

7th December 2023

Belvedere House, 5th Floor
12 Booth Street
Manchester
M2 4AW

Ancoats Dispensary – Planning Ref 130356/FO/2021

0161 833 9579
www.ridge.co.uk

5014349

Ridge have prepared this technical note to provide information in relation to Planning Condition 12, for Planning Reference 130356/FO/2021

12. Prior to the first occupation of the development, details of the implementation, maintenance and management of the sustainable drainage scheme shall be submitted for approval in writing by the City Council, as Local Planning Authority. This shall include:

-Verification report providing photographic evidence of construction as per design drawings

-As built construction drawings if different from design construction drawings;

-Management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public body or statutory undertaker, or any other arrangements to secure the operation of the sustainable drainage scheme throughout its lifetime.

The implementation of the management and maintenance plan shall be implemented in accordance with the timescales agreed and retained for as long as the development remains in use.

Reason - To manage flooding and pollution and to ensure that a managing body is in place for the sustainable drainage system and there is funding and maintenance mechanism for the lifetime of the development pursuant to policies SP1, EN14 and DM1 of the Manchester Core Strategy (2012).

Element of Planning Condition 12	Related Information to Discharge
<i>Verification report providing photographic evidence of construction as per design drawings.</i>	This TN constitutes the verification report, photos, drawings, schedules and data sheets are provided for the drainage system within this document. An operation and maintenance plan has been provided as part of this Technical Note.
<i>As built construction drawings if different from design construction drawings.</i>	. The most recent drawings of the surface water network have been included in Appendix A.
<i>Management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public body or statutory undertaker, or any other arrangements to secure the operation of the sustainable drainage scheme throughout its lifetime.</i>	<p>The construction record drawings are included in Appendix A</p> <p>The construction record drawings include manhole schedules that record grid reference of chambers.</p> <p>Installation photographs have been provided in a table below.</p> <p>Critical Assets such as attenuation tanks and flow controls are annotated on the drawing and have been identified for an operation and maintenance regime in the maintenance schedule. Included in Appendix B</p> <p>Data sheets for the hydrobrake have been provided in Appendix C.</p>

Critical Drainage Element	Photographic evidence of installation.
Attenuation Installation	
	
Pipework Installation	





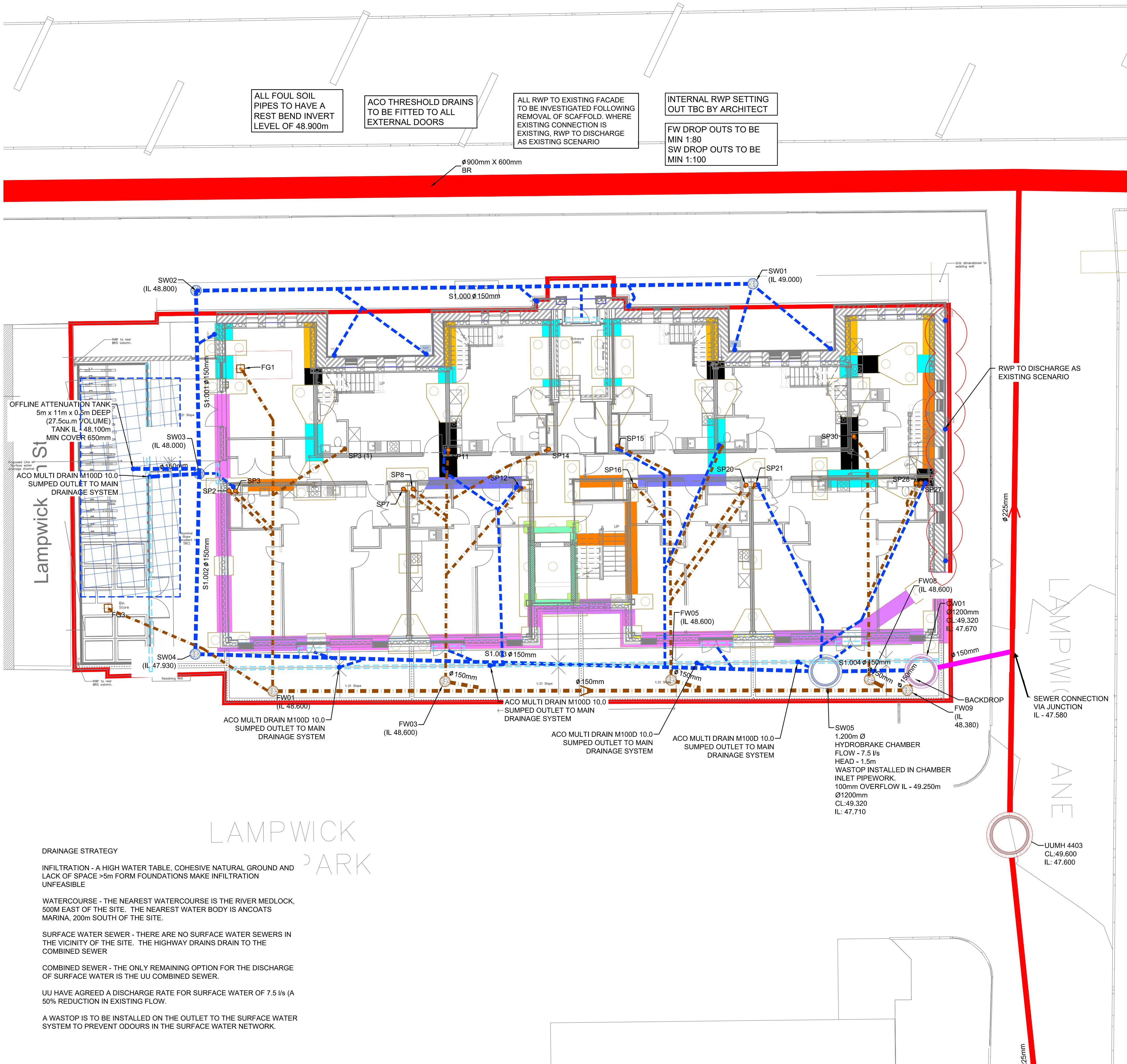
PROPERTY & CONSTRUCTION CONSULTANTS

RIDGE

APPENDIX A –

NOTES

- Drawings to be read in conjunction with all services and structural engineers drawings & specifications.
- This document must not be altered, reproduced or distributed without prior written consent of the originator.
- Do not scale from this document – use figured dimensions only.
- All dimensions must be checked on site prior to commencement of any related works.
- Contractor to provide and have an approved method statement prior to works.
- This drawing shall be read in conjunction with the civil engineering specification, and all relevant Architect's and Engineer's drawings.
- All setting out to be in accordance with the Architects drawings. Any discrepancies between Ridge and the Architects drawings to be referred to the Architect before proceeding. Dimensions must not be scaled.
- All levels are in metres above ordnance datum.
- The Contractor is to comply full with CDM regulations in the course of constructing the works.
- At the commencement of the works, the Contractor is to carry out trial pits and liaise with utility companies in order to establish the exact position of all existing utility plant in the vicinity of the works and take adequate precautions for their protection.
- The Contractor is to refer to Health and Safety Executive 'Note 47 – Avoiding Danger from Underground Services' and 'Document C56 – Avoiding Danger from Overhead Electric Lines.'
- Works on or adjacent to existing public highway will be executed in accordance with the Traffic Safety Code for Road Works and Traffic Signs Manual: Chapter 8.
- The Contractor will ascertain the CBR value of the subgrade in order to determine the required sub-base / capping thickness.
- Prior to laying any material, the subgrade must be inspected and any soft spots removed and filled with 6F2 capping material.
- Prior to the construction of any drainage works, the Contractor is to confirm the invert levels of existing manholes, drains and sewers. Any variations from the designed levels shown on the drawings must be reported to the Drainage Engineer in advance of construction works commencing. All new sewers and drains are to be laid in sequence starting from the outfall location.
- All drainage to be installed in accordance with relevant Building Regulation documents and current Sewers for Adoption. Connections to public sewers are to be agreed and inspection by the Water Authority.
- All drain and sewer pipes are #100mm and laid soffit to soffit, unless shown otherwise.
- Invert to base of soil stack bands to be 450mm below lowest branch connection for up to three storey buildings; for buildings up to five storeys, the invert to the base of soil stack bands should not be less than 750mm. All foul and surface water drainage stacks are to have above ground radding access. Refer to above ground drainage layout(s) by others.
- All RWP and SVP setting is to be confirmed by the Architect. All below ground connections are to match above ground outlet size, minimum #100mm.
- SVPs are to project 100mm above finished floor level.
- All internal manholes and inspection chambers to have double sealed recessed covers to suit floor finishes as defined by the Architect.
- All external covers in non-tarmac areas are to have recessed covers to suit the paving material.
- This drawing has been produced in colour and should be reproduced in colour for clarity.
- A CCTV survey and report in WINCAN format for all new drainage will be required prior to 'as built' drawing being issued.
- The Contractor is responsible for the traffic safety and management associated with the construction of the works. Works will not commence on the existing highway until their traffic management proposals have been agreed with Highway Authority.
- Where the works involve the obstruction of a footway, the Contractor will provide an alternative safe footway properly signed, guarded and lit.
- Where one-way traffic is unavoidable, traffic will be controlled by a proper system of vehicle-actuated traffic signals or manual stop / go signs and during the hours of darkness, by a proper system of vehicle-actuated traffic signals, all to the approval of Highway Authority.
- 65mm Minimum thickness tactile paving, coloured buff will be incorporated at all pedestrian crossings in accordance with the Department for Transport and Regions document "Guidance on the Use of Tactile Paving Surfaces." (DETR No. 1998)
- All signs and road markings will be in accordance with the "Traffic Signs Regulations and General Directions 2016". (TSRGD 2016)
- All excavation and backfilling work in the existing highway to be in accordance with the provisions of the New Street Works Act 1991 or that specified on the working drawings.
- All highways works to be carried out in accordance with Highway Authority's highway standards, to the satisfaction of the Highway Authority Section 278 Inspector and in accordance with the Specification for Highway Works.
- Gullies, gully connections, drains, manholes, catch pit, soakways, headwalls and other drainage structures intended to convey only highway water are to be constructed in accordance with the specification of Highway Authority and to the satisfaction of the Highway Inspector.
- Where existing junctions and accesses are to remain in operation within the works during the construction process, the Contractor will ensure that access to these units remains available at all times.
- Highways in the vicinity of the works must be kept free from mud, debris and dust falling from vehicles or wheels of vehicles connected with the works. Where the deposits of debris and mud are unavoidable, warning signs must be displayed whilst work is in progress and affected carriageways / footways must be regularly cleaned.
Source:
 - Topographical survey by ? Drawing No. ? dated ?
 - Architect's layout by ? Drawing No. ? dated ?



DRAINAGE STRATEGY

INFILTRATION - A HIGH WATER TABLE, COHESIVE NATURAL GROUND AND LACK OF SPACE >5m FORM FOUNDATIONS MAKE INFILTRATION UNFEASIBLE

WATERCOURSE - THE NEAREST WATERCOURSE IS THE RIVER MEDLOCK, 500M EAST OF THE SITE. THE NEAREST WATER BODY IS ANCOATS MARINA, 200m SOUTH OF THE SITE.

SURFACE WATER SEWER - THERE ARE NO SURFACE WATER SEWERS IN THE VICINITY OF THE SITE. THE HIGHWAY DRAINS DRAIN TO THE COMBINED SEWER

COMBINED SEWER - THE ONLY REMAINING OPTION FOR THE DISCHARGE OF SURFACE WATER IS THE UU COMBINED SEWER.

UU HAVE AGREED A DISCHARGE RATE FOR SURFACE WATER OF 7.5 l/s (A 50% REDUCTION IN EXISTING FLOW.

A WASTOP IS TO BE INSTALLED ON THE OUTLET TO THE SURFACE WATER SYSTEM TO PREVENT ODOURS IN THE SURFACE WATER NETWORK.

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- KEY
- EXISTING UU COMBINED SEWER
 - PROPOSED FOUL DRAIN
 - PROPOSED SURFACE DRAIN
 - PROPOSED ACO
 - PROPOSED ATTENUATION
 - PIPE SLEEVED THROUGH GROUND BEAM

C4	CONSTRUCTION ISSUE	29.07.22	AP	PB
C3	CONSTRUCTION ISSUE	11.07.22	AP	PB
C2	CONSTRUCTION ISSUE	18.05.22	AP	PB
C1	CONSTRUCTION ISSUE	25.04.22	AP	PB

REV	DESCRIPTION	DATE	BY	CHKD
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ORIGINATOR:

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BELVEDERE HOUSE
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MANCHESTER M2 4AW

TEL: 0161 833 9579

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CLIENT:
ERIC WRIGHT

IN ASSOCIATION WITH:
GREAT PLACES HOUSING GROUP LTD

PROJECT:
ANCOATS DISPENSARY

TITLE:
PROPOSED DRAINAGE
GENERAL ARRANGEMENT

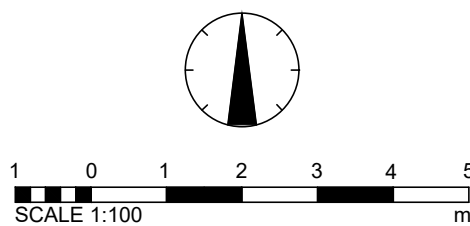
ENG/TECH:	CSE:	ICSE:	SCALE:	1:100	@	A1
PB	PB	ED	STATUS ISSUE:	D2		

STATUS:
CONSTRUCTION

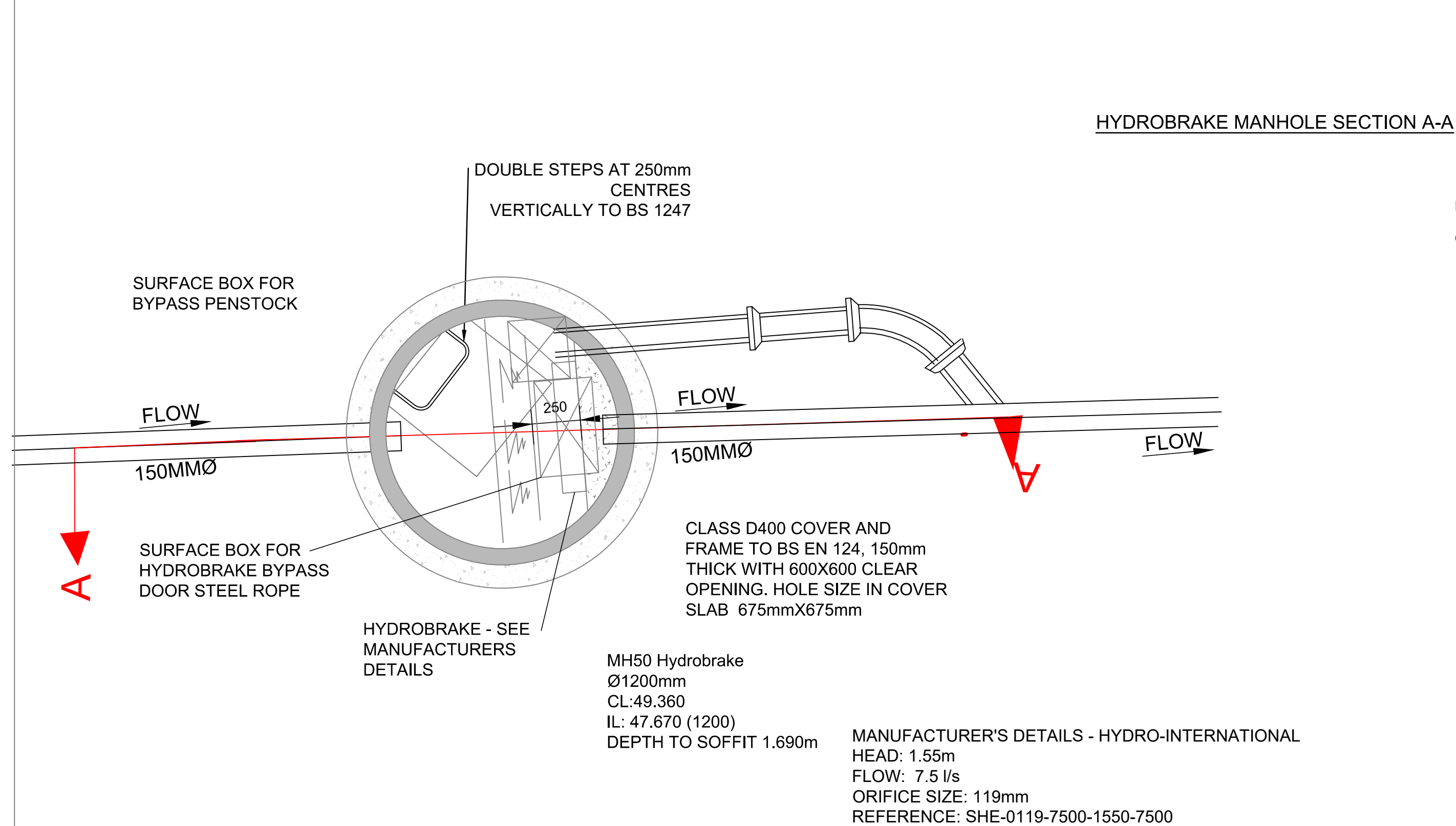
UNLESS ISSUED FOR CONSTRUCTION - WORKS AT CLIENT/CONTRACTORS RISK

SUITABILITY: S4 - Issued for Construction Approval

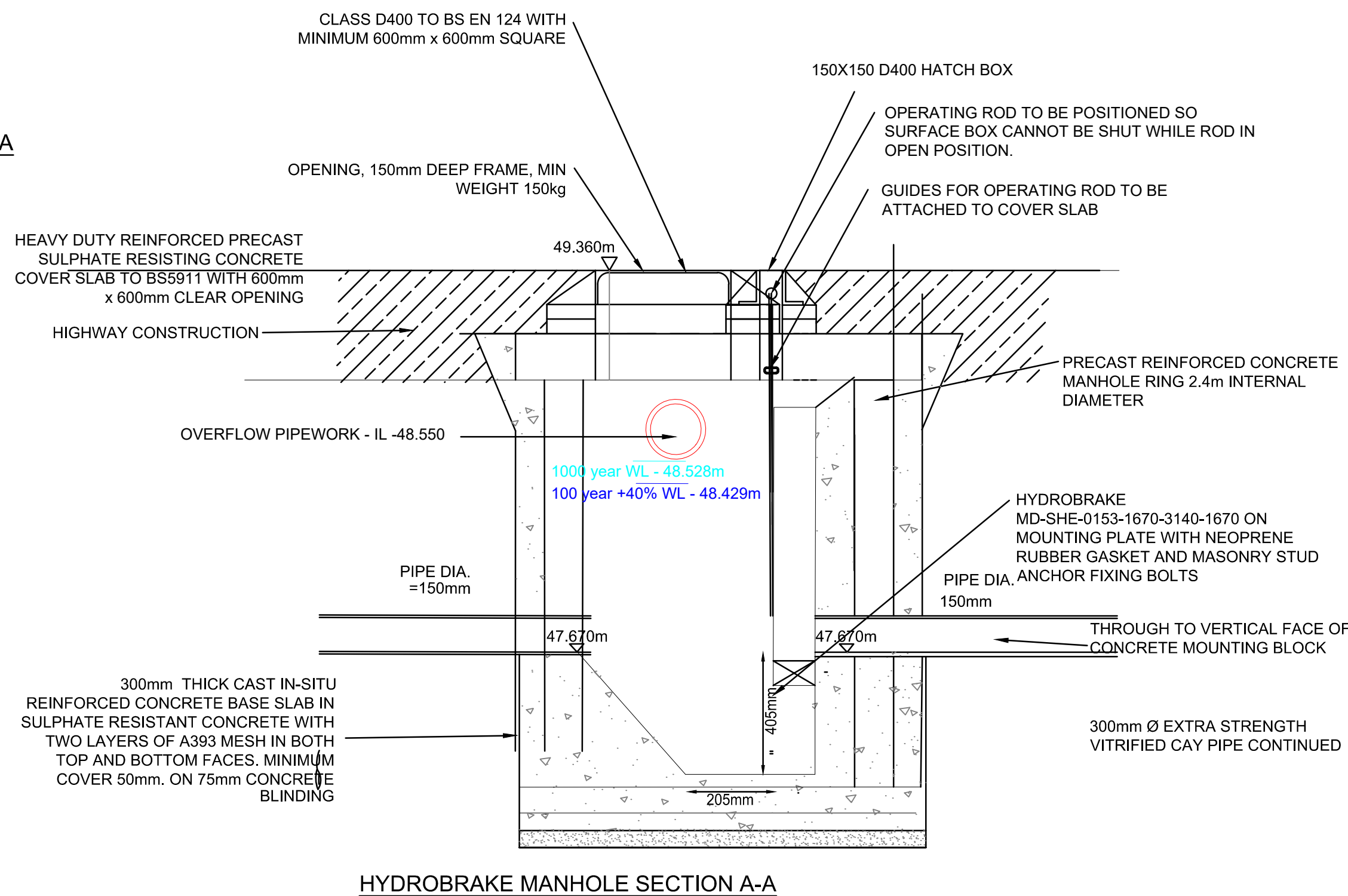
PROJECT:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
210005	RDG	XX	XX	DR	C	0100	C4



NOTES



1:20 DETAIL
HYDROBRAKE MANHOLE
PLAN AND SECTION



HYDROBRAKE MANHOLE SECTION A-A

THE CONTRACTOR SHALL PROHIBIT THE MOVEMENT OF CONSTRUCTION PLANT ACROSS THE STORAGE TANK AND WHERE NECESSARY PROVIDE ADDITIONAL SUPPORT AND PROTECTION TO THE STRUCTURE. PARTICULARLY POST CONSTRUCTION, TEMPORARY FENCING CAN BE USED TO PROHIBIT TRADE STOCKS, PILLING MATERIALS, HEAVY PLANTS ETC.,

INLET/OUTLET PIPES MUST BE SUPPORTED WITH CONCRETE TO PROTECT IT DURING BACKFILLING

BACKFILL OPTIONS ABOVE THE MODULAR UNIT :

- MIN 100mm THICK SELECTED EXCAVATED MATERIAL IF SEEN SUITABLE BY THE SITE ENGINEER.
- 100 mm THICK COARSE SAND OR CLASS 6H SELECTED GRANULAR MATERIAL.
- BACKERBOARD HD (IS A PREMOULDED BOARD FOR USE AS PROTECTION AGAINST BACKFILL)

ESS PLUVIAL CUBE MODULE
TO BE WRAPPED WITH TUFLEX
IMPERMEABLE GEOMEMBRANE
WITH A mm LAP HEAT WELDED
JOINTS. (AS SUPPLIED BY
ALDERBURGH LIMITED).

**ESS PLUVIAL CUBE MODULE
(500 mm LONG x 500 mm WIDE X
500 mm HIGH) ARRANGEMENTS
AS SHOWN. MODULES CAN BE
SECURED AS A 'HOUSE
KEEPING' MEASURE WITH
PLASTIC PROPRIETY CABLE
TIES.**

150mm THICK CONCRETE SLAB
WITH 1 LAYER A393 MESH.
CONCRETE TO BE MIN C35
WITH SULPHATE RESISTANCE
CLASS DC2. SLAB TO EXTEND
500mm BEYOND TANK ON ALL
SIDES.

TO PROTECT THE WATERPROOF TUFLEX GEOMEMBRANE DURING BACKFILLING OPERATION, OVERLAY THE TOP AND SIDES WITH GEOTEX 300 PP NEEDLE PUNCHED NON-WOVEN PROTECTION GEOTEXTILE WITH A LAPPED JOINTS (AS SUPPLIED BY ALDERBURGH LIMITED).

BACKFILL SUGGESTIONS
OPTIONS AROUND THE SIDES
OF MODULAR UNIT:

- 100mm THICK SELECTED EXCAVATED MATERIAL IF SEEN SUITABLE BY THE SITE ENGINEER.
- BACKERBOARD HD (IS A PREMOULDED BOARD FOR USE AS PROTECTION AGAINST BACKFILL)

PIPES CONNECTED TO THE ATTENUATION TANK USING HEAVY DUTY PIPE COLLARS (HEAT WELDED TO TULFEX IMPERMEABLE GEOMEMBRANE) WITH STAINLESS STEEL STRANGLE BANDS FOR FASTENING AROUND THE PIPE (AS SUPPLIED BY ALDERBURGH LIMITED).



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C01	CONSTRUCTION ISSUE	24.04.22	PB	PB
P04	STAGE 4	18.02.22	PB	PB
P03	PRELIMINARY	17.12.21	PB	PB
P02	PRELIMINARY	09.07.21	PB	PB
P01	PRELIMINARY	20.04.21	PB	PB

REV	DESCRIPTION	DATE	BY	CHK
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CLIENT:

ERIC WRIGHT

IN ASSOCIATION WITH:

GREAT PLACES HOUSING GROUP LTD

PROJECT:

ANCOATS DISPENSARY

TITLE:

PROPOSED DRAINAGE SPECIFIC DETAILS

ENG/TECH:	CSE:	ICSE:	SCALE: 1:20 @ A1
PB	PB	ED	STATUS ISSUE: D2

STATUS: PRELIMINARY

****UNLESS ISSUED FOR CONSTRUCTION - WORKS AT CLIENT/CONTRACTORS RISK****

SUITABILITY: S2 - Issued for Information

PROJECT:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
210005	RDG	XX	XX	DR	C	0107	C01

NOTES

600 X 600 CLEAR OPENING
DUCTILE IRON COVER AND FRAME TO BE
BS EN124 KITEMARKED, CLASS D400 AND
150mm DEEP IN HIGHWAY. BEDDED ON
CLASS M1, M2 OR EPOXY MORTAR.
APPROVED PACKING MATERIAL MAY BE
USED IF REQUIRED. MANUFACTURERS
NAME TO BE CLEARLY VISIBLE

CLASS M1, M2 OR EPOXY
MORTAR HAUNCHING TO
M.H. COVER AND FRAME
COVER SLAB WITH 675 X 675 ACCESS
(BS5911 KITEMARKED) BEDDED ON
MORTAR.

LIFTING EYES IN CONCRETE
RING TO BE POINTED

DOUBLE WIDTH STEP IRONS
AT 250mm CENTRES
VERTICALLY SHOULD BE
INSTALLED IN ALL MANHOLES
UPTO 6m DEEP

ALL INSITU CONCRETE TO BE C20
WITH SULPHATE RESISTING CEMENT
UNLESS OTHERWISE AGREED

HIGH STRENGTH CONCRETE
TOPPING TO BE BROUGHT UP
TO A DENSE SMOOTH FACE
NEATLY SHAPED AND FINISHED
TO ALL BRANCH CONNECTIONS
(MIN THICKNESS 20mm)
CONSTRUCTION JOINT

DISTANCE BETWEEN TOP OF PIPE
AND UNDERSIDE OF PRECAST
SECTION TO BE MIN 50mm

INVERTS TO BE FORMED
USING CHANNEL PIPES

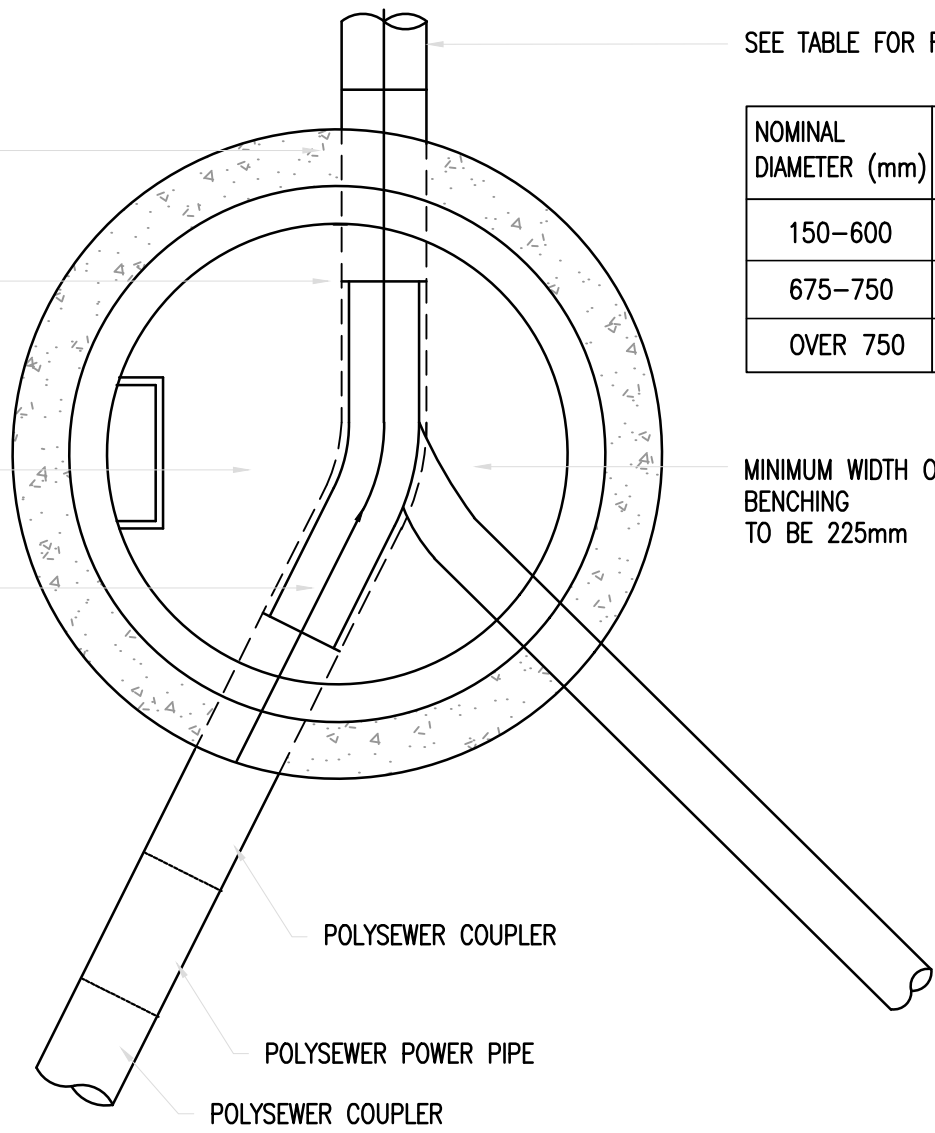
JOINT TO BE AS CLOSE AS POSSIBLE
TO FACE OF MANHOLE TO PERMIT
SATISFACTORY JOINT AND
SUBSEQUENT MOVEMENT

PIPE JOINT WITH CHANNEL
TO BE LOCATED MIN 100mm
INSIDE FACE OF MANHOLE

MINIMUM WIDTH OF BENCHING
TO BE 500mm

ALL CHANNELS IN MANHOLES
TO BE CLAYWARE

MANHOLES WITH OUTGOING
PIPES GREATER THAN 600mm
DIA SHOULD BE FITTED WITH GAIRD
BARS, SAFETY CHAINS
OR OTHER SAFETY DEVICES



TYPICAL MANHOLE DETAIL-TYPE B

SEWERS FOR ADOPTION - 6th EDITION.
MAX DEPTH FROM GROUND LEVEL TO SOFFIT OF PIPE 3.0m AND
600mm X 600mm CLEAR OPENING ACCESS.
THE DESIGN OF MANHOLES WILL NEED TO COMPLY WITH THE
UNDERTAKER'S SAFETY POLICY.

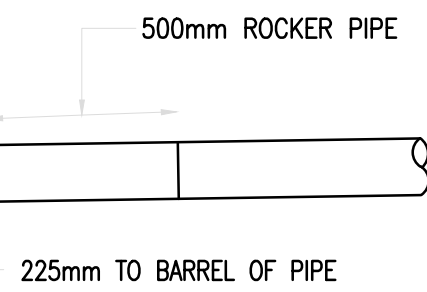
675mm MAX TO FIRST STEP
PROPRIETARY ADJUSTING UNIT (LOAD
BEARING SLAB) (BS5911
KITEMARKED) WITH 600 X 600
ECCENTRIC ACCESS HOLE (BS752)
BEDDED ON MORTAR.

PRECAST CONCRETE CHAMBER
SECTIONS AND COVER SLAB TO
BE BEDDED WITH MORTAR,
PROPRIETARY BITUMEN OR
RESIN MASTIC SEALANT

150mm CONCRETE SURROUND
CHAMBER HEIGHT
(NOT LESS THAN 900mm)

BENCHING SLOPE TO
BE 1 IN 10 TO 1 IN 30

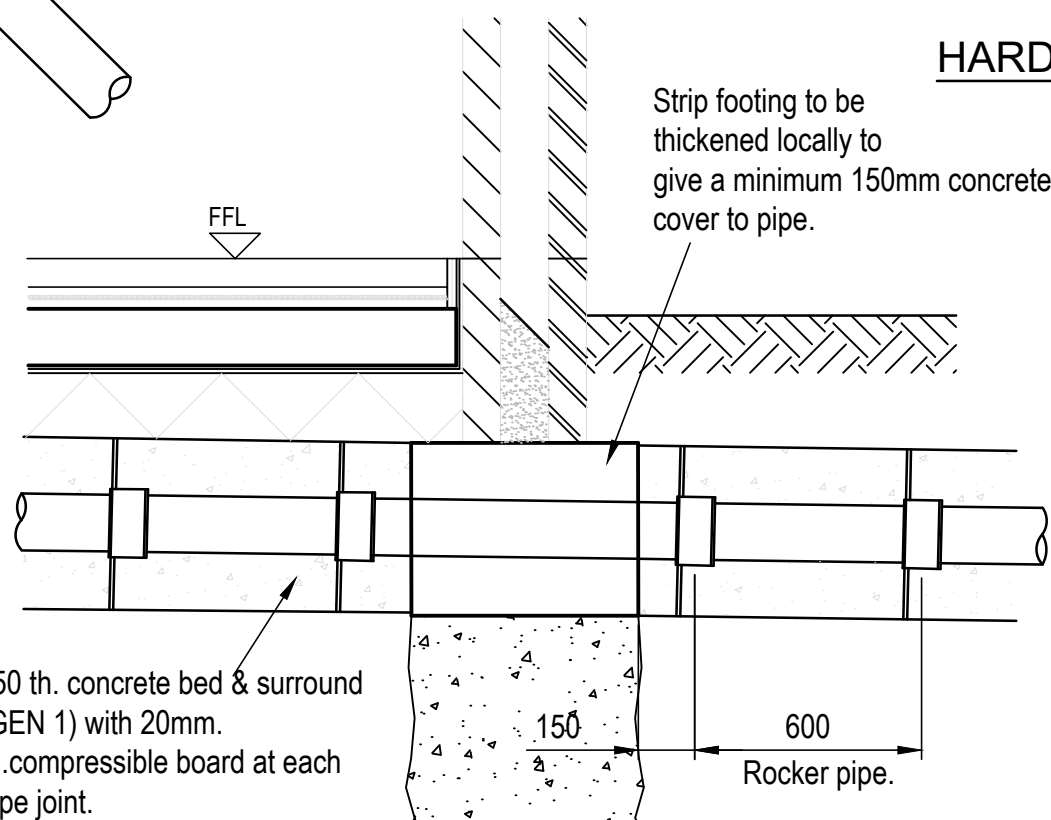
THE BOTTOM PRECAST MANHOLE
RING TO BE BUILT INTO BASE
CONCRETE MIN 100mm



SEE TABLE FOR ROCKER PIPE DETAILS

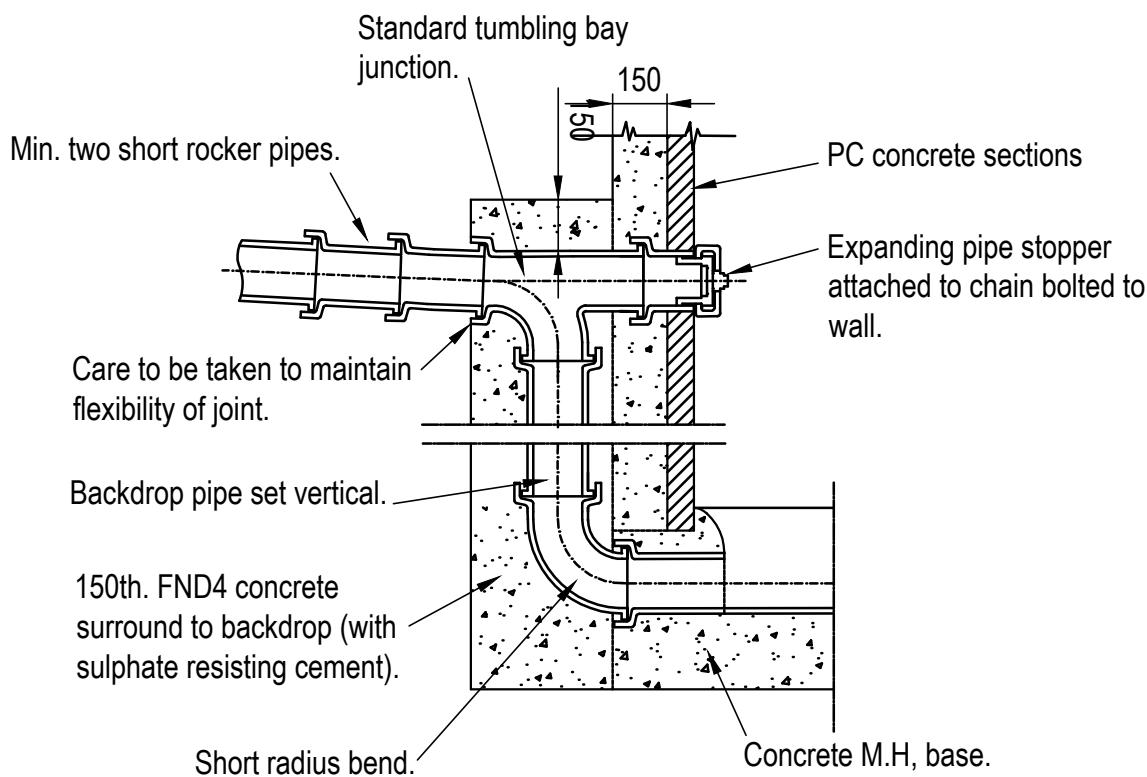
NOMINAL DIAMETER (mm)	EFFECTIVE LENGTH (m)
150-600	0.6
675-750	1.0
OVER 750	1.25

MINIMUM WIDTH OF
BENCHING
TO BE 225mm

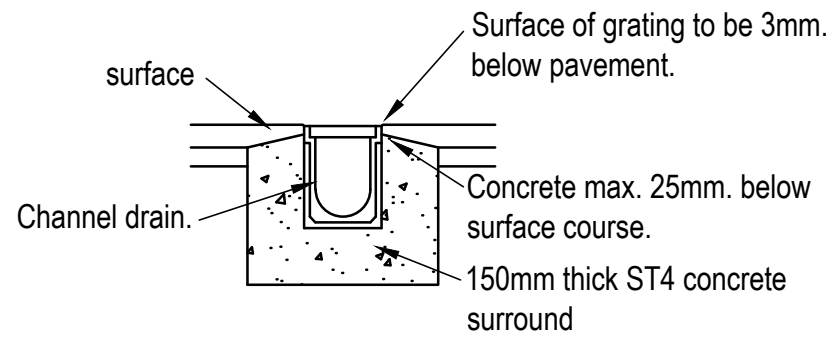


DETAIL OF PIPE THROUGH FOUNDATION

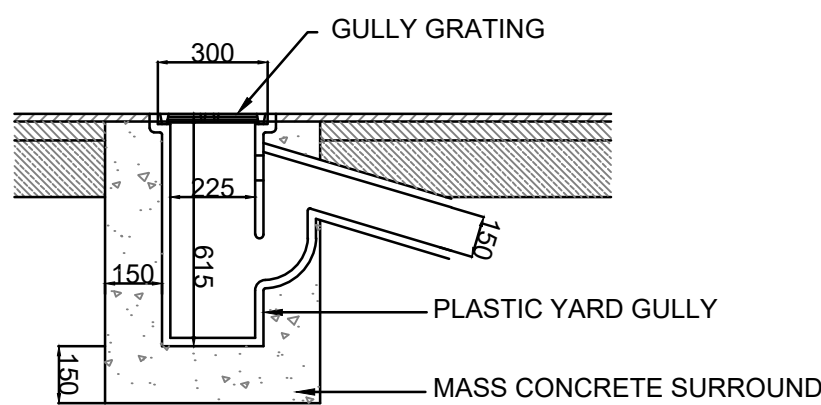
SCALE 1:25



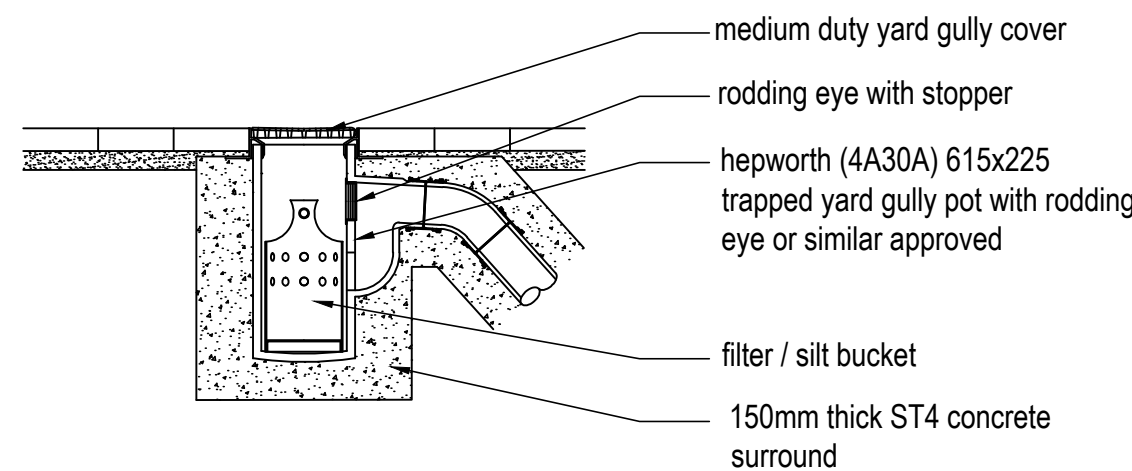
VERTICAL BACKDROP DETAIL



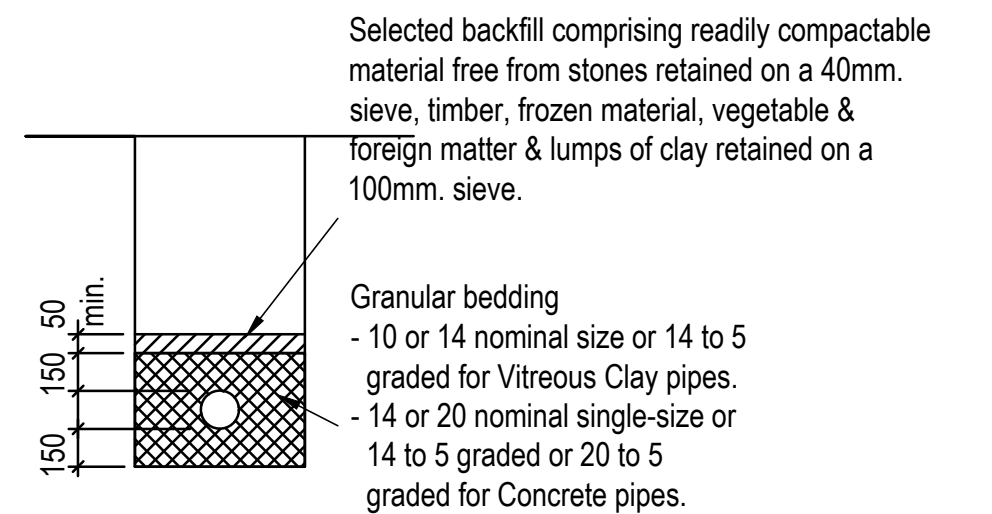
CHANNEL DRAIN



HARD LANDSCAPE GULLY

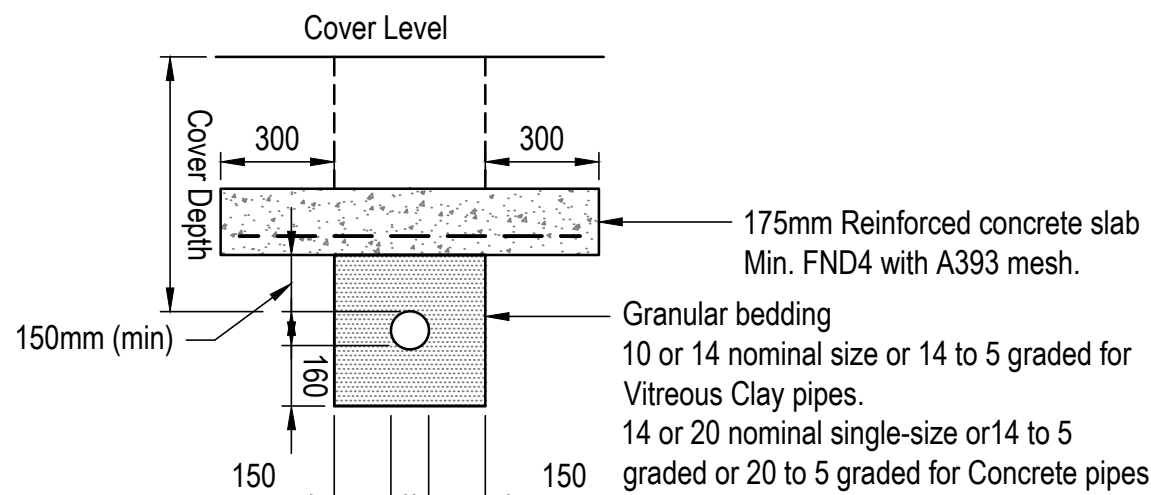


YARD GULLY



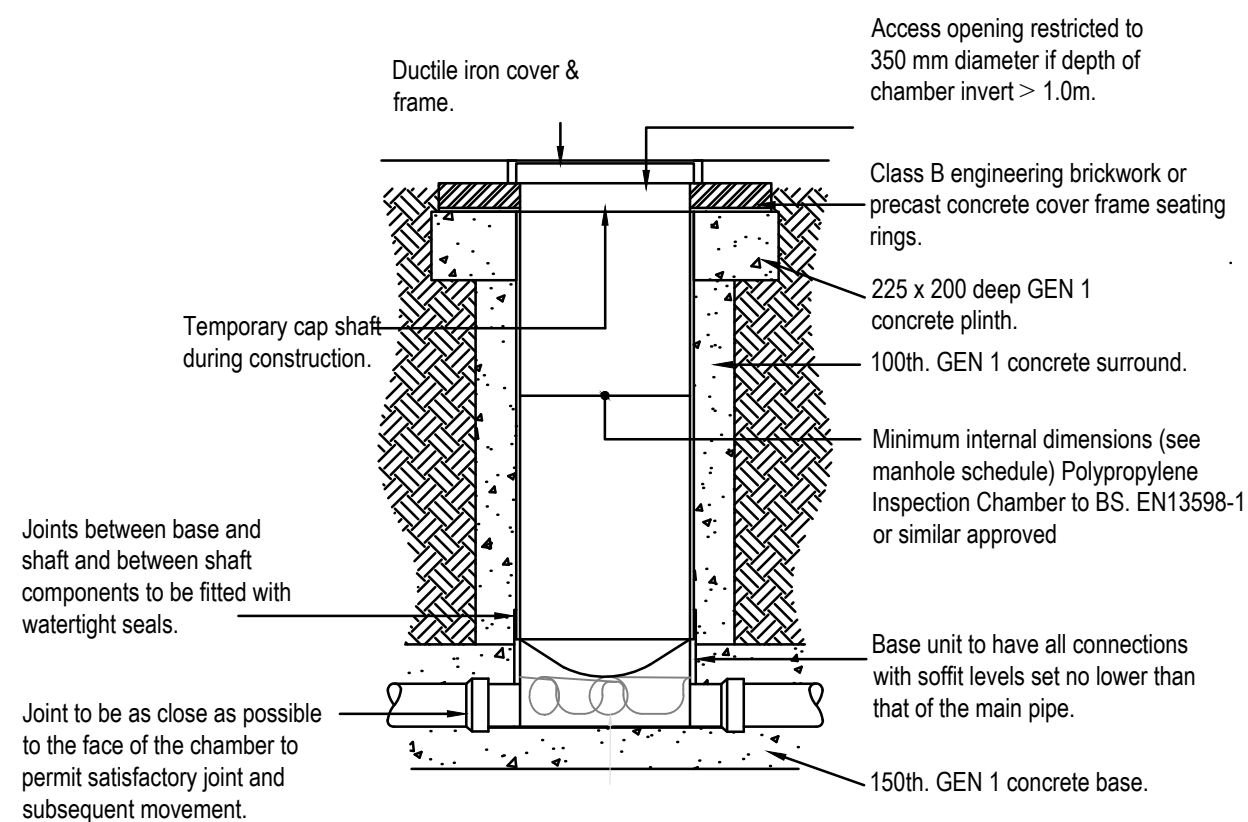
BEDDING DETAIL - CLASS S

(Where depth of cover is grater than 900mm in
landscaped areas and 1200mm in roads &
footpaths / highway verge)



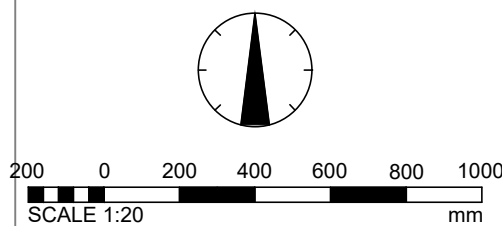
Bedding Detail - Concrete
Slab Protection

(Where depth of cover is less than 900mm in landscaped
areas or 1200mm in roads & footpaths)
Scale 1:25



450mm. DIA. INSPECTION CHAMBER
DETAIL 100 & 150 DIA. Max Depth 3m

SCALE 1:20



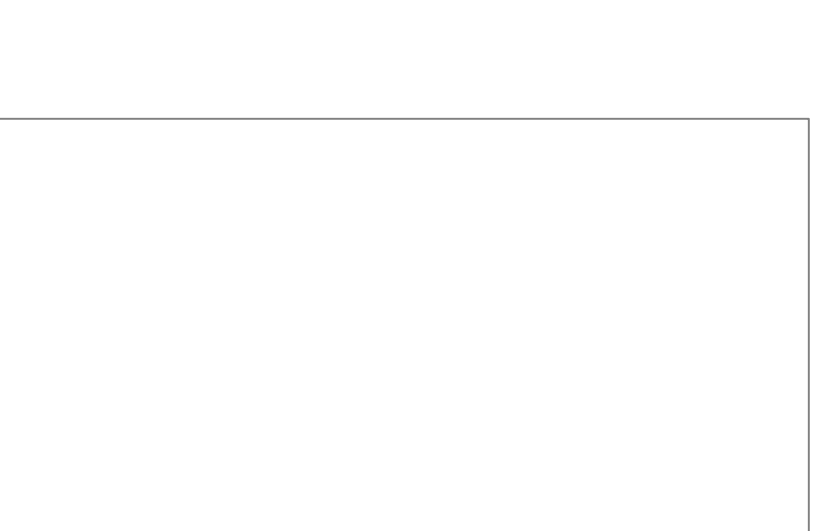
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DRAWING NOTES:

CDM REGULATIONS 2015

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C1	CONSTRUCTION ISSUE	25.04.22	AP	PB
REV	DESCRIPTION	DATE	BY	CHKD
ORIGINATOR:				
RIDGE PROPERTY & CONSTRUCTION CONSULTANTS				
26th FLOOR BELVEDERE HOUSE BOOTH STREET MANCHESTER, M2 4AW				
TEL: 0161 833 9579 WWW.RIDGE.CO.UK				

CLIENT:	ERIC WRIGHT
IN ASSOCIATION WITH:	GREAT PLACES HOUSING GROUP LTD
PROJECT:	ANCOATS DISPENSARY
TITLE:	PROPOSED DRAINAGE TYPICAL DETAILS

ASSOCIATION WITH:

GREAT PLACES HOUSING GROUP LTD

PROJECT:

ANCOATS DISPENSARY

TITLE:

PROPOSED DRAINAGE
TYPICAL DETAILS

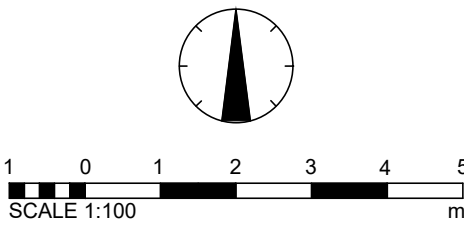
ENG/TECH:	CSE:	ICSE:	SCALE:	1:100	@	A1
PB	PB	ED	STATUS ISSUE:	D2		

STATUS:

CONSTRUCTION

UNLESS ISSUED FOR CONSTRUCTION - WORKS AT CLIENT/CONTRACTORS RISK

SUITABILITY:	S4 - Issued for Construction Approval						
PROJECT:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
210005	RDG	XX	XX	DR	C	0105	C1



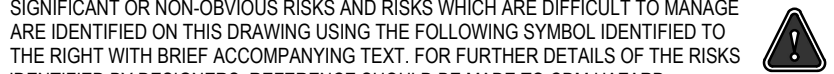
MANHOLE SCHEDULE									
MANHOLE NO.	MANHOLE CO-ORDINATES	COVER LEVEL (m)	DEPTH TO INVERT (m)	MANHOLE SIZE	MANHOLE TYPE	PIPE IN NAME, INVERT LEVEL (m) & DIA	PIPE OUT NAME, INVERT LEVEL (m) & DIA	COVER SIZE (mm) & GRADE	COMMENTS
CW01	E:385470.260 N:398427.887	49.320	1.650	1,200	Type-B	F1.001, IL=48.300, 150mmØ	C1.000, IL=47.670, 150mmØ	600x600 D400	
CW02	E:385473.270 N:398431.507	49.584	2.004	1,500	Type-B	C1.000, IL=47.640, 150mmØ		600x600 D400	Confirm Invert Level of Existing Drain S106 Part 2 Required to be approved before Installation Specific Detail o9n Drawing 0107
FW01	E:385445.084 N:398407.182	49.380	0.780	450	IC		F1.000, IL=48.600, 150mmØ	450 B125	
FW03	E:385451.631 N:398412.851	49.350	0.750	450			BSD, IL=48.600, 150mmØ	450 B125	
FW05	E:385460.577 N:398419.848	49.350	0.750	450	IC		Pipe4 (3), IL=48.600, 150mmØ	450 B125	
FW08	E:385468.445 N:398425.966	49.350	0.750	450	IC		Pipe4 (6), IL=48.600, 150mmØ	450 B125	
FW09	E:385470.286 N:398426.703	49.350	0.970	450	IC	F1.000, IL=48.380, 150mmØ	F1.001, IL=48.380, 150mmØ	450 B125	
SW01	E:385451.650 N:398438.124	49.929	0.929	450	IC		S1.000, IL=49.000, 150mmØ	450 B125	
SW02	E:385429.719 N:398420.750	49.721	0.921	450	IC	S1.000, IL=48.800, 150mmØ	S1.001, IL=48.800, 150mmØ	450 B125	
SW03	E:385435.471 N:398413.571	49.400	1.400	450	IC	S1.001, IL=48.000, 150mmØ XXXXX, IL=48.000, 150mmØ	S1.002, IL=48.000, 150mmØ	450 B125	
SW04	E:385440.858 N:398406.272	49.400	1.470	450	IC	S1.002, IL=47.930, 150mmØ	S1.003, IL=47.930, 150mmØ	450 B125	
SW05	E:385466.443 N:398424.921	49.320	1.610	1,200	Hydrobrake	S1.003, IL=47.710, 150mmØ	S1.004, IL=47.710, 150mmØ	1200x675 D400	Hydrobrake Chamber - See Details Sheet 0107 Hydrobrake Flow - 7.5 l/s Hydrobrake Head - 1.5m

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- THIS DOCUMENT MUST NOT BE ALTERED, REPRODUCED OR DISTRIBUTED WITHOUT PRIOR WRITTEN CONSENT OF THE ORIGINATOR
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C4	COVER LEVELS UPDATED	29.07.22	AP	PB
C3	UPDATE TO INCLUDE SW AND FW	11.07.22	AP	PB
P04	UPDATE TO INCLUDE SW AND FW	22.03.22	AP	PB
P03	STAGE 4	18.02.22	PB	PB
P02	PRELIMINARY ISSUE	09.07.21	PB	PB
P01	PRELIMINARY ISSUE	30.04.21	PB	PB
REV	DESCRIPTION	DATE	BY	CHKD

ORIGINATOR:

7TH FLOOR
BELVEDERE HOUSE
12 BOOTH STREET
MANCHESTER M2 4AW

TEL: 0161 833 9579
WWW.RIDGE.CO.UK

CLIENT:

ERIC WRIGHT

IN ASSOCIATION WITH:

GREAT PLACES HOUSING GROUP LTD

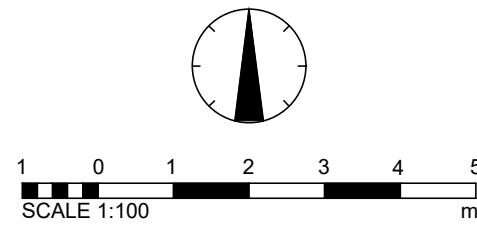
PROJECT:

ANCOATS DISPENSARY

TITLE:

PROPOSED DRAINAGE
MANHOLE SCHEDULE

ENG/TECH:	CSE:	ICSE:	SCALE:	1:100	@	A1
PB	PB	ED	STATUS ISSUE:	D2		
STATUS:						
PRELIMINARY						
UNLESS ISSUED FOR CONSTRUCTION - WORKS AT CLIENT/CONTRACTORS RISK						
SUITABILITY: S2 - Issued for Information						
PROJECT:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:
210005	RDG	XX	XX	DR	C	0102
						REV:
						C4



KERBING KEY

 HB2 KERB (100mm UPSTAND)

 PIN KERB (0mm UPSTAND)

ORIGINATOR:

RIDGE
PROPERTY & CONSTRUCTION CONSULTANTS

CLIENT: _____

IN ASSOCIATION WITH:
GREAT PLACES HOUSING GROUP LTD

ANCOATS DISPENSARY

ENG/TECH:	CSE:	ICSE:	SCALE: 1:100 @ A1
JF	PB	ED	STATUS ISSUE: D2

STATUS:	CONSTRUCTION
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****UNLESS ISSUED FOR CONSTRUCTION - WORKS AT CLIENT/CONTRACTORS RISK****

SUITABILITY: S4 - Issued for Construction Approval

PROJECT:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
210005	RDG	XX	XX	DR	C	0300	C2

PROPERTY & CONSTRUCTION CONSULTANTS

RIDGE

APPENDIX B –

ANCOATS DISPENSARY DRAINAGE MAINTENANCE SCHEDULE

Organisation responsible for maintenance: _____

Contact Details – Name: _____

Number: _____

Documents:

- Drainage Layout
- Drainage Details

SUDS have been specified for the site to promote sustainable management of surface water for both flow attenuation and water quality. This document outlines the maintenance schedules for each system in order to maintain the efficiency of the drainage network. The schedules have been created based on guidance from CIRIA C753.

Table 1: Pipes and Manholes Maintenance Schedule

Maintenance schedule	Required Action	Recommended Frequency
Occasional maintenance	Visual inspection of covers, gratings and manhole chambers.	Annually or as required.
	Cleaning out manholes.	Annually or as required.
	CCTV inspection of drainage pipes.	Annually or as required.
Remedial actions	Reactive cleaning of manholes and drains.	During flooding events.
	Cleaning out drains by water jetting.	As required.
	Replace damaged covers, grating and manhole components.	As required.
	Rehabilitation – repairs, relining or replacement.	As determined by inspections.

Table 2: Geocellular Tank Maintenance Schedule

Maintenance Schedule	Required Action	Recommended Frequency
Regular Maintenance	Inspect and identify areas that are not operating correctly. If required, take remedial action	Monthly for 3 months, then annually or as required
	Remove debris from the catchment surface	Monthly
	Remove sediment from pre-treatment structures	Annually

Remedial Actions	Repair / rehabilitate inlets/outlet and vents	As required
Monitoring	Inspect inlets, outlets and vents to ensure they are in good condition and operating as designed.	Annually
	Survey Inside of tank for sediment build up and remove is necessary	Every 5 years or where concerned about operation

Table 3: Drainage Channels and Gullies

Maintenance schedule	Required Action	Recommended Frequency
Occasional maintenance	Visual inspection of covers, gratings and manhole chambers.	Annually or as required.
	Cleaning out sumps and outlets	Annually or as required.
Remedial actions	Reactive cleaning of drainage channels.	During flooding events.
	Cleaning out channels by water jetting.	As required.
	Replace damaged covers and gratings	As required.
	Rehabilitation – repairs, or replacement.	As determined by inspections.

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APPENDIX C –

Technical Specification

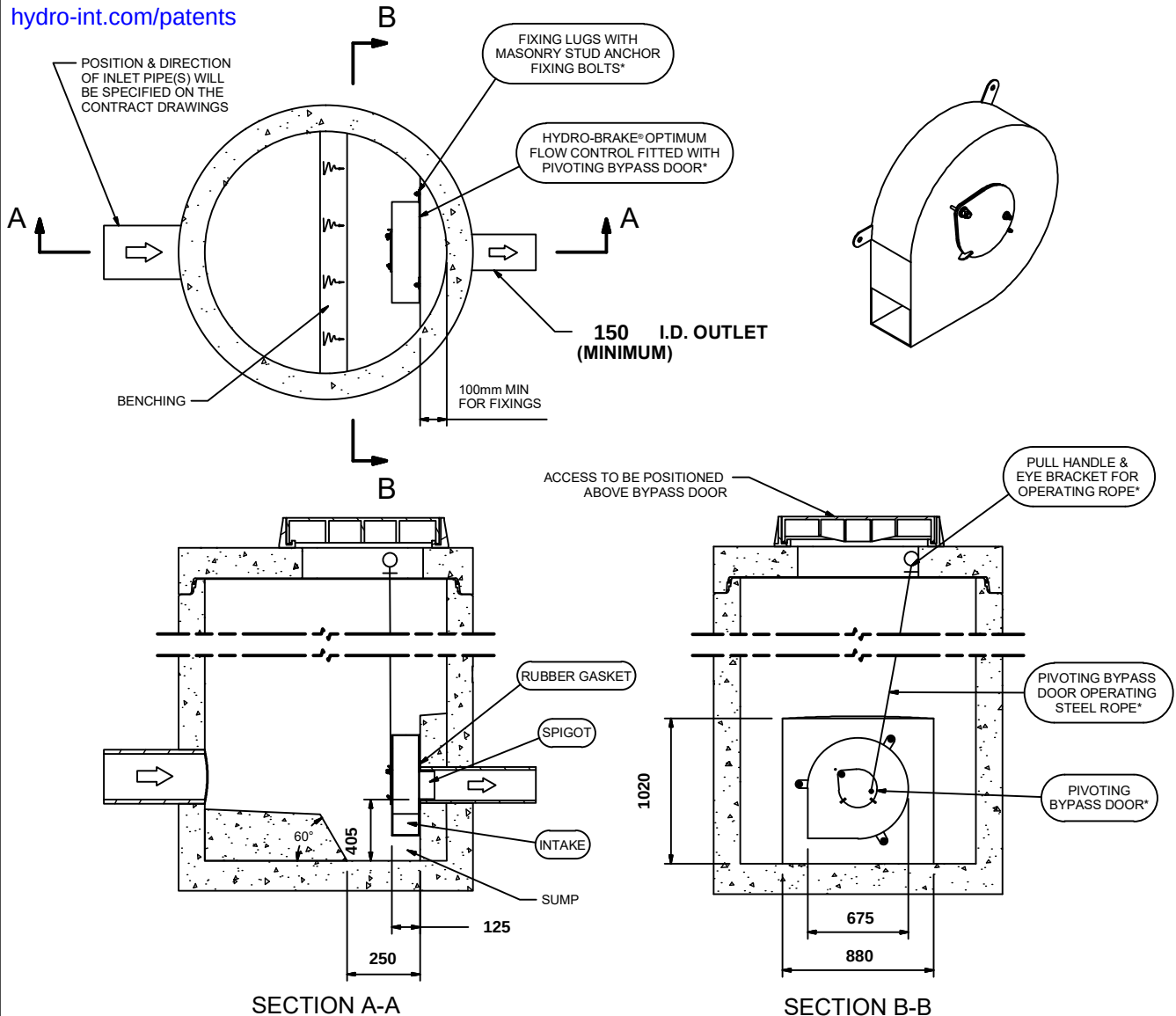
Control Point	Head (m)	Flow (l/s)
Primary Design	1.550	7.500
Flush-Flo™	0.454	7.492
Kick-Flo®	0.946	5.955
Mean Flow		6.560

Hydro-Brake® Optimum Flow Control including:

- 3 mm grade 304L stainless steel
- Integral stainless steel pivoting by-pass door allowing clear line of sight through to outlet, c/w stainless steel operating rope
- Beed blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet



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IMPORTANT:

○ LIMIT OF HYDRO INTERNATIONAL SUPPLY

THE DEVICE WILL BE HANDED TO SUIT SITE CONDITIONS
FOR SITE SPECIFIC DETAILS AND MINIMUM CHAMBER SIZE REFER TO HYDRO INTERNATIONAL
ALL CIVIL AND INSTALLATION WORK BY OTHERS

* WHERE SUPPLIED

HYDRO-BRAKE® FLOW CONTROL & HYDRO-BRAKE® OPTIMUM FLOW CONTROL ARE REGISTERED TRADEMARKS FOR FLOW CONTROLS DESIGNED AND MANUFACTURED EXCLUSIVELY BY HYDRO INTERNATIONAL

THIS DESIGN LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE.

**DESIGN
ADVICE**



The head/flow characteristics of this SHE-0119-7500-1550-7500 Hydro-Brake® Optimum Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve.
The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

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International®

DATE 4/6/2021 6:13 AM

SITE Ancoats Dispensary

DESIGNER Philip Barrett

REF ACD - HYD - 01

SHE-0119-7500-1550-7500

Hydro-Brake® Optimum

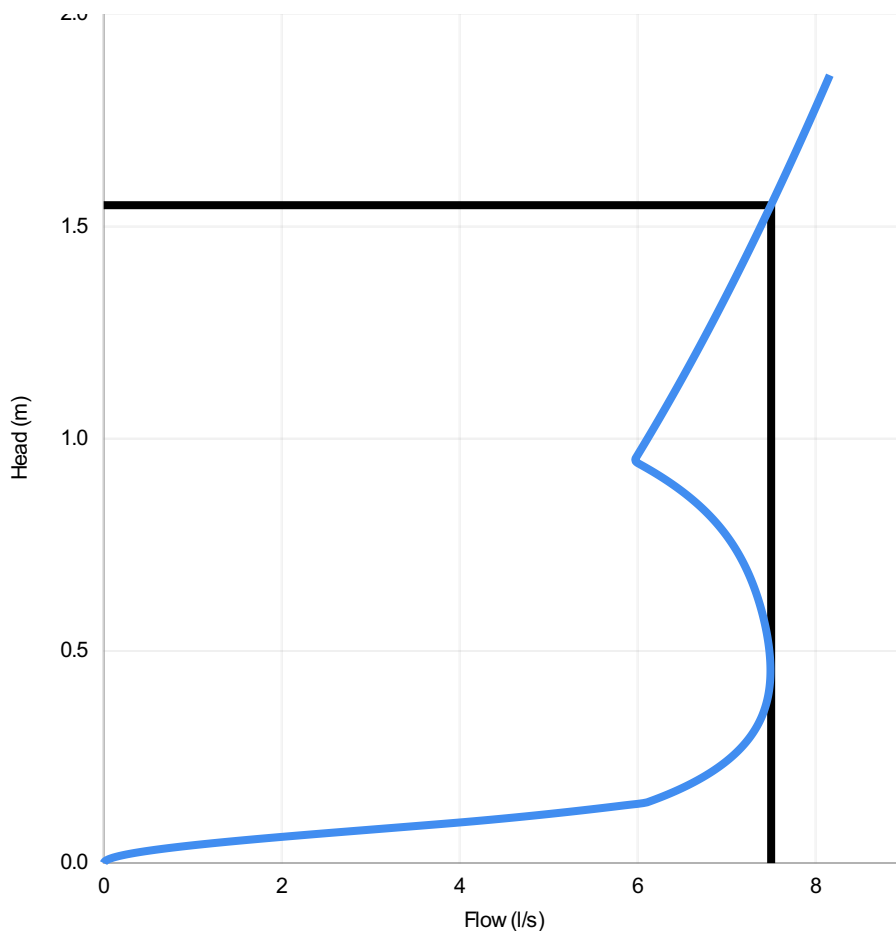
Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	1.550	7.500
Flush-Flo	0.454	7.492
Kick-Flo®	0.946	5.955
Mean Flow		6.560



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Head (m)	Flow (l/s)
0.000	0.000
0.053	1.550
0.107	4.586
0.160	6.320
0.214	6.822
0.267	7.141
0.321	7.337
0.374	7.443
0.428	7.488
0.481	7.488
0.534	7.457
0.588	7.401
0.641	7.323
0.695	7.217
0.748	7.076
0.802	6.883
0.855	6.623
0.909	6.275
0.962	6.002
1.016	6.154
1.069	6.303
1.122	6.448
1.176	6.589
1.229	6.727
1.283	6.862
1.336	6.994
1.390	7.124
1.443	7.250
1.497	7.375
1.550	7.497

DESIGN ADVICE



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The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

Hydro
International

DATE	06/04/2021 06:13
Site	Ancoats Dispensary
DESIGNER	Philip Barrett
Ref	ACD - HYD - 01

SHE-0119-7500-1550-7500
Hydro-Brake Optimum®