



Extension at 28 Dark Lane, Wargarve

Surface Water Drainage Strategy

April 2026

Project No. 2395

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Revision History

Rev	Date	Purpose/Status	Comments
-	April 2026	Information	First Issue

1. INTRODUCTION

- 1.1. AFA Consulting Engineers Ltd have been commissioned by Mr Matthew Tucker to prepare a Surface Water Drainage strategy report to accompany the planning application for extension to 28 Dark Lane, Wargrave.
- 1.2. This report will provide detailed layout and construction details for disposal of foul and surface water from the development.
- 1.3. This report has been prepared for the use of Mr Matthew Tucker. No other third party may rely upon or reproduce the contents of this report without the written approval of AFA Consulting Engineers Ltd. If any unauthorised third party comes into the possession of this report, they rely on it entirely at their own risk and AFA do not owe them any Duty of Care or Skill.

2. EXISTING SITE

- 2.1. The location of 28 Dark Lane, Wargrave is shown on the mapping extract below in Figure 1.



Figure 1 – Site Location Plan

- 2.2. The existing site drains to separate foul and surface water sewer which discharge to the East.

3. SURFACE WATER DRAINAGE STRATEGY

- 3.1. The proposed development is to extend the existing residential property at 28 Dark Lane, Wargrave. Refer to Appendix A for proposed site plan.
- 3.2. SUDS mimic the natural drainage system and provide a method of surface water drainage which can decrease the quantity of water discharged, and hence reduce the risk of flooding. In addition to reducing flood risk, these features can improve water quality and provide biodiversity and amenity benefits.
- 3.3. The SUDS management train incorporates a hierarchy of techniques and considers all three SUDS criteria of flood reduction, pollution reduction, and landscape and wildlife benefit. In decreasing order of preference, the preferred means of disposal of surface water runoff is:
- Discharge to ground / infiltration
 - Discharge to a surface water body.
 - Discharge to a surface water sewer.
 - Discharge to a combined sewer.
- 3.4. The philosophy of SUDS is to replicate as closely as possible the natural drainage from a site predevelopment and to treat runoff to remove pollutants, resulting in a reduced impact on the receiving watercourses. The benefits of this approach are as follows:
- Reducing runoff rates, thus reducing the flood risk downstream.
 - Reducing pollutant concentrations, thus protecting the quality of the receiving water body.
 - Groundwater recharge.
 - Contributing to the enhanced amenity and aesthetic value of development areas.
 - Providing habitats for wildlife in developed areas, and opportunity for biodiversity enhancement
- 3.5. Infiltration testing failed with shallow ground water observed.
- 3.6. There are no watercourses in proximity to the site.
- 3.7. The greenfield runoff rate of the site has been calculated as 0.2l/s as shown in Appendix B.
- 3.8. Following the hierarchy of surface water discharge it is proposed to drain the surface water runoff from the development to the existing sewer with a restricted discharge of 0.2l/s. Discharge will be limited via a hydrobrake.
- 3.9. The network including attenuation storage has been designed to accommodate rainfall events up to 1 in 100 years over a range of storm durations with 30% climate change allowance. The supporting infodrainage calculations are provided within Appendix D.

-
- 3.10. To deal with the residual risk of blockage to all onsite drainage features, the operator/owner will ensure maintenance of all drainage systems in line with the requirements in Ciria C753 the SuDS Manual.
- 3.11. A copy of the detailed Maintenance Management Plan is shown in Appendix D. This will ensure that over the lifetime of the proposed development the drainage system will be properly maintained to ensure proper functionality.

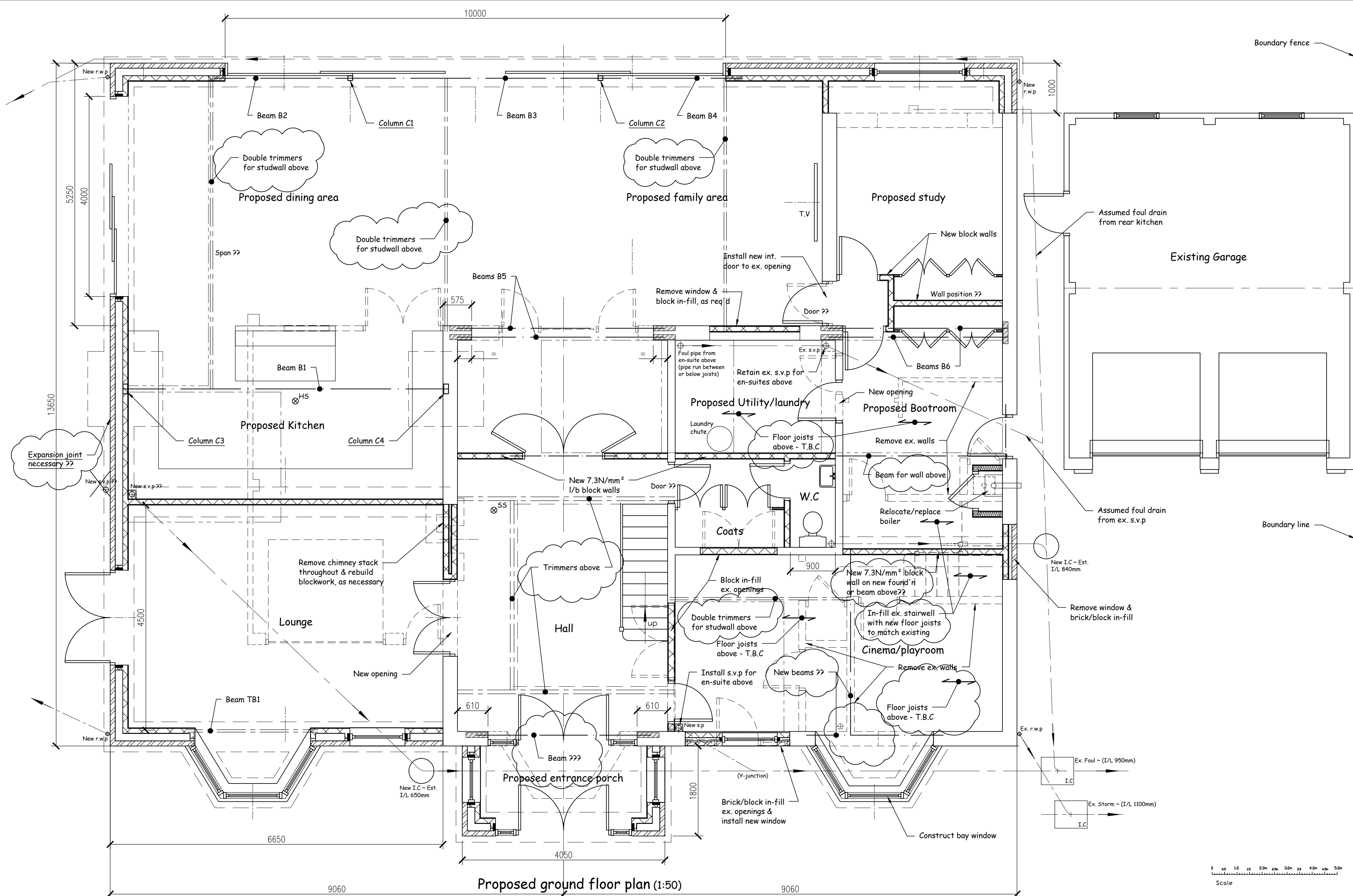
4. EFFECTS OF DEVELOPMENT ON OTHER SITES

- 4.1. The system has been designed to ensure that there is no risk of flooding over a range of storm durations for up to 1 in 100 years plus a 30% allowance for climate change. This will ensure that the risk of flooding to adjacent sites will not be increased.

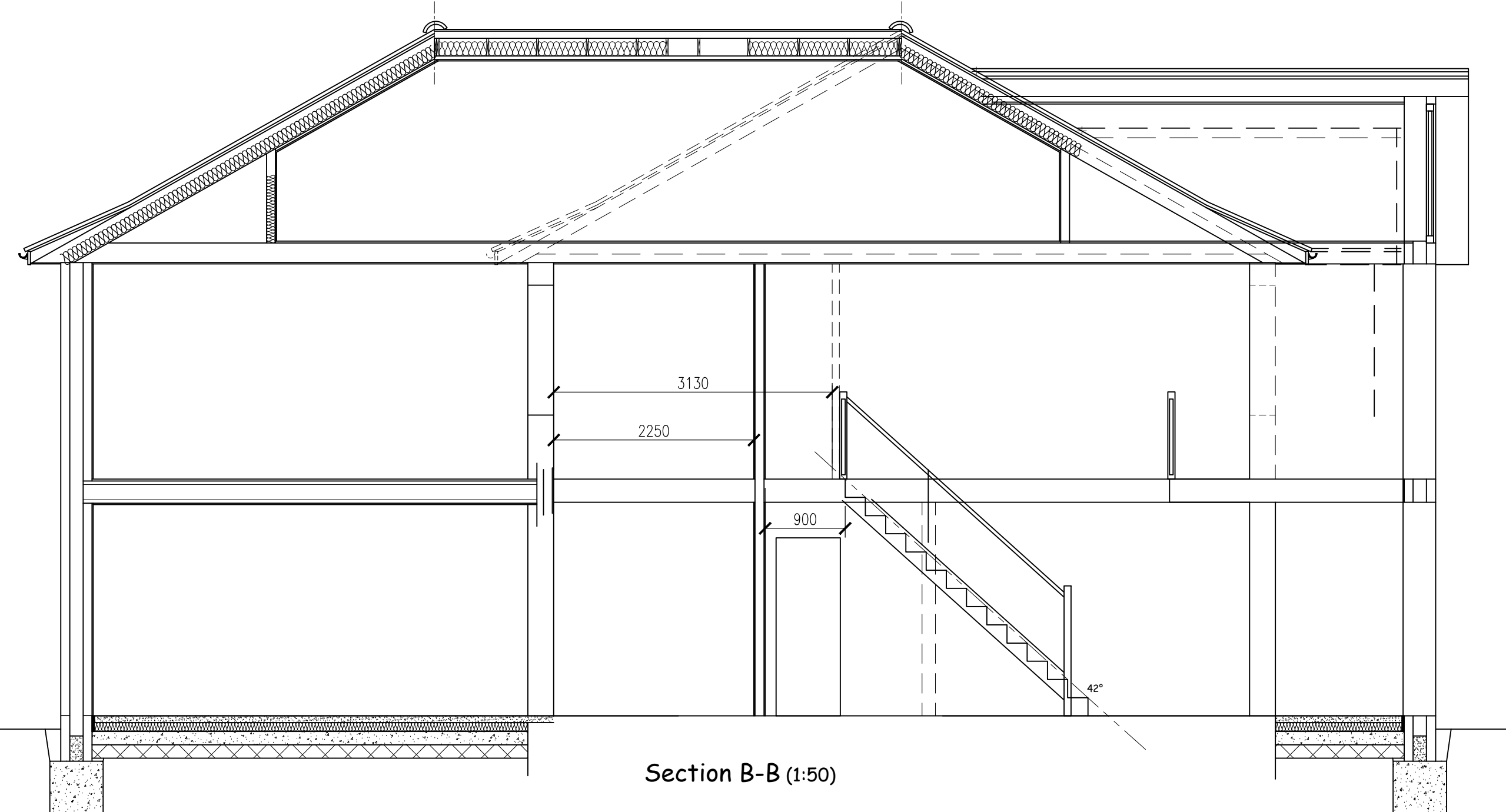
5. CONCLUSIONS AND RECOMMENDATIONS

- 5.1. Infiltration testing has been undertaken on site and verified that soakaways will not be feasible for the discharge of surface water runoff.
- 5.2. There are no watercourses in proximity to the site.
- 5.3. The greenfield runoff rate of the site has been calculated as 0.2l/s as shown in Appendix B.
- 5.4. Following the hierarchy of surface water discharge it is proposed to drain the surface water runoff from the development to the existing surface water sewer with a restricted discharge of 0.2l/s. Discharge will be limited via a hydrobrake.
- 5.5. The network including attenuation storage has been designed to accommodate rainfall events up to 1 in 100 years over a range of storm durations with 30% climate change allowance. The supporting infodrainage calculations are provided within Appendix D. The proposed drainage layout is shown in Appendix E.
- 5.6. The proposed surface drainage solution should be approved by the local authority prior to commencing any drainage works on site.

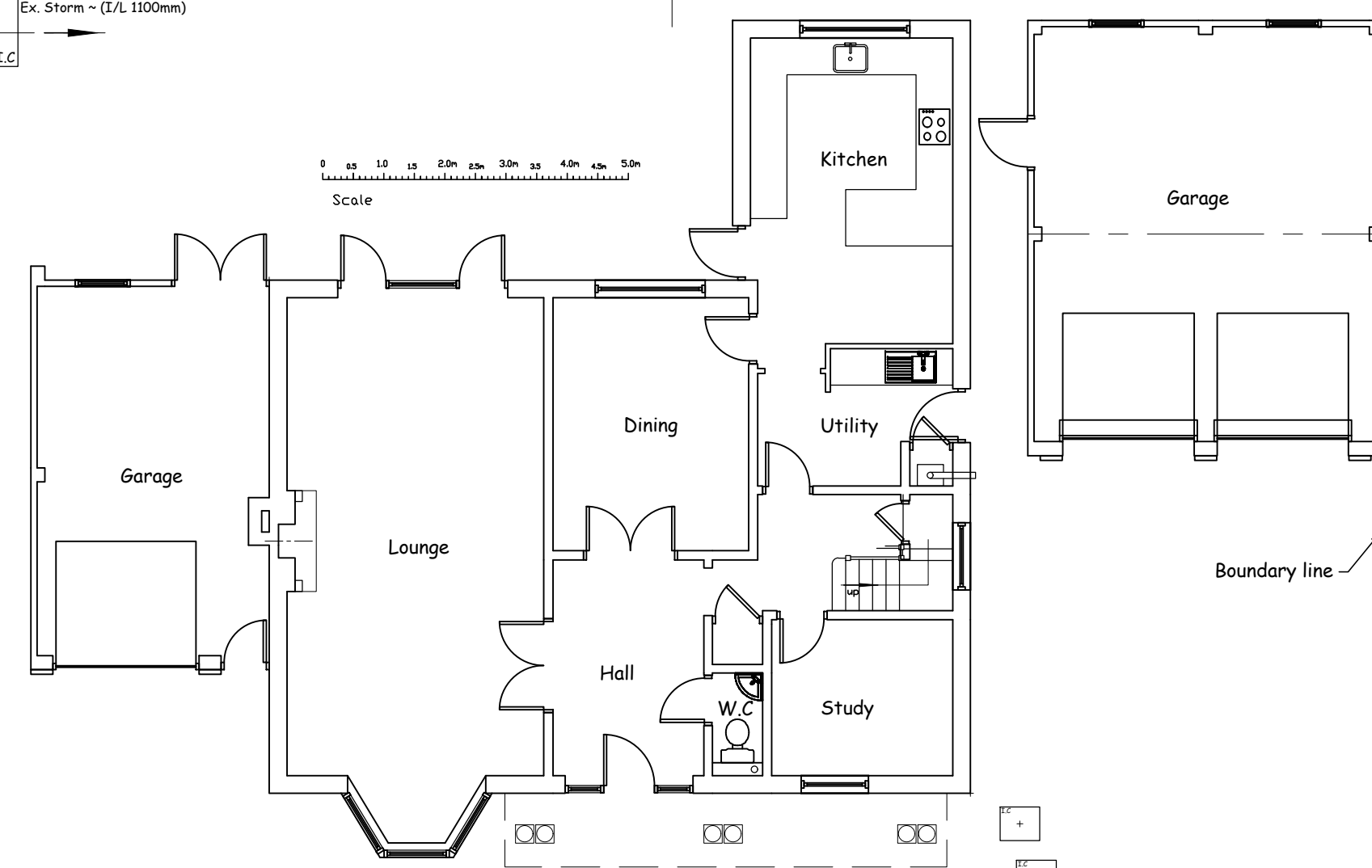
APPENDIX A
EXISTING AND PROPOSED PLANS



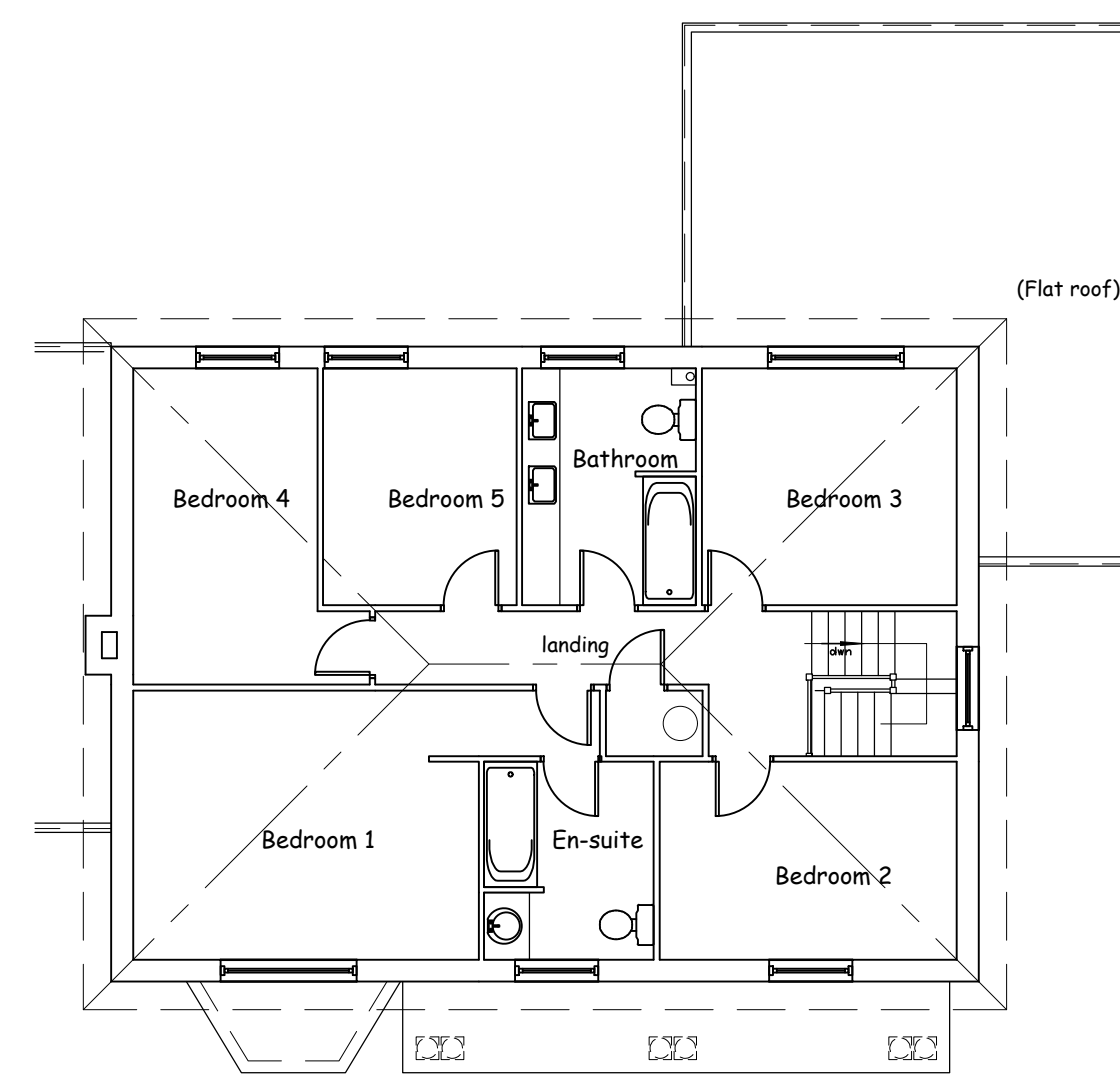
Proposed ground floor plan (1:50)



Section B-B (1:50)



Existing ground floor plan (1:100)



Existing first floor plan (1:100)

Client: Mr & Mrs M Tucker 28 Dark Lane Wargrave RG10 8JU	
Title: Proposed two storey side and rear extensions following removal of existing garage and single storey rear extension, two storey front extension and alterations to roof to accommodate loft conversion. (Sheet 1 of 2)	
Scale: 1:50 & 1:100 (@ A1)	Date: Nov 2025
Drawn: R Williams	Drg. No. MT0938-02-25
Williams Design & Development Ltd	

DRAFT 1
Issue A

APPENDIX B
GREENFIELD RUNOFF CALCULATION

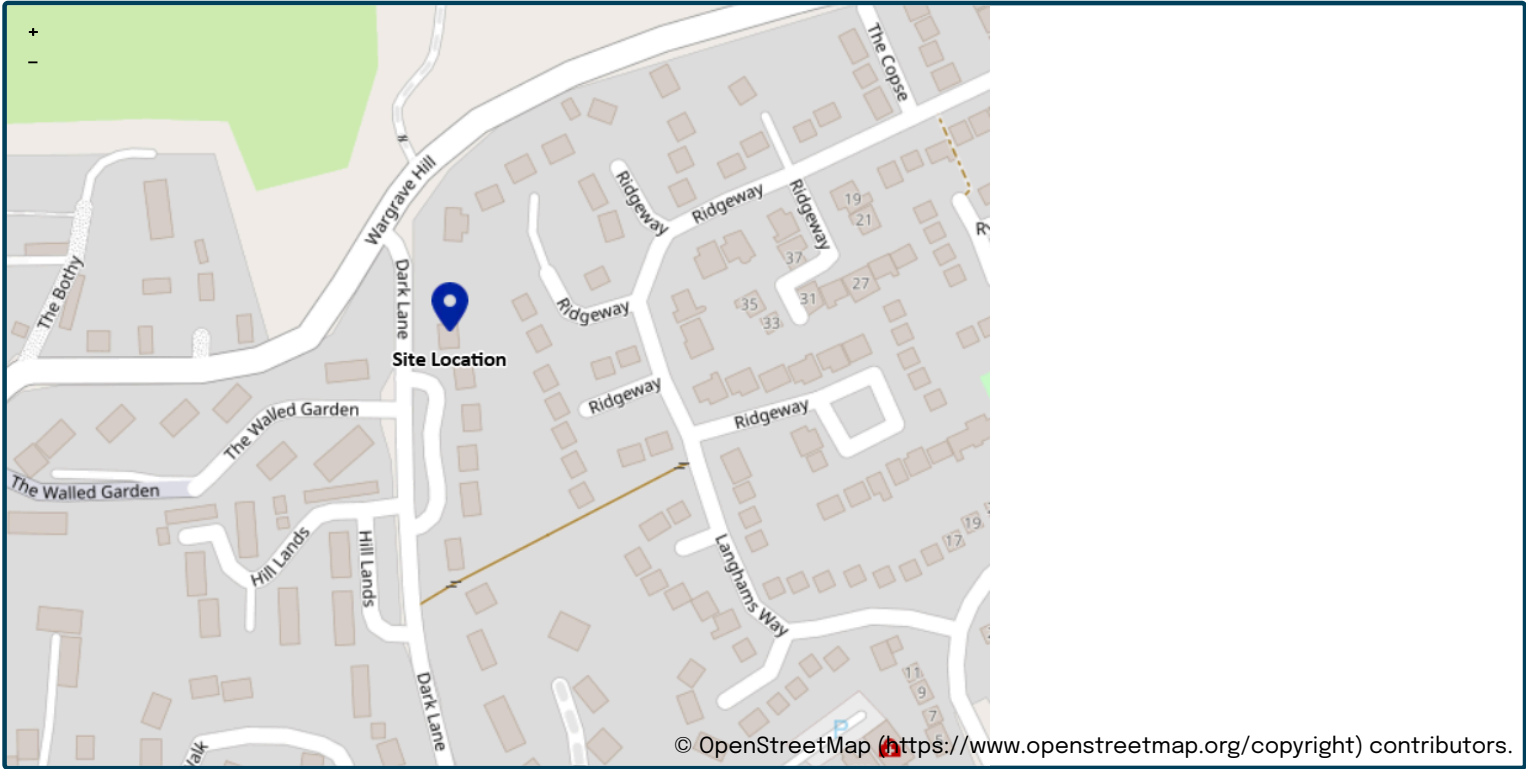
This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance “Rainfall runoff management for developments”, SC030219 (2013), the SuDS Manual C753 (CIRIA, 2015) and the non-statutory standards for SuDS (Defra, 2015). 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	07/04/2026
Calculated by	GB
Reference	Dark Lane
Model version	2.2.3

Location

Site name	Wargrave
Site location	Wargrave



Site easting (British National Grid)	478876
Site northing (British National Grid)	178882

Site details

Total site area (ha)	0.137	ha
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Greenfield runoff

Method

Method	IH124
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IH124

	<u>My value</u>		<u>Map value</u>
SAAR (mm)	659	mm	659
How should SPR be derived?	WRAP soil type		
WRAP soil type	2		2
SPR	0.3		
QBar (IH124) (l/s)	0.2	l/s	

Growth curve factors

	<u>My value</u>		<u>Map value</u>
Hydrological region	6		6
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	IH124	
Flow rate 1 year (l/s)	0.2	l/s
Flow rate 2 year (l/s)	0.2	l/s
Flow rate 10 years (l/s)	0.4	l/s
Flow rate 30 years (l/s)	0.5	l/s
Flow rate 100 years (l/s)	0.7	l/s
Flow rate 200 years (l/s)	0.9	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/) (<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) (<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 C
MAINTENANCE MANAGEMENT PLAN

SuDS MAINTENANCE MANAGEMENT PLAN

This document sets out the principles for the long-term management and maintenance of the proposed surface water Sustainable Drainage Systems (SuDS) installed at 28 Dark Lane, Wargrave.

The purpose of this document is to ensure that the adopting operator of the building is entrusted with a robust inspection and maintenance programme, ensuring the optimum operation of the surface water drainage network is continually maintained for the lifetime of the development and to prevent the increased risk of flooding both on and off site.

SUDS are engineered solutions that aim to mimic natural drainage processes. They help to reduce pollution of watercourses and localised flooding, as well as providing amenity benefit and biodiversity.

Key Factors to be considered during maintenance

- Undesirable plants – all efforts should be made to prevent drains becoming blocked and the growth of unintentional vegetation which could be detrimental to the intentional plant regime, biodiversity aims and the building fabric.
- Regular site attendance for litter collection, grass cutting and checking of inlets, outlets and control structures.
- Occasional visits to brush clean inlet gullies and drainage channels, remove silt from source control features.
- Drain heads and outlets – all drainage points must be checked every year and cleared out if necessary to ensure optimum performance.

The maintenance of all drainage features serving the development will be maintained by the building owner/operator. Ongoing maintenance activities for this infrastructure are detailed below.

All those responsible for the maintenance operations should adhere to the relevant health and safety legislation for the activities listed within this report (including lone working, if relevant). Method statements and risk assessments should always be completed prior to the undertaking of any works.

Cellular Storage Crates

The ongoing maintenance activities for below ground cellular storage crates are detailed below.

Cellular Storage Crates	
<i>Regular Maintenance</i>	<i>Frequency</i>
Inspection - Record and clean as required	Monthly
Litter and debris removal	Monthly
<i>Occasional Tasks</i>	<i>Frequency</i>
CCTV survey is blockages identified, jet clean as required. In line with manufacturers recommendations	As required
<i>Remedial Work</i>	<i>Frequency</i>
Jet clean as required. In line with manufacturers recommendations	As required

Hydrobrake

The ongoing maintenance activities for the Hydrobrake should be in line with manufacturer recommendations. A summary of the typical expected requirements is detailed below.

Hydrobrake	
Regular Maintenance	Frequency
Inspection - Record and empty/clean as required	Monthly
Litter and debris removal	Monthly
Occasional Tasks	Frequency
Service – in line with manufacturers recommendations	As required in line with manufacturers recommendations
Remedial Work	Frequency
Jet clean as required. In line with manufacturers recommendations	As required in line with manufacturers recommendations

Conventional Surface Water Drainage Features

The maintenance of all drainage features serving the development will be maintained by the building owner/operator. Ongoing maintenance activities for this infrastructure are detailed below.

Maintenance Activity	Action	Frequency
Check gully pots, linear drainage channels and catchpits	Check, clean and empty gully pots and catchpits as required to remove debris and sediment	Regular - Monthly
Check manholes and inspection chambers	Inspect manholes and inspection chambers for any signs of blockages. Clean, jet and empty as required	Regular - Annually
CCTV survey and jetting of drains	Check the integrity of drains, jet and clean as required. Remove collected debris as required	As necessary Every 5 years
Hydrobrake chambers / Vortex Flow Control – visual inspection	Check and remove any silt build up or blockages in accordance with the Manufacturers recommendations	Typically annually or as required

Records

A service log will be maintained which will include details of all scheduled maintenance required. Logs will be incorporated that record when checks were carried out and whether any actions are deemed necessary. If actions are required, a breakdown of the maintenance measures undertaken or in progress will be logged along with the date when the action was or is to be scheduled.

Records will be maintained by the management company for a minimum period of 5 years.

APPENDIX D
SURFACE WATER SUDS CALCULATIONS

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Inflows Storm Phase: Phase	Company Address:		





Catchment Area

Type : Catchment Area

Area (ha)	0.018
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Dynamic Sizing	
Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.750
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment Area (1)

Type : Catchment Area

Area (ha)	0.013
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Dynamic Sizing	
Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.750
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment Area (2)

Type : Catchment Area

Area (ha)	0.002
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Dynamic Sizing	
Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.750
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Project - 2395: 28 Dark Lane, Wargrave		Date: 07/04/2026			
		Designed by: Graeme Beaven	Checked by:		Approved By:
Report Details: Type: Junctions Storm Phase: Phase		Company Address:			

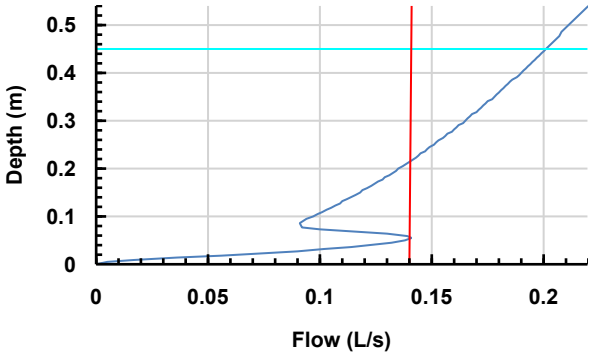
Name	Junction Type	Easting (m)	Northing (m)	Cover Level (m)	Depth (m)	Invert Level (m)	Chamber Shape	Diameter (m)
SMH02	Manhole	500576.357	164933.941	10.000	0.950	9.050	Circular	1.000
SMH03	Manhole	500593.125	164935.232	10.000	1.090	8.910	Circular	1.000
SMH01	Manhole	500575.665	164953.878	10.000	0.720	9.280	Circular	0.600
SIC01	Manhole	500594.170	164954.454	10.000	0.520	9.480	Circular	0.600

Name	Lock
SMH02	None
SMH03	None
SMH01	None
SIC01	None

Inlets

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
SMH02	Inlet (1)	Pipe (3)	(None)	No Restriction
SMH03	Inlet	Pipe (1)	(None)	No Restriction
SMH01	Inlet	Pipe (2)	(None)	No Restriction
	Inlet (1)	Catchment Area	(None)	No Restriction
SIC01	Inlet	Catchment Area (1)	(None)	No Restriction

Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
SMH02	Outlet	Pipe	Free Discharge
SMH03	Outlet	(None)	Hydro-Brake®
	Invert Level (m)	8.910	
	Design Depth (m)	0.450	
	Design Flow (L/s)	0.2	
	Objective	Minimise Upstream Storage Requirements	
	Application	Surface Water Only	
	Sump Available	☐	
	Unit Reference	CHE-0024-2000-0450-2000	
			
SMH01	Outlet	Pipe (3)	Free Discharge
SIC01	Outlet	Pipe (2)	Free Discharge

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Storm Phase: Phase	Company Address:		



Cellular Storage

Type : Cellular Storage

Dimensions

Exceedance Level (m)	10.000
Depth (m)	0.400
Base Level (m)	9.000
Number of Crates Long	8
Number of Crates Wide	5
Number of Crates High	1
Porosity (%)	95
Crate Length (m)	1
Crate Width (m)	1
Crate Height (m)	0.4
Total Volume (m³)	15.800

Inlets

Inlet

Inlet Type	Point Inflow
Incoming Item(s)	Pipe
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet (1)

Inlet Type	Point Inflow
Incoming Item(s)	Catchment Area (2)
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe (1)
Outlet Type	Free Discharge

Project - 2395: 28 Dark Lane, Wargrave		Date: 07/04/2026			
		Designed by: GraemeBeaven	Checked by:		Approved By:
Report Details: Type: Connections Storm Phase: Phase		Company Address:			

Name	Length (m)	Connection Type	Slope (1:X)	Manning's n	Colebrook-White Roughness (mm)	Diameter / Base Width (mm)	Upstream Cover Level (m)	Upstream Invert Level (m)
Pipe	1.301	Pipe	26.020		0.6	100	10.000	9.050
Pipe (1)	7.972	Pipe	88.580		0.6	100	10.000	9.000
Pipe (2)	18.514	Pipe	92.568		0.6	100	10.000	9.480
Pipe (3)	19.949	Pipe	86.736		0.6	100	10.000	9.280

Name	Downstream Cover Level (m)	Downstream Invert Level (m)	Part Family	Lock	Culvert Type	Culvert Entrance
Pipe	10.000	9.000		None	(None)	(None)
Pipe (1)	10.000	8.910		None	(None)	(None)
Pipe (2)	10.000	9.280		None	(None)	(None)
Pipe (3)	10.000	9.050		None	(None)	(None)

Project - 2395: 28 Dark Lane, Wargrave		Date: 07/04/2026			
		Designed by: GraemeBeaven	Checked by:		Approved By:
Report Details: Type: Manhole Schedule Storm Phase: Phase		Company Address:			

Name	Cover Level (m) Invert Level (m)		Connection Details				Type
Coordinates (m)	Depth (m)	Manhole Size (m)	Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
SMH02	10.000 9.050	Diameter / Length: 1.000	{1} Pipe (3)	Pipe	9.050	Diam/Width:100	Manhole
E:500576.357 N:164933.941	0.950		{a} Pipe	Pipe	9.050	Diam/Width:100	Not Applicable
SMH03	10.000 8.910	Diameter / Length: 1.000	{1} Pipe (1)	Pipe	8.910	Diam/Width:100	Manhole
E:500593.125 N:164935.232	1.090						Not Applicable
SMH01	10.000 9.280	Diameter / Length: 0.600	{1} Pipe (2)	Pipe	9.280	Diam/Width:100	Manhole
E:500575.665 N:164953.878	0.720		{a} Pipe (3)	Pipe	9.280	Diam/Width:100	Not Applicable
SIC01	10.000 9.480	Diameter / Length: 0.600					Manhole
E:500594.170 N:164954.454	0.520		{a} Pipe (2)	Pipe	9.480	Diam/Width:100	Not Applicable

Project - 2395: 28 Dark Lane, Wargrave		Date: 07/04/2026			
		Designed by: GraemeBeaven	Checked by:		Approved By:
Report Details: Type: Inflow Summary Storm Phase: Phase		Company Address:			

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment Area	SMH01		Time of Concentration	0.018	100	0	100	0.018
Catchment Area (1)	SIC01		Time of Concentration	0.013	100	0	100	0.013
Catchment Area (2)	Cellular Storage		Time of Concentration	0.002	100	0	100	0.002
TOTAL		0.0		0.034				0.034

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Network Design Criteria Storm Phase: Phase	Company Address:		



Flow Options

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

Pipe Options

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 - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Network Design Criteria Storm Phase: Phase	Company Address:		



Manhole Options

Apply Offset	☐
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Manhole Size Library

Default

Diameter / Width

Connection (mm)	Diameter / Length (m)	Width (m)
0	1.200	0.000
375	1.350	0.000
500	1.500	0.000
750	1.800	0.000

Additional Sizing

Connection (mm)	900
Diameter / Length (m)	0.900
Width (m)	0.000

Depth

Depth (m)	Diameter / Length (m)	Width (m)
0.000	1.050	0.000
1.500	1.200	0.000

Access

Depth (m)	Ladder Protrusion (mm)
0.000	130
3.000	230

Benching Requirements

Landing Width (mm)	500
Benching Width (mm)	225

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026			
	Designed by: GraemeBeaven	Checked by:	Approved By:	
Report Details: Type: Outfall Details Storm Phase: Phase	Company Address:			

Outfalls

Outfall	Outfall Type	Gated	Fixed Surcharged Level (m)	Level Curve
SMH03	Free Discharge			

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026			
	Designed by: GraemeBeaven	Checked by:	Approved By:	
	Report Title: Rainfall Analysis Criteria			
Company Address:				

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	0
Perform No Discharge Analysis	☐

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Inflows Summary Storm Phase: Phase	Company Address:		

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Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
Catchment Area	FSR: 100 years: +30 %: 15 mins: Summer	0.02	9.9	4.332
Catchment Area (1)	FSR: 100 years: +30 %: 15 mins: Summer	0.01	7.2	3.159
Catchment Area (2)	FSR: 100 years: +30 %: 15 mins: Summer	0.00	1.2	0.550

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address:		





Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
SMH02	FSR: 100 years: +30 %: 480 mins: Winter	10.00 0	9.050	9.537	0.487	1.8	0.382	0.000	1.7	19.403	Surcharged
SMH03	FSR: 100 years: +30 %: 480 mins: Winter	10.00 0	8.910	9.536	0.626	0.3	0.491	0.000	0.2	10.155	OK
SMH01	FSR: 100 years: +30 %: 15 mins: Summer	10.00 0	9.280	9.776	0.496	13.6	0.140	0.000	10.5	7.475	Surcharged
SIC01	FSR: 100 years: +30 %: 15 mins: Summer	10.00 0	9.480	9.858	0.378	7.2	0.107	0.000	4.7	3.162	Surcharged

Project - 2395: 28 Dark Lane, Wargrave		Date: 07/04/2026			
		Designed by: GraemeBeaven	Checked by:		Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Company Address:			



Critical Storm Per Item: Rank By: Max. Avg. Depth

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)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Cellular Storage	FSR: 100 years: +30 %: 480 mins: Winter	9.536	9.536	0.536	0.536	1.8	15.343	0.000	0.3	10.456	2.892	OK

Project - 2395: 28 Dark Lane, Wargrave		Date: 07/04/2026			
		Designed by: GraemeBeaven	Checked by:		Approved By:
Report Details: Type: Connections Summary Storm Phase: Phase		Company Address:			



Critical Storm Per Item: Rank By: Max. Velocity

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
Pipe	FSR: 100 years: +30 %: 15 mins: Winter	Pipe	SMH02	Cellular Storage	10.000	9.219	0.100	7.283	2.0	0.83	9.8	Surcharged
Pipe (1)	FSR: 100 years: +30 %: 15 mins: Winter	Pipe	Cellular Storage	SMH03	10.000	9.195	0.100	0.540	0.5	0.07	0.4	Surcharged
Pipe (2)	FSR: 100 years: +30 %: 15 mins: Summer	Pipe	SIC01	SMH01	10.000	9.858	0.100	3.162	0.6	0.75	4.7	Surcharged
Pipe (3)	FSR: 100 years: +30 %: 15 mins: Summer	Pipe	SMH01	SMH02	10.000	9.776	0.100	7.475	1.3	1.62	10.5	Surcharged

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Phase Management Storm Phase: Phase	Company Address:		





Phase

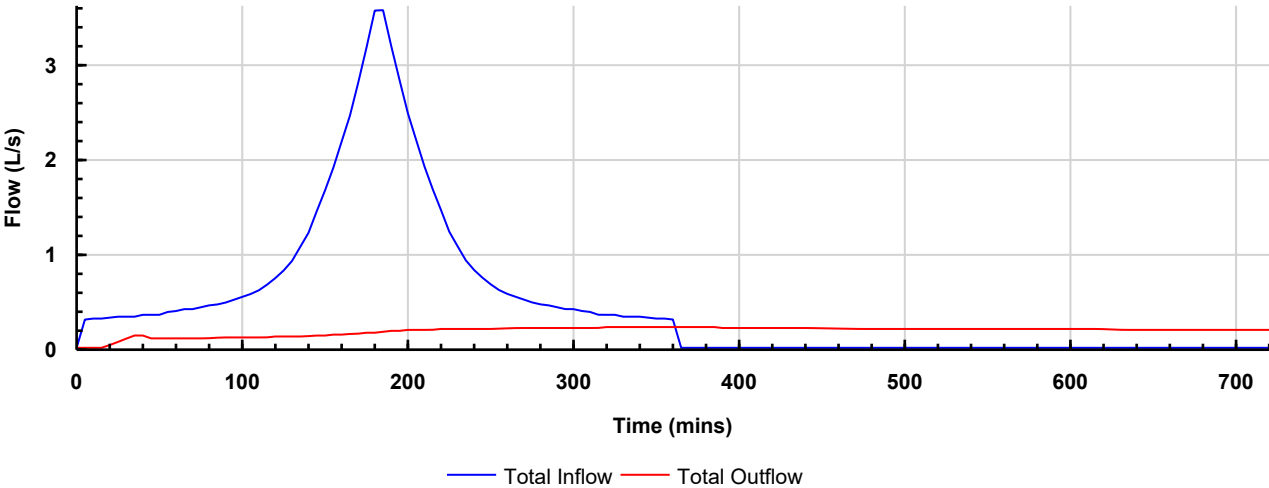
FSR: 100 years: Increase Rainfall (%): +30: 360 mins: Summer

Tables

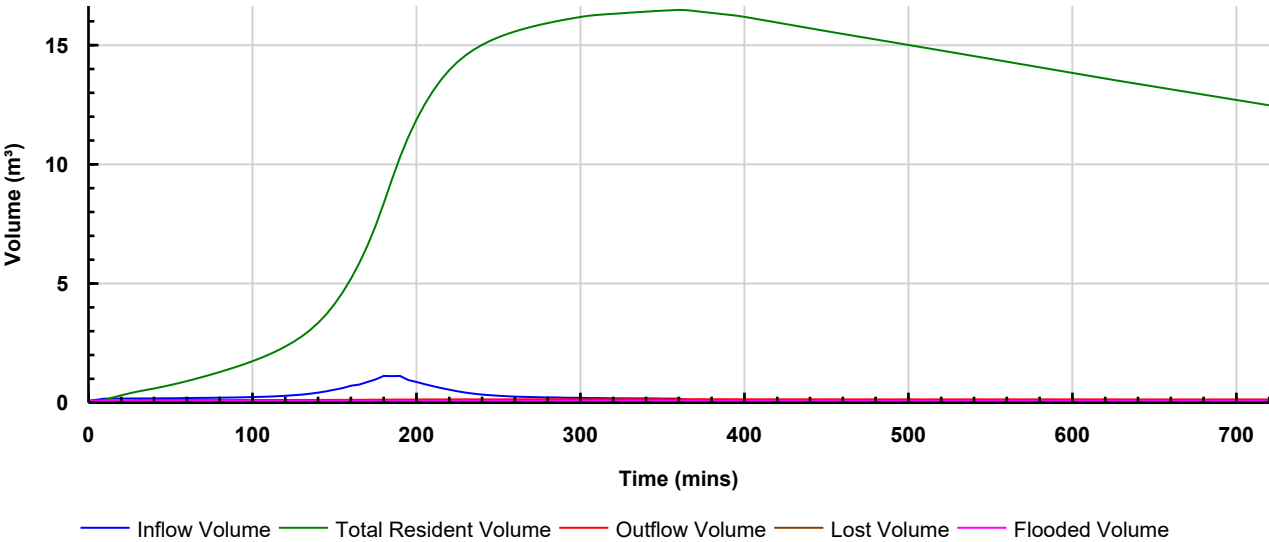
Name	Max. Inflow (L/s)	Total Inflow Volume (m³)	Max. Outflow (L/s)	Total Outflow Volume (m³)
SMH03			0.2	7.650
TOTAL	3.6	20.200	0.2	7.650

Graphs

Flow Graph



Volume Graph



Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Inflow Results Storm Phase: Phase	Company Address:		





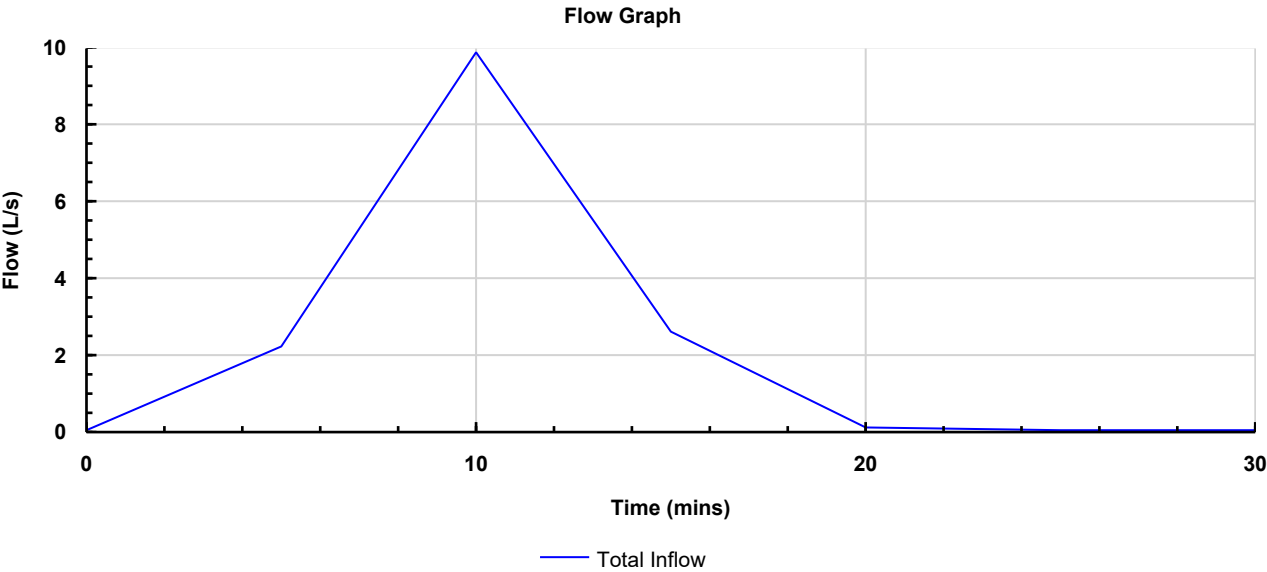
Catchment Area
Critical Storm: FSR: 100 years: Increase Rainfall (%): +30: 15 mins: Summer

Type : Catchment Area

Inflow

Max. Inflow (L/s)	9.9
Total Inflow Volume (m³)	4.332

Graphs



Tables

Time (mins)	Total Inflow (L/s)
0	0.0
5	2.2
10	9.9
15	2.6
20	0.1
25	0.0
30	0.0

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Inflow Results Storm Phase: Phase	Company Address:		





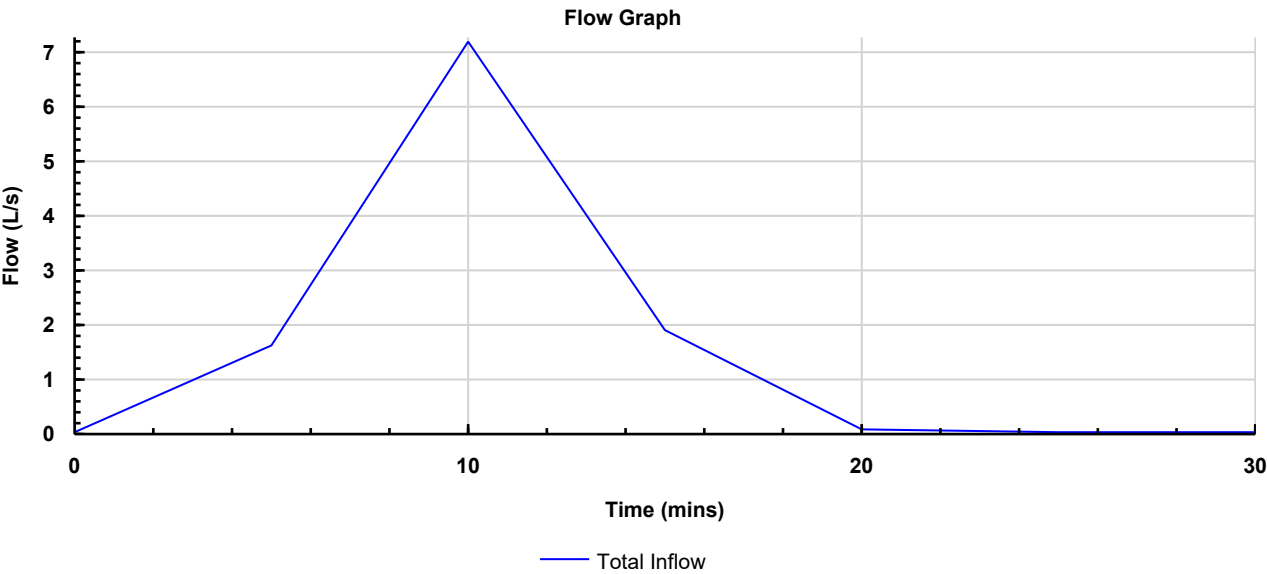
Catchment Area (1)
Critical Storm: FSR: 100 years: Increase Rainfall (%): +30: 15 mins: Summer

Type : Catchment Area

Inflow

Max. Inflow (L/s)	7.2
Total Inflow Volume (m³)	3.159

Graphs



Tables

Time (mins)	Total Inflow (L/s)
0	0.0
5	1.6
10	7.2
15	1.9
20	0.1
25	0.0
30	0.0

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Inflow Results Storm Phase: Phase	Company Address:		





Catchment Area (2)
Critical Storm: FSR: 100 years: Increase Rainfall (%): +30: 15 mins: Summer

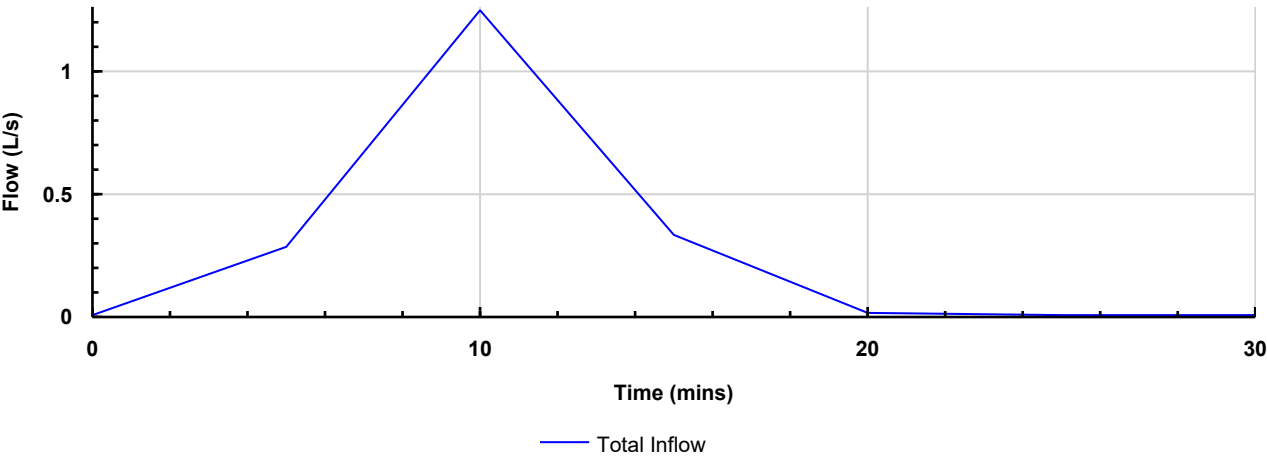
Type : Catchment Area

Inflow

Max. Inflow (L/s)	1.2
Total Inflow Volume (m³)	0.550

Graphs

Flow Graph



Tables

Time (mins)	Total Inflow (L/s)
0	0.0
5	0.3
10	1.2
15	0.3
20	0.0
25	0.0
30	0.0

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		



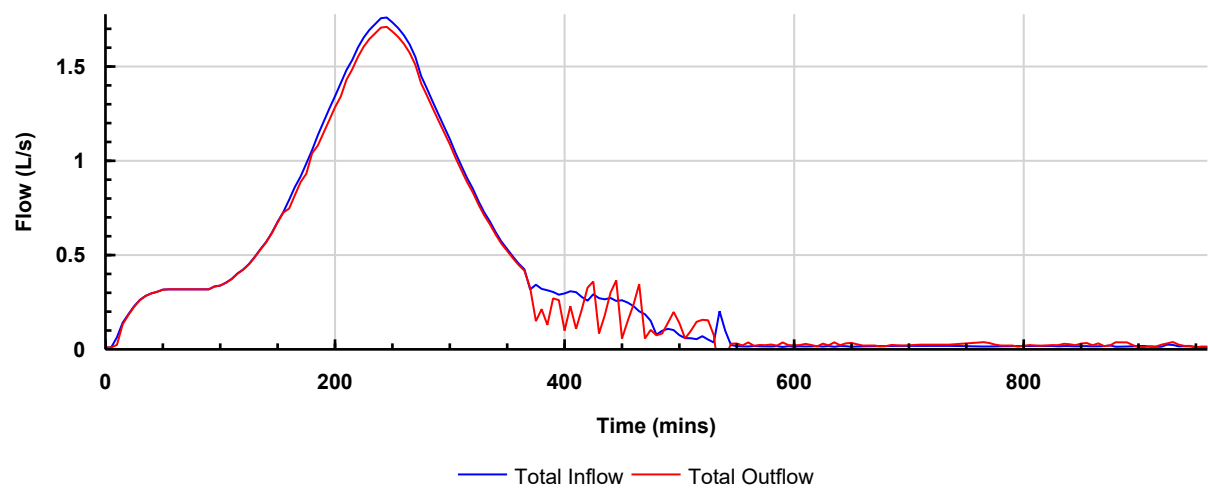


SMH02
Critical Storm: FSR: 100 years: Increase Rainfall (%): +30: 480 mins: Winter

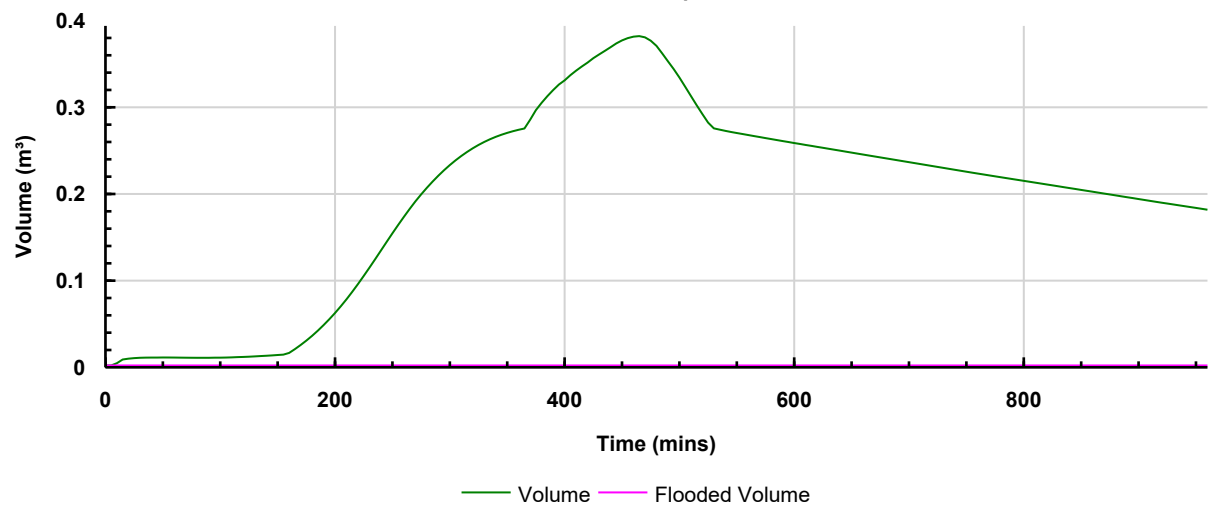
Type : Manhole

Graphs

Flow Graph

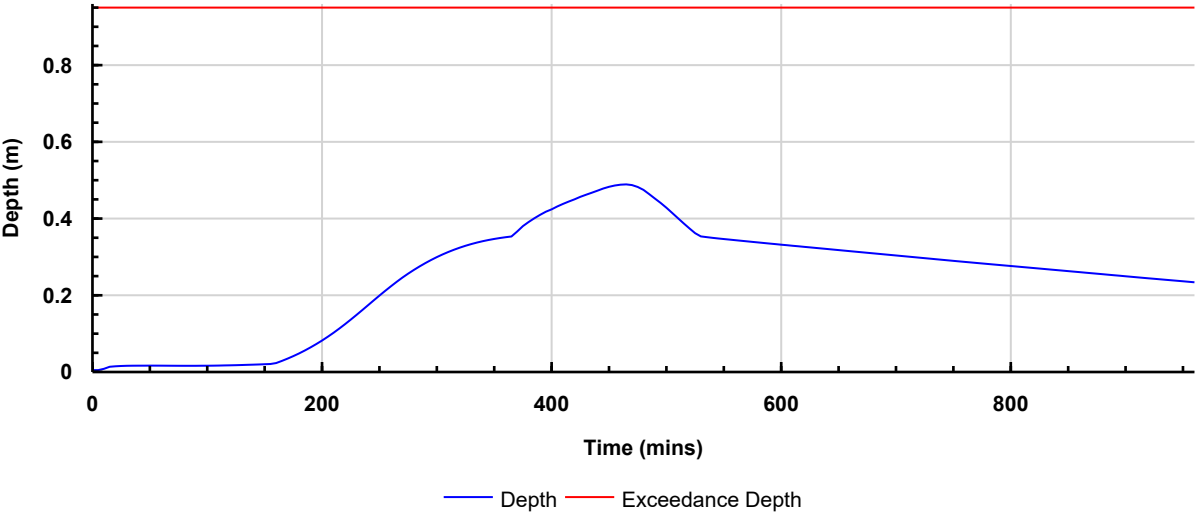


Volume Graph



Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026			
	Designed by: GraemeBeaven	Checked by:	Approved By:	
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:			

Depth Graph



Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		



Tables

Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.0
5	0.0	0.000	0.000	0.000	0.0
10	0.1	0.003	0.003	0.000	0.0
15	0.1	0.009	0.007	0.000	0.1
20	0.2	0.010	0.008	0.000	0.2
25	0.2	0.011	0.008	0.000	0.2
30	0.3	0.011	0.009	0.000	0.3
35	0.3	0.012	0.009	0.000	0.3
40	0.3	0.012	0.009	0.000	0.3
45	0.3	0.012	0.009	0.000	0.3
50	0.3	0.012	0.009	0.000	0.3
55	0.3	0.012	0.009	0.000	0.3
60	0.3	0.012	0.009	0.000	0.3
65	0.3	0.012	0.009	0.000	0.3
70	0.3	0.011	0.009	0.000	0.3
75	0.3	0.011	0.009	0.000	0.3
80	0.3	0.011	0.009	0.000	0.3
85	0.3	0.011	0.009	0.000	0.3
90	0.3	0.011	0.009	0.000	0.3
95	0.3	0.011	0.009	0.000	0.3
100	0.3	0.012	0.009	0.000	0.3
105	0.3	0.012	0.009	0.000	0.3
110	0.4	0.012	0.009	0.000	0.4
115	0.4	0.012	0.010	0.000	0.4
120	0.4	0.013	0.010	0.000	0.4
125	0.4	0.013	0.010	0.000	0.4
130	0.5	0.013	0.011	0.000	0.5
135	0.5	0.014	0.011	0.000	0.5
140	0.6	0.014	0.011	0.000	0.6
145	0.6	0.015	0.012	0.000	0.6
150	0.7	0.015	0.012	0.000	0.7
155	0.7	0.016	0.013	0.000	0.7
160	0.8	0.018	0.015	0.000	0.7
165	0.9	0.024	0.019	0.000	0.8
170	0.9	0.030	0.024	0.000	0.9
175	1.0	0.037	0.029	0.000	0.9
180	1.1	0.044	0.034	0.000	1.0
185	1.1	0.051	0.040	0.000	1.1
190	1.2	0.060	0.047	0.000	1.1
195	1.3	0.068	0.054	0.000	1.2
200	1.3	0.078	0.061	0.000	1.3
205	1.4	0.087	0.069	0.000	1.3
210	1.5	0.098	0.077	0.000	1.4
215	1.5	0.109	0.085	0.000	1.5
220	1.6	0.120	0.094	0.000	1.6
225	1.7	0.132	0.104	0.000	1.6
230	1.7	0.145	0.113	0.000	1.6
235	1.7	0.157	0.123	0.000	1.7
240	1.8	0.170	0.133	0.000	1.7
245	1.8	0.183	0.143	0.000	1.7
250	1.7	0.195	0.153	0.000	1.7
255	1.7	0.208	0.163	0.000	1.7

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		



Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
260	1.7	0.220	0.172	0.000	1.6
265	1.6	0.231	0.182	0.000	1.6
270	1.5	0.242	0.190	0.000	1.5
275	1.4	0.253	0.198	0.000	1.4
280	1.4	0.263	0.206	0.000	1.3
285	1.3	0.272	0.213	0.000	1.3
290	1.2	0.280	0.220	0.000	1.2
295	1.2	0.289	0.227	0.000	1.1
300	1.1	0.296	0.232	0.000	1.1
305	1.0	0.303	0.238	0.000	1.0
310	1.0	0.310	0.243	0.000	0.9
315	0.9	0.315	0.248	0.000	0.9
320	0.8	0.321	0.252	0.000	0.8
325	0.8	0.326	0.256	0.000	0.8
330	0.7	0.330	0.259	0.000	0.7
335	0.7	0.334	0.262	0.000	0.7
340	0.6	0.338	0.265	0.000	0.6
345	0.6	0.341	0.268	0.000	0.6
350	0.5	0.344	0.270	0.000	0.5
355	0.5	0.346	0.272	0.000	0.5
360	0.4	0.348	0.273	0.000	0.4
365	0.4	0.350	0.275	0.000	0.4
370	0.3	0.363	0.285	0.000	0.3
375	0.3	0.377	0.296	0.000	0.1
380	0.3	0.388	0.305	0.000	0.2
385	0.3	0.398	0.312	0.000	0.1
390	0.3	0.407	0.319	0.000	0.3
395	0.3	0.415	0.326	0.000	0.3
400	0.3	0.421	0.331	0.000	0.1
405	0.3	0.429	0.337	0.000	0.2
410	0.3	0.436	0.342	0.000	0.1
415	0.3	0.442	0.347	0.000	0.2
420	0.2	0.448	0.351	0.000	0.3
425	0.3	0.454	0.356	0.000	0.4
430	0.3	0.460	0.361	0.000	0.1
435	0.3	0.465	0.365	0.000	0.2
440	0.3	0.470	0.369	0.000	0.3
445	0.2	0.476	0.374	0.000	0.4
450	0.3	0.480	0.377	0.000	0.0
455	0.2	0.484	0.380	0.000	0.1
460	0.2	0.486	0.381	0.000	0.2
465	0.2	0.487	0.382	0.000	0.3
470	0.2	0.485	0.381	0.000	0.0
475	0.1	0.480	0.377	0.000	0.1
480	0.1	0.472	0.371	0.000	0.1
485	0.1	0.461	0.362	0.000	0.1
490	0.1	0.449	0.353	0.000	0.1
495	0.1	0.438	0.344	0.000	0.2
500	0.1	0.426	0.334	0.000	0.1
505	0.0	0.412	0.323	0.000	0.0
510	0.0	0.398	0.313	0.000	0.1
515	0.0	0.385	0.302	0.000	0.1
520	0.1	0.372	0.292	0.000	0.1
525	0.0	0.359	0.282	0.000	0.1
530	0.0	0.350	0.275	0.000	0.1

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		



Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
535	0.2	0.348	0.274	0.000	-0.2
540	0.1	0.347	0.272	0.000	-0.1
545	0.0	0.345	0.271	0.000	0.0
550	0.0	0.343	0.270	0.000	0.0
555	0.0	0.342	0.268	0.000	0.0
560	0.0	0.340	0.267	0.000	0.0
565	0.0	0.339	0.266	0.000	0.0
570	0.0	0.338	0.265	0.000	0.0
575	0.0	0.336	0.264	0.000	0.0
580	0.0	0.335	0.263	0.000	0.0
585	0.0	0.333	0.261	0.000	0.0
590	0.0	0.332	0.260	0.000	0.0
595	0.0	0.330	0.259	0.000	0.0
600	0.0	0.329	0.258	0.000	0.0
605	0.0	0.327	0.257	0.000	0.0
610	0.0	0.326	0.256	0.000	0.0
615	0.0	0.324	0.255	0.000	0.0
620	0.0	0.323	0.254	0.000	0.0
625	0.0	0.322	0.252	0.000	0.0
630	0.0	0.320	0.251	0.000	0.0
635	0.0	0.319	0.250	0.000	0.0
640	0.0	0.317	0.249	0.000	0.0
645	0.0	0.316	0.248	0.000	0.0
650	0.0	0.315	0.247	0.000	0.0
655	0.0	0.313	0.246	0.000	0.0
660	0.0	0.312	0.245	0.000	0.0
665	0.0	0.310	0.244	0.000	0.0
670	0.0	0.309	0.242	0.000	0.0
675	0.0	0.307	0.241	0.000	0.0
680	0.0	0.306	0.240	0.000	0.0
685	0.0	0.305	0.239	0.000	0.0
690	0.0	0.303	0.238	0.000	0.0
695	0.0	0.302	0.237	0.000	0.0
700	0.0	0.300	0.236	0.000	0.0
705	0.0	0.299	0.235	0.000	0.0
710	0.0	0.298	0.234	0.000	0.0
715	0.0	0.296	0.233	0.000	0.0
720	0.0	0.295	0.231	0.000	0.0
725	0.0	0.293	0.230	0.000	0.0
730	0.0	0.292	0.229	0.000	0.0
735	0.0	0.291	0.228	0.000	0.0
740	0.0	0.289	0.227	0.000	0.0
745	0.0	0.288	0.226	0.000	0.0
750	0.0	0.286	0.225	0.000	0.0
755	0.0	0.285	0.224	0.000	0.0
760	0.0	0.284	0.223	0.000	0.0
765	0.0	0.282	0.222	0.000	0.0
770	0.0	0.281	0.220	0.000	0.0
775	0.0	0.279	0.219	0.000	0.0
780	0.0	0.278	0.218	0.000	0.0
785	0.0	0.277	0.217	0.000	0.0
790	0.0	0.275	0.216	0.000	0.0
795	0.0	0.274	0.215	0.000	0.0
800	0.0	0.273	0.214	0.000	0.0
805	0.0	0.271	0.213	0.000	0.0

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		



Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
810	0.0	0.270	0.212	0.000	0.0
815	0.0	0.269	0.211	0.000	0.0
820	0.0	0.267	0.210	0.000	0.0
825	0.0	0.266	0.209	0.000	0.0
830	0.0	0.265	0.208	0.000	0.0
835	0.0	0.263	0.207	0.000	0.0
840	0.0	0.262	0.206	0.000	0.0
845	0.0	0.261	0.205	0.000	0.0
850	0.0	0.259	0.204	0.000	0.0
855	0.0	0.258	0.203	0.000	0.0
860	0.0	0.257	0.202	0.000	0.0
865	0.0	0.255	0.200	0.000	0.0
870	0.0	0.254	0.199	0.000	0.0
875	0.0	0.253	0.198	0.000	0.0
880	0.0	0.251	0.197	0.000	0.0
885	0.0	0.250	0.196	0.000	0.0
890	0.0	0.249	0.195	0.000	0.0
895	0.0	0.247	0.194	0.000	0.0
900	0.0	0.246	0.193	0.000	0.0
905	0.0	0.245	0.192	0.000	0.0
910	0.0	0.243	0.191	0.000	0.0
915	0.0	0.242	0.190	0.000	0.0
920	0.0	0.241	0.189	0.000	0.0
925	0.0	0.239	0.188	0.000	0.0
930	0.0	0.238	0.187	0.000	0.0
935	0.0	0.237	0.186	0.000	0.0
940	0.0	0.235	0.185	0.000	0.0
945	0.0	0.234	0.184	0.000	0.0
950	0.0	0.233	0.183	0.000	0.0
955	0.0	0.231	0.182	0.000	0.0
960	0.0	0.230	0.181	0.000	0.0

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		

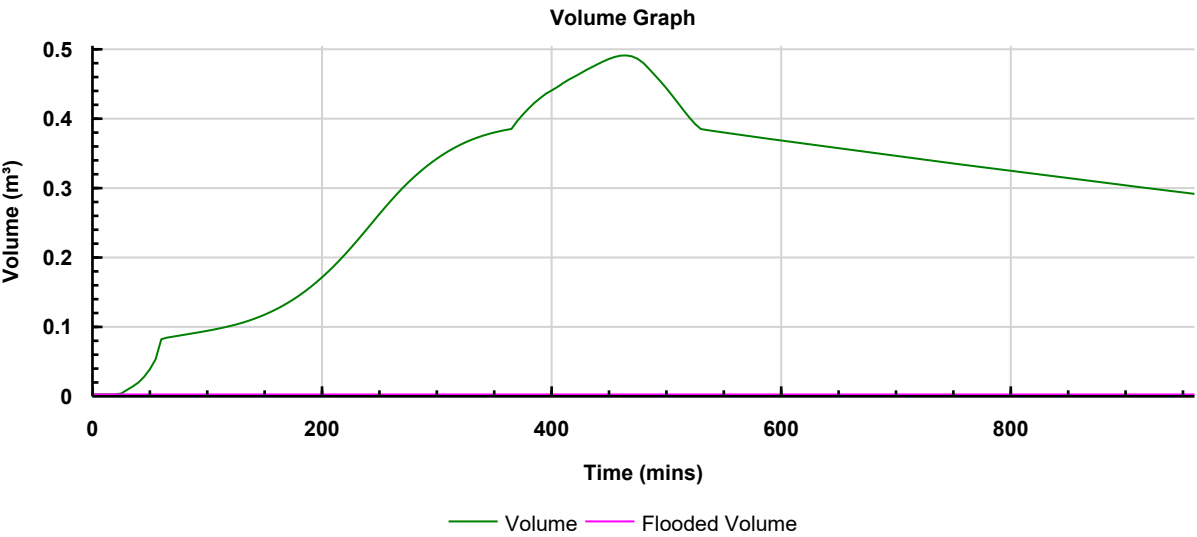
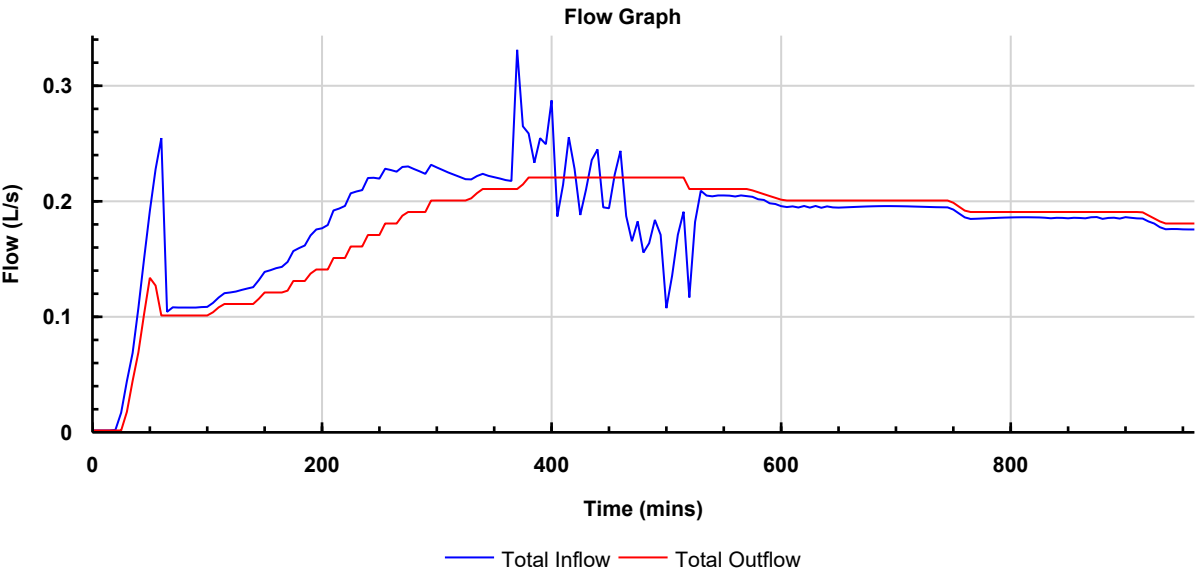




SMH03
Critical Storm: FSR: 100 years: Increase Rainfall (%): +30: 480 mins: Winter

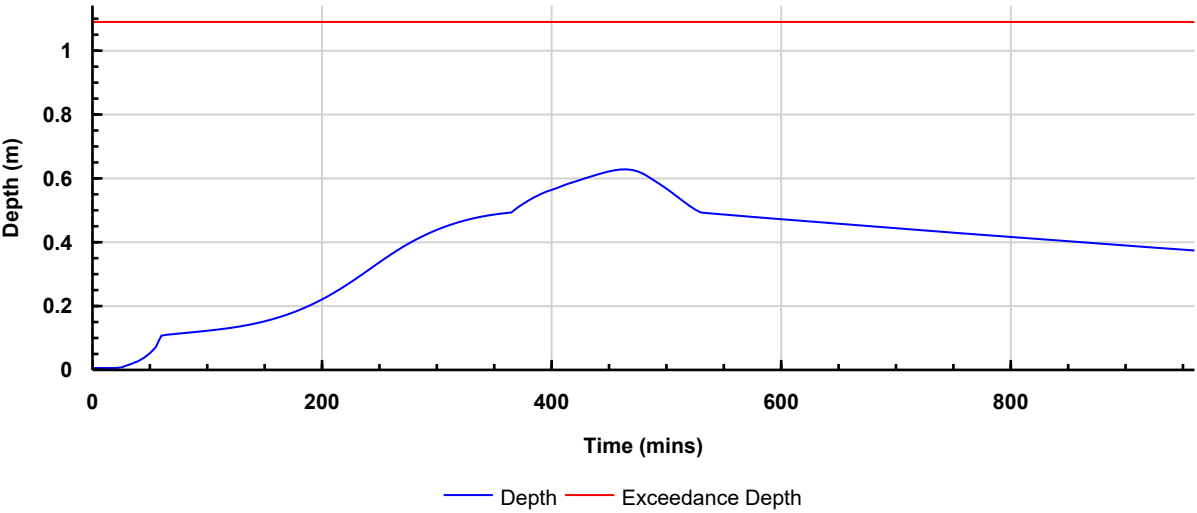
Type : Manhole

Graphs



Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026			
	Designed by: GraemeBeaven	Checked by:	Approved By:	
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:			

Depth Graph



Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		



Tables

Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.0
5	0.0	0.000	0.000	0.000	0.0
10	0.0	0.000	0.000	0.000	0.0
15	0.0	0.000	0.000	0.000	0.0
20	0.0	0.000	0.000	0.000	0.0
25	0.0	0.002	0.001	0.000	0.0
30	0.0	0.008	0.006	0.000	0.0
35	0.1	0.015	0.011	0.000	0.0
40	0.1	0.022	0.017	0.000	0.1
45	0.1	0.033	0.026	0.000	0.1
50	0.2	0.046	0.036	0.000	0.1
55	0.2	0.065	0.051	0.000	0.1
60	0.3	0.102	0.080	0.000	0.1
65	0.1	0.105	0.082	0.000	0.1
70	0.1	0.107	0.084	0.000	0.1
75	0.1	0.108	0.085	0.000	0.1
80	0.1	0.110	0.086	0.000	0.1
85	0.1	0.112	0.088	0.000	0.1
90	0.1	0.114	0.089	0.000	0.1
95	0.1	0.116	0.091	0.000	0.1
100	0.1	0.117	0.092	0.000	0.1
105	0.1	0.119	0.094	0.000	0.1
110	0.1	0.122	0.095	0.000	0.1
115	0.1	0.124	0.097	0.000	0.1
120	0.1	0.126	0.099	0.000	0.1
125	0.1	0.129	0.101	0.000	0.1
130	0.1	0.132	0.104	0.000	0.1
135	0.1	0.135	0.106	0.000	0.1
140	0.1	0.139	0.109	0.000	0.1
145	0.1	0.143	0.112	0.000	0.1
150	0.1	0.147	0.116	0.000	0.1
155	0.1	0.152	0.119	0.000	0.1
160	0.1	0.157	0.123	0.000	0.1
165	0.1	0.163	0.128	0.000	0.1
170	0.1	0.169	0.133	0.000	0.1
175	0.2	0.175	0.138	0.000	0.1
180	0.2	0.182	0.143	0.000	0.1
185	0.2	0.190	0.149	0.000	0.1
190	0.2	0.198	0.156	0.000	0.1
195	0.2	0.207	0.162	0.000	0.1
200	0.2	0.216	0.170	0.000	0.1
205	0.2	0.226	0.177	0.000	0.1
210	0.2	0.236	0.185	0.000	0.2
215	0.2	0.247	0.194	0.000	0.2
220	0.2	0.258	0.203	0.000	0.2
225	0.2	0.270	0.212	0.000	0.2
230	0.2	0.282	0.222	0.000	0.2
235	0.2	0.295	0.231	0.000	0.2
240	0.2	0.307	0.241	0.000	0.2
245	0.2	0.320	0.251	0.000	0.2
250	0.2	0.333	0.261	0.000	0.2
255	0.2	0.345	0.271	0.000	0.2

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		



Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
260	0.2	0.357	0.281	0.000	0.2
265	0.2	0.369	0.290	0.000	0.2
270	0.2	0.381	0.299	0.000	0.2
275	0.2	0.391	0.307	0.000	0.2
280	0.2	0.401	0.315	0.000	0.2
285	0.2	0.410	0.322	0.000	0.2
290	0.2	0.419	0.329	0.000	0.2
295	0.2	0.427	0.336	0.000	0.2
300	0.2	0.435	0.342	0.000	0.2
305	0.2	0.442	0.347	0.000	0.2
310	0.2	0.449	0.352	0.000	0.2
315	0.2	0.455	0.357	0.000	0.2
320	0.2	0.460	0.361	0.000	0.2
325	0.2	0.465	0.365	0.000	0.2
330	0.2	0.470	0.369	0.000	0.2
335	0.2	0.474	0.372	0.000	0.2
340	0.2	0.477	0.375	0.000	0.2
345	0.2	0.481	0.377	0.000	0.2
350	0.2	0.483	0.379	0.000	0.2
355	0.2	0.486	0.381	0.000	0.2
360	0.2	0.488	0.383	0.000	0.2
365	0.2	0.490	0.385	0.000	0.2
370	0.3	0.504	0.396	0.000	0.2
375	0.3	0.517	0.406	0.000	0.2
380	0.3	0.528	0.414	0.000	0.2
385	0.2	0.538	0.422	0.000	0.2
390	0.3	0.547	0.429	0.000	0.2
395	0.2	0.555	0.436	0.000	0.2
400	0.3	0.561	0.440	0.000	0.2
405	0.2	0.567	0.445	0.000	0.2
410	0.2	0.574	0.451	0.000	0.2
415	0.3	0.581	0.456	0.000	0.2
420	0.2	0.587	0.460	0.000	0.2
425	0.2	0.592	0.465	0.000	0.2
430	0.2	0.598	0.470	0.000	0.2
435	0.2	0.604	0.474	0.000	0.2
440	0.2	0.609	0.478	0.000	0.2
445	0.2	0.615	0.482	0.000	0.2
450	0.2	0.619	0.486	0.000	0.2
455	0.2	0.623	0.489	0.000	0.2
460	0.2	0.625	0.491	0.000	0.2
465	0.2	0.626	0.491	0.000	0.2
470	0.2	0.624	0.490	0.000	0.2
475	0.2	0.619	0.486	0.000	0.2
480	0.2	0.611	0.480	0.000	0.2
485	0.2	0.600	0.471	0.000	0.2
490	0.2	0.589	0.462	0.000	0.2
495	0.2	0.577	0.453	0.000	0.2
500	0.1	0.565	0.444	0.000	0.2
505	0.1	0.552	0.433	0.000	0.2
510	0.2	0.538	0.422	0.000	0.2
515	0.2	0.524	0.412	0.000	0.2
520	0.1	0.511	0.401	0.000	0.2
525	0.2	0.499	0.392	0.000	0.2
530	0.2	0.490	0.384	0.000	0.2

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		



Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
535	0.2	0.488	0.383	0.000	0.2
540	0.2	0.486	0.382	0.000	0.2
545	0.2	0.485	0.381	0.000	0.2
550	0.2	0.483	0.379	0.000	0.2
555	0.2	0.482	0.378	0.000	0.2
560	0.2	0.480	0.377	0.000	0.2
565	0.2	0.479	0.376	0.000	0.2
570	0.2	0.477	0.375	0.000	0.2
575	0.2	0.476	0.374	0.000	0.2
580	0.2	0.474	0.372	0.000	0.2
585	0.2	0.473	0.371	0.000	0.2
590	0.2	0.472	0.370	0.000	0.2
595	0.2	0.470	0.369	0.000	0.2
600	0.2	0.469	0.368	0.000	0.2
605	0.2	0.467	0.367	0.000	0.2
610	0.2	0.466	0.366	0.000	0.2
615	0.2	0.464	0.365	0.000	0.2
620	0.2	0.463	0.363	0.000	0.2
625	0.2	0.462	0.362	0.000	0.2
630	0.2	0.460	0.361	0.000	0.2
635	0.2	0.459	0.360	0.000	0.2
640	0.2	0.457	0.359	0.000	0.2
645	0.2	0.456	0.358	0.000	0.2
650	0.2	0.454	0.357	0.000	0.2
655	0.2	0.453	0.356	0.000	0.2
660	0.2	0.452	0.355	0.000	0.2
665	0.2	0.450	0.353	0.000	0.2
670	0.2	0.449	0.352	0.000	0.2
675	0.2	0.447	0.351	0.000	0.2
680	0.2	0.446	0.350	0.000	0.2
685	0.2	0.445	0.349	0.000	0.2
690	0.2	0.443	0.348	0.000	0.2
695	0.2	0.442	0.347	0.000	0.2
700	0.2	0.440	0.346	0.000	0.2
705	0.2	0.439	0.345	0.000	0.2
710	0.2	0.437	0.343	0.000	0.2
715	0.2	0.436	0.342	0.000	0.2
720	0.2	0.435	0.341	0.000	0.2
725	0.2	0.433	0.340	0.000	0.2
730	0.2	0.432	0.339	0.000	0.2
735	0.2	0.430	0.338	0.000	0.2
740	0.2	0.429	0.337	0.000	0.2
745	0.2	0.428	0.336	0.000	0.2
750	0.2	0.426	0.335	0.000	0.2
755	0.2	0.425	0.333	0.000	0.2
760	0.2	0.423	0.332	0.000	0.2
765	0.2	0.422	0.331	0.000	0.2
770	0.2	0.421	0.330	0.000	0.2
775	0.2	0.419	0.329	0.000	0.2
780	0.2	0.418	0.328	0.000	0.2
785	0.2	0.417	0.327	0.000	0.2
790	0.2	0.415	0.326	0.000	0.2
795	0.2	0.414	0.325	0.000	0.2
800	0.2	0.413	0.324	0.000	0.2
805	0.2	0.411	0.323	0.000	0.2

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		



Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
810	0.2	0.410	0.322	0.000	0.2
815	0.2	0.409	0.321	0.000	0.2
820	0.2	0.407	0.320	0.000	0.2
825	0.2	0.406	0.319	0.000	0.2
830	0.2	0.405	0.318	0.000	0.2
835	0.2	0.403	0.317	0.000	0.2
840	0.2	0.402	0.316	0.000	0.2
845	0.2	0.401	0.315	0.000	0.2
850	0.2	0.399	0.313	0.000	0.2
855	0.2	0.398	0.312	0.000	0.2
860	0.2	0.397	0.311	0.000	0.2
865	0.2	0.395	0.310	0.000	0.2
870	0.2	0.394	0.309	0.000	0.2
875	0.2	0.393	0.308	0.000	0.2
880	0.2	0.391	0.307	0.000	0.2
885	0.2	0.390	0.306	0.000	0.2
890	0.2	0.389	0.305	0.000	0.2
895	0.2	0.387	0.304	0.000	0.2
900	0.2	0.386	0.303	0.000	0.2
905	0.2	0.385	0.302	0.000	0.2
910	0.2	0.383	0.301	0.000	0.2
915	0.2	0.382	0.300	0.000	0.2
920	0.2	0.381	0.299	0.000	0.2
925	0.2	0.379	0.298	0.000	0.2
930	0.2	0.378	0.297	0.000	0.2
935	0.2	0.377	0.296	0.000	0.2
940	0.2	0.375	0.295	0.000	0.2
945	0.2	0.374	0.294	0.000	0.2
950	0.2	0.373	0.293	0.000	0.2
955	0.2	0.371	0.292	0.000	0.2
960	0.2	0.370	0.291	0.000	0.2

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		



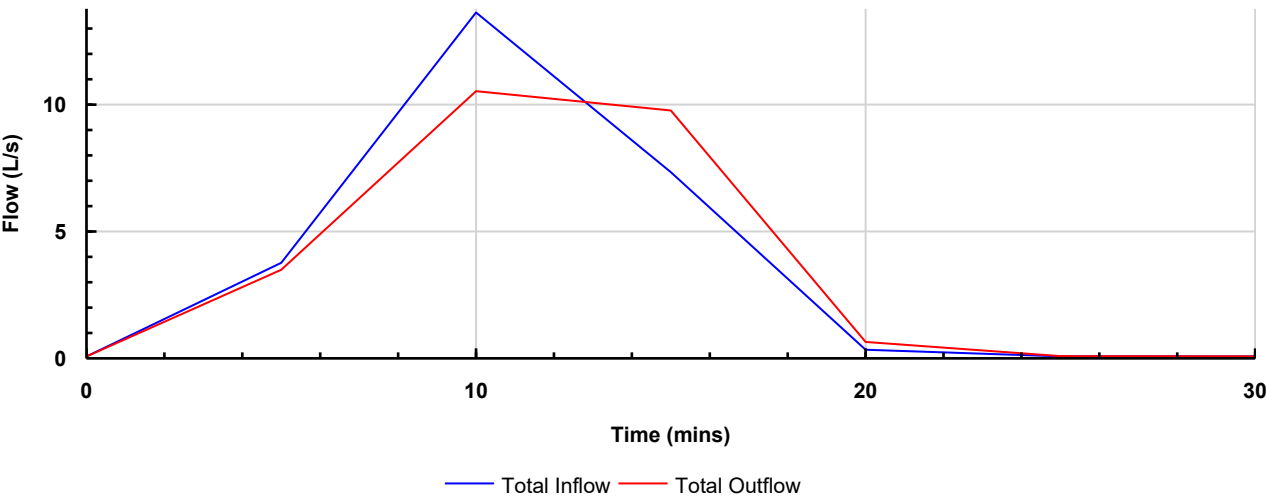


SMH01
Critical Storm: FSR: 100 years: Increase Rainfall (%): +30: 15 mins: Summer

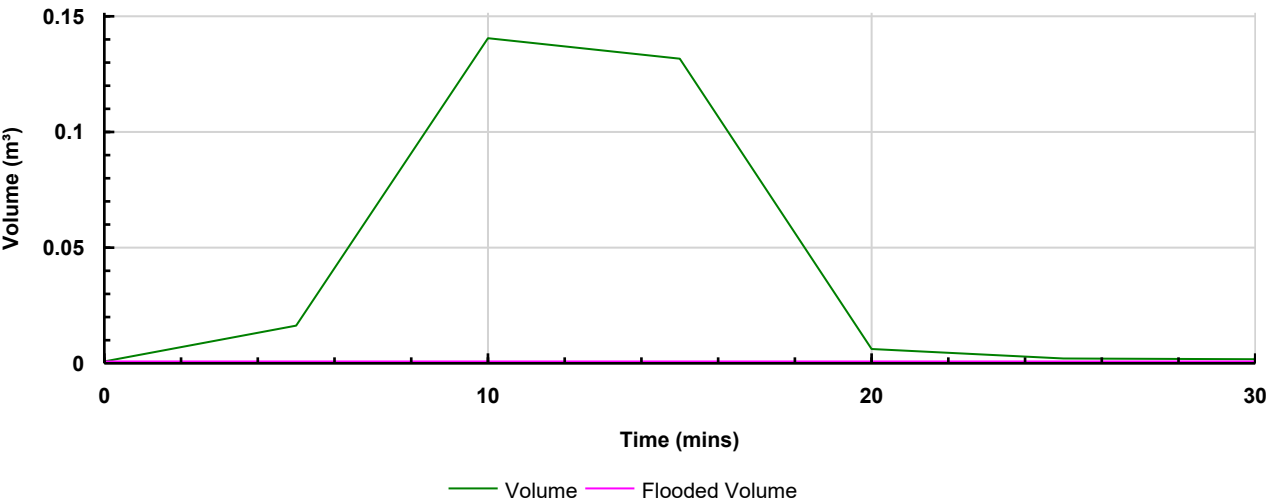
Type : Manhole

Graphs

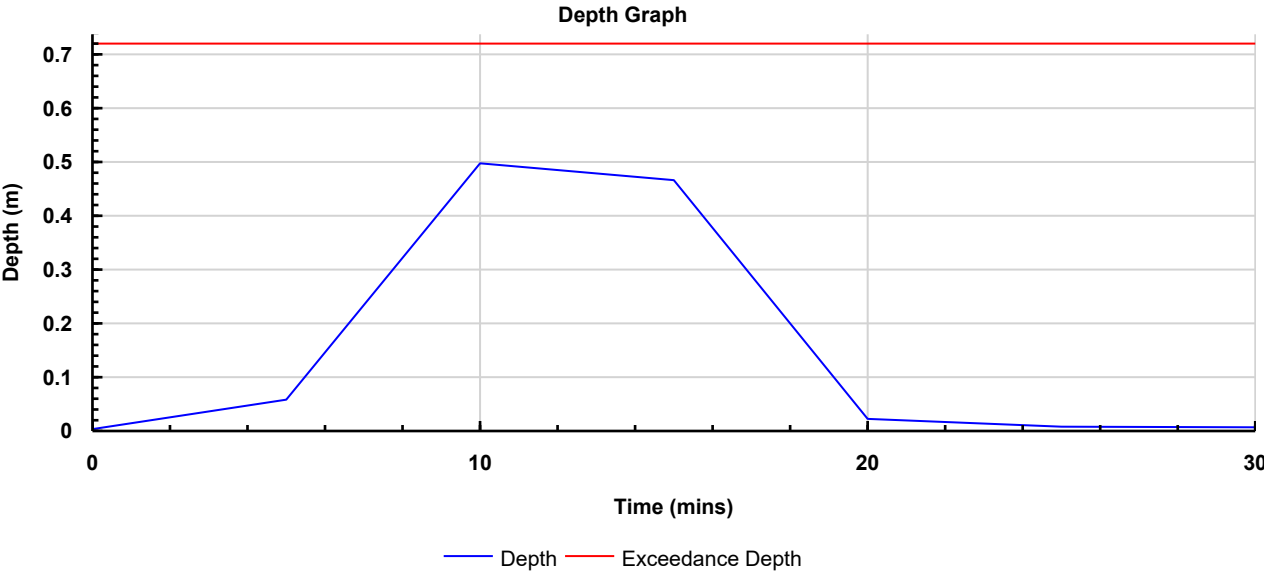
Flow Graph



Volume Graph



Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026			
	Designed by: GraemeBeaven	Checked by:	Approved By:	
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:			



Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		



Tables

Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.0
5	3.7	0.055	0.016	0.000	3.4
10	13.6	0.496	0.140	0.000	10.5
15	7.3	0.465	0.132	0.000	9.7
20	0.3	0.019	0.005	0.000	0.6
25	0.0	0.005	0.001	0.000	0.0
30	0.0	0.003	0.001	0.000	0.0

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		

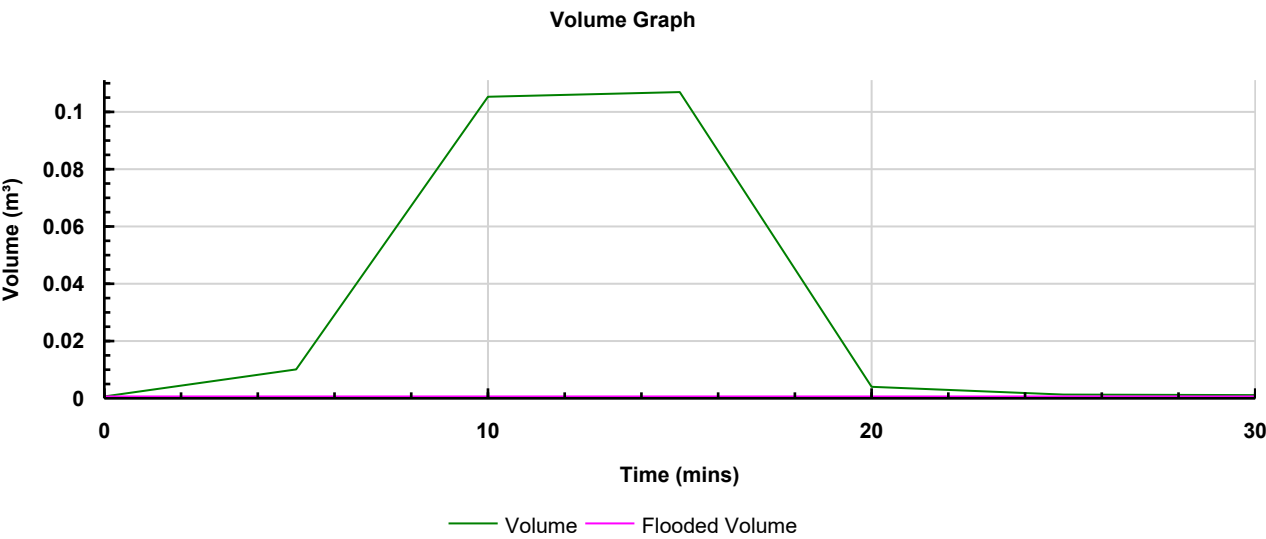
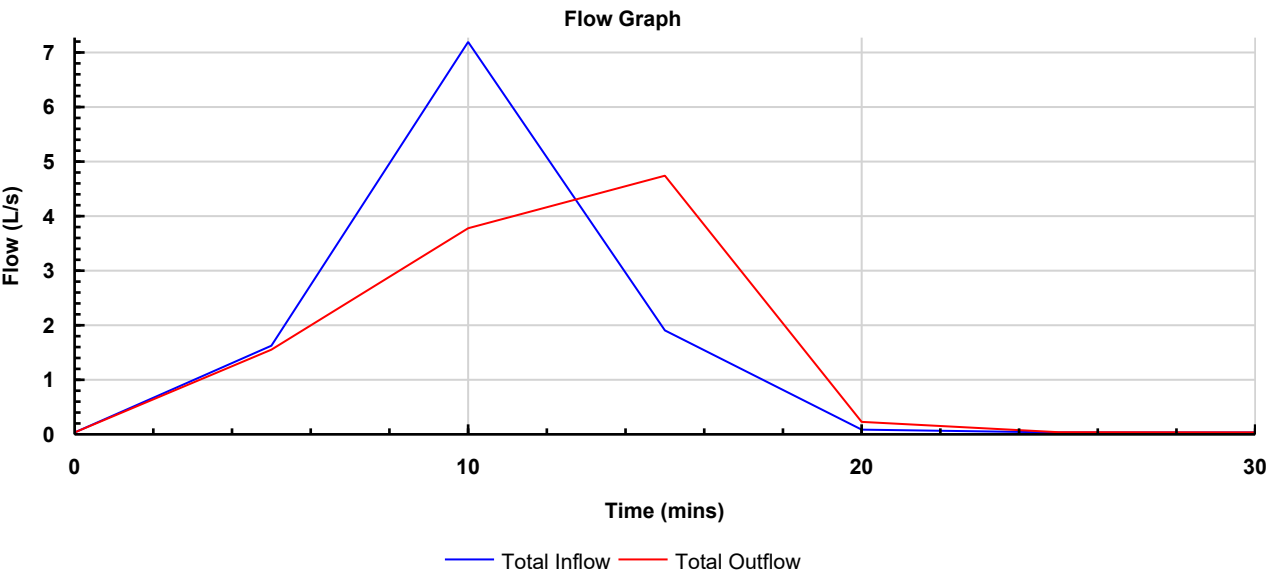




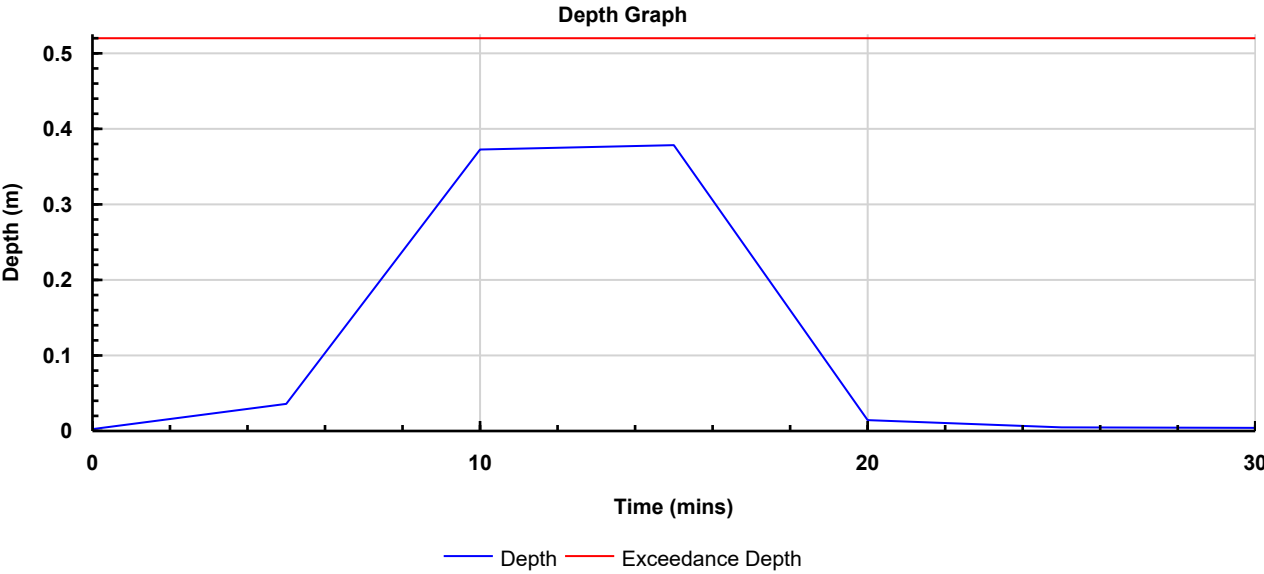
SIC01
Critical Storm: FSR: 100 years: Increase Rainfall (%): +30: 15 mins: Summer

Type : Manhole

Graphs



Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026			
	Designed by: GraemeBeaven	Checked by:	Approved By:	
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:			



Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Junction Results Storm Phase: Phase	Company Address:		



Tables

Time (mins)	Total Inflow (L/s)	Depth (m)	Volume (m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.0
5	1.6	0.034	0.009	0.000	1.5
10	7.2	0.372	0.105	0.000	3.8
15	1.9	0.378	0.107	0.000	4.7
20	0.1	0.012	0.003	0.000	0.2
25	0.0	0.002	0.001	0.000	0.0
30	0.0	0.002	0.000	0.000	0.0

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		



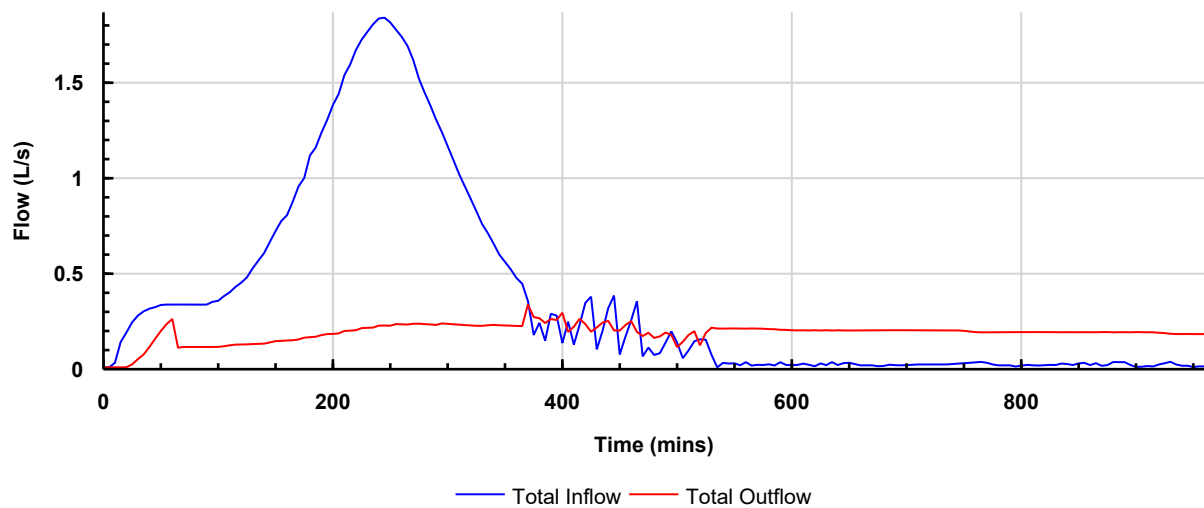


Cellular Storage
Critical Storm: FSR: 100 years: Increase Rainfall (%): +30: 480 mins: Winter

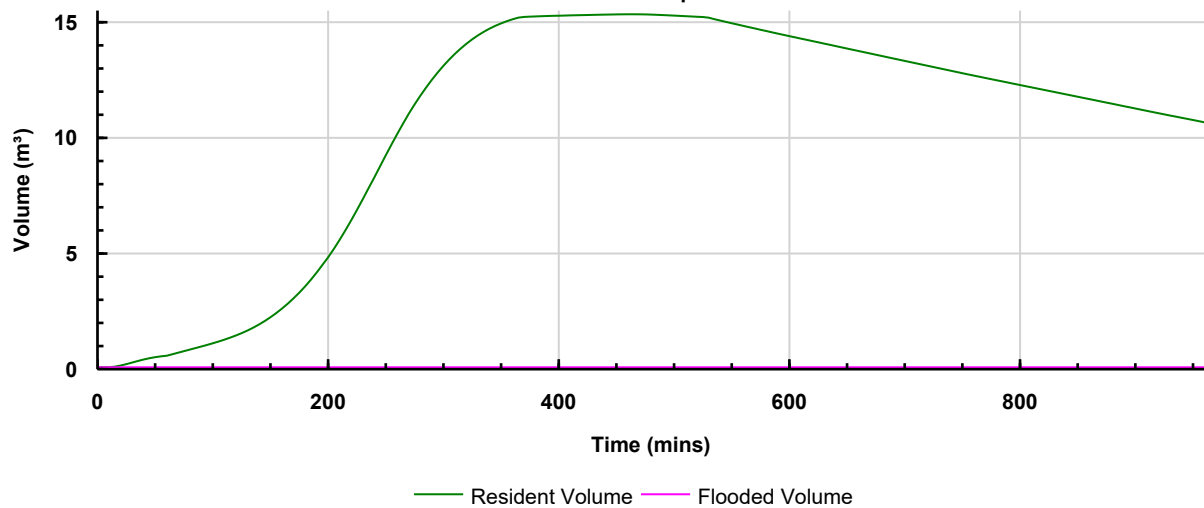
Type : Cellular Storage

Graphs

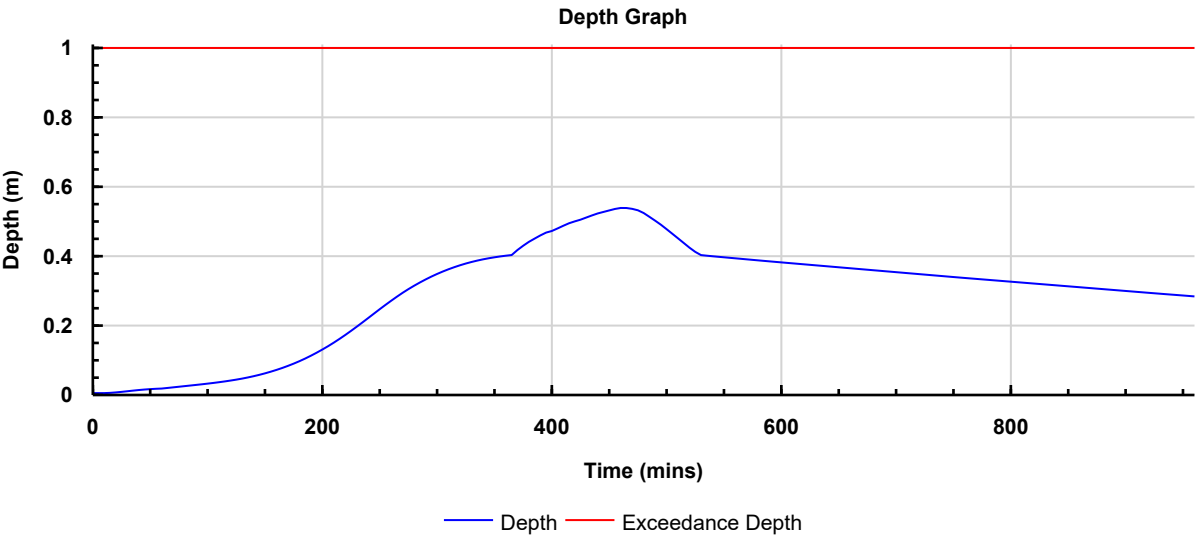
Flow Graph



Volume Graph



Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026			
	Designed by: GraemeBeaven	Checked by:	Approved By:	
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:			



Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		



Tables

Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.0
5	0.0	0.000	0.000	0.000	0.0
10	0.0	0.000	0.002	0.000	0.0
15	0.1	0.001	0.027	0.000	0.0
20	0.2	0.002	0.076	0.000	0.0
25	0.2	0.004	0.137	0.000	0.0
30	0.3	0.005	0.205	0.000	0.0
35	0.3	0.007	0.273	0.000	0.1
40	0.3	0.009	0.339	0.000	0.1
45	0.3	0.010	0.394	0.000	0.1
50	0.3	0.012	0.440	0.000	0.2
55	0.3	0.013	0.476	0.000	0.2
60	0.3	0.013	0.502	0.000	0.3
65	0.3	0.015	0.568	0.000	0.1
70	0.3	0.017	0.635	0.000	0.1
75	0.3	0.018	0.702	0.000	0.1
80	0.3	0.020	0.769	0.000	0.1
85	0.3	0.022	0.836	0.000	0.1
90	0.3	0.024	0.903	0.000	0.1
95	0.3	0.026	0.971	0.000	0.1
100	0.4	0.027	1.044	0.000	0.1
105	0.4	0.029	1.119	0.000	0.1
110	0.4	0.032	1.201	0.000	0.1
115	0.4	0.034	1.288	0.000	0.1
120	0.4	0.036	1.382	0.000	0.1
125	0.5	0.039	1.484	0.000	0.1
130	0.5	0.042	1.596	0.000	0.1
135	0.6	0.045	1.721	0.000	0.1
140	0.6	0.049	1.858	0.000	0.1
145	0.7	0.053	2.009	0.000	0.1
150	0.7	0.057	2.175	0.000	0.1
155	0.8	0.062	2.356	0.000	0.1
160	0.8	0.067	2.553	0.000	0.1
165	0.9	0.073	2.765	0.000	0.1
170	1.0	0.079	2.996	0.000	0.1
175	1.0	0.085	3.244	0.000	0.2
180	1.1	0.092	3.512	0.000	0.2
185	1.2	0.100	3.802	0.000	0.2
190	1.2	0.108	4.114	0.000	0.2
195	1.3	0.117	4.445	0.000	0.2
200	1.4	0.126	4.779	0.000	0.2
205	1.4	0.136	5.148	0.000	0.2
210	1.5	0.146	5.541	0.000	0.2
215	1.6	0.157	5.955	0.000	0.2
220	1.7	0.168	6.387	0.000	0.2
225	1.7	0.180	6.838	0.000	0.2
230	1.8	0.192	7.301	0.000	0.2
235	1.8	0.205	7.777	0.000	0.2
240	1.8	0.218	8.245	0.000	0.2
245	1.8	0.230	8.731	0.000	0.2
250	1.8	0.243	9.214	0.000	0.2
255	1.8	0.256	9.687	0.000	0.2
260	1.7	0.268	10.147	0.000	0.2
265	1.7	0.279	10.594	0.000	0.2
270	1.6	0.291	11.025	0.000	0.2

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		



Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
275	1.5	0.301	11.427	0.000	0.2
280	1.4	0.311	11.805	0.000	0.2
285	1.4	0.320	12.161	0.000	0.2
290	1.3	0.329	12.497	0.000	0.2
295	1.2	0.338	12.812	0.000	0.2
300	1.2	0.345	13.104	0.000	0.2
305	1.1	0.352	13.375	0.000	0.2
310	1.0	0.359	13.625	0.000	0.2
315	1.0	0.365	13.854	0.000	0.2
320	0.9	0.370	14.065	0.000	0.2
325	0.8	0.375	14.257	0.000	0.2
330	0.8	0.380	14.429	0.000	0.2
335	0.7	0.384	14.582	0.000	0.2
340	0.7	0.388	14.720	0.000	0.2
345	0.6	0.391	14.841	0.000	0.2
350	0.6	0.393	14.948	0.000	0.2
355	0.5	0.396	15.043	0.000	0.2
360	0.5	0.398	15.126	0.000	0.2
365	0.4	0.400	15.198	0.000	0.2
370	0.3	0.415	15.227	0.000	0.3
375	0.2	0.427	15.240	0.000	0.3
380	0.2	0.438	15.250	0.000	0.3
385	0.1	0.448	15.259	0.000	0.2
390	0.3	0.457	15.268	0.000	0.3
395	0.3	0.465	15.276	0.000	0.2
400	0.1	0.470	15.280	0.000	0.3
405	0.2	0.477	15.287	0.000	0.2
410	0.1	0.485	15.295	0.000	0.2
415	0.2	0.492	15.301	0.000	0.3
420	0.3	0.498	15.306	0.000	0.2
425	0.4	0.502	15.311	0.000	0.2
430	0.1	0.509	15.318	0.000	0.2
435	0.2	0.515	15.323	0.000	0.2
440	0.3	0.521	15.328	0.000	0.2
445	0.4	0.525	15.332	0.000	0.2
450	0.1	0.529	15.338	0.000	0.2
455	0.2	0.534	15.341	0.000	0.2
460	0.2	0.536	15.343	0.000	0.2
465	0.3	0.536	15.343	0.000	0.2
470	0.1	0.534	15.341	0.000	0.2
475	0.1	0.530	15.338	0.000	0.2
480	0.1	0.522	15.330	0.000	0.2
485	0.1	0.511	15.319	0.000	0.2
490	0.1	0.500	15.309	0.000	0.2
495	0.2	0.488	15.298	0.000	0.2
500	0.1	0.475	15.285	0.000	0.1
505	0.0	0.462	15.273	0.000	0.1
510	0.1	0.448	15.260	0.000	0.2
515	0.1	0.435	15.247	0.000	0.2
520	0.1	0.421	15.234	0.000	0.1
525	0.1	0.409	15.223	0.000	0.2
530	0.1	0.400	15.195	0.000	0.2
535	0.0	0.398	15.130	0.000	0.2
540	0.0	0.397	15.070	0.000	0.2
545	0.0	0.395	15.012	0.000	0.2
550	0.0	0.394	14.954	0.000	0.2
555	0.0	0.392	14.897	0.000	0.2
560	0.0	0.391	14.839	0.000	0.2

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		



Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
565	0.0	0.389	14.782	0.000	0.2
570	0.0	0.388	14.728	0.000	0.2
575	0.0	0.386	14.669	0.000	0.2
580	0.0	0.385	14.615	0.000	0.2
585	0.0	0.383	14.557	0.000	0.2
590	0.0	0.382	14.501	0.000	0.2
595	0.0	0.380	14.447	0.000	0.2
600	0.0	0.379	14.393	0.000	0.2
605	0.0	0.377	14.340	0.000	0.2
610	0.0	0.376	14.284	0.000	0.2
615	0.0	0.374	14.232	0.000	0.2
620	0.0	0.373	14.177	0.000	0.2
625	0.0	0.372	14.125	0.000	0.2
630	0.0	0.370	14.069	0.000	0.2
635	0.0	0.369	14.017	0.000	0.2
640	0.0	0.367	13.962	0.000	0.2
645	0.0	0.366	13.908	0.000	0.2
650	0.0	0.365	13.854	0.000	0.2
655	0.0	0.363	13.800	0.000	0.2
660	0.0	0.362	13.746	0.000	0.2
665	0.0	0.360	13.693	0.000	0.2
670	0.0	0.359	13.639	0.000	0.2
675	0.0	0.357	13.585	0.000	0.2
680	0.0	0.356	13.531	0.000	0.2
685	0.0	0.355	13.477	0.000	0.2
690	0.0	0.353	13.423	0.000	0.2
695	0.0	0.352	13.370	0.000	0.2
700	0.0	0.350	13.316	0.000	0.2
705	0.0	0.349	13.263	0.000	0.2
710	0.0	0.348	13.210	0.000	0.2
715	0.0	0.346	13.156	0.000	0.2
720	0.0	0.345	13.103	0.000	0.2
725	0.0	0.343	13.049	0.000	0.2
730	0.0	0.342	12.996	0.000	0.2
735	0.0	0.341	12.942	0.000	0.2
740	0.0	0.339	12.889	0.000	0.2
745	0.0	0.338	12.835	0.000	0.2
750	0.0	0.336	12.782	0.000	0.2
755	0.0	0.335	12.729	0.000	0.2
760	0.0	0.334	12.677	0.000	0.2
765	0.0	0.332	12.626	0.000	0.2
770	0.0	0.331	12.573	0.000	0.2
775	0.0	0.330	12.523	0.000	0.2
780	0.0	0.328	12.472	0.000	0.2
785	0.0	0.327	12.421	0.000	0.2
790	0.0	0.326	12.371	0.000	0.2
795	0.0	0.324	12.319	0.000	0.2
800	0.0	0.323	12.268	0.000	0.2
805	0.0	0.321	12.217	0.000	0.2
810	0.0	0.320	12.166	0.000	0.2
815	0.0	0.319	12.115	0.000	0.2
820	0.0	0.317	12.064	0.000	0.2
825	0.0	0.316	12.014	0.000	0.2
830	0.0	0.315	11.963	0.000	0.2
835	0.0	0.313	11.912	0.000	0.2
840	0.0	0.312	11.860	0.000	0.2
845	0.0	0.311	11.810	0.000	0.2
850	0.0	0.309	11.760	0.000	0.2

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	Company Address:		



Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Total Outflow (L/s)
855	0.0	0.308	11.708	0.000	0.2
860	0.0	0.307	11.658	0.000	0.2
865	0.0	0.305	11.607	0.000	0.2
870	0.0	0.304	11.555	0.000	0.2
875	0.0	0.303	11.504	0.000	0.2
880	0.0	0.301	11.454	0.000	0.2
885	0.0	0.300	11.401	0.000	0.2
890	0.0	0.299	11.349	0.000	0.2
895	0.0	0.297	11.300	0.000	0.2
900	0.0	0.296	11.248	0.000	0.2
905	0.0	0.295	11.197	0.000	0.2
910	0.0	0.293	11.145	0.000	0.2
915	0.0	0.292	11.094	0.000	0.2
920	0.0	0.291	11.044	0.000	0.2
925	0.0	0.289	10.994	0.000	0.2
930	0.0	0.288	10.943	0.000	0.2
935	0.0	0.287	10.895	0.000	0.2
940	0.0	0.285	10.845	0.000	0.2
945	0.0	0.284	10.797	0.000	0.2
950	0.0	0.283	10.748	0.000	0.2
955	0.0	0.281	10.698	0.000	0.2
960	0.0	0.280	10.646	0.000	0.2

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Connection Results Storm Phase: Phase	Company Address:		

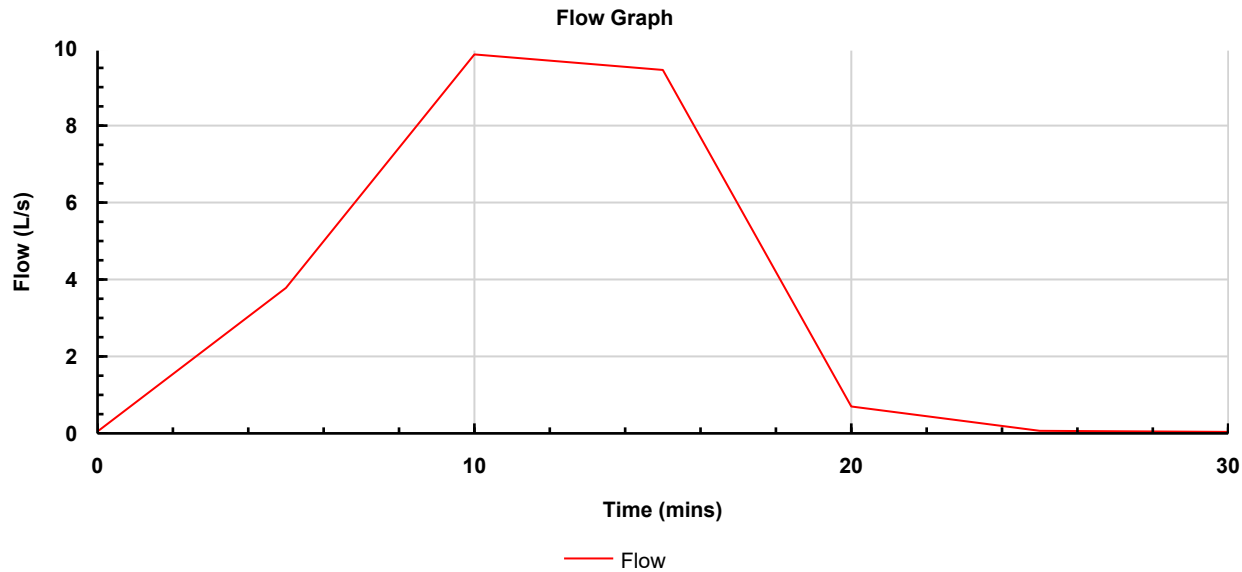




Pipe
Critical Storm: FSR: 100 years: Increase Rainfall (%): +30: 15 mins: Winter

Type : Pipe

Graphs



Tables

Time (mins)	Depth (m)	Flow (L/s)
0	0.000	0.0
5	0.028	3.8
10	0.081	9.8
15	0.100	9.4
20	0.100	0.7
25	0.100	0.0
30	0.100	-0.0

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Connection Results Storm Phase: Phase	Company Address:		



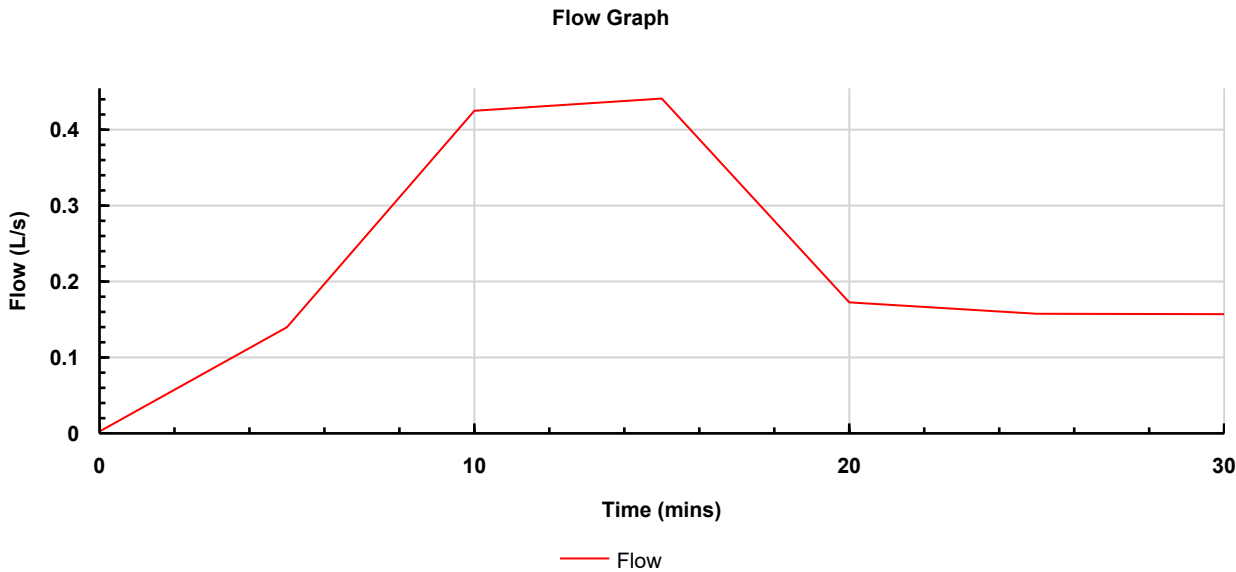


Pipe (1)

Critical Storm: FSR: 100 years: Increase Rainfall (%): +30: 15 mins: Winter

Type : Pipe

Graphs



Tables

Time (mins)	Depth (m)	Flow (L/s)
0	0.000	0.0
5	0.008	0.1
10	0.100	0.4
15	0.100	0.4
20	0.100	0.2
25	0.100	0.2
30	0.100	0.2

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Connection Results Storm Phase: Phase	Company Address:		

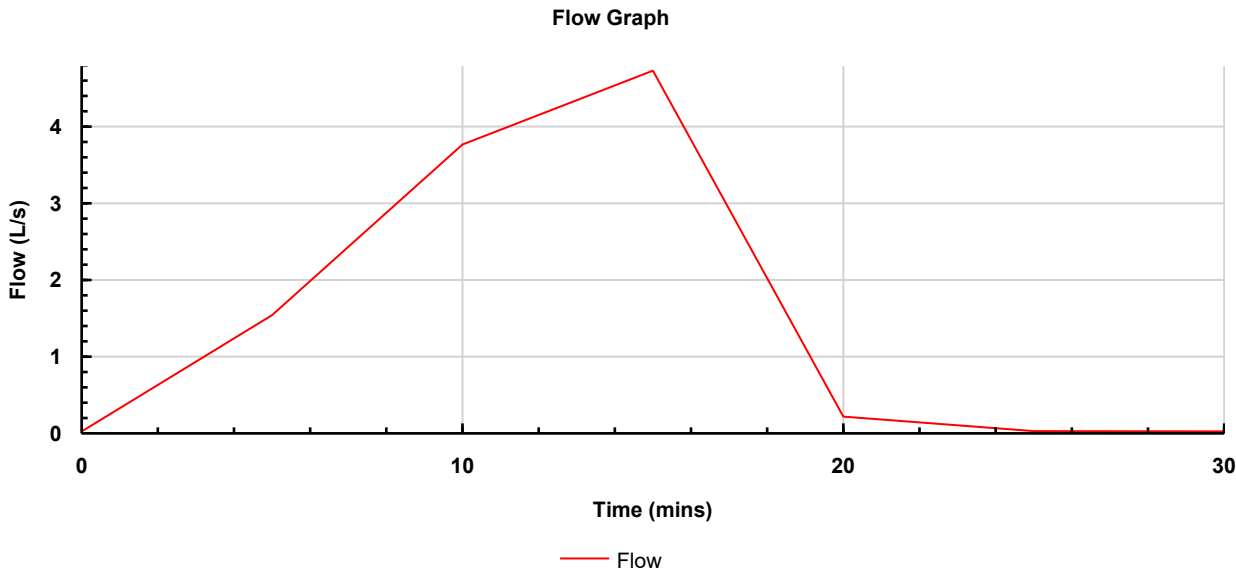




Pipe (2)
Critical Storm: FSR: 100 years: Increase Rainfall (%): +30: 15 mins: Summer

Type : Pipe

Graphs



Tables

Time (mins)	Depth (m)	Flow (L/s)
0	0.000	0.0
5	0.044	1.5
10	0.100	3.8
15	0.100	4.7
20	0.015	0.2
25	0.003	0.0
30	0.003	0.0

Project - 2395: 28 Dark Lane, Wargrave	Date: 07/04/2026		
	Designed by: GraemeBeaven	Checked by:	Approved By:
Report Details: Type: Connection Results Storm Phase: Phase	Company Address:		



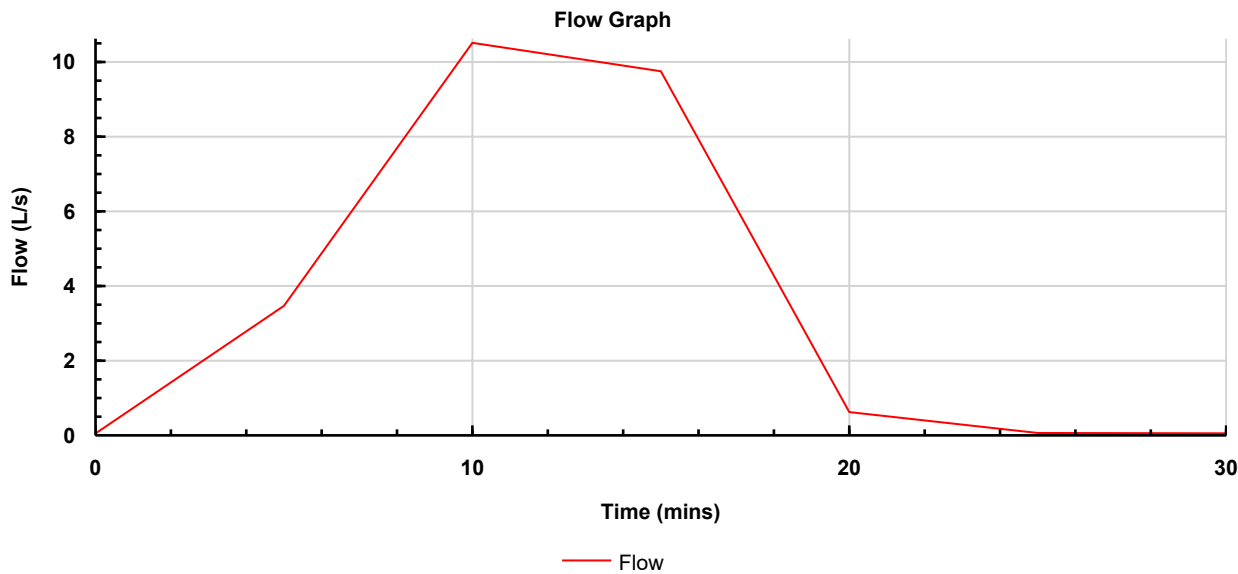


Pipe (3)

Critical Storm: FSR: 100 years: Increase Rainfall (%): +30: 15 mins: Summer

Type : Pipe

Graphs



Tables

Time (mins)	Depth (m)	Flow (L/s)
0	0.000	0.0
5	0.049	3.4
10	0.100	10.5
15	0.100	9.7
20	0.082	0.6
25	0.075	0.0
30	0.074	0.0

APPENDIX E
DRAINAGE LAYOUT AND DETAILS

DO NOT SCALE FROM THIS DRAWING

GENERAL

- These notes are intended to augment drawings and specifications. Where conflict of requirements exists the order of precedence shall be as shown in the specifications. Otherwise the strictest provision shall govern.
- This drawing is to be read in conjunction with all other relevant Engineers and Architects drawings.
- Drawings not to be scaled. All dimensions to be checked on site by the Contractor prior to the commencement of any work or shop drawing. Any discrepancies to be notified to the Architect & Engineer and further instructions obtained before work is commenced.

DRAINAGE NOTES

- Invert of foul and surface water inspection chambers to be min 600mm below FFL.
- Covers HD in road, MD in paths and landscaped areas.
- All branches from stacks 100mm Ø.
- All inspection chambers 450mm Ø with 450mm covers.
- Manholes generally to be 1200x750 or 1050 Ø with 600x600 or 600 Ø covers except manholes between 1.5 & 2.7m deep which are to be minimum 1200mm Ø.
- Ground floor ensuite shower and bath connections made below floor into nearest run min. 2000mm downstream using 135 branch pipe. Trap to be demountable for rodding.
- RWP to discharge into roddable access gullies compatible
- Gullies in hardstanding to be Hepworth semi-universal-square top (200m² capacity).
- Ensure trap is fitted on laundry installation (separate connection).
- Drain runs in the car park area to be surrounded in minimum 150mm pea gravel giving class s bedding factor 2.5.
- All soil stacks to be vented - those marked SVP are taken through the roof and vented to air, all other to be fitted with Agreement Certified Air Admittance Valves.
- Invert levels, pipe diameters, gradients, and connection points associated with petrol interceptors, storage and infiltration areas to be specified by Subcontractor.
- Rocker pipes are to be fitted at each side of any pipes penetrating walls or relieving intells are to be provided.
- See project specification for further information.
- 1500 drains assume 1:150 unless stated
- 1000 drains assume 1:80 unless stated
- Kitchen wastes connected to above floor grease trap and then into soil stack.
- Where manhole/inspection chamber covers are located in paved or block paved areas, then covers need to be recessed to accept paving type.

DRAWING REVISIONS

REV	DESCRIPTION	DATE	BY	CHK
A	Updated to suit comments	07-04-2026	GB	SS



CONSULTING ENGINEERS LTD

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2a Acorn Court,
Front St,
Acomb,
York
YO24 3BU
admin@afa-eng.co.uk

CLIENT

Matthew Tucker

PROJECT

Proposed Extension and Alteration works at
Existing House at
28 Dark Lane, Wargrave.

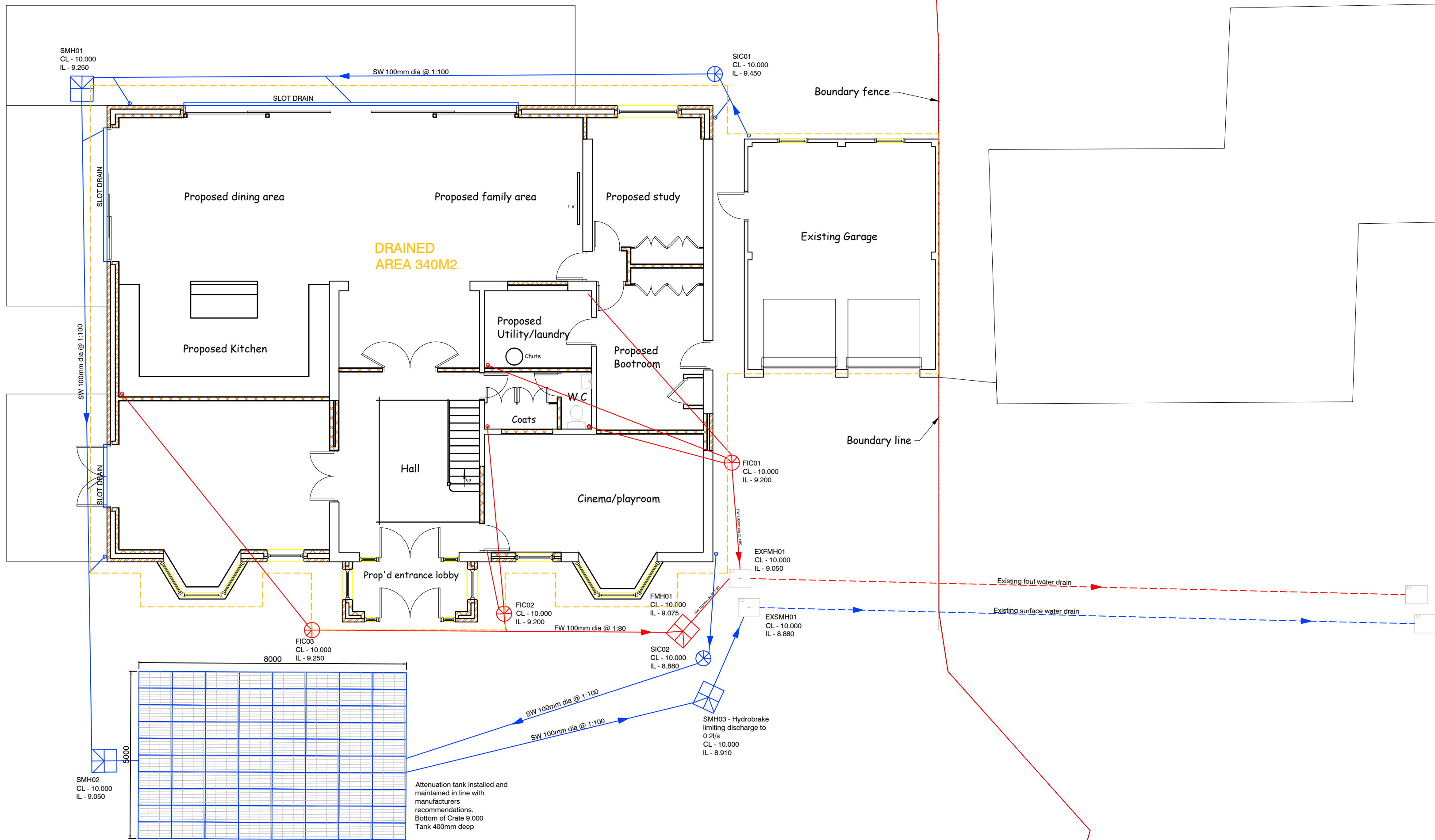
DRAWING TITLE

Drainage Layout

DRAWING STATUS

FOR COMMENT

SCALE	DATE	
1:200 @ A1	April 2026	
DRAWN BY	CHECKED BY	
BB	GB	
JOB NO.	DWG NO.	REV
2395	SL(5)500	A



Key

- Foul water pipe showing flow direction
- FMH00 Foul water manhole & number
- FIC00 Foul water inspection chamber & number
- Surface water pipe showing flow direction
- SMH00 Surface water manhole & number
- SIC00 Surface water inspection chamber & number
- Surface water pipe showing flow direction
- Foul water pipe showing flow direction

Notes

- Contractor to undertake CCTV of existing foul sewer prior to commencing works on site and invert level TBC.
- Surface water discharge to be agreed with local authority prior to connection.
- Catch pits to be installed to all chambers/manholes prior to discharge to attenuation chamber.
- Manhole and interception cover level to be confirmed.
- For Aco drain to entrance/door threshold use Aco RainDrain Brickslot B 125 or similar approved with heel protector.