Suite 5 Brightwater House
Market Place
Ringwood
Hampshire
BH24 1AP
Tel: 01256 703355

Our Ref: MT/6129

1st October 2026

FAO: Drainage Dept.
Horsham District Council
Parkside
Horsham
West Sussex
RH12 1RL

Dear Sir/Madam

Re: Sincox Lane, Shipley, West Sussex

Bellamy Roberts has been instructed by Forays Homes revise the surface and foul water drainage strategy with reference to the above scheme.

Previously, due to land constraint issues, surface water was to be attenuated within a cellular storage system beneath the proposed carriageway and parking areas. This was then discharged at a restricted rate of 1.1l/s into the existing ditch.

Foul water was to be conveyed to an on-site package treatment plant and the treated effluent was discharged to the same ditch. The package treatment plant was to be located under the proposed turning head.

This was approved by the LLFA.

The previous land constraint issues have been resolved and the surface water strategy has been revised to incorporate an attenuation basin, rather than a cellular storage system. Outfall is still proposed to the ditch and the discharge rate remains at 1.1l/s.

The proposed package treatment plan has been relocated out of the proposed turning head.

The revised drainage strategy is enclosed, along with construction details and the accompanying Infodrainage analysis.

Given above ground attenuation is preferable to below ground storage, it is considered that the revised strategy results in a betterment over that previously agreed.

Yours sincerely

[redacted]

Matt Twinberrow BEng. MCIHT
Associate Director
[redacted]

Enclosed:
Surface Water Drainage Strategy (6129/1003 rev. G)
Infodrainage Analysis
Drainage Construction Details (6440/1008 rev. A)

Director:
IT Roberts MCIHT
Associate Director:
MJ Twinberrow BEng MCIHT
Consultant:
GD Bellamy BSc CEng MICE

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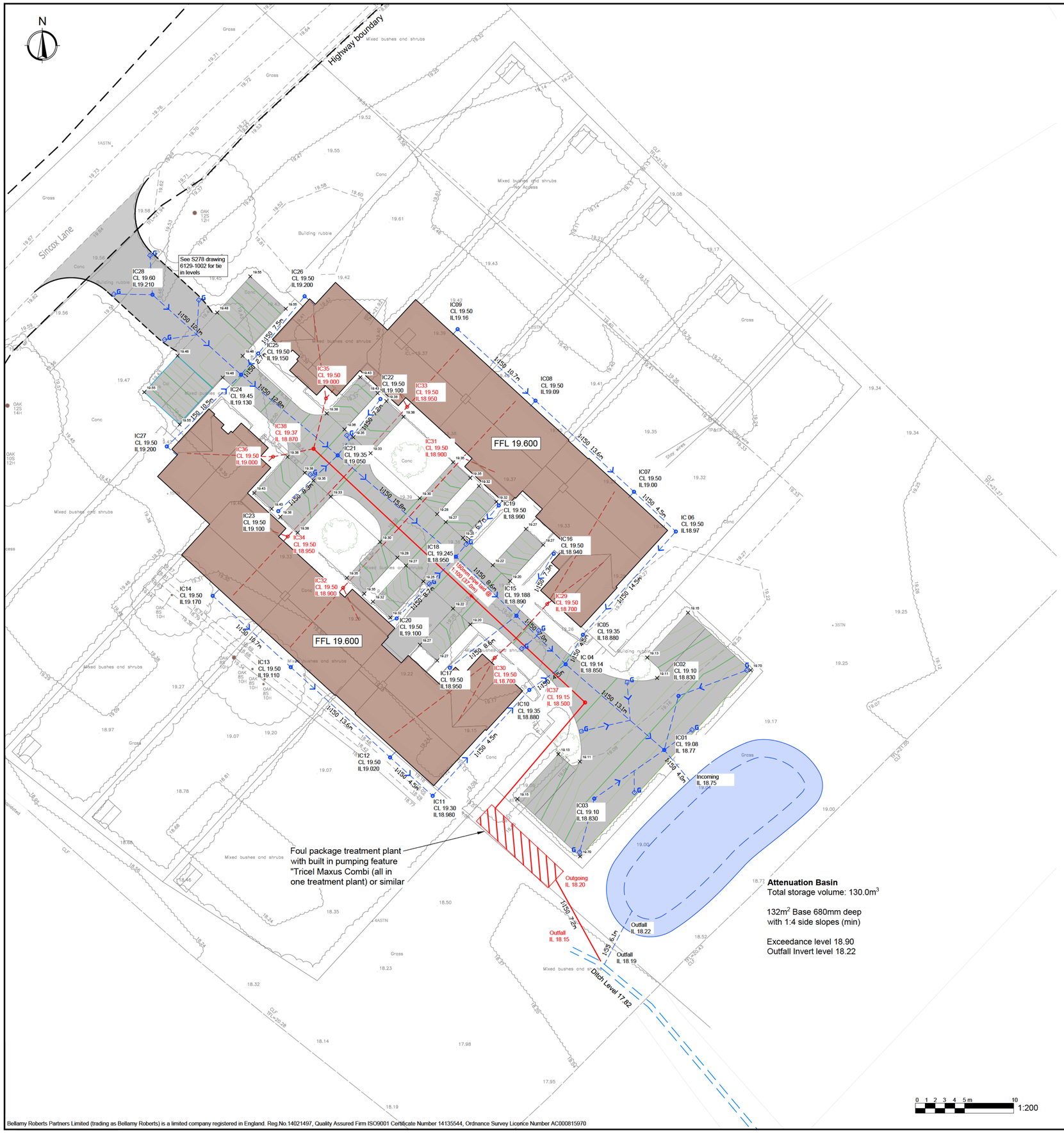
Reg No 14021497. Registered Office: Clifton House, Bunnian Place, Basingstoke, Hampshire RG21 7JE



Inspection Chamber Schedule

IC ID	Cover Level (m)	Invert Level (m)	Chamber Depth (m)	Type of Construction
IC01	19.080	18.770	0.310	Type B
IC02	19.100	18.830	0.270	Type B
IC03	19.100	18.830	0.270	Type B
IC04	19.140	18.850	0.290	Type B
IC05	19.350	18.880	0.470	Type A
IC06	19.500	18.970	0.530	Type A
IC07	19.500	19.000	0.500	Type A
IC08	19.500	19.090	0.410	Type A
IC09	19.500	19.160	0.340	Type A
IC10	19.350	18.880	0.470	Type A
IC11	19.300	18.980	0.320	Type A
IC12	19.500	19.020	0.480	Type A
IC13	19.500	19.110	0.390	Type A
IC14	19.500	19.170	0.330	Type A
IC15	19.188	18.890	0.300	Type B
IC16	19.500	18.940	0.560	Type A
IC17	19.500	18.950	0.550	Type A
IC18	19.245	18.950	0.300	Type B
IC19	19.500	18.990	0.510	Type A
IC20	19.500	19.100	0.400	Type A
IC21	19.350	19.050	0.300	Type B
IC22	19.500	19.100	0.400	Type A
IC23	19.500	19.100	0.400	Type A
IC24	19.450	19.130	0.320	Type B
IC25	19.500	19.150	0.350	Type A
IC26	19.500	19.200	0.300	Type A
IC27	19.500	19.200	0.300	Type A
IC28	19.520	19.210	0.310	Type B
IC29	19.500	18.700	0.800	Type A
IC30	19.500	18.700	0.800	Type A
IC31	19.500	18.900	0.600	Type A
IC32	19.500	18.900	0.600	Type A
IC33	19.500	18.950	0.550	Type A
IC34	19.500	18.950	0.550	Type A
IC35	19.500	19.000	0.500	Type A
IC36	19.500	19.000	0.500	Type A
IC37	19.150	18.500	0.650	Type B
IC38	19.370	18.870	0.500	Type B

Notes

Do not scale this drawing

This drawing shall be read in conjunction with all other relevant Engineering, Architectural, Landscaping details, drawings and specifications and all relevant Highway Authority Plans.

Any works constructed prior to technical approval are at the contractors own risk.

Infiltration is expected to be extremely low on site due to results from a neighbouring site. A dry attenuation basin is being suggested with total storage capacity of 130m^3 to cater for 0.176ha of impermeable surface area, discharging at a maximum controlled rate of 1.1 l/s into a nearby ditch. Control orifice to be guarded to reduce risk of blockages.

Manhole locations are approximate. Chamber locations are indicative and may be adjusted locally to suit the final building drainage connections.

All surface water drainage pipes to be lightweight HDPE pipes or similar to comply with HAPAS BBA, 100mmØ unless otherwise stated.

All foul sewer pipes to be PVC or similar material, 150mmØ unless otherwise stated.

All drainage pipes with less than 1.2m cover in vehicular areas or less than 900mm cover in soft landscaped areas shall be provided with Class Z concrete bed and surround in accordance with drawing 6129-1008.

- Foul sewer
- House foul sewer connection and inspection chamber
- Surface water drainage
- Perforated pipe
- Gulley pot
- Surface Water Manhole
- Foul Water Manhole
- Major Contour (250mm)
- Minor Contour (50mm)

Catchment Areas

- Roof area - 790m^2
- Roads - 680m^2

Total 1470m^2

REVISION	AMENDMENT	DRN	DATE	CHK
G	Adding tie in levels & removing permeable paving	CR	30/09/26	MT
F	Detailed Drainage Design	CR	04/09/26	MT
E	Potential Attenuation Basin sized	CR	07/08/25	MT
D	Flow arrows removed	MB	20/01/25	MT
C	Drainage details updated following	JCB	21/11/24	MT
B	Drainage details updated	JCB	08/11/24	MT
A	Drainage details updated	JCB	02/10/24	MT

Bellamy Roberts
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Western Lane
Odiham
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Tel: 01256 703355
Email: info@bellamyroberts.co.uk

CLIENT: Forays Homes

PROJECT: Sincox Lane

TITLE: **Proposed Access and Residential Dev**
Drainage Design

DRAWN BY	DESIGN BY	CHK BY
JCB	JCB	MT

DATE	DRAWING No.	REV No.
07/08/24	6129 / 1003	G

SCALE: 1:200 @ A1

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Project:	Date:		
Sincox Lane Drainage Strategy Ref - 6129 Rev A	02/09/2026		
	Designed by: CR	Checked by: MT	Approved By: MT
Report Details: Type: Inflows Storm Phase: Phase	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		

Catchment Area (Houses)

Type : Catchment Area

Area (ha)	0.076

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (Carriageways)

Type : Catchment Area

Area (ha)	0.071

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Project:	Date:		
Sincox Lane Drainage Strategy Ref - 6129 Rev A	02/09/2026		
	Designed by: CR	Checked by: MT	Approved By: MT
Report Details: Type: Stormwater Controls Storm Phase: Phase	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		

Attenuation Basin

Type : Pond

Dimensions

Exceedance Level (m)	18.900
Depth (m)	0.680
Base Level (m)	18.220
Freeboard (mm)	5
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:X)	4.088
Total Volume (m³)	130.027

Depth (m)	Area (m²)	Volume (m³)
0.000	132.00	0.000
0.530	235.00	95.952

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Orifice

Diameter (m)	0.029
Coefficient of Discharge	0.600
Invert Level (m)	18.220

Advanced

Perimeter	Circular
Length (m)	42.356
Friction Scheme	Manning's n
n	0.05

Project:	Date:		
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Report Details: Type: Inflow Summary Storm Phase: Phase	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment Area (Carriageways)	Attenuation Basin		Time of Concentration	0.071	100	10	110	0.078
Catchment Area (Houses)	Attenuation Basin		Time of Concentration	0.076	100	10	110	0.084
TOTAL		**0.0**		**0.147**				**0.162**

Project:	Date:		
Sincox Lane Drainage Strategy Ref - 6129 Rev A	02/09/2026		
	Designed by:	Checked by:	Approved By:
	CR	MT	MT
Report Details: Type: Network Design Criteria Storm Phase: Phase	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		

Flow Options

Peak Flow Calculation	(UK) Modified Rational Method
Min. Time of Entry (mins)	5
Max. Travel Time (mins)	30

Lock Slope Options	None
Design Options	Minimise Excavation
Design Level	Level Soffits
Min. Cover Depth (m)	1.200
Min. Slope (1:X)	500.00
Max. Slope (1:X)	40.00
Min. Velocity (m/s)	1.0
Max. Velocity (m/s)	3.0
Use Flow Restriction	☐
Reduce Channel Depths	☐

Pipe Size Library

Default

Add. Increment (mm)	75
Max. Diameter (mm)	0

Diameter (mm)	Min. Slope (1:X)	Max. Slope (1:X)
100	0.00	0.00
150	0.00	0.00

Project:	Date:		
Sincox Lane Drainage Strategy Ref - 6129 Rev A	02/09/2026		
	Designed by: CR	Checked by: MT	Approved By: MT
Report Title: Rainfall Analysis Criteria	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	10
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Project:	Date:		
Sincox Lane Drainage Strategy Ref - 6129 Rev A	02/09/2026		
	Designed by: CR	Checked by: MT	Approved By: MT
Report Details: Type: Inflows Summary Storm Phase: Phase	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		

FSR: 1 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m^3)
Catchment Area (Houses)	FSR: 1 years: +0 %: 15 mins: Winter	0.08	10.8	5.076
Catchment Area (Carriageways)	FSR: 1 years: +0 %: 15 mins: Winter	0.07	10.1	4.738

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Report Details: Type: Inflows Summary Storm Phase: Phase	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		

FSR: 30 years: Increase Rainfall (%): +35: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m^3)
Catchment Area (Houses)	FSR: 30 years: +35 %: 15 mins: Winter	0.08	35.9	16.778
Catchment Area (Carriageways)	FSR: 30 years: +35 %: 15 mins: Winter	0.07	33.5	15.672

Project:	Date:		
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Report Details: Type: Inflows Summary Storm Phase: Phase	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		

FSR: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m^3)
Catchment Area (Houses)	FSR: 100 years: +45 %: 15 mins: Winter	0.08	50.0	23.336
Catchment Area (Carriageways)	FSR: 100 years: +45 %: 15 mins: Winter	0.07	46.7	21.802

Project:	Date:		
Sincox Lane Drainage Strategy Ref - 6129 Rev A	02/09/2026		
	Designed by: CR	Checked by: MT	Approved By: MT
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		

FSR: 1 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Attenuation Basin	FSR: 1 years: +0 %: 960 mins: Winter	18.393	18.393	0.173	0.173	2.0	25.369	0.000	0.000	0.7	43.816	80.489	OK

Project:	Date:		
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Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		

FSR: 30 years: Increase Rainfall (%): +35: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Attenuation Basin	FSR: 30 years: +35 %: 960 mins: Winter	18.696	18.695	0.476	0.475	5.5	83.419	0.000	0.000	1.2	99.800	35.845	OK

Project:	Date:		
Sincox Lane Drainage Strategy Ref - 6129 Rev A	02/09/2026		
	Designed by: CR	Checked by: MT	Approved By: MT
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		

FSR: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Attenuation Basin	FSR: 100 years: +45 %: 960 mins: Winter	18.851	18.849	0.631	0.629	7.4	119.223	0.000	0.000	1.4	120.338	8.309	OK



Phase
FSR: 1 years: Increase Rainfall (%): +0: 960 mins: Winter

Tables

Name	Max. Inflow (L/s)	Total Inflow Volume (m³)	Max. Outflow (L/s)	Total Outflow Volume (m³)
Attenuation Basin			0.7	43.816
TOTAL	2.0	45.522	0.7	43.816

Project:	Date:		
Sincox Lane Drainage Strategy Ref - 6129 Rev A	02/09/2026		
	Designed by: CR	Checked by: MT	Approved By: MT
Report Details: Type: Phase Management Storm Phase: Phase	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		



Phase
FSR: 30 years: Increase Rainfall (%): +35: 960 mins: Winter

Tables

Name	Max. Inflow (L/s)	Total Inflow Volume (m³)	Max. Outflow (L/s)	Total Outflow Volume (m³)
Attenuation Basin			1.2	99.800
TOTAL	5.5	124.731	1.2	99.800

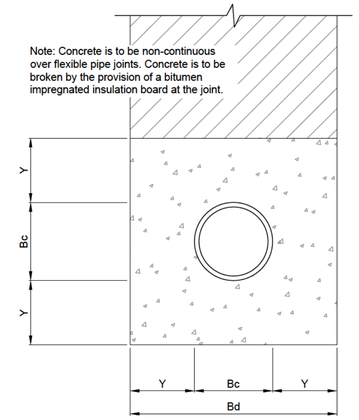
Project:	Date:		
Sincox Lane Drainage Strategy Ref - 6129 Rev A	02/09/2026		
	Designed by: CR	Checked by: MT	Approved By: MT
Report Details: Type: Phase Management Storm Phase: Phase	Company Address: Suite 5, Brightwater House Market Place, Ringwood BH24 1AP		



Phase
FSR: 100 years: Increase Rainfall (%): +45: 960 mins: Winter

Tables

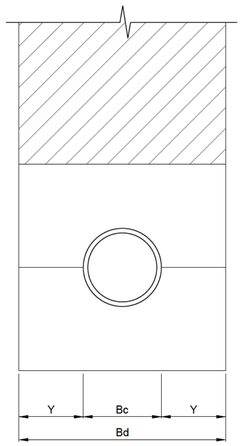
Name	Max. Inflow (L/s)	Total Inflow Volume (m³)	Max. Outflow (L/s)	Total Outflow Volume (m³)
Attenuation Basin			1.4	120.338
TOTAL	7.4	169.504	1.4	120.338



Pipe Bedding Detail
Class Z
For pipes laid less than 1.2m in Vehicular Areas
or less than 900mm in soft areas
(Scale 1:10)

DoT Type 1 material to be used under vehicular areas. Selected as-dug material elsewhere which is free from (large aggregate over 40mm, clay over 100mm, frozen and/or vegetable matter). Material compacted in layers not exceeding 250mm thk and mechanical compaction equipment not to be used until there is a minimum cover of 300mm above the crown of the pipe.

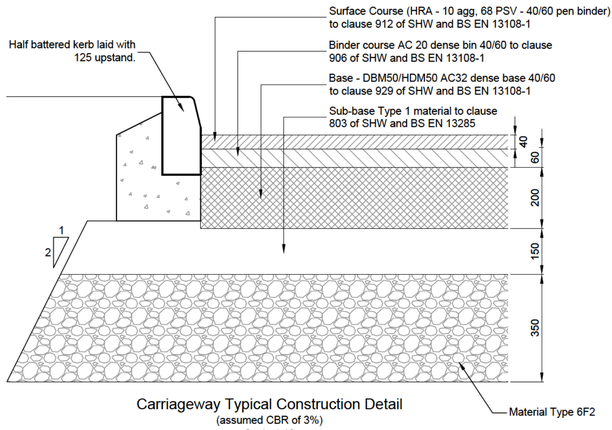
GEN3 Concrete to BSEN206-1 and BS8500, bed and surround to pipework.



Pipe Bedding Detail
Class B
For pipes laid more than 900mm in Landscaped Areas
(Scale 1:10)

Initial backfill material, not less than 150mm thk. Heavy compaction equipment not to be used.

Granular material to BS882, bed and surround to pipework.

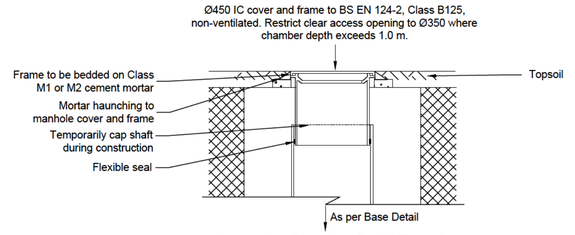


Carriageway Typical Construction Detail
(assumed CBR of 3%)
Scale 1:10

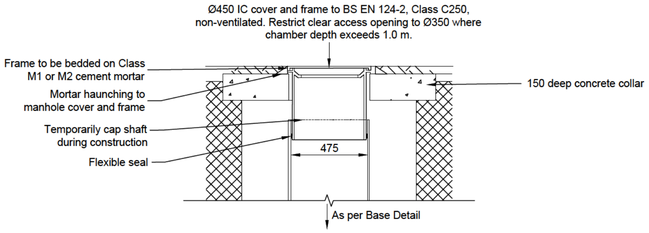
Notes

Sub-base thickness shall be determined in accordance with latest guidence from MCHW
Capping layer (if required) shall be laid in accordance with Specification for highway Works
Materials to be Type 6F unless otherwise approved.
Surface course shall have 1.3mm surface texture.

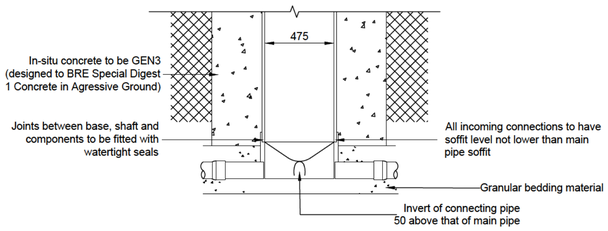
Exact thickness to be determined and adjusted if required to suit and match that of the construction thickness along the A36 noce exposed during the construction phase.



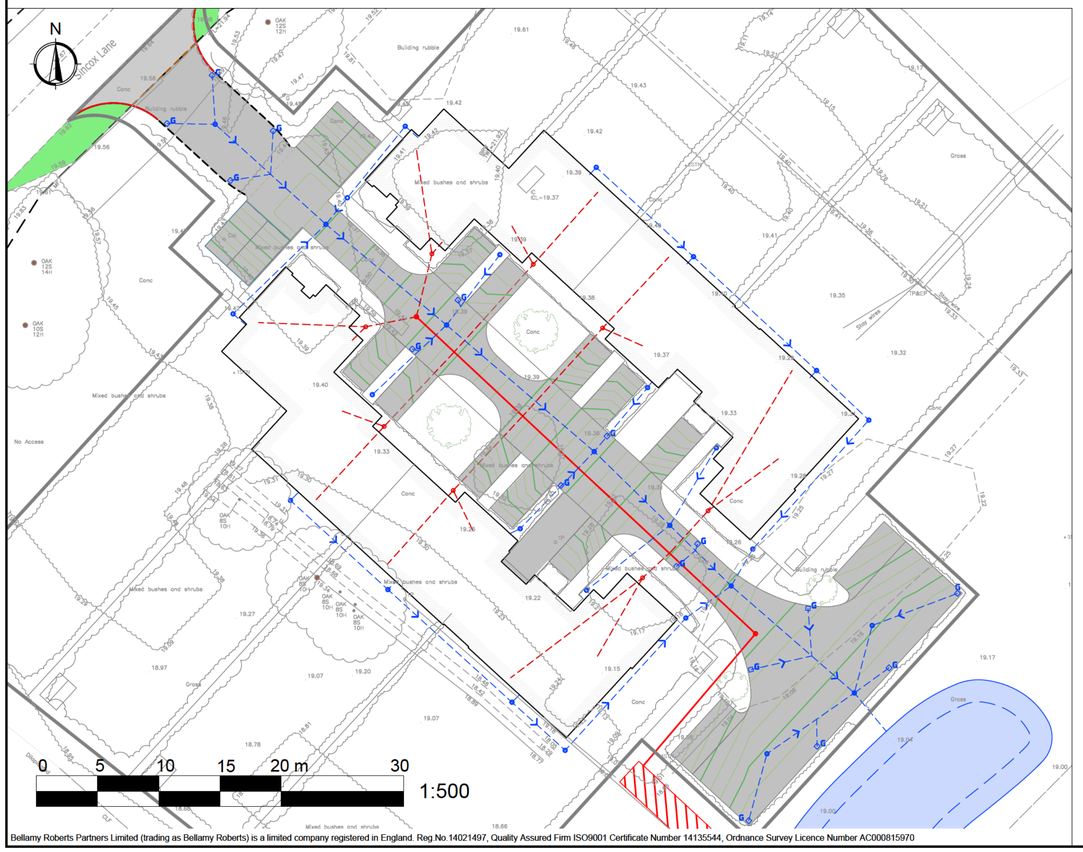
Inspection Chamber Detail Type A
Soft Landscaping
Scale 1:20



Inspection Chamber Detail Type B
Paved or Trafficked areas
Scale 1:20



Inspection Chamber Base Detail
Scale 1:20



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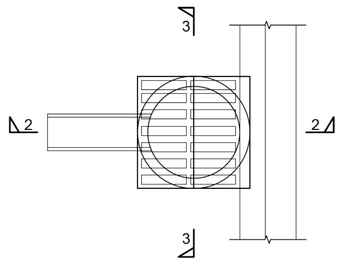
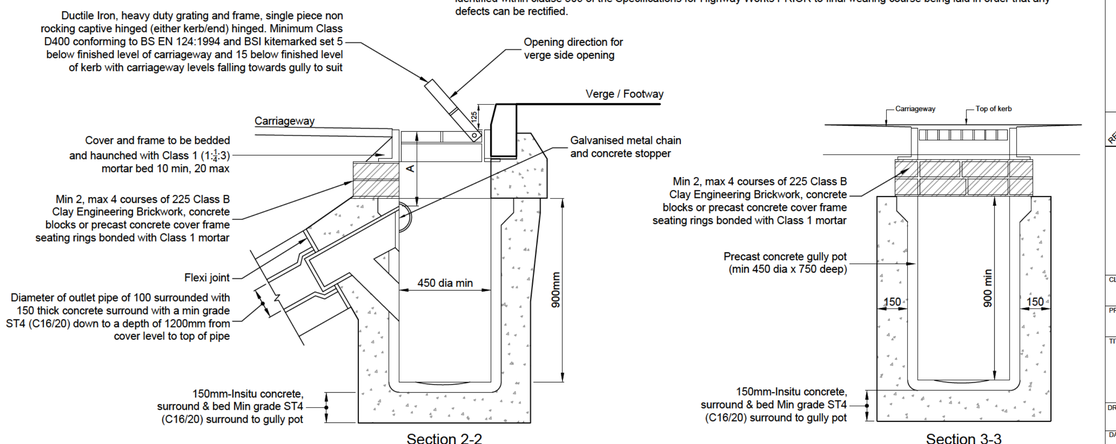


Plan

Notes

1. All gully gratings shall be of Ductile Iron construction and have minimum grade of D400 complying with BS EN 124:1994 and section 508 of the Specifications for Highway Works and shall carry the BSI Kitemark. Gully grating and frames have a minimum depth of 100 and shall be single piece non rocking anti theft captive hinged and be free from defects with kerbside hinged units. Gully grating and frames shall have a clear opening of 450 x 450 unless otherwise agreed in writing by the Highway Authority prior to installation.
2. Without exception all gully pots shall be Precast Concrete units complying with BS 5911-6:2004 1994 and section 508 of the Specifications for Highway Works, and shall carry the BSI Kitemark. Gully pots shall be trapped shall have a minimum internal diameter of 450, depth of 900 and a gully outlet of 150. Gullies shall be constructed so that no part of the trap or spout has cross sectional area less than 2/3rd that of the outlet. The depth of water seal in trapped gullies shall not be less than 50. Depth "A" to be 750 minimum below carriageway to allow for services to clear gully connections and reduce the risk of damage to pipes due to settlement. Where depth of run is 1.2m below carriageway level a flexi joint is to be used at every joint.
3. All brickwork shall be solid Class 'B' clay engineering brick complying with BS EN 771-1:2003 and Series 2400 of the Specifications for Highway Work.
4. All mortar required for bonding brickwork, haunching and bedding the manhole cover and frame shall be Class (i) with a cement/lime/sand ratio of 1:¼:3 complying with BS EN 998-1:2003, BS EN 998-2:2003 and Series 2400 of the Specifications for Highway Works.
5. All precast concrete gully pots shall be set on and surrounded with a minimum of 150 bedded on a Insitu concrete with a minimum grade of ST4/C16/20 concrete in accordance with the relevant sections of BS EN 206-1, BS 8500-1:2006, BS 8500-2:2006 and item 2602 of Series 2600 of The Specifications for Highway Works.
6. All new surface/highway drainage systems installed by the developer/contractor shall be tested using the water test method identified within clause 509 of the Specifications for Highway Works PRIOR to final wearing course being laid in order that any defects can be rectified.



Section 2-2

Section 3-3

Trapped Precast Concrete Gully Detail

Notes

Do not scale this drawing

This drawing shall be read in conjunction with all other relevant Engineering, Architectural, Landscaping details, drawings and specifications and all relevant Highway Authority Plans.

All surfacing works to be carried out in accordance with the Engineer's specification and relevant British Standards.Finished surface levels to be coordinated with building DPCs and drainage inverts.

REVISION	AMENDMENT	DRN	DATE	CHK
A	Details amended	CR	30/09/26	MT

Bellamy Roberts
Suite 5, Brightwater House
Market place, Ringwood
Hampshire BH24 1AP
Tel: 01256 703355
Email: info@bellamyroberts.co.uk

CLIENT: Forays Homes
PROJECT: Sincox Lane
TITLE: Drainage Construction Details

DRAWN BY	DESIGN BY	CHK BY
CR	CR	MT

DATE	DRAW NG No.	REV No.
04/09/2026	6129-1008	A

SCALE: As Shown @ A1