

Calcinotto



Drainage Technical Note

Barton Peverill College Car Park

115267-CAL-XX-XX-RE-D-001
Revision A

Project Ref.

115267

Client:

Barton Peverill College

Produced By

Name

Mark Dewson BEng (Hons) CEng MICE MCIHT

Job Title

Director of Civil Engineering

Checked By

Name

Matthew Singleton

Job Title

Director

Revisions

Rev	Issue Date	Revision Notes	By	Chkd
-	01/05/2026	Initial Issue	MRD	MSS
A	30/06/2026	Updated to include reference to SuDS Guidance (Paras 3.2.8 to 3.2.10)	MRD	MSS

1 Executive Summary

- 1.1 This Technical Note has been prepared in support of the submission of the Planning Application for car park improvements at Barton Peverill College, Eastleigh, Hampshire.
- 1.2 Details of the development are provided within Stride Treglown's respective documents.
- 1.3 This Technical Note provides a narrative for the surface water drainage design strategy and flood risk that will be considered for the development.
- 1.4 The principles of the surface water design follow the National SuDS Standards guidelines and LLFA Requirements.
- 1.5 The location of the development is within Flood Zone 1 with no risk of flooding.
- 1.6 The design of the surface water drainage solution has been developed in close collaboration with the key stakeholders in particular Barton Peverill College to achieve a fully compliant design suitable for Planning Approval.
- 1.7 It is considered that with considerate design with due cognisance of the respective site constraints and the LLFA and National SuDS guidance and requirements, the surface water drainage system can achieve the desired outcomes and provide a sustainable and efficient design solution.
- 1.8 Foul / Waste water drainage at the site is not affected by the proposed development.

2 Proposed development

2.1 The site location and layout plan can be seen in the images below.



Figures 1 & 2. Site Location and proposed plan (Stride Treglown / Google)

- 2.2 The existing site is currently a surface (asphaltic concrete) car park with access road and bin storage and facilities for bike parking with small soft areas of verge at sections of kerbed junction radii. Access to the site is via a gated entrance onto Tennyson Road.
- 2.3 The new development comprises remodelling the car park and cycle parking to improve access and movement and to increase the number of parking spaces and enhance the existing cycle parking facilities
- 2.4 The site has a general ground level of around 13.0m AOD, this varies slightly across the site but it is generally a flat site with local cross falls to point gullies (and gravity fed carrier sewers) within the car park.

3 Drainage Strategy

3.1 Existing Drainage

- 3.1.1 A utility scan survey undertaken by Sumo Ltd was prepared in March 2024 (see Appendix B).
- 3.1.2 As can be seen from the plan, the area is drained by a series of trapped road gullies and network of private surface water sewers.
- 3.1.3 No public sewers are within the site or affected by the works.
- 3.1.4 There is no record, written or anecdotal, of surface flooding or capacity issues with the private surface water drainage network serving the car park.

3.2 Surface Water Drainage Strategy

- 3.2.1 See Appendix A for the drainage plans and construction details.
- 3.2.2 The current site is approx. 90% impermeable (apart from the small verge areas) and surface water runoff from hardstandings is via gulleys.
- 3.2.3 It is the intention to maintain the existing gulleys within the site and augment this with a new ACO Linear Drainage Channel (LDC) to capture surface water runoff from the resurfaced car park area. The car park resurfacing will be laid to a uniform crossfall so using a LDC is an efficient method of surface water capture.
- 3.2.4 A new small catchpit shall be installed immediately downstream of the LDC to mitigate against silts from the car park drainage entering the downstream sewer network.
- 3.2.5 New Rain Water Down Pipes (RWPs) shall be installed on the new bike storage facilities and these will discharge to the same private surface water drainage network. The green roof proposed for the bike shed will assist in reducing the potential for contaminants entering the downstream system from the roof.
- 3.2.6 As the site retains the exact hard paved area, there is no increase in volume or rate of surface water runoff discharging from the site and as such no requirement to increase the capacity of the downstream network or provide attenuation and flow controls to restrict the discharge.
- 3.2.7 As the formation is London Clay / slit and sand, there is no potential to use ground infiltration / soakaways to discharge surface water to ground.
- 3.2.8 Pollution control is managed via trapped gullies and the inclusion of silt traps to collect particulates and hydrocarbons.

- 3.2.9 Due to the shallow nature of the downstream drainage network, installation of a vortex separator to capture solids is unviable without introduction of a new surface water pumped system. This option would be in contravention of the 2025 SuDS Design Guidance Design Hierarchy.
- 3.2.10 The proposals are relatively minor, any major reinstatement of the car park to incorporate the above (i.e interceptor and separator) would be very costly, cause significant impact to the college and result in a far larger carbon footprint for the development

4 Flood Risk.

- 4.1 As mentioned, the area is in Flood Zone 1 with no risk of flooding from rivers and sea or surface (rainfall) flooding. The proposals for the car park improvements will not impact on potential flooding of the site.

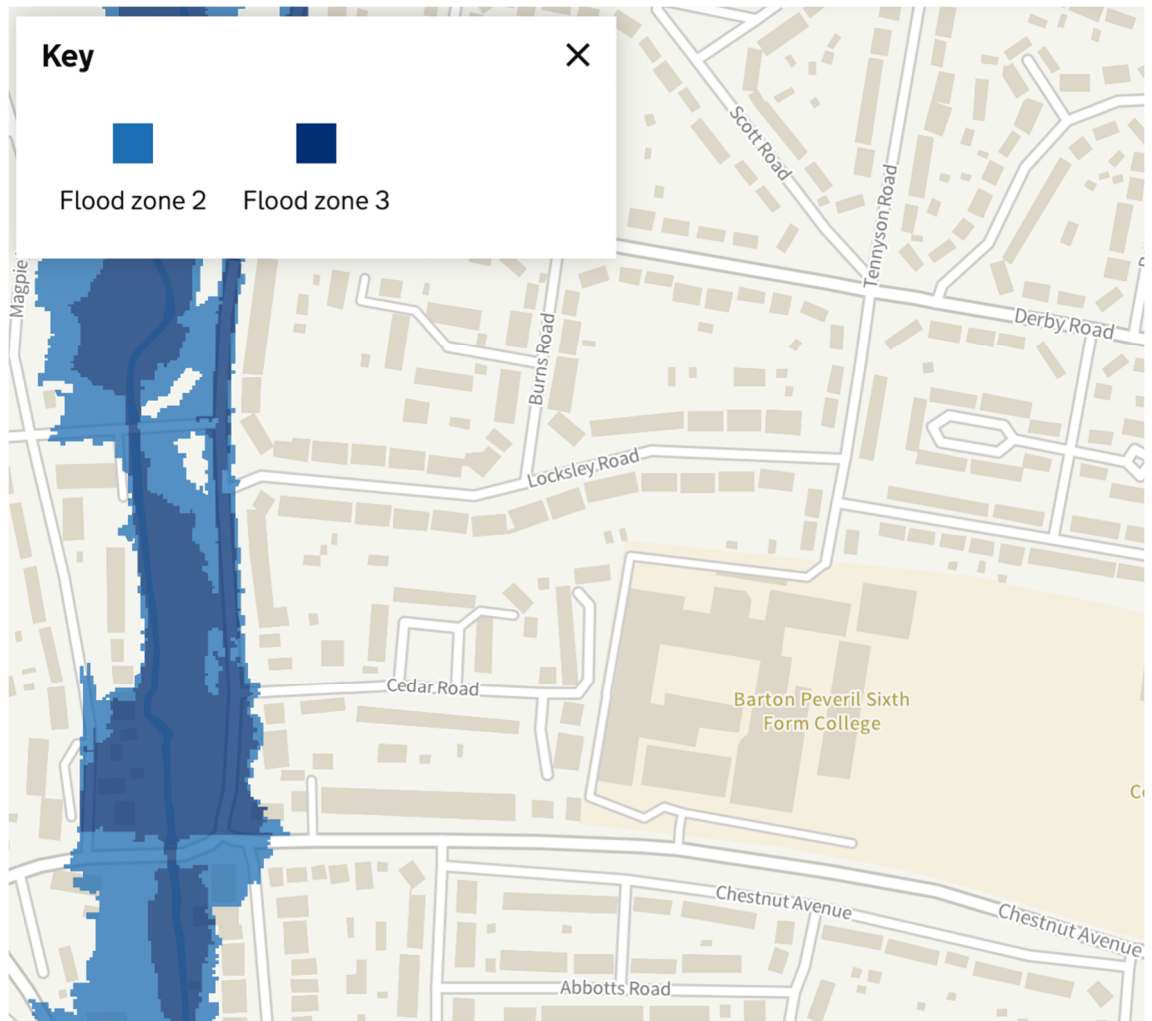
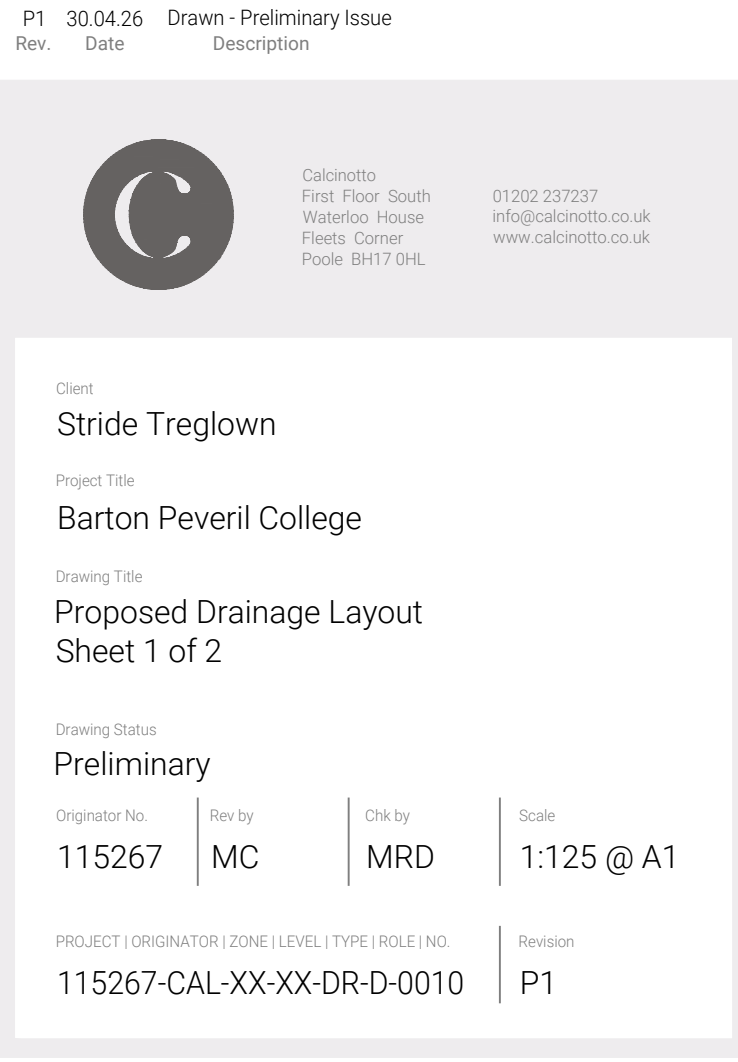
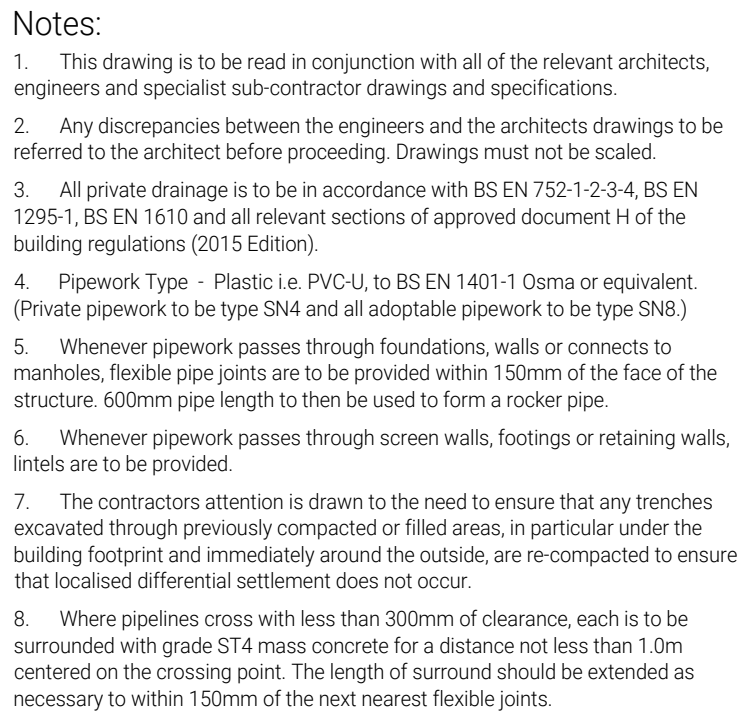


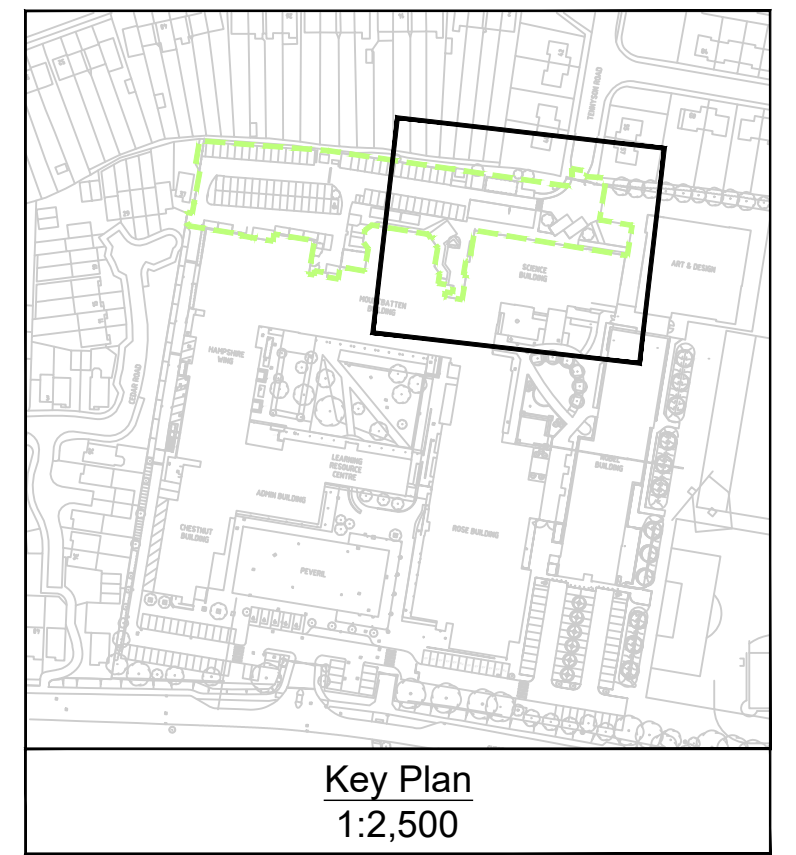
Fig 5: UKGov Flood Maps (Flooding from Rivers/Sea & Surface)

5 Summary.

- 5.1 The proposed surface water drainage for the car park improvements are relatively simple (installation of a new LDC) with no increase risk of flooding or pollution to the area or existing downstream sewer.
- 5.2 There is no flood risk associated with the development.

Appendix A: Drainage Plans and Construction Details





P1	30.04.26	Drawn - Preliminary Issue
Rev.	Date	Description



Calacinto
First Floor South
Waterloo House
Fleets Corner
Poole, BH17 9HL

01702 237287
info@calacinto.co.uk
www.calacinto.co.uk

Client
Stride Treglown

Project Title
Barton Peveril College

Drawing Title
**Proposed Drainage Layout
Sheet 2 of 2**

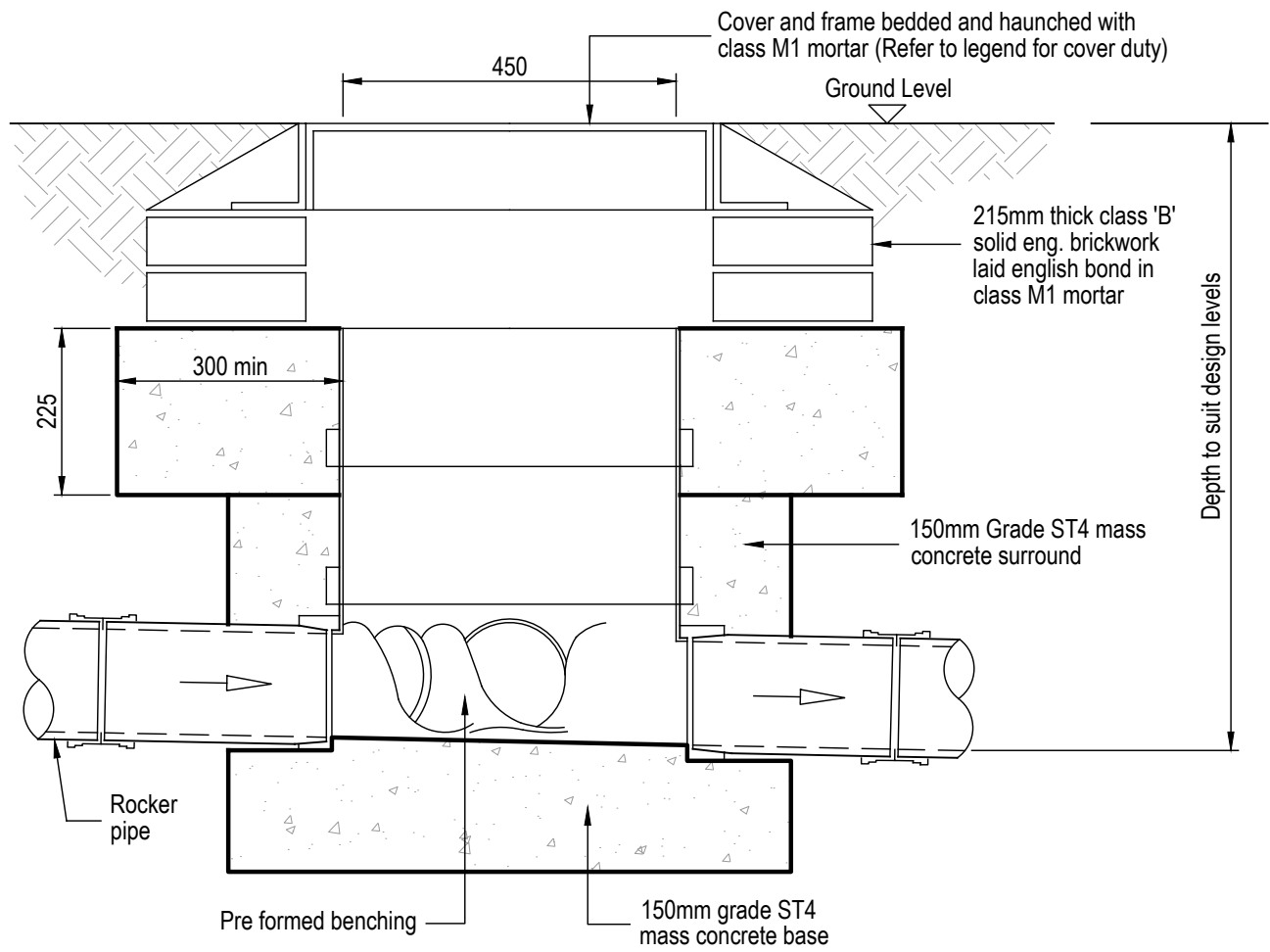
Drawing Status
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Originator No.	Rev by	Chk by	Scale
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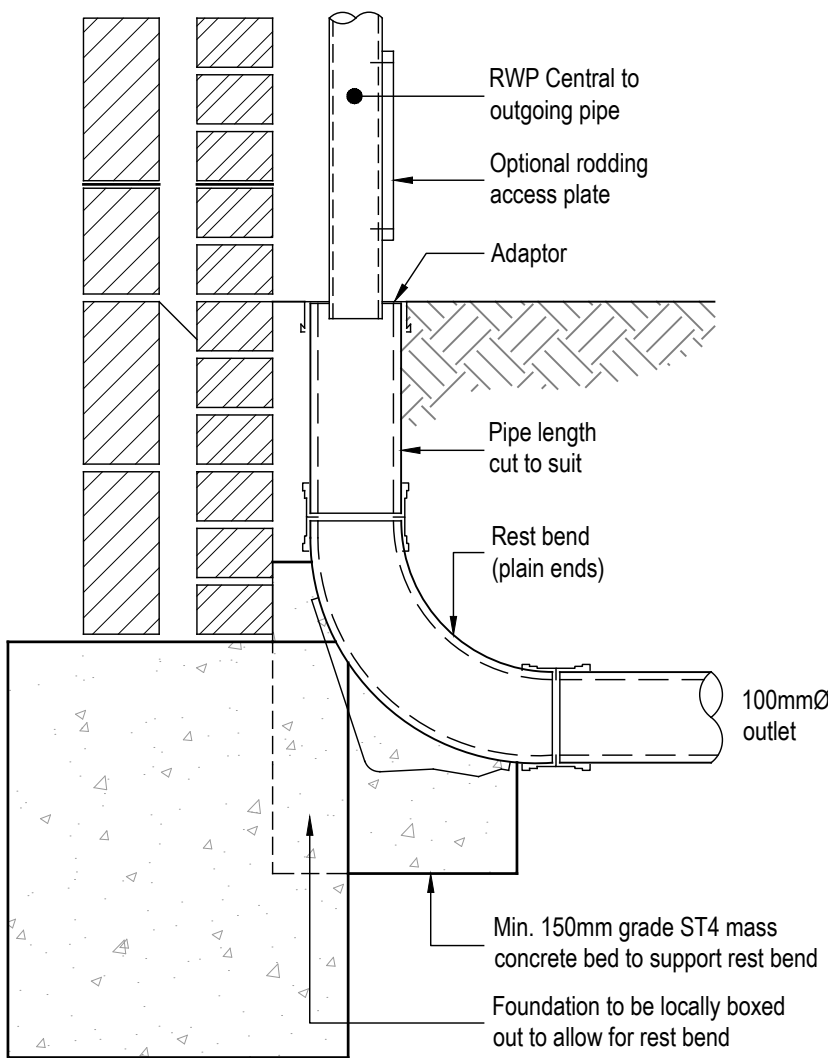
PROJECT | ORIGINATOR | ZONE | LEVEL | TYPE | ROLE | NO.

115267-CAL-XX-XX-DR-D-0011

Revision
P1

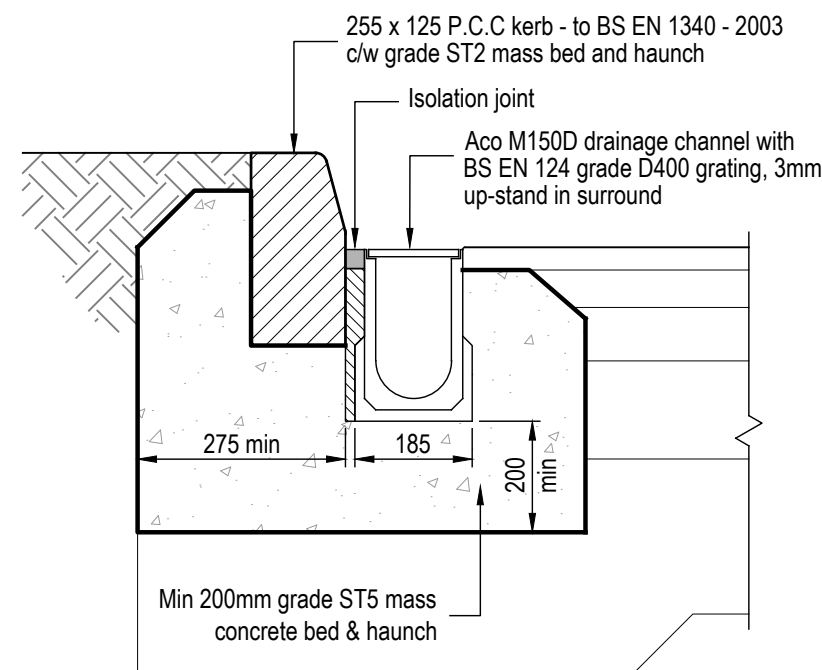
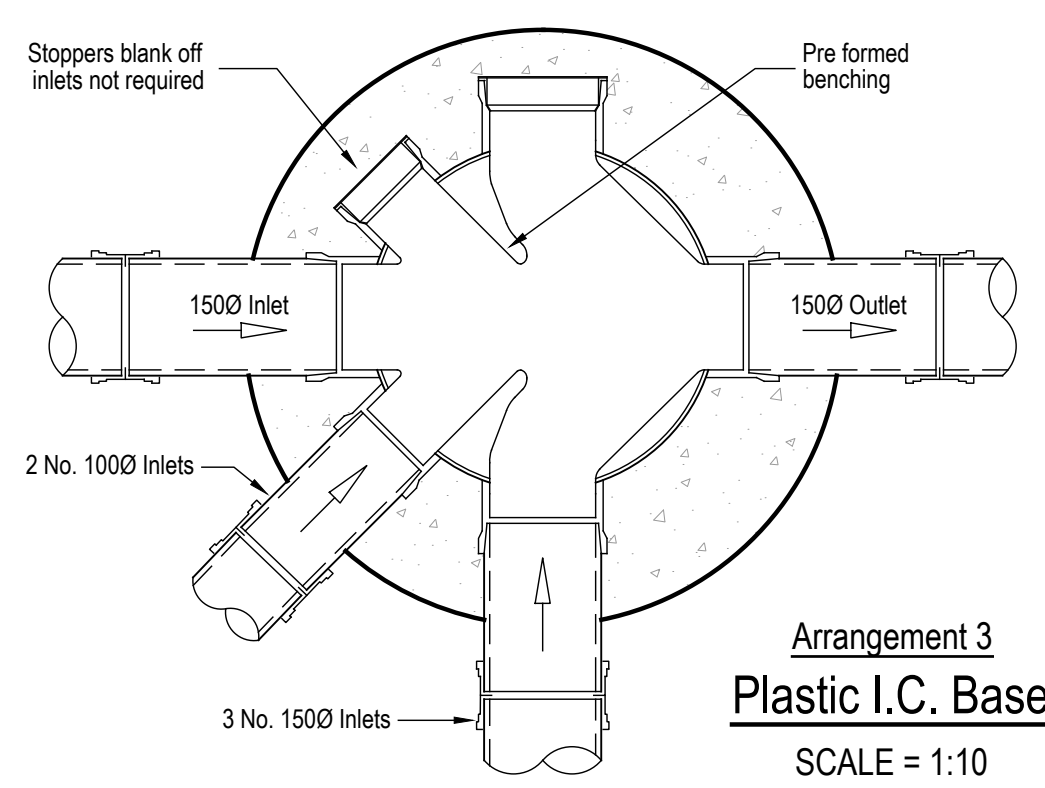
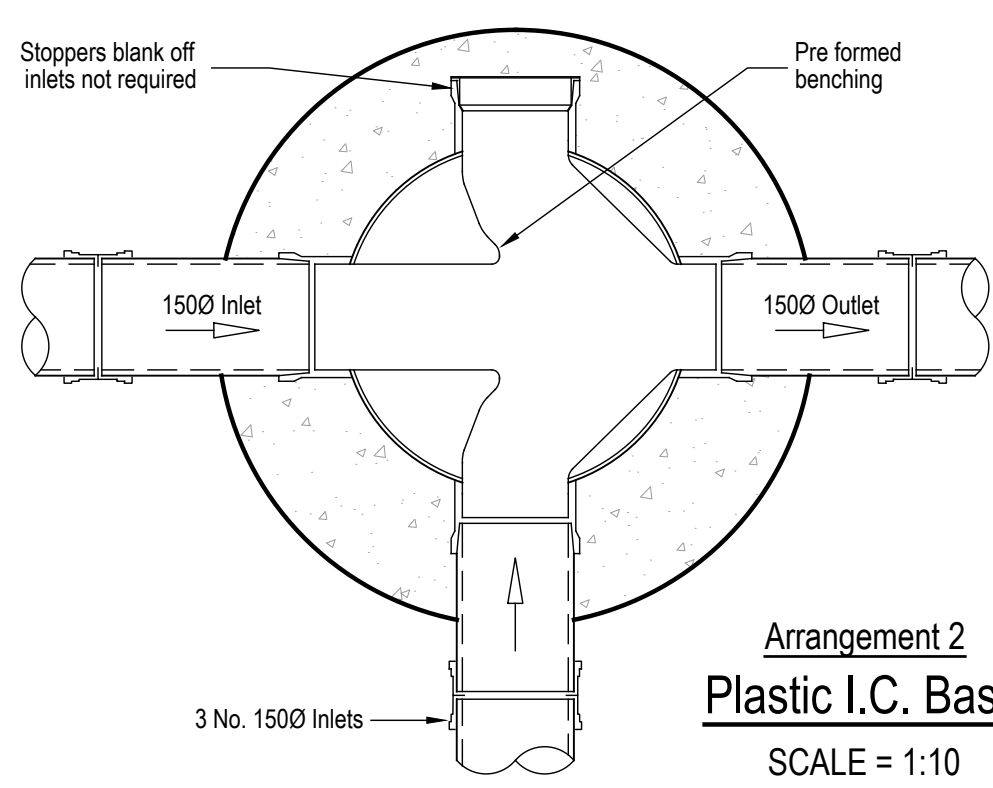
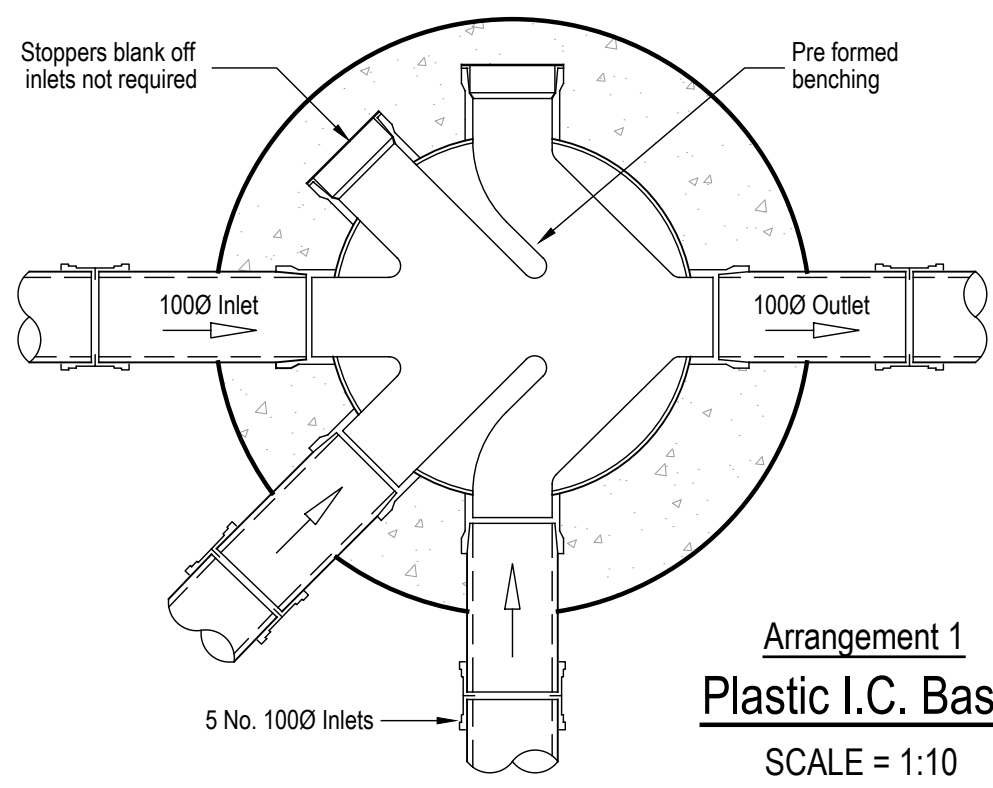


Plastic Inspection Chamber Section Detail
SCALE = 1:10



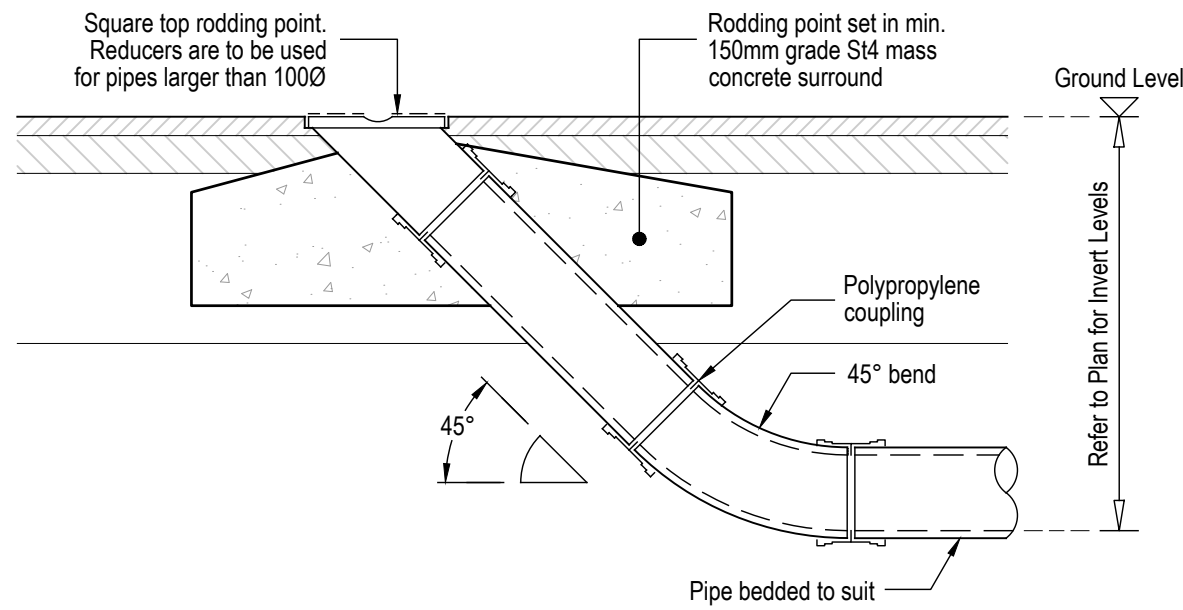
Roddable / Non-Roddable RWP Connection Detail
SCALE = 1:10

Note:
1. The above detail is only to be used where the RWP connects directly to an access chamber, inspection chamber or manhole.
2. If the RWP does not connect directly to an access chamber, inspection chamber or manhole then a rodding access plate must be included as shown above.

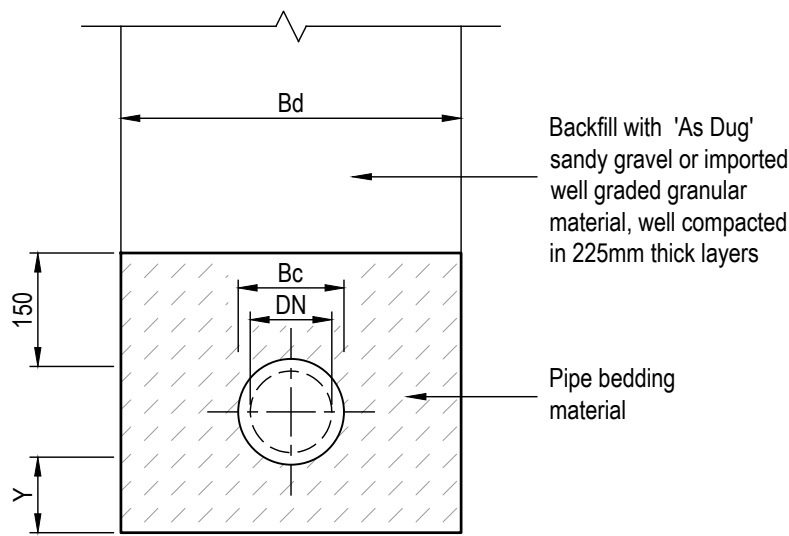


Aco M100D / M150D Drainage Channel (Adjacent P.C.C Kerb) Construction Detail
SCALE = 1:10

Notes:
1. Drainage channels to be laid at a constant depth unless stated otherwise on the drainage layout plans.
3. Expansion joint to be provided @ 5m c/c's along length of channel across whole width of concrete as per manufacturer's recommendations.
4. The channel must not be trafficked until after the wearing course has been laid and compacted.

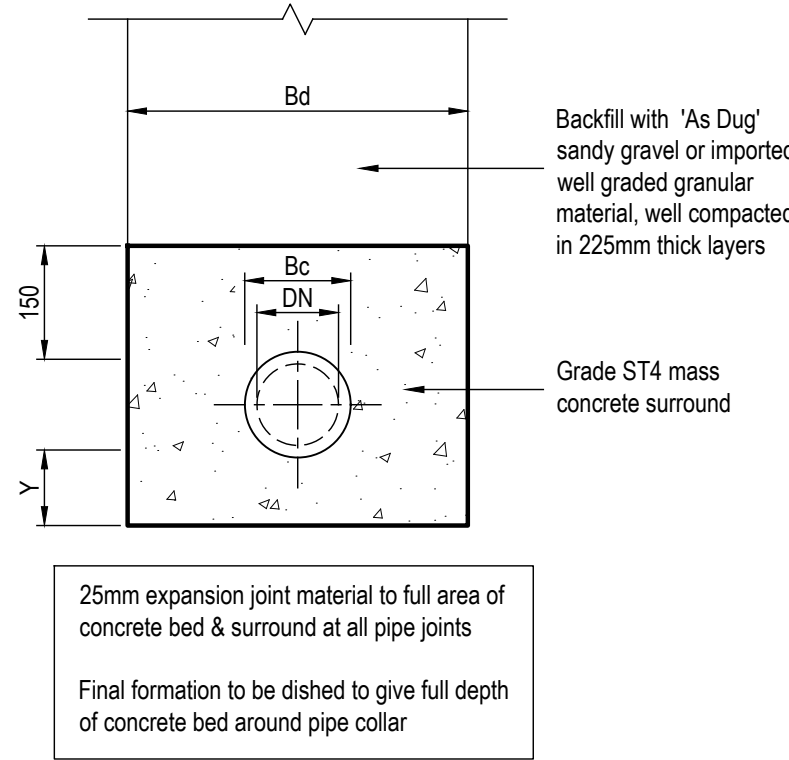


Hard Paved Areas External Rodding Point Detail
SCALE = 1:10



Class 'S' Bedding Detail (Granular Bed & Surround)
SCALE = 1:10

Note - For use on all pipework with:
More than 0.6m of cover in all landscaped and pedestrianised areas.
More than 1.2m of cover in all trafficked areas.



Class 'Z' Bedding Detail (Concrete Bed & Surround)
SCALE = 1:10

Note - For use on all pipework with:
Less than 0.6m of cover in all landscaped and pedestrianised areas.
Less than 1.2m of cover in all trafficked areas.

Nominal maximum aggregate size (mm) B.S. 882 Grading			
Pipe bore (mm)	Aggregate	Bedding class	
100	Single size graded	10	--
150	Single size graded	10 or 14	14 to 5

Pipe Bedding Tables

- Notes:
- This drawing is to be read in conjunction with all of the relevant architects, engineers and specialist sub-contractor drawings and specifications.
 - Any discrepancies between the engineers and the architects drawings to be referred to the architect before proceeding. Drawings must not be scaled.
 - All private drainage is to be in accordance with BS EN 752-1-2-3-4, BS EN 1295-1, BS EN 1610 and all relevant sections of approved document H of the building regulations (2015 Edition).
 - Pipework Type - Plastic i.e. PVC-U, to BS EN 1401-1 Osma or equivalent. (Private pipework to be type SM4 and all adoptable pipework to be type SM8.)
 - Whenever pipework passes through foundations, walls or connects to manholes, flexible pipe joints are to be provided within 150mm of the face of the structure. 600mm pipe length to then be used to form a rocker pipe.
 - Whenever pipework passes through screen walls, footings or retaining walls, lintels are to be provided.
 - The contractors attention is drawn to the need to ensure that any trenches excavated through previously compacted or filled areas, in particular under the building footprint and immediately around the outside, are re-compacted to ensure that localised differential settlement does not occur.
 - Where pipelines cross with less than 300mm of clearance, each is to be surrounded with grade ST4 mass concrete for a distance not less than 1.0m centered on the crossing point. The length of surround should be extended as necessary to within 150mm of the next nearest flexible joints.
 - For private drainage, concrete protection is to be provided where the effective cover to the crown of the pipe(s) is less than 1.2m in trafficked areas and 0.6m in soft landscaped or pedestrianised areas. (Applies during and after construction).
 - The contractor is to ensure that suitable protective measures are taken to ensure that the drainage pipework and fittings are not damaged by site traffic prior to any over-site filling operations being completed.
 - Chamber annotation references are as follows:
AC - Denotes a polypropylene or vitrified clay access chamber, depth not exceeding 600mm, diameter not exceeding 300mm.
IC - Denotes a polypropylene inspection chamber, depth not exceeding 3.0m, diameter not exceeding 600mm. Standard diameter 450mm, unless specified otherwise.
MH - Denotes a manholes constructed from either brick or P.C.C. sections. Chamber depth to be in excess of 1.2m, unless specified otherwise.
 - All foul and surface water drainage pipelines are to be 100mm dia min and laid at a gradient no slackier than 1:80, unless stated otherwise.
 - The contractor is to ensure that all pipework connections are arranged to direct flows down or into the main channel in the direction of the main flow. Any oblique or perpendicular chamber connections are to be directed into the mainline channel via appropriate benching. All chambers must include a connection via the main channel to ensure that a flush through is achieved.
 - The contractor is to ensure that when preformed polypropylene manhole bases are used, they are orientated such that the main flow is directed through the main channel of the base. This should be achieved by using long radius bends outside of the manhole when necessary.
 - Where new connections are to be made into existing manholes or sewers, all invert levels, pipe orientation and sizes should be checked on-site prior to the commencement of the works, with any variance reported to the engineer once identified. Where new connections are to be made either on or off-site, the contractor is to check the line and level of any existing services / mains, to ensure that no clashes exist prior to the works commencing.
 - Drainage channel(s) to be 'ACO' or equivalent. For installation guidance refer to the manufacturer's specification. Refer to landscape architects details for surface treatments around units where applicable. All drainage channels are to be constructed with in-built falls where possible. Relevant units are to be incorporated to provide the necessary length of channel gradient from the head of the run to the sump unit.

P1 30.04.26 Drawn - Preliminary Issue
Rev. Date Description



Calcototto
First Floor, South
Waterloo House
Fleets Corner
Poole, BH17 9PL
01202 237237
info@calcototto.co.uk
www.calcototto.co.uk

Client
Stride Treglown

Project Title
Barton Peveril College

Drawing Title
Drainage Construction Details

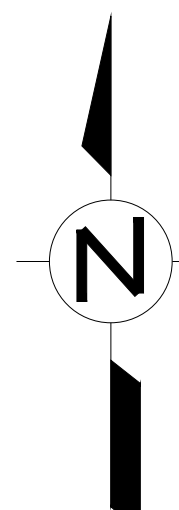
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115267	MC	MRD	1:125 @ A1

PROJECT ORIGINATOR ZONE LEVEL TYPE ROLE NO.	Revision
115267-CAL-XX-XX-DR-D-0050	P1

Appendix B: SUMO Utility Survey Plans

[illegible]

[illegible]

PAS128 SURVEYS	
(5.00-8.25) 0.85+ = Depth in metres, B2 = Quality Level, P = Post processed GPR	
Key to Quality Levels	
Quality Level	Definition
D	Undefined (Static, desktop records search)
B4	Suspected to exist, not detected by GPR or EMI
B3	Horizontal position located by one technique only
B2	Horizontal and vertical position located by one technique only
B1	Horizontal and vertical position located by multiple techniques
A	Horizontal and vertical position verified visually of the service

	 Areas Grouped	 Possible Service	 Unable to Survey
ABBREVIATIONS			
BR	Beltline Road	LUG	Lights in Ground
BS	Boulevard	MHI	Manhole Cover
CAB	Canal	NDA	No Depth Altimeter
CL	Coastal		Post Box
CP	Concrete Paving Slabs	PM	Phone Manhole
CIV	Cable Television	PE	Polystyrene Pipe Material
CLP	Charging Cable	RD	Road
CP	Copper Pipe	RE	Roofing Eave
EC	Electric Pole	RD	Road
EP	Exposed Pipe	RDP	Road
FF	Finished Floor Level	SC	Seal Coat
FR	Feed Pipe	SG	Sign Post
FP	Fence Post	SG	Sign Post
FL	Flow in the Street	SG	Sign Post
FL	Flood Light	SG	Sign Post
GV	Gas Valve	SG	Sign Post
GL	Gully	SG	Sign Post
IL	Inspection Chamber	SG	Sign Post
IL	Invert Level	SG	Sign Post
IL	Lighting Rodded	SG	Sign Post
LP	Lamp Post	SG	Sign Post

TOPOGRAPHIC LEGEND

	Building		Gate
	Cover with Chamber Externals		Heres Fence
	Cenopy		Kerb Channel
	Crash Barrier		Kerb Trip
	Drainage Channel		Levels
	Drop Kerb		Overhead Service
	Edge Detail		Twe (dimensions in meters)
	Embankment Slope		Wall

GENERAL NOTES

Irrespective of the information provided by a utility survey and statutory plans, excavation work should be undertaken with extreme caution and in accordance with HSE Guidelines - MSG47 Avoiding Danger from Underground Services

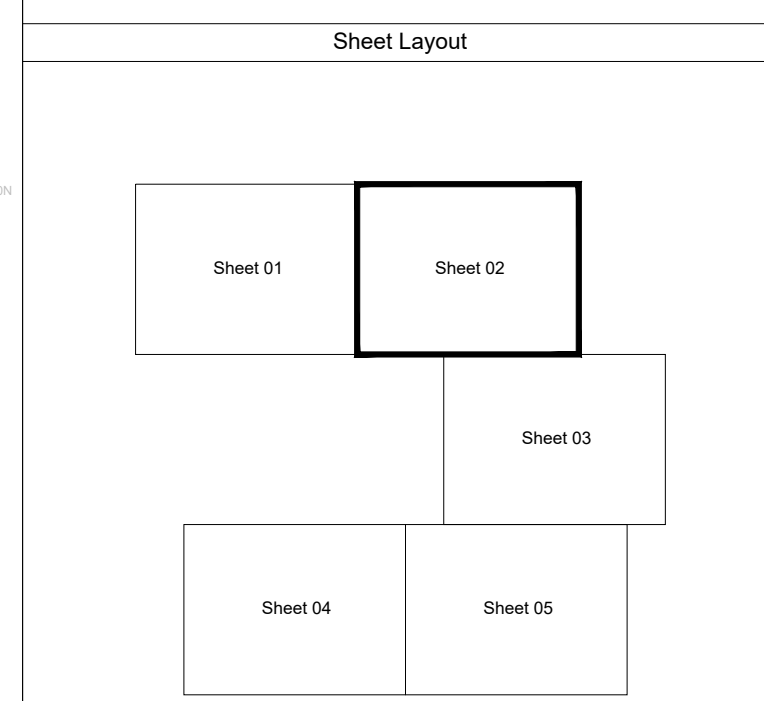
Utilities may continue outside of the survey area. Any point marks outside of the area are for investigative purposes only and may not represent the full extent of the sub-surface utilities.

Where logic indicates a utility exists but which cannot be positively confirmed with the technology, an assumed route (ASR) is recorded. All assumed service routes (ASR) have been highlighted with a background yellow colour for visual enhancement.

GPR is utilized across the site in all accessible areas where ground conditions, obstructions allow. Areas of dense vegetation, unclear areas, marsh land, steep banks etc. will not be covered by GPR.

Vertical & Horizontal Position - Vertical position (depth) is indicative to the top of the utility feature and should not be taken as exact, as this could be the surround to the service rather than the service itself. Where depth information from the technology is unclear, depth is not shown.

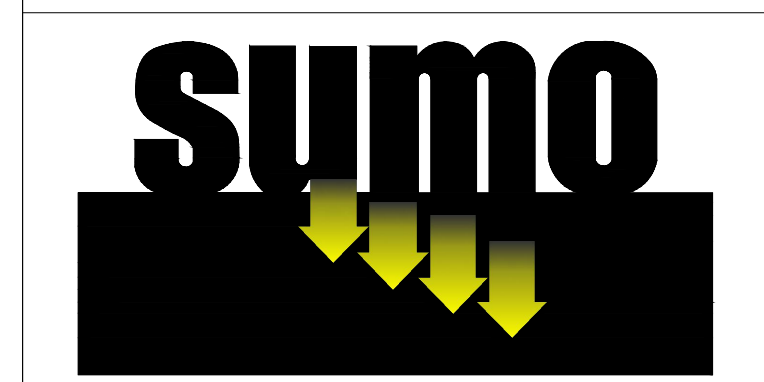
Warranty
This drawing does not provide an absolute representation of the sub-surface. Utilities have been detected using non-invasive technologies only and the performance can be adversely affected by ground, weather and site conditions outside of SUMO's control, therefore, some utilities may be undetectable. While SUMO uses reasonable endeavours to detect all utilities, it does not warrant that 100% detection will be achieved and that approximate depth penetration of the technologies SUMO uses will not be greater than two metres.



Rev	Notes	Drawn	Date
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Notes:

Survey is referenced to OS Grid and Level Datum.



SUMO Services Ltd
8 Hayward Business Centre
New Lane
Havant
Hampshire
PO9 2NL

TEL:0845 456 1104

www.sumoservices.com

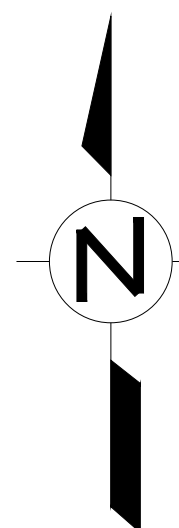
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Client: Amiri Construction Ltd

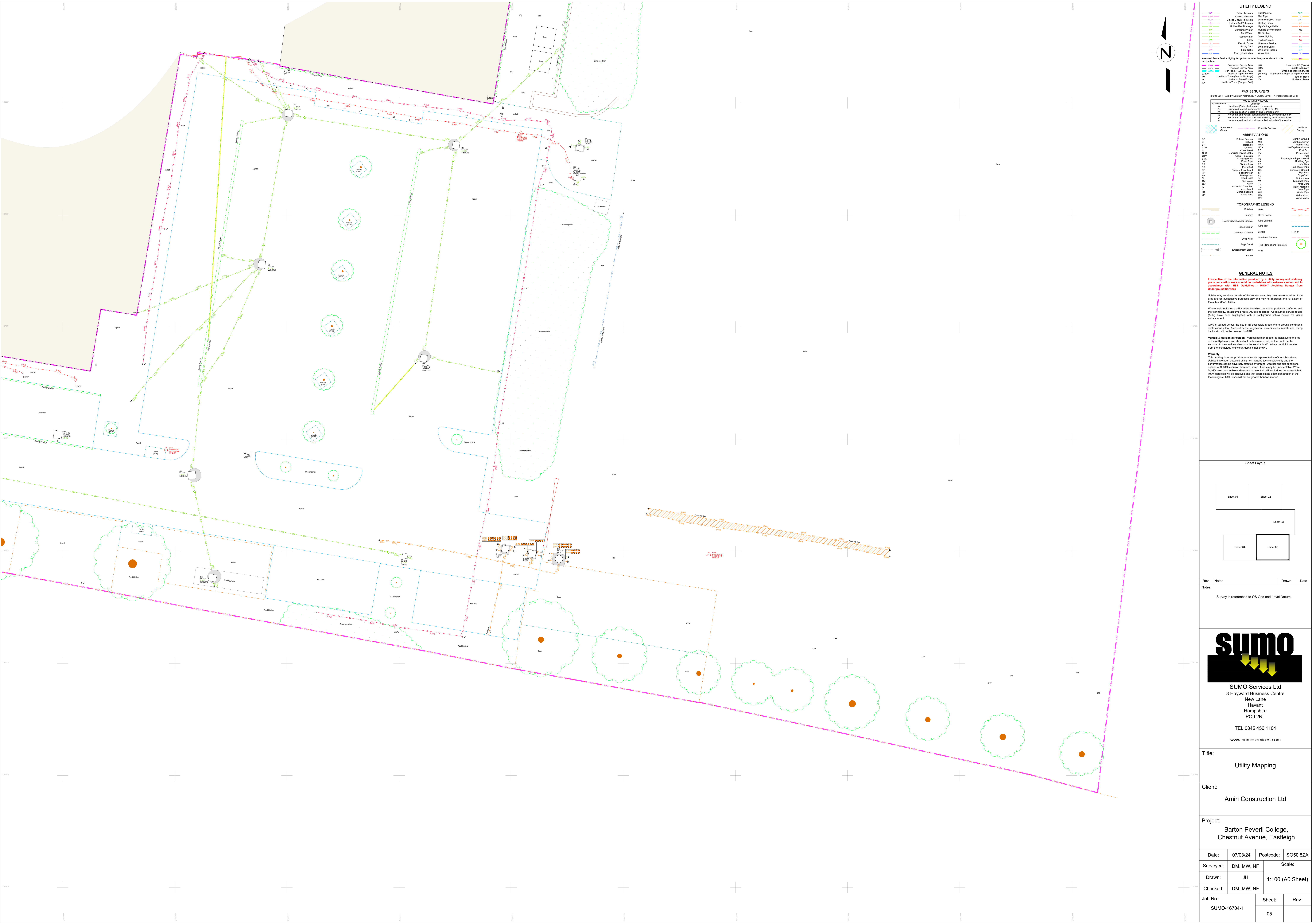
Project:
Barton Peveril College,
Chestnut Avenue, Eastleigh

Date:	07/03/24	Postcode:	SO50 5ZA
Surveyed:	DM, MW, NF	Scale: 1:100 (A0 Sheet)	
Drawn:	JH		
Checked:	DM, MW, NF		

Job No:	Sheet:	Rev:
SUMO-16704-1	02	



UTILITY LEGEND			
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12"	Brick Telemeter	15"	Brick Telemeter
18"	Brick Telemeter	24"	Brick Telemeter
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48"	Brick Telemeter	60"	Brick Telemeter
72"	Brick Telemeter	96"	Brick Telemeter
120"	Brick Telemeter	144"	Brick Telemeter
180"	Brick Telemeter	240"	Brick Telemeter
300"	Brick Telemeter	480"	Brick Telemeter
600"	Brick Telemeter	960"	Brick Telemeter
1200"	Brick Telemeter	1920"	Brick Telemeter
2400"	Brick Telemeter	4800"	Brick Telemeter
4800"	Brick Telemeter	9600"	Brick Telemeter
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38400"	Brick Telemeter	76800"	Brick Telemeter
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11333679558887148512870400"	Brick Telemeter	22667359117774297025740800"	Brick Telemeter
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362677745884388752411852800"	Brick Telemeter	725355491768777504823705600"	Brick Telemeter
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38029518006846882045720296652800"	Brick Telemeter	76059036013693764091440593305600"	Brick Telemeter
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4984604984193434523496650722875801600"	Brick Telemeter	9969209968386869046993301445751603200"	Brick Telemeter
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19938419936773738093986602891503206400"	Brick Telemeter	39876839873547476187973205783006412800"	Brick Telemeter
39876839873547476187973205783006412800"	Brick Telemeter	79753679747094952375946411566012825600"	Brick Telemeter
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159507359494189904751892823132025651200"	Brick Telemeter	319014718988379809503785646264051302400"	Brick Telemeter
319014718988379809503785646264051302400"	Brick Telemeter	638029437976759619007571292528102604800"	Brick Telemeter
638029437976759619007571292528102604800"	Brick Telemeter	1276058875953519238015142570056205209600"	Brick Telemeter
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2552117751907038476030285140112410419200"	Brick Telemeter	5104235503814076952060570280224820838400"	Brick Telemeter
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669022355955918694260483067769627688447564800"	Brick Telemeter	1338044711911837388520966135539255376895129600"	Brick Telemeter</



UTILITY LEGEND

8	Brick Trench	10	Gas Pipe	12	Gas
11	Brick Trench	13	Gas Pipe	14	Gas
15	Brick Trench	16	Gas Pipe	17	Gas
18	Brick Trench	19	Gas Pipe	20	Gas
21	Brick Trench	22	Gas Pipe	23	Gas
24	Brick Trench	25	Gas Pipe	26	Gas
27	Brick Trench	28	Gas Pipe	29	Gas
30	Brick Trench	31	Gas Pipe	32	Gas
33	Brick Trench	34	Gas Pipe	35	Gas
36	Brick Trench	37	Gas Pipe	38	Gas
39	Brick Trench	40	Gas Pipe	41	Gas
42	Brick Trench	43	Gas Pipe	44	Gas
45	Brick Trench	46	Gas Pipe	47	Gas
48	Brick Trench	49	Gas Pipe	50	Gas
51	Brick Trench	52	Gas Pipe	53	Gas
54	Brick Trench	55	Gas Pipe	56	Gas
57	Brick Trench	58	Gas Pipe	59	Gas
60	Brick Trench	61	Gas Pipe	62	Gas
63	Brick Trench	64	Gas Pipe	65	Gas
66	Brick Trench	67	Gas Pipe	68	Gas
69	Brick Trench	70	Gas Pipe	71	Gas
72	Brick Trench	73	Gas Pipe	74	Gas
75	Brick Trench	76	Gas Pipe	77	Gas
78	Brick Trench	79	Gas Pipe	80	Gas
81	Brick Trench	82	Gas Pipe	83	Gas
84	Brick Trench	85	Gas Pipe	86	Gas
87	Brick Trench	88	Gas Pipe	89	Gas
90	Brick Trench	91	Gas Pipe	92	Gas
93	Brick Trench	94	Gas Pipe	95	Gas
96	Brick Trench	97	Gas Pipe	98	Gas
99	Brick Trench	100	Gas Pipe	101	Gas

PAS108 SURVEYS

(0.60V BPR) 0.60V - Depth in metres, 0.2V - Quality Level, 0 = First processed GPR

Quality Level	Key to Quality Levels
0	Unreliable
1	Unreliable
2	Unreliable
3	Unreliable
4	Unreliable
5	Unreliable
6	Unreliable
7	Unreliable
8	Unreliable
9	Unreliable
10	Unreliable
11	Unreliable
12	Unreliable
13	Unreliable
14	Unreliable
15	Unreliable
16	Unreliable
17	Unreliable
18	Unreliable
19	Unreliable
20	Unreliable
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86	Unreliable
87	Unreliable
88	Unreliable
89	Unreliable
90	Unreliable
91	Unreliable
92	Unreliable
93	Unreliable
94	Unreliable
95	Unreliable
96	Unreliable
97	Unreliable
98	Unreliable
99	Unreliable
100	Unreliable

ABBREVIATIONS

BB	Brick Trench	10	Gas Pipe	12	Gas
11	Brick Trench	13	Gas Pipe	14	Gas
15	Brick Trench	16	Gas Pipe	17	Gas
18	Brick Trench	19	Gas Pipe	20	Gas
21	Brick Trench	22	Gas Pipe	23	Gas
24	Brick Trench	25	Gas Pipe	26	Gas
27	Brick Trench	28	Gas Pipe	29	Gas
30	Brick Trench	31	Gas Pipe	32	Gas
33	Brick Trench	34	Gas Pipe	35	Gas
36	Brick Trench	37	Gas Pipe	38	Gas
39	Brick Trench	40	Gas Pipe	41	Gas
42	Brick Trench	43	Gas Pipe	44	Gas
45	Brick Trench	46	Gas Pipe	47	Gas
48	Brick Trench	49	Gas Pipe	50	Gas
51	Brick Trench	52	Gas Pipe	53	Gas
54	Brick Trench	55	Gas Pipe	56	Gas
57	Brick Trench	58	Gas Pipe	59	Gas
60	Brick Trench	61	Gas Pipe	62	Gas
63	Brick Trench	64	Gas Pipe	65	Gas
66	Brick Trench	67	Gas Pipe	68	Gas
69	Brick Trench	70	Gas Pipe	71	Gas
72	Brick Trench	73	Gas Pipe	74	Gas
75	Brick Trench	76	Gas Pipe	77	Gas
78	Brick Trench	79	Gas Pipe	80	Gas
81	Brick Trench	82	Gas Pipe	83	Gas
84	Brick Trench	85	Gas Pipe	86	Gas
87	Brick Trench	88	Gas Pipe	89	Gas
90	Brick Trench	91	Gas Pipe	92	Gas
93	Brick Trench	94	Gas Pipe	95	Gas
96	Brick Trench	97	Gas Pipe	98	Gas
99	Brick Trench	100	Gas Pipe	101	Gas

TOPOGRAPHIC LEGEND

Building	Gate	10	Gas Pipe	12	Gas
11	Gate	13	Gas Pipe	14	Gas
15	Gate	16	Gas Pipe	17	Gas
18	Gate	19	Gas Pipe	20	Gas
21	Gate	22	Gas Pipe	23	Gas
24	Gate	25	Gas Pipe	26	Gas
27	Gate	28	Gas Pipe	29	Gas
30	Gate	31	Gas Pipe	32	Gas
33	Gate	34	Gas Pipe	35	Gas
36	Gate	37	Gas Pipe	38	Gas
39	Gate	40	Gas Pipe	41	Gas
42	Gate	43	Gas Pipe	44	Gas
45	Gate	46	Gas Pipe	47	Gas
48	Gate	49	Gas Pipe	50	Gas
51	Gate	52	Gas Pipe	53	Gas
54	Gate	55	Gas Pipe	56	Gas
57	Gate	58	Gas Pipe	59	Gas
60	Gate	61	Gas Pipe	62	Gas
63	Gate	64	Gas Pipe	65	Gas
66	Gate	67	Gas Pipe	68	Gas
69	Gate	70	Gas Pipe	71	Gas
72	Gate	73	Gas Pipe	74	Gas
75	Gate	76	Gas Pipe	77	Gas
78	Gate	79	Gas Pipe	80	Gas
81	Gate	82	Gas Pipe	83	Gas
84	Gate	85	Gas Pipe	86	Gas
87	Gate	88	Gas Pipe	89	Gas
90	Gate	91	Gas Pipe	92	Gas
93	Gate	94	Gas Pipe	95	Gas
96	Gate	97	Gas Pipe	98	Gas
99	Gate	100	Gas Pipe	101	Gas

GENERAL NOTES

Inspection of the information provided by a utility survey and statutory plans, excavation work should be undertaken with extreme caution and in accordance with HSE Guidelines - H5047 Avoiding Danger from Underground Services

Utilities may continue outside of the survey area. Any paint marks outside of the area are for investigation purposes only and may not represent the full extent of the sub-surface utilities.

Where logic indicates a utility exists but which cannot be positively confirmed with the technology, an assumed route (ASR) is recorded. All assumed service routes (ASRs) have been highlighted with a background yellow colour for visual enhancement.

GPR is utilised across the site in all accessible areas where ground conditions, obstructions allow. Areas of dense vegetation, unclear areas, marsh land, steep banks etc. will not be covered by GPR.

Vertical & Horizontal Position - Vertical position (depth) is indicative to the top of the utility/structure and should not be taken as an indication as this should be the horizontal to the service rather than the service itself. Where depth information from the technology is unclear, depth is not shown.

Warranty

This drawing does not provide an absolute representation of the sub-surface. Utilities have been detected using non-invasive technologies only and the performance can be adversely affected by ground, weather and site conditions outside of SUMO's control. Therefore, some utilities may be undetected. While SUMO uses reasonable endeavours to detect all utilities, it does not warrant that 100% detection will be achieved and that approximate depth penetration of the technologies SUMO uses will not be greater than two metres.

Sheet Layout

Sheet 01	Sheet 02
Sheet 03	Sheet 04
Sheet 05	

Rev	Notes	Drawn	Date
1	Survey is referenced to OS Grid and Level Datum.		

SUMO Services Ltd
8 Hayward Business Centre
New Lane
Havant
Hampshire
PO9 2NL
TEL:0845 456 1104
www.sumoservices.com

Title: Utility Mapping

Client: Amiri Construction Ltd

Project: Barton Peveril College, Chestnut Avenue, Eastleigh

Date:	07/03/24	Postcode:	SO50 5ZA
Surveyed:	DM, MW, NF	Scale:	
Drawn:	JH		
Checked:	DM, MW, NF		
Job No:	SUMO-16704-1	Sheet:	05
		Rev:	

[illegible]



UTILITY LEGEND

--- M	Brick Trench	--- F	Full Pipeline	--- F	Full Pipeline
--- C	Cable Trench	--- G	Gas Pipe	--- G	Gas Pipe
--- U	Unidentified Trench	--- T	Unidentified Target	--- T	Unidentified Target
--- H	Unidentified Trench	--- H	High Voltage Cable	--- H	High Voltage Cable
--- W	Water	--- W	Water	--- W	Water
--- C	Combined Water	--- C	Combined Water	--- C	Combined Water
--- S	Storm Water	--- S	Storm Water	--- S	Storm Water
--- E	Electric Cable	--- E	Electric Cable	--- E	Electric Cable
--- L	Lighting Cable	--- L	Lighting Cable	--- L	Lighting Cable
--- F	Fire Alarm Cable	--- F	Fire Alarm Cable	--- F	Fire Alarm Cable
--- P	Pipe	--- P	Pipe	--- P	Pipe
--- A	Assumed	--- A	Assumed	--- A	Assumed

Assumed Route Service highlighted yellow, includes changes as above to route service type

PAS108 SURVEYS

(GVA) BPT - 0.64 - Depth in metres, B2 - Quality Level, P - Final processed GPR

Quality Level	Key to Quality Levels
B1	Unprocessed GPR Data
B2	Processed GPR Data
B3	Processed GPR Data with corrections
B4	Processed GPR Data with corrections and interpretation
B5	Processed GPR Data with corrections and interpretation and verification
B6	Processed GPR Data with corrections and interpretation and verification and validation
B7	Processed GPR Data with corrections and interpretation and verification and validation and assessment
B8	Processed GPR Data with corrections and interpretation and verification and validation and assessment and approval
B9	Processed GPR Data with corrections and interpretation and verification and validation and assessment and approval and sign-off
B10	Processed GPR Data with corrections and interpretation and verification and validation and assessment and approval and sign-off and final approval

ABBREVIATIONS

Abbreviation	Meaning
BB	Building Boundary
BR	Brick
CB	Concrete
CL	Clay
CP	Concrete Pipe
CUP	Concrete Under Pressure
EP	Electric Pipe
FP	Fire Protection
FL	Flammable
GL	Ground Level
IL	Insulation
IP	Insulation Pipe
LP	Lighting Pipe
MP	Manhole
OP	Open
PP	Pipe
RP	Road
SP	Service
TP	Trench
UP	Unidentified
VP	Vertical
WP	Water

TOPOGRAPHIC LEGEND

Symbol	Description
[Symbol]	Building
[Symbol]	Canopy
[Symbol]	Cover with Chamber
[Symbol]	Cover
[Symbol]	Drainage Channel
[Symbol]	Drop Kerb
[Symbol]	Edge Detail
[Symbol]	Enticement Slope
[Symbol]	Fence
[Symbol]	Gate
[Symbol]	Hedge Fence
[Symbol]	Kerb Channel
[Symbol]	Kerb Trip
[Symbol]	Level
[Symbol]	Overhead Service
[Symbol]	Tree (dimensions in metres)
[Symbol]	Wall

GENERAL NOTES

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Sheet 01	Sheet 02
Sheet 03	Sheet 04
Sheet 05	

Rev	Notes	Drawn	Date
1	Survey is referenced to OS Grid and Level Datum.		

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Havant
Hampshire
PO9 2NL
TEL:0845 456 1104
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Title:	Utility Mapping		
Client:	Amiri Construction Ltd		
Project:	Barton Peveril College, Chestnut Avenue, Eastleigh		
Date:	07/03/24	Postcode:	SO50 5ZA
Surveyed:	DM, MW, NF	Scale:	1:100 (A0 Sheet)
Drawn:	JH		
Checked:	DM, MW, NF		
Job No:	SUMO-16704-1	Sheet:	02
		Rev:	