

Technical Note 39: Phase 3 Units 17 & 18 Drainage Strategy

Site: Billingshurst – Phase 3 Units 17 & 18
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Date: 02/04/2026

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1.0 Introduction

- 1.1 This Drainage Strategy Technical Note has been prepared by Motion on behalf of Dunmoore Group Ltd to support a planning application for an extension to the consented mixed used development in Billingshurst, West Sussex. This development will make up Phase 3 of the development site and is located to the south of the existing Phase 1 and 2 developments. The application consists of two Class E (industrial processes) units, shown as units 17 and 18. The site plan can be found in full in **Appendix A**.
- 1.2 A Drainage Strategy and SuDS Assessment for the Phase 1 and 2 development was undertaken by Motion in January 2019, as part of the original consented hybrid application. As this technical note is associated with a new outline planning application, it is intended to be treated as a standalone report, however where necessary it takes into account the various applications and variations to the original consented hybrid application.
- 1.3 The site is located approximately to the north of Billingshurst Village centre within the administrative boundaries of Horsham District Council (HDC) and West Sussex County Council (WSCC). The site is currently undeveloped agricultural land.
- 1.4 This Drainage Statement builds on the previously approved drainage strategy for Phases 1 and 2 and will define how the site will manage surface water so that the development does not increase flood risk in the area or to neighbouring properties.
- 1.5 This FRA and drainage strategy follows the guidance set out in:
- ▶ 2024 National Planning Policy Framework (NPPF)
 - ▶ Technical Guidance to the National Planning Policy Framework
 - ▶ CIRIA SuDS Manual 2015 (C753)
 - ▶ Environment Agency Rainfall Runoff Management for Developments.
- 1.6 This report does not provide information on how the drainage infrastructure will be protected during the construction phase of the project. The provision of this information is the responsibility of the appointed contractor.

2.0 Site Description

Table 2.1 – Site Summary

Site Name	Phase 3 Billingshurst – Units 17 & 18
Location	Phase 3 Billingshurst Trade Park, Stane Street, West Sussex, RH14 9HN.
Grid Reference	E 509253 N 126594.
Site Area	0.89 Hectares (ha)
Development Type	Class E (Industrial Processes)
Environment Agency (EA) Flood Zone	The site is located wholly within Flood Zone 1 (less than 1 in 1,000 annual probability of flooding from rivers or the sea).
Surface Water Flood Risk	The Jeremy Benn Associates (JBA) Comprehensive Flood Maps (CFM's) and the EA's Risk of Flooding from Surface Water (RoFSW) map show that the whole site is in an area of low risk of surface water flooding.
Ground Water Flood Risk	The Envirocheck report shows that the site has not got any geological and hydrogeological indicators for groundwater flooding to occur. According to the BGS Groundwater Flooding Susceptibility maps and the GeoSmart Information, the site is in an area of negligible risk.
Local Water Authority	Southern Water (SW).
Local Planning Authority	Horsham District Council (HDC).
Lead Local Flood Authority	West Sussex County Council (WSCC).

Site Location and Description

- 2.1 The site is located in the village of Billingshurst in the District of Horsham and County of West Sussex. The nearest post code is RH14 9HN and the site co-ordinates are 509253, 126594. The application site is approximately 0.89 hectare (ha). The site is made up of mostly agricultural land with some trees and can be described as Greenfield. Site location plan can be found in **Appendix B**.
- 2.2 The site is proposed to be for Class E (industrial processes). An extract of the illustrative masterplan is illustrated can be found in full in **Appendix A**.

Topography

- 2.3 A topographical survey of the existing site was undertaken by Hollis in November 2019 which is provided in **Appendix C** of this report. The site generally falls from northeast to southwest with ground levels ranging from approximately 56.05 metres Above Ordnance Datum (mAOD) to 51.94mAOD.

Geology

- 2.4 The British Geological Survey (BGS) online Geindex Mapping indicates that the site is underlain by Weald Clay Formation, which is made up of clay, silt and sand with no superficial deposits of Head. Borehole records from the surrounding area have been obtained from the BGS online index and these can be found in **Appendix D**. These Borehole records support the findings of the BGS mapping and confirm that the site is underlain by clay, silt and sand.
- 2.5 The Department for the Environment, Food and Rural Affairs (Defra's) Magic Map states that soils in the area are 'Slowly Permeable Seasonally Wet Slightly Acid But Base-Rich Loamy and Clayey Soils'.

- 2.6 Intrusive ground investigations were carried out at the site in December 2025, and several exploratory holes were excavated up to a maximum depth of 4m. The exploratory hole logs confirmed that the ground comprises Weald Clay Formation, with coarse soils and weathered sandstone encountered across the south-eastern half of the site, and fine/cohesive soils and mudstone across the north-west. A copy of the exploratory hole logs taken from Soiltechnics Ground Investigation report can be found in **Appendix E**.
- 2.7 The intrusive investigations also confirmed that the use of infiltration techniques at the site are unlikely to be feasible as groundwater prevented permeability testing from being carried out.

Hydrogeology

- 2.8 Defra's Magic Map indicates that the site is not located in a Groundwater Source Protection Zone (SPZ) or in an Aquifer designation. A flood screening report has been obtained from Envirocheck Landmark Information Group Ltd and this can be found in **Appendix F**. The report shows that the site has not got geological and hydrogeological indicators for groundwater flooding to occur. According to the BGS Groundwater Flooding Susceptibility maps and the GeoSmart Information, the site is in an area of negligible risk.

Existing Drainage Regime

- 2.9 The site is existing agricultural land site made up of open fields. Therefore, the existing site can be described as greenfield.
- 2.10 The nearest watercourse to the site is an unnamed ditch (a tributary of the River Arun) which flows in an easterly direction along the site's southern boundary. The nearest main river to the site is the River Adur which is located 1km east of the site.
- 2.11 Asset location plans were obtained from Southern Water (see **Appendix G**), and these indicate there are no surface water sewers which currently serve the site.

3.0 The New National Standards for SUDS

- 3.1 On 19 June 2025 the UK government published its new National Standards for Sustainable Drainage Systems (SuDS). The new standards are an evolution of industry standards and current best practice, many of which practitioners and design engineers have already been actively incorporating in their drainage strategies. Therefore, while the new National Standards do not fundamentally change current standards, they are a welcome step in clarifying points that had previously been uncertain and has enshrined them in a single piece of guidance.
- 3.2 The standards emphasise how sustainable drainage and flood risk should be considered in developments, and the importance of site appraisal and early, integrated design with the site's natural features and proposed infrastructure. However, the Planning Balance and other technical factors/policy requirements must always be considered.
- 3.3 The new National Standards for SuDS outline that;
 - ▶ SuDS are mandatory for major developments and drainage strategies must conform with the new national criteria and LLFA guidance.
 - ▶ There is a stronger emphasis on the 'four pillars' of SuDS. Drainage strategies must demonstrate benefits for water quantity and quality as well as amenity, and biodiversity. This pushes designers to incorporate more surface level SuDS and rely less on below-ground attenuation.
 - ▶ There is also greater emphasis on using water recycling within developments, especially in water-stressed areas.
 - ▶ There is more clarity on long-term adoption & maintenance of SuDS system and LPA's will expect clearer maintenance and management strategies for drainage systems and require stronger evidence of deliverability.
- 3.4 As stated before, this is a minor evolution of the current approach to drainage design, but there are subtle differences in the design factors, which could lead to an increase in size of attenuation features. In addition to the above overarching principles of the New National Standards for SuDS, the below specific points should be borne in mind by designers and included in any drainage strategies:
 - ▶ Standard 2 provides explicit guidance on the management of everyday rainfall. The first 5mm of rainfall (the 'first flush') must be managed by interception and should not leave the site. Instead, it should either collected for reuse, infiltrated into the ground, or else captured, conveyed, and stored within SuDS features (but there are specific criteria that make this last point acceptable).
 - ▶ The latest standards now formalise that the minimum permissible infiltration rate for discharging surface water via a 'System A' (Total Infiltration) solution. The minimum infiltration coefficient that can support an infiltration-based drainage solution is 1.0×10^{-6} m/sec. Additionally, the standards now add that the half drain in the 3.3% AEP event should be less than 24 hours.
 - ▶ A 'relaxation factor' should instead be applied to the target greenfield runoff rates on brownfield site. It defines that the maximum relaxation factor for runoff rates should be no greater than five times the greenfield rates. This allows for easier implementation on heavily developed urban sites, especially where LLFA's previously demanded greenfield runoff rates.
 - ▶ The new National Standards confirm a previous 'grey area' by stating that SuDS features should be included in the contributing catchment area. It also notes that there is no requirement to provide attenuation for external overland flows entering the site, but these flows should be considered for capacity of the pipe network.
 - ▶ Standard 3 of the new National Standards for SuDS clarifies the expectations with regards to urban creep. It says "*within developments an urban creep uplift factor shall be applied by adding a percentage increase to the calculated area of the impermeable area within the property curtilages. This shall be 10% for all*

developments unless there are no external private permeable spaces, for example, flats and apartments, when it shall be 0%."

- 3.5 There are also other specific technical calculations and approaches that need to be balanced in site design (such as the allowable ratio of contributing areas to permeable pavements when discharging via infiltration, as one such example) that also must be taken into account. These should be assessed and balanced on a site-by-site basis.

4.0 Proposed Surface Water Drainage Design

Proposed Surface Water Drainage Strategy

- 4.1 Current planning policy and EA guidance requires developments to employ SuDS (Sustainable Drainage Systems) techniques wherever feasible. Careful design of SuDS features can ensure that a development's surface water drainage closely reflects the natural hydrology of the pre-developed site.
- 4.2 SuDS will attenuate and treat surface water run-off quantities at the source (source control) in line with NPPF and EA policies.
- 4.3 Source control systems treat surface water close to the point of origin, in features such as soakaways, permeable paving and swales, to name a few.
- 4.4 The existing and proposed impermeable areas for the development site are summarised in Table 4.4 below. This demonstrates that the proposed development will increase the hardstanding area of the site. An impermeable area plan is detailed in **Appendix I**.

Table 4.4 – Existing and Proposed Surface Cover

Land Use	Impermeable Area		Gardens and Landscaping	
	Area (ha)	% Cover	Area (ha)	% Cover
Existing	0.00	0	0.89	100
Proposed	0.80	90	0.09	10

- 4.5 Including the EVM site and access road, the total impermeable area for all Phase 3 works is 2.16 (ha), which eventually drains to the existing site drainage network, constructed as part of the Phase 1 development.

Greenfield Runoff Rate

- 4.6 The greenfield runoff rates have been calculated for the proposed impermeable area using HR Wallingford's UKSuDS online calculator and a summary of these are presented in Table 4.6, and can be seen in full in **Appendix J**.

Table 4.6 – Greenfield Runoff Rate

Return Period	1 in 1	1 in 30	1 in 100	QBar
Discharge Rate (l/s/ha)	7.1	19.2	26.7	8.4
Units 17 & 18 Discharge Rate (l/s)	6.3	17.1	23.8	7.5

- 4.7 A total discharge rate for QBar of 7.5 l/s will be applied to the drainage strategy for all return periods up to and including the 1 in 100-year storm event with an allowance for climate change.

The Drainage Hierarchy

- 4.8 The drainage hierarchy is a sequential check that intends to ensure that all practical and reasonable measures are taken to manage surface water as high up the hierarchy (with '1' being the highest) as possible, and that the amount of surface water managed at the bottom of the hierarchy is minimised. The PPG to the NPPF states that "Generally, the aim should be to discharge surface run off as high up the following hierarchy of drainage options as reasonably practicable".

- 4.9 The drainage hierarchy presented in the NPPF presents only four tiers of drainage options. This has been expanded on and adopted by others and now can be viewed as the following:
1. Store rainwater for later use.
 2. Use infiltration techniques, such as porous surfaces in non-clay areas.
 3. Attenuate rainwater in ponds or open water features for gradual release.
 4. Attenuate rainwater by storing in tanks or sealed water features for gradual release.
 5. Discharge rainwater direct to a watercourse.
 6. Discharge rainwater to a surface water sewer/drain.
 7. Discharge rainwater to the combined sewer.
 8. Discharge rainwater to the foul sewer.
- 4.10 The first two tiers of the drainage hierarchy ensure that surface water is retained within the site boundary and does not increase flood risk to others. This is always the most preferable method of surface water management.
- 4.11 The next six tiers of the hierarchy provide regional control, but with decreasing levels of pollution removal and reduced potential for amenity and habitat creation with each tier of the drainage hierarchy.
- 4.12 Within the lower six tiers of the drainage hierarchy, there must be some form of flow restriction, so that off-site surface water discharge resembles greenfield runoff rates, as much as is reasonably practicable. This requires on-site storage facilities, which may include ponds, swales, subsurface storage tanks and System C (non-infiltration) permeable pavements with flow control devices. Again, methods that provide the most potential for amenity and pollution removal should be favoured.
- 4.13 Each tier of the drainage hierarchy has been considered for the surface water drainage for the development. In order of preference, the outcome of these considerations is below.

Tier 1 - Store rainwater for later use

- 4.14 As detailed in the 2024 Water Neutrality Report undertaken by Motion, the development is proposed to have a rainwater harvesting system. The water captured by the rainwater harvesting system will be suitable for use in flushing toilets only and will not be treated for potable water use. It is therefore recommended that the tank size is greater than 9,000 litres for each unit to meet the required daily demand of each Unit.

Tier 2 - Use Infiltration techniques, such as porous surfaces in non-clay areas

- 4.15 As detailed in Chapter 2, intrusive ground investigations were carried out in December 2025 and failed permeability testing indicates that the use of infiltration techniques at the site would not be possible.

Tier 3 - Attenuate rainwater in ponds or open water features for gradual release

- 4.16 Due to the site layout and lack of available open space within the application boundary, it is proposed to provide a 24m long open swale along the northern boundary of the site, which will be utilised solely for conveyancing the surface water runoff to the outfall point and does not provide any attenuation. The swale would be constructed as follows:
- ▶ Swale invert / base level: 49.850 mAOD.
 - ▶ Swale depth: 0.9 m.
 - ▶ Side slopes: 1:3 gradient.
 - ▶ Longitudinal Gradient: 1:25.

- 4.17 This swale will discharge freely into the downstream chamber and outfall at the QBar greenfield runoff rate of 7.5 l/s, which is the discharge rate for the application site (Units 17 & 18 only) and connects to the previously consented drainage system for the Phase 3 access road. This would then discharge into the constructed Phase 1 network before eventually reaching the existing watercourse to the west of Stane Street. Details for this proposed access road drainage have been submitted under a separate planning application.

Tier 4 - Attenuate rainwater by storing in tanks or sealed water features for gradual release

- 4.18 In addition to the swale, it is proposed to attenuate surface water through the use of two attenuation tanks; one located in the parking court of Unit 18 in the eastern half of the application site, and one and located in the grass verge south of Unit 17 in the western half of the application site. The attenuation tank in front of Unit 18 will be 1m deep covering an overall area of 560m², providing a total storage volume of 532m³, whilst the attenuation tank in front of Unit 17 will be 1.5m deep covering an overall area of 120m², providing a total storage volume of 187.5m³.
- 4.19 In addition to the above, a permeable paving area will be used for the southernmost parking court area of Unit 17. The permeable paving will be 450mm deep with 30% voids and will provide up to 38m³ of attenuation.
- 4.20 A hydraulic model has been produced using InfoDrainage to represent the proposed drainage strategy, and the model results can be found in **Appendix K**. The model was run for a number of events and return periods. They are as follows:
- ▶ 1 in 1-year rainfall for 15, 30, 60, 120, 240, 360, 480, 960 and 1440-minute storm durations
 - ▶ 1 in 30-year (plus 40% increase for climate change) rainfall for 15, 30, 60, 120, 240, 360, 480, 960 and 1440-minute storm durations
 - ▶ 1 in 100-year (plus 45% increase for climate change) rainfall for 15, 30, 60, 120, 240, 360, 480, 960 and 1440-minute storm durations.
- 4.21 InfoDrainage software was used to determine the size of the required attenuation tank for storm events up to and including the 1 in 100-year storm (+ 45% increase for climate change).
- 4.22 It should be noted that in the model there is not currently an option to set the MADD factor in InfoDrainage.
- 4.23 A Cv value of 1 for summer and winter storms was used. In addition, FEH 2022 rainfall data was used.
- 4.24 The InfoDrainage Network model has shown that the proposed drainage strategy can discharge surface water with no flooding for the 1 in 100-year + 45% event. Therefore, the proposed drainage strategy can be considered as appropriate and suitable for the proposed development.
- 4.25 The surface water drainage strategy can be found in full in **Appendix H**.

Tier 5 - Discharge rainwater direct to a watercourse

- 4.26 As discussed above, it is proposed to discharge surface water through the existing surface water drainage network constructed as part of the Phase 1 development, which then outfalls into the ordinary watercourse to the west of Stane Street.

Tier 6 - Discharge rainwater to a surface water sewer/drain

- 4.27 This tier of the drainage hierarchy will not be needed for surface water discharge.

Tier 7 - Discharge rainwater to the combined sewer

- 4.28 This tier of the drainage hierarchy will not be needed for surface water discharge.

Tier 8 - Discharge rainwater to the foul sewer

- 4.29 This tier of the drainage hierarchy will not be needed for surface water discharge.

Exceedance Event

- 4.30 An Exceedance Routing Plan for surface water is found in **Appendix L**. This details where surface water would flow to on Site and where it would be stored in an extreme event.

Urban Creep

- 4.31 Urban Creep can be described as future urban expansion within a development such as extensions to buildings and paved gardens as the development matures. These activities increase the impermeable area of a site and often sit outside of the development control process. The development proposal for the site is for a commercial unit (Class E) and therefore it is understood that an Urban Creep sensitivity assessment is not appropriate for this site and future urban expansion is unlikely.

Surface Water Runoff Quality

- 4.32 The NPPF states that the development should not have a detrimental impact on the environment, including the water environment. The technical guidance to the NPPF provides further advice on the benefits of ensuring runoff quality is to an appropriate standard.
- 4.33 The CIRIA SuDS Manual provides guidance on the treatment of surface water runoff. With regards to the parking areas and access road on the site, Table 7.2 of the CIRIA SuDS Manual rates the pollution hazard from non-residential car parking as 'medium'. To mitigate a 'medium' pollution hazard, the CIRIA SuDS Manual recommends using a simple index approach in line with Section 26.7.1. This is discussed, below.
- 4.34 Table 26.2 of the CIRIA SuDS Manual provides pollution hazard indices for different land use classifications. The land use classification that requires consideration for the site is in Table 4.34.

Table 4.34 – Excerpt from Table 26.2 of CIRIA SuDS Manual

Land Use	Pollution Hazard Level	Total Suspended Solids (TSS)	Metals	Hydro-Carbons
Commercial yard and delivery areas, non-residential car parking with frequent change (eg hospitals, retail), all roads except low traffic roads and trunk roads/motorways.	Medium	0.7	0.6	0.7

- 4.35 To deliver adequate pollution treatment and mitigation, the CIRIA SuDS Manual recommends using a SuDS component that has a total pollution mitigation index (for each contaminant type) that equals or exceeds the pollution hazard index (for each contaminant type).
- 4.36 Table 26.3 of the CIRIA SuDS Manual provides indicative SuDS mitigation indices for each SuDS type. Table 4.36, below, which is an excerpt from Table 26.3, shows the mitigation index for permeable paving, detention basin, and a swale.

Table 4.36 – Excerpt from Table 26.3 of CIRIA SuDS Manual

Type of SuDS Component	Total Suspended Solids (TSS)	Metals	Hydro-Carbons
Permeable Paving	0.7	0.6	0.7
Detention Basin (Swale)	0.5	0.3	0.3

- 4.37 The mitigation indices for permeable pavements meets those of the highest pollution hazard index figures from Table 4.36. Therefore, surface water runoff that enters the drainage network via the permeable paving will have all pollutants sufficiently mitigated.

- 4.38 As the majority of the surface water drainage network does not travel through the permeable paving, and the swale provides insufficient pollution mitigation for the associated pollution hazard, it is proposed to include oil separators within the drainage network, located downstream of the main industrial service areas and upstream of the outfall to the Phase 1 drainage network.

New National Standards for SuDS

- 4.39 The following provides a summary of how the proposed surface water drainage strategy and SuDS meet the requirements of the new National Standards for SuDS.

Standard 1 – Runoff Destinations

- 4.40 The proposed development will incorporate rainwater harvesting systems which meets priority 1 of standard 1.

Standard 2 – Management of Everyday Rainfall (Interception)

- 4.41 The proposed surface water drainage strategy will provide interception by utilising the following SuDS features:

- ▶ Rainwater Harvesting; and
- ▶ Permeable Paving.

Therefore, the site meets the requirements of Standard 2.

Standard 3 – Management of Extreme Rainfall and Flooding

- 4.42 The proposed drainage system will control runoff from the site to QBar, which is equivalent to the 1 in 2-year event (50%AEP), and therefore the surface water drainage strategy is compliant with Standard 3.

Standard 4 – Water Quality

- 4.43 The proposed SuDS will ensure that any surface water discharging to the watercourse will meet the necessary water quality standards, see paragraphs 4.34 to 4.37. Therefore, the proposals meet the requirements of Standard 4.

Standard 5 – Amenity

- 4.44 The surface drainage system works with the wider landscape proposals for the site to provide opportunities for amenity. Therefore, the proposals meet standard 5.

Standard 6 – Biodiversity

- 4.45 The SuDS maximise the biodiversity benefits of the site by utilising open SuDS where possible. Therefore, the proposal meets the requirements of Standard 6.

Standard 7 – Design of Drainage for Construction, Operation, Maintenance, Decommissioning and Structural Integrity

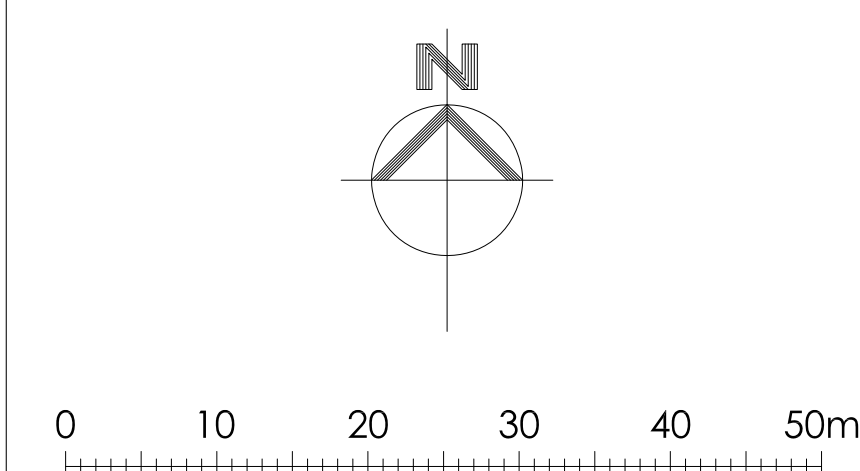
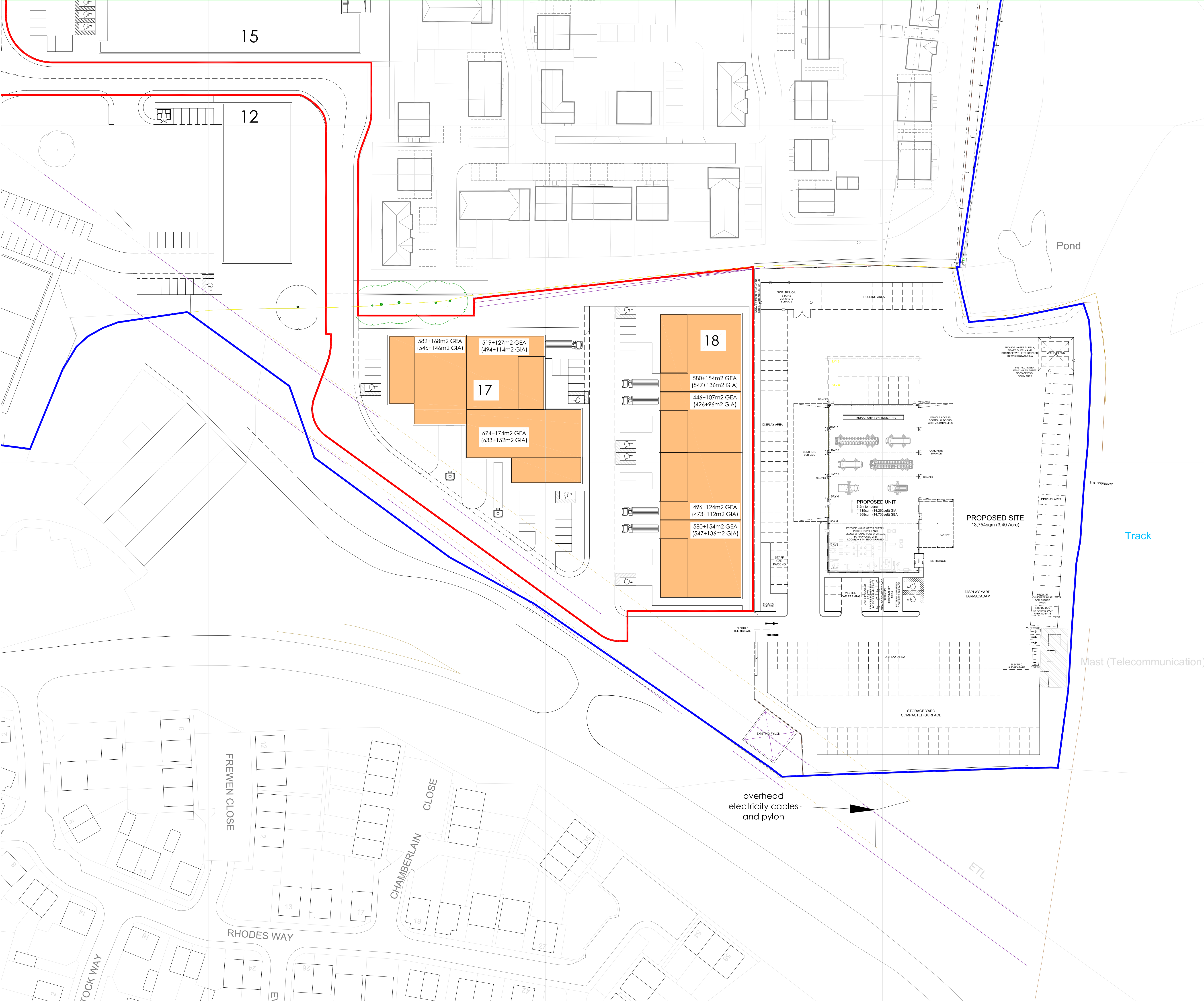
- 4.46 The drainage strategy has been designed to ensure that the drainage system can be easily and safely constructed, operated and maintained. At the detailed design stage, a full Management and Maintenance Plan will be developed for the site. Therefore, the site will meet Standard 7.

5.0 Summary and Conclusion

- 5.1 This Drainage Strategy Technical Note has been prepared by Motion on behalf of Dunmoore Group Ltd to support a planning application for an extension to the consented mixed used development in Billingshurst, West Sussex. This development will make up Phase 3 of the development site and is located to the south of the existing Phase 1 and 2 developments. The application consists of two Class E (industrial processes) units, shown as units 17 and 18.
- 5.2 A Drainage Strategy and SuDS Assessment for the Phase 1 and 2 development was undertaken by Motion in January 2019, as part of the original consented hybrid application. As this technical note is associated with a new outline planning application, it is intended to be treated as a standalone report, however where necessary it takes into account the various applications and variations to the original consented hybrid application.
- 5.3 Details for the proposed access road and the workshop/storage unit (EVM) site drainage under a separate planning application.
- 5.4 The site is existing agricultural land site made up of open fields. Therefore, the existing site can be described as greenfield.
- 5.5 The nearest watercourse to the site is an unnamed ditch (a tributary of the River Arun) which flows in a easterly direction along the site's southern boundary. The nearest main river to the site is the River Adur which is located 1km east of the site.
- 5.6 The EA's Flood Map for Planning shows that the entire site is located within Flood Zone 1 (less than 1 in 1000 annual probability of flooding from rivers or the sea).
- 5.7 The site is at low risk of groundwater flooding, infrastructure failure and of flooding from artificial sources. Both the JBA Comprehensive Flood Maps (CFM's) and the EA's Risk of Flooding from Surface Water maps show that the Site is not affected by surface water flooding.
- 5.8 Intrusive ground investigations were carried out in December 2025 and failed permeability testing due to groundwater demonstrates that infiltration techniques are not considered possible on this site.
- 5.9 Surface water runoff will be managed via permeable paving, two attenuation tanks, and a conveyancing swale before discharging at a restricted rate of 7.5 l/s (the QBar greenfield runoff rate for the impermeable areas on site) to the wider onsite network and conveyed through Phase 1 to the existing watercourse to the west of Stane Street.
- 5.10 The below ground attenuation tanks have been sized to accommodate surface water run-off from the site, with an available storage volume of 719.5m³.
- 5.11 In addition, oil interceptors to manage the surface water quality have been included before the surface water discharges into the wider surface water drainage network.
- 5.12 The hydraulic modelling results demonstrate that the proposed attenuation tanks, the swale and the permeable paving can accommodate the surface water run-off from the site with no flooding for the 1 in 30-year storm event (+40% allowance for climate change) and 1 in 100-year storm event (+45% allowance for climate change). Therefore, it can be considered as appropriate and suitable for the proposed development.
- 5.13 As detailed in the 2024 Water Neutrality Report undertaken by Motion the development is proposed to have a rainwater harvesting system. The water captured by the rainwater harvesting system will be suitable for use in flushing toilets and will not be treated for potable water use. It is recommended that the tank size is greater than 9,000 litres for each unit to meet the required daily demand of each unit.
- 5.14 This report demonstrates that the proposed development will not result in an increased risk of flooding on site or to neighbouring areas. Therefore, it can be concluded that the development fulfils the requirements of the PPG and the NPPF.

Appendix A

Proposed Site Layout



Rev D:
Rev C:
Rev B:
Rev A:

Notes:
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Job
Billingshurst Trade Park
Dunmore Group

Title
Phase III
Proposed Block Plan

Drg No	D-101-Ph 3-TP-PBP-01		
Date	1-2026	Scale	1:250 (A1)
Drawn	Checked	Rev	-
		Planning	drawing

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IAN C KING Associates - Architects is the trading name of Garmony Ltd

Appendix B

Site Location Plan



Project:	Land off Stane Street, Billingshurst			Title	Site Location Plan		
Client:	Dunmoore (West London) Limited & EG Group			Geo-Environmental Services Ltd Unit 7 Danworth Farm, Cuckfield Road Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net	 Geo-Environmental		
Ref No:	GE18159	Revision:	0				
Drawn:	KOD	Date:	07/06/2019				
Figure:	1	Scale:	Not To Scale				



Appendix C

Topographic Survey



DATE 27.11.2019		DRAWN BY SH	
SCALE 1: 500 ⒸA1		CHECKED VG	
PROJECT	ORIGINATOR	VOLUME/ ZONE/BLDG	LEVEL
84297	HLS	00	Z0
DISCIPLINE/ ROLE	NUMBER		STATUS
G	10100		A7

Appendix D

BGS Borehole Record

301

N/S

TQ02/24

301/115

BILLINGSHURST.

Sussex 23NE

From Topleys notes, where it is given as Billingshurst

W.S.S.x.II, p. 159. 1911

From notes and specimens sent by Messrs. Topley

water at first stood $15\frac{1}{2}$ feet down. Started falling when the boring was $60\frac{1}{2}$ feet down and fell 19 feet down. When the hole was 80 feet deep stood at 52 feet down.

Weald Clay

	Thickness	Depth.
Sand	15	15
Red clay	5	20
Bluish sand clay	4	24
Brown & red clay	10	34
Bluish clay	6	40
Yellow sandy clay	5	45
Stiff yellow clay	5	50
Blue clay	17	67
Sandstone	$\frac{1}{2}$	$67\frac{1}{2}$
Blue clay	$32\frac{1}{2}$	100.

? Sussex Co. 23 N.E. (E.) Site not traced in field survey.

S.E.G.H. 20.3.41.

301/115 Billingshurst. Site not determined

N/S TQ 02 NE/19
TQ 02/24

W.S.Sx.II, p. 159. When bore less than 60%, R.W.L. 15½ down; bore 60%, R.W.L. 19 down;
bore 80, R.W.L. 52 down. Tilley, 1911.

WC

100

100

301/115		Thickness	Depth.
Weald Clay 100	Sand	15	15
	Red clay	5	20
	Bluish sand clay	4	24
	Brown & red clay	10	34
	Bluish clay	6	40
	Yellow sandy clay	5	45
	Stiff yellow clay	5	50
	Blue clay	17	67
	Sandstone	$\frac{1}{2}$	$67\frac{1}{2}$
	Blue clay	$32\frac{1}{2}$	100.

301/115 Billingshurst. Site not determined

N/S TQ 02 NE/
TQ 02/25

W.S.Sx.II, p. 159. When bore less than 60%, R.W.L. 15 1/2 down; bore 60%, R.W.L. 19 d
bore 80, R.W.L. 52 down. Tilley, 1911.

WC

100

100

301/115		Thickness	Depth.
Weald Clay 100	Sand	15	15
	Red clay	5	20
	Bluish sand clay	14	24
	Brown & red clay	10	34
	Bluish clay	6	40
	Yellow sandy clay	5	45
	stiff yellow clay	5	50
	Blue clay	17	67
	Sandstone	1/2	67 1/2
	Blue clay	32 1/2	100.

301/115
 N/S
 TQ02/24 301/115

BILLINGSHURST.

Sussex 23NE/E

From Topleys notes, where it is given as Billingshurst.

W.S.S. II, p. 159. 1911

From notes and specimens sent by Messrs. Tilley.

Water at first stood $15\frac{1}{2}$ feet down. Started falling when the boring was $60\frac{1}{2}$ feet down and fell to 19 feet down. When the hole was 80 feet deep it stood at 52 feet down.

	Thickness	Depth.
Sand	15	15
Red clay	5	20
Bluish sand clay	4	24
Brown + red clay	10	34
Bluish clay	6	40
Yellow sandy clay	5	45
Stiff yellow clay	5	50
Blue clay	17	67
Sandstone	$\frac{1}{2}$	$67\frac{1}{2}$
Blue clay	$32\frac{1}{2}$	100.

Weald Clay

? Sussex 6 in. 23 NE. (E.) Site not traced in field survey.

S.E. 44. 20. 3. 41.

? Possibly connected with old water-work - see notes of MS notes on record 3

Appendix E

SoilTechnics Ground Investigation Report



- Key:
- Phase 1 Works area
 - Phase 2 Works area (site boundary)
 - Phase 3 Works area
 - Stockpile
 - Photos
 - Dynamic Cone Penetrometer Test
 - Trial Pit
 - Windowless Sampling Borehole
 - Monitoring Installation
 - Infiltration Test

Notes

- 1) Base image provided by Google.
2) All drawn features are approximate.

Contains OS data © Crown copyright [and database right] [2024]
Map data © 2024 Google

A	Dec 2025	First issue
REV	DATE	COMMENT ON VARIATION

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PROJECT
Hilland Road, Billingshurst

TITLE
Exploratory Hole Location Plan

DRAWING No.
STX7305-D01-A

Key to legends

Composite materials, soils and lithology					
	Topsoil		Made Ground		Boulders
	Clay		Coal		Cobbles
	Gravel		Limestone		Mudstone
	Sand		Sandstone		Silt
					Siltstone
					Chalk
					Concrete
					Peat

Note: Composite soil types are signified by combined symbols.

Key to 'test results' and 'sampling' columns

Test result		Sampling	
Depth	Records depth that the test was carried out (i.e.: at 2.10m or between 2.10m and 2.55m)	From (m) To (m)	Records depth of sampling
	PP – Pocket penetrometer result reported as an equivalent undrained shear strength (kN/m ²) by applying a factor of 50.		D Disturbed sample
			B Bulk disturbed sample
			ES Environmental sample
Result	SV – Hand held shear vane result reported as an undrained shear strength (kN/m ²). Where multiple readings are taken at the same level the average value is shown on the log. * Signifies that instrument limit reached.	Type	W Water sample
			U Undisturbed thick-walled sample 100mm diameter sampler
			UT Undisturbed thin walled sample 100mm diameter sampler
			UTF Failed undisturbed sample

Water observations

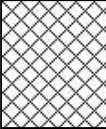
Described at foot of log and shown in the 'water strike' column.

▼ Water level observed after specified delay in drilling

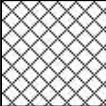
∇ Water strike

Density

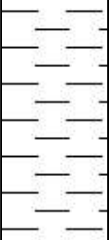
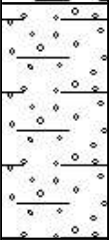
Density recorded in brackets determined by qualitative field assessment or inferred from density testing and soil descriptions from across the site (i.e.: [Medium dense]).

STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto firm to stiff brown slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded mudstone and brick. (MADE GROUND)	0.60						0.50		ES
TRIAL PIT TERMINATED AT 0.60m									

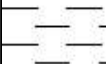
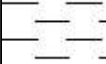
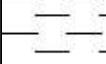
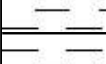
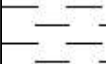
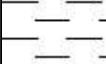
Notes Hand pit for environmental sampling.	Groundwater observations		Title Trial pit record	Dimensions (w x l) 0.20m x 0.20m	Date(s) 15/12/2025
	Strike (m)	Comments	Method Hand excavated	Plant used Hand tools	Sheet number Sheet 1 of 1
			Level (m OD) -	Logged by OW	Revision A
			Co-ordinates Not surveyed	Status FINAL	HP01
	No groundwater strike recorded				

STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto firm to stiff reddish brown slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded mudstone. (MADE GROUND)	0.50						0.40		ES
TRIAL PIT TERMINATED AT 0.50m									

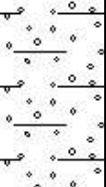
Notes Hand pit for environmental sampling.	Groundwater observations		Title Trial pit record	Dimensions (w x l) 0.20m x 0.20m	Date(s) 15/12/2025 - 15/02/2026
	Strike (m)	Comments	Method Hand excavated	Plant used Hand tools	Sheet number Sheet 1 of 1
			Level (m OD) -	Logged by OW	Revision A
			Co-ordinates Not surveyed	Status FINAL	HP02
	No groundwater strike recorded				

STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto dark brown slightly sandy organic CLAY. (TOPSOIL)	0.50				PP 0.60	PP 75	0.70		D
Firm light greyish brown CLAY. (WEALD CLAY FORMATION - MUDSTONE)									
Dense greyish brown clayey fine to coarse angular to subrounded GRAVEL. (WEALD CLAY FORMATION - MUDSTONE)									
	1.70								
	2.80						2.00		D
TRIAL PIT TERMINATED AT 2.80m									

Notes Trial pit side remained upright and stable. Terminated due to competency of strata.	Groundwater observations		Title Trial pit record	Dimensions (w x l) 0.60m x 2.00m	Date(s) 15/12/2025
	Strike (m)	Comments	Method Machine excavated	Plant used 5T tracked excavator	Sheet number Sheet 1 of 1
			Level (m OD) -	Logged by OW	Revision A
			Co-ordinates Not surveyed	Status FINAL	TP01
	No groundwater strike recorded				

STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING							
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE					
Grass onto dark brown slightly sandy CLAY. (TOPSOIL)	0.30				PP 0.80	PP 75	0.20		D					
Firm light greyish brown CLAY. (WEALD CLAY FORMATION - MUDSTONE)							0.50		D					
							1.10		D					
							1.70		D					
Stiff reddish brown slightly gravelly CLAY. Gravel is fine to coarse subangular to subrounded mudstone. (WEALD CLAY FORMATION - MUDSTONE)	1.60				PP 1.30	PP 88								
														
														
														
...at 2.5m depth, becoming slightly sandy	2.60				PP 1.80	PP 129								
TRIAL PIT TERMINATED AT 2.60m														
														
														
														

Notes Trial pit side remained upright and stable. Terminated due to competency of strata.	Groundwater observations		Title Trial pit record	Dimensions (w x l) 0.60m x 2.00m	Date(s) 15/12/2025
	Strike (m)	Comments	Method Machine excavated	Plant used 5T tracked excavator	Sheet number Sheet 1 of 1
			Level (m OD) -	Logged by OW	Revision A
			Co-ordinates Not surveyed	Status FINAL	TP02
	No groundwater strike recorded				

STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto dark brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse subangular brick. (TOPSOIL - MADE GROUND)	0.40						0.10		ES
Firm light greyish brown CLAY. (WEALD CLAY FORMATION - MUDSTONE)							0.80		D
Stiff red gravelly CLAY. Gravel is fine to coarse subangular mudstone. (WEALD CLAY FORMATION - MUDSTONE)	1.50						1.70		D
Stiff grey gravelly CLAY. Gravel is fine to coarse subangular mudstone. (WEALD CLAY FORMATION - MUDSTONE)	2.40						2.50		D
TRIAL PIT TERMINATED AT 2.70m	2.70								

Notes Trial pit side remained upright and stable. Terminated due to competency of strata.	Groundwater observations		Title Trial pit record	Dimensions (w x l) 0.60m x 2.00m	Date(s) 15/12/2025
	Strike (m)	Comments	Method Machine excavated	Plant used 5T tracked excavator	Sheet number Sheet 1 of 1
			Level (m OD) -	Logged by OW	Revision A
			Co-ordinates Not surveyed	Status FINAL	TP03
	No groundwater strike recorded				

STX7305

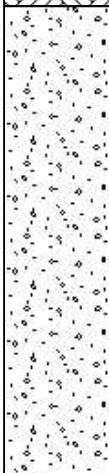
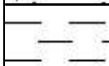
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[illegible]

Notes Trial pit side remained upright and stable. Terminated due to competency of strata.	Groundwater observations		Title	Dimensions (w x l)	Date(s)
	Strike (m)	Comments	Trial pit record	0.60m x 2.00m	15/12/2025
			Method Machine excavated	Plant used 5T tracked excavator	Sheet number Sheet 1 of 1
			Level (m OD) -	Logged by OW	Revision A
			Co-ordinates Not surveyed	Status FINAL	TP04
	No groundwater strike recorded				

STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto dark brown slightly sandy organic CLAY. (TOPSOIL)	0.30						0.60	1.00	B
[Medium dense] greyish brown fine to coarse SAND. (WEALD CLAY FORMATION - SANDSTONE)									
[Medium dense] dark yellowish brown mottled grey sandy fine to coarse subangular to subrounded GRAVEL of mudstone. (WEALD CLAY FORMATION - SANDSTONE)	1.80						1.60 1.80	2.20	D B
TRIAL PIT TERMINATED AT 2.50m	2.50								

Notes Trial pit collapsed to 1.8m bgl. Terminated due to instability/collapse.	Groundwater observations		Title Trial pit record	Dimensions (w x l) 0.60m x 2.00m	Date(s) 15/12/2025
	Strike (m)	Comments	Method Machine excavated	Plant used 5T tracked excavator	Sheet number Sheet 1 of 1
	0.90	Slight seepage			
	2.20	Fast flow, caused collapse	Level (m OD) -	Logged by OW	Revision A
			Co-ordinates Not surveyed	Status FINAL	TP05

STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING										
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE								
Grass onto dark brown slightly sandy organic CLAY. (TOPSOIL)	0.30																
[Medium dense] dark yellowish brown slightly gravelly SAND. Gravel is fine to coarse subangular to subrounded sandstone. (WEALD CLAY FORMATION - SANDSTONE)																	
Stiff grey CLAY. (WEALD CLAY FORMATION - MUDSTONE)	2.50				PP 2.70	PP 134	2.30		D								
TRIAL PIT TERMINATED AT 2.80m	2.80						2.60		D								

Notes Trial pit side remained upright and stable. Terminated at scheduled depth.	Groundwater observations		Title Trial pit record	Dimensions (w x l) 0.60m x 2.00m	Date(s) 15/12/2025
	Strike (m)	Comments	Method Machine excavated	Plant used 5T tracked excavator	Sheet number Sheet 1 of 1
	2.40	Filling base of pit by 50mm in 5 minutes			
			Level (m OD) -	Logged by OW	Revision A
			Co-ordinates Not surveyed	Status FINAL	TP06

STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto dark brown slightly sandy organic CLAY. (TOPSOIL)	0.15								
Firm light greyish brown CLAY. (WEALD CLAY FORMATION - MUDSTONE)					PP 0.50	PP 67	0.50		D
	1.30				PP 0.90	PP 75	1.20		D
Stiff red gravelly CLAY. Gravel is fine to coarse subangular mudstone. (WEALD CLAY FORMATION - MUDSTONE)					PP 1.60	PP 138	1.80		D
TRIAL PIT TERMINATED AT 2.50m	2.50								

Notes Trial pit side remained upright and stable. Terminated at scheduled depth.	Groundwater observations		Title Trial pit record	Dimensions (w x l) 0.60m x 2.00m	Date(s) 15/12/2025
	Strike (m)	Comments	Method Machine excavated	Plant used 5T tracked excavator	Sheet number Sheet 1 of 1
			Level (m OD) -	Logged by OW	Revision A
			Co-ordinates Not surveyed	Status FINAL	TP07
	No groundwater strike recorded				

Key to legends

Composite materials, soils and lithology					
	Topsoil		Made Ground		Boulders
	Clay		Coal		Cobbles
	Gravel		Limestone		Mudstone
	Sand		Sandstone		Silt
					Siltstone
					Peat
					Concrete
					Chalk

Note: Composite soil types are signified by combined symbols.

Key to 'test results' and 'sampling' columns

Test result		From (m) To (m)	Records depth of sampling	
Depth	Records depth that the test was carried out (i.e.: at 2.10m or between 2.10m and 2.55m)		D	Disturbed sample
			B	Bulk disturbed sample
			ES	Environmental sample
			SPTLS	SPT liner sample
		Type	W	Water sample
			U	Undisturbed thick-walled sample 100mm diameter sampler
			UT	Undisturbed thin walled sample 100mm diameter sampler
			UTF	Failed undisturbed sample
Result	PP – Pocket penetrometer result reported as an equivalent undrained shear strength (kN/m²) by applying a factor of 50. SV – Hand held shear vane result reported as an undrained shear strength (kN/m²). Where multiple readings are taken at the same level the average value is shown on the log. * Signifies that instrument limit reached. SPT – Standard Penetration Test result (N value uncorrected)^{1,2,3} SPT(c) – Standard Penetration Test result (solid cone) (N value) (uncorrected)^{1,2,3} * Signifies that the test was terminated before full penetration was achieved. UT – Undisturbed sample 100mm diameter sampler with number of blows of driving equipment required to obtain sample			
Sampling				

Note 1: Total seating blows recorded in brackets.

Note 2: Casing depth records depth of casing when SPT or SPT(c) was carried out.

Note 3: Water depth records depth of water when SPT or SPT(c) was carried out.

Water observations

Described at foot of log and shown in the 'water strike' column.

▼ Water level observed after specified delay in drilling

▽ Water strike

Density

Density recorded in brackets determined by qualitative field assessment or inferred from density testing and soil descriptions from across the site (i.e.: [Medium dense]).

Installation details

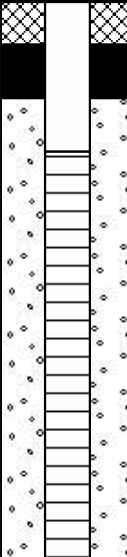
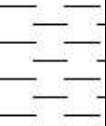
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	Arisings		Grout
	Extensometer magnet		Vibrating wire piezometer

STX7305

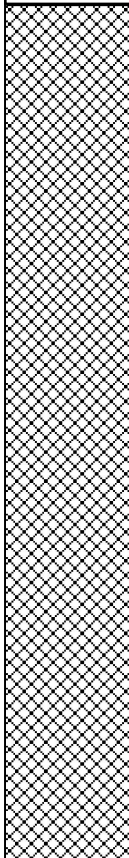
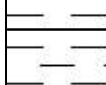
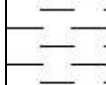
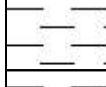
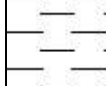
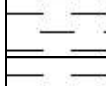
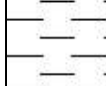
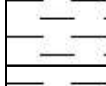
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[illegible]

Notes Terminated due to competency of strata.	Groundwater observations						Recovery details		Title		Date(s)
	Strike (m)	5mins	10mins	15mins	20mins	Comments	Range (m)	% Recv	Dynamic windowless sampling record		15/12/2025
							1.00 - 2.00 2.00 - 3.00	100 100	Method	Plant used	Sheet number
									Windowless Sampling	Dando Terrier	Sheet 1 of 1
									Level (m OD)	Logged by	Revision
	-	ML	A								
No groundwater strike recorded								Co-ordinates	Status	WLS01	
								Not surveyed	FINAL		

INSTALL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (mOD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Grass onto brown slightly sandy organic CLAY. (TOPSOIL)	0.40										0.30		ES
	Soft light brown slightly sandy CLAY. (WEALD CLAY FORMATION - MUDSTONE)													
	Firm light grey mottled orange CLAY. (WEALD CLAY FORMATION - MUDSTONE)	1.50				C 1.20	(2) 10					1.50		D
	Firm reddish brown slightly gravelly CLAY. Gravel is fine to coarse angular to subrounded mudstone. (WEALD CLAY FORMATION - MUDSTONE)	1.74										2.30		D
	Stiff light grey slightly sandy CLAY. (WEALD CLAY FORMATION - MUDSTONE)	2.45				C 2.00	(9) 33							
BOREHOLE TERMINATED AT 2.60m		2.60				C 2.60	(17) 83*							

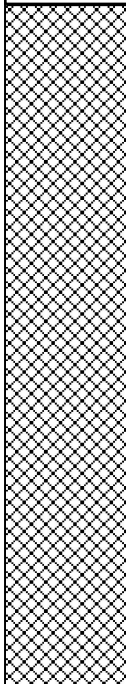
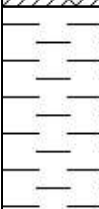
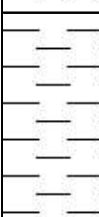
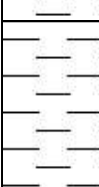
Notes Terminated due to competency of strata.	Groundwater observations						Recovery details		Title		Date(s)
	Strike (m)	5mins	10mins	15mins	20mins	Comments	Range (m)	% Recv	Dynamic windowless sampling record		15/12/2025
							1.00 - 2.00 2.00 - 2.60	100 100	Method	Plant used	Sheet number
									Windowless Sampling	Dando Terrier	Sheet 1 of 1
									Level (m OD)	Logged by	Revision
	-	ML	A								
No groundwater strike recorded								Co-ordinates	Status	WLS02	
								Not surveyed	FINAL		

INSTALL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING						
	DESCRIPTION	DEPTH (m)	REDUCED LVL (mOD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE				
	Grass onto brown slightly sandy organic CLAY. (TOPSOIL)	0.40 0.55				C 1.20	(4) 20					0.50		ES				
	Firm light grey mottled orange CLAY. (WEALD CLAY FORMATION - MUDSTONE)																	
	Firm light brown CLAY. (WEALD CLAY FORMATION - MUDSTONE)																	
	...between 1.4m and 1.6m depth, becoming reddish brown			C 3.00		(9) 31						2.70		D				
	Stiff light grey slightly sandy CLAY. (WEALD CLAY FORMATION - MUDSTONE)	1.60																
	Stiff reddish brown slightly gravelly CLAY. Gravel is fine to coarse angular to subrounded mudstone. (WEALD CLAY FORMATION - MUDSTONE)	2.40																
	Stiff grey mottled purple CLAY. (WEALD CLAY FORMATION - MUDSTONE)	3.30				C 4.00	(22) 71*					3.70		D				
	BOREHOLE TERMINATED AT 4.00m	4.00																

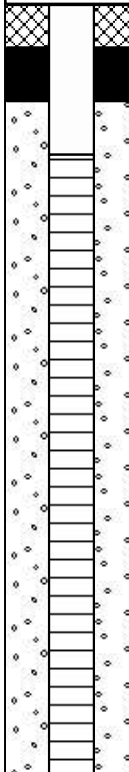
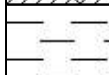
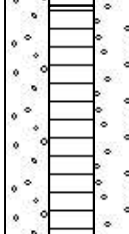
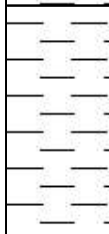
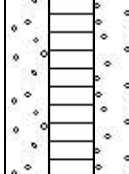
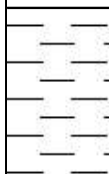
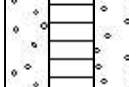
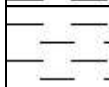
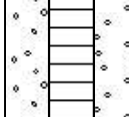
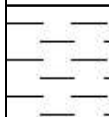
Notes Terminated due to competency of strata.	Groundwater observations						Recovery details		Title Dynamic windowless sampling record		Date(s) 15/12/2025
	Strike (m)	5mins	10mins	15mins	20mins	Comments	Range (m)	% Recv			
							1.00 - 2.00	100	Method Windowless Sampling	Plant used Dando Terrier	Sheet number Sheet 1 of 1
							2.00 - 3.00	100			
							3.00 - 4.00	100	Level (m OD) -	Logged by ML	Revision A
	No groundwater strike recorded								Co-ordinates Not surveyed	Status FINAL	WLS03

STX7305

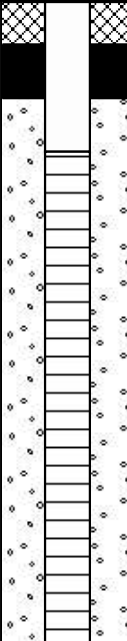
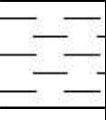
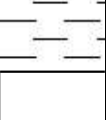
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INSTALL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING						
	DESCRIPTION	DEPTH (m)	REDUCED LVL (MOD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE				
	Grass onto brown slightly sandy organic CLAY. (TOPSOIL)	0.35				C 1.20	(5) 15					0.35		ES				
	Firm light grey mottled orange CLAY. (WEALD CLAY FORMATION - MUDSTONE)																	
	Stiff reddish brown CLAY. (WEALD CLAY FORMATION - MUDSTONE)	1.35													C 2.20	(8) 28	2.00	D
	Stiff grey slightly sandy CLAY. (WEALD CLAY FORMATION - MUDSTONE)	2.40																
	BOREHOLE TERMINATED AT 3.20m	3.20				C 3.20	(18) 78*				3.20		D					

Notes Terminated due to competency of strata.	Groundwater observations						Recovery details		Title		Date(s)
	Strike (m)	5mins	10mins	15mins	20mins	Comments	Range (m)	% Recv	Dynamic windowless sampling record		15/12/2025
							1.20 - 2.20 2.20 - 3.20	100 100	Method	Plant used	Sheet number
									Windowless Sampling	Dando Terrier	Sheet 1 of 1
									Level (m OD)	Logged by	Revision
	-	ML	A								
No groundwater strike recorded								Co-ordinates	Status	WLS04	
								Not surveyed	FINAL		

INSTALL		STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING					
		DESCRIPTION	DEPTH (m)	REDUCED LVL (mOD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE			
		Grass onto brown slightly sandy organic CLAY. (TOPSOIL)	0.35			C 1.20	(3) 10					0.25		ES				
		Firm light brown CLAY. (WEALD CLAY FORMATION - MUDSTONE)																
		Firm light grey mottled orange CLAY. (WEALD CLAY FORMATION - MUDSTONE)	0.70															
		Firm light brown slightly gravelly CLAY. Gravel is fine to coarse angular to subrounded mudstone. (WEALD CLAY FORMATION - MUDSTONE)	1.80			C 2.00	(10) 25					2.25		D				
		Stiff brown slightly gravelly CLAY. Gravel is fine to coarse angular to subrounded mudstone. (WEALD CLAY FORMATION - MUDSTONE)	2.60															
		Firm grey slightly sandy CLAY. (WEALD CLAY FORMATION - MUDSTONE)	3.00			C 3.00	(9) 43					3.30		D				
																		
		BOREHOLE TERMINATED AT 3.60m	3.60															

Notes Terminated due to competency of strata.	Groundwater observations						Recovery details		Title		Date(s)
	Strike (m)	5mins	10mins	15mins	20mins	Comments	Range (m)	% Recv	Dynamic windowless sampling record		15/12/2025
	2.10	2.10	2.10	2.10	2.10	No rise recorded	1.00 - 2.00	100	Method Windowless Sampling	Plant used Dando Terrier	Sheet number Sheet 1 of 1
							2.00 - 3.00	100			
							3.00 - 3.60	100	Level (m OD) -	Logged by ML	Revision A
									Co-ordinates Not surveyed	Status FINAL	WLS05

INSTALL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (mOD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Grass onto brown slightly sandy organic CLAY. (TOPSOIL)	0.45			 	C 1.20	(6) 14					0.45		ES
	Soft creamy orange very sandy CLAY. (WEALD CLAY FORMATION - MUDSTONE)													
	Firm light grey very sandy CLAY. (WEALD CLAY FORMATION - MUDSTONE)	1.00										1.20		D
	Stiff multicoloured slightly sandy CLAY. (WEALD CLAY FORMATION - MUDSTONE)	1.50												
	Stiff purplish red CLAY. (WEALD CLAY FORMATION - MUDSTONE) ...between 2m and 2.25m depth, band of grey fine sand.	2.00										2.80		D
	BOREHOLE TERMINATED AT 3.00m	3.00				C 3.00	(9) 73*							

Notes Terminated due to competency of strata.	Groundwater observations						Recovery details		Title		Date(s)
	Strike (m)	5mins	10mins	15mins	20mins	Comments	Range (m)	% Recv	Dynamic windowless sampling record		16/12/2025
	1.40	1.34	1.25	1.2	1.15	Rose to 0.7m in 2hrs	1.00 - 2.00	100	Method Windowless Sampling	Plant used Dando Terrier	Sheet number Sheet 1 of 1
							2.00 - 3.00	100			
									Level (m OD) -	Logged by ML	Revision A
									Co-ordinates Not surveyed	Status FINAL	WLS06

STX7305

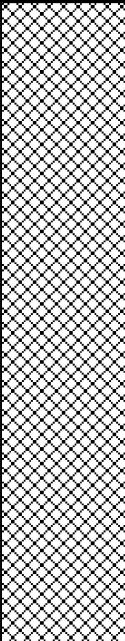
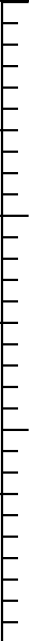
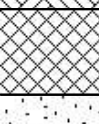
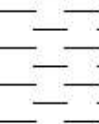
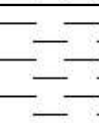
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[illegible]

Notes Terminated due to SPT refusal.	Groundwater observations						Recovery details		Title		Date(s)
	Strike (m)	5mins	10mins	15mins	20mins	Comments	Range (m)	% Recv	Dynamic windowless sampling record		16/12/2025
							1.00 - 1.40	100	Method Windowless Sampling	Plant used Dando Terrier	Sheet number Sheet 1 of 1
									Level (m OD) -	Logged by ML	Revision A
									Co-ordinates Not surveyed	Status FINAL	WLS07
No groundwater strike recorded											

STX7305

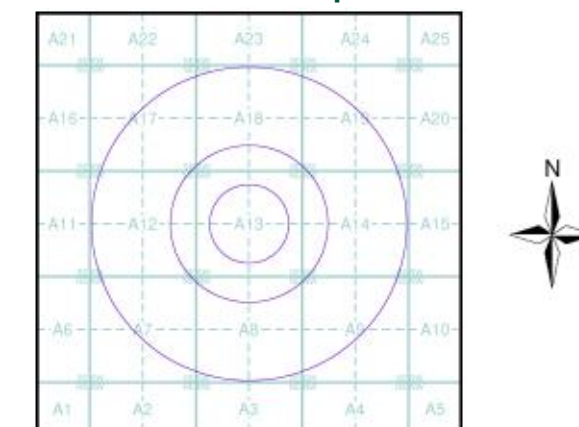
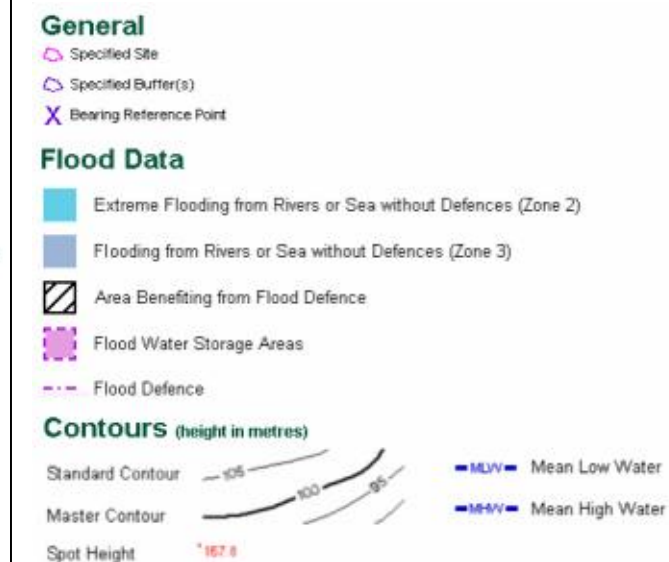
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INSTALL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (mOD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Grass onto brown slightly sandy organic CLAY. (TOPSOIL)					C 1.20	(10) 24					0.50		ES
	Soft brown slightly sandy slightly gravelly CLAY. Gravel is coarse angular brick and concrete. (MADE GROUND)													
	[Medium dense] multicoloured slightly clayey fine SAND. (WEALD CLAY FORMATION - SANDSTONE)													
	Stiff light grey slightly sandy CLAY. (WEALD CLAY FORMATION - MUDSTONE)													
	Stiff brown slightly gravelly CLAY. Gravel is fine to coarse angular to subrounded mudstone. (WEALD CLAY FORMATION - MUDSTONE)													
	BOREHOLE TERMINATED AT 3.00m	3.00				C 3.00	(18) 80*							

Notes Terminated due to SPT refusal.	Groundwater observations						Recovery details		Title		Date(s)
	Strike (m)	5mins	10mins	15mins	20mins	Comments	Range (m)	% Recv	Dynamic windowless sampling record		16/12/2025
							1.00 - 2.00 2.00 - 3.00	100 100	Method	Plant used	Sheet number
									Windowless Sampling	Dando Terrier	Sheet 1 of 1
									Level (m OD)	Logged by	Revision
	-	ML	A								
No groundwater strike recorded								Co-ordinates	Status	WLS08	
								Not surveyed	FINAL		

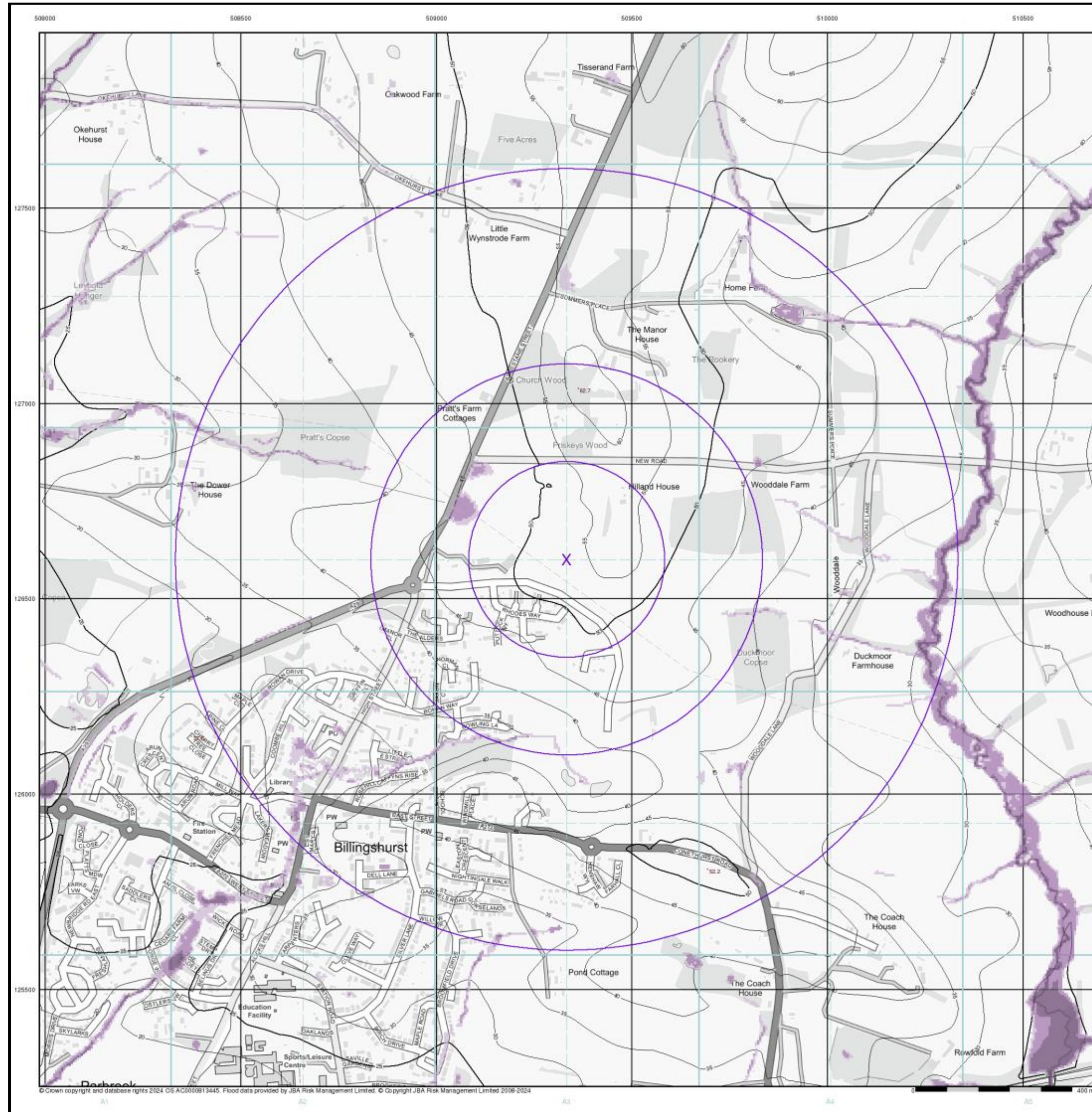
Appendix F

Envirocheck Flood Screening Report



Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN



motion

JBA 75 Year Return Flood Map (Un defended) (1:10,000)

General

-  Specified Site
-  Specified Buffer(s)
-  Bearing Reference Point

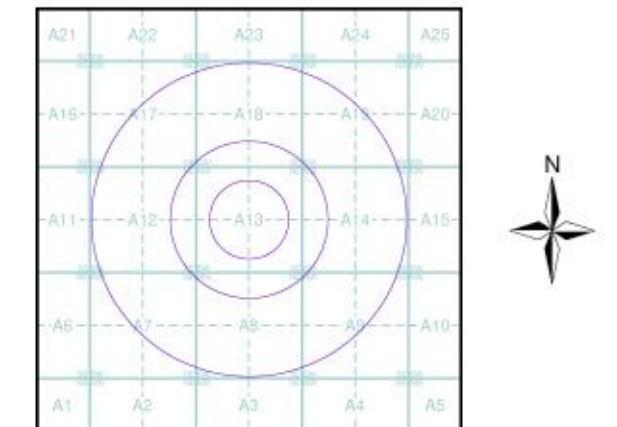
Modelled Flood Depth

Pluvial Depth	Fluvial Depth	Coastal Depth
 0.1m	 0.01m - 0.05m	 0.01m - 0.05m
 0.1m - 0.3m	 0.05m - 0.1m	 0.05m - 0.1m
 0.3m - 1m	 0.1m - 0.3m	 0.1m - 0.3m
 >1m	 0.3m - 1m	 0.3m - 1m
	 >1m	 >1m

Contours (height in metres)

- Standard Contour  105
- Master Contour  100
- Spot Height  107.8
-  MLW Mean Low Water
-  MHW Mean High Water

JBA 75 Year Return Flood Map (Un defended) - Slice A



Order Details

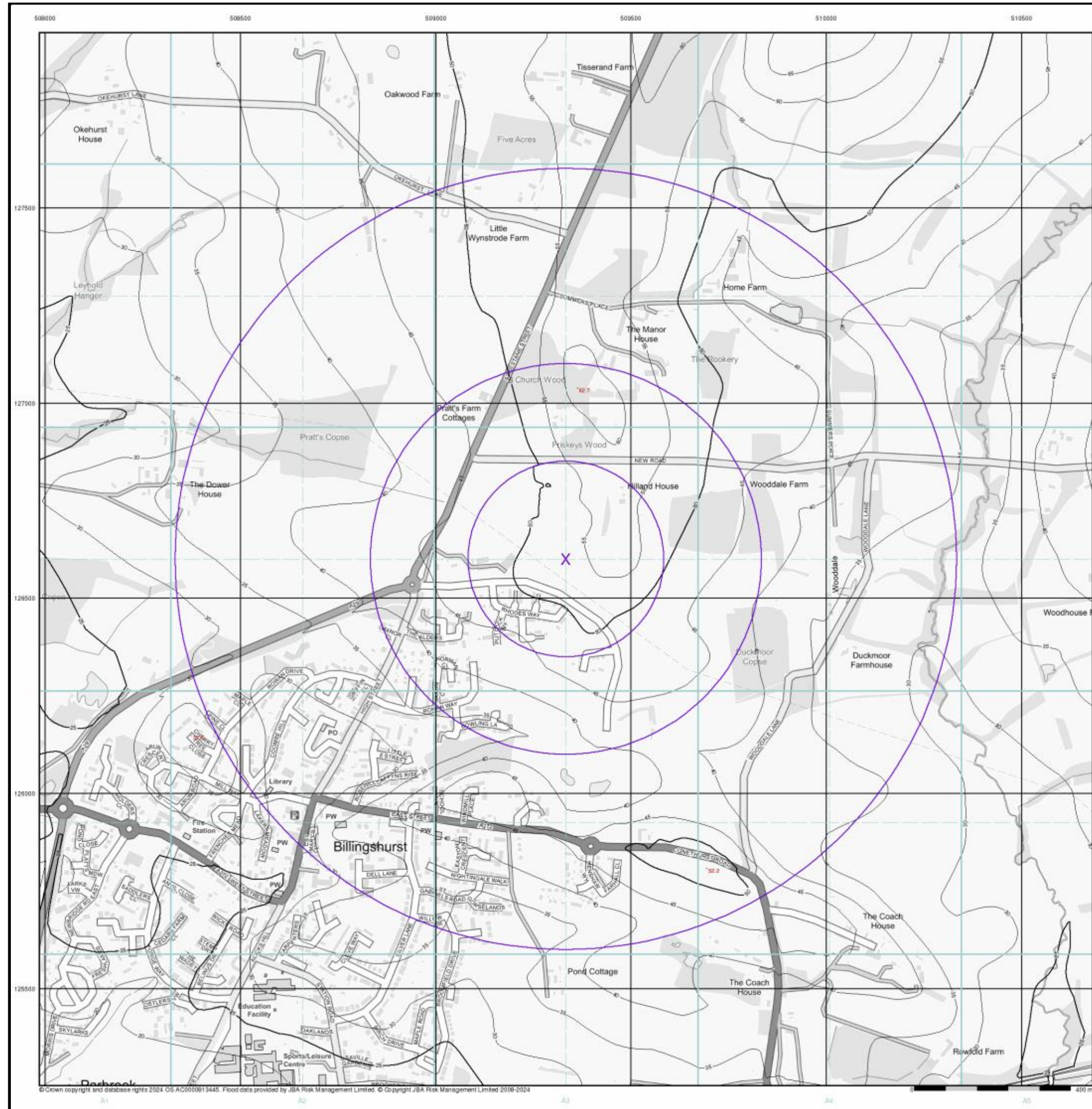
Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



motion

JBA 100 Year Return Flood Map (Un defended) (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Modelled Flood Depth

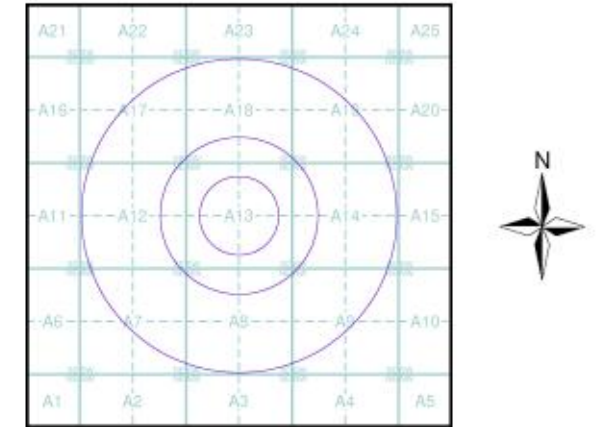
Fluvial Depth	Coastal Depth
0.01m - 0.05m	0.01m - 0.05m
0.05m - 0.1m	0.05m - 0.1m
0.1m - 0.3m	0.1m - 0.3m
0.3m - 1m	0.3m - 1m
>1m	>1m

Contours (height in metres)

- Standard Contour
- Master Contour
- Spot Height

MLW Mean Low Water
MHW Mean High Water

JBA 100 Year Return Flood Map (Un defended) - Slice A

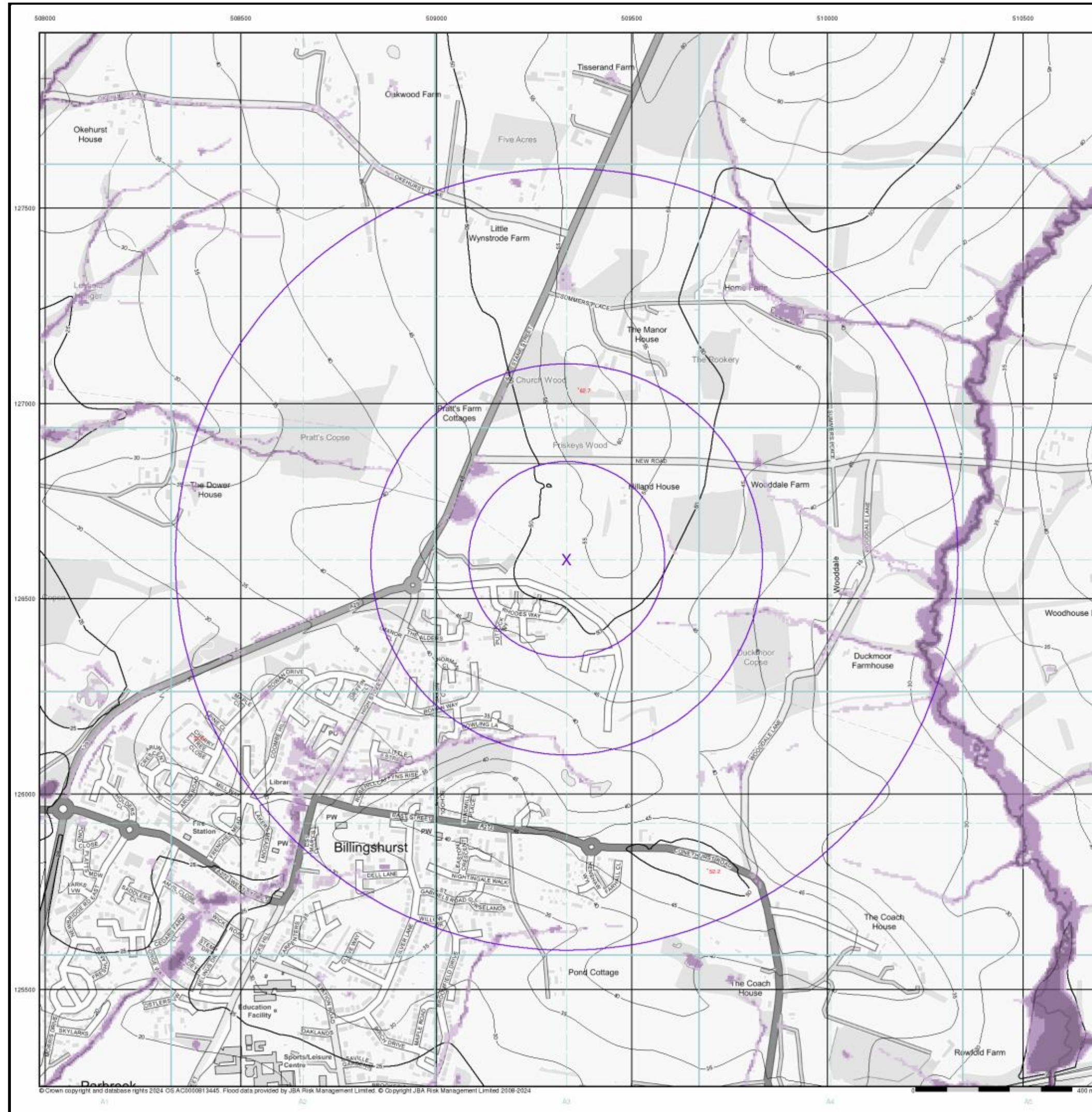


Order Details

Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN



JBA 200 Year Return Flood Map (Un defended) (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

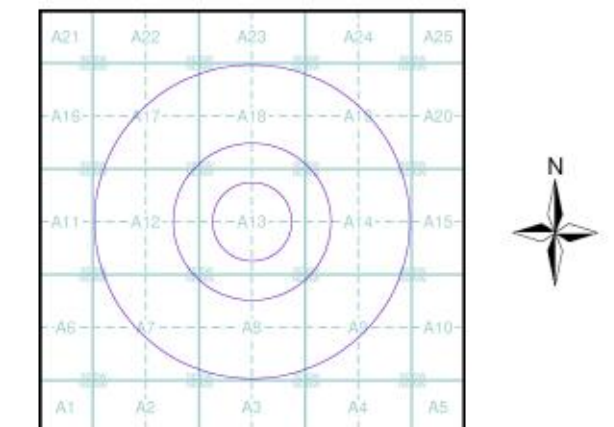
Modelled Flood Depth

Pluvial Depth	Fluvial Depth	Coastal Depth
0.1m	0.01m - 0.05m	0.01m - 0.05m
0.1m - 0.3m	0.05m - 0.1m	0.05m - 0.1m
0.3m - 1m	0.1m - 0.3m	0.1m - 0.3m
>1m	0.3m - 1m	0.3m - 1m
	>1m	>1m

Contours (height in metres)

- Standard Contour
- Master Contour
- Spot Height
- MLW Mean Low Water
- MHW Mean High Water

JBA 200 Year Return Flood Map (Un defended) - Slice A



Order Details

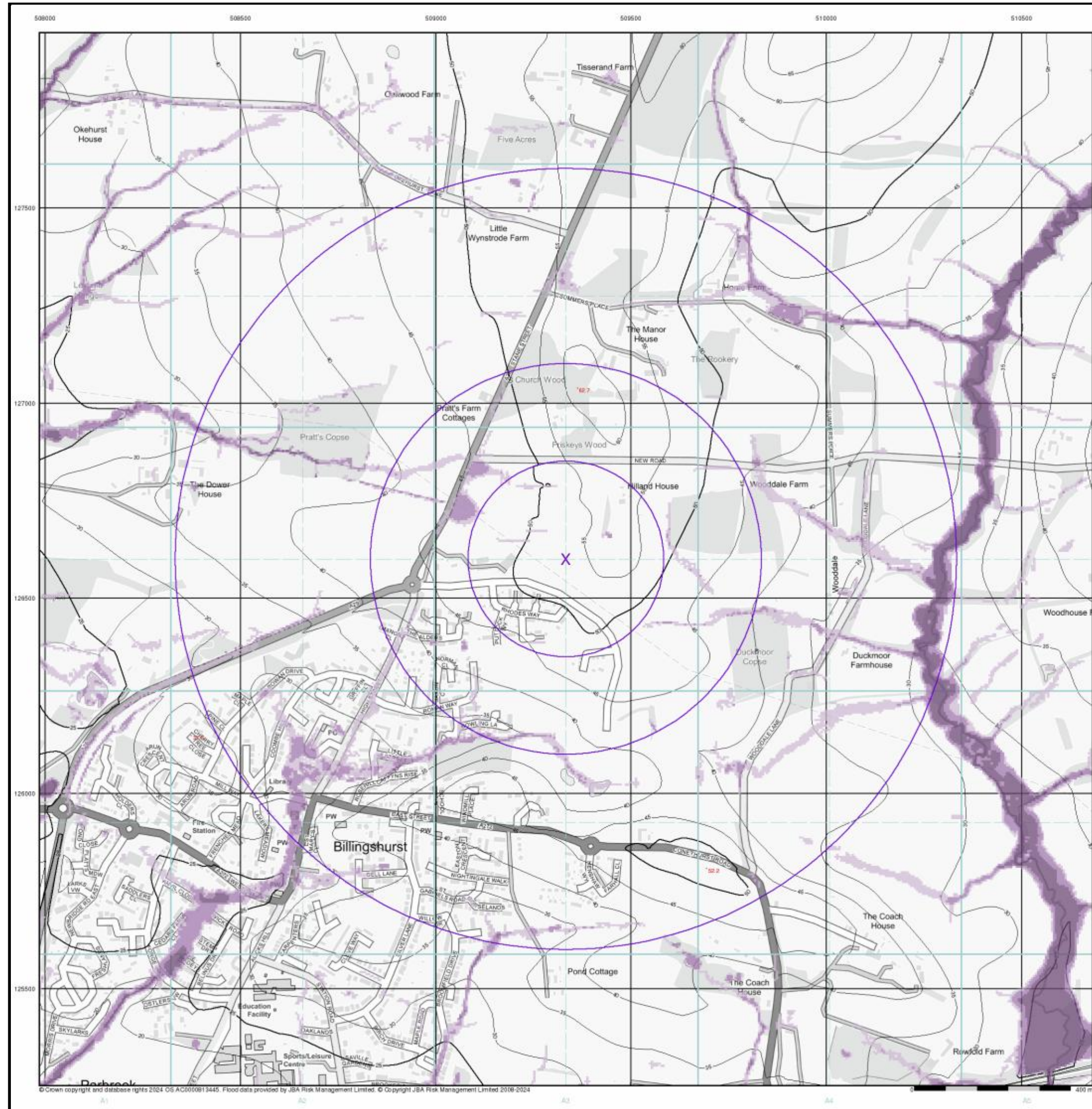
Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN

Landmark
INFORMATION GROUP

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Fax: 0844 844 9951
Web: www.envirocheck.co.uk



JBA 1000 Year Return Flood Map (Un defended) (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

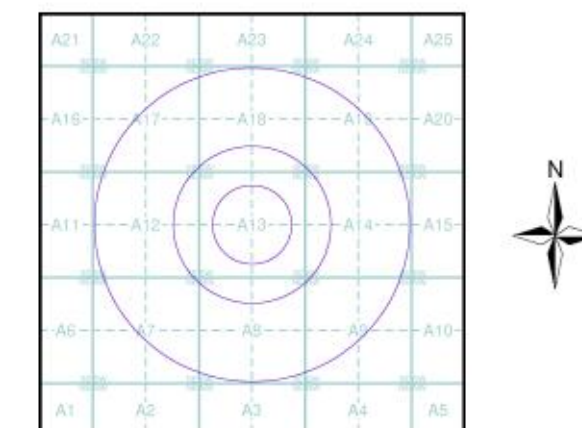
Modelled Flood Depth

Pluvial Depth	Fluvial Depth	Coastal Depth
0.1m	0.01m - 0.05m	0.01m - 0.05m
0.1m - 0.3m	0.05m - 0.1m	0.05m - 0.1m
0.3m - 1m	0.1m - 0.3m	0.1m - 0.3m
>1m	0.3m - 1m	0.3m - 1m
	>1m	>1m

Contours (height in metres)

- Standard Contour
- Master Contour
- Spot Height
- MLW Mean Low Water
- MHW Mean High Water

JBA 1000 Year Return Flood Map (Un defended) - Slice A



Order Details

Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

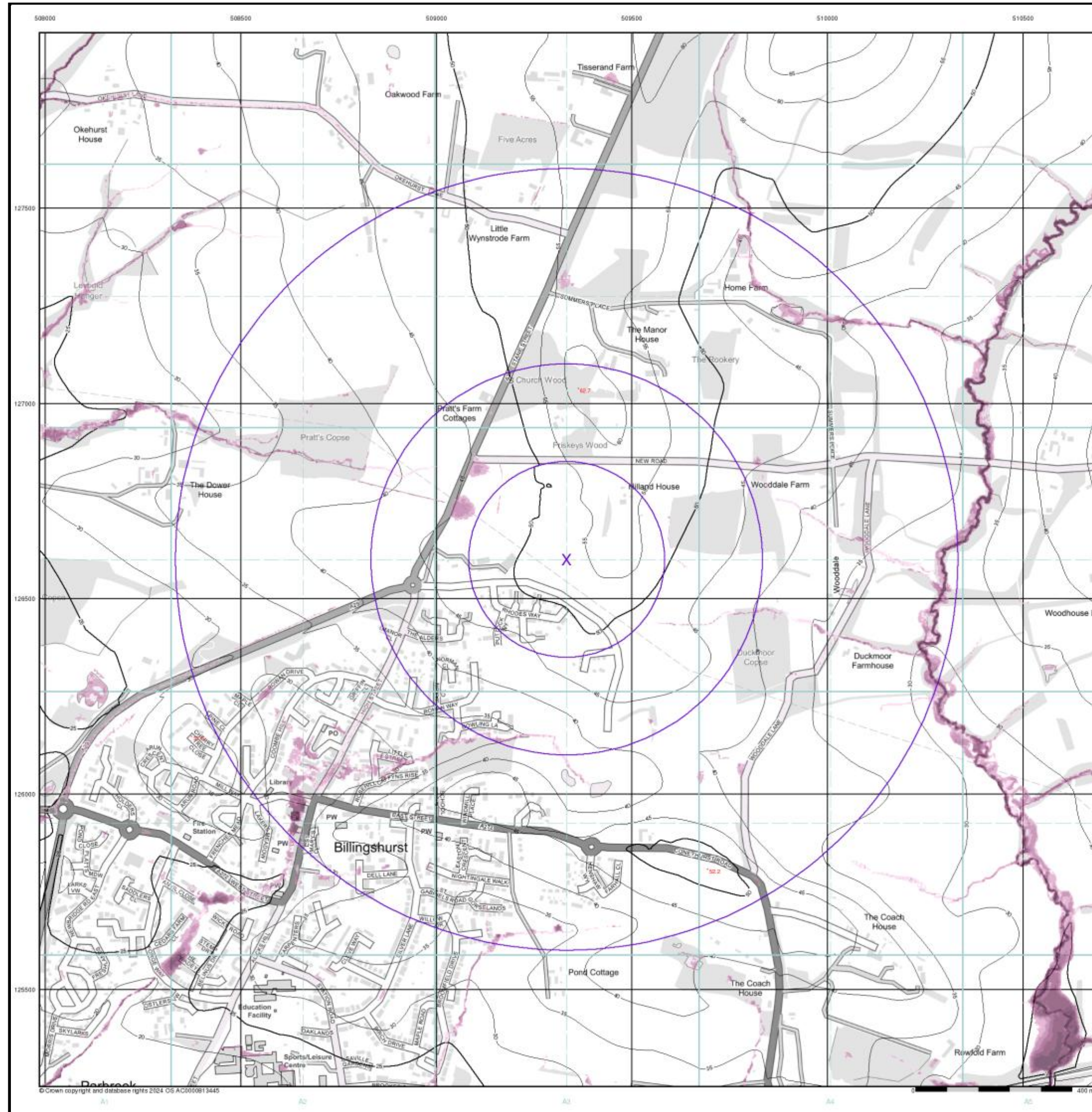
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2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN



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EA/NRW Surface Water 30 Year Return Depth
Map (1:10,000)

General

Specified Site Specified Buffer(s) Bearing Reference Point

Surface Water Depth

0 - 0.15m
0.15 - 0.30m
0.30 - 0.60m
0.60 - 0.90m
0.90 - 1.20m
> 1.20m

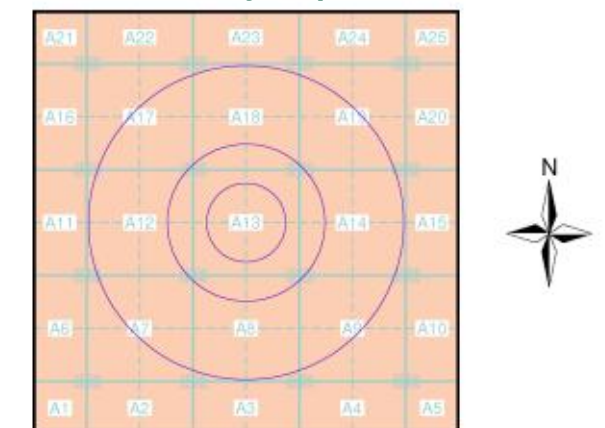
Contours (height in metres)

Standard Contour
Master Contour
Spot Height
Mean Low Water
Mean High Water

Suitability

See the suitability map below
National to county
County to town
Town to street
Street to parcels of land
Property

EA/NRW Suitability Map - Slice A



Order Details

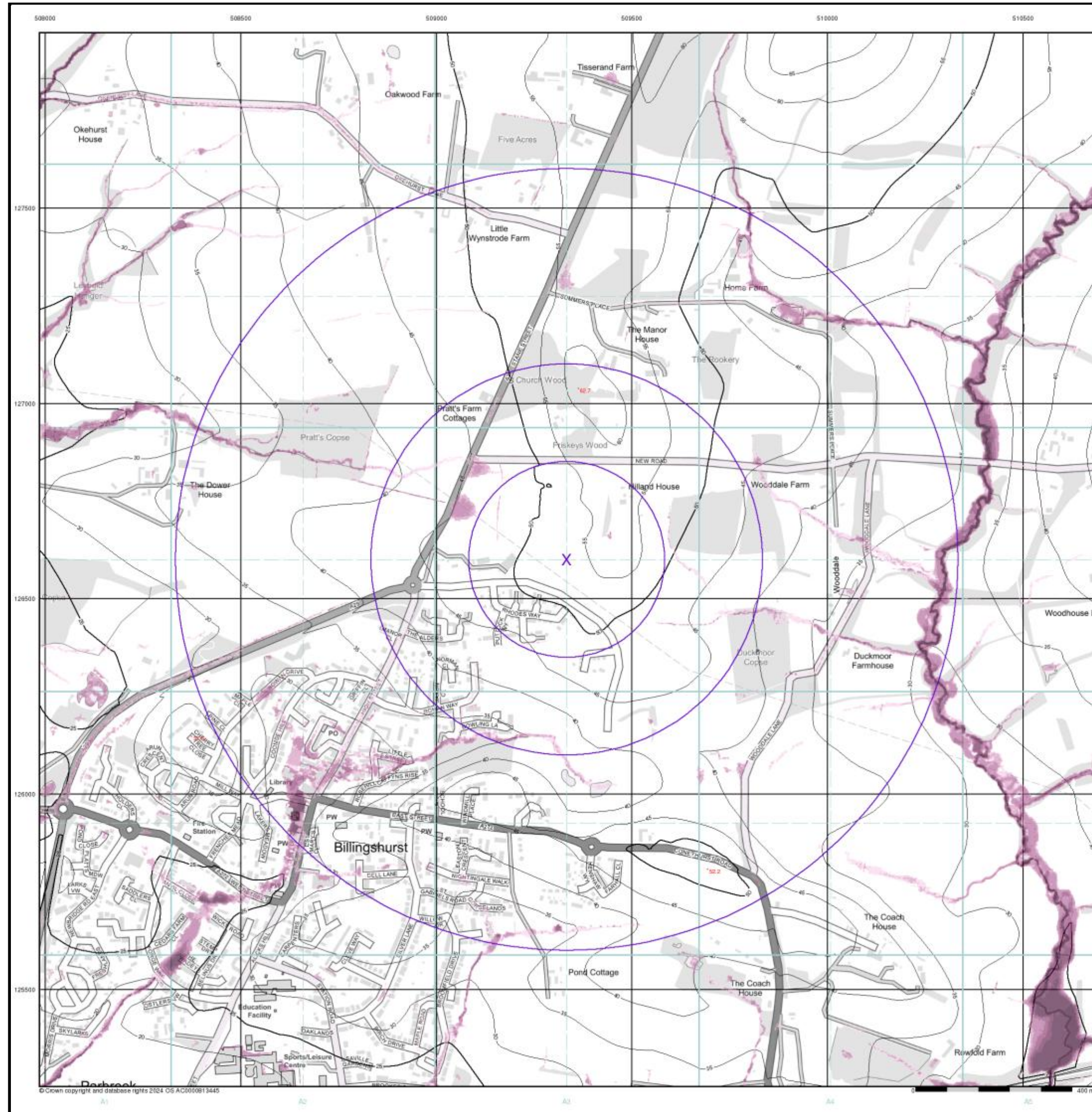
Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN

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Web: www.envirocheck.co.uk

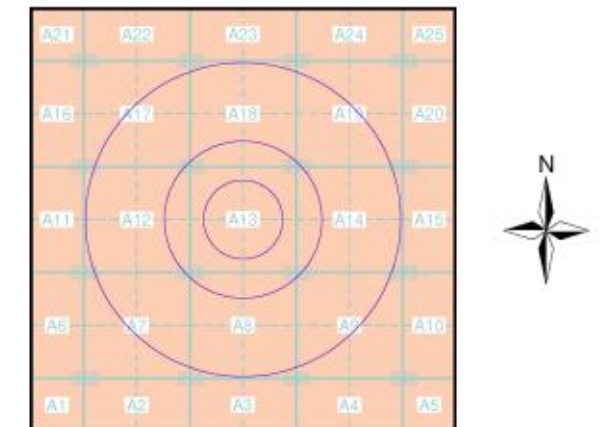


motion

EA/NRW Surface Water 100 Year Return Depth Map



EA/NRW Suitability Map - Slice A



Order Details

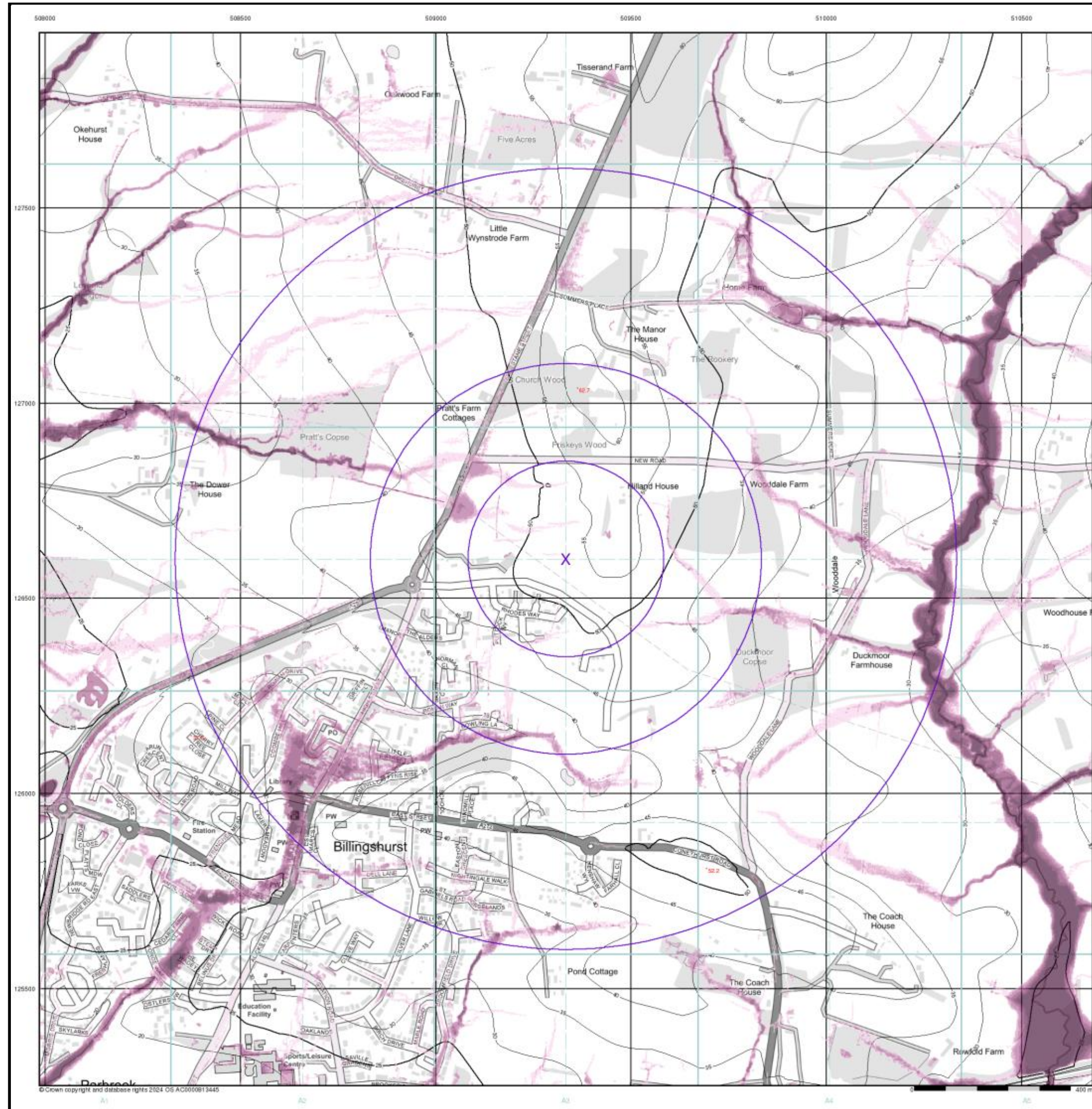
Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN

Landmark
INFORMATION GROUP

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Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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EA/NRW Surface Water 1000 Year Return Depth Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Surface Water Depth

- 0 - 0.15m
- 0.15 - 0.30m
- 0.30 - 0.60m
- 0.60 - 0.90m
- 0.90 - 1.20m
- > 1.20m

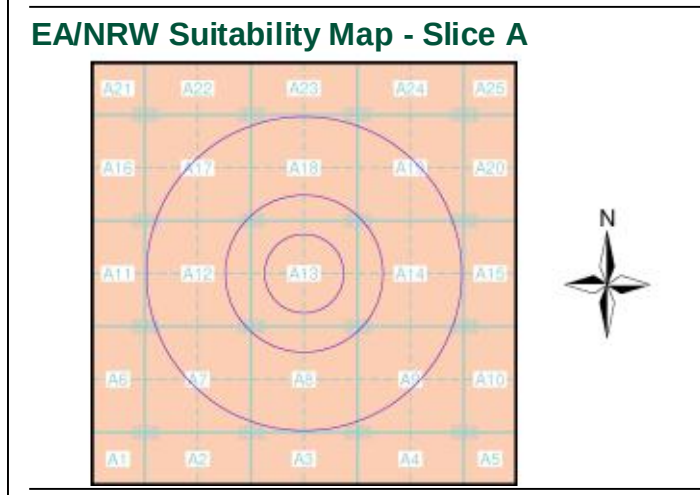
Contours (height in metres)

- Standard Contour:
- Master Contour:
- Spot Height:
- Mean Low Water
- Mean High Water

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

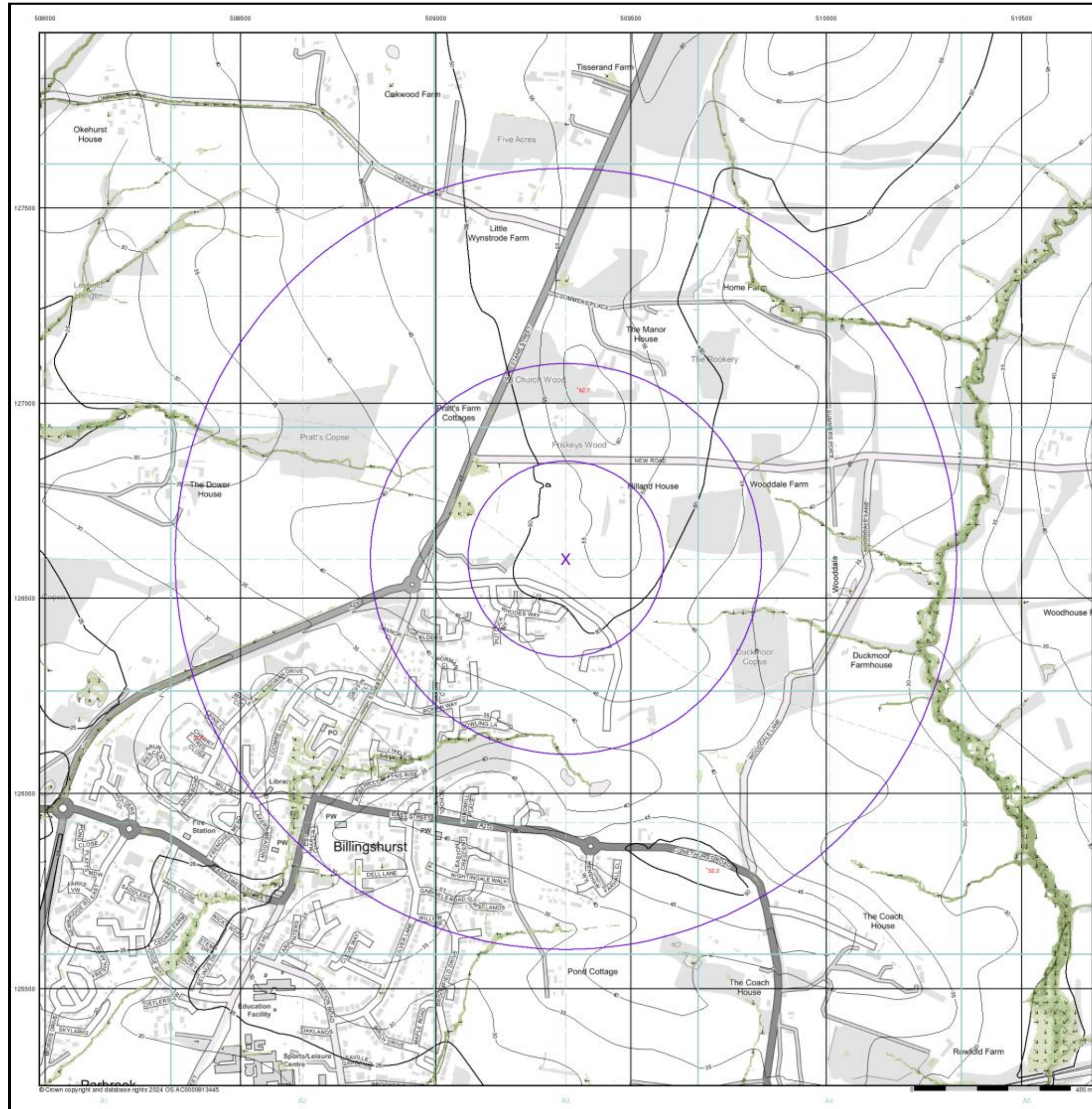


Order Details

Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN



motion

EA/NRW Surface Water 30 Year Return Velocity and Flow Direction Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Surface Water Velocity and Direction

- 0.00 - 0.25m/s
- 0.25 - 0.50m/s
- 0.50 - 1.00m/s
- 1.00 - 2.00m/s
- > 2.00m/s

Flow Direction at maximum velocity

Contours (height in metres)

- Standard Contour
- Master Contour
- Spot Height

Mean Low Water (MLW)

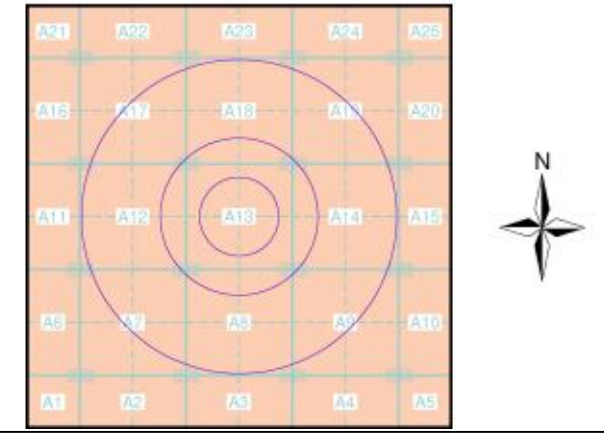
Mean High Water (MHW)

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice A

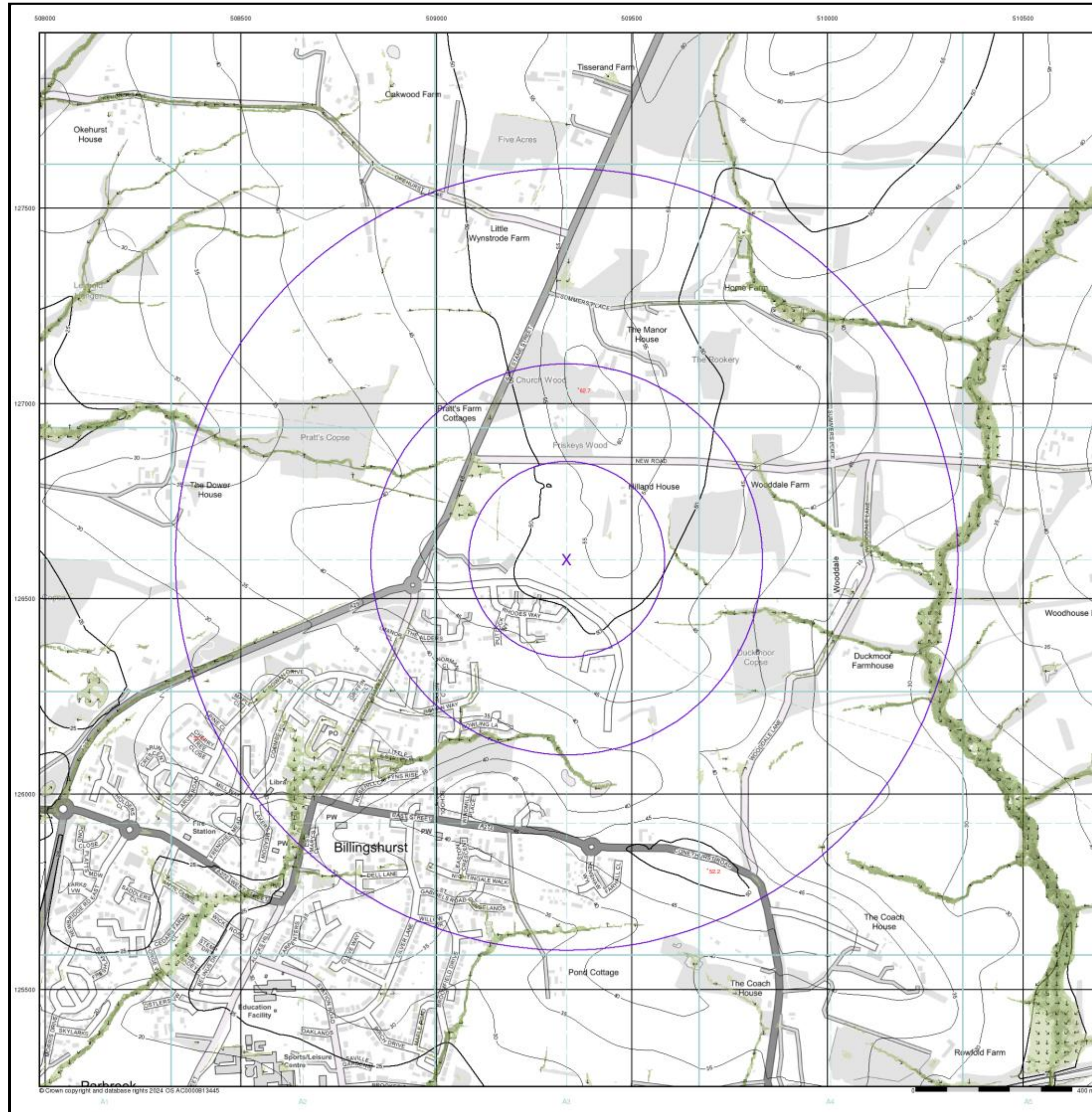


Order Details

Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

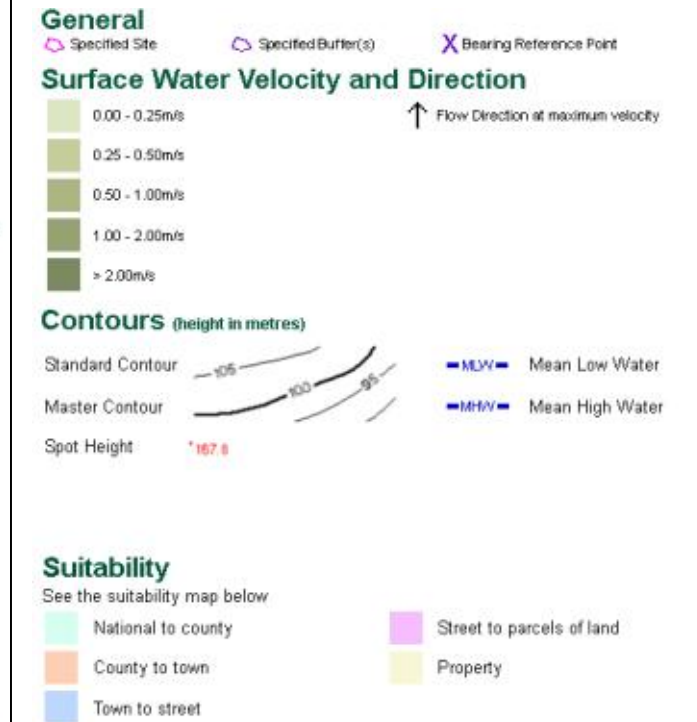
Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN

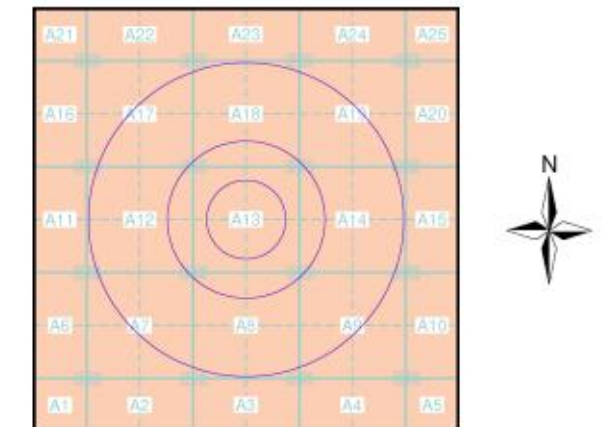


motion

EA/NRW Surface Water 100 Year Return Velocity and Flow Direction Map (1:10,000)



EA/NRW Suitability Map - Slice A



Order Details

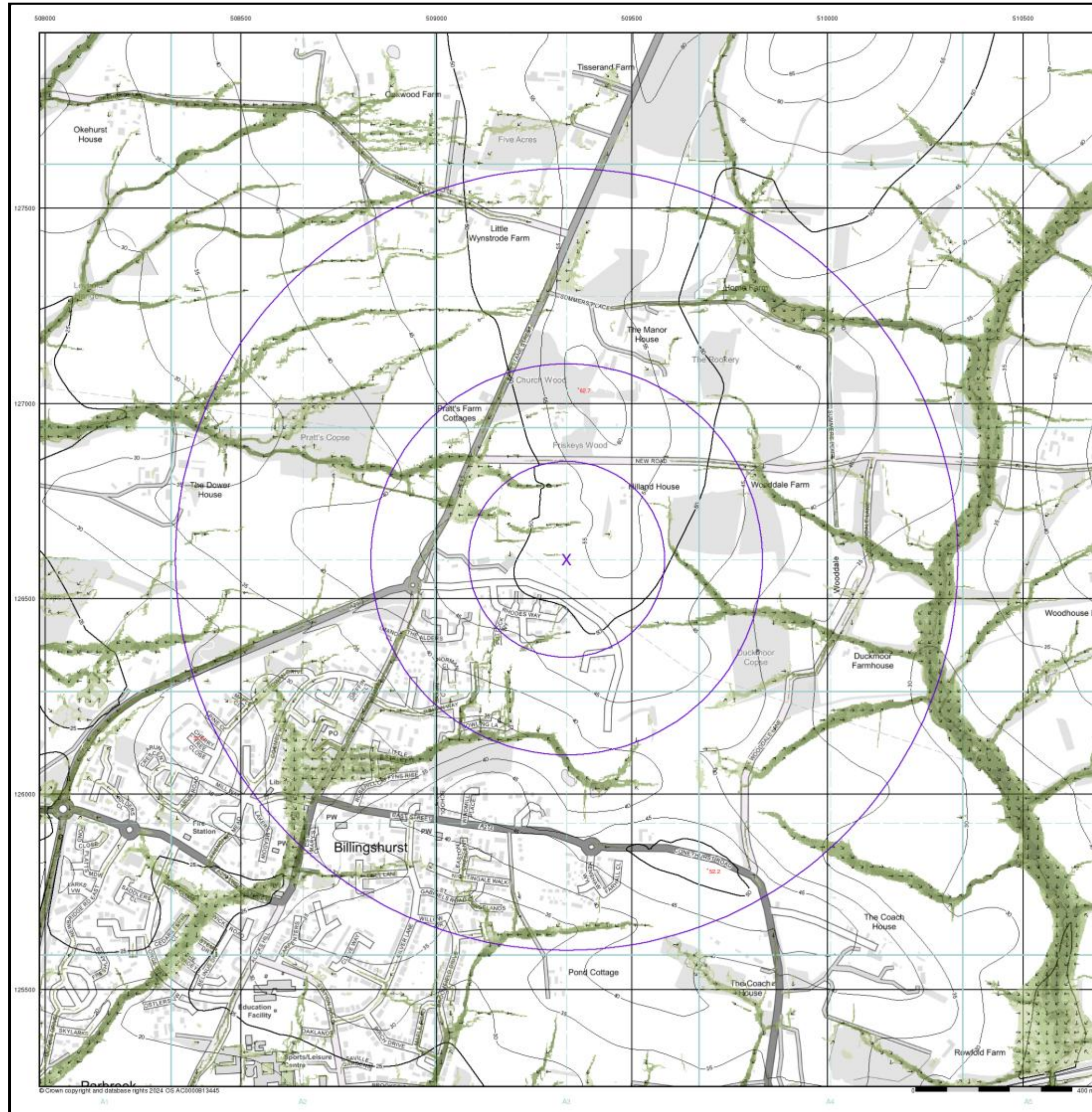
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Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN

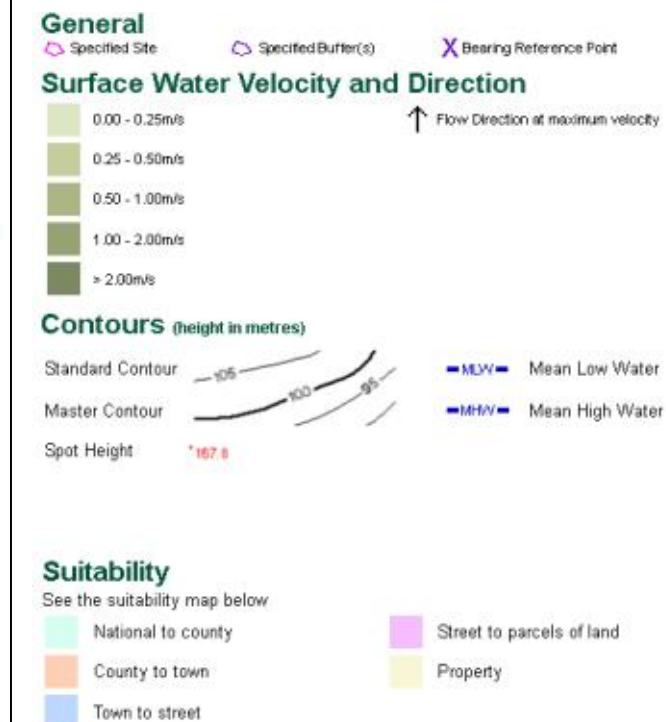
Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

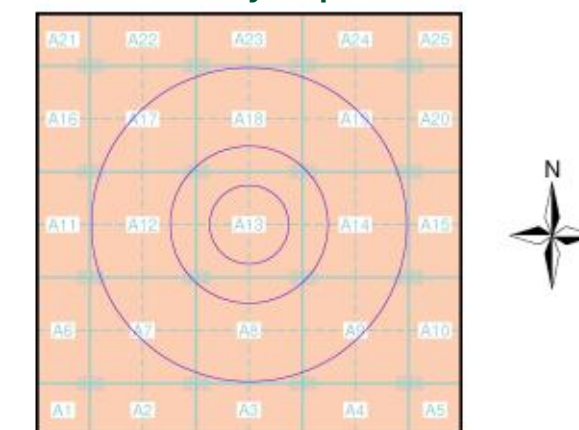


motion

EA/NRW Surface Water 1000 Year Return Velocity and Flow Direction Map (1:10,000)



EA/NRW Suitability Map - Slice A



Order Details

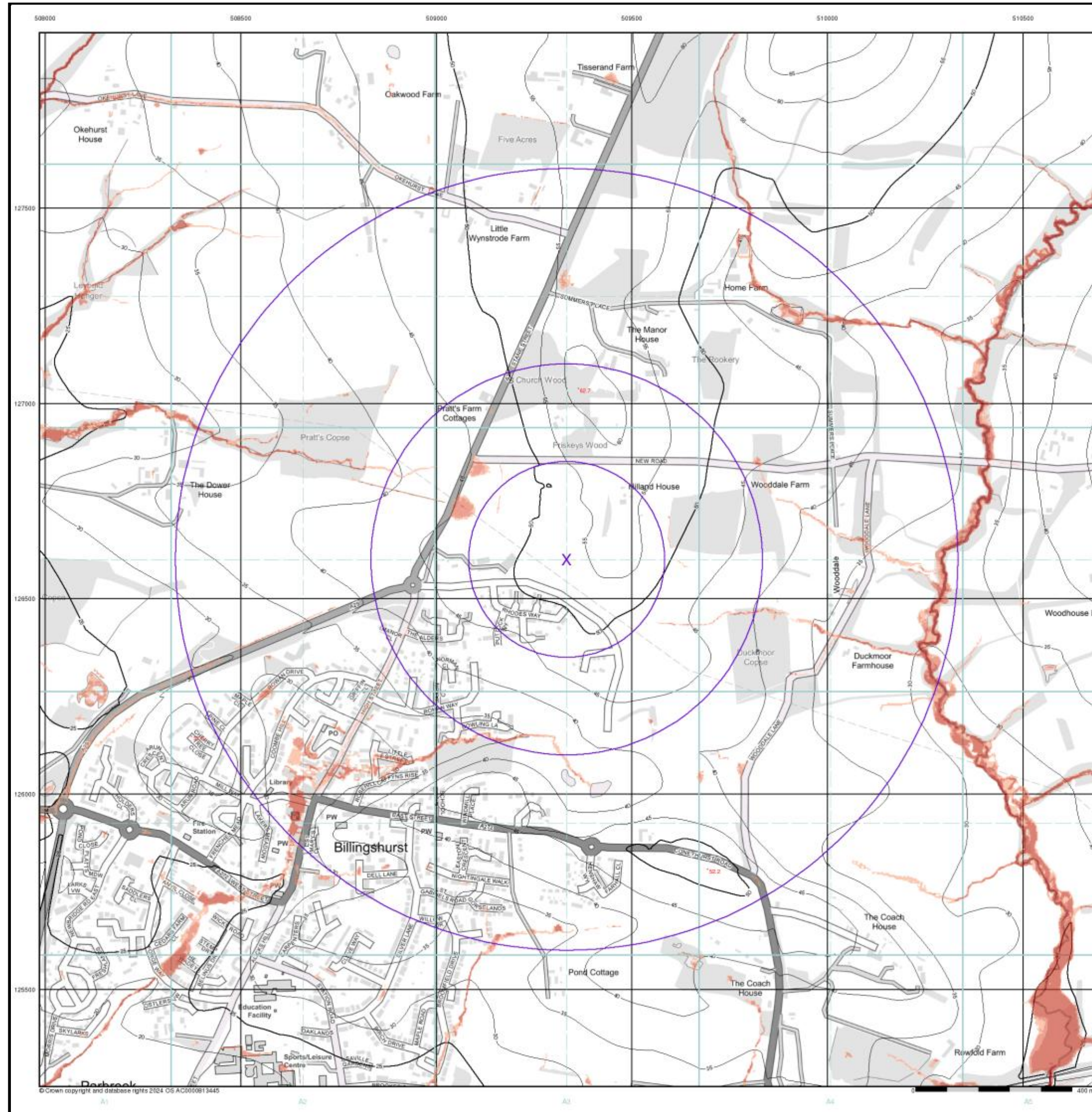
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Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN

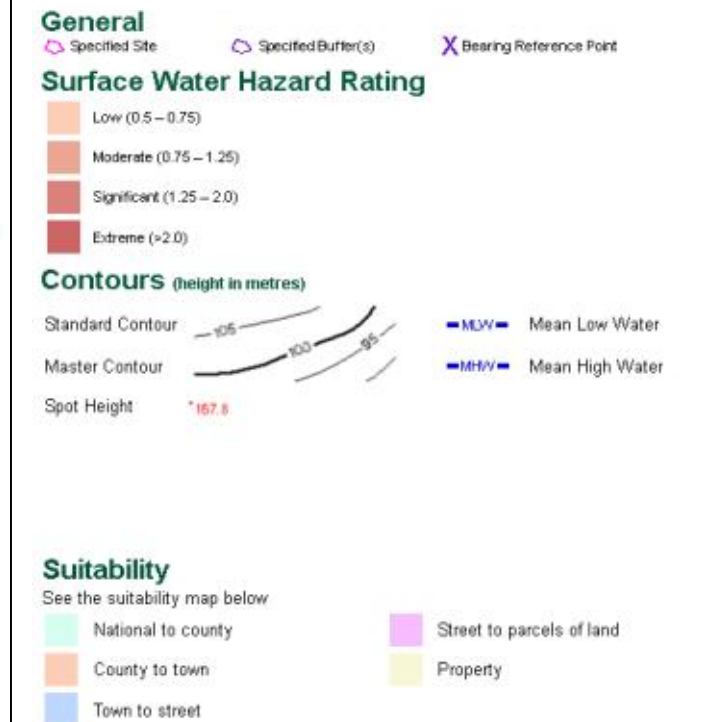
Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

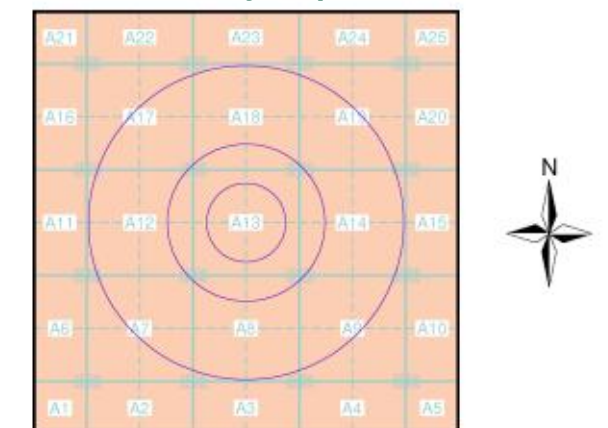


motion

EA/NRW Surface Water 30 Year Return Hazard Rating Map (1:10,000)



EA/NRW Suitability Map - Slice A



Order Details

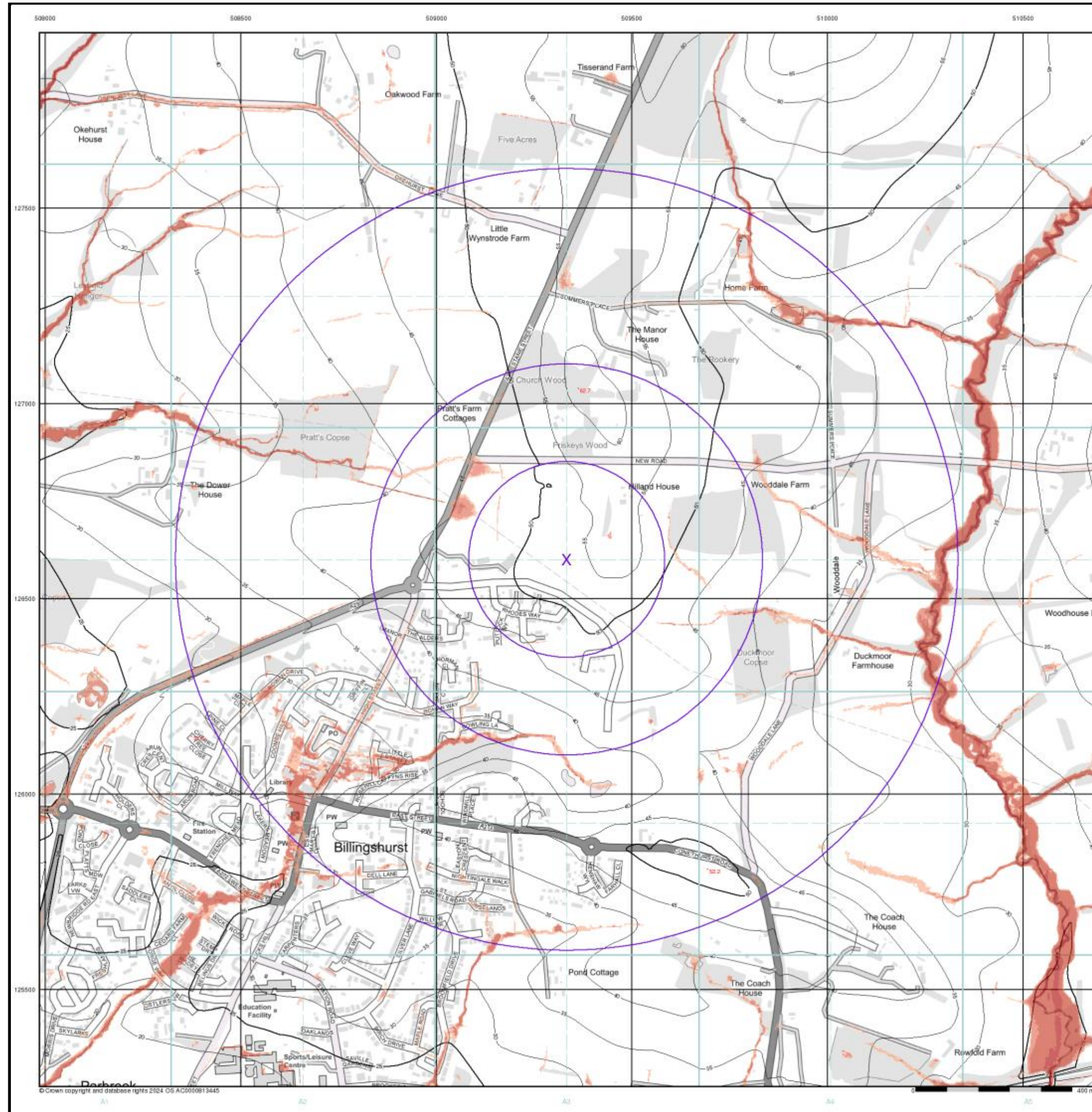
Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



motion

EA/NRW Surface Water 100 Year Return Hazard Rating Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Surface Water Hazard Rating

- Low (0.5 – 0.75)
- Moderate (0.75 – 1.25)
- Significant (1.25 – 2.0)
- Extreme (>2.0)

Contours (height in metres)

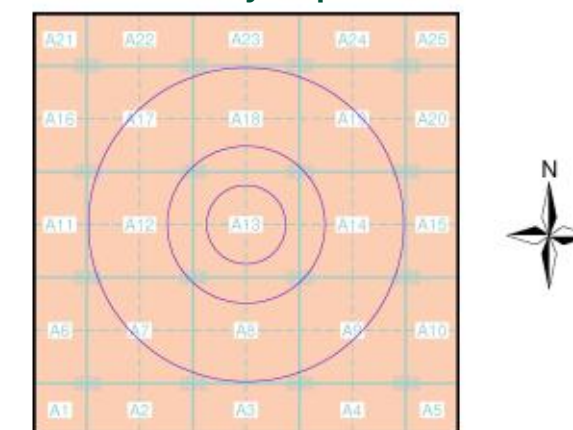
- Standard Contour
- Master Contour
- Spot Height

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice A



Order Details

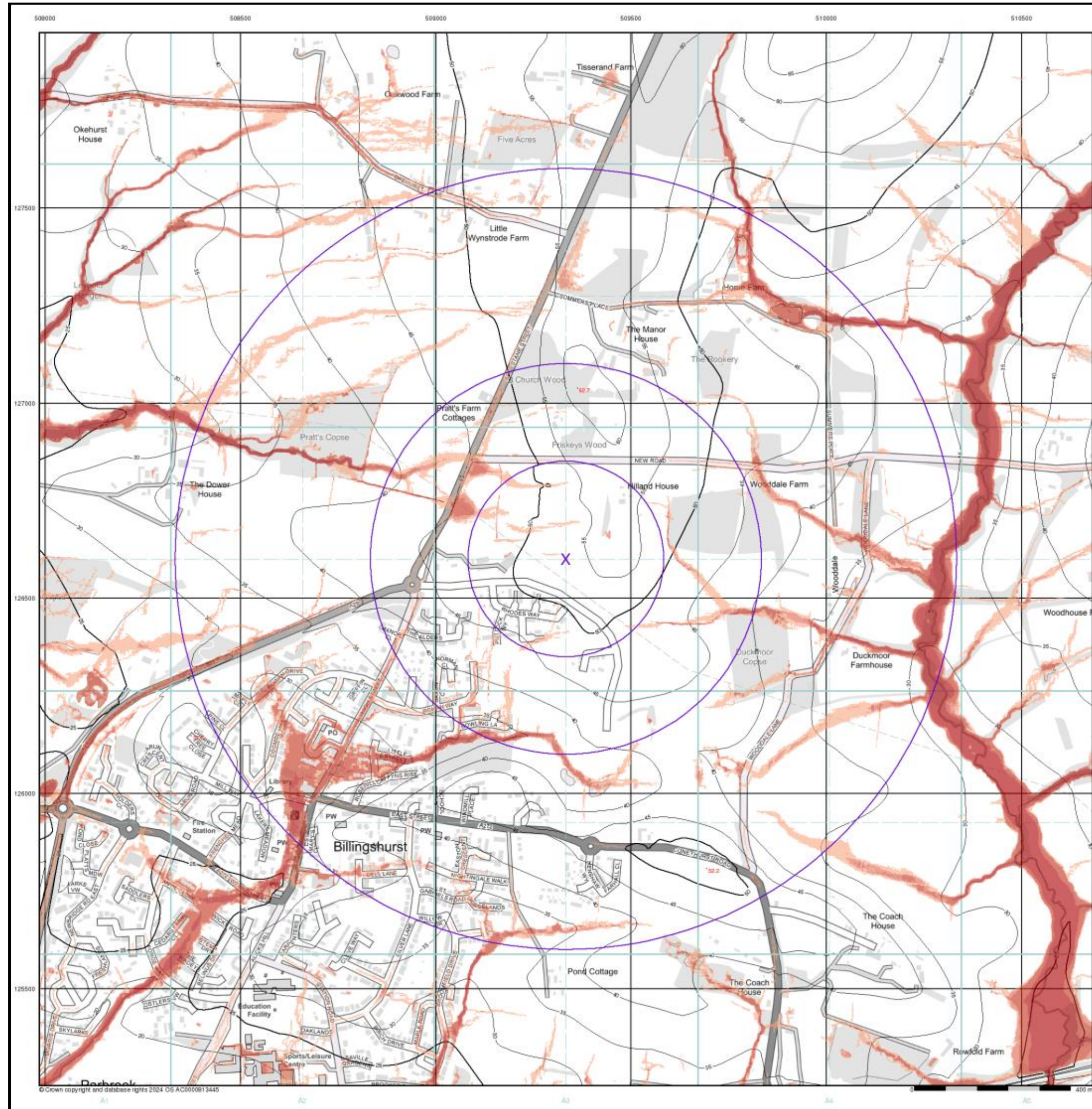
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Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



motion

EA/NRW Surface Water 1000 Year Return Hazard Rating Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Surface Water Hazard Rating

- Low (0.5 – 0.75)
- Moderate (0.75 – 1.25)
- Significant (1.25 – 2.0)
- Extreme (>2.0)

Contours (height in metres)

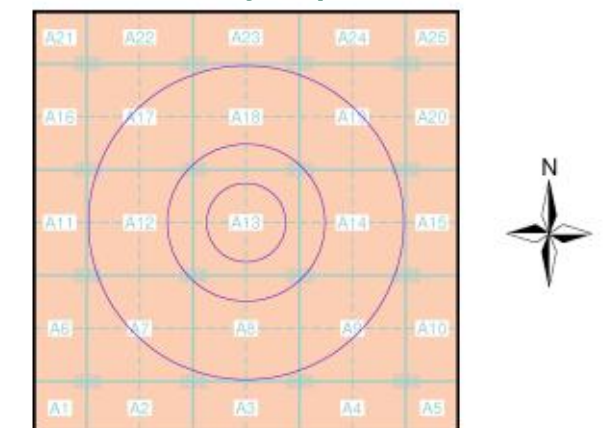
- Standard Contour
- Master Contour
- Spot Height

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice A

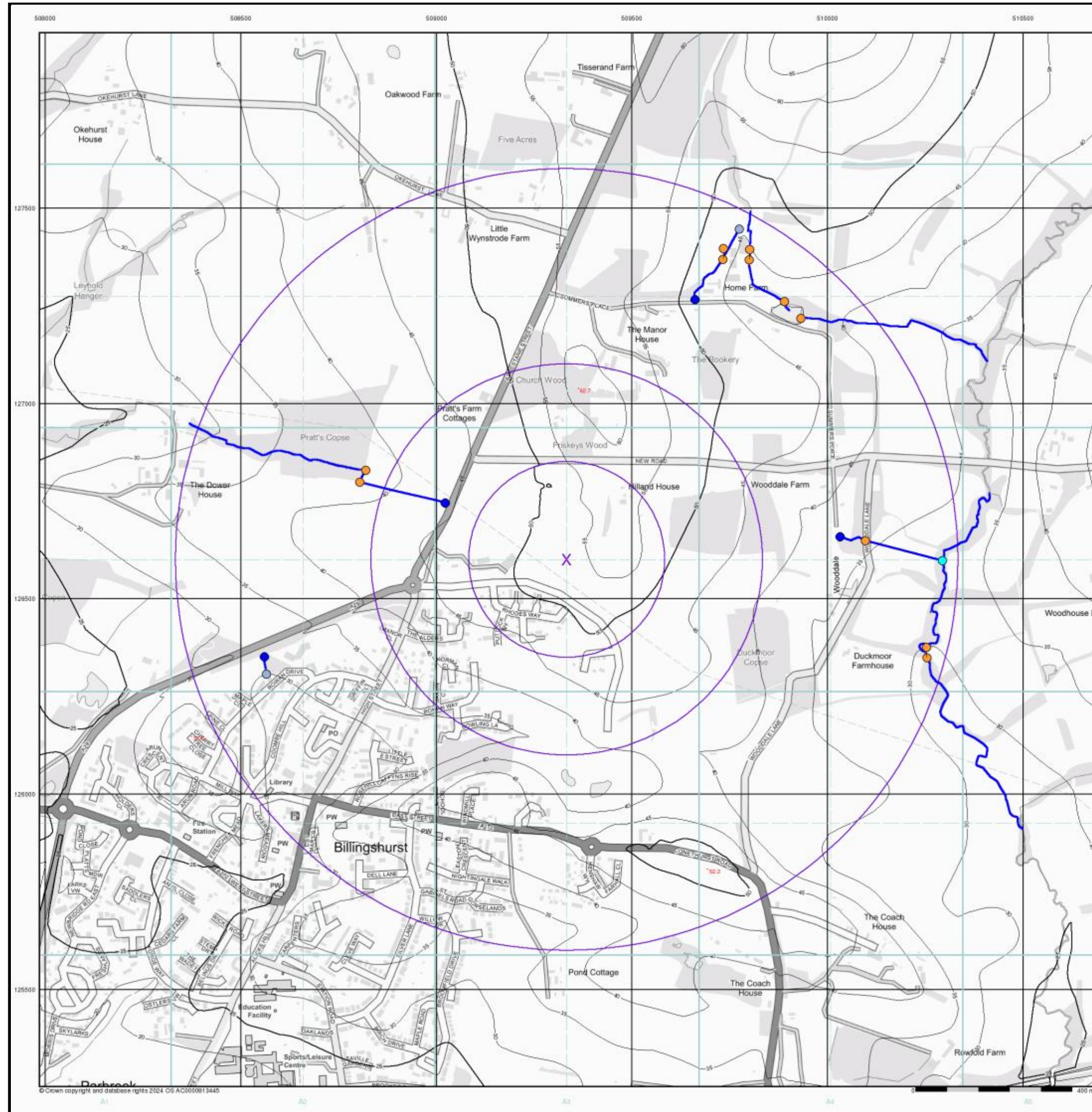


Order Details

Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN



motion

OS Water Network Lines Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

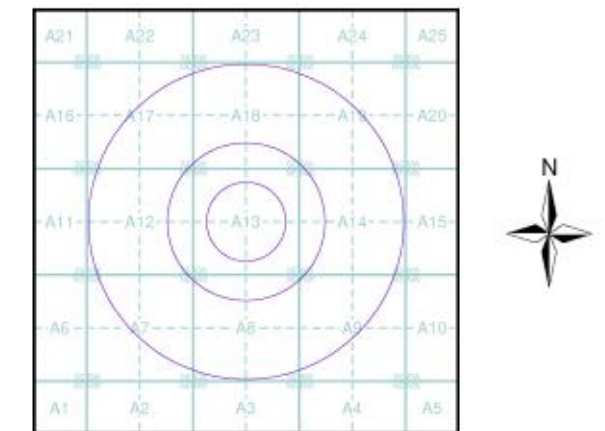
OS Water Network Data

- | | |
|--------------|-------------------------|
| Canal | Drain |
| Reservoir | Other |
| Foreshore | Lake |
| Marsh | Transfer |
| Tidal River | Lock Or Flight Of Locks |
| Inland River | Sea |
| Junction | Source |
| Outlet | Other |
| Pseudo | |

Contours (height in meters)

- Standard Contour 105 100 95
- Master Contour 100 95
- Spot Height 167.3
- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

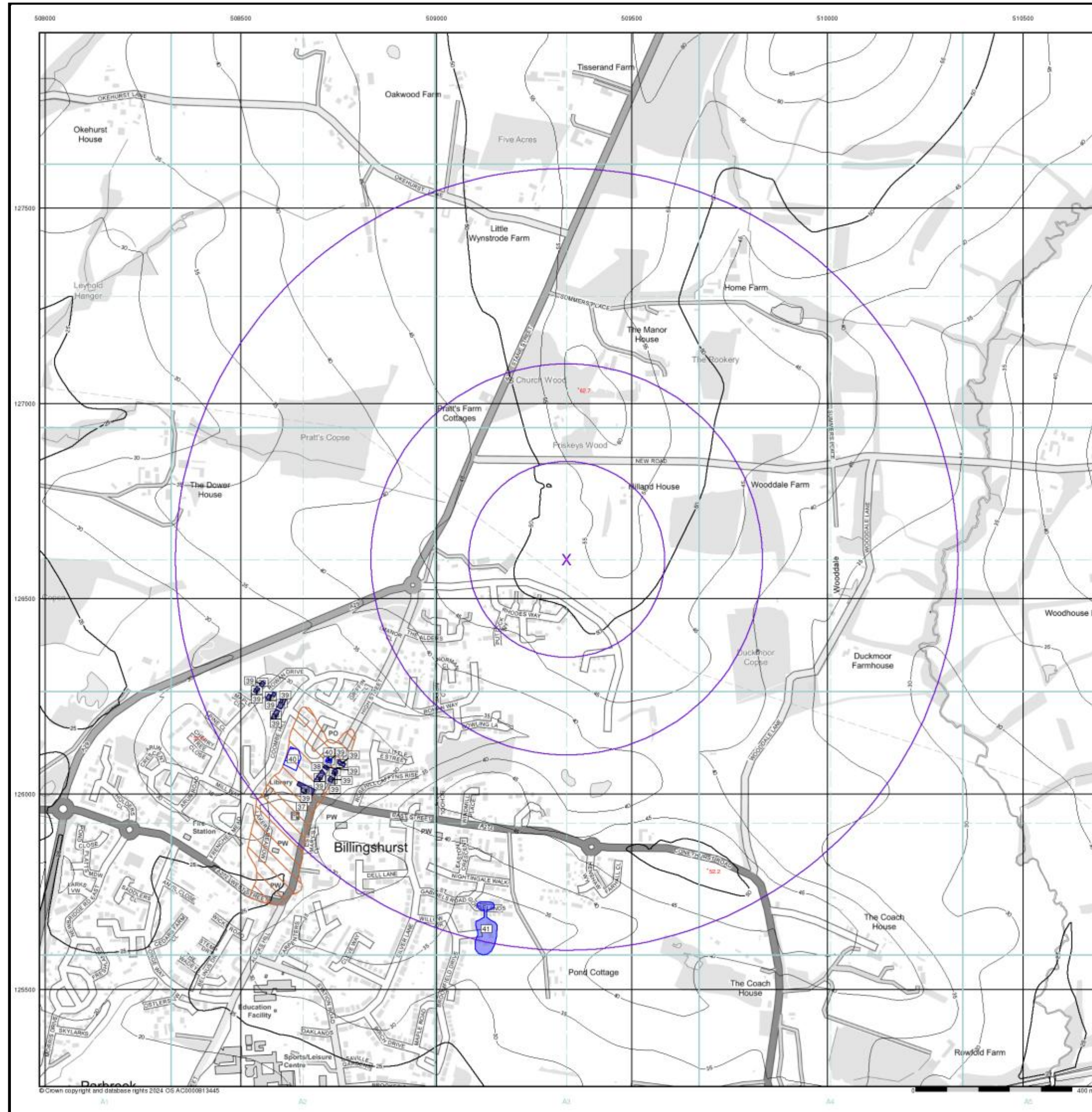
Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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EANRW Historic Flood Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID

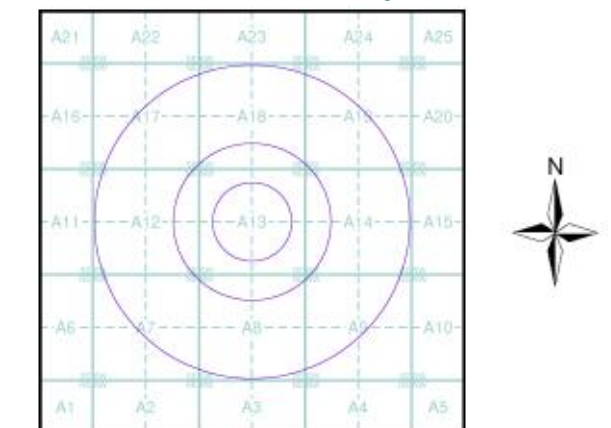
Historic Flood Events Data

- | | |
|--|--|
| Channel Capacity Exceeded (no raised defences) | Obstruction/Blockage - Culvert |
| Channel Capacity Exceeded /Surface Water | Obstruction/Blockage - Debris Screen |
| Groundwater/High Water Table | Operational Failure/ Breach of Defence |
| Local Drainage/Surface Water | Other |
| Mechanical Failure | Overtopping of Defences |
| Obstruction/Blockage - Bridge | Surface Water |
| Obstruction/Blockage - Channel | Unknown |
| Historical Flood Liabilities | |

Contours (height in metres)

- | | | |
|------------------|-------|-----------------|
| Standard Contour | 105 | Mean Low Water |
| Master Contour | 100 | Mean High Water |
| Spot Height | 167.8 | |

EANRW Historic Flood Map - Slice A



Order Details

Order Number: 360250553_1_1
Customer Ref: 1dubil 1904029
National Grid Reference: 509330, 126600
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 1000

Site Details

2 Old Hilland, Hilland Road, BILLINGSHURST, RH14 9HN

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

Appendix G

Southern Water Asset Records



(c) Crown copyright and database rights 2021 Ordnance Survey 100031673

Date: 25/01/21

Scale: 1:1000

Map Centre: 509230.126590

Data updated: 18/01/21

Our Ref: 487518 - 1

Wastewater Plan A1

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 2020 Ordnance Survey 100031673. 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.

vhldo@motion.co.uk

Billingshurst



Appendix H

Surface Water Drainage Strategy

Plot 15

15

12

18

17

FREWEN CLOSE

CLOSE

BERLAIN

Pond

Track

Mast (Telecommunication)

- Drainage Notes:
1. Pipes entering/leaving manholes shall have common soffit levels unless otherwise stated.
 2. Private covers in paved areas are to be recessed.
 3. Cover level to suit location on site. Adjustment may be required on site to best accommodate angle of entry of incoming/outgoing connections.

* Denotes flow control manhole with 450mm sump. Stated invert level does not include 450mm sump below pipe invert

Manhole Schedule				
Manhole Name	Pipe Number	Cover Level (m)	Invert Level (m)	Pipe Diameter (mm)
PH3-S1	1.000	52.350	48.825	225
PH3-S2	1.001	52.500	48.700	225
PH3-S3	2.000	52.400	50.900	225
PH3-S4	1.002	52.600	48.675	225
PH3-S5	1.003	52.300	48.625	300
PH3-S6	4.000	51.500	50.000	225
PH3-S7	1.005	50.950	48.175	450
PH3-S8	1.007	50.200	48.125	450
PH3-S9	5.000	52.200	50.700	225
PH3-S10	5.002	50.775	49.275	225
PH3-S11	5.003	50.000	48.500	300
PH3-S12*	1.008	49.662	47.200	225
PH3-S14	1.009	48.597	46.750	225
PH3-S15	1.010	48.223	46.400	225
Ex-SWMH54	-	47.156	45.925	225

Notes

1. All levels and dimensions are to be checked on site before any work commences. All dimensions are in metres unless stated otherwise.
2. This drawing has been based upon survey information supplied by Hollis and Motion cannot guarantee the accuracy of the data provided.
3. Any discrepancies should be reported to the architect and/or engineer immediately, so that clarification can be sought prior to the commencement of works.
4. This drawing should be read in conjunction with all other relevant architect and engineering details, drawings and specification.
5. Land ownership boundary has been taken from Ian C King Associates drawing U1-SLP-01-D.
6. All works to adopted system are to be carried out in accordance with Water UK - Design and Construction Guidance and Thames Water Local practice.
7. All private rainwater pipes and internal foul soil pipes are to be set out in accordance with the architect layout.
8. Pipes and channels constructed within private drainage to be either:
 - Concrete to BS EN 1916 & BS 5911
 - Extra Strength Vitrified Clay to BS EN 295
 - Unplasticised PVC to BS EN 1401 (Not to be used in adoptable drainage and beneath basement slab)
 - Ductile Iron to BS EN 598. Ductile Iron to BS EN 598. For use within pipe caps and ground beams. Ductile iron pipes to have a cement mortar lining.
8. All private drainage is to be 100mmØ laid at a minimum gradient of 1 in 80, or 1 in 40 where no toilets are connected, for foul drains and 1 in 100 for surface water, unless otherwise stated.
9. 350mm minimum cover is to be provided for pipes laid in soft/paved areas, and 500mm minimum cover is to be provided for pipes laid beneath roads/driveways unless not practical. This is based on a uPVC system for private surface water and foul drainage.
10. All pipes shall be laid soffit to soffit with outgoing pipes unless otherwise stated.
11. All private drainage to be in accordance with the Building Regulations Approved Document 'H' (2010 edition). It is the contractors responsibility to ensure compliance with these regulations.
12. Shallow private drainage may require protection using concrete surround or paving slabs bridging the trench, subject to NHBC Inspector's requirements. In areas where 450mm cover to private sewer is not achievable, protective measures should be undertaken as above.

Legend

- Land Ownership Boundary
- Phase 3 Boundary (Units 17-18)
- Existing Phase 1 Surface Water Drainage Network
- New Surface Water Gravity Pipe
- New Surface Water Manhole
- New SW Inspection Chamber [Ø450mm/Ø600mm]
- New Surface Water Oil Separator
- Linear Drainage Channel
- New Surface Water Headwall
- Geocellular Crates
- Pervious Paving Type C (Non - infiltration)
- Tree Root Protection Area
- New SW Pond/Basin/Swale
- Rodding Eye

P01	First Issue	JB	AU	N3	02/04/2026
Rev.	Description	Drm	Chk	App	Date

Drawing Status:

FOR PLANNING
NOT FOR CONSTRUCTION

motion
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Client:

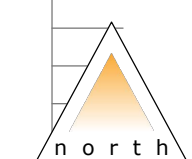
Project:
Trade Park Billingshurst
Stane Street, Billingshurst

Title:
Phase 3 Works - Units 17-18
Surface Water Drainage Strategy

Scale: 1:500 (@ A1)

Drawing:
1904029-P3-0510

Revision:
P01



Ex-SWMH54
CL 47.156
IL 45.925

126700 N

126675 N

126600 N

126575 N

126550 N

126525 N

126500 N

Swale
24 x 0.6 x 0.9m deep
Side Slope = 1:3
Long Slope = 1:25
Base Level = 49.850
Total Storage = 71m³

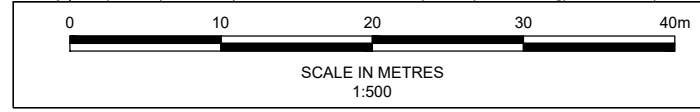
Flow Control Chamber
Flow restricted to 7.5 l/s

Cellular Storage 2
24 x 5 x 1.5m deep
Total Storage = 167.5m³

Pervious Paving (Type C non-infiltration)
Minimum 450mm thick Type 3 Sub-base
Total volume = 283m³ x 0.45m x 0.3 = 38m³

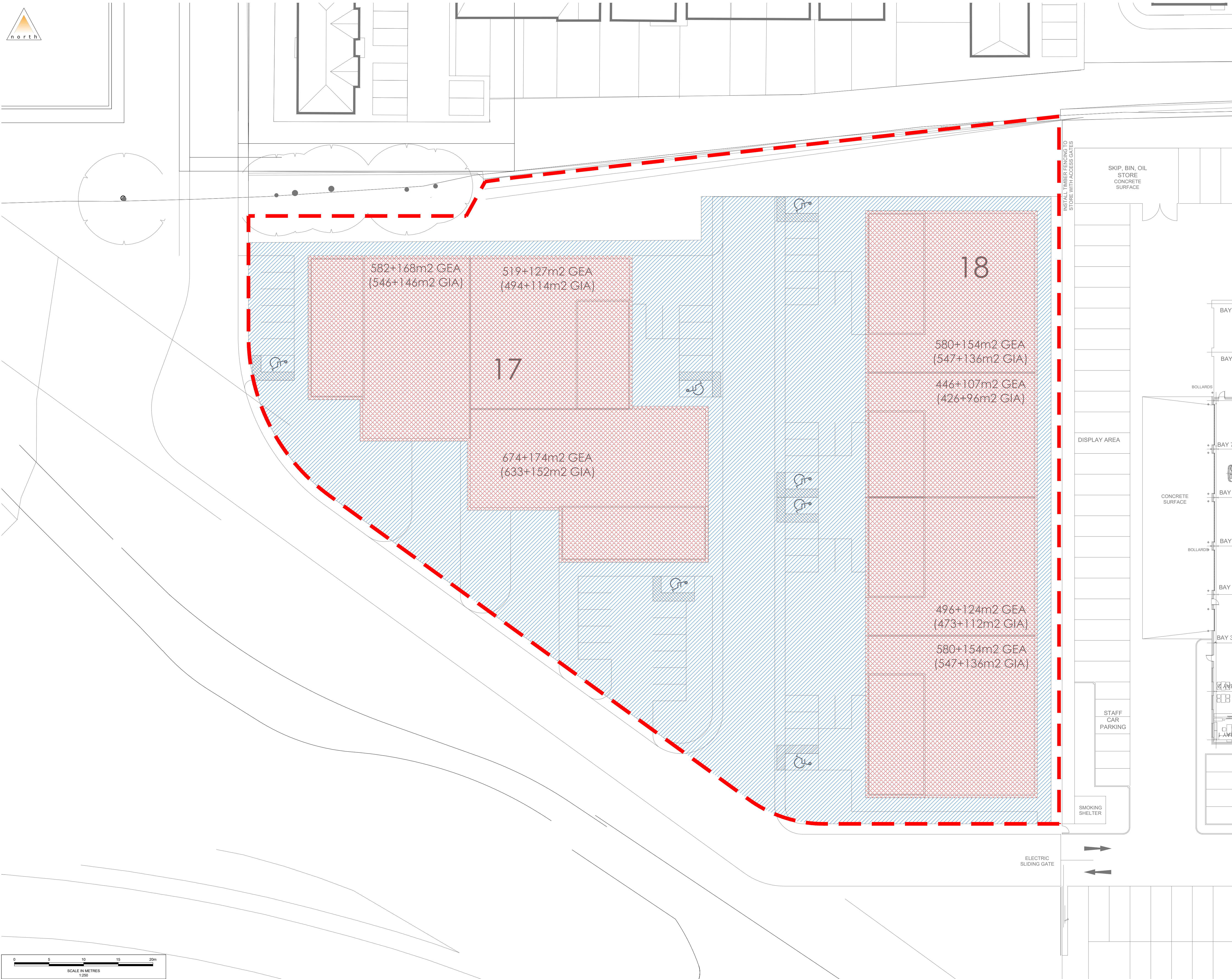
Cellular Storage 2
56 x 10 x 1.0m deep
Total Storage = 532m³

overhead
electricity cables
and pylon



Appendix I

Impermeable Area Plan



Legend	
	Phase 3 Boundary (Units 17 - 18)
	Impermeable Areas - Roofs Total Area - 3,877 m ² [0.39 ha]
	Impermeable Areas - Roads/Paving Total Area - 3,997 m ² [0.40 ha]

P01	First Issue	LL	MH	NJ	01/04/2026
Rev.	Description	Drm	Chk	App	Date

Drawing Status: **FOR PLANNING**
NOT FOR CONSTRUCTION

motion
Guildford - Reading - London
www.motion.co.uk

Client: **DUNMOORE**

Project: **Stane Street, Billingshurst**

Title: **Phase 3 Works
Units 17 - 18
Impermeable Areas Plan**

Scale: 1:250 (@ A1)

Drawing: **1904029-P3-9002** Revision: **P01**

C:\Users\jlorett\Motion\GarfSite - 1.dwg 1904029 Drawings\1904029-P3-9002-P01 [Phase 3 - Impermeable Areas].dwg

Appendix J

Greenfield Runoff Rate Calculations

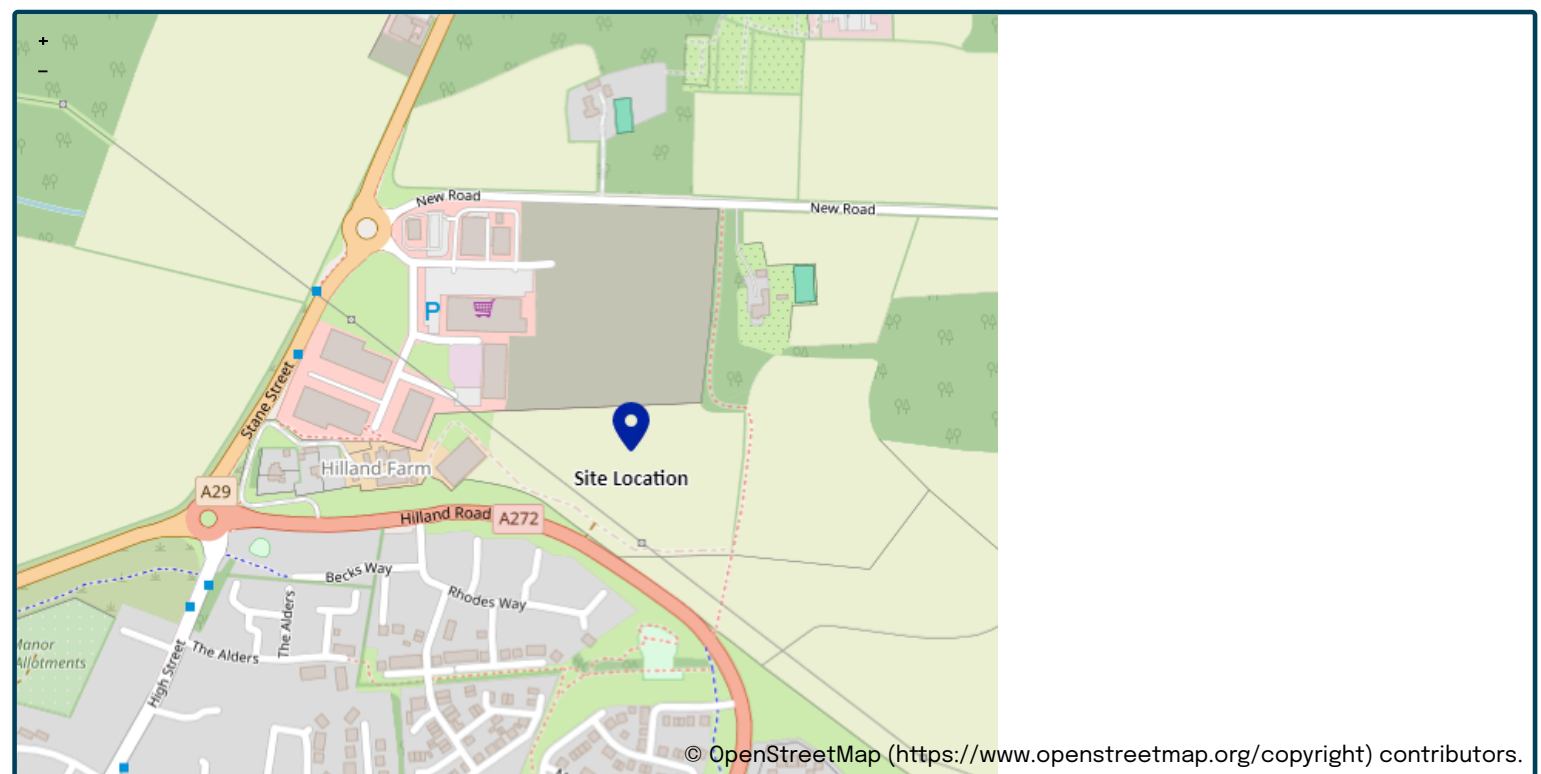
This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance “Rainfall runoff management for developments”, SC030219 (2013), the SuDS Manual C753 (CIRIA, 2015) and the non-statutory standards for SuDS (Defra, 2015). 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	02/04/2026
Calculated by	
Reference	
Model version	2.2.3

Location

Site name	Phase 3 - Units 17 & 18
Site location	Billingshurst



Site easting (British National Grid)	509353
Site northing (British National Grid)	126588

Site details

Total site area (ha)	0.9	ha
----------------------	----------------------------------	----

Greenfield runoff

Method

Method	FEH statistical (2025)
--------	------------------------

FEH statistical (2025)

	<u>My value</u>	<u>Map value</u>
SAAR9120 (mm)	824	mm
BFIHOST19scaled	0.262	
QMed-QBar conversion	1.136	1.136
QMed (l/s)	6.6	l/s
QBar (FEH statistical 2025) (l/s)	7.5	l/s

Growth curve factors

	<u>My value</u>	<u>Map value</u>
Hydrological region	7	7
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	FEH statistical (2025)
Flow rate 1 year (l/s)	6.4
Flow rate 2 year (l/s)	6.6
Flow rate 10 years (l/s)	12.2
Flow rate 30 years (l/s)	17.3
Flow rate 100 years (l/s)	24.0
Flow rate 200 years (l/s)	28.2

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/>). 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>). 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 K

InfoDrainage Modelling Calculations

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18	Date: 01/04/2026		
	Designed by: AU	Checked by: AU	Approved By: NJ
Report Details: Type: Junctions Storm Phase: Storm	Company Address: 84 North Street Guildford GU1 4AU		

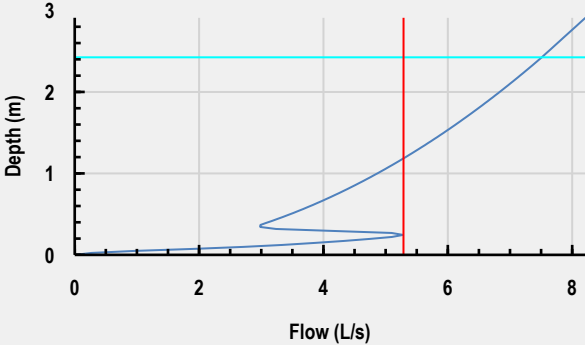


Name	Junction Type	Easting (m)	Northing (m)	Cover Level (m)	Depth (m)	Invert Level (m)	Chamber Shape	Diameter (m)
Ex-SWMH54	Manhole	509157.246	126652.306	47.156	1.231	45.925	Circular	0.600
PH3-S15	Manhole	509180.333	126645.088	48.223	1.823	46.400	Circular	0.600
PH3-S14	Manhole	509201.284	126645.416	48.597	1.847	46.750	Circular	1.200
PH3-S2	Manhole	509323.505	126568.667	52.500	3.800	48.700	Circular	1.200
PH3-S8	Manhole	509247.232	126617.617	50.200	2.075	48.125	Circular	1.350
PH3-S12	Manhole	509246.515	126633.648	49.662	2.462	47.200	Circular	1.350
PH3-S1	Manhole	509324.338	126634.252	52.350	3.525	48.825	Circular	1.200
PH3-S5	Manhole	509304.005	126569.372	52.300	3.675	48.625	Circular	1.350
PH3-S9	Manhole	509311.538	126643.972	52.200	1.500	50.700	Circular	1.200
PH3-S10	Manhole	509272.446	126638.660	50.775	1.500	49.275	Circular	1.200
PH3-S11	Manhole	509252.377	126638.739	50.000	1.500	48.500	Circular	1.200
PH3-S7	Manhole	509269.720	126595.799	50.950	2.775	48.175	Circular	1.350
PH3-S3	Manhole	509316.952	126600.570	52.400	1.500	50.900	Circular	1.200
PH3-S4	Manhole	509316.950	126569.051	52.600	3.925	48.675	Circular	1.200
PH3-S6	Manhole	509286.073	126596.822	51.500	1.500	50.000	Circular	1.200

Name	Lock
Ex-SWMH54	None
PH3-S15	None
PH3-S14	None
PH3-S2	None
PH3-S8	None
PH3-S12	None
PH3-S1	None
PH3-S5	None
PH3-S9	None
PH3-S10	None
PH3-S11	None
PH3-S7	None
PH3-S3	None
PH3-S4	None
PH3-S6	None

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Junctions Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			

Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
PH3-S15	Outlet	1.010	Free Discharge
PH3-S14	Outlet	1.009	Free Discharge
PH3-S2	Outlet	1.002	Free Discharge
PH3-S8	Outlet	1.007	Free Discharge
PH3-S12	Outlet	1.008	Hydro-Brake®
	Invert Level (m)	47.200	
	Design Depth (m)	2.425	
	Design Flow (L/s)	7.5	
	Objective	Minimise Upstream Storage Requirements	
	Application	Surface Water Only	
	Sump Available	☐	
	Unit Reference	CHE-0101-7500-2425-7500	
			
PH3-S1	Outlet	1.000	Free Discharge
PH3-S5	Outlet	1.004	Free Discharge
PH3-S9	Outlet	5.000	Free Discharge
PH3-S10	Outlet	5.002	Free Discharge
PH3-S11	Outlet	5.003	Free Discharge
PH3-S7	Outlet	1.005	Free Discharge
PH3-S3	Outlet	2.000	Free Discharge
PH3-S4	Outlet	1.003	Free Discharge
PH3-S6	Outlet	4.000	Free Discharge

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18	Date: 01/04/2026		
	Designed by: AU	Checked by: AU	Approved By: NJ
Report Details: Type: Stormwater Controls Storm Phase: Storm	Company Address: 84 North Street Guildford GU1 4AU		





Porous Paving

Type : Porous Paving

Dimensions	
Exceedance Level (m)	52.000
Depth (m)	0.680
Base Level (m)	51.320
Paving Layer Depth (mm)	230
Membrane Percolation (m/hr)	3.0
Porosity (%)	30
Length (m)	27.199
Long. Slope (1:X)	150.00
Width (m)	10.415
Total Volume (m³)	38.242

Advanced	
Conductivity (m/hr)	350.0

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18	Date: 01/04/2026		
	Designed by: AU	Checked by: AU	Approved By: NJ
Report Details: Type: Stormwater Controls Storm Phase: Storm	Company Address: 84 North Street Guildford GU1 4AU		





Swale

Type : Swale

Swale	
Exceedance Level (m)	50.750
Depth (m)	0.900
Base Level (m)	49.850
Top Width (m)	6.000
Side Slope (1:X)	3.00
Base Width (m)	0.600
Freeboard (mm)	0
Length (m)	24.000
Long. Slope (1:X)	25.00
Filtration Rate (m/hr)	0.0
Friction Scheme	Manning's n
n	0.035
Total Volume (m³)	71.280

Advanced	
Swale	
Porosity (%)	100

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18	Date: 01/04/2026		
	Designed by: AU	Checked by: AU	Approved By: NJ
Report Details: Type: Stormwater Controls Storm Phase: Storm	Company Address: 84 North Street Guildford GU1 4AU		





Cellular Storage 1

Type : Cellular Storage

Dimensions	
Exceedance Level (m)	49.725
Depth (m)	1.000
Base Level (m)	48.725
Number of Crates Long	56
Number of Crates Wide	10
Number of Crates High	2
Porosity (%)	95
Crate Length (m)	1
Crate Width (m)	1
Crate Height (m)	0.5
Total Volume (m³)	532.000



Cellular Storage 2

Type : Cellular Storage

Dimensions	
Exceedance Level (m)	49.650
Depth (m)	1.500
Base Level (m)	48.150
Number of Crates Long	24
Number of Crates Wide	5
Number of Crates High	3
Porosity (%)	95
Crate Length (m)	1
Crate Width (m)	1
Crate Height (m)	0.5
Total Volume (m³)	171.000

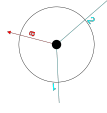
Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Manhole Schedule Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			

Setting Out Information	
Easting Origin (m)	0.000
Northing Origin (m)	0.000
Orientation (Degrees anticlockwise from North)	0

Name	Cover Level (m) Invert Level (m)	Manhole Schematic	Manhole Size (m)	Connection Details				Type		
Coordinates (m)	Depth (m)			Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type	Flow Control Type	Flow Control IL (m)
Intersection (m)				Outgoing Connections				Cover		
Ex-SWMH54	47.156 45.925		Diameter / Length: 0.600	{1} 1.010	Pipe	45.925	Diam/Width:225	Manhole		
E:509157.245 N:126652.310	1.231									
IP E:509157.245 IP N:126652.310								Not Applicable		
PH3-S15	48.223 46.400		Diameter / Length: 0.600	{1} 1.009	Pipe	46.400	Diam/Width:225	Manhole	{a} Free Discharge	
E:509180.332 N:126645.091	1.823									
IP E:509180.332 IP N:126645.091				{a} 1.010	Pipe	46.400	Diam/Width:225	Not Applicable		
PH3-S14	48.597 46.750		Diameter / Length: 1.200	{1} 1.008	Pipe	46.750	Diam/Width:225	Manhole	{a} Free Discharge	
E:509201.283 N:126645.420	1.847									
IP E:509201.283 IP N:126645.420				{a} 1.009	Pipe	46.750	Diam/Width:225	Not Applicable		
PH3-S2	52.500 48.700		Diameter / Length: 1.200	{1} 1.001	Pipe	48.700	Diam/Width:225	Manhole	{a} Free Discharge	
E:509323.504 N:126568.671	3.800									
IP E:509323.504 IP N:126568.671				{a} 1.002	Pipe	48.700	Diam/Width:225	Not Applicable		
PH3-S8	50.200 48.125		Diameter / Length: 1.350	{1} 1.006	Pipe	48.125	Diam/Width:450	Manhole	{a} Free Discharge	
E:509247.231 N:126617.620	2.075									
IP E:509247.231 IP N:126617.620				{a} 1.007	Pipe	48.125	Diam/Width:450	Not Applicable		

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Manhole Schedule Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			

Setting Out Information	
Easting Origin (m)	0.000
Northing Origin (m)	0.000
Orientation (Degrees anticlockwise from North)	0

Name	Cover Level (m) Invert Level (m)	Manhole Schematic	Manhole Size (m)	Connection Details				Type		
Coordinates (m)	Depth (m)			Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type	Flow Control Type	Flow Control IL (m)
Intersection (m)				Outgoing Connections				Cover		
PH3-S12	49.662 47.200		Diameter / Length: 1.350	{1} 1.007	Pipe	47.200	Diam/Width:450	Manhole	{a} Hydro-Brake®	47.200
E:509246.514 N:126633.652	2.462			{2} 5.003	Pipe	47.200	Diam/Width:300			
IP E:509246.514 IP N:126633.652				{a} 1.008	Pipe	47.200	Diam/Width:225	Not Applicable		
PH3-S1	52.350 48.825		Diameter / Length: 1.200					Manhole	{a} Free Discharge	
E:509324.337 N:126634.255	3.525									
IP E:509324.337 IP N:126634.255				{a} 1.000	Pipe	48.825	Diam/Width:225	Not Applicable		
PH3-S5	52.300 48.625		Diameter / Length: 1.350	{1} 1.003	Pipe	48.625	Diam/Width:300	Manhole	{a} Free Discharge	
E:509304.004 N:126569.376	3.675			{2} 3.000	Pipe	48.625	Diam/Width:225			
IP E:509304.004 IP N:126569.376				{a} 1.004	Pipe	48.625	Diam/Width:375	Not Applicable		
PH3-S9	52.200 50.700		Diameter / Length: 1.200					Manhole	{a} Free Discharge	
E:509311.537 N:126643.975	1.500									
IP E:509311.537 IP N:126643.975				{a} 5.000	Pipe	50.700	Diam/Width:225	Not Applicable		

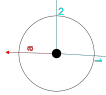
Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
Report Details: Type: Manhole Schedule Storm Phase: Storm		Designed by: AU	Checked by: AU		Approved By: NJ
		Company Address: 84 North Street Guildford GU1 4AU			

Setting Out Information	
Easting Origin (m)	0.000
Northing Origin (m)	0.000
Orientation (Degrees anticlockwise from North)	0

Name	Cover Level (m) Invert Level (m)	Manhole Schematic	Manhole Size (m)	Connection Details				Type		
Coordinates (m)	Depth (m)			Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type	Flow Control Type	Flow Control IL (m)
Intersection (m)				Outgoing Connections				Cover		
PH3-S10	50.775 49.275		Diameter / Length: 1.200	{1} 5.001	Pipe	49.275	Diam/Width:225	Manhole	{a} Free Discharge	
E:509272.445 N:126638.664	1.500			{a} 5.002	Pipe	49.275	Diam/Width:225	Not Applicable		
IP E:509272.445 IP N:126638.664										
PH3-S11	50.000 48.500		Diameter / Length: 1.200	{1} 5.002	Pipe	48.500	Diam/Width:225	Manhole	{a} Free Discharge	
E:509252.376 N:126638.743	1.500			{a} 5.003	Pipe	48.500	Diam/Width:300	Not Applicable		
IP E:509252.376 IP N:126638.743										
PH3-S7	50.950 48.175		Diameter / Length: 1.350	{1} 1.004	Pipe	48.175	Diam/Width:375	Manhole	{a} Free Discharge	
E:509269.719 N:126595.802	2.775			{2} 4.000	Pipe	48.175	Diam/Width:225			
IP E:509269.719 IP N:126595.802				{a} 1.005	Pipe	48.175	Diam/Width:450	Not Applicable		
PH3-S3	52.400 50.900		Diameter / Length: 1.200					Manhole	{a} Free Discharge	
E:509316.952 N:126600.573	1.500			{a} 2.000	Pipe	50.900	Diam/Width:225	Not Applicable		
IP E:509316.952 IP N:126600.573										

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Manhole Schedule Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			

Setting Out Information	
Easting Origin (m)	0.000
Northing Origin (m)	0.000
Orientation (Degrees anticlockwise from North)	0

Name	Cover Level (m) Invert Level (m)	Manhole Schematic	Manhole Size (m)	Connection Details				Type		
Coordinates (m)	Depth (m)			Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type	Flow Control Type	Flow Control IL (m)
Intersection (m)				Outgoing Connections				Cover		
PH3-S4	52.600 48.675		Diameter / Length: 1.200	{1} 1.002	Pipe	48.675	Diam/Width:225	Manhole	{a} Free Discharge	
E:509316.949 N:126569.055	3.925			{2} 2.000	Pipe	48.675	Diam/Width:225			
IP E:509316.949 IP N:126569.055				{a} 1.003	Pipe	48.675	Diam/Width:300	Not Applicable		
PH3-S6	51.500 50.000		Diameter / Length: 1.200					Manhole	{a} Free Discharge	
E:509286.072 N:126596.826	1.500									
IP E:509286.072 IP N:126596.826				{a} 4.000	Pipe	50.000	Diam/Width:225	Not Applicable		

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Inflow Summary Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment 17/18	PH3-S2		Time of Concentration	0.181	100	0	100	0.181
Catchment 17/18	PH3-S5		Time of Concentration	0.011	100	0	100	0.011
Catchment Area	PH3-S10		Time of Concentration	0.042	100	0	100	0.042
Catchment Area (1)	PH3-S4		Time of Concentration	0.028	100	0	100	0.028
Catchment Area (2)	PH3-S3		Time of Concentration	0.051	100	0	100	0.051
Catchment Area (3)	PH3-S6		Time of Concentration	0.070	100	0	100	0.070
Catchment Area (4)	PH3-S11		Time of Concentration	0.030	100	0	100	0.030
Catchment Area (5)	PH3-S12		Time of Concentration	0.024	100	0	100	0.024
Catchment Area (6)	PH3-S8		Time of Concentration	0.025	100	0	100	0.025
Catchment Area (7)	PH3-S7		Time of Concentration	0.009	100	0	100	0.009
Catchment Area (21)	PH3-S1		Time of Concentration	0.190	100	0	100	0.190
Catchment Area (22)	Porous Paving		Time of Concentration	0.048	100	0	100	0.048
Catchment Area (23)	PH3-S9		Time of Concentration	0.045	100	0	100	0.045
Catchment Area (29)	PH3-S7		Time of Concentration	0.047	100	0	100	0.047
TOTAL		0.0		0.801				0.801

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18	Date: 01/04/2026		
	Designed by: AU	Checked by: AU	Approved By: NJ
Report Title: Rainfall Analysis Criteria	Company Address: 84 North Street Guildford GU1 4AU		



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

Rainfall	
FEH	Type: FEH
Site Location	GB 518745 119390 TQ 18745 19390
Rainfall Version	2022
Summer	☒
Winter	☒

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0.000
30.0	40.000
100.0	45.000

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

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Junctions Summary Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			



FEH: 2 years: Increase Rainfall (%): +0: 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
Ex-SWMH54	FEH: 2 years: +0 %: 360 mins: Summer	47.156	45.925	45.969	0.044	6.1	0.000	0.000	6.1	223.047	OK
PH3-S15	FEH: 2 years: +0 %: 360 mins: Summer	48.223	46.400	46.445	0.045	6.1	0.013	0.000	6.1	223.047	OK
PH3-S14	FEH: 2 years: +0 %: 360 mins: Summer	48.597	46.750	46.797	0.047	6.1	0.053	0.000	6.1	223.167	OK
PH3-S2	FEH: 2 years: +0 %: 15 mins: Summer	52.500	48.700	48.888	0.188	39.1	0.213	0.000	28.3	18.826	OK
PH3-S8	FEH: 2 years: +0 %: 360 mins: Summer	50.200	48.125	48.827	0.702	6.0	1.004	0.000	6.0	188.707	Surcharged
PH3-S12	FEH: 2 years: +0 %: 360 mins: Summer	49.662	47.200	48.827	1.627	7.8	2.328	0.000	6.1	225.549	Surcharged
PH3-S1	FEH: 2 years: +0 %: 15 mins: Summer	52.350	48.825	48.971	0.146	41.0	0.165	0.000	40.6	17.807	OK
PH3-S5	FEH: 2 years: +0 %: 360 mins: Summer	52.300	48.625	48.827	0.202	15.4	0.289	0.000	15.4	150.646	OK
PH3-S9	FEH: 2 years: +0 %: 15 mins: Summer	52.200	50.700	50.891	0.191	9.7	0.217	0.000	9.5	4.031	OK
PH3-S10	FEH: 2 years: +0 %: 15 mins: Summer	50.775	49.275	49.343	0.068	17.5	0.077	0.000	17.0	7.919	OK
PH3-S11	FEH: 2 years: +0 %: 360 mins: Summer	50.000	48.500	48.827	0.327	6.5	0.370	0.000	6.4	36.524	Surcharged
PH3-S7	FEH: 2 years: +0 %: 360 mins: Summer	50.950	48.175	48.827	0.652	21.5	0.933	0.000	20.1	189.182	Surcharged
PH3-S3	FEH: 2 years: +0 %: 15 mins: Summer	52.400	50.900	50.941	0.041	11.0	0.046	0.000	10.8	4.788	OK
PH3-S4	FEH: 2 years: +0 %: 15 mins: Summer	52.600	48.675	48.845	0.170	45.2	0.192	0.000	43.6	21.823	OK
PH3-S6	FEH: 2 years: +0 %: 15 mins: Summer	51.500	50.000	50.044	0.044	15.0	0.050	0.000	14.9	6.520	OK

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Junctions Summary Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			



FEH: 30 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
Ex-SWMH54	FEH: 30 years: +40 %: 480 mins: Winter	47.156	45.925	45.972	0.047	7.0	0.000	0.000	7.0	360.251	OK
PH3-S15	FEH: 30 years: +40 %: 480 mins: Winter	48.223	46.400	46.448	0.048	7.0	0.014	0.000	7.0	360.251	OK
PH3-S14	FEH: 30 years: +40 %: 480 mins: Winter	48.597	46.750	46.800	0.050	7.0	0.057	0.000	7.0	360.398	OK
PH3-S2	FEH: 30 years: +40 %: 480 mins: Winter	52.500	48.700	49.366	0.666	28.0	0.753	0.000	10.2	393.266	Surcharged
PH3-S8	FEH: 30 years: +40 %: 480 mins: Winter	50.200	48.125	49.365	1.240	6.9	1.775	0.000	6.9	291.025	Surcharged
PH3-S12	FEH: 30 years: +40 %: 480 mins: Winter	49.662	47.200	49.365	2.165	10.4	3.098	0.000	7.0	376.897	Surcharged
PH3-S1	FEH: 30 years: +40 %: 15 mins: Summer	52.350	48.825	50.079	1.254	126.8	1.418	0.000	119.0	54.936	Surcharged
PH3-S5	FEH: 30 years: +40 %: 480 mins: Winter	52.300	48.625	49.366	0.741	15.6	1.060	0.000	14.8	310.972	Surcharged
PH3-S9	FEH: 30 years: +40 %: 15 mins: Winter	52.200	50.700	50.944	0.244	28.2	0.276	0.000	28.3	12.843	Surcharged
PH3-S10	FEH: 30 years: +40 %: 15 mins: Summer	50.775	49.275	49.398	0.123	55.7	0.139	0.000	55.4	24.795	OK
PH3-S11	FEH: 30 years: +40 %: 480 mins: Winter	50.000	48.500	49.365	0.865	8.7	0.978	0.000	8.6	97.562	Surcharged
PH3-S7	FEH: 30 years: +40 %: 480 mins: Winter	50.950	48.175	49.365	1.190	20.9	1.703	0.000	19.9	365.190	Surcharged
PH3-S3	FEH: 30 years: +40 %: 15 mins: Summer	52.400	50.900	50.974	0.074	34.1	0.084	0.000	33.7	14.770	OK
PH3-S4	FEH: 30 years: +40 %: 480 mins: Winter	52.600	48.675	49.366	0.691	15.1	0.782	0.000	14.1	321.297	Surcharged
PH3-S6	FEH: 30 years: +40 %: 15 mins: Summer	51.500	50.000	50.077	0.077	46.3	0.088	0.000	46.1	20.063	OK

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Junctions Summary Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			



FEH: 100 years: Increase Rainfall (%): +45: 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
Ex-SWMH54	FEH: 100 years: +45 %: 600 mins: Winter	47.156	45.925	45.973	0.048	7.5	0.000	0.000	7.5	475.871	OK
PH3-S15	FEH: 100 years: +45 %: 600 mins: Winter	48.223	46.400	46.449	0.049	7.5	0.014	0.000	7.5	475.871	OK
PH3-S14	FEH: 100 years: +45 %: 600 mins: Winter	48.597	46.750	46.802	0.052	7.5	0.059	0.000	7.5	476.023	OK
PH3-S2	FEH: 100 years: +45 %: 600 mins: Winter	52.500	48.700	49.648	0.948	30.2	1.072	0.000	9.3	549.621	Surcharged
PH3-S8	FEH: 100 years: +45 %: 600 mins: Winter	50.200	48.125	49.647	1.522	7.4	2.178	0.000	7.4	386.784	Surcharged
PH3-S12	FEH: 100 years: +45 %: 600 mins: Winter	49.662	47.200	49.647	2.447	11.3	3.501	0.000	7.5	500.981	Surcharged
PH3-S1	FEH: 100 years: +45 %: 15 mins: Summer	52.350	48.825	50.805	1.980	164.9	2.240	0.000	156.1	71.499	Surcharged
PH3-S5	FEH: 100 years: +45 %: 600 mins: Winter	52.300	48.625	49.647	1.022	13.3	1.463	0.000	12.7	404.621	Surcharged
PH3-S9	FEH: 100 years: +45 %: 15 mins: Summer	52.200	50.700	50.959	0.259	39.1	0.293	0.000	38.7	16.823	Surcharged
PH3-S10	FEH: 100 years: +45 %: 60 mins: Summer	50.775	49.275	49.678	0.403	44.8	0.456	0.000	43.0	55.787	Surcharged
PH3-S11	FEH: 100 years: +45 %: 600 mins: Winter	50.000	48.500	49.647	1.147	9.4	1.297	0.000	9.3	132.228	Surcharged
PH3-S7	FEH: 100 years: +45 %: 600 mins: Winter	50.950	48.175	49.647	1.472	17.9	2.106	0.000	17.3	468.953	Surcharged
PH3-S3	FEH: 100 years: +45 %: 15 mins: Summer	52.400	50.900	50.986	0.086	44.3	0.097	0.000	44.0	19.208	OK
PH3-S4	FEH: 100 years: +45 %: 600 mins: Winter	52.600	48.675	49.648	0.973	15.8	1.100	0.000	12.0	429.000	Surcharged
PH3-S6	FEH: 100 years: +45 %: 15 mins: Summer	51.500	50.000	50.090	0.090	60.3	0.102	0.000	60.1	26.192	OK

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Stormwater Controls Summary Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			



FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. Avg. Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Avg. 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)
Cellular Storage 1	FEH: 2 years: +0 %: 360 mins: Summer	48.829	48.829	48.829	0.104	0.104	0.104	12.5	55.169	0.000	0.000	4.8	61.171
Porous Paving	FEH: 2 years: +0 %: 480 mins: Summer	51.607	51.325	51.413	0.106	0.005	0.093	2.2	7.867	0.000	0.000	0.8	14.489
Swale	FEH: 2 years: +0 %: 15 mins: Summer	50.838	49.889	49.881	0.028	0.039	0.031	9.5	0.508	0.000	0.000	8.5	4.021
Cellular Storage 2	FEH: 2 years: +0 %: 360 mins: Summer	48.827	48.827	48.827	0.677	0.677	0.677	22.1	77.174	0.000	0.000	6.0	179.264

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18	Date: 01/04/2026		
	Designed by: AU	Checked by: AU	Approved By: NJ
Report Details: Type: Stormwater Controls Summary Storm Phase: Storm	Company Address: 84 North Street Guildford GU1 4AU		



Percentage Available (%)	Status
89.630	OK
79.427	OK
99.288	OK
54.869	OK

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Stormwater Controls Summary Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			



FEH: 30 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. Avg. Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Avg. 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)
Cellular Storage 1	FEH: 30 years: +40 %: 480 mins: Winter	49.366	49.366	49.366	0.641	0.641	0.641	41.7	341.217	0.000	0.000	6.0	155.781
Porous Paving	FEH: 30 years: +40 %: 240 mins: Summer	51.782	51.330	51.533	0.281	0.010	0.213	9.0	18.137	0.000	0.000	3.2	27.909
Swale	FEH: 30 years: +40 %: 15 mins: Summer	50.866	49.923	49.910	0.056	0.073	0.060	31.1	1.115	0.000	0.000	28.0	12.837
Cellular Storage 2	FEH: 30 years: +40 %: 480 mins: Winter	49.365	49.365	49.365	1.215	1.215	1.215	21.0	138.537	0.000	0.000	6.9	255.937

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18	Date: 01/04/2026		
	Designed by: AU	Checked by: AU	Approved By: NJ
Report Details: Type: Stormwater Controls Summary Storm Phase: Storm	Company Address: 84 North Street Guildford GU1 4AU		



Percentage Available (%)	Status
35.861	OK
52.572	OK
98.436	OK
18.984	OK

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Stormwater Controls Summary Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			



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

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. Avg. Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Avg. 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)
Cellular Storage 1	FEH: 100 years: +45 %: 600 mins: Winter	49.648	49.648	49.648	0.923	0.923	0.923	45.3	491.010	0.000	0.000	5.9	210.701
Porous Paving	FEH: 100 years: +45 %: 240 mins: Summer	51.860	51.332	51.586	0.359	0.012	0.266	11.6	22.594	0.000	0.000	4.2	36.897
Swale	FEH: 100 years: +45 %: 15 mins: Summer	50.873	49.935	49.918	0.063	0.085	0.068	38.7	1.316	0.000	0.000	36.0	16.815
Cellular Storage 2	FEH: 100 years: +45 %: 600 mins: Winter	49.647	49.647	49.647	1.497	1.497	1.497	17.8	170.629	0.000	0.000	7.4	336.076

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18	Date: 01/04/2026		
	Designed by: AU	Checked by: AU	Approved By: NJ
Report Details: Type: Stormwater Controls Summary Storm Phase: Storm	Company Address: 84 North Street Guildford GU1 4AU		



Percentage Available (%)	Status
7.705	OK
40.919	OK
98.154	OK
0.217	OK

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Connections Summary Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			



FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flow

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
1.010	FEH: 2 years: +0 %: 360 mins: Summer	Pipe	PH3-S15	Ex-SWMH54	48.223	46.445	0.044	223.047	1.1	0.08	6.1	OK
1.009	FEH: 2 years: +0 %: 360 mins: Summer	Pipe	PH3-S14	PH3-S15	48.597	46.797	0.046	223.167	1.1	0.09	6.1	OK
1.007	FEH: 2 years: +0 %: 60 mins: Winter	Pipe	PH3-S8	PH3-S12	50.200	48.662	0.450	18.989	0.1	0.01	6.4	Surcharged
1.001	FEH: 2 years: +0 %: 120 mins: Summer	Pipe	Cellular Storage 1	PH3-S2	49.725	48.802	0.090	23.582	0.5	0.11	6.2	OK
3.000	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	Porous Paving	PH3-S5	52.181	51.360	0.066	1.197	0.2	0	2.3	OK
5.002	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	PH3-S10	PH3-S11	50.775	49.343	0.055	7.919	2.2	0.17	17.0	OK
5.003	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	PH3-S11	PH3-S12	50.000	48.543	0.300	10.711	0.3	0.05	23.3	OK
1.004	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	PH3-S5	PH3-S7	52.300	48.749	0.165	23.931	1.2	0.23	46.5	OK
1.005	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	PH3-S7	Cellular Storage 2	50.950	48.464	0.302	32.764	2.0	0.26	67.6	OK
1.002	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	PH3-S2	PH3-S4	52.500	48.888	0.179	14.569	0.8	0.89	28.3	OK
1.003	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	PH3-S4	PH3-S5	52.600	48.845	0.147	21.823	1.3	0.63	43.6	OK
2.000	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	PH3-S3	PH3-S4	52.400	50.941	0.105	4.788	0.6	0.08	10.8	OK
4.000	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	PH3-S6	PH3-S7	51.500	50.044	0.147	6.520	0.8	0.09	14.9	OK
5.001	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	Swale	PH3-S10	51.710	49.881	0.053	4.021	1.2	0.07	8.5	OK
5.000	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	PH3-S9	Swale	52.200	50.891	0.110	0.000	0.5	0.05	9.5	OK
1.006	FEH: 2 years: +0 %: 240 mins: Winter	Pipe	Cellular Storage 2	PH3-S8	49.650	48.826	0.450	113.045	0.9	0.02	6.0	Surcharged
1.000	FEH: 2 years: +0 %: 15 mins: Summer	Pipe	PH3-S1	Cellular Storage 1	52.350	48.971	0.082	17.807	3.1	0.68	40.6	OK
1.008	FEH: 2 years: +0 %: 360 mins: Summer	Pipe	PH3-S12	PH3-S14	49.662	48.827	0.050	223.390	0.9	0.12	6.1	Surcharged

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Connections Summary Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			



FEH: 30 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Flow

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
1.010	FEH: 30 years: +40 %: 480 mins: Winter	Pipe	PH3-S15	Ex-SWMH54	48.223	46.448	0.047	360.251	1.1	0.1	7.0	OK
1.009	FEH: 30 years: +40 %: 480 mins: Winter	Pipe	PH3-S14	PH3-S15	48.597	46.800	0.049	360.398	1.1	0.1	7.0	OK
1.007	FEH: 30 years: +40 %: 15 mins: Winter	Pipe	PH3-S8	PH3-S12	50.200	49.044	0.450	0.789	0.1	0.01	9.5	Surchar ged
1.001	FEH: 30 years: +40 %: 30 mins: Summer	Pipe	Cellular Storage 1	PH3-S2	49.725	49.029	0.225	0.000	0.2	0.14	7.8	Surchar ged
3.000	FEH: 30 years: +40 %: 15 mins: Summer	Pipe	Porous Paving	PH3-S5	52.181	51.440	0.212	4.009	0.4	0.01	7.7	OK
5.002	FEH: 30 years: +40 %: 15 mins: Summer	Pipe	PH3-S10	PH3-S11	50.775	49.398	0.225	24.795	2.1	0.54	55.4	OK
5.003	FEH: 30 years: +40 %: 15 mins: Summer	Pipe	PH3-S11	PH3-S12	50.000	49.061	0.300	32.343	0.9	0.14	65.3	Surchar ged
1.004	FEH: 30 years: +40 %: 15 mins: Summer	Pipe	PH3-S5	PH3-S7	52.300	49.038	0.375	45.129	1.1	0.59	120.1	Surchar ged
1.005	FEH: 30 years: +40 %: 15 mins: Summer	Pipe	PH3-S7	Cellular Storage 2	50.950	49.057	0.450	73.233	2.2	0.74	193.8	Surchar ged
1.002	FEH: 30 years: +40 %: 15 mins: Summer	Pipe	PH3-S2	PH3-S4	52.500	49.205	0.225	23.065	1.5	1.85	59.0	Surchar ged
1.003	FEH: 30 years: +40 %: 15 mins: Summer	Pipe	PH3-S4	PH3-S5	52.600	49.069	0.300	42.204	1.5	1.54	106.1	Surchar ged
2.000	FEH: 30 years: +40 %: 15 mins: Summer	Pipe	PH3-S3	PH3-S4	52.400	50.974	0.225	14.770	0.8	0.24	33.7	OK
4.000	FEH: 30 years: +40 %: 15 mins: Summer	Pipe	PH3-S6	PH3-S7	51.500	50.077	0.225	20.063	1.2	0.26	46.1	OK
5.001	FEH: 30 years: +40 %: 15 mins: Summer	Pipe	Swale	PH3-S10	51.710	49.910	0.098	12.837	1.7	0.22	28.0	OK
5.000	FEH: 30 years: +40 %: 15 mins: Summer	Pipe	PH3-S9	Swale	52.200	50.932	0.144	0.000	1.2	0.17	31.1	Surchar ged
1.006	FEH: 30 years: +40 %: 360 mins: Summer	Pipe	Cellular Storage 2	PH3-S8	49.650	49.360	0.450	149.553	0.9	0.03	6.9	Surchar ged
1.000	FEH: 30 years: +40 %: 15 mins: Summer	Pipe	PH3-S1	Cellular Storage 1	52.350	50.079	0.225	54.876	3.0	1.99	119.0	Surchar ged
1.008	FEH: 30 years: +40 %: 480 mins: Winter	Pipe	PH3-S12	PH3-S14	49.662	49.365	0.054	360.668	1.0	0.14	7.0	Surchar ged

Trade Park Billingshurst: Phase 3 Works - Unit 17 and 18		Date: 01/04/2026			
		Designed by: AU	Checked by: AU		Approved By: NJ
Report Details: Type: Connections Summary Storm Phase: Storm		Company Address: 84 North Street Guildford GU1 4AU			



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

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
1.010	FEH: 100 years: +45 %: 600 mins: Winter	Pipe	PH3-S15	Ex-SWMH54	48.223	46.449	0.049	475.871	1.2	0.1	7.5	OK
1.009	FEH: 100 years: +45 %: 600 mins: Winter	Pipe	PH3-S14	PH3-S15	48.597	46.802	0.051	476.023	1.1	0.11	7.5	OK
1.007	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	PH3-S8	PH3-S12	50.200	49.315	0.450	0.972	0.1	0.02	12.2	Surchar ged
1.001	FEH: 100 years: +45 %: 30 mins: Summer	Pipe	Cellular Storage 1	PH3-S2	49.725	49.166	0.225	0.000	0.2	0.14	7.8	Surchar ged
3.000	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	Porous Paving	PH3-S5	52.181	51.476	0.225	5.394	0.2	0.02	9.9	OK
5.002	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	PH3-S10	PH3-S11	50.775	49.415	0.225	32.428	2.1	0.69	71.2	OK
5.003	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	PH3-S11	PH3-S12	50.000	49.320	0.300	42.490	1.3	0.2	93.5	Surchar ged
1.004	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	PH3-S5	PH3-S7	52.300	49.286	0.375	52.147	1.2	0.64	131.1	Surchar ged
1.005	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	PH3-S7	Cellular Storage 2	50.950	49.313	0.450	90.134	2.3	0.89	233.0	Surchar ged
1.002	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	PH3-S2	PH3-S4	52.500	49.483	0.225	22.601	1.7	2.07	65.9	Surchar ged
1.003	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	PH3-S4	PH3-S5	52.600	49.323	0.300	47.817	1.8	1.82	125.1	Surchar ged
2.000	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	PH3-S3	PH3-S4	52.400	50.986	0.225	19.208	1.1	0.32	44.0	OK
4.000	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	PH3-S6	PH3-S7	51.500	50.090	0.225	26.192	1.5	0.34	60.1	OK
5.001	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	Swale	PH3-S10	51.710	49.918	0.113	16.814	1.8	0.28	36.0	OK
5.000	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	PH3-S9	Swale	52.200	50.959	0.161	0.000	1.3	0.21	38.7	Surchar ged
1.006	FEH: 100 years: +45 %: 15 mins: Winter	Pipe	Cellular Storage 2	PH3-S8	49.650	49.302	0.450	0.498	1.0	0.04	11.3	Surchar ged
1.000	FEH: 100 years: +45 %: 15 mins: Summer	Pipe	PH3-S1	Cellular Storage 1	52.350	50.805	0.225	71.496	3.9	2.61	156.1	Surchar ged
1.008	FEH: 100 years: +45 %: 600 mins: Winter	Pipe	PH3-S12	PH3-S14	49.662	49.647	0.056	476.302	1.0	0.15	7.5	Surchar ged

Appendix L

Exceedance Routing Plan



Legend

Phase 3 Boundary (Units 17 - 18)

Exceedance Flow Direction Arrow

P01 First Issue LL MH NJ 02/04/2026

Rev. Description Dm Chk App Date

Drawing Status:

FOR PLANNING
NOT FOR CONSTRUCTION

motion

Guildford - Reading - London
www.motion.co.uk

Client:

DUNMOORE

Project:

Stane Street, Billingshurst

Title:

Phase 3 Works
Units 17 - 18
Exceedance Plan

Scale: 1:250 (@ A1)

Drawing:

1904029-P3-0508

Revision:

P01

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