MR JAMES SPOONER

17 VALEBRIDGE ROAD, BURGESS HILL, WEST SUSSEX, RH15 0RA

Compensatory Storage, Sequential Test and Evacuation Plan

September 2025

eas ltd
Environmental Assessment Services Ltd

REPORT DATA SHEET

Requirement	Data
Report Reference	831/MrJamesSpooner/17ValebridgeRoad/CS
Date	September 2025
Client	Mr James Spooner
Report type	Compensatory Storage, Sequential Test & Evacuation Plan
Purpose	Planning Application
Revisions	
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Approved by	Xanthe Lyford  Signed

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APPENDICES

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1. THE SITE & PROPOSED DEVELOPMENT

1.1 The site comprises an existing workshop/storage building and surrounding, mainly paved, area at the rear of No. 17 Valebridge Road in the northern part of Burgess Hill. The site area is approximately 800 m^2. The Ordnance Survey (OS) map reference for the site is TQ 32198 20213. The site elevation is approximately +33.5 m OD. See Appendix A, Figure 1: Site Location Plan and Figure 2: Existing site layout.

1.2 According to the British Geological Survey (available online), the site lies on Cretaceous Weald Clay. Online Environment Agency (EA) groundwater mapping identifies the site to lie on unproductive strata. The site does not lie within a groundwater source protection zone.

1.3 The land at the site and beyond falls gently to the southwest, until it meets the London – Brighton railway line, which is elevated on an embankment 40 m to the west of the site. There is an underpass beneath the embankment some 100 m to the north of the site.

1.4 It is proposed to demolish the existing workshop/storage building and construct a two-storey, four bedroom dwelling with associated garage and bin storage. See Figure 3.

2. FLOOD RISK ASSESSMENT

2.1 A detailed flood risk assessment (FRA) was carried out by GeoSmart Information Limited in January 2025. This FRA confirmed that the site lies within Flood Zone 1 (low risk of fluvial flooding) and at low risk of surface water (pluvial) flooding. The site lies just within the 1 in 1000 year return period (0.1% Annual Exceedance Probability - AEP) pluvial flood event. Adding the current recommended climate change allowance (45% in this catchment) for the likely life of the proposed development, would place the site within the 1 in 100 year return period (1% AEP) pluvial event. See Figure 4.

2.2 The Environment Agency Flood Prediction data states that the site is not considered at risk of groundwater flooding or flooding from reservoirs. There is no known history of flooding at the site and no history of sewer flooding.

2.3 The GeoSmart Information Limited FRA considered the loss of pluvial flood plain volume resulting from the proposed development to be trivial and not worth providing compensatory storage for. However, it is understood that Mid Sussex District Council has requested compensatory storage.

3. COMPENSATORY STORAGE

3.1 The site was visited on 20 August 2025 in order to examine the site and surrounding topography plus existing drainage arrangements. See Appendix B: Site Photographs.

3.2 The loss of pluvial flood plain volume is based on the 1% AEP flood depth at the site and the difference in the plan area of the proposed development compared with the existing plan area of the workshop/storage buildings.

3.3 The plan area of the existing workshop storage buildings is 69 m^2, and the plan area of the proposed house and garage is 96 m^2. The depth of the water during the future 1% AEP event is not given in the FRA, but based on the floor level recommendations given in the FRA report, the absolute maximum depth would appear to be 0.2 m. Thus, the compensatory storage volume required would appear to be (96 – 69) x 0.2 = 5.4 m^3.

3.4 The compensatory storage may be provided in the form of lowering the site ground level by 3 cm.

3.5 The alternative to lowering the site by a relatively trivial amount would be to construct the proposed new house with a suspended floor, with air bricks beneath floor (and damp-proof course) level, permitting flood water to enter (and drain out of) the void below the floor. This would reduce the effective post development volume taken from the surface water flood plain to below the existing.

4. THE SEQUENTIAL TEST

4.1 The purpose of the Sequential Test is to encourage more vulnerable development to be located in Flood Zones 1 or 2 and a low risk of flooding from other sources and moved away from Flood Zone 3 and high risk of flooding from other sources.

4.2 Residential housing is classified as *more vulnerable* under National Planning Practice Guidance (NPPG) 2022. Location within Flood Zone 3a or higher risk of flooding from other sources would also require the Exception Test to be applied.

4.3 In this case the site lies in Flood Zone 1 and at low risk of flooding from surface water and other sources. The location is within an area presently developed for housing. On this basis, the Sequential Test is satisfied. Speculative estimation of climate change could move the location into the moderate risk of surface water (pluvial) flooding within the predicted life of the development.

4.4 The GeoSmart FRA report stated that the project will not be subject to the Sequential oror Exception Tests. However, we understand that the Sequential Test must be satisfied for all vulnerable development.

4.5 The FRA report recommends that the finished floor level at the proposed residence should be at least 300 mm above ground level. Where a design flood level has been established, finished ground floor level should be 600 mm above design flood level, where this is higher than 300 mm above ground level.

4.6 The FRA recommended that ground levels should be arranged to fall away from the buildings and the overall pattern of water flow offsite to the west should be preserved.

5. EVACUATION PLAN

5.1 Superficially, there should be minimal need to evacuate the site. Even in the worse surface water flood scenario, residents would remain safe within their house.

5.2 In the event that the residents wished to evacuate from the site, there may be a short wade through shallow water to Valebridge Road pavement and then a short walk north directly out of the area at risk of flooding.

5.3 The likely worse case flood depth would not prevent ambulances or other emergency services attending the site.

5.4 The Environment Agency operates a flood warning service for all areas at risk of flooding, and this is available on their website https:/www.gov.uk/check-flood-risk.

6. SURFACE WATER DRAINAGE AND FOUL SEWERAGE

6.1 The FRA recommended that new surface water drainage should be sustainable (SuDS). However, the proposed development will not increase the impermeable area of the site and will provide the opportunity to slightly reduce it by adding areas of soft landscaping.

6.2 The proposed development should not increase the risk of flooding downstream from the site. There is existing surface water drainage at the site, comprising gullies in the surfacing and downpipes discharging into the same system. It is assumed that this will continue with the proposed development. There is also a gravel fringe along the north side of the site that provides a surface water drain.

6.3 Foul sewage will discharge to the public sewer in Valebridge Road.

6.4 Additional SuDS options which could be incorporated into the development include permeable paving, a rain garden and rainwater harvesting

7. CONCLUSIONS & RECOMMENDATIONS

7.1 The Flood Risk Assessment carried out by GeoSmart Information Limited concluded that the loss of flood plain volume was trivial and no compensatory storage was required. However, in the worse case scenario, the loss has been calculated at 5.4 m3. Compensatory storage could be provided by slightly lowering the site ground level, however, it was recommended that having a suspended ground floor with vented underfloor void in the proposed new house would remove any requirement for compensatory storage.

7.2 The site is in Flood Zone 1, and at low risk of surface water flooding. No other flood risks appear to be significant. The site lies within a developed residential area. The Sequential Test is deemed to be satisfied and there is no need to apply the Exception Test.

7.3 There would appear to be minimal requirement for an evacuation plan. Future residents would remain safe within their houses. In the worse case, a short and shallow wade would bring residents to Valebridge Road, and dry land would be accessible immediately to the north on Valebridge Road. Emergency services vehicles should be able to access the site at all times.

7.4 Existing connections are available for both surface water and foul sewage drainage. The proposed development will not increase flood risk downstream from the site. Additional SuDS options which could be incorporated into the development include permeable paving, a rain garden and rainwater harvesting.

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APPENDIX A: FIGURES

Figure 1: Site Location Plan
Figure 2: The Site as Existing
Figure 3: Proposed Development
Figure 4: Environment Agency Surface Water Flood Map

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Scale as shown

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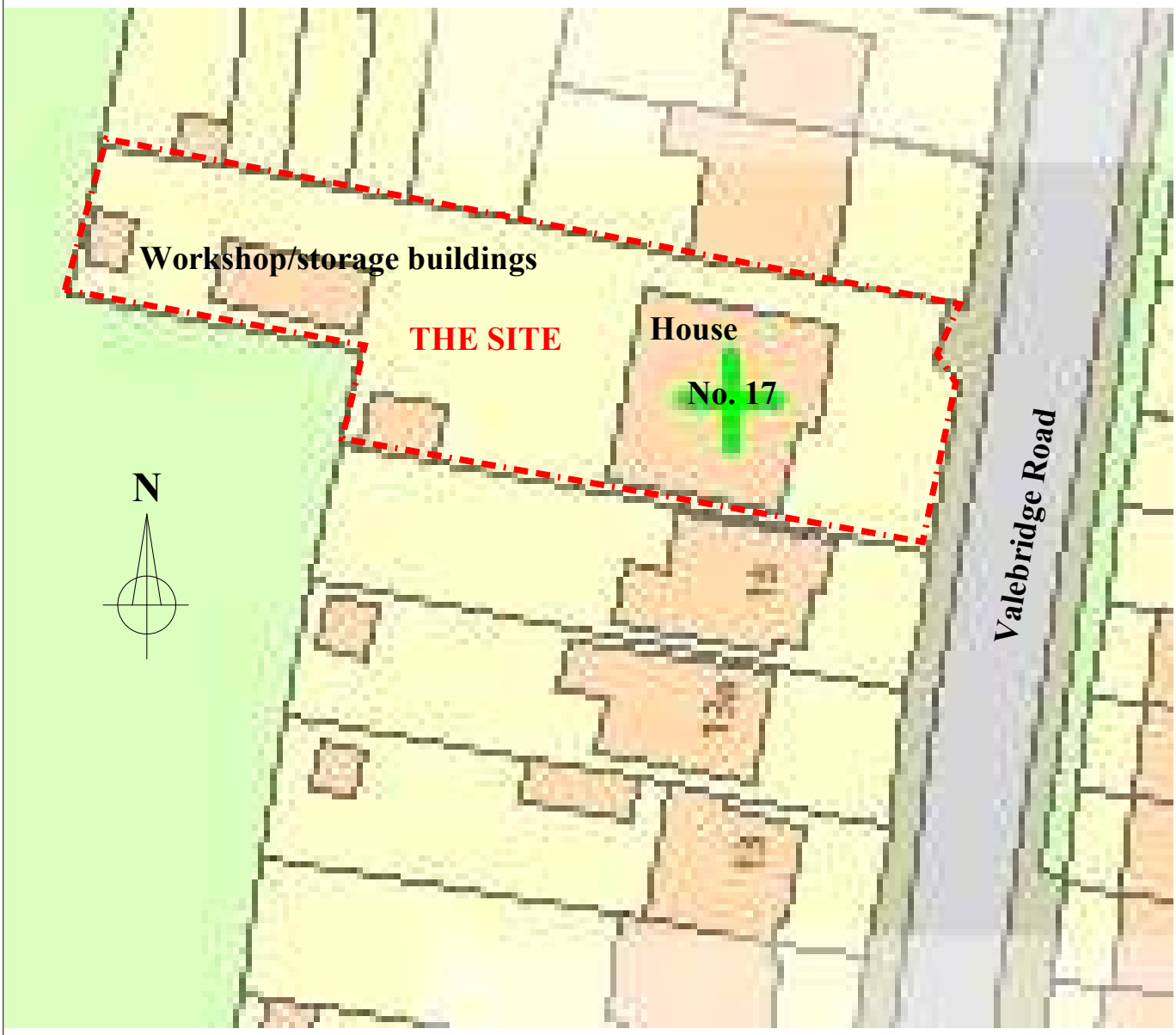
Figure 1: Site Location

September 2025



0 10 20 30 40 50

metres

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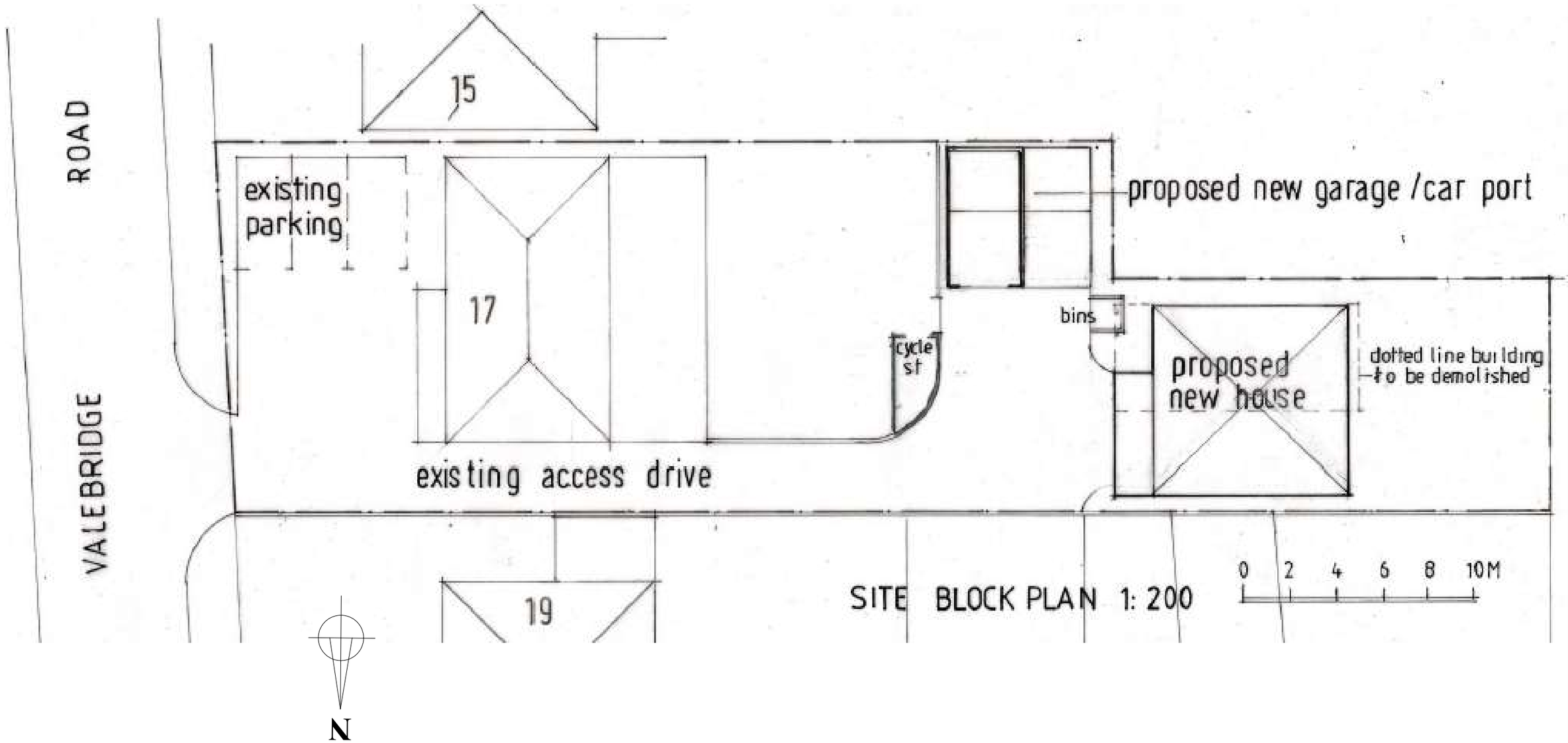
Figure 2: Existing Site Layout

September 2025



Scale as shown

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Figure 3: Proposed Development

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Figure 4: Environment Agency Surface Water Flood Map

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APPENDIX B
Site Photographs

Photo 1: The Site

Photo 2: The site, rear view.

Photo 3: Rear yard area.

Photo 4: Existing Drainage.

Photo 5: Gravel edge drain adjacent to fence.

Photo 6: Land outside site falling to the west.

Photo 7: Route to Valebridge Road.

Photo 8: Evacuation route from the site north on Valebridge Road.

APPENDIX C
Southern Water Sewer Plans

(c) Crown copyright and database rights 2025 Ordnance Survey AC0000808122 | Scale: 1:1250 | Date: 22/09/25 | Wastewater Plan A4

Data updated: 21/08/25 | Map Centre: 532209,120209 | Our Ref: 1886287 - 1 | Powered by digdat

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

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17 Valebridge Road

WATER for LIFE from Southern Water

The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site. This plan is produced by Southern Water Services Ltd (c) Crown copyright and database rights 2025 Ordnance Survey AC0000808122 .This map is to be used for the purposes of viewing the location of Southern Water plant only. Any other uses of the map data or further copies is not permitted.

WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

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

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert
1005	F	0.00	0.00	
1007	F	0.00	0.00	
1101	F	32.24	30.42	
1201	F	33.03	30.08	
1202	F	34.62	29.83	
1203	F	34.91	29.86	
1204	F	34.24	29.34	
1205	F	34.81	33.83	
1206	F	0.00	0.00	
1209	F	0.00	0.00	
1210	F	0.00	0.00	
1211	F	0.00	0.00	
1212	F	0.00	0.00	
1213	F	0.00	0.00	
2002	F	32.89	30.65	
2003	F	33.09	0.00	
2010	F	33.82	31.75	
2011	F	32.78	32.78	
2102	F	32.74	31.97	
2103	F	32.76	31.53	
2104	F	32.71	30.72	
2201	F	35.23	32.40	
2202	F	34.35	0.00	
2203	F	31.82	0.00	
2204	F	35.06	33.25	
2205	F	35.25	33.05	
2206	F	0.00	0.00	
2207	F	0.00	0.00	
2208	F	0.00	0.00	
2209	F	0.00	0.00	
2211	F	0.00	0.00	
2301	F	34.38	30.95	
2302	F	34.50	0.00	
3101	F	33.93	31.76	
1153	S	0.00	0.00	
1250	S	34.78	33.37	
1251	S	34.87	33.24	
2053	S	32.41	0.00	
2166	S	33.27	31.80	
2253	S	34.94	33.12	
2254	S	35.05	32.95	
2255	S	35.20	32.86	
3253	S	36.07	34.68	

APPENDIX D
Environment Agency Flood Risk Summary

Surface water

More about your surface water flood risk

Yearly chance of flooding

Very low | **Low** | Medium | High

Yearly chance of flooding between 2040 and 2060

Very low | **Low** | Medium | High

What surface water is

Surface water flooding is sometimes known as flash flooding. It happens when rainwater cannot drain away through normal drainage systems.

▶ Why surface water flooding is a problem

Rivers and the sea

More about your rivers and sea flood risk

Yearly chance of flooding

Very low | Low | Medium | High

Yearly chance of flooding between 2036 and 2069

Very low | Low | Medium | High

What makes rivers and sea flooding more likely

Low-lying areas that are close to rivers or the sea are more likely to flood

Other flood risks

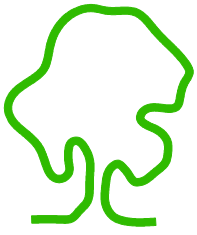
More about groundwater and reservoirs

Groundwater

Flooding from groundwater is unlikely in this area.

Reservoirs

Flooding from reservoirs is unlikely in this area.



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