



**STETON WORKS, TURNERS HILL ROAD,
CRAWLEY DOWN, WEST SUSSEX RH10
4HQ**

PROPOSED RESIDENTIAL DEVELOPMENT

Drainage Strategy

Prepared on Behalf of

JW Stratton Limited

D2348/DS1.1

March 2025

DOCUMENT CONTROL

Project: Steton Works, Turners Hill Road, Crawley Down, West Sussex RH10 4HQ
Proposed Residential Development

Document: Drainage Strategy

Client: JW Stratton Limited

Reference: D2348/DS1.1

Document Checking:

Author: S Burnett **Date:** 19/03/2025

Checked by: M Akmenkalns **Date:** 27/03/2025

Approved by: M Akmenkalns **Date:** 27/03/2025

Status:

Issue	Date	Status	Issued by
1.0	27/03/2025	DRAFT	S Burnett
1.1	07/04/2025	FINAL	S Burnett

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DRAWINGS

SK001 Existing Drainage
PL100 Site Location Plan
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PL300 Impermeable Areas Comparison
PL001 Proposed Drainage
PL002 Proposed Levels

APPENDICES

Appendix A ECE Architectural Development Proposals
Appendix B Engineering Land & Building Surveys Topographic Survey
Appendix C Albury S.I. Ltd Site Investigation
Appendix D Southern Water Public Sewer Records
Appendix E Flood Maps for Planning Extracts
Appendix F Wallingford Greenfield Run-off Calculations
Appendix G Causeway Flow Existing Surface Water Drainage Calculations
Appendix H Site 3D Proposed Surface Water Drainage Calculations

1 INTRODUCTION

1.1 Background

- 1.1.1 BP Civils is instructed by JW Stratton Limited ('the client') to prepare a drainage strategy to accompany a discharge of condition application in relation to the proposed residential development at Steton Works, Turners Hill Road, Crawley Down.
- 1.1.2 The site was granted outline planning approval (DM/22/0867) further to appeal (APP/D3830/W/22/3303070).
- 1.1.3 This drainage strategy has been prepared to assist in discharging Condition 6 of the appeal decision notice.
- 1.1.4 Condition 6 states:
- 'No development shall take place until foul and surface water drainage works have been provided on the site to serve the development hereby permitted, in accordance with details that have first been submitted to and approved in writing by the local planning authority. The details shall include a timetable for its implementation and a management and maintenance plan for the lifetime of the development which shall include arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime. Maintenance and management during the lifetime of the development should be in accordance with the approved details.'*
- 1.1.5 The proposed development concerns the demolition of all existing buildings on site and construction of 5 No. dwellings and associated parking.
- 1.1.6 The architectural development proposals are contained within **Appendix A**.
- 1.1.7 This report has been undertaken in accordance with National Planning Policy Framework (NPPF) and The Planning Practice Guidance on the use of SuDS for achieving sustainable development.
- 1.1.8 In preparing this report, BP Civils has referred to the following documents and information:
- Albury S.I. Ltd Site Investigation
 - British Geological Survey (BGS) Information and Records
 - Environment Agency 'Flood Maps for Planning'
 - Long-Term Flood Risk Maps (Gov.uk)
 - Mid Sussex District Council Strategic Flood Risk Assessment
 - Southern Water Public Sewer Records
- 1.1.9 This drainage strategy report has been prepared to assess site constraints and opportunities and propose a drainage strategy that is appropriate for the design life of the development, without causing off site impacts from run-off in a design event.
- 1.1.10 This report has been prepared for the benefit of the named client only.

2 SITE LOCATION AND DESCRIPTION

- 2.1.1 The National Grid Reference for the site is TQ 33745 38412.
- 2.1.2 A site location plan is included within this report (drawing **PL100 'Site Location Plan'**).
- 2.1.3 The site measures 2,780m² (0.28Ha) and is located on the eastern side of Turners Hill Road at the former Palmers Autocentre Tyres site.
- 2.1.4 The site is currently occupied by 4 No. existing buildings with an existing impermeable area totalling 1,459m².
- 2.1.5 A topographic survey has been undertaken at the site by Engineering Land & Building Surveys, dated November 2021. The survey is contained within **Appendix B**.
- 2.1.6 The topographic survey identifies levels in the range of 109.80m AOD and 112.100m AOD.
- 2.1.7 Drawing **PL200 'Site Topographic Survey & Contours'** demonstrates the trends in topography at the site.

3 GROUND CONDITIONS

- 3.1.1 Albury S.I. Ltd has undertaken intrusive investigation at the site. Site works were undertaken on 2nd April 2024.
- 3.1.2 7 No. boreholes were excavated on site to depths in the range of 1.60m to 3.10m below ground level.
- 3.1.3 Albury S.I. Ltd's reporting is contained within **Appendix C**.
- 3.1.4 Made Ground was encountered at all 7 No. borehole locations at depths of up to 0.80m below ground level. The Made Ground was underlain by varying geology, as recorded by the borehole logs contained within **Appendix C**.
- 3.1.5 In addition to Albury S.I. Ltd's report, reference has also been made to the BGS Geology of Britain Viewer.
- 3.1.6 The BGS Geology of Britain Viewer indicates an 'Upper Tunbridge Wells Sand – Sandstone and siltstone, interbedded' bedrock geology.

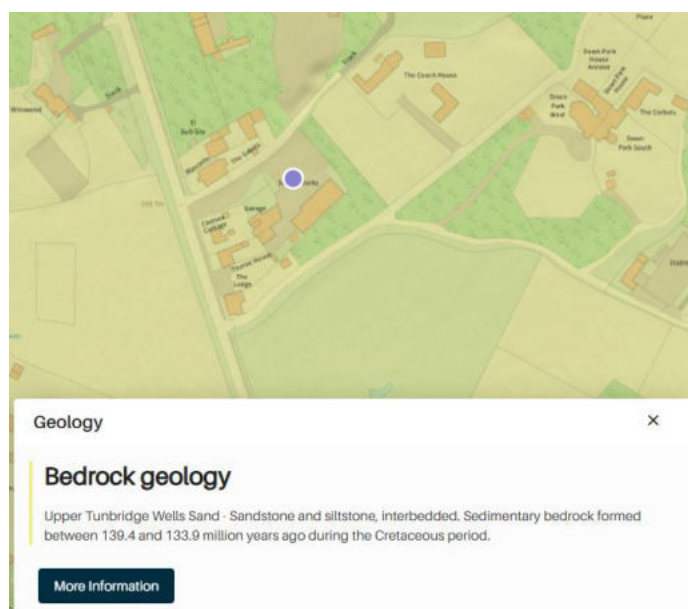


Figure 1. BGS Geology of Britain Viewer – Bedrock Geology

- 3.1.7 No superficial deposits are recorded at the site.

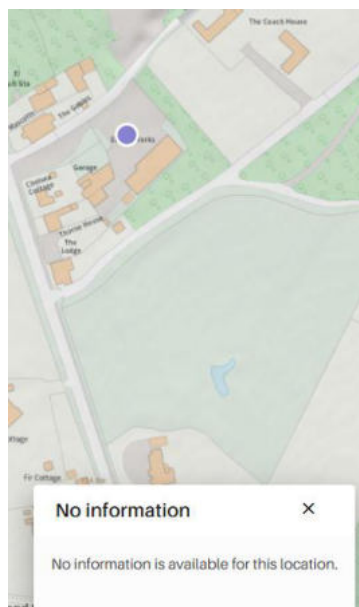


Figure 2. BGS Geology of Britain Viewer – Superficial Deposits

3.2 Groundwater

- 3.2.1 Albury S.I. Ltd has confirmed that groundwater was struck at depths of 1.55m, 2.70m and 1.55m below ground level at borehole locations 3, 6 and 7. Standing water levels were also observed at these depths upon completion of the boreholes. The remaining borehole locations remained dry during excavation and upon completion.
- 3.2.2 2 No. visits were conducted by Albury S.I. Ltd to collect groundwater readings. These readings were collected on 16th April 2024 and 3rd May 2024. The results are confirmed below:

Date	Borehole Location	Water Level (m bgl)
16/04/2024	3	0.56
	5	1.14
	6	0.71
03/05/2024	3	0.49
	5	0.64
	6	0.56

- 3.2.3 Mapping managed by MAGIC (magic.defra.gov.uk) provides geographic information concerning the

natural environment from across government. This mapping tool has been referred to in order to confirm aquifer designations, as well as whether the site is located within any groundwater source protection zones, groundwater vulnerability zones, drinking water protected areas or drinking water safeguard zones.

3.2.4 The site falls within a 'Secondary A' bedrock aquifer and an 'Unproductive' superficial drift aquifer.

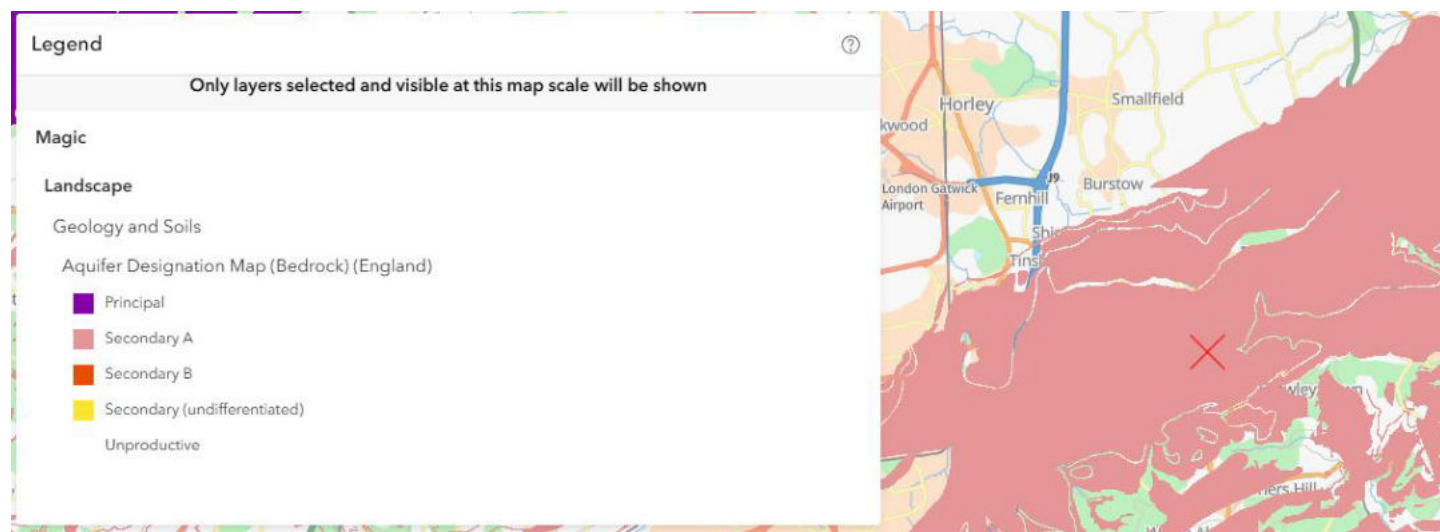


Figure 3. Bedrock Aquifer Designation Map (DEFRA)

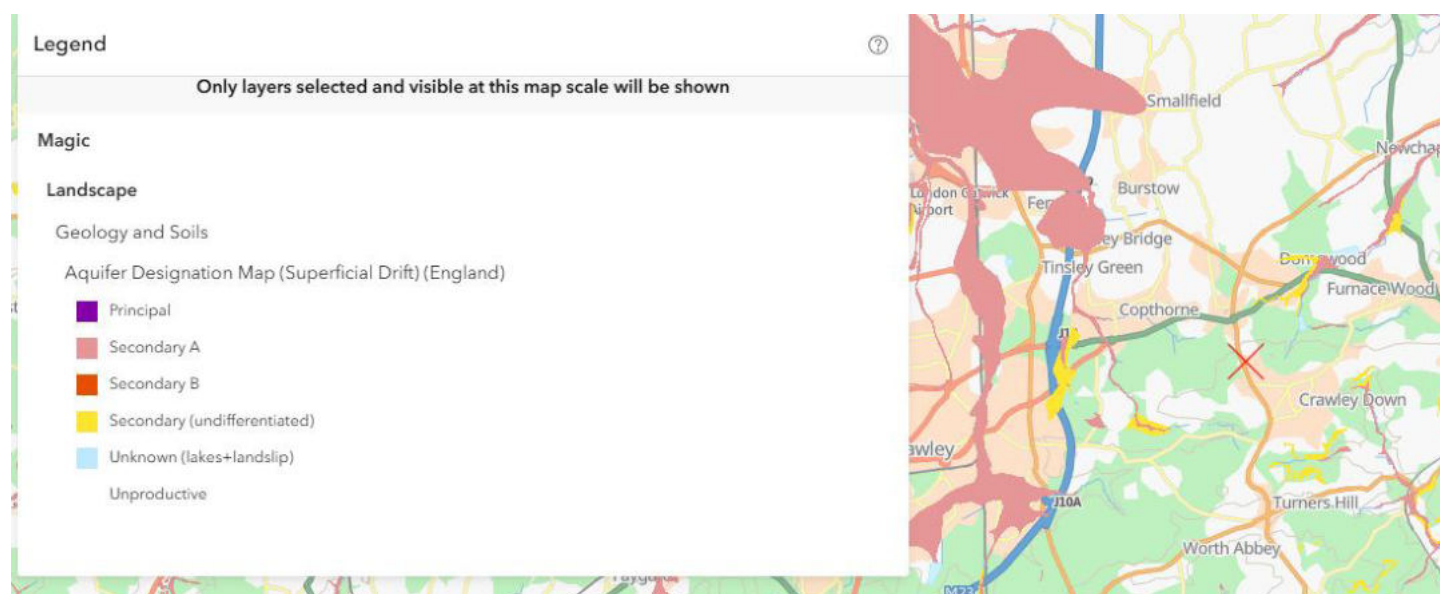


Figure 4. Superficial Drift Designation Map (DEFRA)

3.2.5 The Groundwater Vulnerability Map confirms that the site falls within a 'High' groundwater vulnerability zone.

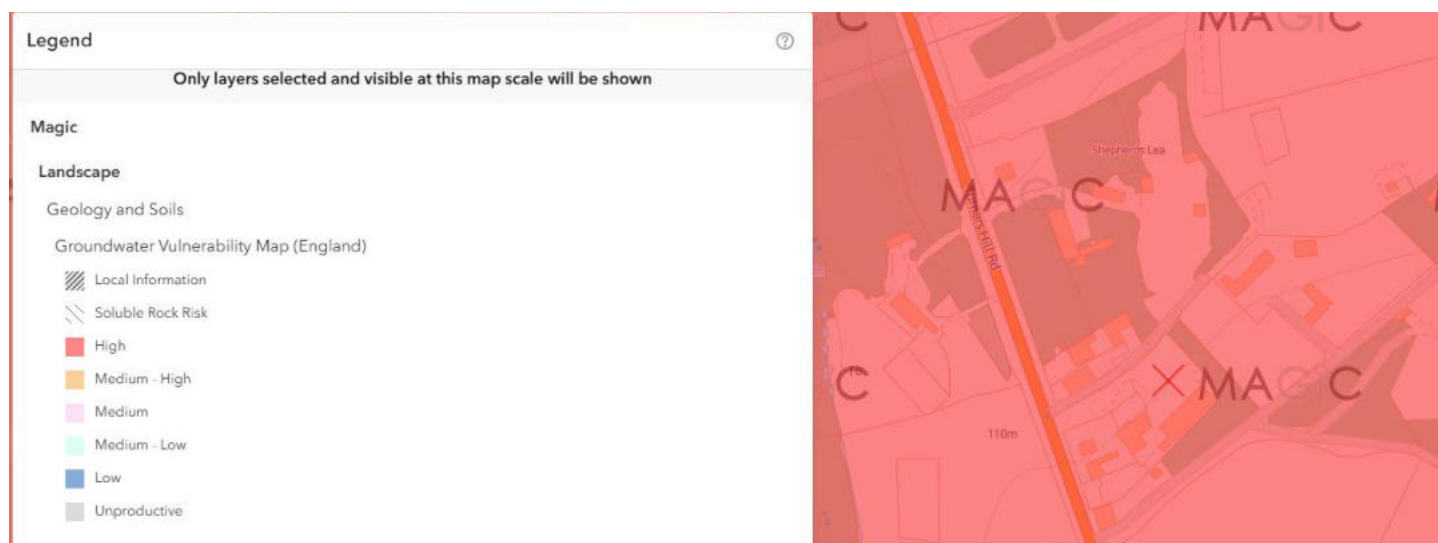


Figure 5. Groundwater Vulnerability Map (DEFRA)

3.2.6 The site falls outside of any Drinking Water Protected Areas for Surface Water, Drinking Water Safeguard Zones for Groundwater as well as all Groundwater Source Protection Zones, but is located within a Drinking Water Safeguard Zone for Surface Water.

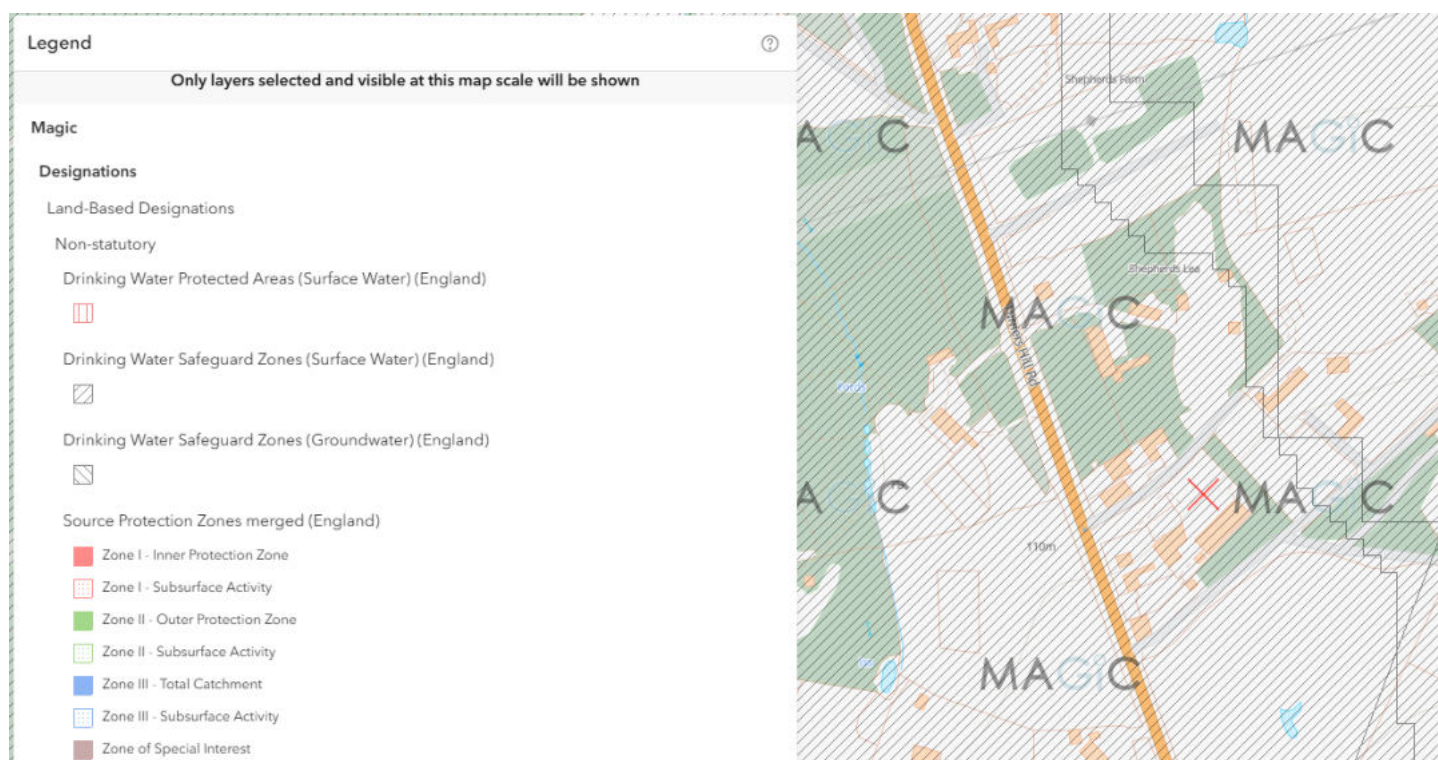


Figure 6. Drinking Water Protected Areas (Surface Water), Drinking Water Safeguard Zones (Surface Water and Groundwater) and Source Protection Zones Map (DEFRA)

4 EXISTING DRAINAGE

4.1 Surface Water

- 4.1.1 A CCTV survey has been undertaken at the site by Happy Drains. The survey works were undertaken on 20th February 2025 with additional survey works undertaken on 18th March 2025.
- 4.1.2 Drawing **SK001 'Existing Drainage'** has been prepared to demonstrate the findings of the survey works undertaken.
- 4.1.3 The existing buildings on site currently drain to a below ground surface water drainage system which discharges to soakaways on site.
- 4.1.4 Run-off from the areas of impermeable block paving is collected by 2 No. channel drains, discharging to the below ground surface water drainage system as referenced in 4.1.3.
- 4.1.5 It has been confirmed that the soakaways on-site have piped connectivity to Southern Water's public foul water sewer located beneath Turners Hill Road. It is assumed that this piped connectivity provides a high-level overflow to the public foul water sewer when the soakaways are inundated and unable to operate, impacted by high (shallow) groundwater levels. It is likely that groundwater is also being conveyed to the public foul water sewer as a result of this connectivity.
- 4.1.6 The areas of 'rough asphalt' identified on the topographic survey (scalpings, or similar) are understood to drain naturally where possible, with any exceedance following the topography of the site.
- 4.1.7 The existing asphalt access drive is not served by formal drainage infrastructure on-site. A slot drain is located at the site entrance (at the back edge of footway) although this ineffective owing to evident silt accumulation. Run-off therefore falls to Turners Hill Road, draining to the public highway drainage system.
- 4.1.8 Greenfield run-off rates have been calculated based on the site area of 2,780m² (0.28Ha) as follows:
- QBAR: 1.6 l/s
 - 1 in 1-Year: 1.4 l/s
 - 1 in 10-Year: 2.6 l/s
 - 1 in 30-Year: 3.7 l/s
 - 1 in 100-Year: 5.1 l/s
 - 1 in 200-Year: 6 l/s
- 4.1.9 A 1D hydraulic model has been prepared to calculate existing rates of run-off generated by the site.
- 4.1.10 Brownfield run-off rates have been calculated based on the existing catchment (c. 1,022m²) draining to the public foul water sewer beneath Turners Hill Road as follows:
- 1 in 2-Year: 7.5 l/s
 - 1 in 10-Year: 8.3 l/s
 - 1 in 30-Year: 8.3 l/s

- 1 in 100-Year: 8.4 l/s

- 4.1.11 There are no ordinary watercourses and/or Main Rivers located within the immediate vicinity of the site.
- 4.1.12 There are no other known water bodies within the vicinity of the site.
- 4.1.13 The local sewerage authority is Southern Water. Public sewer records have been obtained from Southern Water (**Appendix D**), which confirm that there are no public surface water sewers within the immediate vicinity of the site.
- 4.1.14 Southern Water has been unable to confirm the location of the nearest public surface water sewer.

4.2 Foul Water

- 4.2.1 Southern Water's public sewer records identify a 225mm dia. public foul water sewer beneath Turners Hill Road. This is identified as flowing in a south-easterly direction.
- 4.2.2 The site benefits from an existing connection to the public foul water sewer beneath Turners Hill Road.

4.3 Highway Drainage

- 4.3.1 Turners Hill Road is served by traditional road gullies, which discharge to a highway drainage system located beneath the footway on the eastern side of the road.
- 4.3.2 It is not known where the highway drainage system discharges to.

5 FLOOD RISK

5.1 Flood Maps and Modelling

5.1.1 Flood Maps for Planning identifies the site falling fully within Flood Zone 1.

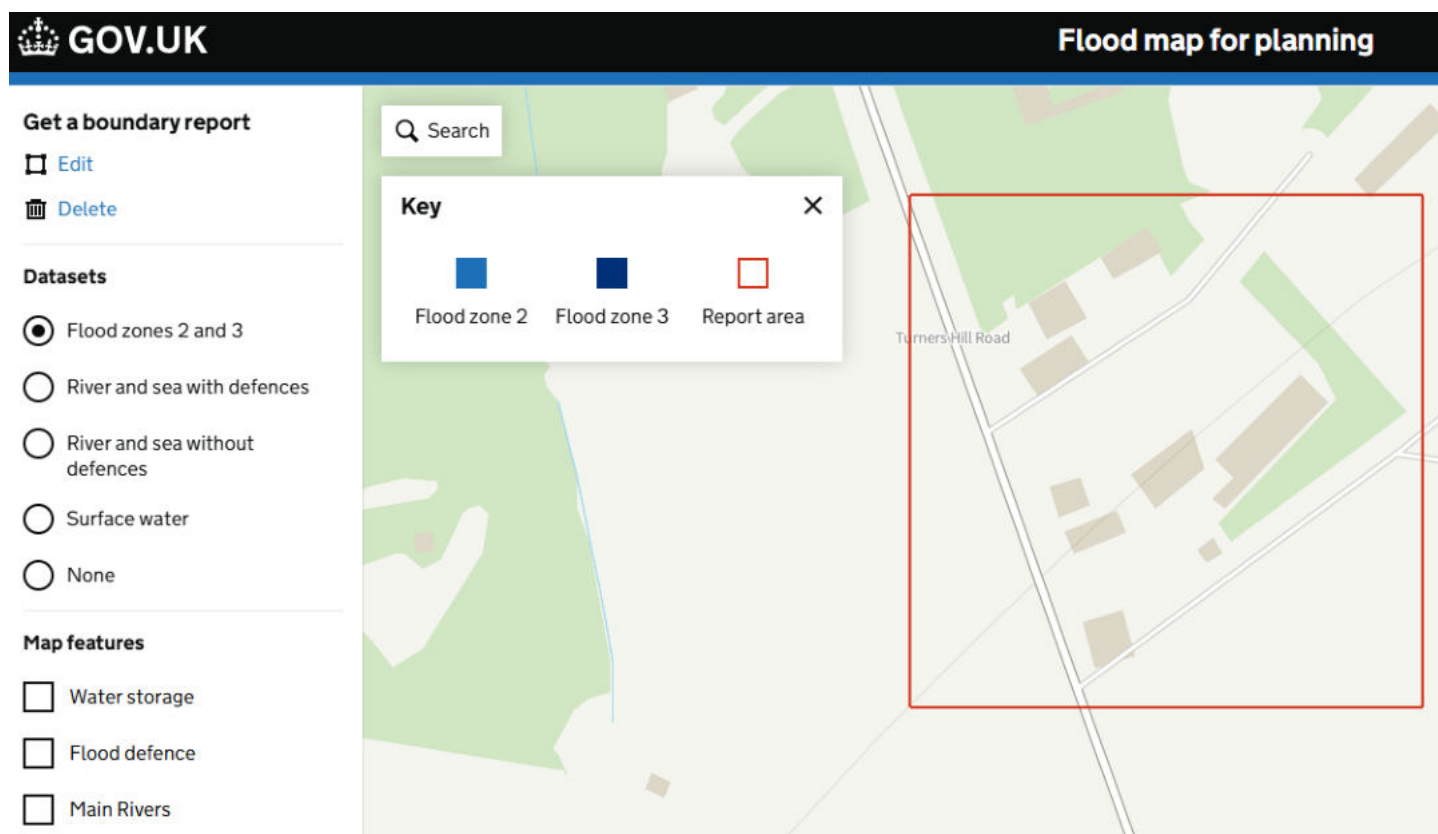


Figure 7. Flood Maps for Planning (Gov.uk)

Flood Zone	Definition
Zone 1 Low Probability	Land having a less than 0.1% annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map for Planning – all land outside Zones 2, 3a and 3b).
Zone 2 Medium Probability	Land having between a 1% and 0.1% annual probability of river flooding; or land having between a 0.5% and 0.1% annual probability of sea flooding. (Land shown in light blue on the Flood Map).
Zone 3a High Probability	Land having a 1% or greater annual probability of river flooding; or land having a 0.5% or greater annual probability of sea. (Land shown in dark blue on the Flood Map).
Zone 3b The Functional Floodplain	This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise:

	- Land having a 3.3% or greater annual probability of flooding, with any existing flood management infrastructure operating effectively; or - Land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability flooding). Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. (Not separately distinguished from Zone 3a on the Flood Map).
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- 5.1.2 Flood Maps for Planning, Rivers and the Sea, do not identify the site as being at risk of flooding from such sources in either the present day, or in view of climate change (with and/or without defences).
- 5.1.3 Flood Maps for Planning, Surface Water, largely do not identify the site as being at risk of surface water flooding. Minimal extents beyond the north-eastern boundary are identified as being at risk (1 in 30 and 1 in 100), with areas at or near the site entrance identified as being at risk (1 in 1000).
- 5.1.4 Flood Maps for Planning extracts are contained within **Appendix E**.
- 5.1.5 The Long-Term Flood Risk Service indicates that groundwater and/or reservoir flooding is 'unlikely' at the site.

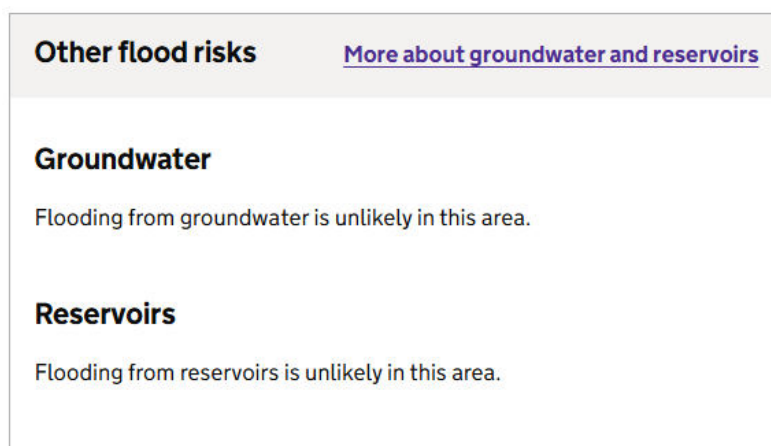


Figure 8. Long-Term Flood Risk Service – Groundwater and Reservoirs (Gov.uk)

5.2 Summary of Flood Risk

5.2.1 The potential sources of flooding are:

Source of Flooding	Level of Risk
Rivers and Coastal	Very Low The site is not identified as being at risk of flooding from such sources.
Surface Water	Very Low to Low Flood Maps for Planning, Surface Water, identify the site, largely, as not being at risk of surface water flooding. Extents beyond the north-eastern boundary of the site are identified as being at risk (1 in 30 and 1 in 100) as well as at or near the site entrance (1 in 1000).
Groundwater	Low to Medium Groundwater has been encountered at shallow depths on site in relation to investigation undertaken by Albury S.I. Ltd. The Long-term Flood Risk Service (Gov.uk) indicates that groundwater flooding is 'unlikely' at the site. No historic instances of groundwater flooding have been identified at the site.
Sewers	Very Low There are no public surface water sewers within the vicinity of the site, whilst the nearest public foul water sewer is located beneath Turners Hill Road. The site is served by an existing connection to the public foul water sewer. Given the location of the known sewer and the local topography, sewer flooding is not anticipated. No information has been identified which suggests historic sewer flooding at the site.
Artificial Sources	None The site is not identified as being at risk of flooding from artificial sources.

6 PROPOSED DEVELOPMENT

6.1 Description of Development

- 6.1.1 The proposed development will the demolition of the existing buildings on site and the construction of 5 No. dwellings. The architectural development proposals are contained within **Appendix A**.
- 6.1.2 The type of development proposed falls within the "More Vulnerable" flood risk vulnerability classification (Annex 3: Flood risk vulnerability classification, NPPF) and is appropriate in Flood Zone 1 (Flood Risk and Coastal Change Table 2).

Flood Zones	Flood Risk Vulnerability Classification				
	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
Flood Zone 1	✓	✓	✓	✓	✓
Flood Zone 2	✓	Exception Test Required	✓	✓	✓
Flood Zone 3a†	Exception Test Required †	✗	Exception Test Required	✓	✓
Flood Zone 3b*	Exceptions Test Required *	✗	✗	✗	✓*
✓ = Development is appropriate ✗ = Development should not be permitted					

- 6.1.3 The pre-development impermeable area totals 1,459m² (0.15Ha).
- 6.1.4 The post-development impermeable area totals 1,313m² (0.13Ha).
- 6.1.5 The reduction in impermeable area, post development, amounts to 146m² (10%).
- 6.1.6 The use of SuDS methods and techniques, where site conditions and constraints allow, will be utilised to assist in the management of surface water run-off generated by the proposed development, whilst adhering to the SuDS hierarchy as stated within Building Regulations (Part H) and The SuDS Manual (C753).
- 6.1.7 The specific drainage proposal is detailed in **Section 7** of this report.

7 PROPOSED DRAINAGE STRATEGY

7.1 Surface Water

7.1.1 The SUDS Manual and Building Regulations, Approved Document H, set out a hierarchy of drainage methods to ensure that developments maximise the use of sustainable drainage techniques. The hierarchy favours infiltration methods of disposal over other methods such as watercourse and sewers, as detailed below;

- i. Utilise infiltration techniques
- ii. Attenuate rainwater in ponds or open water features for gradual release
- iii. Attenuate rainwater by storing in tanks or sealed water features for gradual release
- iv. Discharge rainwater direct to a watercourse
- v. Discharge rainwater to a surface water sewer/drain
- vi. Discharge rainwater to a combined sewer

SUDS Technique	Suitable	Comments
Living Roof	No	Not suitable in view of architectural proposals.
Basins and Ponds (such as Wetlands, Balancing Ponds, Detention Basins, Retention Ponds)	No	Not viable in view of spatial constraints at the site and the proposed site layout.
Filter strips and swales	No	Not viable in view of spatial constraints at the site.
Infiltration Devices - Soakaways - Infiltration trenches and basins	No	Groundwater has been encountered at shallow depths (as shallow as 0.49m below ground level), therefore infiltration methods and techniques cannot be implemented.
Permeable surfaces and filter drains (such as gravelled areas and porous block paving)	Yes	Features such as permeable paving will need to be tanked to avoid groundwater ingress.
Tanked systems (such as oversized pipes or cellular tanks)	Yes	Groundwater to be considered in terms of flotation.

7.1.2 Site investigation undertaken by Albury S.I. Ltd in April and May 2024 has identified groundwater at shallow depths at the site.

- 7.1.3 West Sussex County Council policies require 1m+ freeboard in relation to peak groundwater levels and the base of infiltration features. In view of the depths at which groundwater has been encountered on site, it is not possible to utilise infiltration and accommodate soakaways on site to serve the proposed development. The presence of made-ground is also restrictive in relation to such features.
- 7.1.4 There are no ordinary watercourses and/or Main Rivers within the vicinity of the site to which post-development run-off could discharge to.
- 7.1.5 Southern Water's public sewer records do not identify any public surface water sewers within the vicinity of the site. Southern Water has confirmed in correspondence that *'it appears there is no surface water sewer in the area.'*
- 7.1.6 West Sussex County Council will not permit private surface water flows to discharge to public highway drainage systems. As such, it is not possible to discharge surface water to the highway drain serving Turners Hill Road.
- 7.1.7 The site currently drains surface water to Southern Water's public foul water sewer, beneath Turners Hill Road. As the site currently drains to this asset, it is proposed that the site will continue to do so, albeit with attenuation. As existing, the site drains freely, without attenuation, to the public foul water sewer.
- 7.1.8 It is proposed that all private driveways and the turning head area will be of a permeable construction. This will be tanked.
- 7.1.9 The access drive will be of an impermeable construction, draining via road gullies to a new surface water sewer constructed on site.
- 7.1.10 Flows to Southern Water's public foul water sewer will be restricted to 1.00 l/s.
- 7.1.11 The surface water drainage calculations have considered a 1-in-100-year storm event, inclusive of an allowance of 45% for the potential impact(s) of climate change.

7.2 Treatment

- 7.2.1 In accordance with the CIRIA SuDS Manual C753 regarding methods for managing pollution risks, the risk posed by surface water run-off to the receiving environment depends on the pollution hazard at the site (the source), SuDS treatment techniques (the pathway), and the sensitivity of the environment (the receptor).
- 7.2.2 The simple index approach considers whether SuDS techniques are appropriate for the site. The states that for SuDS components to deliver adequate treatment, the total pollution mitigation index for each contaminant type should equal or exceed the pollution hazard index.
- 7.2.3 The SuDS Manual outlines three categories of pollution hazard identification, which vary depending on proposed land use, which are as follows:
- Total Suspended Solids (TSS).
 - Metals (M).
 - Hydrocarbons (H).
- 7.2.4 In accordance with C753 Table 26.2, the proposed land uses at the site are categorised as follows:

- Residential Roofs– Very low/TSS=0.2/M=0.2/H=0.05
- Individual property driveways, residential car parks, low traffic roads – Low/TSS=0.5/M=0.4/H=0.4

7.2.5 In accordance with C753 Table 26.3, the values of SuDS Mitigation indices are provided for permeable paving:

- Permeable Pavement – TSS=0.7/M=0.6/H=0.7

7.2.6 The use of permeable paving will ensure that run-off from the site receives a level of treatment required by the SuDS Manual, with hydrocarbons being filtered by the aggregate and geotextile layers.

7.2.7 As the pollution hazard index does not exceed any pollution mitigation index for any contaminant type, the proposed SuDS methods will provide sufficient treatment for the proposed development.

7.3 Climate Change

7.3.1 Gov.uk provides guidance for local planning authorities preparing strategic flood risk assessments and developers and their agents preparing flood risk assessments for planning applications, and development consent orders for nationally significant infrastructure projects.

7.3.2 Climate change allowances are predictions of anticipated change for peak river flow, peak rainfall intensity, sea level rise and offshore wind speed and extreme wave height.

7.3.3 Allowance for climate change shall be provided in the undertaking of site-specific flood risk assessments where new development is proposed to minimise vulnerability and provide resilience to flooding and coastal change.

7.3.4 The 'Peak Rainfall Allowances Map' shows anticipated changes in peak rainfall intensity.

7.3.5 Based on the latest allowances, for the 3.3% annual exceedance rainfall event, an increase of 35% should be applied to peak rainfall in relation to the proposed development.

7.3.6 For the 1% annual exceedance rainfall event, an increase of 40% should be applied to peak rainfall in relation to the proposed development.

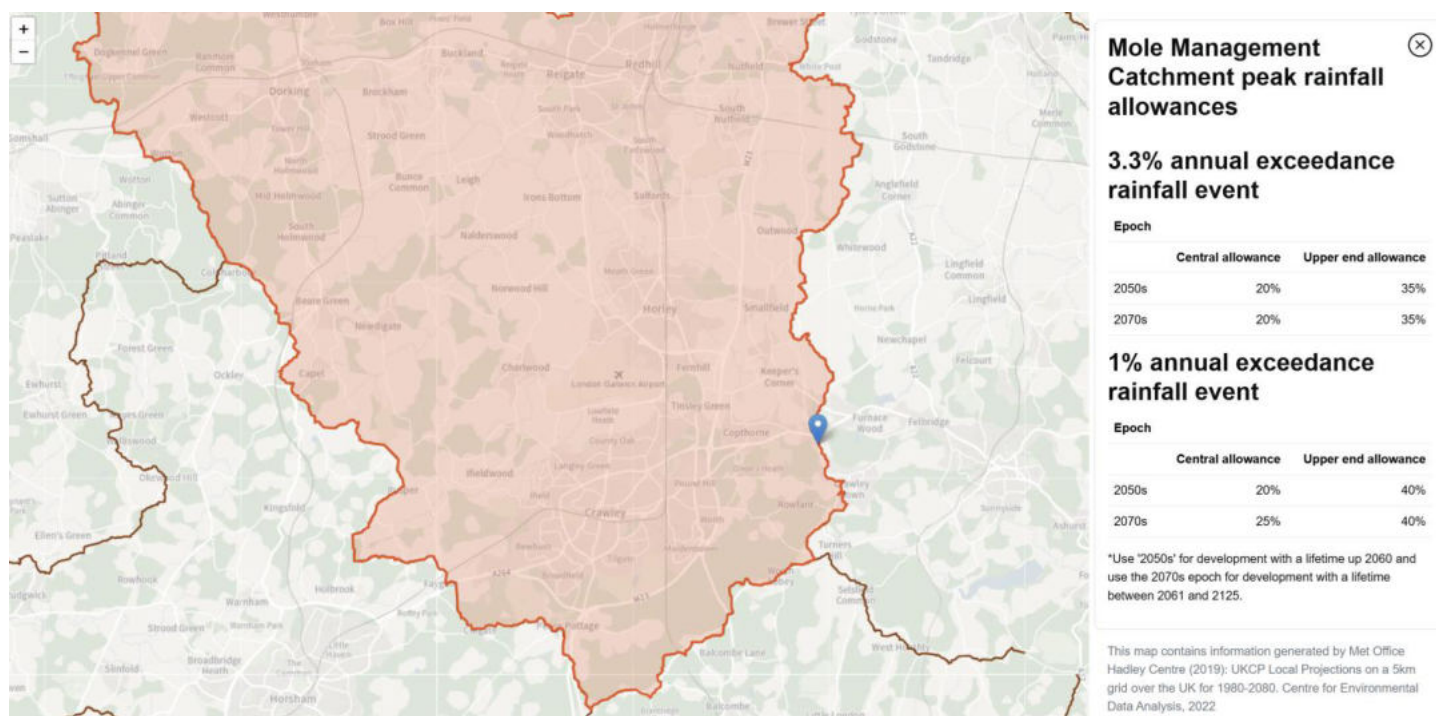


Figure 9. Climate Change Allowances – Peak Rainfall Allowances (Gov.uk)

7.4 Urban Creep

- 7.4.1 An allowance of 10% has been made within the surface water drainage calculations prepared for the potential impacts of urban creep. This has been attributed to the proposed roof areas of the 5 No. plots.

7.5 Foul Water Drainage

- 7.5.1 It is proposed that the 5 No. dwellings will drain to Southern Water's public foul water sewer. A new connection is to be established.
- 7.5.2 Post development, peak foul water flows are estimated to amount to 0.23 l/s (based on Sewer Sector Guidance, Appendix C, Design and Construction Guidance).
- 7.5.3 Connection to the public foul water sewer will be subject to a S106 application, and approval from Southern Water.
- 7.5.4 Recent changes to infrastructure and connection charges (OFWAT Charging Rules) place the onus on the sewerage undertaker to reinforce their network should there no longer be sufficient capacity to serve the new development. Funding for this is provided by revised charging arrangements for infrastructure and connection charges for each dwelling constructed comprising a Network Reinforcement Charge and Site-Specific Charges. The revised charging arrangement (funded by the developer) covers alterations to the Existing Sewer Network and the sewerage undertaker remains responsible for the cost of reinforcing their Strategic Assets. The developer is responsible for connecting the development to the public sewer network.

8 MAINTENANCE

8.1 Proposed Maintenance Regime

8.1.1 Maintenance is required to ensure the long-term operational performance of the proposed surface water drainage system.

8.1.2 The drainage system has been designed to minimise maintenance requirements; however a number of key tasks will need to be undertaken so that the system remains in optimal condition. These operations are summarised in the table below, along with the required frequency of works.

Drainage System feature	Proposed maintenance / remedial works	Required frequency of works
Permeable Paving	Surface raking/sweeping to reduce/remove silt and debris accumulation.	Every 8 to 12 weeks
	Removal / management of weed growth	At least once a year
Diffuser units & catch pits, gully sumps and drains	Inspection and additional cleansing as required.	Annual
	Desilting	Year 1, Year 3, then every 5 years
Pipework	Jetting to clear blockages	As required

8.1.3 Infrastructure which is 'shared' (i.e. serving more than a single plot and/or falling outside of any individual plot's curtilage) will be the responsibility of an appointed Management Company.

8.1.4 The responsibility of any drainage infrastructure supporting a single dwelling will be the sole responsibility of the owner/occupier of the associated dwelling.

Accidental Spillages

8.1.5 It is not envisaged that any materials are to be stored onsite once the development has been completed, which could cause major spills and potential pollution issues within the drainage system. If this situation alters in the future consultation with a specialist will be required in order to confirm if any upgrades to the existing system are necessary.

8.1.6 Minor spillages of fuels and oils will be dealt with by the permeable paving and deep trapped gullies, by bio-degrading and collecting the hydrocarbons respectively.

Future Alterations to the Development

8.1.7 Any future alterations at the site which may impact upon the proposed drainage systems should be assessed and confirmed by a specialist.

8.1.8 Where possible any future services are to avoid being located through areas of permeable paving.

8.1.9 If new services are required to run through areas of permeable paving, services should be installed below the depth of permeable paving with the permeable system reinstalled above.

9 OFFSITE IMPACTS

- 9.1.1 The proposed surface water drainage system will improve the off-site situation by reducing the areas of impermeable surfacing draining to the public foul water sewer, with attenuation also proposed, with flows restricted to 1.00 l/s. The existing soakaways and high-level overflow allow groundwater to drain to the public foul water sewer. The proposed drainage arrangement will remove groundwater from the existing foul water sewer network.

Foul water from the proposed development will drain to Southern Water's public foul water sewer, via a new connection to be established on Turners Hill Road.

10 SUMMARY

- 10.1.1 The proposed development concerns the demolition of all existing buildings on site and construction of 5 No. dwellings and associated parking.
- 10.1.2 The site measures 2,780m² (0.28Ha) and is currently occupied by 4 No. existing buildings with an existing impermeable area totalling 1,459m².
- 10.1.3 The site topographic survey identifies levels in the range of 109.80m AOD and 112.100m AOD.
- 10.1.4 Groundwater has been identified on site at depths as shallow as 0.49m below ground level.
- 10.1.5 The site currently drains to soakaways with a high-level overflow to Southern Water's public foul water sewer beneath Turners Hill Road.
- 10.1.6 The site is located in Flood Zone 1 and has been assessed as being at 'Very Low' or 'Low' risk of flooding from all of the potential sources of flood risk considered, with the exception of groundwater ('Low' to 'Medium').
- 10.1.7 Post development, the site will continue to drain to Southern Water's public foul water sewer, beneath Turners Hill Road. All other opportunities in terms of surface water drainage have been exhausted.
- 10.1.8 Flows will be restricted to 1.00 l/s with attenuation provided within permeable paving.
- 10.1.9 Post development, peak foul water flows are estimated to be to 0.23 l/s (based on Sewer Sector Guidance, Appendix C, Design and Construction Guidance).
- 10.1.10 Foul water will drain to the public foul water sewer beneath Turners Hill Road. A new connection will be established.
- 10.1.11 There will be no negative impacts off-site as a result of the re-development of the site, with betterment provided in respect of surface water drainage.