



DRAINAGE STATEMENT

RYEFIELDS FARMHOUSE, OAK TREE LANE

Residential Development

2026-C160-DS03

August 2026

Prepared on Behalf of Chichester Carpentry & Building Ltd

DOCUMENT CONTROL

Project Name: Ryefields Farmhouse, Oak Tree Lane
Development Type: Residential Development
Report Type: Drainage Statement
Client Name: Chichester Carpentry & Building Ltd
Document Reference: 2026-C160-DS03
Prepared by: Dan Lytton

REVISIONS:

Issue	Date	Status	Issued by
01	14/05/2026	Original Issue	DJL
02	08/07/2026	Revised Issue	DJL
03	3/8/2026	Revised Issue	DJL

DRAWINGS

2026-C160-001 Geotechnical Investigation Plan
2026-C160-002 Engineering GA - Levels & Drainage Design
2026-C160-003 Proposed Catchment
2026-C160-004 Interception Assessment
2026-C160-005 Construction Details
2026-C160-006 Manhole Schedule & Impermeable Areas Schedule

APPENDICES

Appendix A Greenfield Runoff Calculation
Appendix B Geotechnical Investigation Extracts
Appendix C Southern Water Sewer Records
Appendix D Planning Stage Drainage Design
Appendix E Southern Water S106 Approval
Appendix F Evidence of Deed of Easement
Appendix G Hydraulic Modelling Calculations
Appendix H Sudsstore Controflow Universal Flow Control Detail
Appendix I GreenBlue SuDSPod Detail
Appendix J Maintenance Schedule



FLOOD AND DRAINAGE STATEMENT

Harbourstone Design Limited is instructed by Chichester Carpentry & Building Ltd to prepare a Drainage Statement to support a Discharge of Condition Application for a Residential Development at Ryefields Farmhouse, Oak Tree Lane. This report is for the benefit of the Client only.

The below sets out information about the drainage design for the benefit of the application.

Existing Site Information	
Location:	Land at Ryefields Farmhouse, Oak Tree Lane, Woodgate PO20 3GU
Area:	0.20 Ha.
Existing Topography:	Fairly flat, with fall southeasterly. Site levels vary from 9.9m to 9.4m AOD.
Existing Site Use:	Greenfield
Proposed Development Type:	4 no. residential dwellings
Existing Site Greenfield Rate:	0.4 l/s (Appendix A)

Existing Geology	
Geology:	Topsoil: SILT, Silt/Clay, Made Ground Superficial Deposits: River Terrace Deposits – CLAY, Silt/Clay, Sand (below 1.4mbgl) Bedrock: London Clay Formation – CLAY, silt and sand
Hydrogeology:	Superficial Drift Aquifer: 'Secondary A' Bedrock Aquifer: 'Unproductive Strata' - Potential for some/limited shallow infiltration, above bedrock only. Groundwater Vulnerability: Medium-Low - Low vulnerability to groundwater from pollutants
Groundwater Depth:	Peak winter groundwater levels at 0.09mbgl, January 2021.
Soakage Results:	1 no. soakage test was undertaken at 2 no. trial pits on site. Results were 3.26×10^{-7} and 1.87×10^{-7} m/s.
Infiltration Viability:	Infiltration is not viable, primarily due to very shallow groundwater levels. (Drawing 001, Appendix B)



Existing Drainage	
Nearest Watercourse:	None
Nearest Surface Water Sewer:	None
Nearest Foul Sewer:	225mm dia. foul sewer south of site, in neighbouring land. Nearest manhole 9102, recorded depth 1.26mbgl. (Appendix C)
Existing Site Drainage:	Overland runoff / infiltration
Highway Drainage:	Over-the-edge runoff / infiltration
Other Drainage Conditions:	Adjacent land has approved drainage strategy, with surface water to be attenuated and discharged to watercourse at approved rate. Third party infrastructure is being constructed at time of submission & conformation of implementation will be provided separately.

Prior Design	
Planning Reference:	AL/31/22/PL
Relevant Planning Condition(s):	Condition 5: <i>"Development shall not commence, other than works of site survey and investigation, until full details of the proposed surface water drainage scheme have been submitted to and approved in writing by the Local Planning Authority..."</i> <i>"Where the design of the surface water drainage scheme relies on an adjacent development, a Deed of Easement detailing agreement of taking such drainage shall also be provided as part of the required details..."</i>
Planning Drainage Design:	KNC2107-602-02 Rev E, Kazys Narbutas Consulting, March 2022 (Appendix D)
Proposed Strategy:	Foul water discharge to public foul sewer. Surface water discharge to Third-Party surface water drainage infrastructure, to be further attenuated prior to discharge to watercourse.
Sewerage Authority Approval:	Legal Agreement obtained through S106 Connection Approval (Appendix E)
Third Party Land Approval:	Evidence of Deed of Easement (Appendix F)



Surface Water Drainage Solution	
Proposed Catchment Area:	0.099 Ha
Proposed Catchment Greenfield Rate (Pro-Rata):	Qbar: 0.2 l/s
Drainage Hierarchy:	• Use of living roof, rainwater harvesting, and tanked permeable pavement to ensure that all runoff is subject to interception drainage at source. • Infiltration not viable. • Discharge to watercourse, via Third-party infrastructure as agreed.
Calculations:	Discharge at up to 0.6l/s. No Flooding in Design Storm Event (Appendix G)
Viable SuDS:	Living roof, rainwater harvesting, tanked permeable pavement
Surface Water Storage:	53.6m ³ permeable pavement (30% voids)
Surface Water Discharge:	Restricted discharge via Controflow Universal Flow Control Chamber (Appendix H): • Protected orifice • PS3: 21mm diameter (0.6 l/s design rate, 0.75m design head) • Proposed discharge rate less represents 3 x greenfield rate for catchment area
Design Standards:	1 in 100 year storm, 45% climate change, 10% urban creep
Further Comments:	Utilisation of living roof and GreenBlue SuDSPod prior to discharge from all RWP's will further slow runoff compared to modelling results. Features will reduce first-flush flows and provide evapotranspiration for first 5mm of rainfall, as well as irrigation of surface level planting. GreenBlue SuDSPod also utilise integral attenuation and flow control to reduce storm flow rates, as seen in Appendix I .
Surface Water Treatment: (Pollution Hazard Indices / Pollution Treatment Indices)	Residential Parking: Low, TSS = 0.5, M = 0.4, H = 0.4 Residential Roofs: Very low, TSS = 0.2, M = 0.2, H = 0.05 Permeable Pavement: TSS = 0.7, M = 0.6, H = 0.7 Bioretention system: TSS = 0.8, M = 0.8, H = 0.8



Mitigation against flood risk:	Proposed finished floor levels are raised above surrounding and existing ground levels , to ensure residual risk of internal flooding from shallow groundwater mitigated against for lifetime of development.
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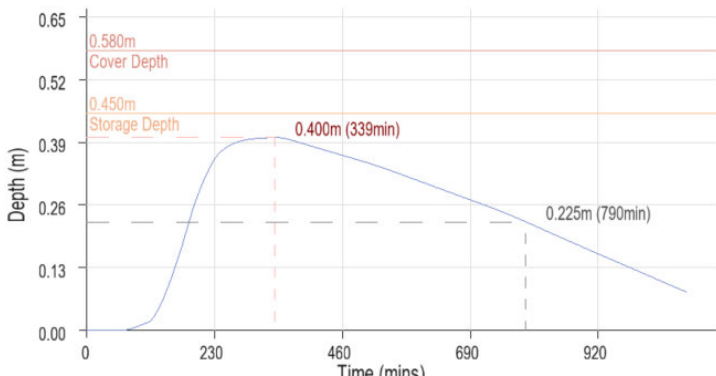
Foul Drainage Solution	
Drainage Hierarchy:	Public foul sewer south of site.
Foul Proposals:	Private foul run from proposed residential development to public sewer, by gravity
Discharge:	Discharge to public foul sewer with direct connection to existing public foul manhole.
Further Comments:	Expected peak foul discharge 0.19 l/s (in accordance with Water UK Design & Construction Guidance). Legal Agreement for connection and strategy with Southern Water under S106 obtained (Appendix E)

Further Design Notes	
Drainage Plans (inc. areas, full drainage details, specification, details, water quality):	Detailed drainage plan provided, and accompanying construction details and flow control specification. Water quality treatment is covered on the previous page.
Biodiversity & Amenity Benefits:	The proposals for Living Roof and Raised Planters (rainwater harvesting) with compatible planting offer attractive features that provides ecological and amenity benefits.
Arboricultural Constraints:	None – no RPZs. Design to be reviewed by arboricultural consultant, minor tree removal, mitigation and/or protection to be made as required.
Hydraulic Modelling:	Modelling shows some surcharged nodes in 1yr & 10yr + 40%CC (climate change) events. This is due to the nature of the proposed design attenuating runoff via a flat system utilising permeable pavement. Use of Living Roof and Raised Planters (rainwater harvesting) will reduce first flush flows and mitigate surcharging in minor storm events. Modelling results show no flooding up to the design event.
Maintenance Responsibilities:	Maintenance plan details responsibilities (Appendix J) & complies with Arun drainage maintenance checklist (https://www.arun.gov.uk/designer-checklists/)



Arun Checklist Adherence	
Ground Investigation Results:	Groundwater monitoring provided: • Full groundwater monitoring data • Plan showing location (Drawing 001) • Depths of holes, dates of observations, depths to groundwater • Evidence of strata encountered • Peak groundwater levels and depths in mbgl and mAOD • Data demonstrates infiltration is not viable (shallow groundwater) Infiltration Testing provided: • Infiltration testing results provided • Data demonstrates infiltration is not viable (failed tests)
Statement:	As provided here, explaining proposals, adherence, hierarchy followed, reasoning and relevant approvals.
1. Runoff Destination:	
Existing Site:	Existing site information: • No existing surface water assets • No flood risk from rivers, sea or surface water. • No flood risk from existing surface water infrastructure • Shallow groundwater, area susceptible to groundwater emergence. Mitigated with raised FFLs, shallow SuDS, raised planters for rainwater harvesting
Proposed Hierarchy:	1. Rainwater reuse YES 2. Infiltration into the ground NOT VIABLE 3. Hybrid infiltration and restricted discharge to an appropriate water body or surface water sewer is proposed NOT VIABLE 4. Restricted discharge to a water body YES 5. Restricted discharge to a surface water sewer or another piped surface water drainage system 6. Restricted discharge to a public combined sewer
Evidence to justify proposed discharge method:	Approved strategy at planning.



Details of consent/off-site works provided:	Evidence of Deed of Easement Provided
Other Design Items:	All pipework designed to Building Regulations Ground raising avoided where possible (base of permeable pavement and foundations roughly level with existing ground levels)
2. Interception Drainage	
Assessment:	Drawing 004 shows all runoff receives interception drainage.
3. Extreme rainfall and flooding	
Proposed Rate:	3xGFR for catchment area only.
Design Criteria:	FEH22 rainfall point data for site location 45% climate change for 1% AEP storm event 10% urban creep on all individual catchment areas CV of 1.0 No flooding in design event No existing flood risk or flood storage on-site
4. Water Quality:	As covered above, adequate treatment for pollutants
5/6. Amenity & Biodiversity:	As covered above, provided by planters and living roof
7. Construction, operation, maintenance:	Detailed in Maintenance Plan (Appendix J) Controflow has integral blockage protection (Appendix H)
Modelling	As detailed above. Half drain times for critical 3.33% + AEP event below PP4 assigned to Manhole D4 (30Yr+40% 360Min Winter) 
Plans:	Provided as required: Contributing area plan



	• Proposed design • Calculations • SuDS details • Pipe details • Control feature details • Construction details
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DRAWINGS

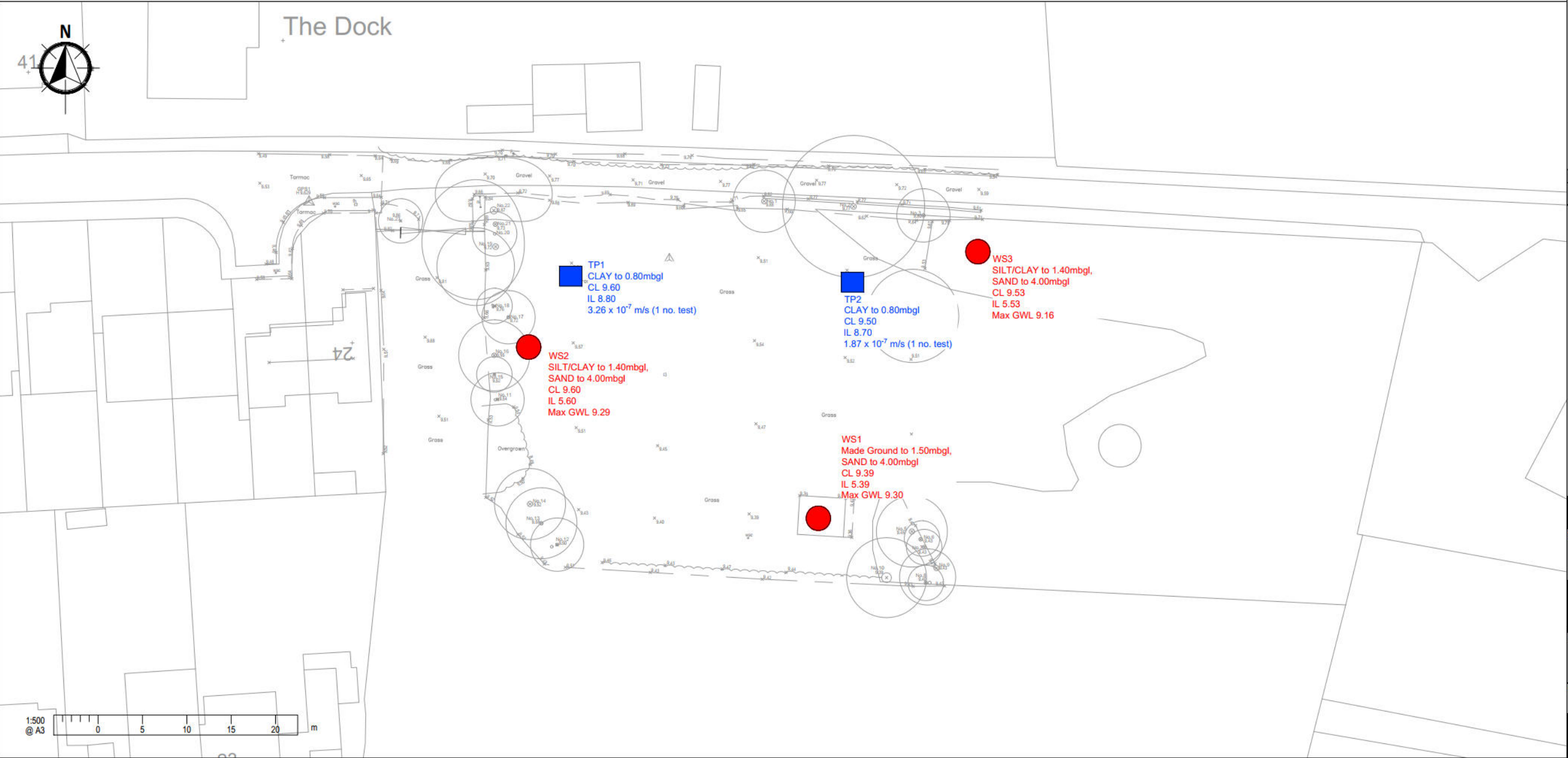
2026-C160-001	Geotechnical Investigation Plan
2026-C160-002	Engineering GA - Levels & Drainage Design
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2026-C160-004	Interception Assessment
2026-C160-005	Construction Details
2026-C160-006	Manhole Schedule & Impermeable Areas Schedule

1. This drawing is to be read in conjunction with any other information, drawings and specification issued by Principle Designer, Architect and the Harbournstone Design package for this project. Any discrepancies found are to be reported immediately to the Engineer.
2. Harbournstone Design accepts no responsibility for inaccuracies in data provided by third parties such as topographic surveys or Ordnance Survey mapping.
3. Drawing to be scaled for planning purposes only, with drawing not for construction purposes. All dimensions are in millimeters unless noted otherwise and all levels are in metres from the topographic survey datum.
4. Any information given regarding existing underground services is given in good faith after consultation with the relevant authority, however accuracy is not certain. The main contractor is responsible for checking all information on site prior to work commencing and taking due care whilst undertaking the works.
5. All dimensions to be checked on site. All details and dimensions relating to sub-contractors work must be checked and agreed between the sub-contractor or supplier and the general contractor.
6. The electronic information from this drawing can not be guaranteed as dimensionally drawn exact. Figured dimensions must be used for setting out and detailing. Harbournstone Design logos and company information must be removed from copies if information is re-used.
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Infiltration Test Results – Recorded Infiltration Rates m/s			
	Test 1	Test 2	Test 3
TP1 @ 0.80m bgl within Undifferentiated River Terrace Deposits	3.26 x10 ⁻⁷ m/s	-	-
TP2 @ 0.80m bgl within Undifferentiated River Terrace Deposits	1.87 x10 ⁻⁷ m/s	-	-

Date	05/01/2021	05/02/2021	17/02/2021	05/03/2021	15/03/2021	27/11/2021	10/12/2021	06/01/2022	16/01/2022
	GWT	GWT	GWT	GWT	GWT	GWT	GWT	GWT	GWT
	(m bgl)	(m bgl)	(m bgl)	(m bgl)	(m bgl)	m bgl)	(m bgl)	(m bgl)	(m bgl)
Trial Hole									
WS1	0.09	0.74	0.98	1.40	1.50	1.40	1.80	1.00	0.90
WS2	0.31	1.00	1.30	1.40	1.50	1.60	1.80	0.82	0.90
WS3	0.37	0.90	1.20	1.40	1.55	1.60	1.80	1.00	0.85

Trial Hole	Cover Level	mAOD	mAOD	mAOD	mAOD	mAOD	mAOD	mAOD	mAOD	mAOD
WS1	9.39	9.30	8.65	8.41	7.99	7.89	7.99	7.59	8.39	8.49
WS2	9.60	9.29	8.60	8.30	8.20	8.10	8.00	7.80	8.78	8.70
WS3	9.53	9.16	8.63	8.33	8.13	7.98	7.93	7.73	8.53	8.68



-	Original Issue	-
Rev.	Amendments	Date



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Drawing Status
DISCHARGE OF CONDITIONS

Client
Chichester Carpentry & Building Ltd

Project
Ryefields Farmhouse, Oak Tree Lane

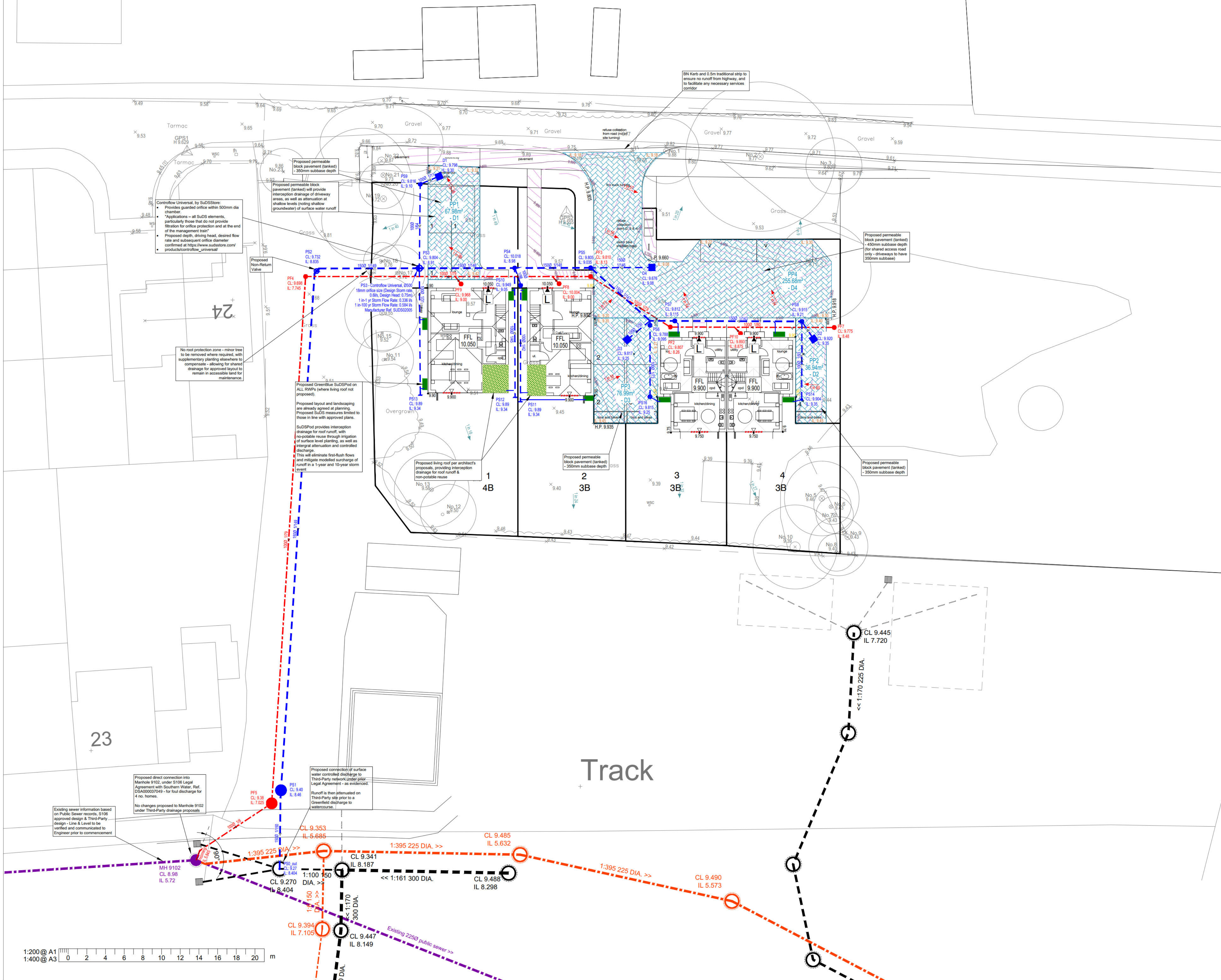
Drawing Title
Geotechnical Investigation Plan

Scale	Date	Drawn by	Checked by
1:500	May '26	DL	CT

Drawing No.	Rev.
2026-C160-001	-



The Dock



1:200 @ A1
1:400 @ A3

-SURFACE WATER DRAINAGE-

- Surface water disposal should be managed in view of the SuDS Hierarchy, set out by Arun District Council;
 - Re-use / Interception
 - Infiltration
 - Watercourse
 - Public Surface Water Sewer(s)
 - Sewer
- Ground investigation, infiltration testing and groundwater monitoring in the vicinity of the site shows that the site is underlain by Clay, and with groundwater levels up to 0.09mbgl & infiltration tests not providing sufficient fall.
- Infiltration is therefore ruled unviable. In accordance with the principles of the drainage strategy for the approved application AL3122/PL, and the Third-Party agreement with the adjacent landowner, surface water discharge will be to the adjacent site infrastructure (which attenuates runoff prior to a watercourse discharge at Greenfield rate). The Third-Party agreement allows for a 1.0ls discharge of surface water, however in accordance with Arun Drainage Policy runoff is restricted to as close to Greenfield rate as possible;
 - Greenfield: Qbar: 0.4 l/s, Q100: 1.3 l/s
 - Proposed: 1-yr storm: 0.33 l/s, Design Storm: 0.58 l/s
- In accordance with Arun District Council's drainage guidance, all runoff from the site will be captured and/or conveyed to interception drainage;
 - Permeable pavement will provide interception drainage for its own surface area only
 - Living roof and elevated planters will provide interception drainage for runoff from all roof areas
- Runoff from the access road and driveways will be captured and attenuated within 437m² of tanked permeable pavement. The access road will have a 450mm sub-base, with individual driveways a 350mm sub-base, and will drain via diffuser units. A controlled discharge to the foul drainage system will use a Controflow protected orifice chamber (18mm)
- The surface water drainage strategy has been designed to accommodate a 1-in-100-year storm event, inclusive of an allowance for climate change (45%) and urban creep (10%).

-FOUL WATER STRATEGY-

- Foul water disposal should adhere to the following hierarchy;
 - Public Sewer
 - Private Treatment Plant
 - Septic Tank and Drainage Field
 - Cesspool
- There is an existing public foul sewer to the south of the site. Agreement with the Landowner for right to connect has been established. As a result, the proposed foul drainage will be discharged to the public sewer, with a soffit-to-soffit connection to an existing manhole.
- Legal Agreement with Southern Water under a S106 Sewer Connection Application has been established.

-DRAINAGE KEY-

- Third-Party Surface Water Drainage
- Proposed Surface Water Drainage
- Proposed Diffuser Unit
- Proposed Permeable Paving (Subbase depth and inverts as shown, tanked)
- Proposed Inspection Chamber (Max 1.2m dp., or 3.0m w/ restricted access)
- Proposed Surface Water Flow Control Chamber - As detailed or otherwise agreed
- Proposed Non-Return Valve
- Rodding Point (Below Ground)
- GreenBlue SuDSPod (or equivalent) - Rainwater interception and non-potable re-use (irrigation), integral attenuation and flow control
- Proposed Living Roof - per Architect's specification, Rainwater interception and non-potable re-use (irrigation)
- Existing Foul Water Drain/Sewer
- Third-Party Foul Water Drainage
- Proposed Foul Water Drainage
- Proposed Foul Inspection Chamber (Max 1.2m dp., or 3.0m w/ restricted access) (Svp shall use main channel)
- Proposed Foul Manhole (Over 1.2m dp.)

DRAINAGE DESIGN NOTES:

ALL INTERNAL FOUL CONNECTIONS (SVPS, DCS ETC.) ARE ASSUMED TO BE Ø100mm & SET 600mm BELOW DESIGN FFL WITH MIN 1:40 INTERNAL FALLS TO INSPECTION CHAMBERS.

GROUNDWATER LEVELS INDICATED AS APPROXIMATELY 0.09mbgl. SOIL STRATA INFORMATION CONFIRMED AS CLAY. EXCAVATED CLAY TO BE USED AS BACKFILL FOR PIPEWORK FOR MITIGATION AGAINST GROUNDWATER FLOTATION.

ALL RWPS TO BE DESIGNED TO DISCHARGE TO RAINWATER HARVESTING OR LIVING ROOF. FINAL DESIGN TO BE COORDINATED WITH ARCHITECT, STRUCTURE & SERVICES.

LEVELS DESIGN NOTES:

THRESHOLD ACCESS POINTS SHOWN AS FLUSH OR WITH 150mm STEP, PER ARCHITECTS PLANS, WITH BUILDING REGULATIONS M4 COMPLIANT ACCESS SLOPES.

NO PROPOSED EARTHWORKS RESULTING IN SLOPE EXCEEDING 1:6 OR SIGNIFICANT EXCAVATION OR LEVEL RAISING THAT COULD IMPACT EXISTING GROUNDWATER TABLE.

RESIDUAL HAZARDS

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, note the following:

- Possible buried services. Contractor to refer to existing services plans and undertake necessary precautions and investigation prior to excavating.
- Excavations close to existing trees. Arboriculturalist to be engaged with regard to civil proposals and appropriate mitigation measures. Contractor to prepare method statement to ensure protection of existing tree roots, in accordance with root protection proposals.
- Connection to public drainage system. Contractor to ensure drains are shut off during works and ensure operatives are familiar and competent with procedure.
- Excavations within area of potential shallow groundwater. Contractor to prepare method statement to ensure stability of excavations.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement



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Drawing Status: DISCHARGE OF CONDITION

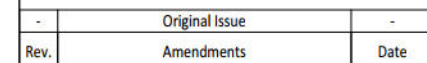
Client: Chichester Carpentry & Building Ltd

Project: Ryefields Farmhouse, Oak Tree Lane

Drawing Title: Engineering GA - Levels & Drainage

Scale: 1:200 Date: May '26 Drawn By: DJL Checked By: CT

Drawing No.: 2026-C160-002 Rev.: B



Drawing Status **DISCHARGE OF CONDITION**

Client
Chichester Carpentry & Building Ltd

Project
Ryefields Farmhouse, Oak Tree Lane

Drawing Title

Interception Assessment

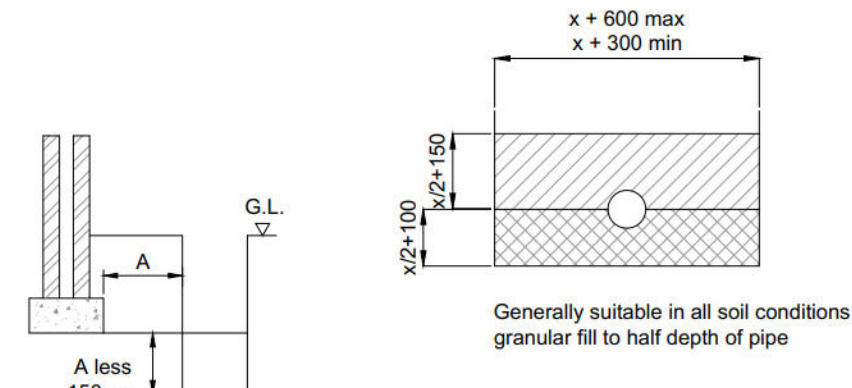
Scale 1:250	Date May '26	Drawn by DL	Checked by CT
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Drawing No.	Rev.
2026-C160-004	-

Minimum Dimensions for Access Fittings and Inspection Chambers						
Type	Min Internal Sizes				Cover Sizes	
	Depth to invert (m)	Size of largest pipe (DN)	Length x Width (mm)	Circular (mm)	Length x Width (mm)	Circular (mm)
Rodding Eye			As Drain but Minimum 100mm ^a			
Access Fitting						
Small	0.6 or less		150x100	150	150x100 ^a	Same size as access fitting
Large	except where situated in a chamber		225x100	225	225x100 ^a	
Inspection Chamber						
Shallow	0.6 or less			190 ^b		190 ^a
	1.2 or less		450x450	450	450x450	430 ^a
Deep	1.2 - 3.0		450x450	450	Max 300x300 ^c	Access restricted ^c to Max 350

Notes:

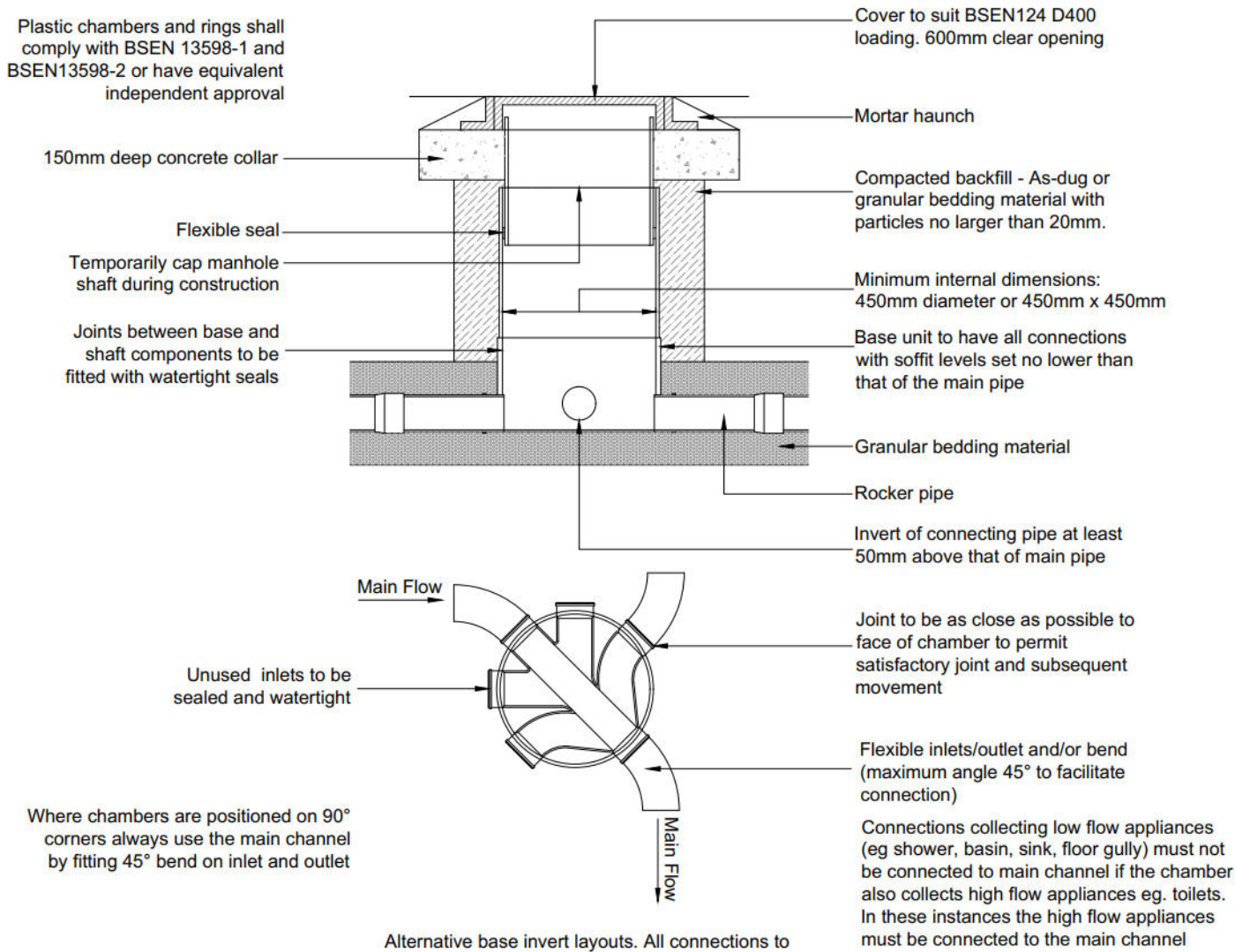
- the clear opening may be reduced by 20mm in order to provide proper support for the cover and frame
- Drains up to 150mm
- A larger clear opening cover may be used in conjunction with a restricted access, the size is restricted for health a safety reasons to deter entry.



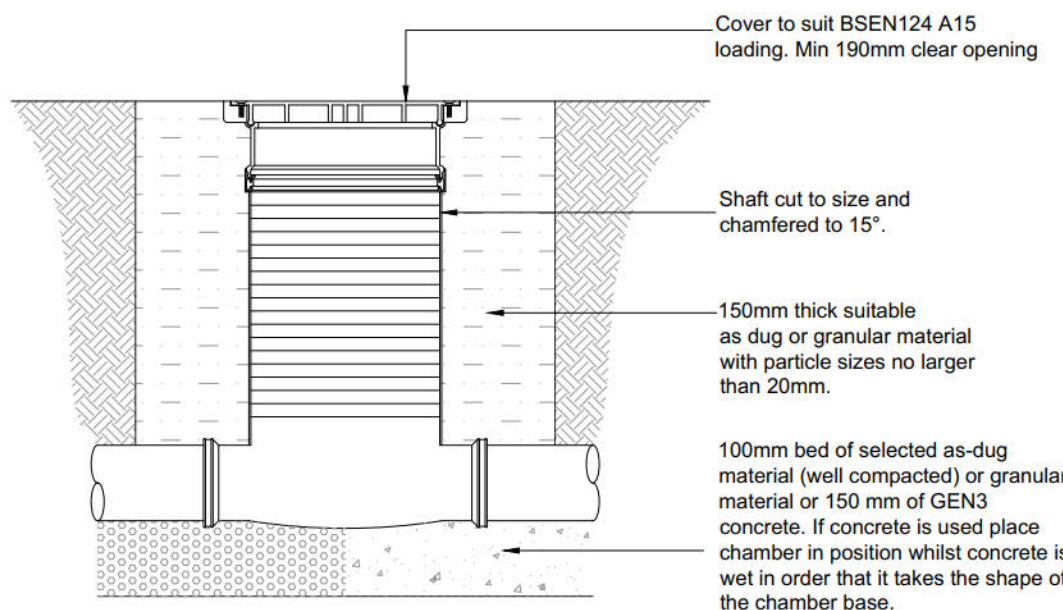
PIPE BEDDING DETAIL UNDER DRIVES AND GARDENS
Min depth of cover 0.35m under private gardens and 0.5m under private drives

BUILDING REGULATIONS MINIMUM DIMENSIONS FOR CHAMBERS

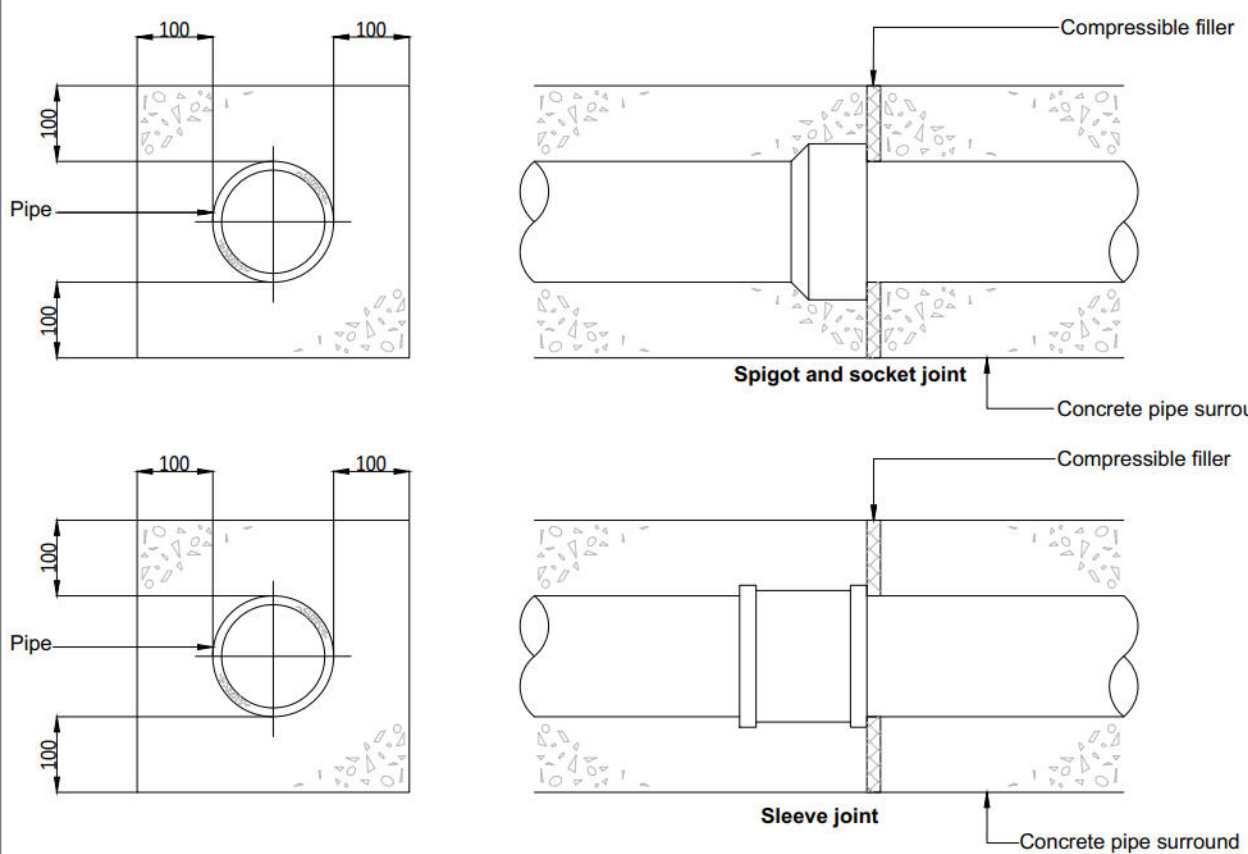
(Not to Scale)
This table complies with the Building Regulations 2015
Section 'H' - Drainage & Waste Disposal.



TYPICAL ACCESS CHAMBER DETAIL - 450Ø (FOOTPATHS AND PRIVATE DRIVES)
1.2m MAXIMUM DEPTH TO FROM COVER TO PIPE INVERT (OR ACCESS RESTRICTED TO MAX 300 X 300 / 350Ø). LOCATED IN AREAS SUBJECT TO LIGHT VEHICLES AND FOOTPATHS

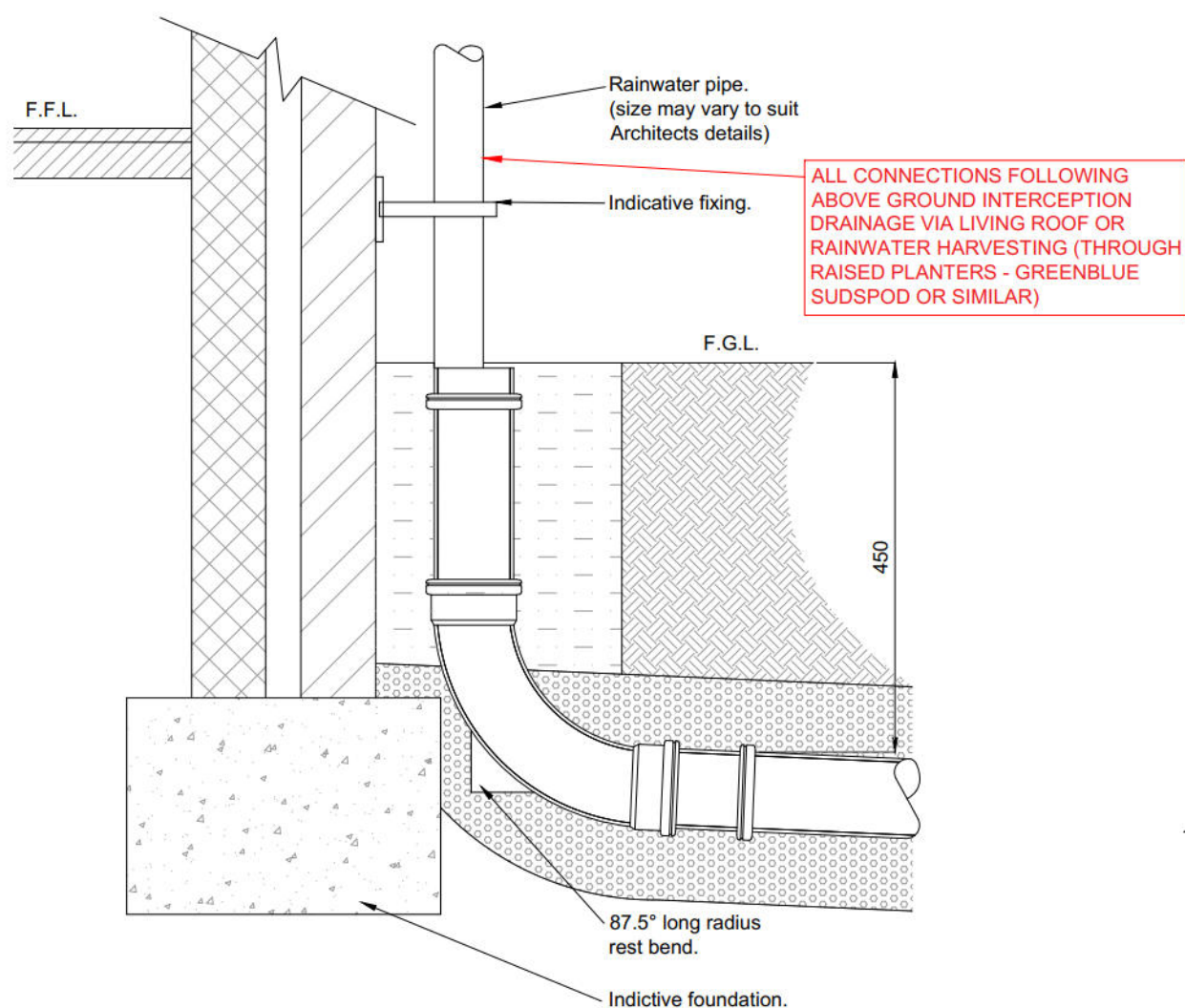


TYPICAL SHALLOW ACCESS CHAMBER DETAIL - 250Ø
0.6m MAXIMUM DEPTH TO FROM COVER TO PIPE INVERT.

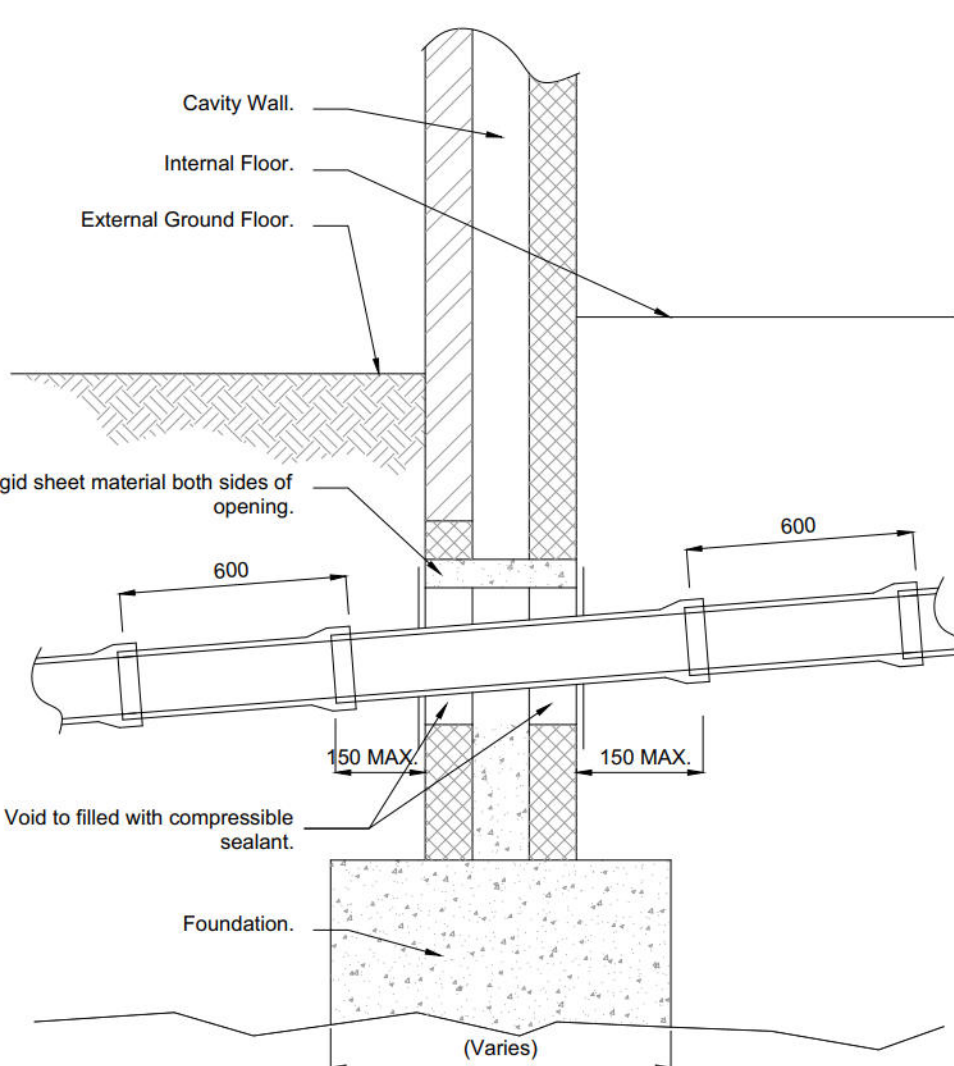


JOINTS FOR ENCASED PIPES

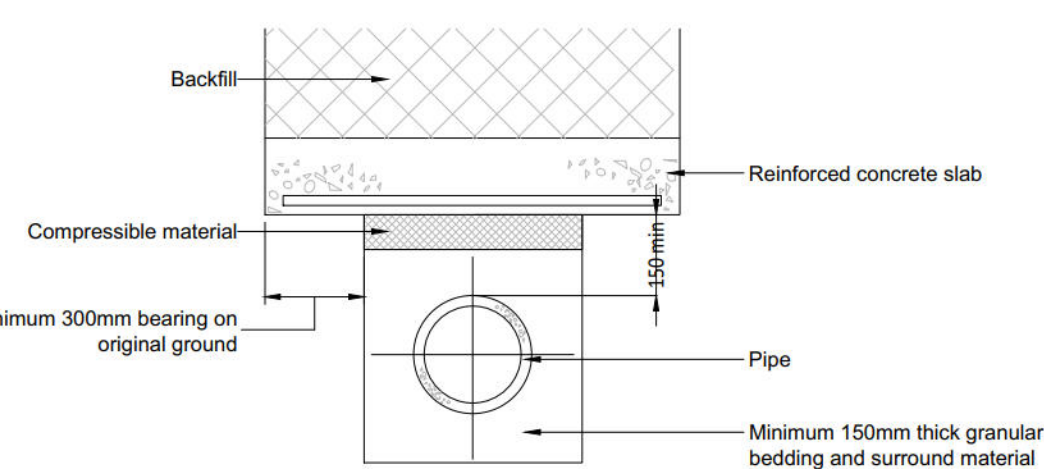
DETAIL OF PIPE RUNS NEAR BUILDINGS
(Not to Scale)



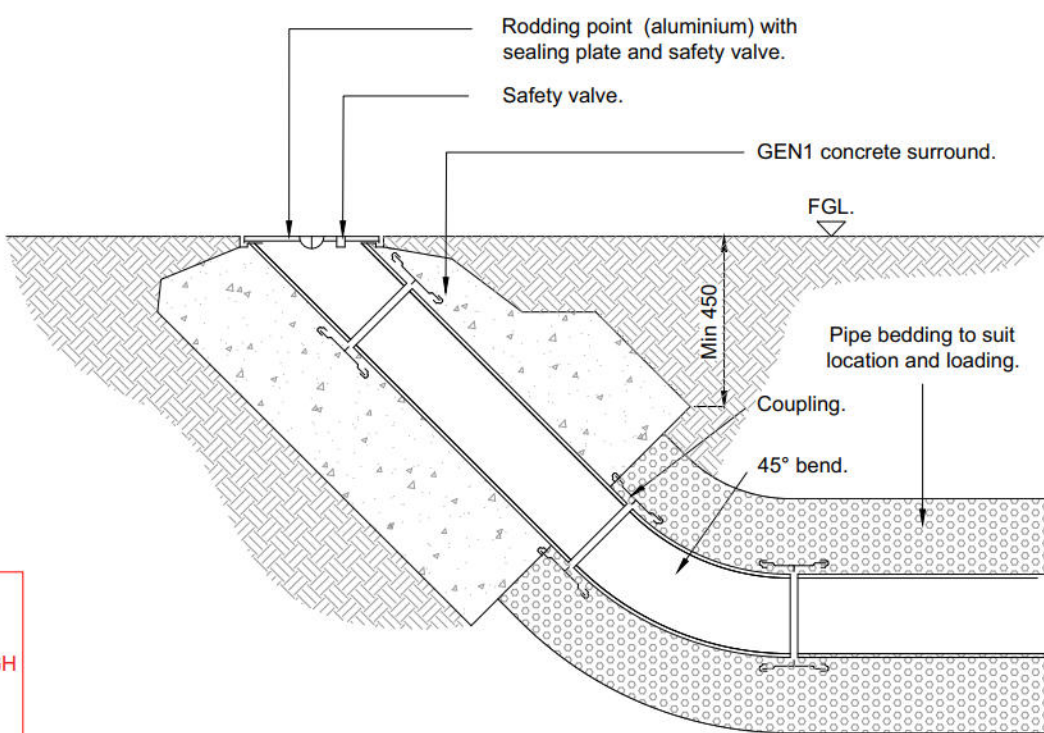
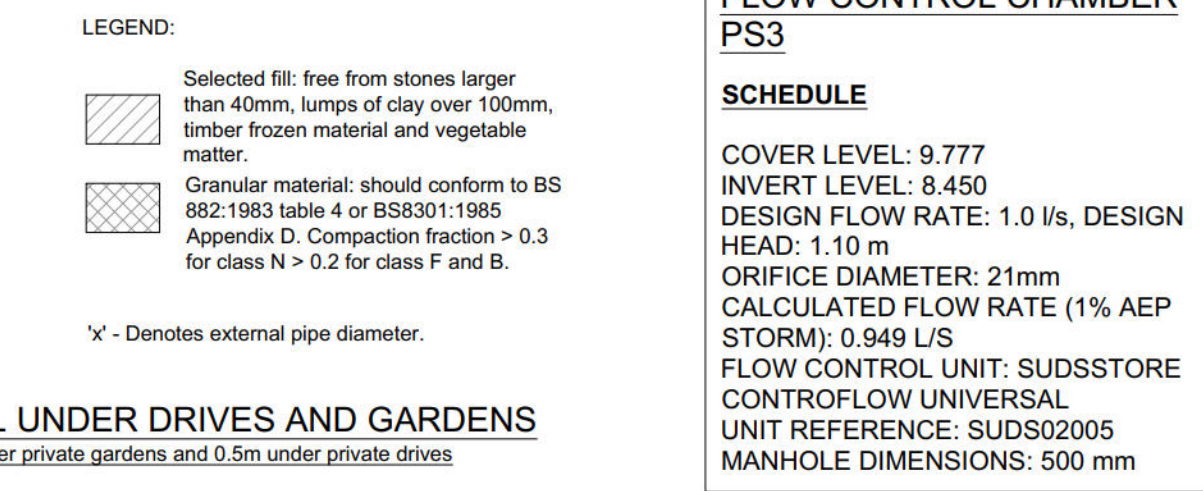
DETAIL OF RAINWATER PIPE
(Scale 1:20)



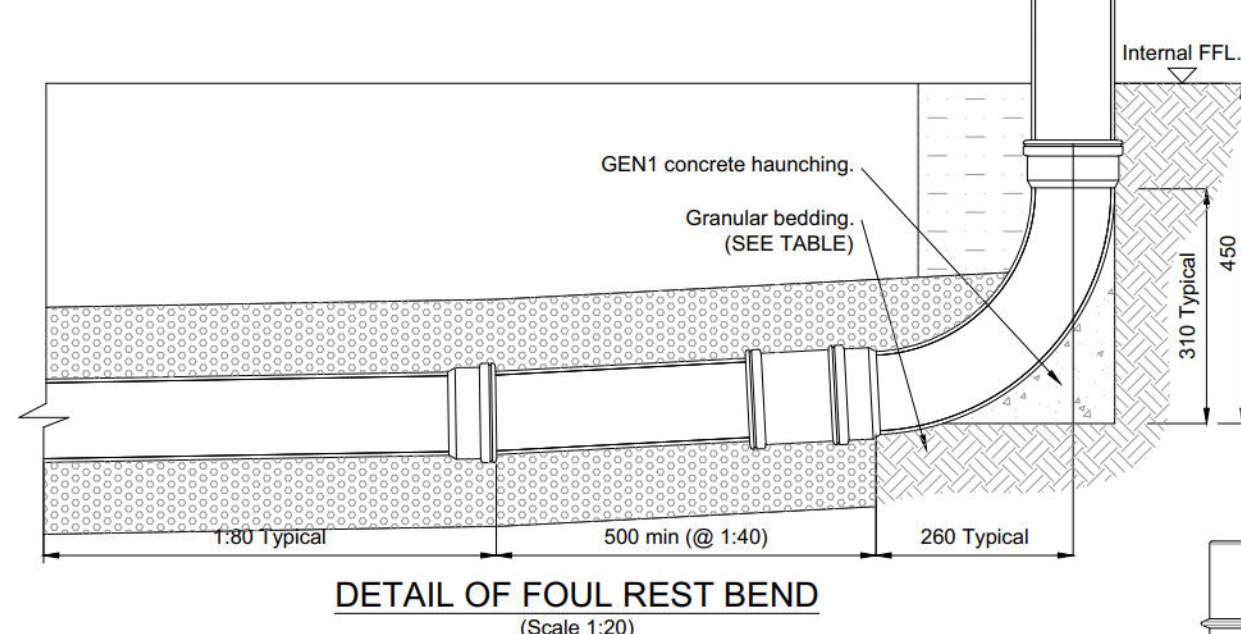
TYPICAL SECTION PIPE PASSING THROUGH WALL PIPE THROUGH INTELLED OPENING
(Scale 1:20)



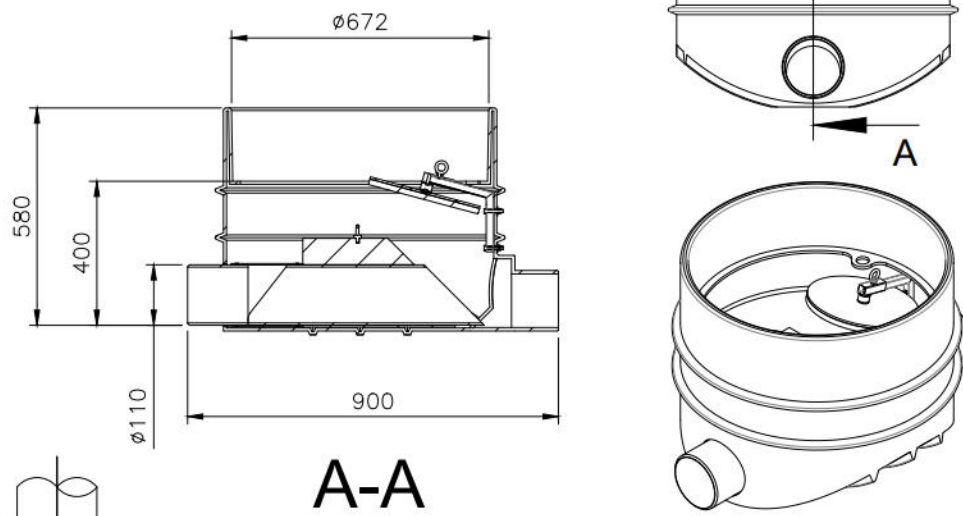
PROTECTION OF PIPES AT SHALLOW DEPTH



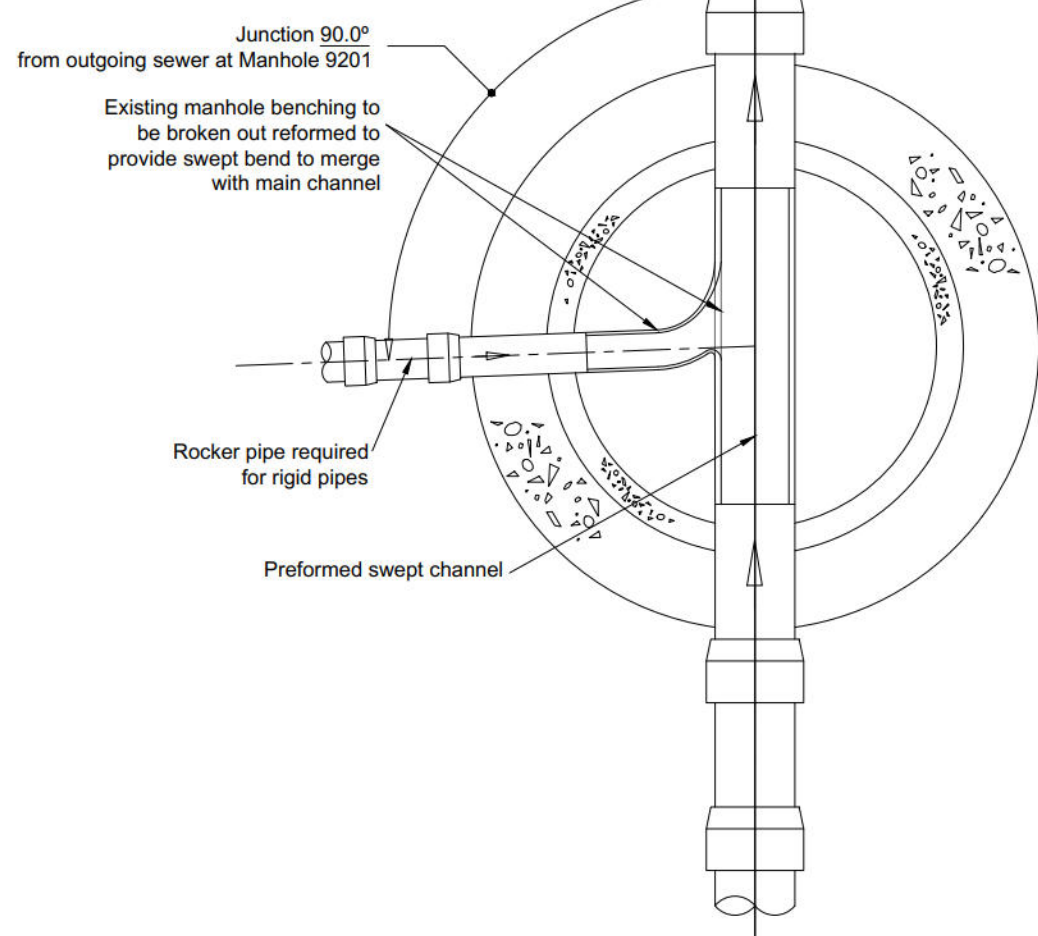
DETAIL OF RODDING EYE



DETAIL OF FOUL REST BEND
(Scale 1:20)



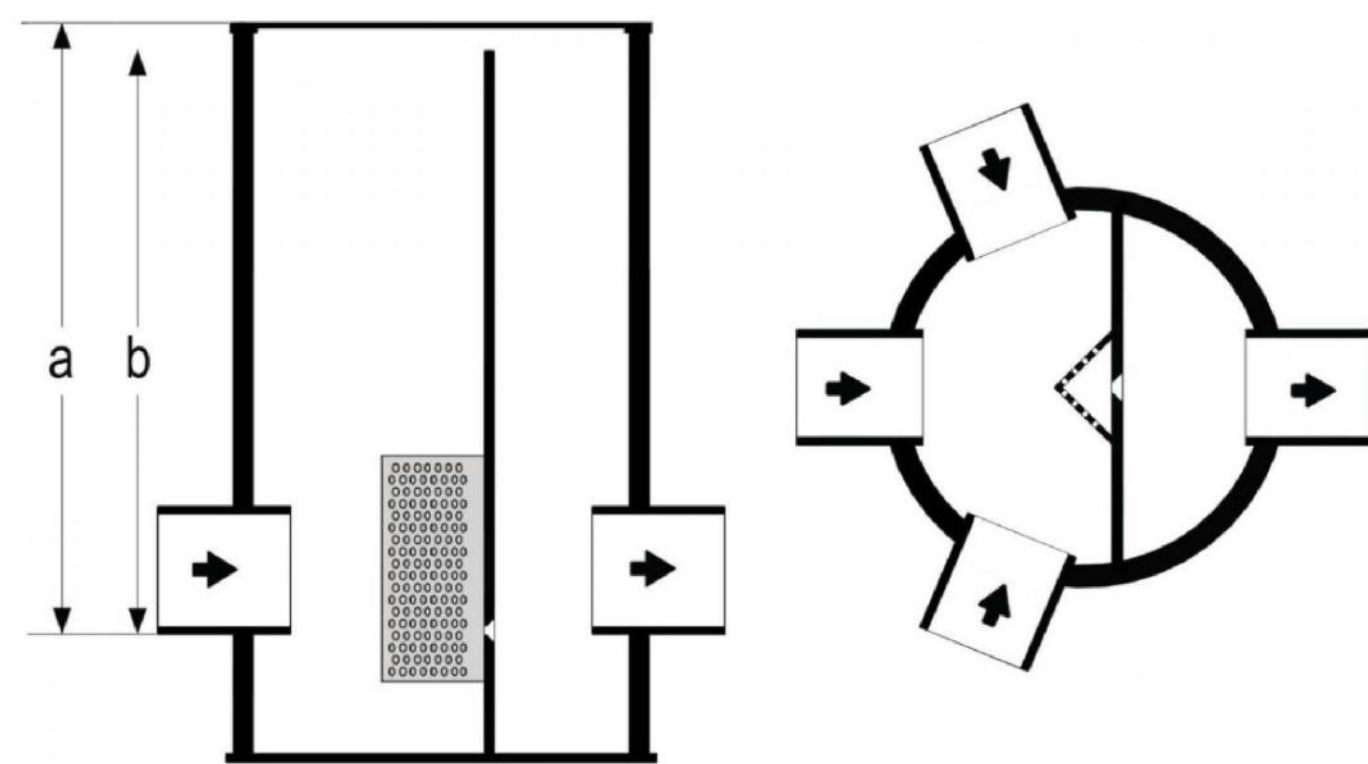
WABACK WB110-600 NON RETURN CHAMBER
100mm INCOMING AND OUTGOING PIPE DIAMETER, MINIMUM INVERT DEPTH 650mm BELOW GROUND LEVEL.



Nominal diameter (mm)	Maximum effective length (m)
150 - 600	0.6
601 - 750	1.00
over 750	1.25

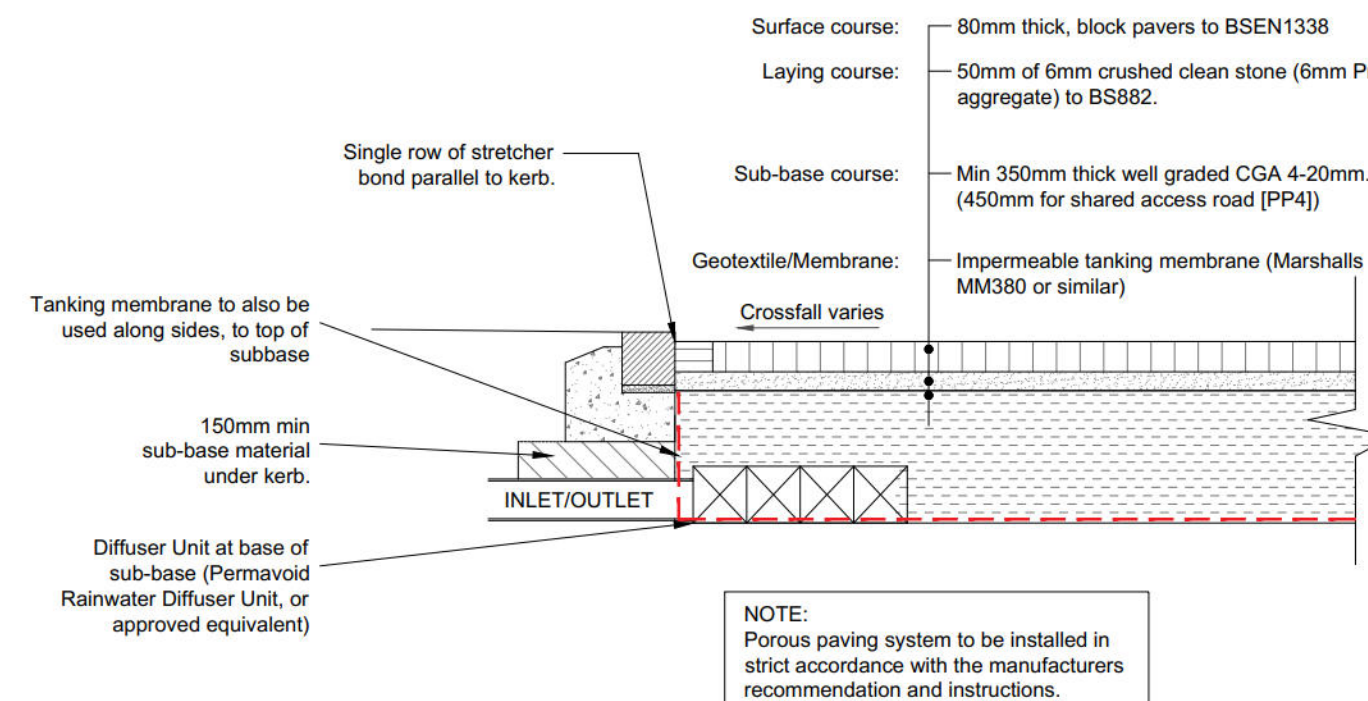
All pipes entering the bottom of the manhole to have soffits level.

ARRANGEMENT OF PIPE JUNCTION WITHIN MANHOLE 9201

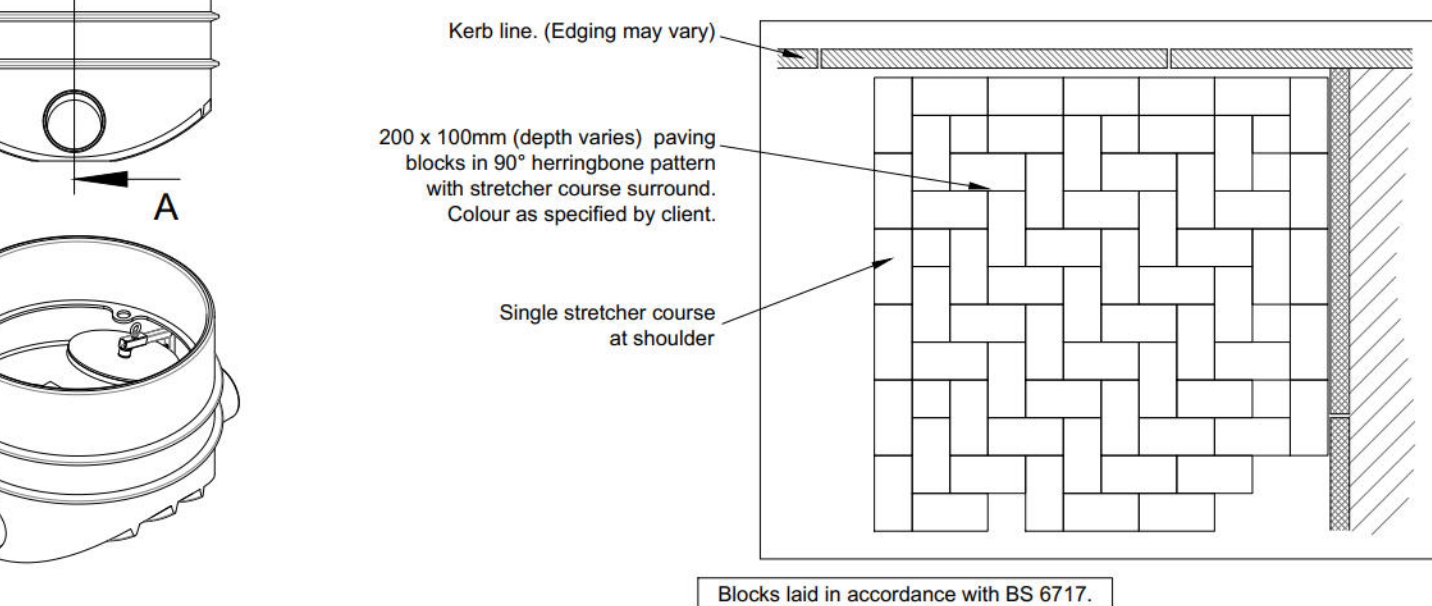


CONTROFLOW UNIVERSAL EXAMPLE SECTION

FURTHER DETAIL SHOWN IN APPENDICES



PERMEABLE DRIVEWAY BLOCK PAVING CONSTRUCTION DETAIL (PERMEABLE PAVERS-TANKED)
(Scale 1:20)



BLOCK PAVING ARRANGEMENT PLAN
(Scale 1:20)

DRAINAGE NOTES:

- All drainage works to be constructed in strict accordance with specification of the Local Authority, Building Regulations, Design and Construction Guidance (published by Water UK) & BSEN.752.
- Any existing drainage found crossing the site is to be investigated, and if found to be 'live', it should be diverted in consultation with Harbournstone Design.
- For location and setting out of building drainage points refer to architects drawings.
- All pipe runs near buildings to comply with the Building Regulations 2015 part H11. Where a pipe is within 1m of a foundation the trench shall be filled with class GEN3 concrete to the lowest level of the foundation. Where the trench is further than 1m from the foundation, the trench shall be filled with class GEN3 concrete to a level below the lowest level for the foundation equal to the distance from the foundation less 150mm. In both cases the pipe shall be bedded and surrounded in 150mm thick class GEN3 concrete.
- Where pipes, external to the structures, have a depth to soffit from ground level of less than 450mm they shall have a class GEN3 concrete encasement (150mm thick).
- Where a pipe, under a carriageway, has a depth of cover of less than 1.2m the pipe shall be laid in a concrete bed and surround.
- Where a pipe, under a vehicular area other than a carriageway has a depth of cover if less than 0.5m the pipe shall be protected with a concrete slab set above it.
- In any circumstances where pipes are bedded and surrounded in concrete flexible joints should be provided, compressible boards (fibreglass or polystyrene) shall be provided at a maximum of 8m centres (coinciding with pipe joints), the boards shall be pre-cut to pipe diameter and to a height and width equal to the concrete cross section, a board thickness of 10mm for pipes up to 450mm nominal diameter and 30mm for pipes over 450mm nominal diameter.
- All private building drainage shall be constructed in strict accordance with BS EN.752. Foul drainage beneath the floor slab shall be laid, shall be laid no flatter than 1:40. Unless otherwise specified below ground building drainage external to the building shall be 100mm diameter and shall be laid at a minimum gradient of (<1% = 1 in 40)>1% = 1 in 80) for foul drains and 1 in 80 for surface water drains.
- All building drains shall be laid in conjunction with 'non adoptive bedding details' (class c, n or b) unless otherwise specified.
- All pipes, bends and junction for private building drainage shall be UPVC conforming to BS4660, BSEN13588 and BSEN1401 as appropriate and shall be laid in accordance with the manufacturer's specification.
- All pipes, bends and junction materials for adoptable drainage shall be vitrified clay, extra strength or super strength to BSEN205, with flexible joints and kilnmark certified.
- All back inlet gullies to be roddable or connected to inspection chambers.
- All gully connections other than at manholes to be 'Y' junctions.
- All road gully connections to be 150mm diameter.
- All stub stacks to be fitted with air admittance valves where branch drain exceeds 12m except at the head of the run. Soil vent pipes located at the head of a run to terminate to fresh air.
- No low point shall be without a method of drainage.
- All connections to be soffit to soffit unless otherwise noted.
- All concrete and concrete products to be in accordance with BRE 363 for sulphates.
- The locations of all building drainage points shall be cross referenced against the architects drawings during setting out and any discrepancies reported immediately.
- Before connections are made to existing public sewers an application under S106 must be made to relevant sewerage undertaker.
- The precise depth and location and size of existing pipes, watercourses or manholes where connections or diversion are proposed must be confirmed and reported to the engineer before works commence on site.
- Any existing drains to be abandoned to be decommissioned in accordance with the Building Regulations by either grubbing, infilling or sealing.
- Should groundwater be encountered on site during construction Harbournstone Design shall be informed to determine if additional measures are required. **This includes design against flotation.**
- The drainage system shall be fully cleansed on completion of the project using methods that ensure pollution off site does not occur.
- Any existing land drains severed during construction shall be reinstated.

GENERAL

- The main contractor is responsible for the design of all temporary works, and is also responsible for the safe maintenance and stability of existing buildings at all times.
- The main contractor is responsible for dealing with all occurrences of ground water during the construction period.
- The contractor must comply with all current legislation relating to health & safety.
- All products specified shall be installed in strict accordance with the manufacturers recommendations and instructions. If there are discrepancies between that information and the details on any Harbournstone Design drawings, the manufacturers instructions must be used.
- All concrete and cement mortar to be in accordance with BS8500, BSEN206 and BSEN998.
- The contractor is responsible for managing surface water run off during construction.

- This drawing is to be read in conjunction with any other information, drawings and specification issued by Principle Designer, Architect and the Harbournstone Design package for this project. Any discrepancies found are to be reported immediately to the Engineer.
- Harbournstone Design accepts no responsibility for inaccuracies in data provided by third parties such as topographic surveys or Ordnance Survey mapping.
- Do not scale, work to figured dimensions only. All dimensions are in millimetres unless noted otherwise and all levels are in metres from the topographic survey datum.
- Any information given regarding existing underground services is given in good faith after consultation with the relevant authority, however accuracy is not certain. The main contractor is responsible for checking all information on site prior to work commencing and taking due care whilst undertaking the works.
- All dimensions to be checked on site. All details and dimensions relating to sub-contractors work must be checked and agreed between the sub-contractor or supplier and the general contractor.
- The electronic information from this drawing can not be guaranteed as dimensionally drawn exact. Figured dimensions must be used for setting out and detailing. Harbournstone Design logos and company information must be removed from copies if information is re-used.
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RESIDUAL HAZARDS

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, note the following:

- Buried services. Contractor to refer to locate existing services and undertake necessary precautions and investigation prior to excavating.
- Excavations close to existing root protection zones. Arboriculturalist to be engaged with regard to civils proposals and appropriate mitigation measures. Contractor to prepare method statement to ensure protection of existing tree roots, in accordance with root protection proposals.
- Connection of existing private drainage. Contractor to ensure drains are shut off during works and ensure operatives are familiar and competent with procedure.
- Excavations close to existing structures. Contractor to prepare method statement to ensure stability of existing structure.
- Working in vicinity of Waterbodies with variable surface water flows & debris. Contractor to provide method statement and ensure operatives have appropriate safeguarding equipment.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement

Rev.	Original Issue	-
Amendments		Date



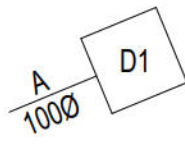
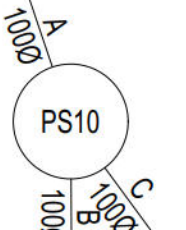
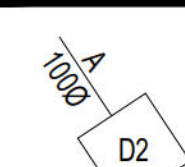
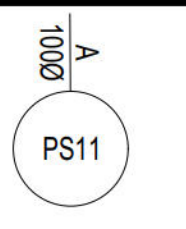
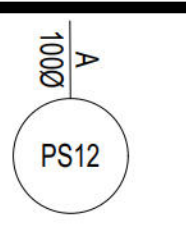
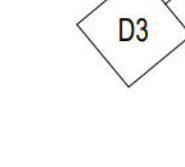
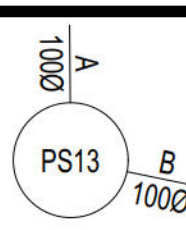
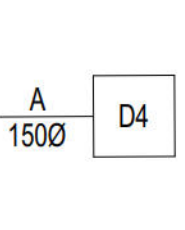
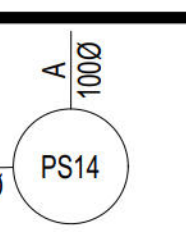
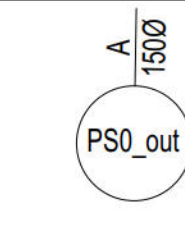
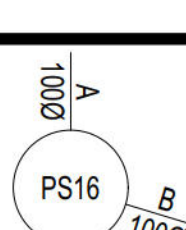
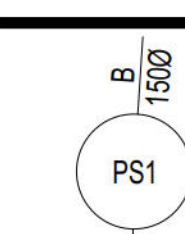
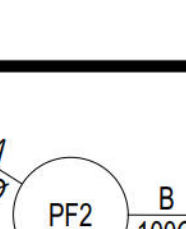
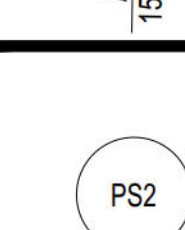
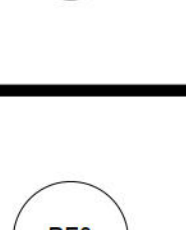
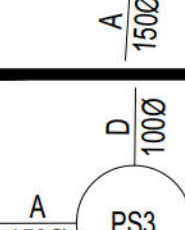
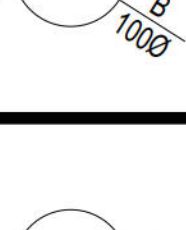
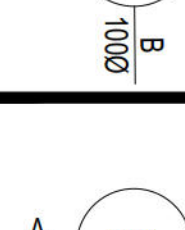
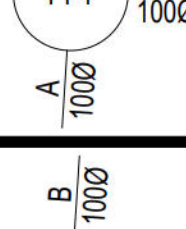
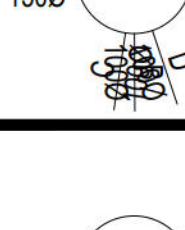
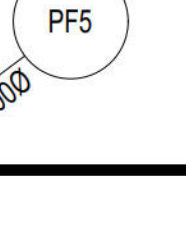
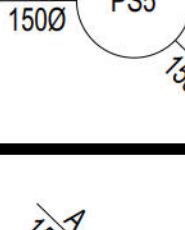
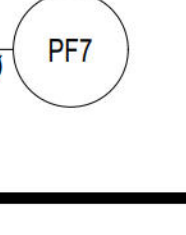
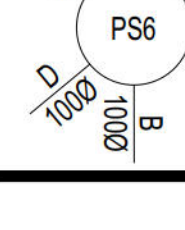
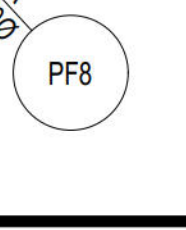
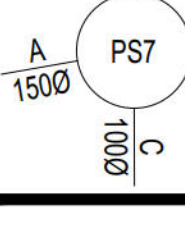
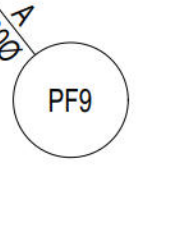
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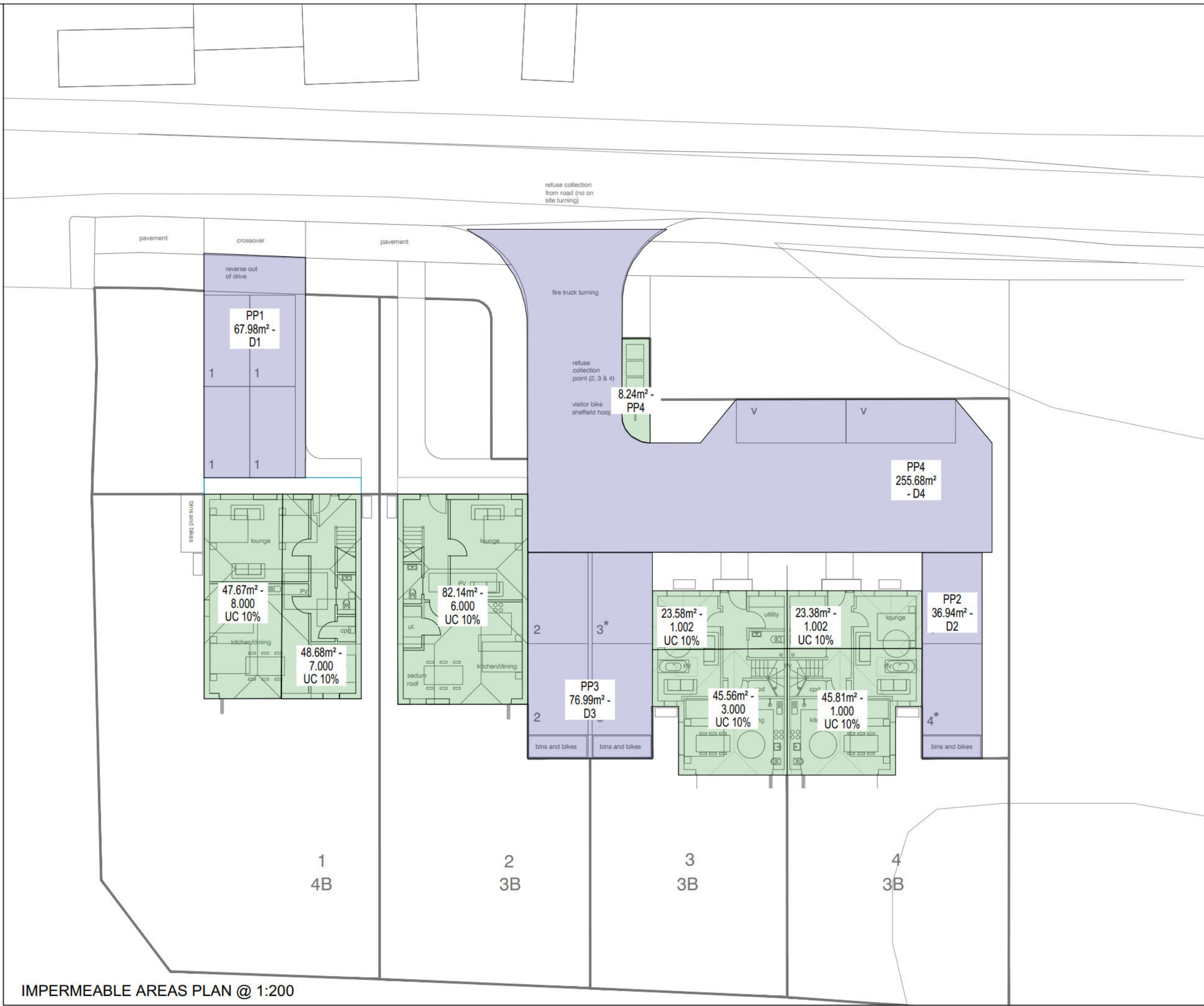
Drawing Status: **DISCHARGE OF CONDITION**
Client: Chichester Carpentry & Building Ltd

Project: Ryefields Farmhouse, Oak Tree Lane

Drawing Title: Construction Details

Scale	Date	Drawn By	Checked By
As Shown	May '26	DJL	CT
Drawing No.	Rev.		
2026-C160-005	-		

	COVER 9.798m SIZE 710mm x 710mm Type E	I N V E R T	A 9.30m B C D E		COVER 9.949m DIAMETER 450mm 450 Inspection	I N V E R T	A 9.05m B 9.05m C 9.05m D E
	COVER 9.920m SIZE 710mm x 710mm Type E	I N V E R T	A 9.35m B C D E		COVER 9.89m DIAMETER 180mm Type E	I N V E R T	A 9.34m B C D E
	COVER 9.817m SIZE 710mm x 710mm Type E	I N V E R T	A 9.25m B C D E		COVER 9.89m DIAMETER 180mm Type E	I N V E R T	A 9.34m B C D E
	COVER 9.676m SIZE 710mm x 710mm Type E	I N V E R T	A 9.08m B C D E		COVER 9.89m DIAMETER 180mm Type E	I N V E R T	A 9.34m B 9.34m C D E
	COVER 9.27m DIAMETER 180mm Type E	I N V E R T	A 8.404m B C D E		COVER 9.904m DIAMETER 250mm 250 Inspection	I N V E R T	A 9.35m B 9.35m C D E
	COVER 9.40m DIAMETER 1200mm Type B	I N V E R T	A 8.46m B 8.46m C D E		COVER 9.815m DIAMETER 450mm 450 Inspection	I N V E R T	A 9.25m B 9.25m C D E
	COVER 9.732m DIAMETER 450mm 450 Inspection	I N V E R T	A 8.835m B 8.835m C D E		COVER 9.807m DIAMETER 450mm 450 Inspection	I N V E R T	A 8.26m B 8.26m C D E
	COVER 9.804m DIAMETER 600mm Type E	I N V E R T	A 8.91m B 8.96m C 8.91m D 8.96m E		COVER 9.810m DIAMETER 450mm 450 Inspection	I N V E R T	A 8.13m B 8.13m C D E
	COVER 10.018m DIAMETER 450mm 450 Inspection	I N V E R T	A 8.98m B 9.03m C 9.03m D 9.03m E 9.98m		COVER 9.698m DIAMETER 450mm 450 Inspection	I N V E R T	A 7.745m B 7.745m C D E
	COVER 9.805m DIAMETER 450mm 450 Inspection	I N V E R T	A 9.035m B 9.035m C 9.035m D E		COVER 9.98m DIAMETER 1200mm Type B	I N V E R T	A 7.025m B 7.025m C D E
	COVER 9.788m DIAMETER 450mm 450 Inspection	I N V E R T	A 9.095m B 9.145m C 9.095m D 9.145m E		COVER 9.775m DIAMETER 450mm 450 Inspection	I N V E R T	A 8.48m B C D E
	COVER 9.812m DIAMETER 450mm 450 Inspection	I N V E R T	A 9.115m B 9.115m C 9.165m D E		COVER 10.004m DIAMETER 450mm 450 Inspection	I N V E R T	A 9.00m B C D E
	COVER 9.915m DIAMETER 450mm 450 Inspection	I N V E R T	A 9.21m B 9.26m C 9.26m D 9.26m E		COVER 9.968m DIAMETER 450mm 450 Inspection	I N V E R T	A 9.00m B C D E
	COVER 9.816m DIAMETER 450mm 450 Inspection	I N V E R T	A 9.10m B 9.10m C D E		COVER 9.893m DIAMETER 450mm 450 Inspection	I N V E R T	A 8.875m B C D E



PHASE: 0								
MH No.	MANHOLE DIMENSION (mm)	MANHOLE TYPE	COVER TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
9102	1200Ø	Type A		9.280	5.720	3.410	493959.862	104193.930

PHASE: 0 (PRIVATE)								
MH No.	MANHOLE DIMENSION (mm)	MANHOLE TYPE	COVER TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
D1	710x710	Type E	B125	9.798	9.300	0.398	493985.867	104267.131
D2	710x710	Type E	B125	9.920	9.350	0.470	494025.958	104249.717
D3	710x710	Type E	B125	9.817	9.250	0.467	494006.018	104249.173
D4	710x710	Type E	D400	9.676	9.080	0.446	494008.658	104257.378
PS1	1200Ø	Type B		9.400	8.460	0.790	493968.944	104201.402
PS2	450Ø	450 Inspection		9.732	8.835	0.747	493972.584	104257.264
PS3	600Ø	Type E		9.804	8.910	0.744	493983.756	104257.293
PS4	450Ø	450 Inspection		10.018	8.980	0.888	493993.973	104257.318
PS5	450Ø	450 Inspection	D400	9.805	9.035	0.620	494002.101	104257.339
PS6	450Ø	450 Inspection	B125	9.788	9.095	0.543	494008.451	104251.187
PS7	450Ø	450 Inspection	B125	9.812	9.115	0.547	494011.106	104251.654
PS8	450Ø	450 Inspection	B125	9.915	9.210	0.555	494024.713	104251.599
PS9	450Ø	450 Inspection		9.816	9.100	0.616	493983.854	104266.299
PS10	450Ø	450 Inspection		9.949	9.050	0.799	493994.597	104255.470
PS11	180Ø	Type E		9.890	9.340	0.450	493994.670	104243.224
PS12	180Ø	Type E		9.890	9.340	0.450	493994.055	104243.400
PS13	180Ø	Type E		9.890	9.340	0.450	493983.803	104251.768
PS14	250Ø	250 Inspection	B125	9.904	9.350	0.454	494024.695	104243.230
PS16	450Ø	450 Inspection	B125	9.815	9.250	0.465	494008.452	104243.540
PS0_out	180Ø	Type E		9.270	8.404	0.716	493968.802	104192.979
PF2	450Ø	450 Inspection		9.807	8.260	1.447	494010.619	104250.997
PF3	450Ø	450 Inspection	B125	9.810	8.130	1.580	494002.085	104256.406
PF4	450Ø	450 Inspection		9.698	7.745	1.853	493971.581	104256.408
PF5	1200Ø	Type B		9.380	7.025	2.255	493967.951	104200.000
PF7	450Ø	450 Inspection		9.775	8.480	1.195	494028.176	104250.953
PF8	450Ø	450 Inspection		10.004	9.000	0.904	493998.719	104255.639
PF9	450Ø	450 Inspection		9.968	9.000	0.868	493988.222	104255.608
PF10	450Ø	450 Inspection		9.893	8.875	0.918	494018.147	104250.302

Manhole No.	Pipe No.	Adoptable IMP	Adoptable UC	Private IMP	Private UC	Total IMP + UC
RWP2	0.000	0.000	0.000	0.000	0.000	0.000
RWP1	0.000	0.000	0.000	0.000	0.000	0.000
RWHT6	1.000	0.000	0.000	45.806	4.581	50.386
PS14	1.001	0.000	0.000	0.000	0.000	0.000
PS8	1.002	0.000	0.000	0.000	0.000	0.000
PS7	1.003	0.000	0.000	0.000	0.000	0.000
PS6	1.004	0.000	0.000	0.000	0.000	0.000
PS5	1.005	0.000	0.000	0.000	0.000	0.000
PS4	1.006	0.000	0.000	0.000	0.000	0.000
PS3	1.007	0.000	0.000	0.000	0.000	0.000
PS2	1.008	0.000	0.000	0.000	0.000	0.000
PS1	1.009	0.000	0.000	0.000	0.000	0.000
RWHT7	2.000	0.000	0.000	23.381	2.338	25.719
D2	3.000	0.000	0.000	36.939	0.000	36.939
RWHT5	4.000	0.000	0.000	23.580	2.358	25.938
RWHT4	5.000	0.000	0.000	45.558	4.556	50.114
PS16	5.001	0.000	0.000	0.000	0.000	0.000
D3	6.000	0.000	0.000	76.992	0.000	76.992
D4	7.000	0.000	0.000	263.921	0.000	263.921
PS11	8.000	0.000	0.000	40.599	4.060	44.659
PS10	8.001	0.000	0.000	0.000	0.000	0.000
RWHT3	9.000	0.000	0.000	41.481	4.148	45.629
PS12	10.000	0.000	0.000	30.158	3.016	33.174
RWHT2	11.000	0.000	0.000	18.612	1.861	20.474
D1	12.000	0.000	0.000	67.976	0.000	67.976
PS9	12.001	0.000	0.000	0.000	0.000	0.000
RWHT1	13.000	0.000	0.000	47.666	4.767	52.433
PS13	13.001	0.000	0.000	0.000	0.000	0.000
Totals:		0.000	0.000	762.671	31.684	794.355

3. This drawing is to be read in conjunction with any other information, including but not limited to, the drawings of the architect and the Harbourside Design package for this project. Any discrepancies found are to be reported immediately to the Engineer.
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7. All dimensions to be checked on site. All details and dimensions relating to sub-contractors work must be checked and agreed with the Engineer.
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3. Contractor to prepare method statement to ensure protection of existing tree roots, in accordance with root protection protocols.
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4. Excavations close to existing structures. Contractor to prepare method statement to ensure stability of existing structure.
5. Working in vicinity of Waterbodies with variable surface water flows & debris. Contractor to provide method statement and ensure operatives have appropriate safety following equipment.

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A	Revised Issue	8/7/26
-	Original Issue	-
Rev.	Amendments	Date



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Registered in England No: 16608131

Drawing Status
DISCHARGE OF CONDITION

Client

Chichester Carpentry & Building Ltd

Project
Ryefields Farmhouse, Oak Tree Lane

Drawing Title

Manhole & Impermeable Areas
Schedules

Scale As Shown	Date May '26	Drawn By DJL	Checked By CT
Drawing No. 2026-C106-006			Rev. A



APPENDICES



Appendix A

Greenfield Runoff Calculation

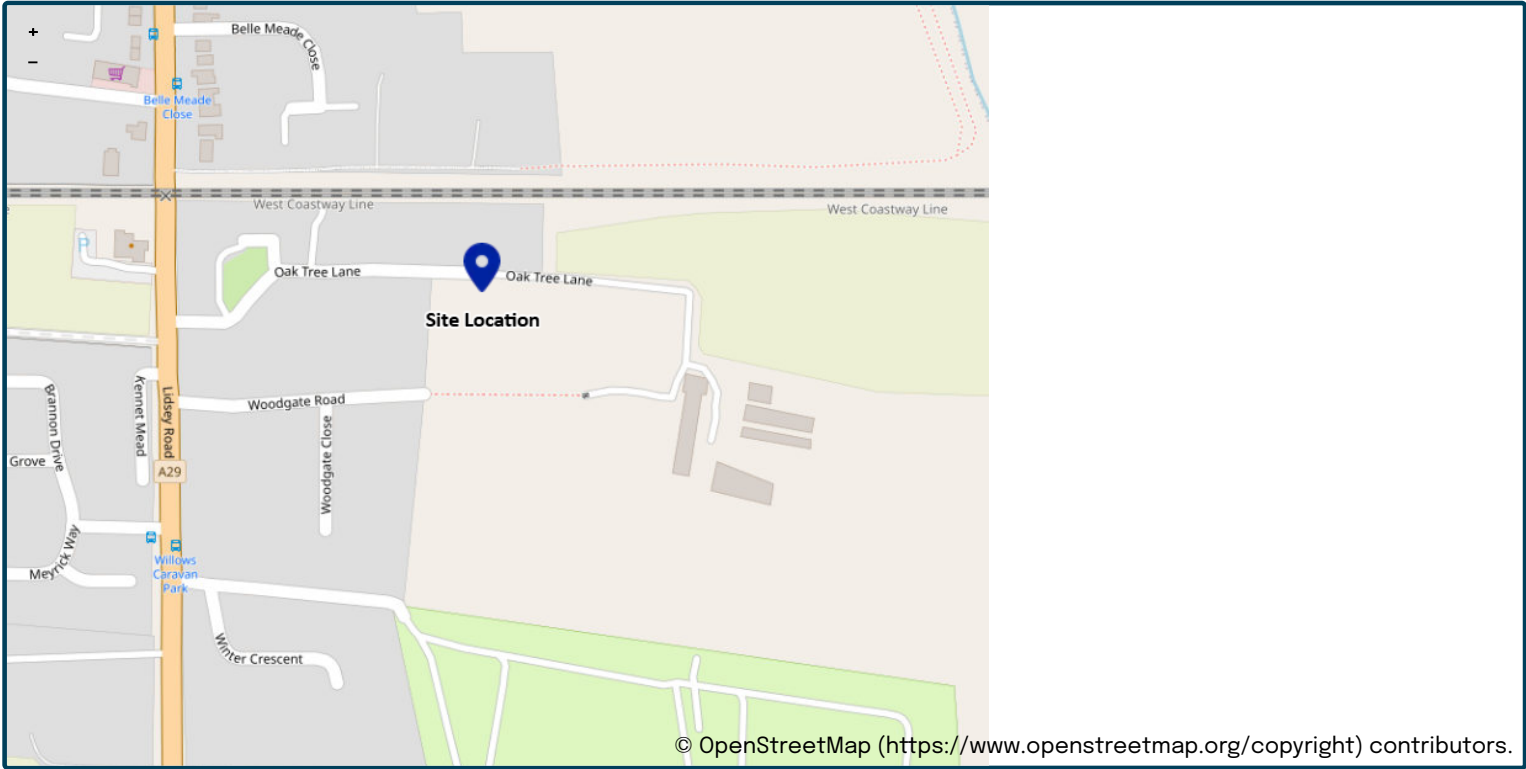
This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance “Rainfall runoff management for developments”, SC030219 (2013), the SuDS Manual C753 (CIRIA, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Project details

Date	13/05/2026
Calculated by	DL
Reference	C160
Model version	2.2.3

Location

Site name	Ryefields
Site location	Woodgate



Site easting (British National Grid)	494000
Site northing (British National Grid)	104246

Site details

Total site area (ha)	0.21	ha
----------------------	-----------------------------------	----

Greenfield runoff

Method

Method	FEH statistical (2025)
--------	-----------------------------------

FEH statistical (2025)

	<u>My value</u>	<u>Map value</u>
SAAR9120 (mm)	794	mm
BFIHOST19scaled	0.68	
QMed-QBar conversion	1.136	1.136
QMed (l/s)	0.4	l/s
QBar (FEH statistical 2025) (l/s)	0.4	l/s

Growth curve factors

	<u>My value</u>	<u>Map value</u>
Hydrological region	7	7
1 year growth factor	0.85	
2 year growth factor	0.88	
10 year growth factor	1.62	
30 year growth factor	2.3	
100 year growth factor	3.19	
200 year growth factor	3.74	

Results

Method	FEH statistical (2025)	
Flow rate 1 year (l/s)	0.4	l/s
Flow rate 2 year (l/s)	0.4	l/s
Flow rate 10 years (l/s)	0.7	l/s
Flow rate 30 years (l/s)	1.0	l/s
Flow rate 100 years (l/s)	1.3	l/s
Flow rate 200 years (l/s)	1.6	l/s

Please note runoff estimation is subject to significant uncertainty. Results are therefore normally reported to only 1 decimal place. Where 2 decimal places are provided, this does not indicate accuracy to this level, it has been adopted to prevent ‘zero’ figures from being reported. Outputs less than 0.01 l/s are reported as 0.01 l/s.

Disclaimer

This report was produced using the Greenfield runoff rate estimation tool (2.2.3) developed by HR Wallingford and available at uksuds.com (<https://www.uksuds.com/>). The use of this tool is subject to the UK SuDS terms and conditions and licence agreement, which can both be found at uksuds.com/terms-conditions (<https://www.uksuds.com/terms-conditions>). The outputs from this tool have been used to estimate Greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, Centre for Ecology and Hydrology, Wallingford Hydrosolutions or any other organisation for the use of these data in the design or operational characteristics of any drainage scheme.



Appendix B Geotechnical Investigation Extracts

Soakage Testing Letter Report

CLIENT	Domusea
SITE ADDRESS	Ryelands Farmhouse, 4 Oak Tree Lane, Woodgate, Chichester, West Sussex PO20 3GU
REPORT REFERENCE	GWPR4660
ENGINEER	Roger Foord, Ground and Water Limited
INVESTIGATION LOCATIONS AND SCOPE OF WORKS	Site works were undertaken in on the 3 rd March 2022. Two trial pits (TP1 and TP2) were machine excavated to a depth of 0.80m bgl. Infiltration tests in accordance with the principles of BRE365 were undertaken in each of the trial pits. A trial hole location plan can be seen in Figure 1.

GROUND CONDITIONS ENCOUNTERED

Summary of Strata Encountered			
Strata	Depth Strata Encountered (m bgl)	Base of Strata (m bgl)	Thickness (m)
TOPSOIL: Brown gravelly sandy SILT. The sand was fine grained and the gravel was fine to medium, sub-angular flint.	GL	0.20m	0.20m
UNDIFFERENTIATED RIVER TERRACE DEPOSITS: Orangish brown sandy CLAY. The sand was fine to medium grained.	0.20m	>0.80m	>0.60m

GROUNDWATER

Groundwater was not encountered.

ROOTS

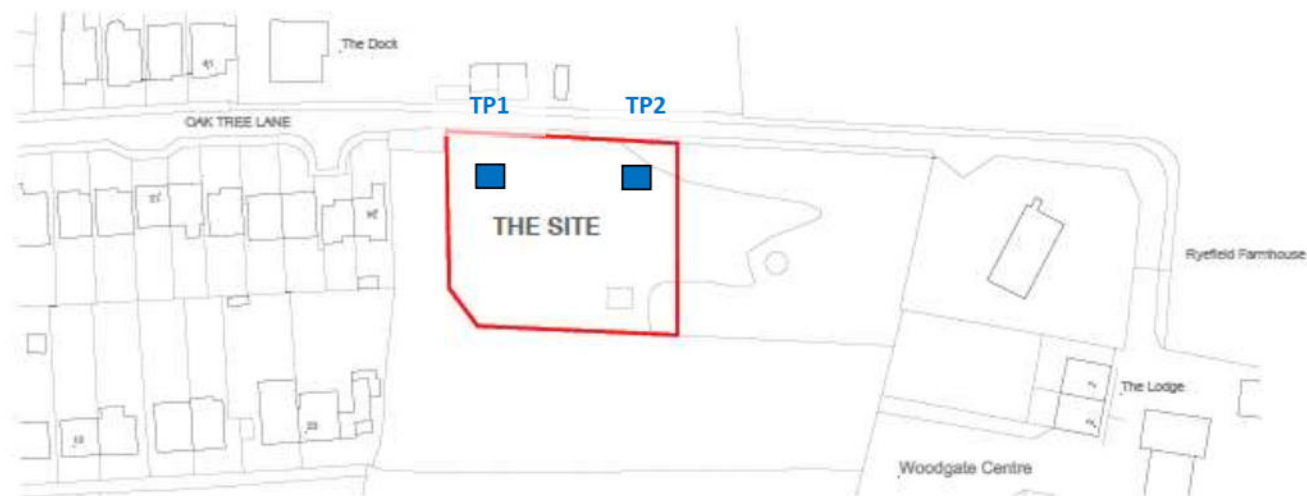
Roots were noted to a depth of 0.70m bgl in TP1 and 0.60m bgl in TP2.

Soakaway tests, in accordance with the principles of BRE365 were undertaken in the base of the trial pits at a depth of 0.80m bgl. TP1 and TP2 were all bottomed out within the soils of the Undifferentiated River Terrace Deposits generally comprising an orange brown sandy clay. The sand was fine to medium grained. The infiltration rates recorded within the trial pits can be seen tabulated below.

INFILTRATION TESTING

Infiltration Test Results – Recorded Infiltration Rates m/s			
	Test 1	Test 2	Test 3
TP1 @ 0.80m bgl within Undifferentiated River Terrace Deposits	3.26 x10 ⁻⁷ m/s	-	-
TP2 @ 0.80m bgl within Undifferentiated River Terrace Deposits	1.87 x10 ⁻⁷ m/s	-	-

Based upon the results of the infiltration tests, it was considered unlikely that the soils of the Undifferentiated River Terrace Deposits encountered at shallow depth would provide a suitable medium for soakaway installation.



LOCATION PLAN
SCALE 1:1250 @ a3



0m 10m 20m 50m 100m

— APPROXIMATE SITE BOUNDARY

NOTE: NOT TO SCALE

Project:

Ryelands Farmhouse, 4 Oak Tree Lane, Woodgate, Chichester, West Sussex PO20 3GU

Client:

Domesua

Date:

March 2022

Trial Hole Location Plan

Ref:

GWPR4660

Figure 1





Trial Pit Log

Project Name: 4, Oak Tree Lane,		Client: Domusea		Date: 03/03/2022	
Location: Woodgate, Chichester, PO20 3GU		Contractor:			
Project No. : GWPR4660		Crew Name:		Equipment:	
Location Number TP1	Location Type TP	Level	Logged By	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.20			Brown gravelly sandy gravelly SILT. The sand was fine grained and the gravel was fine to medium, subangular flint. (TOPSOIL).	
					0.80			Orangish brown sandy CLAY. The sand was fine to medium grained. (UNDIFFERENTIATED RIVER TERRACE DEPOSITS).	
								End of Borehole at 0.800m	1
									2
									3
									4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots noted to 0.70m bgl. Groundwater not encountered.





Trial Pit Log

Project Name: 4, Oak Tree Lane,		Client: Domusea		Date: 03/03/2022	
Location: Woodgate, Chichester, PO20 3GU		Contractor:			
Project No. : GWPR4660		Crew Name:		Equipment:	
Location Number TP2	Location Type TP	Level	Logged By	Scale 1:25	Page Number Sheet 1 of 1

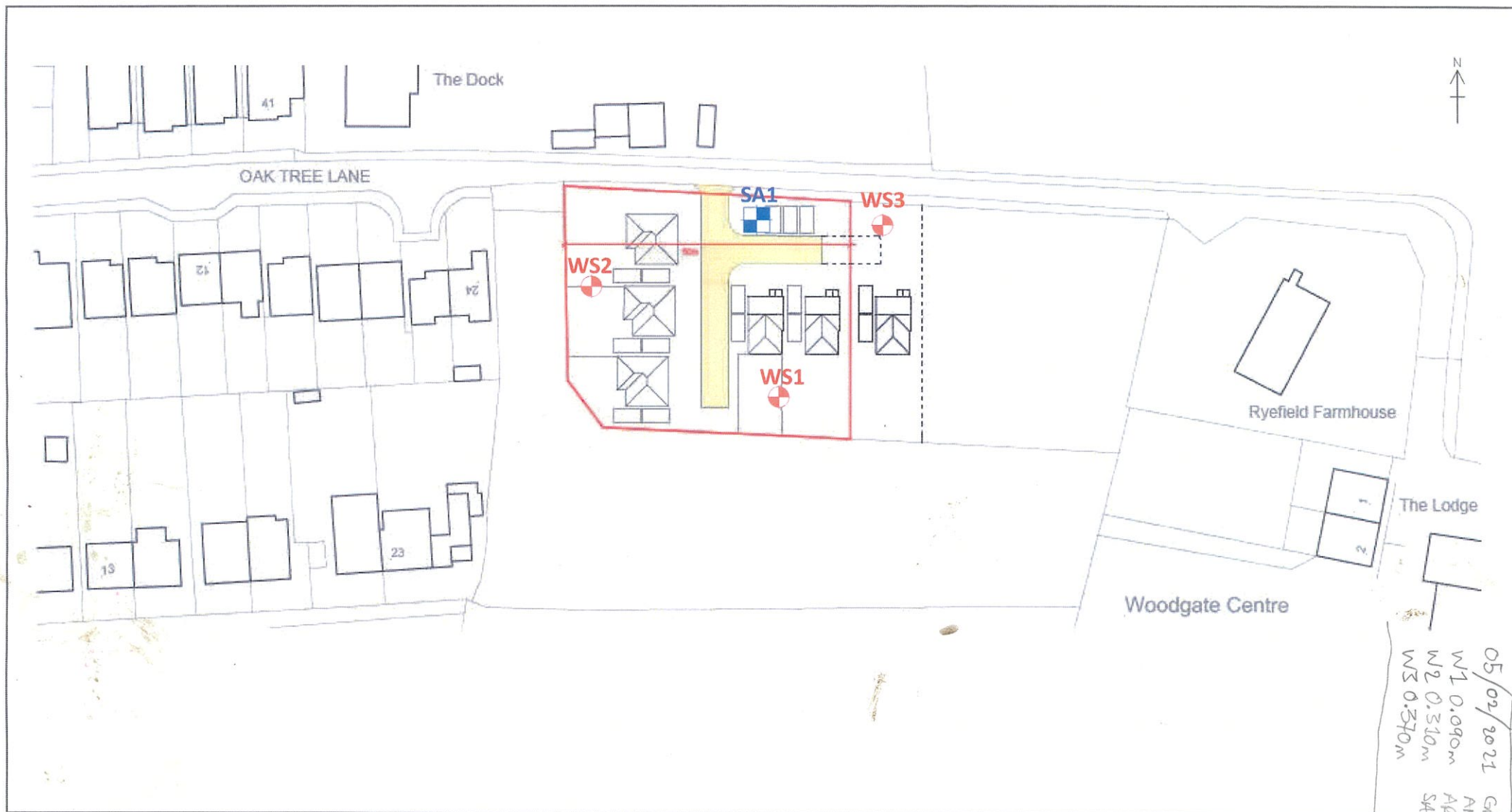
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.20			Brown gravelly sandy SILT. The sand was fine grained and the gravel was fine to medium, sub-angular gravel. (TOPSOIL).	
					0.80			Orangish brown sandy CLAY. The sand was fine to medium grained. (UNDIFFERENTIATED RIVER TERRACE DEPOSITS).	
								End of Borehole at 0.800m	1
									2
									3
									4
									5

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

Remarks

Roots noted to 0.60m bgl. Groundwater not encountered.





05/02/2021
 W1 0.090m
 W2 0.310m
 W3 0.370m

GROUND
 AND SURROUNDINGS
 AREA FULLED/
 SATURATED.

Notes:

1. Do not scale from this drawing.
2. All dimensions must be checked on site prior to commencement of work.
3. Where applicable this drawing is to be read in conjunction with other consultants drawings.
4. This drawing is the copyright of Impact Geotechnical Ltd.

Drawing Title:

Hole Location Plan

Project Reference:

P21.109A

Site Name:

Land to the west of
 Ryefield Farm House

Revision: 0

Drawn by: RM

Scale: Not to Scale



IMPACT
 GEOTECHNICAL

Percussion Drilling Log

Project Name: Ryefield Farm House	Client: Domusea	Date: 26/01/2021
Location: Eastergate, West Sussex	Contractor: Impact GEotechnical Ltd	
Project No. : P21.109B	Crew Name: SG	Drilling Equipment: Archway Dart
Borehole Number WS1	Hole Type WLS	Level
		Logged By RM
		Scale 1:25
		Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.20			Orange brown mottled pale grey sandy SILT/CLAY. Sand is fine (RIVER TERRACE DEPOSITS).	
		1.00	SPT	N=14 (2,2/3,3,4,4)				MADE GROUND: Grass over brown sandy Silt/Clay. Sand is fine. Rare subangular to subrounded fine to medium sized gravel of flint (TOPSOIL).	1
					1.50				
		2.00	SPT	N=17 (2,2/4,4,4,5)				Orange brown occasionally mottled light grey fine to medium SAND (RIVER TERRACE DEPOSITS).	2
									3
					4.00			End of Borehole at 4.000m	4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 1.40mbgl and noted to rise to ~1.30mbgl. 35mm diameter groundwater standpipe installed at 4.00mbgl with 1.00m plain pipe and 3.00m slotted pipe.

Percussion Drilling Log

Project Name: Ryefield Farm House		Client: Domusea		Date: 26/01/2021	
Location: Eastergate, West Sussex		Contractor: Impact GEotechnical Ltd			
Project No. : P21.109B		Crew Name: SG		Drilling Equipment: Archway Dart	
Borehole Number WS2	Hole Type WLS	Level	Logged By RM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.15			MADE GROUND: Grass over brown sandy Silt/ Clay. Sand is fine. Rare subangular to subrounded fine to medium sized gravel of flint (TOPSOIL). Orange brown mottled pale grey sandy SILT/CLAY. Sand is fine (RIVER TERRACE DEPOSITS).	1
		1.00	SPT	N=14 (2,2/3,3,4,4)					
					1.40			Orange brown occasionally mottled light grey fine to medium SAND (RIVER TERRACE DEPOSITS).	2
		2.00	SPT	N=17 (2,2/4,4,4,5)					3
					4.00			End of Borehole at 4.00m	4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 1.40mbgl and noted to rise to ~1.20mbgl. 35mm diameter groundwater standpipe installed at 4.00mbgl with 1.00m plain pipe and 3.00m slotted pipe.

Percussion Drilling Log

Project Name: Ryefield Farm House	Client: Domusea	Date: 26/01/2021
Location: Eastergate, West Sussex	Contractor: Impact GEotechnical Ltd	
Project No. : P21.109B	Crew Name: RM	Drilling Equipment: Archway Dart
Borehole Number WS3	Hole Type WLS	Level RM
	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20						MADE GROUND: Grass over brown sandy Silt/Clay. Sand is fine. Rare subangular to subrounded fine to medium sized gravel of flint (TOPSOIL). Orange brown mottled pale grey sandy SILT/CLAY. Sand is fine (RIVER TERRACE DEPOSITS).	1
		1.00	SPT	N=14 (1,2/3,3,4,4)		1.40		Orange brown occasionally mottled light grey fine to medium SAND (RIVER TERRACE DEPOSITS).	2
		2.00	SPT	N=17 (2,3/3,4,5,5)					3
					4.00			End of Borehole at 4.000m	4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 1.40mbgl and noted to rise to ~1.20mbgl. 35mm diameter groundwater standpipe installed at 3.80mbgl with 0.80m plain pipe and 3.00m slotted pipe.



Appendix C Southern Water Sewer Records



(c) Crown copyright and database rights 2026 Ordnance Survey AC0000808122 Date: 14/05/26 Scale: 1:1250 Map Centre: 493963,104249 Data updated: 17/04/26 Our Ref: 2121238 - 1 Wastewater Plan A3
Powered by digdat

The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site. This plan is produced by Southern Water Services Ltd (c) Crown copyright and database rights 2026 Ordnance Survey AC0000808122. This map is to be used for the purposes of viewing the location of Southern Water plant only. Any other uses of the map data or further copies is not permitted.

WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.

Foul Gravity Sewer	Combined Gravity Sewer	Culverted Water Course or Treated Effluent	Surface Water Gravity Sewer
Rising Main, Vacuum or Syphon	Combined Outfall	Surface Water Outfall	Surface Water Inlet
Combined Pumping Station	Surface Water Pumping Station	Foul Pumping Station	Foul Manhole
Water Treatment Works	Section 104 Area	Building Over Agreement Area	Combined Manhole
			Surface Water Manhole
			Side Entry Manhole, Demarcation Chamber, Dummy Manhole or Surface Water Soakaway

dan@harbourstonedesign.co.uk	
C160	



[illegible][illegible][illegible]