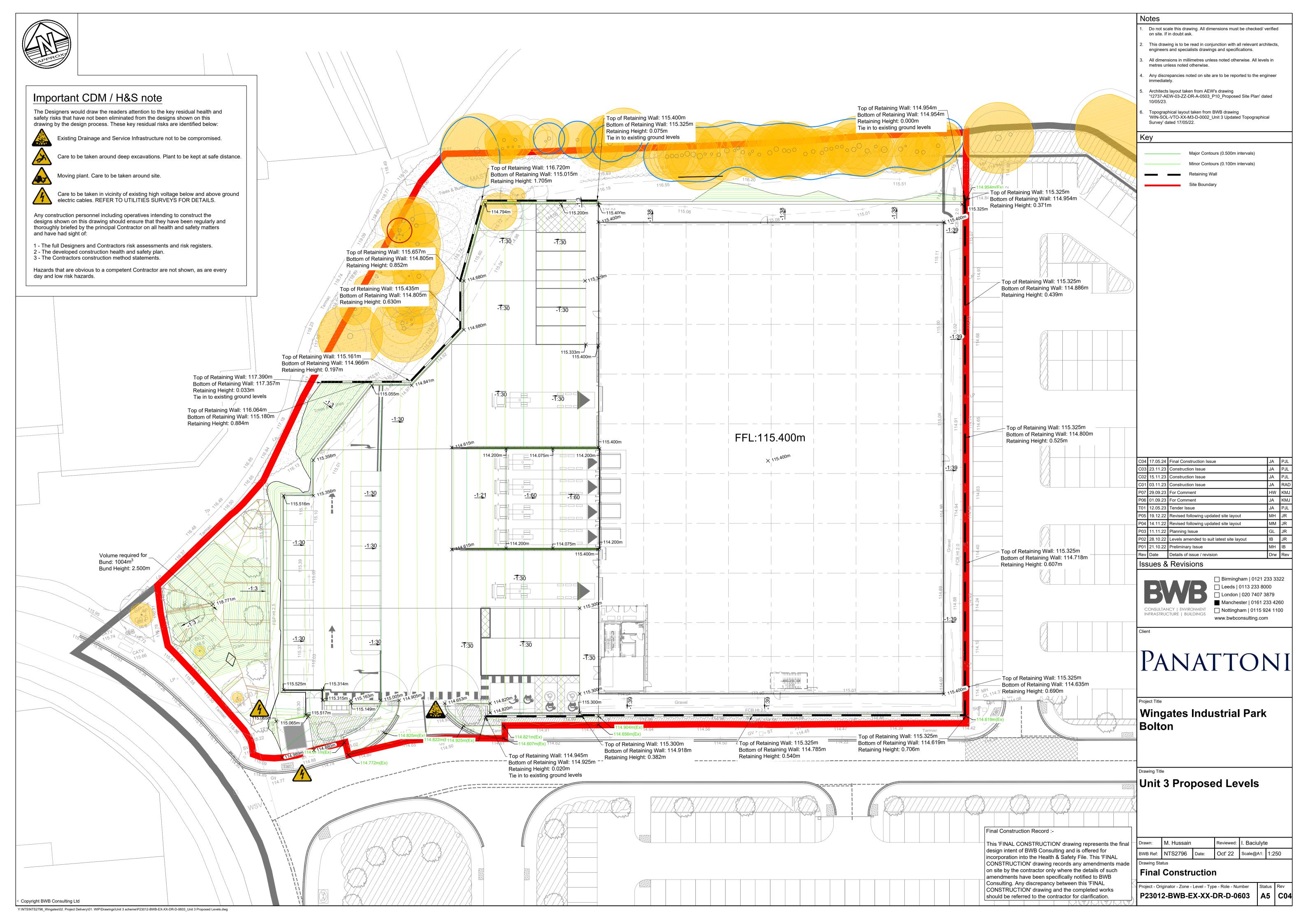
Final Construction Record :-

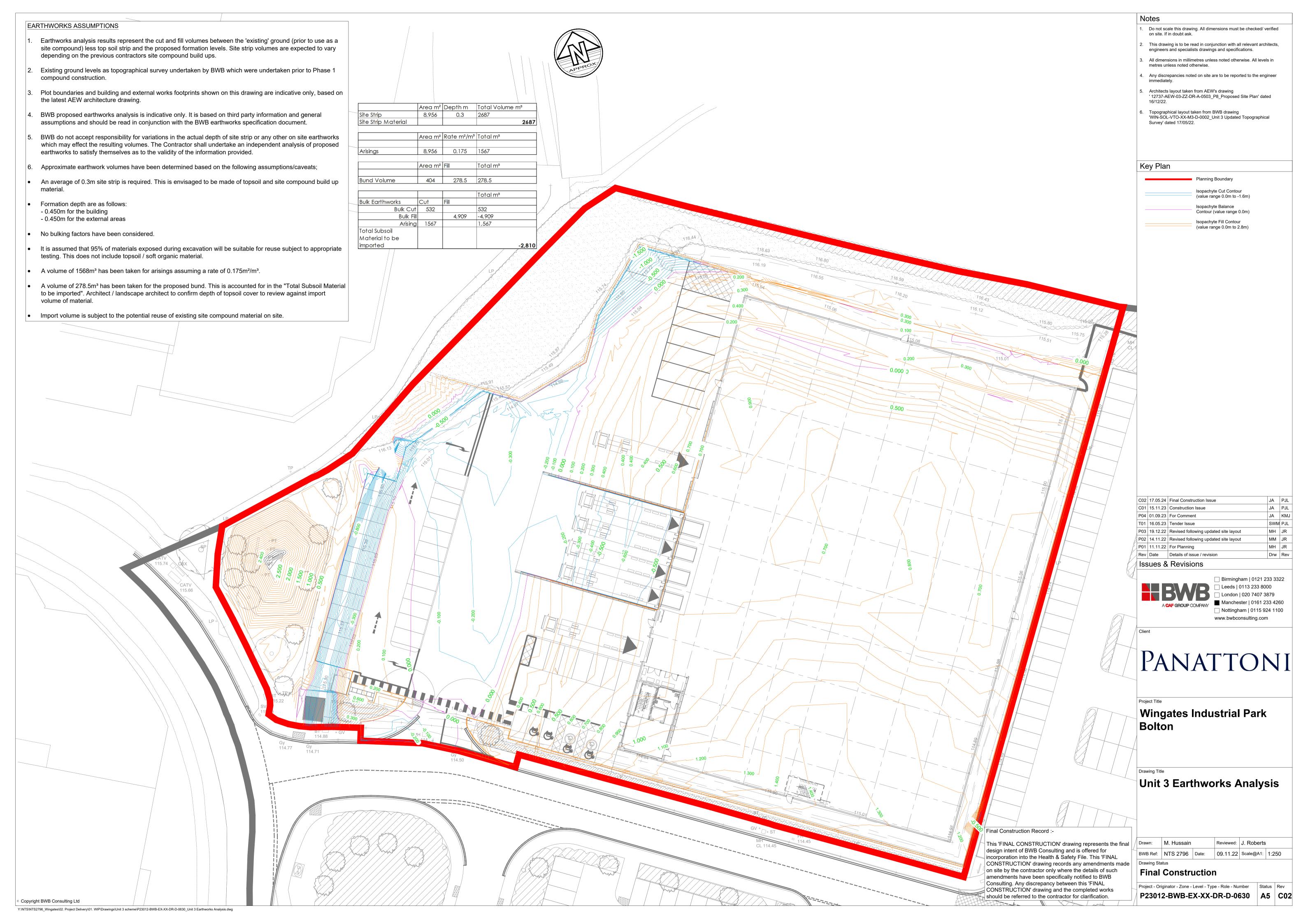
inal	Drawn:	J. Arnold		Reviewed:	P. Laidler	
	BWB Ref:	NTS2796	Date:	Apr 23	Scale@A1:	N.T.S

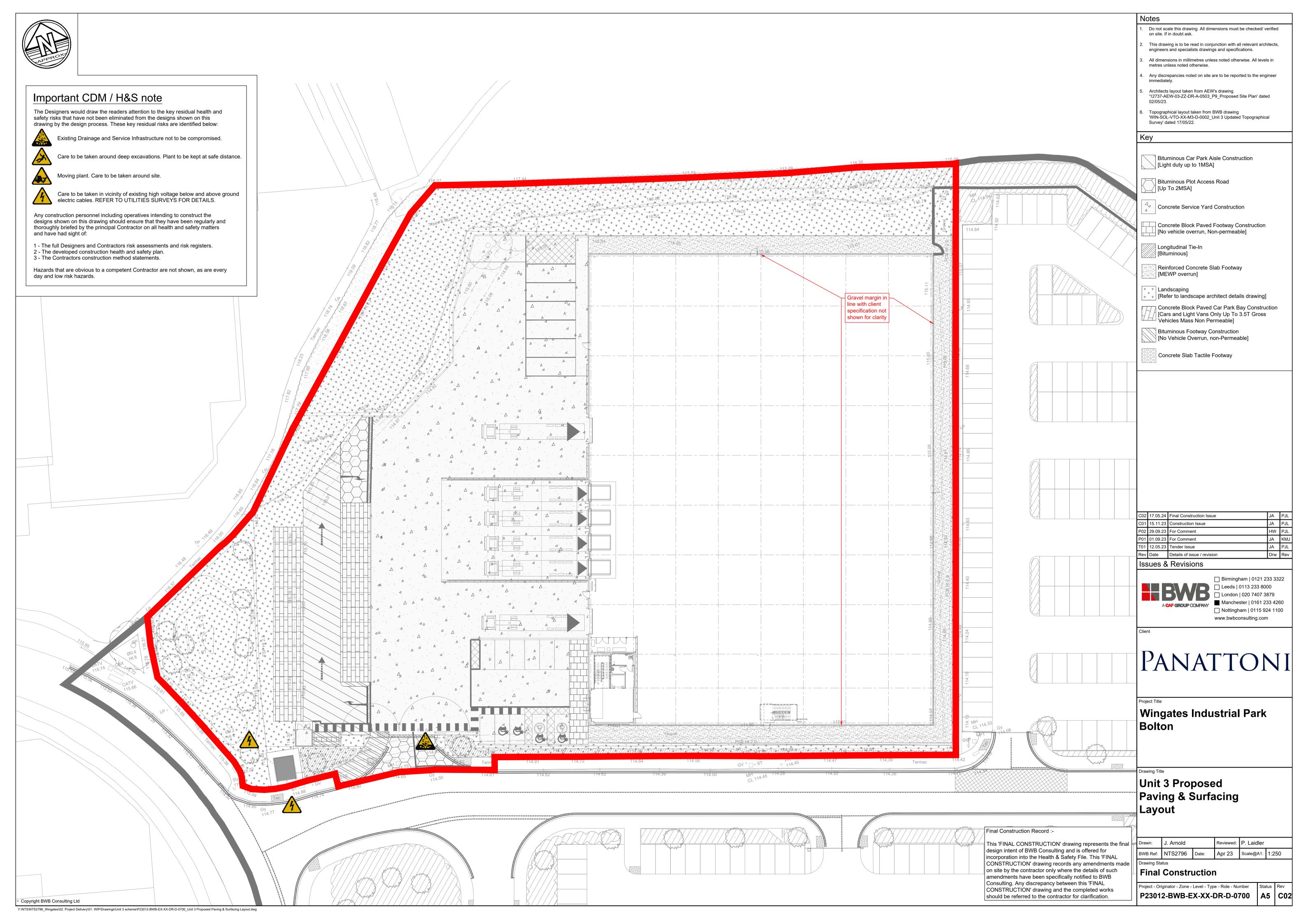
Final Construction

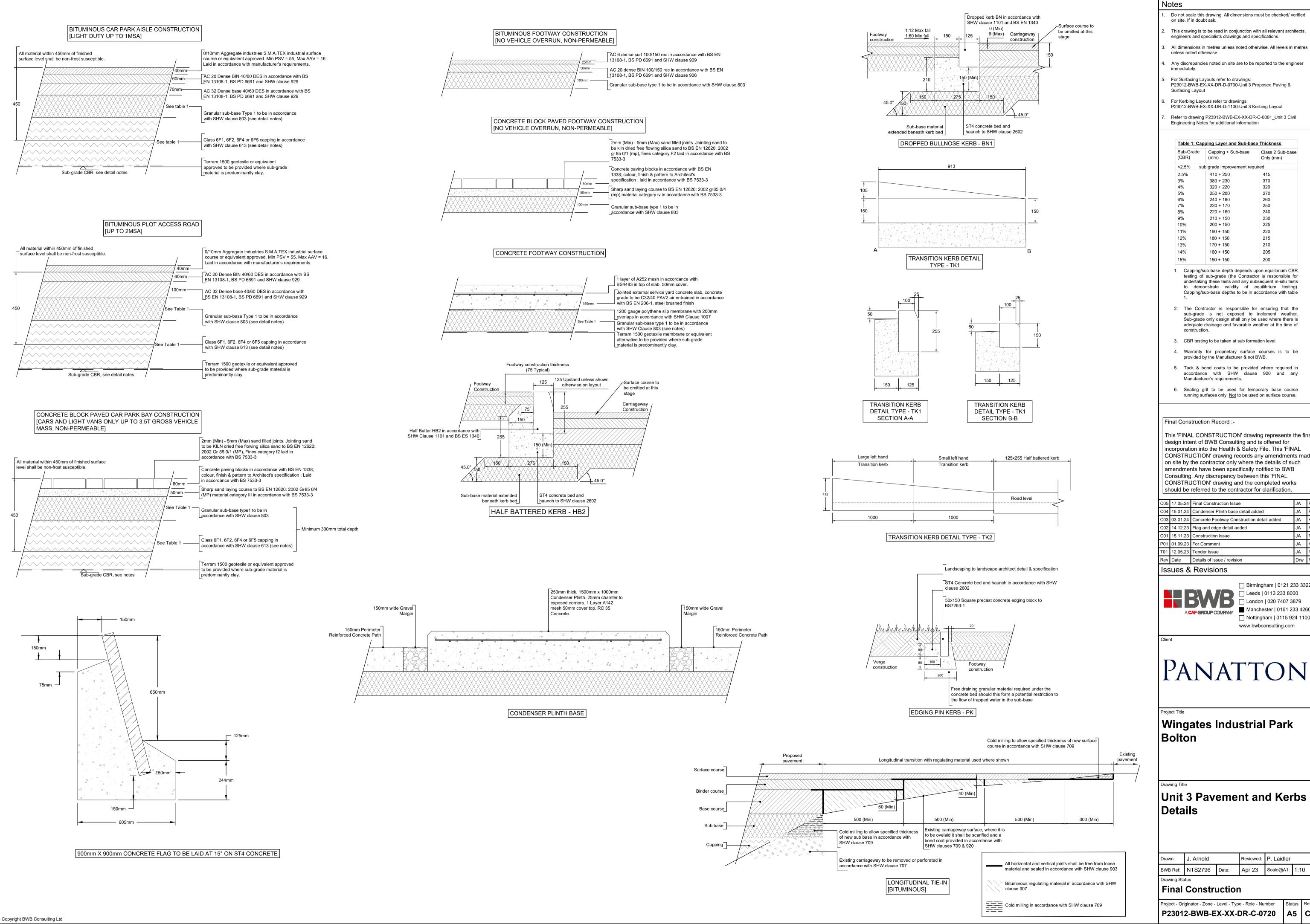
Project - Originator - Zone - Level - Type - Role - Number P23012-BWB-EX-XX-DR-D-0564

For information only.









Notes

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- engineers and specialists drawings and specifications.
- All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
- Any discrepancies noted on site are to be reported to the engineer
- For Surfacing Layouts refer to drawings: P23012-BWB-EX-XX-DR-D-0700-Unit 3 Proposed Paving & Surfacing Layout
- For Kerbing Layouts refer to drawings:
- Refer to drawing P23012-BWB-EX-XX-DR-C-0001_Unit 3 Civil Engineering Notes for additional information

Sub-Grade (CBR)	Capping + Sub-base (mm)	Class 2 Sub-base Only (mm)
<2.5% su	b grade improvement requ	uired
2.5%	410 + 250	415
3%	380 + 230	370
4%	320 + 220	320
5%	250 + 200	270
6%	240 + 180	260
7%	230 + 170	250
8%	220 + 160	240
9%	210 + 150	230
10%	200 + 150	225
11%	190 + 150	220
12%	180 + 150	215
13%	170 + 150	210
14%	160 + 150	205
15%	150 + 150	200

- 1. Capping/sub-base depth depends upon equilibrium CBR testing of sub-grade (the Contractor is responsible for undertaking these tests and any subsequent in-situ tests to demonstrate validity of equilibrium testing). Capping/sub-base depths to be in accordance with table
- 2. The Contractor is responsible for ensuring that the sub-grade is not exposed to inclement weather. Sub-grade only design shall only be used where there is adequate drainage and favorable weather at the time of
- 3. CBR testing to be taken at sub formation level.
- 4. Warranty for proprietary surface courses is to be provided by the Manufacturer & not BWB.
- 5. Tack & bond coats to be provided where required in accordance with SHW clause 920 and any Manufacturer's requirements.
- 6. Sealing grit to be used for temporary base course running surfaces only. Not to be used on surface course.

Final Construction Record :-

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C05	17.05.24	Final Construction Issue	JA	PJL
C04	15.01.24	Condenser Plinth base detail added	JA	PJL
C03	03.01.24	Concrete Footway Construction detail added	JA	KMJ
C02	14.12.23	Flag and edge detail added	JA	PJL
C01	15.11.23	Construction Issue	JA	PJL
P01	01.09.23	For Comment	JA	KMJ
T01	12.05.23	Tender Issue	JA	PJL

Issues & Revisions



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Drw Rev

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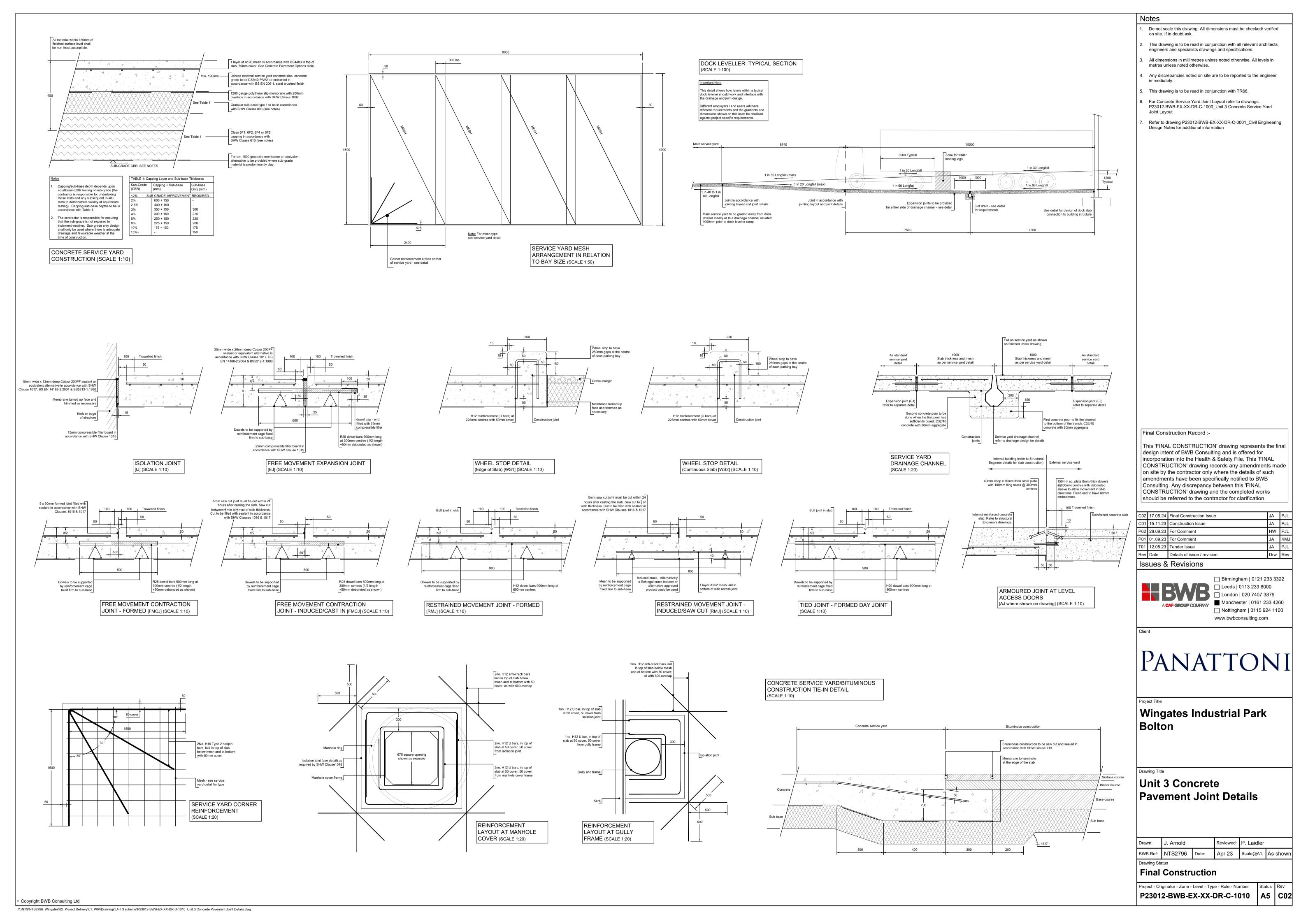
Wingates Industrial Park **Bolton**

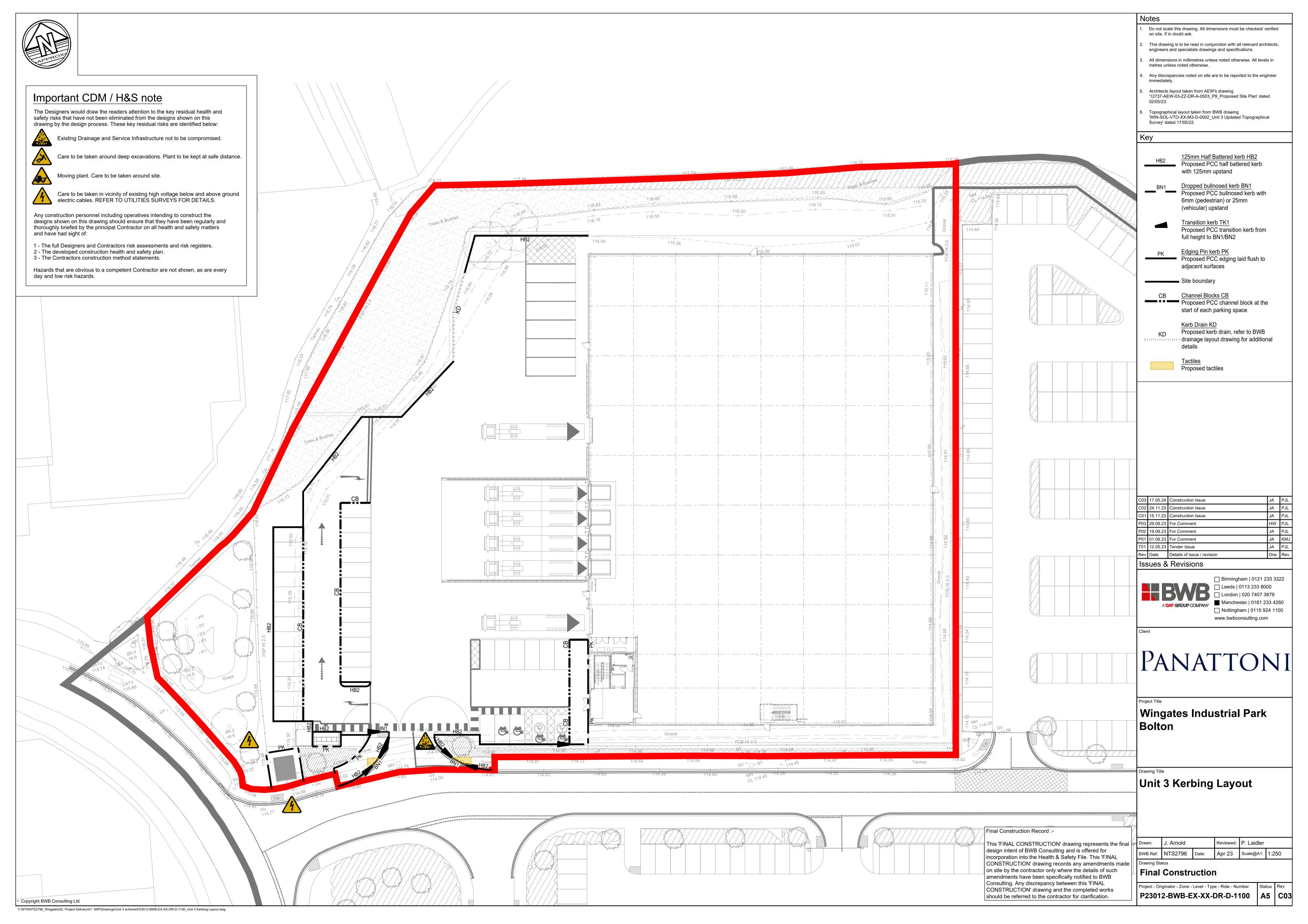
Unit 3 Pavement and Kerbs Details

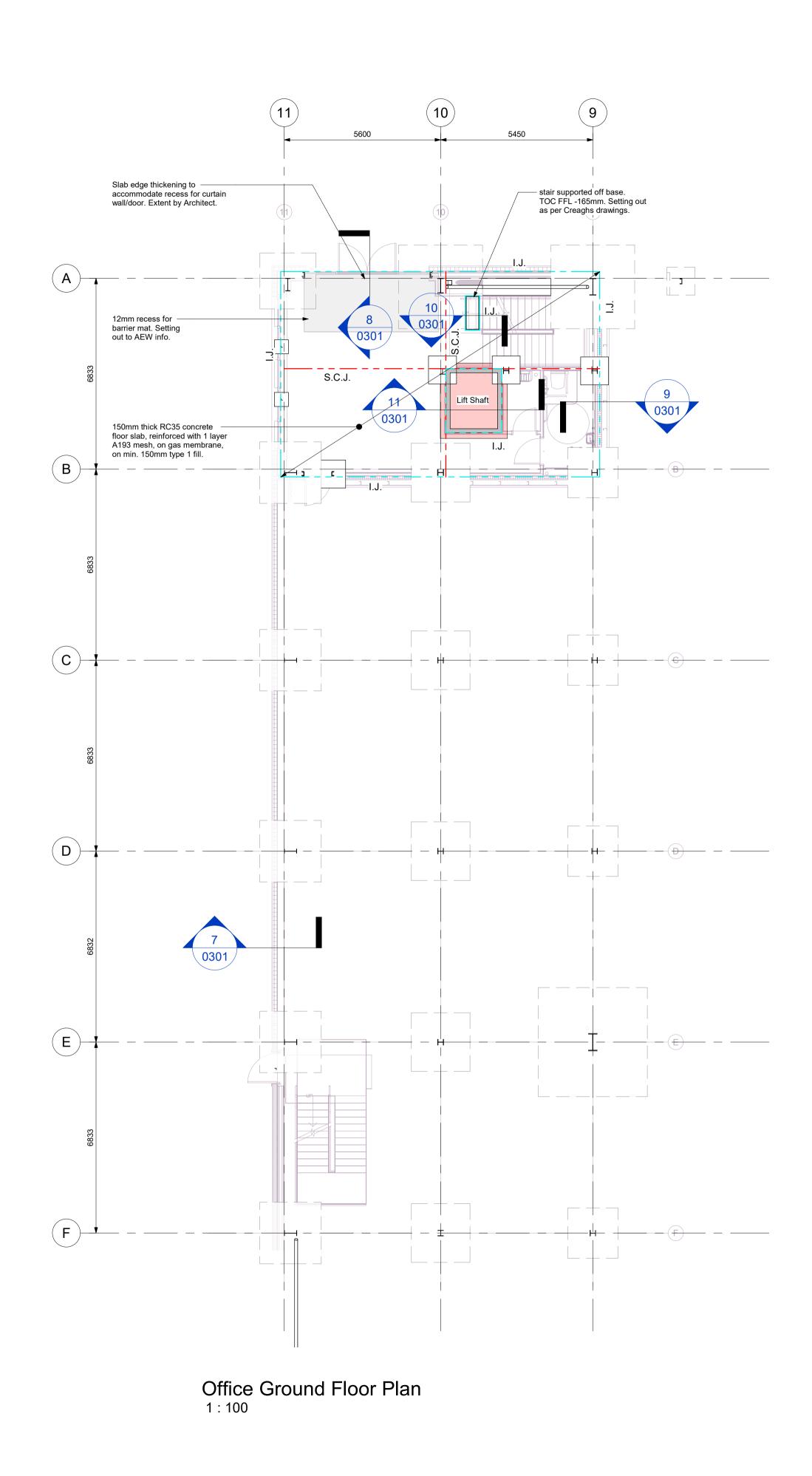
vn:	J. Arnold	Reviewed:	P. Laidler

Drawing Status **Final Construction**

Project - Originator - Zone - Level - Type - Role - Number P23012-BWB-EX-XX-DR-C-0720





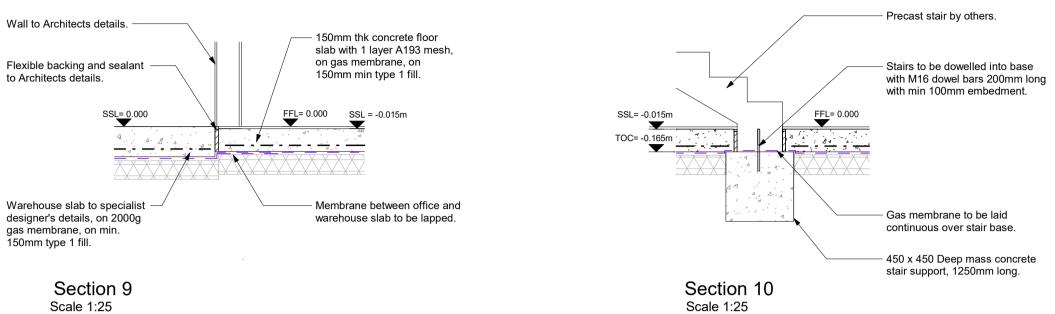


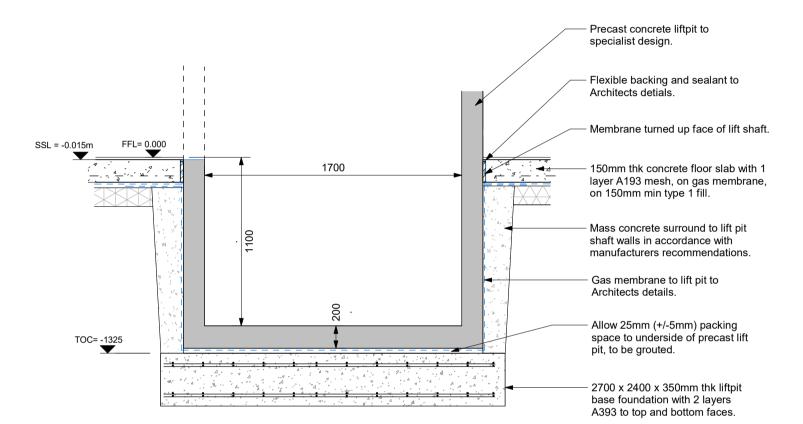
Cladding panel by others - 150 Thick concrete floor slab with 1 Hot rolled galvanised channel layer A193 mesh, on gas by steel fabricator membrane, on 150 min type 1 fill. Gravel margin -External service yard Section 7

Scale 1:25

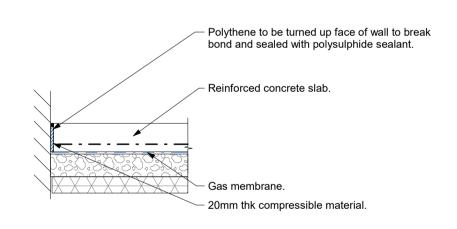
 150 Thk concrete floor slab with 1 layer A193 mesh, on gas membane, on 150mm min type 1 fill. Curtain walling. Slab edge thickening to accomodate recess for curtain wall.

Section 8 Scale 1:25

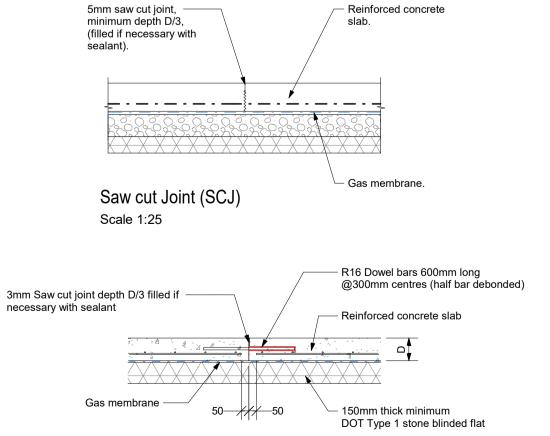




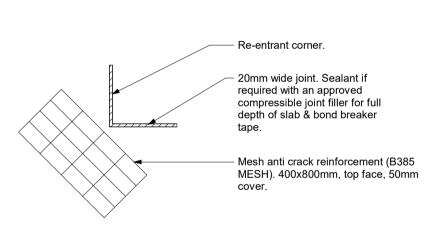
Section 11 Scale 1:25



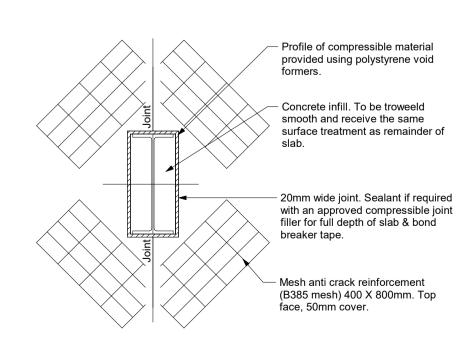
Isolation Joint (I.J.) Scale 1:25



Formed contraction Joint (FCJ) Scale 1:25



Re-entrant Corner Detail Scale 1:25



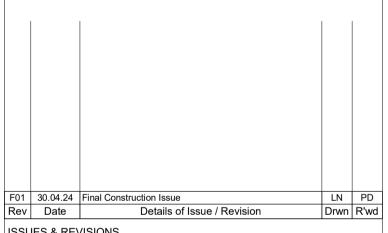
Internal Column Isolation Joint Scale 1:25

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- engineers and specialists drawings and specifications.
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Final Construction Issue.

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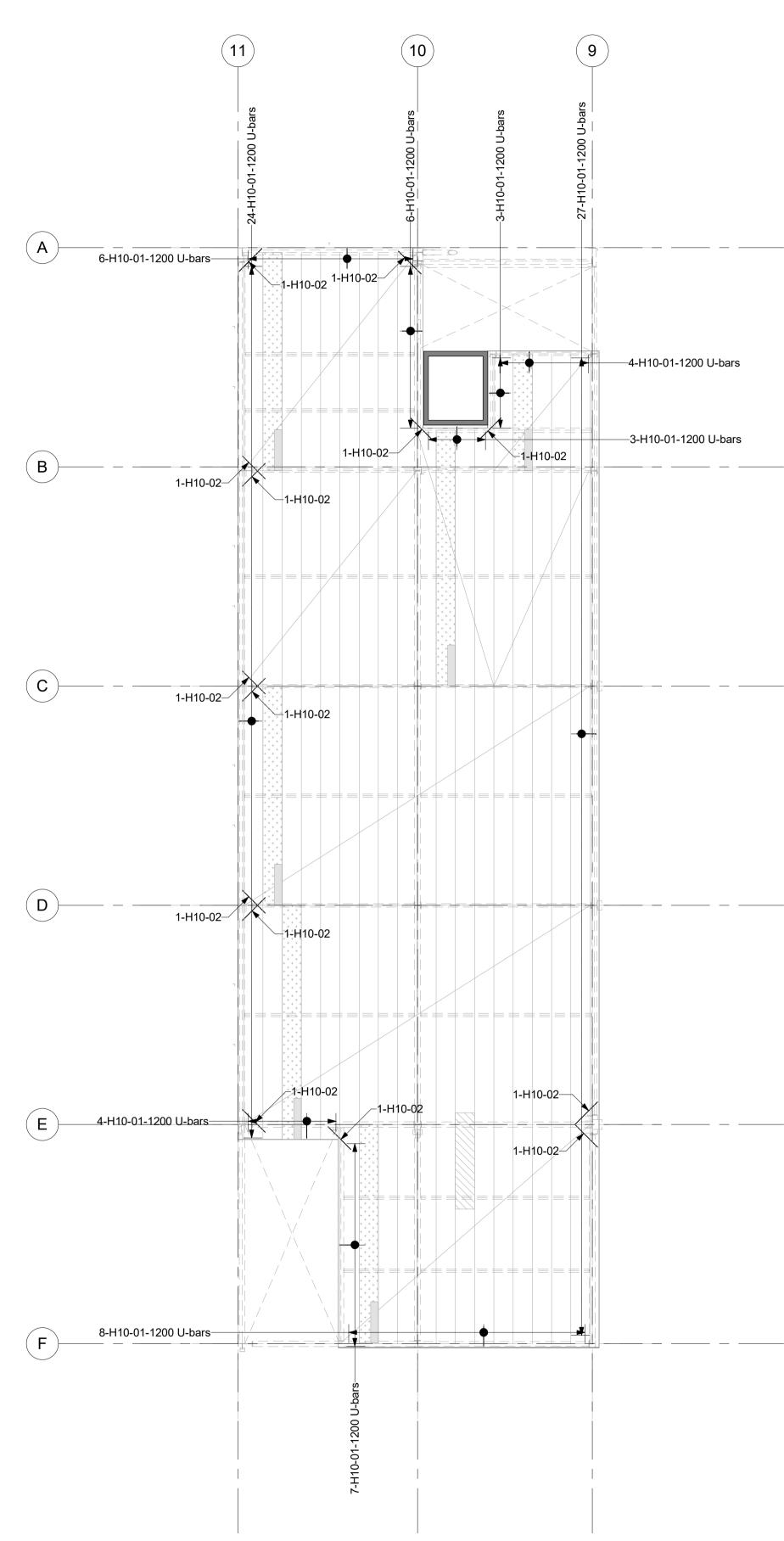
Office Ground Floor **Layout and Details**

Drawn	IAC	Reviewed	PD	
BWB Ref	NTS2796	Scale @A1	As indicated	
Purpose of	Purpose of Issue			

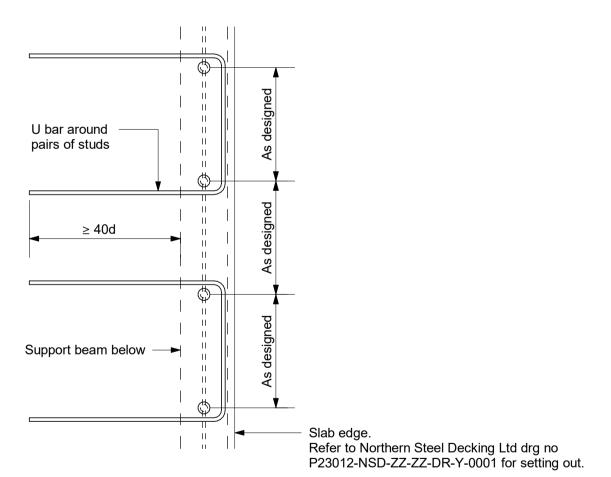
Final Construction

Project-Originator-Zone-Level-Type-Role-Number

P23012-BWB-P3-00-DR-S-0301



First Floor Office Plan
1:100



Plan On Edge Beam U Bar Detail (Bars around pairs of studs)

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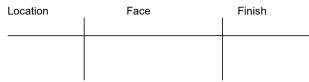
Reinforcemed Concrete Notes.

The base Specification for Reinforced Concrete shall be BS EN 1992 Eurocode 2 'Design of Concrete Structures' and the National Structural Concrete Specification. Drawing to be read in conjunction with main BWB specification.

The following concrete mixes are to be used in accordance with BS8500):-

Mix Reference

The surface finish to concrete faces shall be as follows:-



All reinforcement to BS EN 10080 u.o.n

Minimum cover to reinforcement to be 30mm.

All reinforcement detailed on this drawing is scheduled on bar lists numbered 23012-BWB-P3-01-SH-S-0702-1 of 1.

Location of daywork joints and details to be agreed with the Engineer prior to commencement of the works on site.

Abbreviations:-H. High yield type 2 deformed bar.

- NF. Near face. FF. Far face.
- EF. Each face.
- ABR. Alternate bars reversed. ABS. Alternate bars staggered.

All concrete mix certificates and the cube testing programme shall be approved by the Engineer prior to commencement of the works on site.

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 F01
 30.04.24
 Final Construction Issue

 Rev
 Date
 Details of Issue / Revision

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First Floor Office Slab **Reinforcement Details**

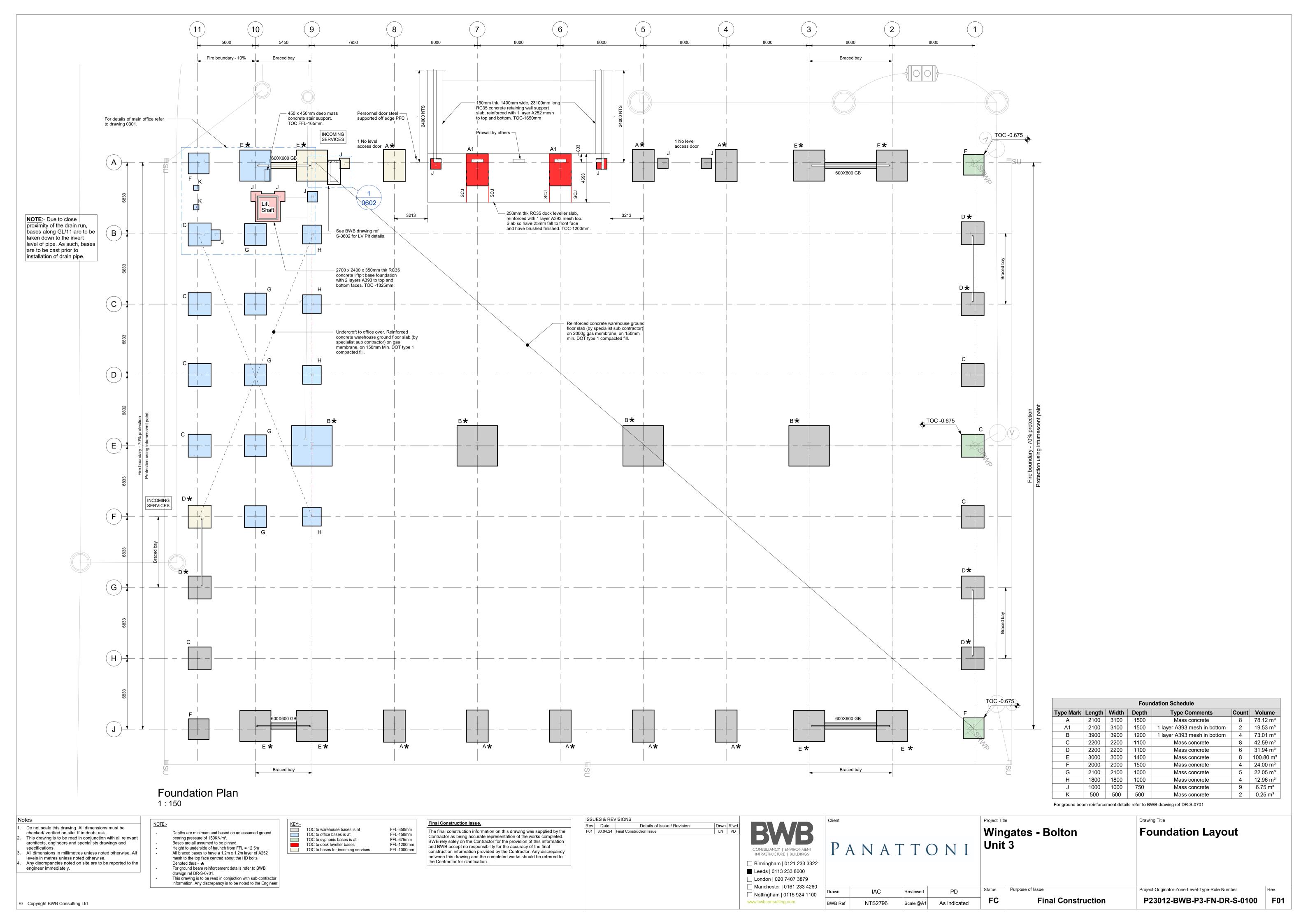
Drawn	IAC	Reviewed	JJ	IK
BWB Ref	NTS2796	Scale @A1	As ind	icated
Purpose of Issue			Status	

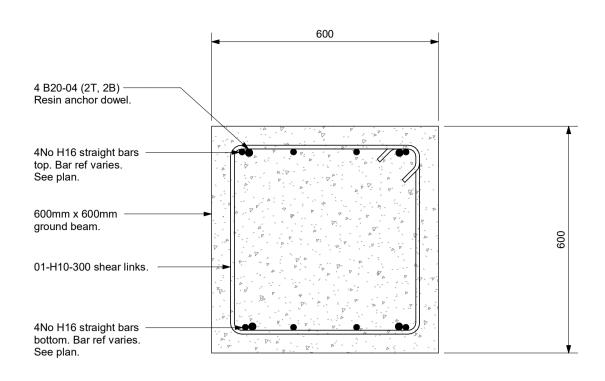
Final Construction

Project-Originator-Zone-Level-Type-Role-Number

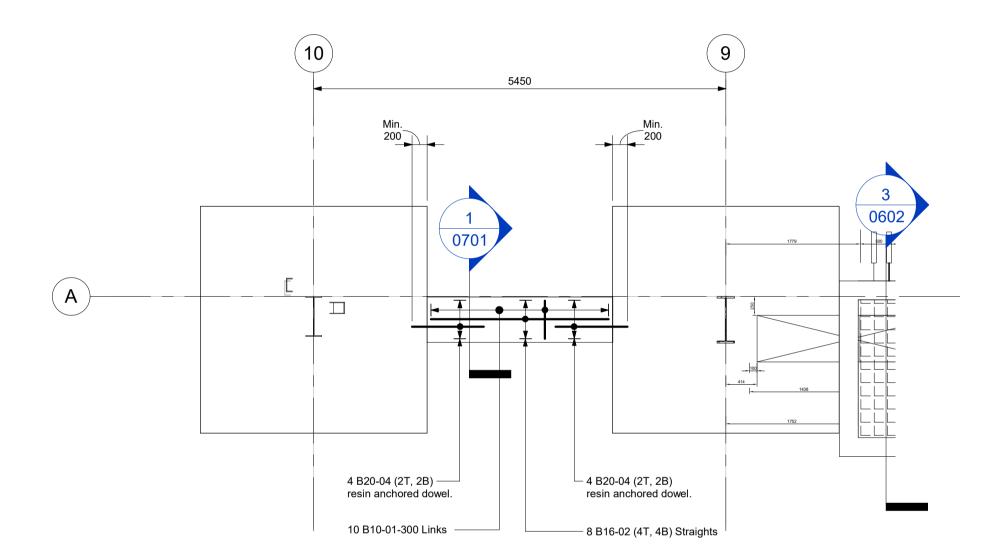
P23012-BWB-P3-01-DR-S-0702

FC

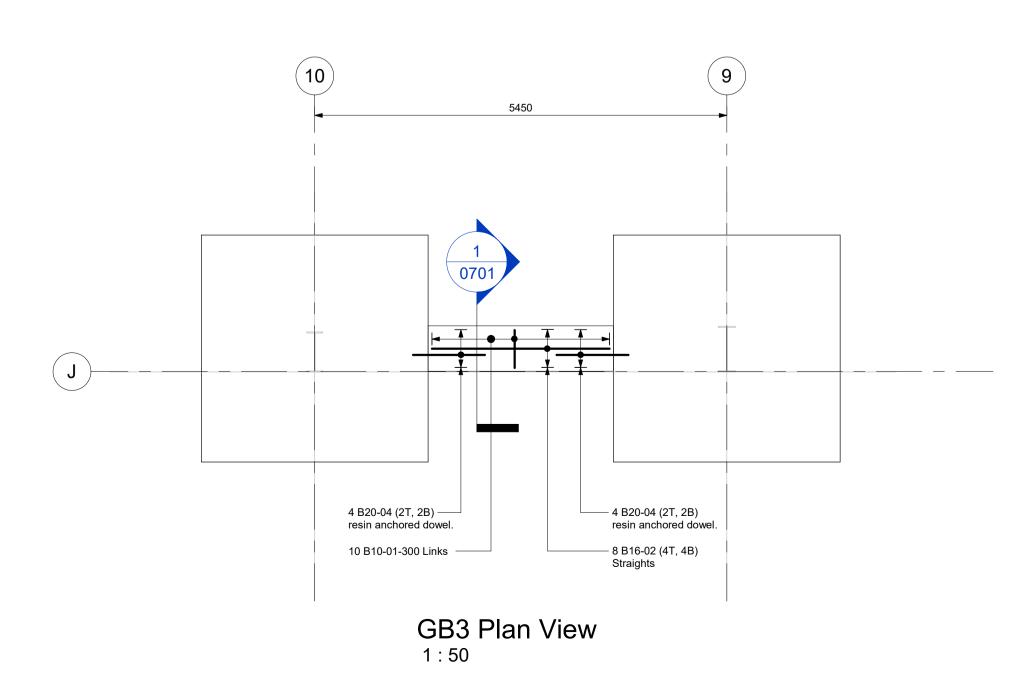


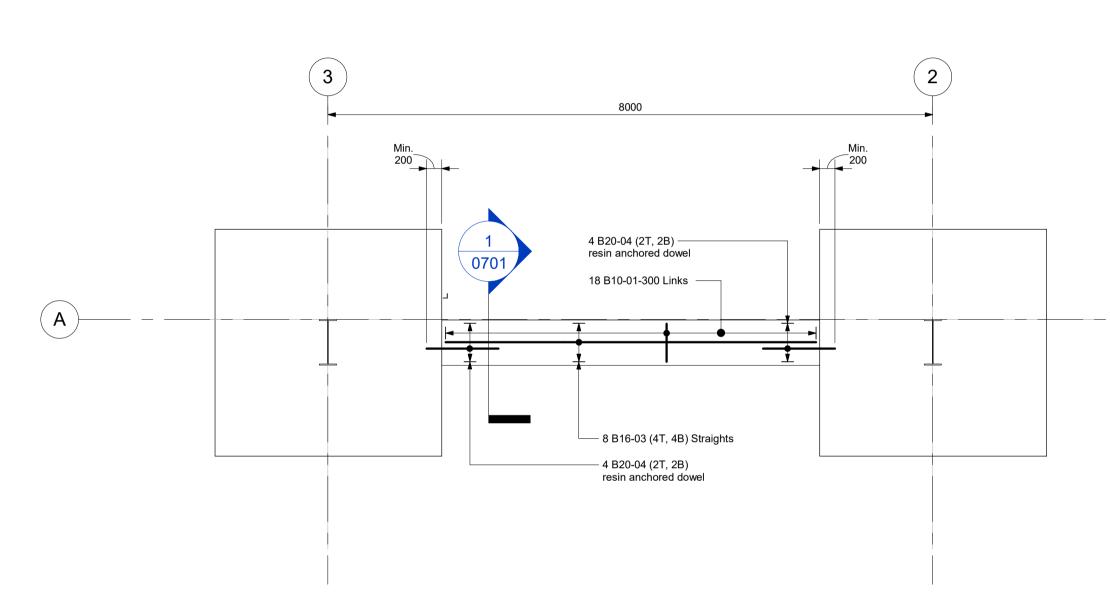


Typical RC Section Through GB

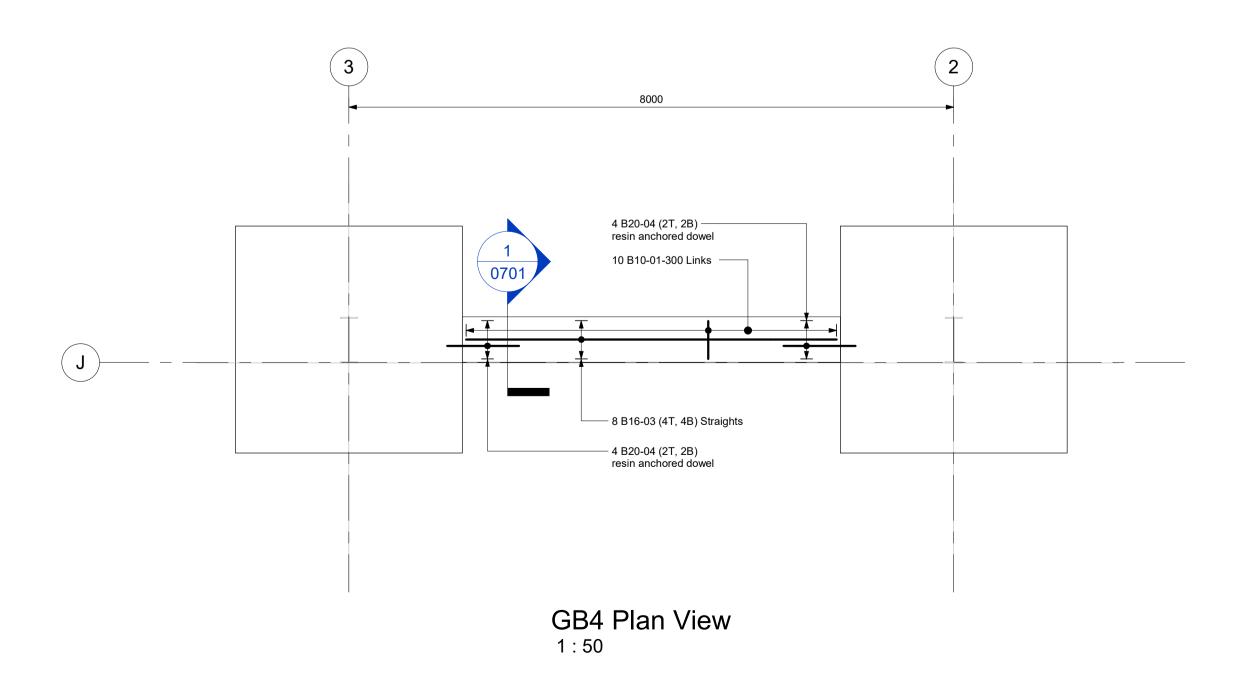


GB1 - Plan View 1:50





GB2 - Plan View 1:50



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For reinforced concrete notes refer to drg no WIN-BWB-P3-ZZ-DR-S-001.

Min. 200mm embedment to be provided to resin anchor dowels.

For foundation general arangement refer to drg no WIN-BWB-P3-FN-DR-S-100.

For reinforcement details refer to bar bending schedule no WIN-BWB-P3-FN-SH-0701-1.

Cover to reinforcement to be 50mm top, bottom and sides.

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| F01 | 30.04.24 | Final Construction Issue | Rev | Date | Details of Issue / Revision

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Ground Beam Reinforcement Details

Drawn	IAC	Reviewed	ΑI	OG
BWB Ref	NTS2796	Scale @A1	As ind	licated
Purpose of Issue Statu			Status	

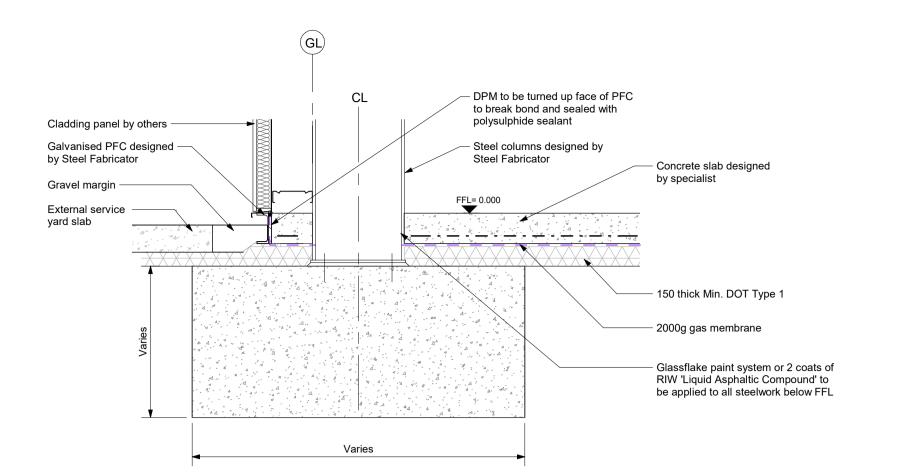
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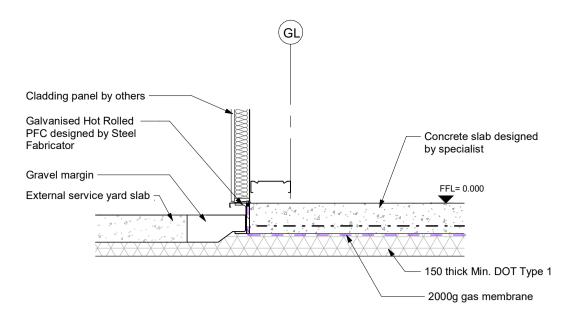
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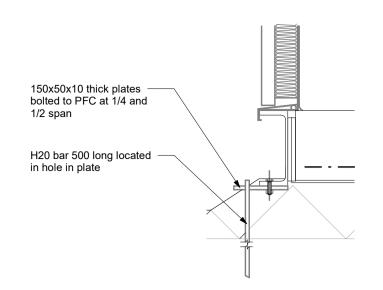
Final Construction

Project-Originator-Zone-Level-Type-Role-Number

P23012-BWB-P3-FN-DR-S-0701



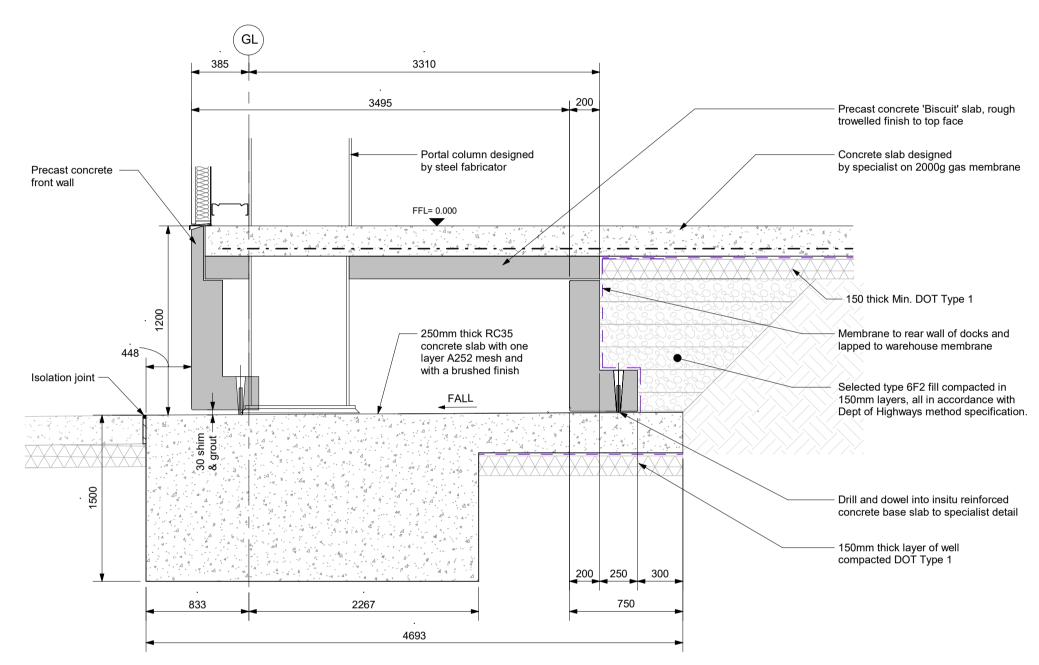




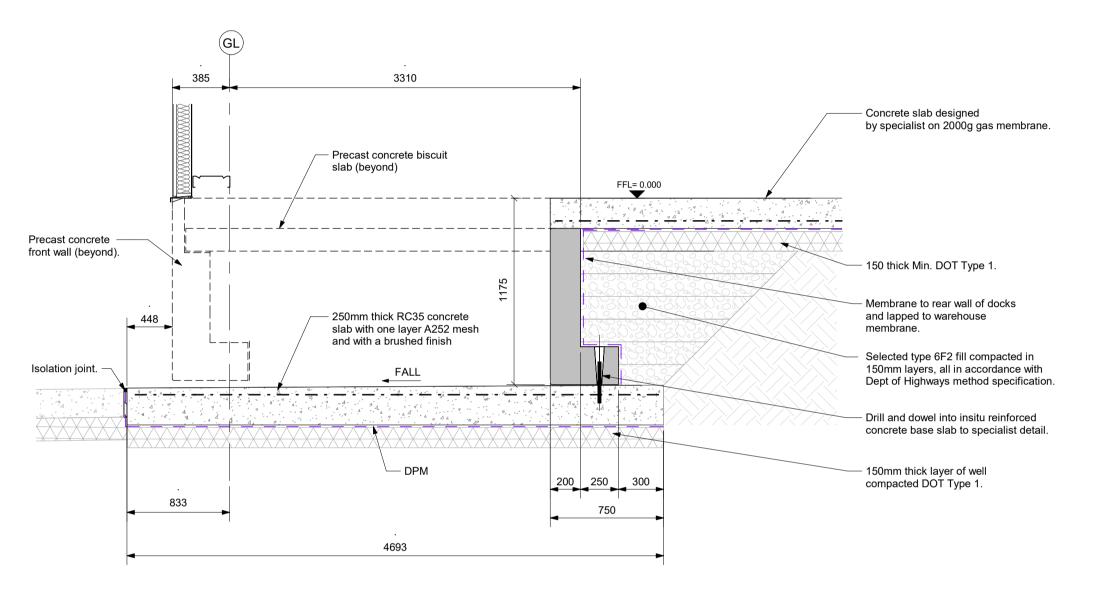
External Slab Edge Section
Scale 1:25

PFC Edge Detail

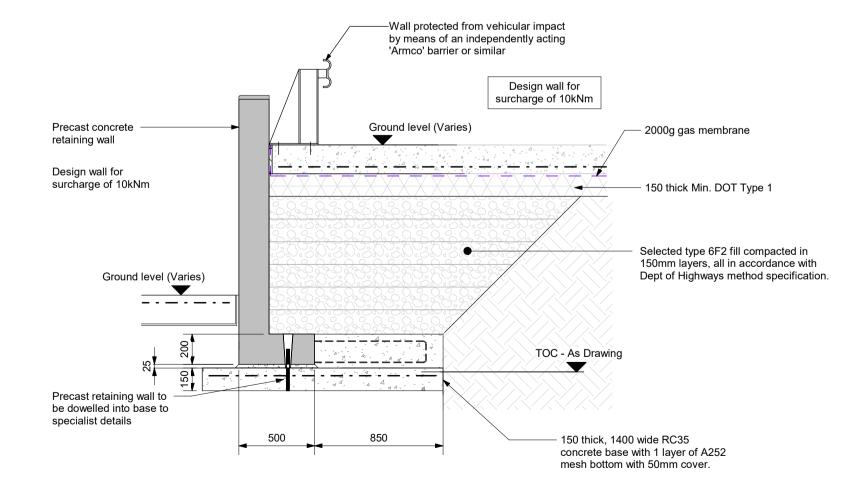
External base Section



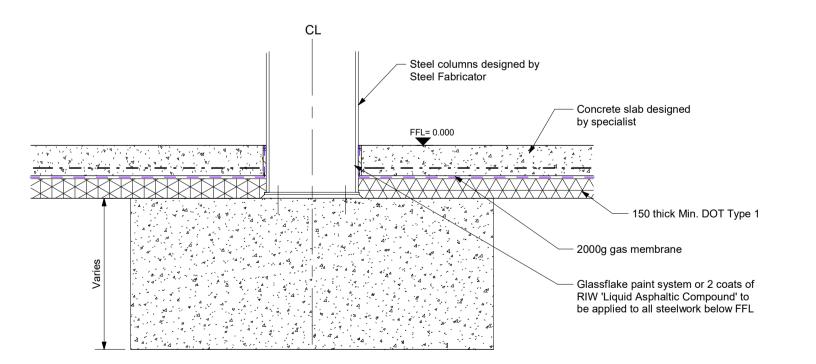
Loading Dock Biscuit Section
Scale 1:25



Loading Dock Section



Service Yard Wall Section Scale 1:25

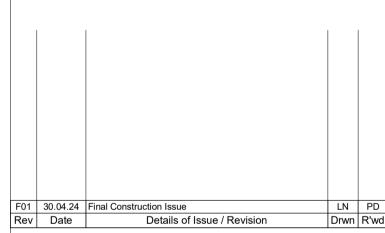


Internal Column Base Section

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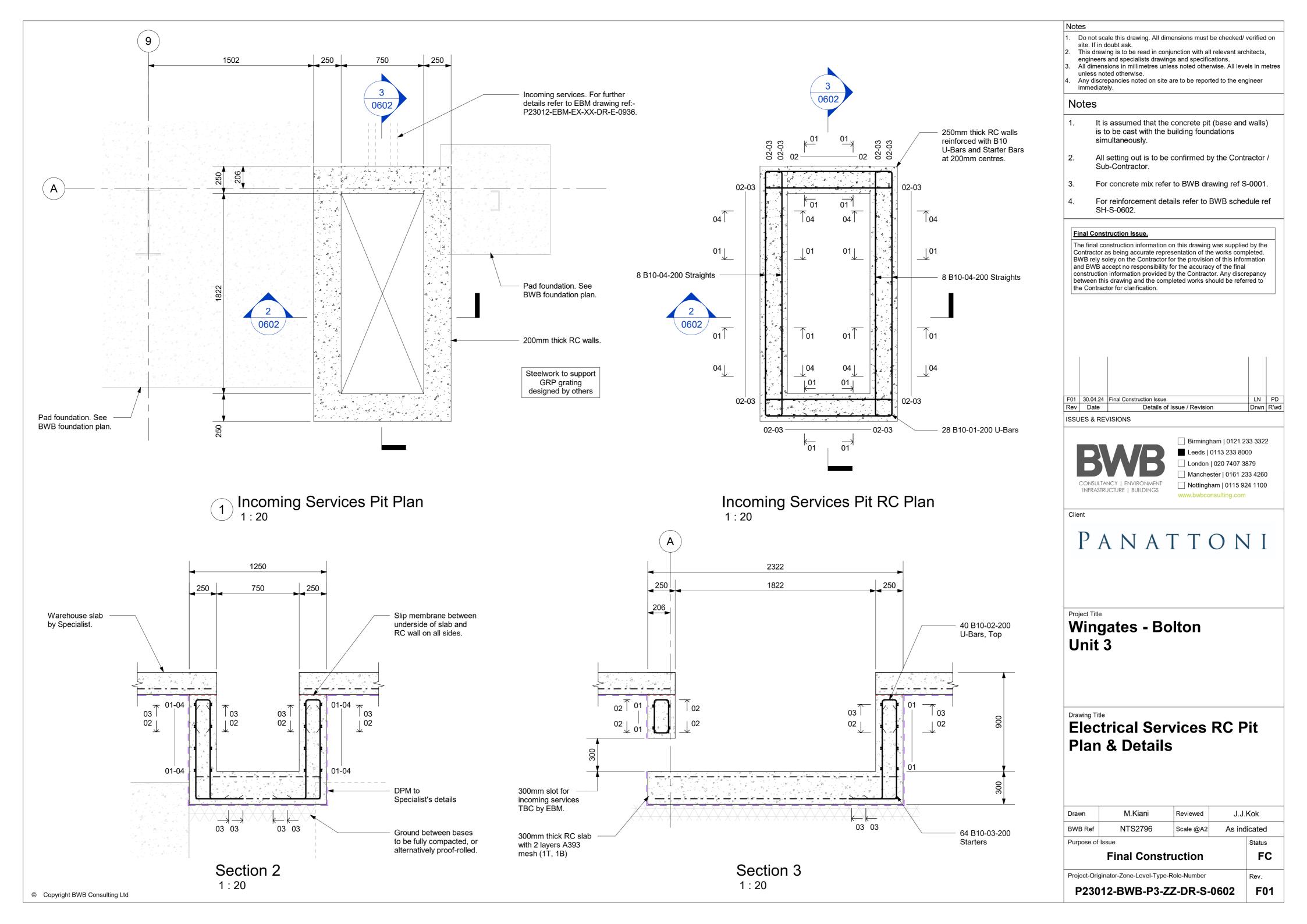
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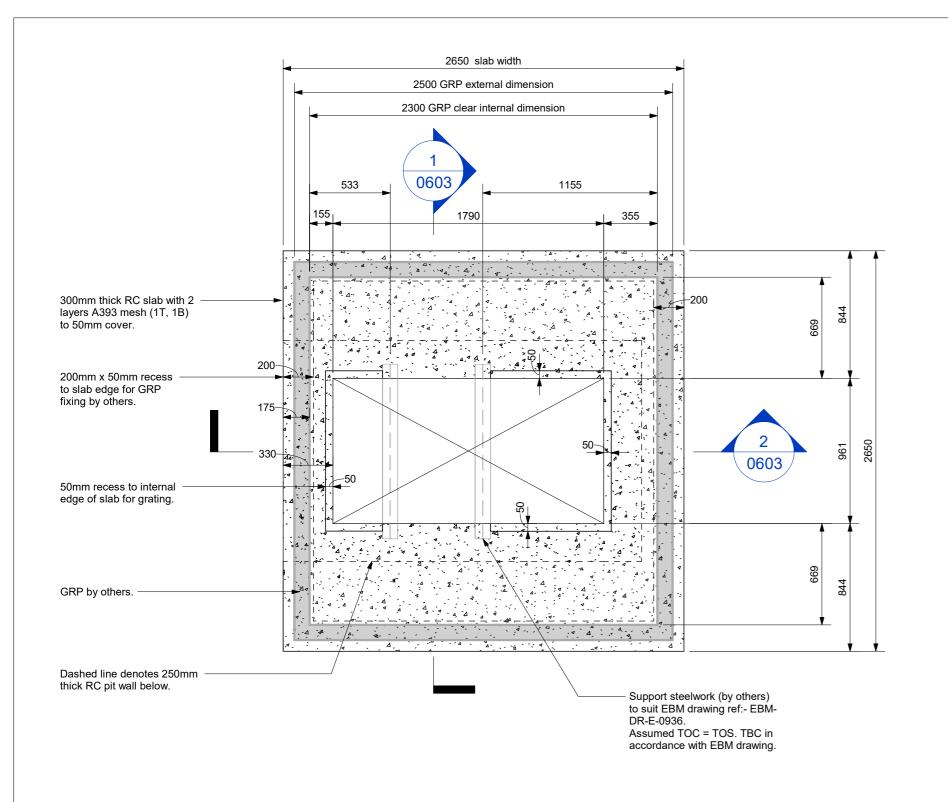
Warehouse Sections and **Details**

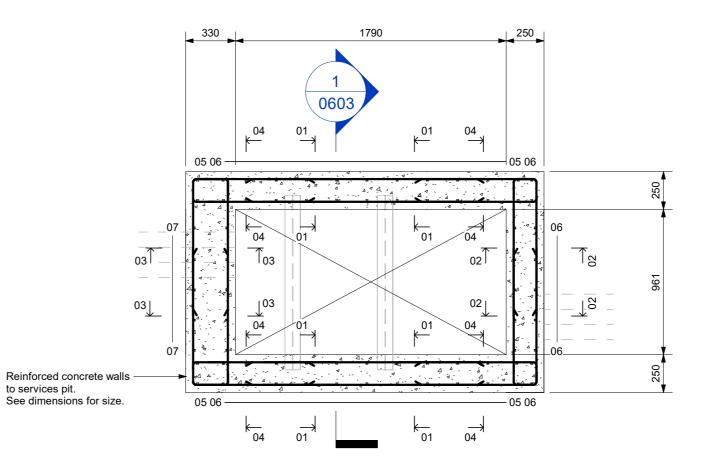
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Purpose of	Purpose of Issue				
BWB Ref	NTS2796	Scale @A1	As ind	icated	
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Project-Originator-Zone-Level-Type-Role-Number

P23012-BWB-P3-ZZ-DR-S-0601 F01

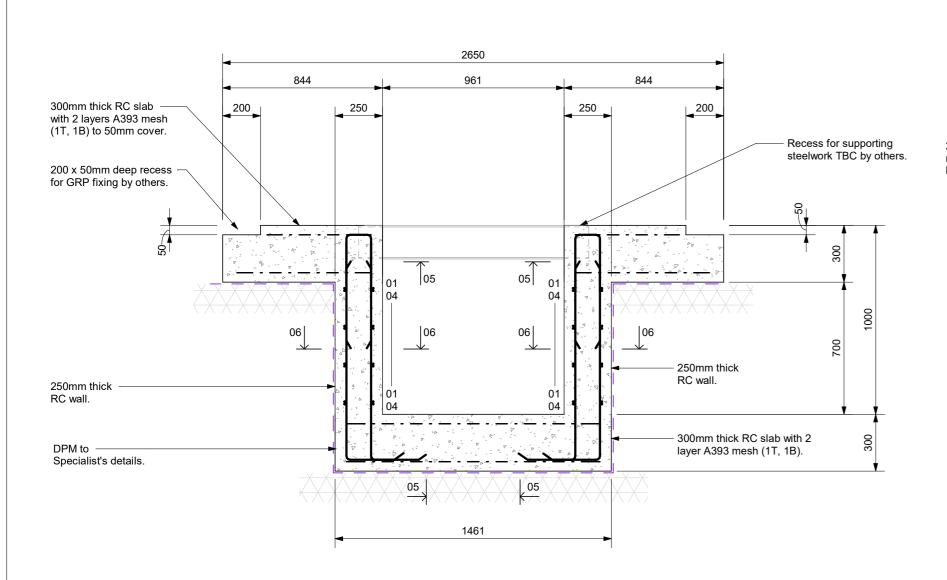






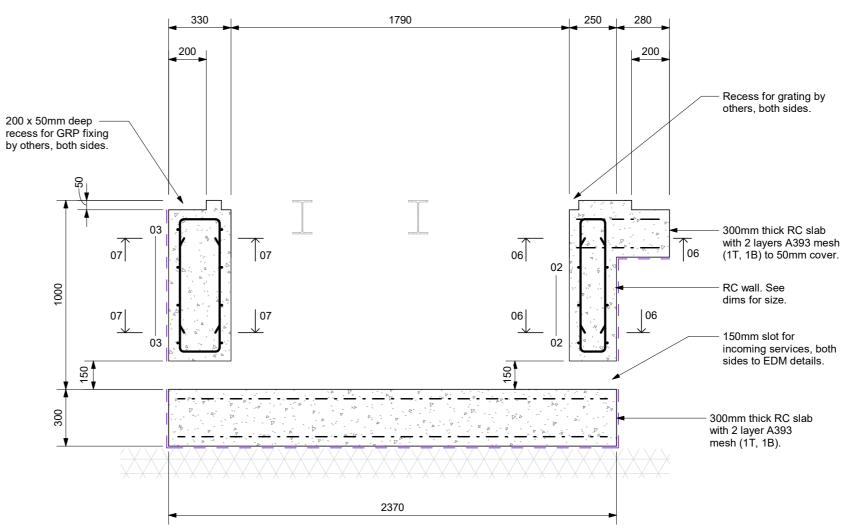
GRP Enclosure RC Pit Plan

GRP Enclosure Slab Plan 1:25



Section 1

1:20



Section 2 1:20 Notes

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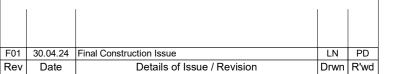
 3. All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
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Notes

- All setting out is to be confirmed by the Contractor / Sub-Contractor.
- For concrete mix refer to BWB drawing ref S-0001.
- Reinforcement cover 50mm.
- 4. For reinforcement details refer to BWB schedule ref SH-S-0603.

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Project Title

Wingates - Bolton Unit 3

Drawing Ti

GRP Substation Foundation Plan & Details

	FC			
Purpose of	Issue			Status
BWB Ref	NTS2796	Scale @A2	As ind	licated
Drawn	M.Kiani	Reviewed	P.Da	avies

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Project-Originator-Zone-Level-Type-Role-Number

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