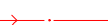


NOTES:

1. DRAWING TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND ALL OTHER EMPLOYERS REQUIREMENTS/TENDER/CONTRACT DOCUMENTS, INCLUDING THE STRUCTURAL AND ARCHITECTURAL PACKAGES.
2. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METERS UNLESS OTHERWISE STATED.
3. ALL DROP POINT LOCATIONS ARE INDICATIVELY SHOWN AND BASED ON RECEIVED INFORMATION.
4. KITA ENGINEERING ACCEPTS NO RESPONSIBILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS CLIENT AND ONLY FOR THE PURPOSE FOR WHICH IT WAS PREPARED AND PROVIDED.
5. THE DESIGN ASSUMES THAT ALL CONTRACTORS ARE COMPETENT AND THAT THEY ARE INDUCTED AND CO-ORDINATED BY THE CONTRACTOR IN ORDER TO CO-OPERATE AND IMPLEMENT SAFE WORKING PRACTICES ON SITE.
6. IF ISSUED IN AN ELECTRONIC FORMAT, IT IS THE RESPONSIBILITY OF THE RECIPIENT TO CHECK THAT THIS DRAWING HAS BEEN REPRODUCED ACCURATELY AND COMPLETELY.
7. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH LOCAL AND NATIONAL REGULATIONS, NATIONAL STANDARDS AND CODES OF PRACTICE, INCLUDING THE RELEVANT STANDARDS.
8. ALL DRAINAGE RUNS TO BE LAID EXCEPT PERFORATED PERMEABLE LANDSCAPING UNDERDRAINS WHICH ARE HDPE OR SIMILAR.
9. ALL EXISTING DRAINAGE TO BE RETAINED SHOULD BE SURVEYED AND REPAIRED IN ACCORDANCE WITH BS EN 1610 CONSTRUCTION AND TESTING OF DRAINS AND SEWERS
10. ALL PIPE SIZES STATED ARE NOMINAL INTERNAL DIAMETERS IN MILLIMETERS.
11. ALL DRAINAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE BUILDING REGULATIONS, BS EN 752 AND RELEVANT AGREEMENT CERTIFICATES.
12. DRAINS TO BE CONSTRUCTED USING FLEXIBLY JOINED VITRIFIED CLAY PIPE TO BS EN 25620:1(1-3) OR UPVC BUILDING DRAINAGE SYSTEM PIPEWORK TO BS EN 1401, BEDDED AND BACKFILLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS AND THE SPECIFICATIONS.
13. BACKFILLING OF DRAIN TREES ADJACENT TO DWELLINGS OF OTHER STRUCTURES TO BE IN ACCORDANCE WITH THE BUILDING REGULATIONS PART 8 DIAGRAM 8.
14. ALL RAIN WATER PIPE LOCATIONS ARE INDICATIVE, FOR ACTUAL LOCATIONS PLEASE REFER TO ARCHITECTS & MEP ENGINEERS PLANS AND ELEVATIONS.
15. WHERE PROPOSED WORKS MAY REQUIRE THE ABANDONMENT OF ANY PIPEWORK, APPROPRIATE CHECKS SHOULD BE UNDERTAKEN TO ENSURE THAT THERE ARE NO OTHER PROPERTIES CONNECTED TO THAT RUN.
16. ALL PRIVATE PAVEMENT IS TO COMPLY AND BE LAID IN ACCORDANCE WITH CURRENT PART 8 OF BUILDING REGULATIONS, BS EN 752:2017 AND BS 5955.
17. POSITION & INVERT LEVELS OF ALL EXISTING MANHOLES, SEWERS AND LATERALS IS TO BE CONFIRMED PRIOR TO CONSTRUCTION & ANY DISCREPANCIES REPORTED TO THE ENGINEER.
18. THE POSITION OF EXISTING SERVICES SHOULD BE VERIFIED PRIOR TO COMMENCEMENT OF WORKS ON-SITE.
19. PROPOSED SOAKAWAY SUBJECT TO DETAILED DESIGN AND BRE365 INFILTRATION TESTING. FINAL LOCATION, SIZE AND DEPTH TO BE CONFIRMED BASED ON SITE GROUND CONDITIONS AND TEST RESULTS.

KEY:

- | | |
|---|----------------------------------|
|  | REDLINE BOUNDARY |
|  | EXISTING FOUL WATER DRAINAGE |
|  | PROPOSED FOUL WATER DRAINAGE |
|  | PROPOSED SURFACE WATER DRAINAGE |
|  | PROPOSED SOIL VENT PIPE |
|  | PROPOSED RAINWATER PIPE |
|  | PROPOSED FRENCH DRAIN OR SIMILAR |
|  | PROPOSED SOAKAWAY |
|  | PROPOSED TYPE A PERMEABLE PAVING |

P02	01/04/2026	OK	ISSUED FOR REVIEW
P01	18/03/2026	OK	FIRST ISSUE
REV	DATE	BY	DESCRIPTION

DRAWING STATUS:

S3 - FOR REVIEW



SITE/PROJECT:

LODDON BRIDGE ROAD
RG5 4BL

TITLE:

PROPOSED DRAINAGE OVERALL SITE LAYOUT

SCALE @ A1:

1-100

DESIGNED:

NED:
OK

DATE: _____

MARCH 2026

DRAWING No:

LDBR-XX-00-CV-DR-0001

•

P02

Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
Report Details: Type: Junctions Storm Phase: Loddon Bridge	HSP STRUCTURAL ENGINEERS: P02			

Name	Junction Type	Easting (m)	Northing (m)	Cover Level (m)	Depth (m)	Invert Level (m)	Chamber Shape	Diameter (m)
SWMH2	Manhole	476654.715	173187.276	48.000	1.015	46.985	Circular	0.450
SWMH3	Manhole	476655.068	173183.278	48.000	1.045	46.955	Circular	0.600
SWMH1	Manhole	476671.727	173188.421	47.750	0.650	47.100	Circular	0.450

Name	Lock
SWMH2	None
SWMH3	None
SWMH1	None

Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
Report Details:	HSP STRUCTURAL ENGINEERS:			
Type: Stormwater Controls Storm Phase: Loddon Bridge	P02			



Soakaway 01

Type : Soakaway

Dimensions	
Exceedance Level (m)	48.000
Depth (m)	1.100
Base Level (m)	46.900
Freeboard (mm)	0
Soakaway Shape	Rectangular
Diameter / Width (m)	2.000
Length (m)	7.000
Porosity (%)	95
Ineffective Storage Depth (m)	0.000
Number of Soakaways	1
Base Infiltration Rate (m/hr)	0.0036
Side Infiltration Rate (m/hr)	0.0036
Safety Factor	2.0
Total Volume (m³)	14.630

Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
Report Details:	HSP STRUCTURAL ENGINEERS:			
Type: Stormwater Controls Storm Phase: Loddon Bridge	P02			



Porous Paving 01

Type : Porous Paving

Dimensions	
Exceedance Level (m)	48.500
Depth (m)	0.450
Base Level (m)	48.050
Paving Layer Depth (mm)	100
Membrane Percolation (m/hr)	325.0
Porosity (%)	30
Length (m)	10.000
Long. Slope (1:X)	100.00
Width (m)	6.969
Total Volume (m³)	7.317

Advanced	
Base Infiltration Rate (m/hr)	0.0036
Side Infiltration Rate (m/hr)	0.0036
Safety Factor	2.0
Conductivity (m/hr)	500.0



Porous Paving 02

Type : Porous Paving

Dimensions	
Exceedance Level (m)	47.500
Depth (m)	0.450
Base Level (m)	47.050
Paving Layer Depth (mm)	100
Membrane Percolation (m/hr)	325.0
Porosity (%)	30
Length (m)	10.000
Long. Slope (1:X)	100.00
Width (m)	3.349
Total Volume (m³)	3.517

Advanced	
Base Infiltration Rate (m/hr)	0.0036
Side Infiltration Rate (m/hr)	0.0036
Safety Factor	2.0
Conductivity (m/hr)	500.0

Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
Report Title: Rainfall Analysis Criteria	HSP STRUCTURAL ENGINEERS: P02			

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)	300
Perform No Discharge Analysis	☐

Rainfall	
FSR	Type: FSR
Region	England And Wales
M5-60 (mm)	18.8
Ratio R	0.400
Summer	☒
Winter	☒

Return Period	
Return Period (years)	Increase Rainfall (%)
100.0	40.000
30.0	20.000

Storm Durations	
Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880
2160	4320
2880	5760
4320	8640
5760	11520
7200	14400
8640	17280
10080	20160

Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
Report Details: Type: Junctions Summary Storm Phase: Loddon Bridge	HSP STRUCTURAL ENGINEERS: P02			



FSR: 100 years: Increase Rainfall (%): +40: 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
SWMH2	FSR: 100 years: +40 %: 10080 mins: Winter	48.000	46.985	47.772	0.787	2.7	0.125	0.000	1.9	158.280	Flood Risk
SWMH3	FSR: 100 years: +40 %: 10080 mins: Winter	48.000	46.955	47.780	0.825	3.5	0.234	0.000	2.1	241.313	Flood Risk
SWMH1	FSR: 100 years: +40 %: 10080 mins: Winter	47.750	47.100	47.767	0.667	0.2	15.359	15.256	0.2	16.594	Flood

Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
Report Details: Type: Junctions Summary Storm Phase: Loddon Bridge	HSP STRUCTURAL ENGINEERS: P02			



FSR: 30 years: Increase Rainfall (%): +20: 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
SWMH2	FSR: 30 years: +20 %: 2160 mins: Summer	48.000	46.985	47.601	0.616	0.3	0.098	0.000	0.2	8.321	Surcharged
SWMH3	FSR: 30 years: +20 %: 2880 mins: Winter	48.000	46.955	47.601	0.646	0.8	0.183	0.000	0.6	12.661	Surcharged
SWMH1	FSR: 30 years: +20 %: 2160 mins: Summer	47.750	47.100	47.601	0.501	0.1	0.080	0.000	0.1	1.409	Flood Risk

Loddon Bridge Road: RG5 4BL	Date: 02/04/2026		
	Designed by: UKOAK001	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Loddon Bridge	HSP STRUCTURAL ENGINEERS: P02		





FSR: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By:
Max. DS 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. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Soakaway 01	FSR: 100 years: +40 %: 10080 mins: Winter	47.767	47.767	0.867	0.867	2.1	11.532	0.000	15.638	0.0	121.973	21.174	OK
Porous Paving 01	FSR: 100 years: +40 %: 720 mins: Winter	48.353	48.353	0.203	0.303	0.4	5.288	0.000	3.233	0.0	0.000	27.734	OK
Porous Paving 02	FSR: 100 years: +40 %: 600 mins: Winter	47.347	47.347	0.197	0.297	0.2	2.485	0.000	1.358	0.0	0.000	29.332	OK

Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
Report Details: Type: Stormwater Controls Summary Storm Phase: Loddon Bridge	HSP STRUCTURAL ENGINEERS: P02			



FSR: 30 years: Increase Rainfall (%): +20: Critical Storm Per Item: Rank By: Max.
DS 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)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Soakaway 01	FSR: 30 years: +20 %: 2160 mins: Summer	47.601	47.601	0.701	0.701	0.5	9.320	0.000	2.998	0.0	1.928	36.295	OK
Porous Paving 01	FSR: 30 years: +20 %: 480 mins: Winter	48.249	48.249	0.099	0.199	0.4	3.123	0.000	2.085	0.0	0.000	57.324	OK
Porous Paving 02	FSR: 30 years: +20 %: 360 mins: Winter	47.247	47.247	0.097	0.197	0.2	1.480	0.000	0.775	0.0	0.000	57.910	OK

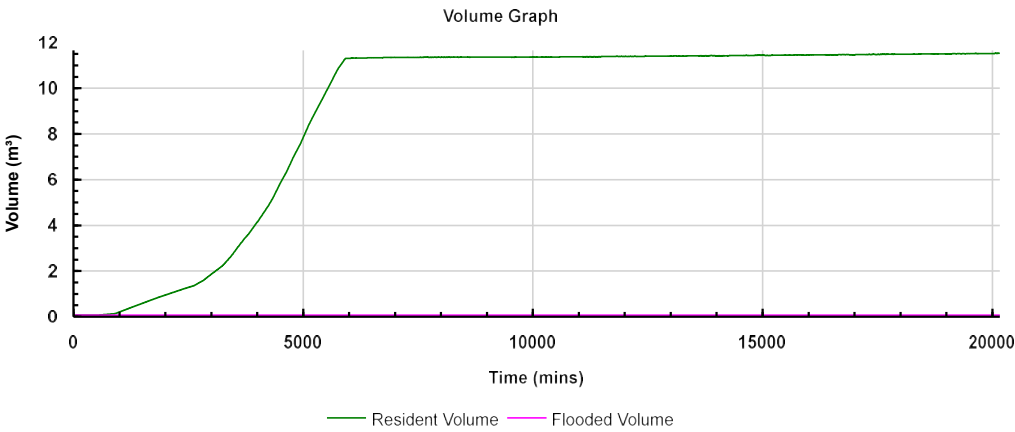
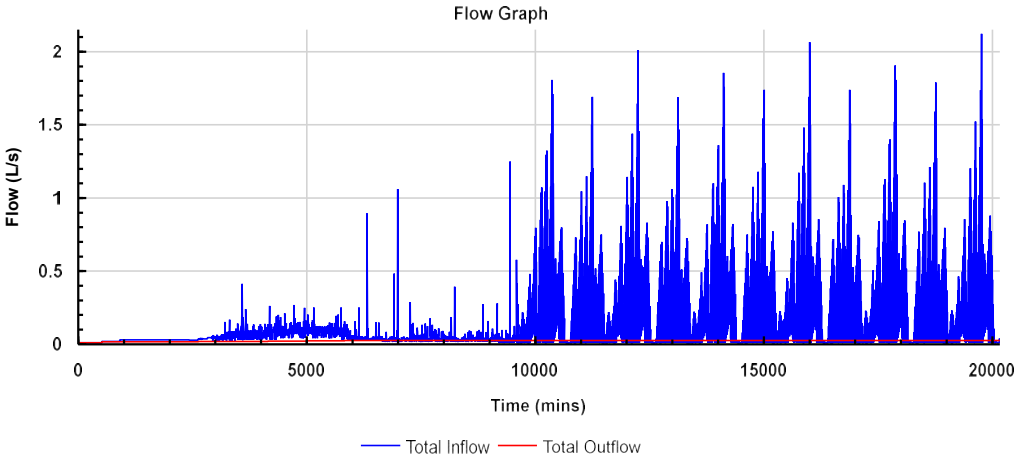
Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
Report Details: Type: Stormwater Control Results Storm Phase: Loddon Bridge	HSP STRUCTURAL ENGINEERS: P02			



Soakaway 01
Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +40: 10080 mins: Winter

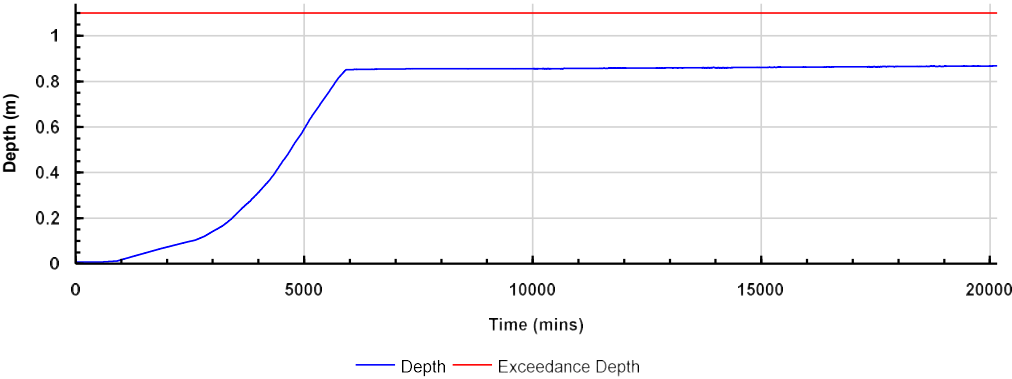
Type : Soakaway

Graphs



Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
	Report Details: Type: Stormwater Control Results Storm Phase: Loddon Bridge			
HSP STRUCTURAL ENGINEERS: P02				

Depth Graph



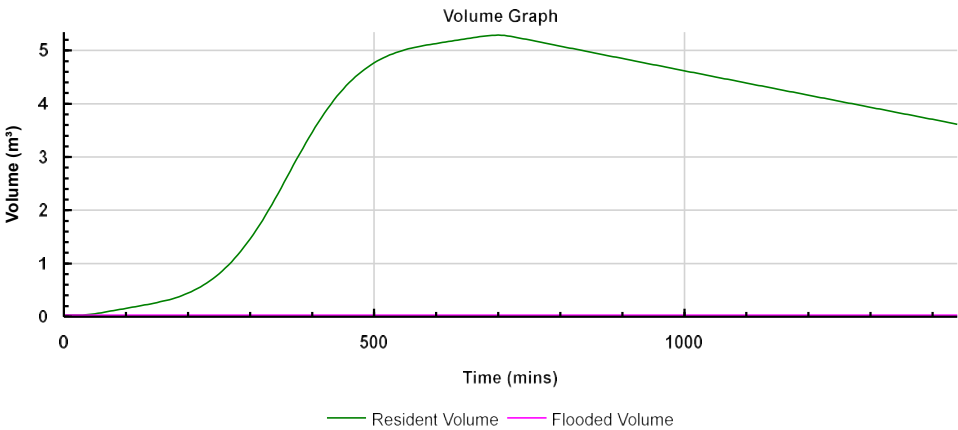
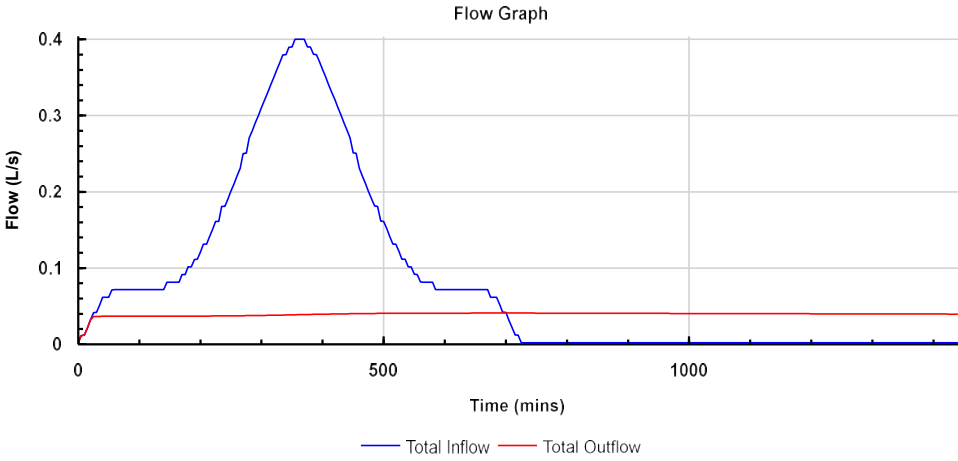
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	Designed by: UKOAK001	Checked by:	Approved By:	
	Report Details: Type: Stormwater Control Results Storm Phase: Loddon Bridge			
HSP STRUCTURAL ENGINEERS: P02				



Porous Paving 01
Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +40: 720 mins: Winter

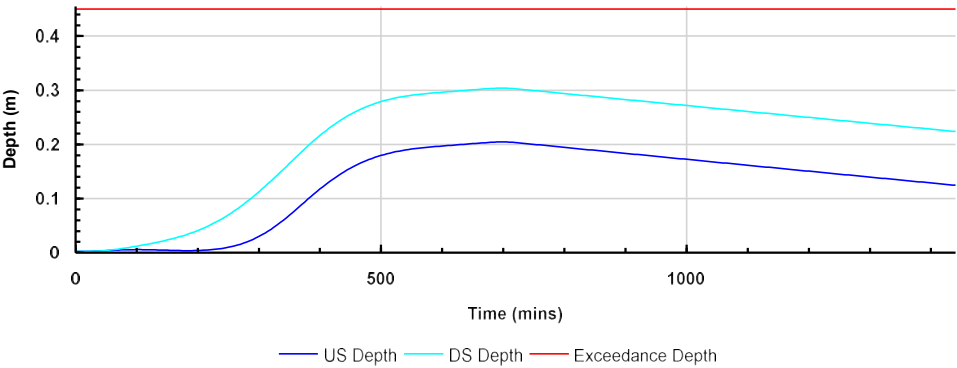
Type : Porous Paving

Graphs



Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
	Report Details: Type: Stormwater Control Results Storm Phase: Loddon Bridge			
HSP STRUCTURAL ENGINEERS: P02				

Depth Graph



Loddon Bridge Road: RG5 4BL	Date: 02/04/2026		
	Designed by: UKOAK001	Checked by:	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Loddon Bridge	HSP STRUCTURAL ENGINEERS: P02		

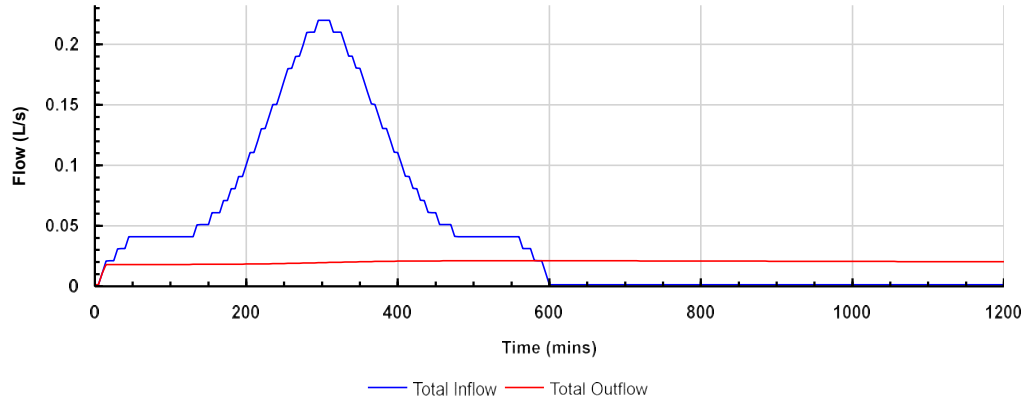


Porous Paving 02
Critical by Return Period: FSR: 100 years: Increase Rainfall (%): +40: 600 mins: Winter

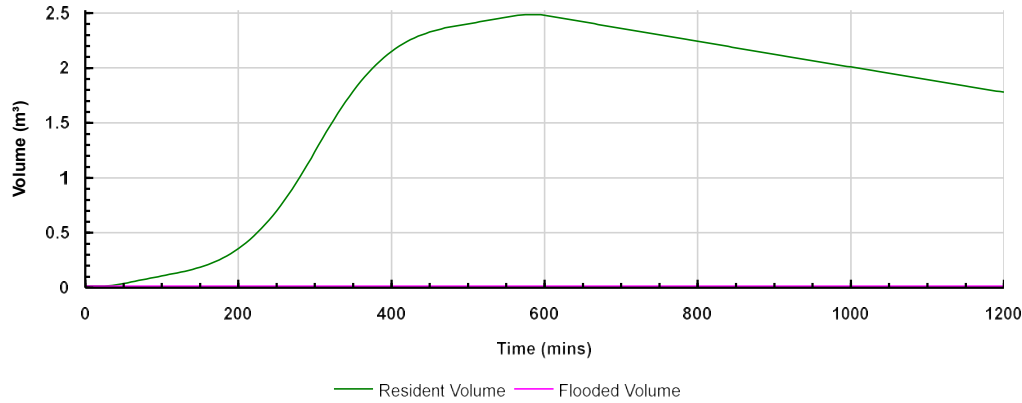
Type : Porous Paving

Graphs

Flow Graph

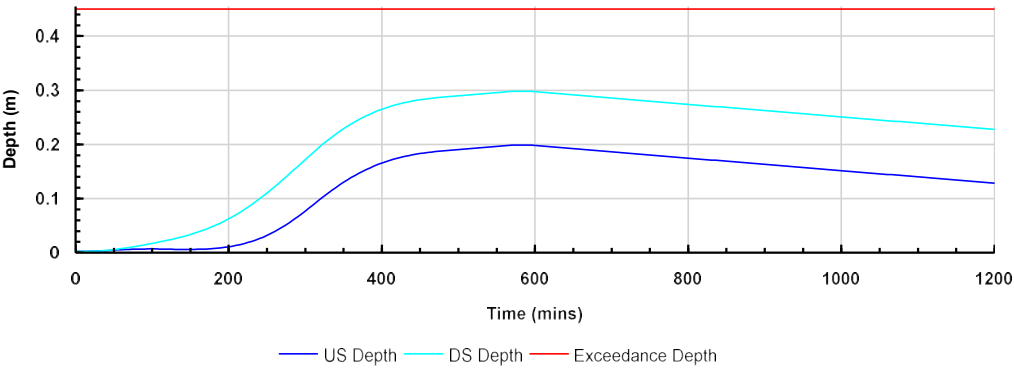


Volume Graph



Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			 
	Designed by: UKOAK001	Checked by:	Approved By:	
	Report Details: Type: Stormwater Control Results Storm Phase: Loddon Bridge			
HSP STRUCTURAL ENGINEERS: P02				

Depth Graph



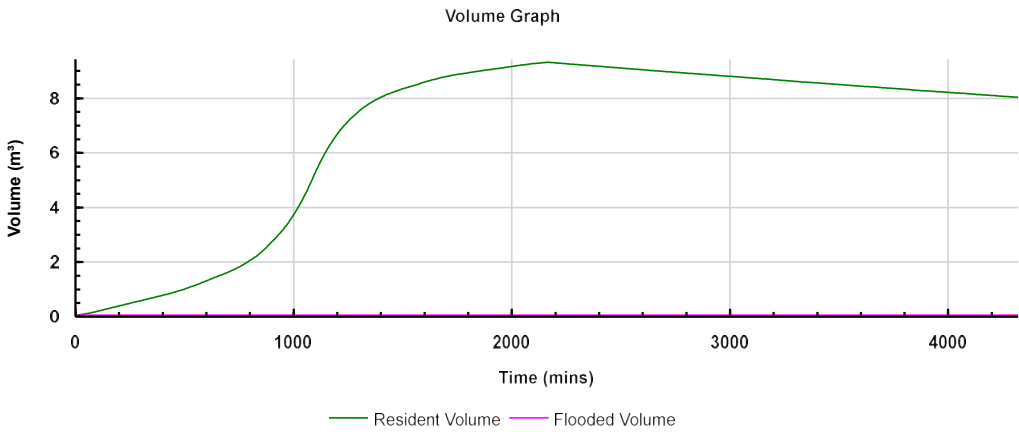
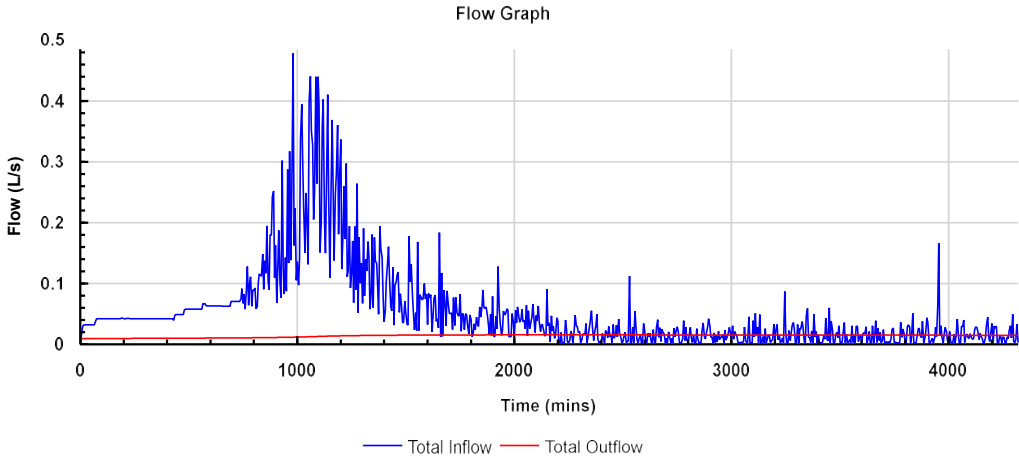
Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
Report Details: Type: Stormwater Control Results Storm Phase: Loddon Bridge	HSP STRUCTURAL ENGINEERS: P02			



Soakaway 01
Critical by Return Period: FSR: 30 years: Increase Rainfall (%): +20: 2160 mins: Summer

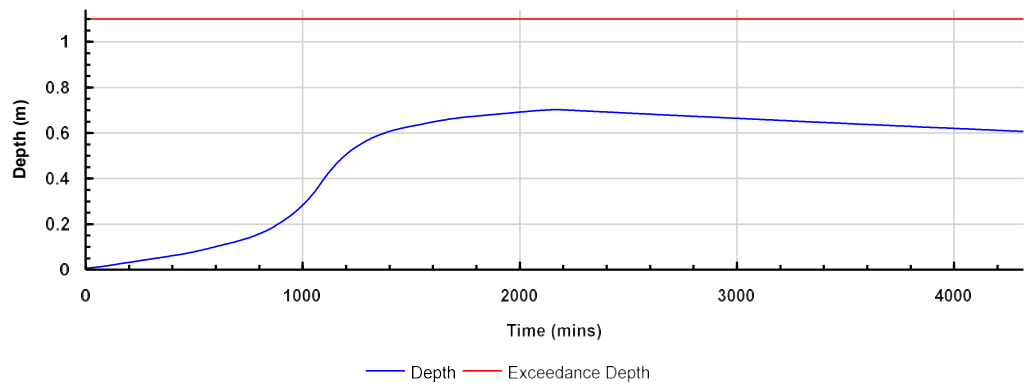
Type : Soakaway

Graphs



Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
	Report Details: Type: Stormwater Control Results Storm Phase: Loddon Bridge			
HSP STRUCTURAL ENGINEERS: P02				

Depth Graph



Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
	Report Details: Type: Stormwater Control Results Storm Phase: Loddon Bridge			
HSP STRUCTURAL ENGINEERS: P02				



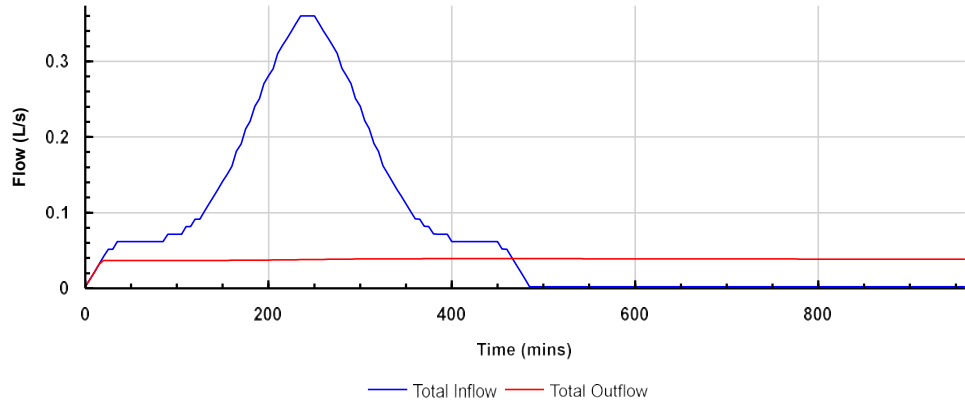
Porous Paving 01

Critical by Return Period: FSR: 30 years: Increase Rainfall (%): +20: 480 mins: Winter

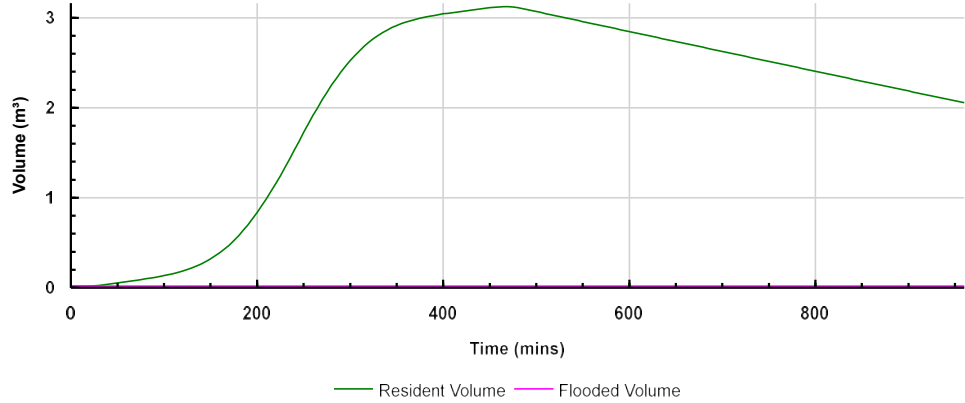
Type : Porous Paving

Graphs

Flow Graph

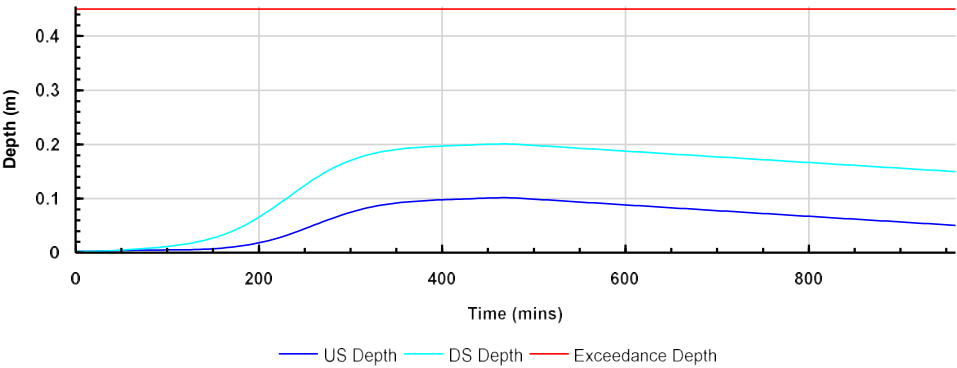


Volume Graph



Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
	Report Details: Type: Stormwater Control Results Storm Phase: Loddon Bridge			
HSP STRUCTURAL ENGINEERS: P02				

Depth Graph



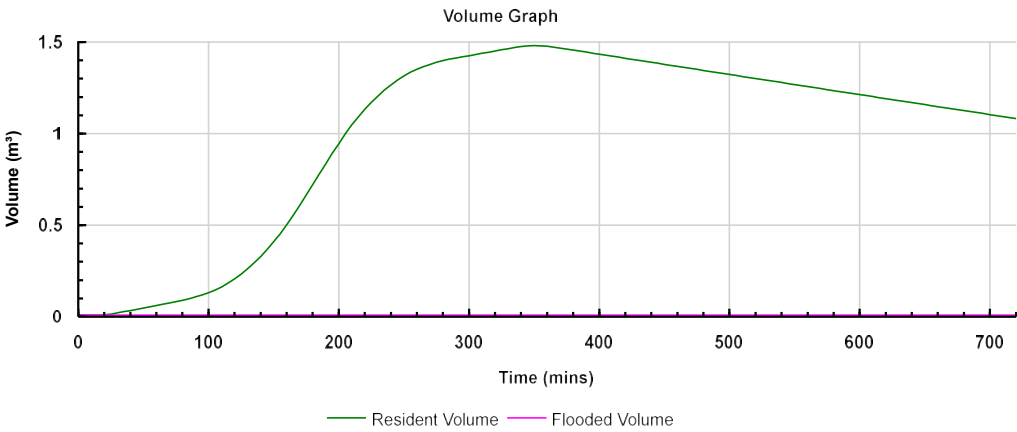
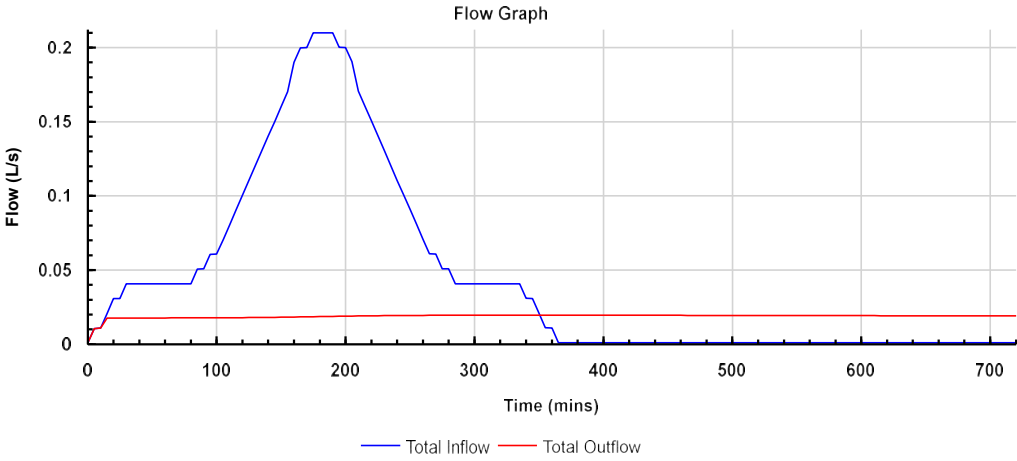
Loddon Bridge Road: RG5 4BL		Date: 02/04/2026			
		Designed by: UKOAK001	Checked by:		Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Loddon Bridge		HSP STRUCTURAL ENGINEERS: P02			



Porous Paving 02
 Critical by Return Period: FSR: 30 years: Increase Rainfall (%): +20: 360 mins: Winter

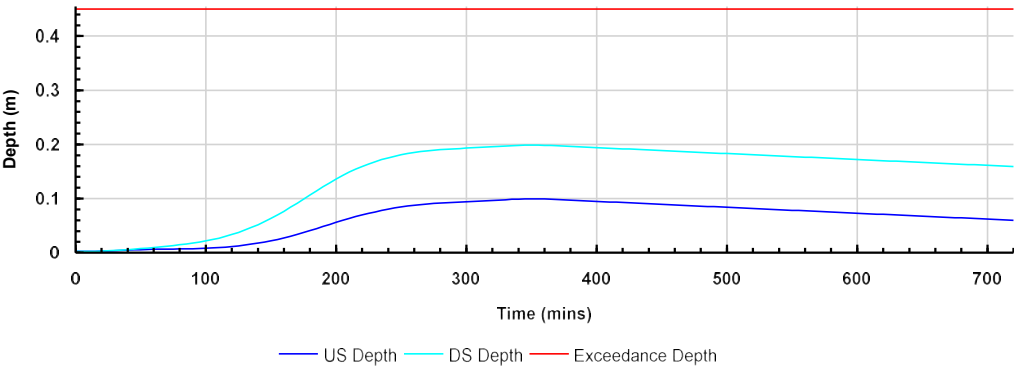
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Graphs

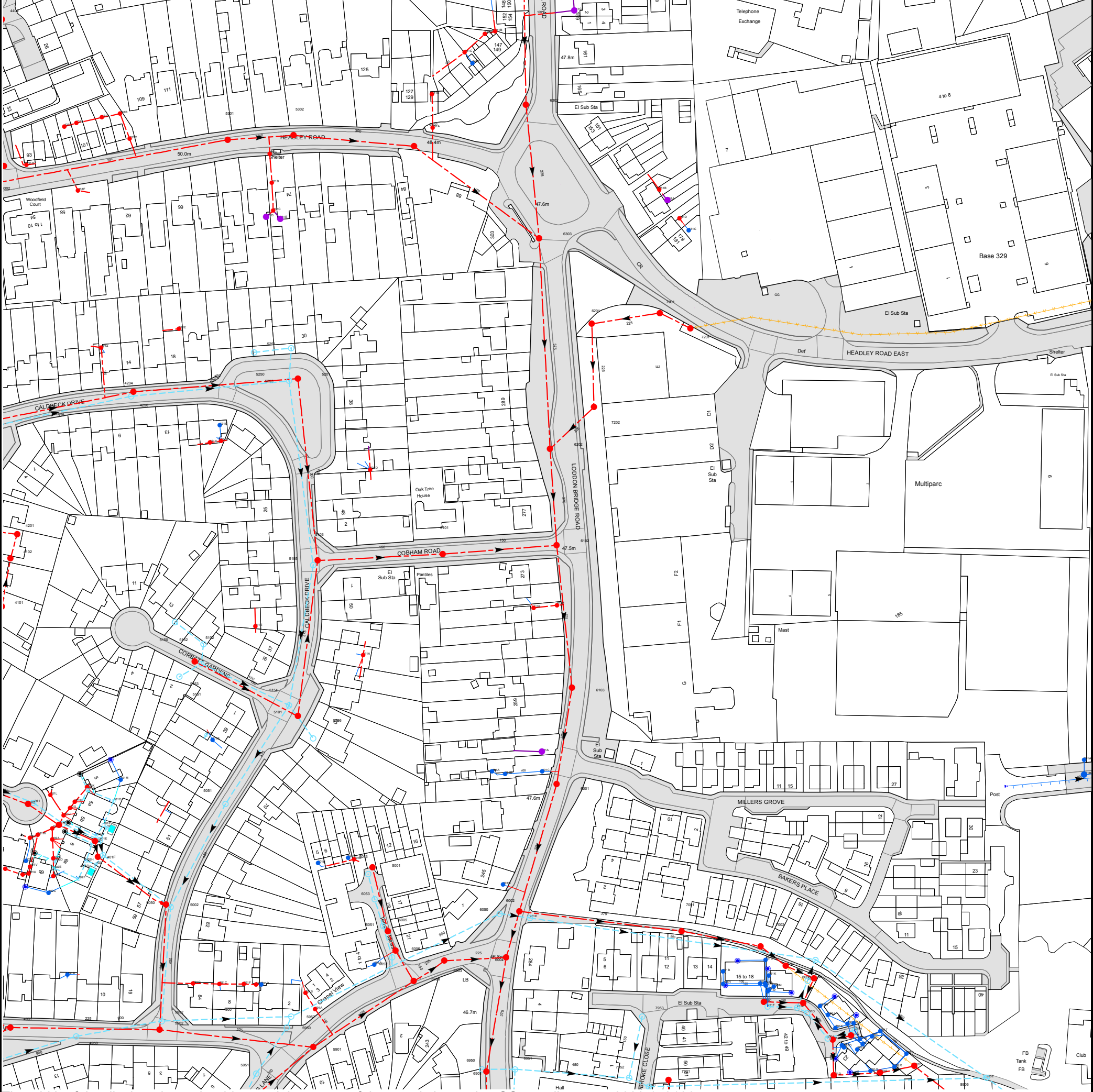


Loddon Bridge Road: RG5 4BL	Date: 02/04/2026			
	Designed by: UKOAK001	Checked by:	Approved By:	
	Report Details: Type: Stormwater Control Results Storm Phase: Loddon Bridge			
HSP STRUCTURAL ENGINEERS: P02				

Depth Graph



Asset Location Search Sewer Map - ALS/ALS/24/2026 5299914



The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 476680,173196
The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

Based on the Ordnance Survey Map (2024) with the Sanction of the controller of H.M. Stationery Office, License no. AC0000849556 Crown Copyright Reserved.

NB. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates that no survey information is available

Manhole Reference	Manhole Cover Level	Manhole Invert Level
8952	n/a	n/a
891D	45.34	43.2
891E	45.18	43.06
891Q	45.65	45.1
891R	45.65	45.02
891F	45.14	42.96
891S	45.6	44.96
891N	45.7	44.65
891O	45.65	44.63
891V	44.84	44.77
891M	45.63	44.34
891C	45.56	43.3
891U	45.6	44.77
891I	45.53	44.6
891L	45.7	44.53
891G	45.69	43.85
891T	45.55	44.86
891H	45.75	44.66
891X	n/a	n/a
891K	n/a	n/a
891Y	n/a	n/a
891J	n/a	n/a
901B	n/a	n/a
901A	n/a	n/a
7901	45.91	44.92
7001	n/a	n/a
701B	46.24	45.29
791H	46.24	45.02
791I	n/a	n/a
7002	n/a	n/a
791C	45	44.25
791J	46.15	44.84
701C	46.24	45.4
791N	46.13	45.19
791F	45.87	44.7
791O	46.02	45.02
791K	45.9	45
791L	46.02	44.77
791M	n/a	n/a
701A	46.03	43.59
791E	45.74	44.51
791A	45.77	43.42
791D	45.68	44.54
791G	45.6	44.45
891B	45.7	43.49
8050	45.97	43.96
891W	n/a	n/a
6901	46.69	44.48
6951	46.57	45.63
7953	46.17	45.23
6004	46.94	44.55
601E	n/a	n/a
6050	47.2	45.23
6002	46.99	44.67
601D	n/a	n/a
6001	47.21	44.8
601B	n/a	n/a
601C	n/a	n/a
601A	n/a	n/a
611A	n/a	n/a
6103	47.31	44.87
611B	n/a	n/a
611C	n/a	n/a
7951	46.01	45
7952	46.12	45.15
6102	47.32	45.02
6202	47.31	45.14
7202	47.37	45.64
7201	47.27	46.03
6201	47.53	45.77
7301	47.32	45.75
6303	47.49	45.51
731C	n/a	n/a
731D	n/a	n/a
731A	n/a	n/a
731B	n/a	n/a
6302	47.85	45.85
641A	n/a	n/a
641B	n/a	n/a
641G	n/a	n/a
641D	n/a	n/a
641H	n/a	n/a
591G	n/a	n/a
591C	n/a	n/a
591F	n/a	n/a
591E	n/a	n/a
5951	47.23	46.42
591D	n/a	n/a
5950	47.32	46.21
5957	n/a	n/a
591B	n/a	n/a

Manhole Reference	Manhole Cover Level	Manhole Invert Level
5901	46.98	45.26
591A	n/a	n/a
501A	n/a	n/a
6005	47.02	45.25
6052	46.87	46.1
6006	46.85	45.1
6903	46.57	44.96
6003	46.6	44.83
6950	46.7	45.74
6051	47.15	46.2
5050	48.67	46.56
6053	47.47	46.29
5053	47.78	46.68
5001	47.85	46.29
501B	n/a	n/a
501D	n/a	n/a
501C	n/a	n/a
5051	48.66	46.55
511B	n/a	n/a
5156	48.6	47.62
511D	n/a	n/a
5101	48.94	46.59
5154	48.95	46.86
5151	50.62	49.57
5153	50.06	48.73
5102	50.11	48.51
4950	48.09	46.57
5902	47.82	45.68
5952	47.82	46.41
491A	n/a	n/a
5002	48.16	45.69
402F	n/a	n/a
402E	n/a	n/a
402I	18.7	17.7
402D	n/a	n/a
402H	19.4	18.4
402B	n/a	n/a
401D	n/a	47.72
401F	n/a	48.27
402G	n/a	n/a
401C	n/a	48.08
401E	n/a	48.57
401R	n/a	n/a
401Q	n/a	n/a
401B	n/a	49.02
401P	n/a	n/a
401A	n/a	49.32
401J	n/a	n/a
401I	n/a	n/a
401H	n/a	n/a
401O	n/a	n/a
401K	n/a	n/a
402K	n/a	n/a
401M	n/a	n/a
511A	n/a	n/a
5152	50.28	49.57
511E	n/a	n/a
5150	50.41	49.87
4101	n/a	n/a
5155	48.47	47.12
5103	48.46	46.17
4102	n/a	n/a
6101	47.89	45.66
4201	n/a	n/a
521D	100	98.7
521A	n/a	n/a
521B	n/a	n/a
521C	n/a	n/a
4250	51.01	49.71
4204	50.97	48.62
5253	49.14	47.69
5201	49.13	47.35
5250	49.37	48.84
5251	49.2	48.39
421A	n/a	n/a
521E	n/a	n/a
531E	n/a	n/a
531D	n/a	n/a
531C	n/a	n/a
431F	n/a	n/a
531B	n/a	n/a
4302	51.44	49.95
431G	n/a	n/a
4402	52.03	51.09
431D	n/a	n/a
431E	n/a	n/a
431A	n/a	n/a
431B	n/a	n/a
431C	n/a	n/a
5301	49.5	47.95
531A	n/a	n/a
5302	49.04	47.45
6301	48.03	46.48

Manhole Reference	Manhole Cover Level	Manhole Invert Level
641E	n/a	n/a
631A	n/a	n/a
641C	n/a	n/a
641F	n/a	n/a
401T	n/a	n/a
4901	48.26	46.02
401S	n/a	n/a
402J	n/a	n/a
4002	51.66	49.87
401U	n/a	n/a
401Y	n/a	n/a
401V	n/a	n/a
4051	51.6	49.99
401W	n/a	n/a
402C	n/a	n/a
401L	n/a	n/a
401X	n/a	n/a
402A	n/a	n/a
401Z	n/a	n/a
The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.		



Asset Location Search - Sewer Key

Public Sewer Types (Operated and maintained by Thames Water)

	Foul Sewer: A sewer designed to convey waste water from domestic and industrial sources to a treatment works.
	Surface Water Sewer: A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.
	Combined Sewer: A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.
	Storm Sewer
	Sludge Sewer
	Foul Trunk Sewer
	Surface Trunk Sewer
	Combined Trunk Sewer
	Foul Rising Main
	Surface Water Rising Main
	Combined Rising Main
	Vacuum
	Thames Water Proposed
	Vent Pipe
	Gallery

Other Sewer Types (Not operated and maintained by Thames Water)

	Sewer		Culverted Watercourse
	Proposed		Decommissioned Sewer
	Content of this drainage network is currently unknown		Ownership of this drainage network is currently unknown

Notes:

- 1) All levels associated with the plans are to Ordnance Datum Newlyn.
- 2) All measurements on the plan are metric.
- 3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate the direction of flow.
- 4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.

Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

	Air Valve		Meter
	Dam Chase		Vent
	Fitting		

Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

	Ancillary		Drop Pipe
	Control Valve		Weir

End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol. Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

	Inlet		Outfall
	Undefined End		

Other Symbols

Symbols used on maps which do not fall under other general categories.

	Change of Characteristic Indicator		Public / Private Pumping Station
	Invert Level		Summit

Areas

Lines denoting areas of underground surveys, etc.

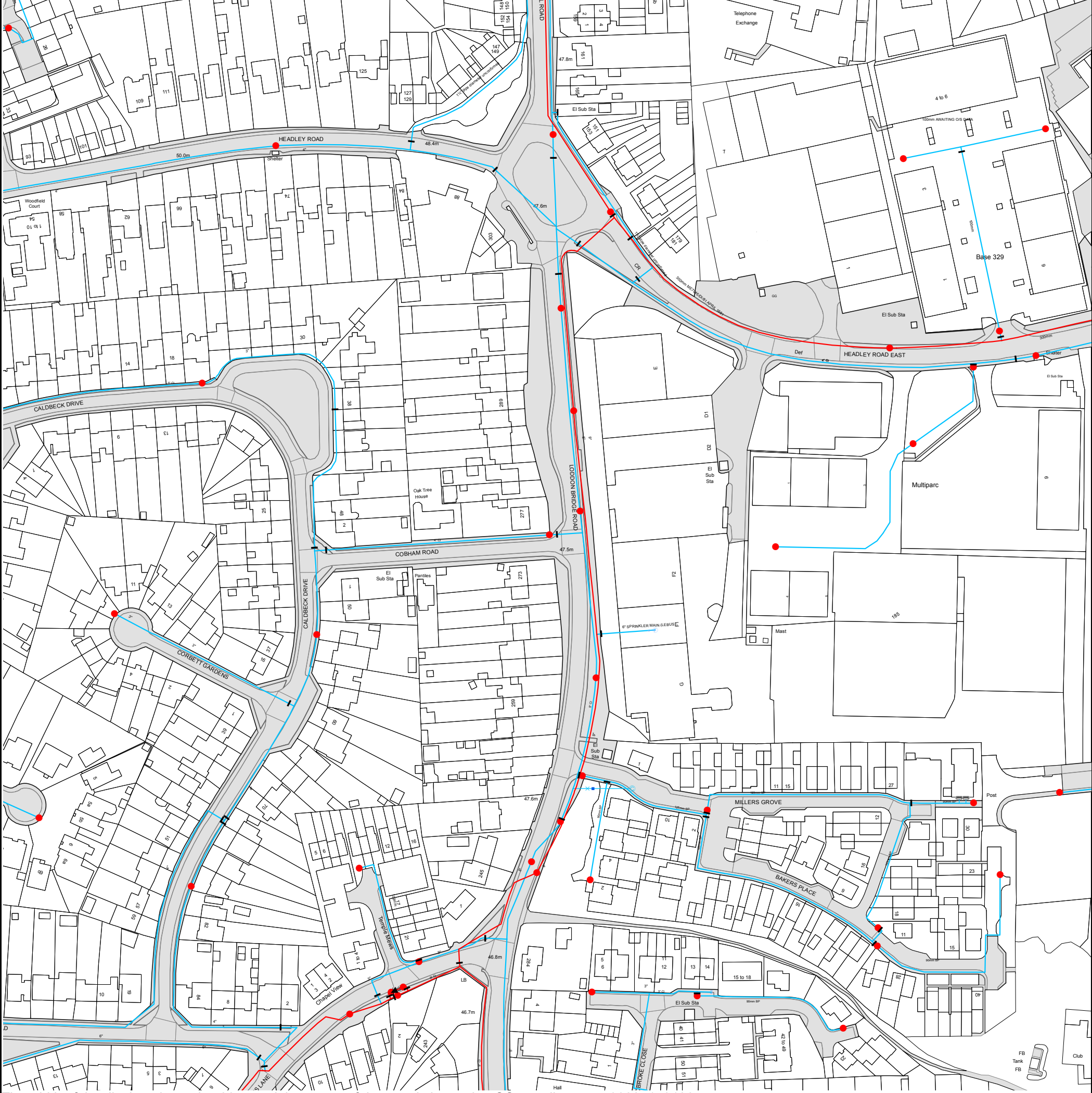
	Agreement
	Chamber
	Operational Site

Ducts or Crossings

	Casement	Ducts may contain high voltage cables. Please check with Thames Water.
	Conduit Bridge	
	Subway	
	Tunnel	

5) 'na' or '0' on a manhole indicates that data is unavailable.

6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in millimeters. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology, please contact Property Searches on 0800 009 4540.



The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 476680, 173196.

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Asset Location Search - Water Key

Water Pipes (Operated & Maintained by Thames Water)

- 4"** **Distribution Main:** The most common pipe shown on water maps. With few exceptions, domestic connections are only made to distribution mains.
- 16"** **Trunk Main:** A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.
- 3" SUPPLY** **Supply Main:** A supply main indicates that the water main is used as a supply for a single property or group of properties.
- 3" FIRE** **Fire Main:** Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.
- 3" METERED** **Metered Pipe:** A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.
- Transmission Tunnel:** A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.
- Proposed Main:** A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

PIPE DIAMETER	DEPTH BELOW GROUND
Up to 300mm (12")	900mm (3')
300mm - 600mm (12" - 24")	1100mm (3' 8")
600mm and bigger (24" plus)	1200mm (4')

Valves

- General Purpose Valve
- Air Valve
- Pressure Control Valve
- Customer Valve

Hydrants

- Single Hydrant

Meters

- Meter

End Items

Symbol indicating what happens at the end of a water main.

- Blank Flange
- Capped End
- Emptying Pit
- Undefined End
- Manifold
- Customer Supply
- Fire Supply

Operational Sites

- Booster Station
- Other
- Other (Proposed)
- Pumping Station
- Service Reservoir
- Shaft Inspection
- Treatment Works
- Unknown
- Water Tower

Other Symbols

- Data Logger
- Casement:** Ducts may contain high voltage cables. Please check with Thames Water.

Other Water Pipes (Not Operated or Maintained by Thames Water)

- Other Water Company Main:** Occasionally other water company water pipes may overlap the border of our clean water coverage area. These mains are denoted in purple and in most cases have the owner of the pipe displayed along them.
- Private Main:** Indicates that the water main in question is not owned by Thames Water. These mains normally have text associated with them indicating the diameter and owner of the pipe.