Solent & South Downs Area

Pre-application Advice Note

September 2019

This document sets out the environmental issues we will consider when providing our planning application consultation advice to Local Councils. It can be used by applicants, developers and consultants at the pre-planning stage.

Fluvial Flood Risk

Development must be safe and should not increase the risk of flooding.

You can view a site's flood zone on the Flood Map for Planning on our website: https://flood-map-for-planning.service.gov.uk

If your proposed development is located within flood zone 2 or 3 you should consult the Flood Risk and Coastal Change pages of the National Planning Policy Guidance (NPPG) http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/

Here you can determine whether the flood risk vulnerability of your proposed development and the flood zone are compatible. You can also establish if there are flood risk sequential test and exception test requirements for your proposed development. In the first instance we recommend the developer/applicant liaises with the Local Planning Authority (LPA) to undertake the Sequential Test in accordance with the National Planning Policy Framework (NPPF).

If your proposed development is located within flood zone 2 orf 3 and its vulnerability and flood zone are considered acceptable under the NPPG then a site specific Flood Risk Assessment (FRA) is required to support any subsequent planning application. This is required by paragraph 163 of the NPPF: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

Guidance on the content of a site specific FRA can be found in the NPPG and online: https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications

More detailed flood risk modelling data is available to help you produce a FRA please contact our Customers and Engagement team at SSDenquiries@environment-agency.gov.uk.

Climate Change Allowances

On 19 February 2016, we published new guidance for planners and developers on how to use climate change allowances in a site-specific FRA: https://www.gov.uk/guidance/flood-risk-assessments-climatechange-allowances

Groundwater Quality

Development must not cause pollution to the water environment.

Source Protection Zones

We have defined Source Protection Zones (SPZs) for 2000 groundwater sources such as wells, boreholes and springs used across the country for public drinking water supply. These zones are more sensitive to contamination from activities that might cause pollution in the area. The closer the activity, the greater the risk.

SPZ1s are the areas designated as most at risk from contamination and development activities and in these areas we may consider it inappropriate for development to discharge foul or surface water into the ground.

To see if your proposed development is located within a Source Protection Zone, please use our online map: https://magic.defra.gov.uk/

Contaminated Land

The NPPF takes a precautionary approach to land contamination. Before the principle of development can be determined, land contamination should be investigated to see whether it could preclude certain development due to environmental risk or cost of remediation. Where contamination is known or suspected, a desk study, site investigation, remediation and other works may be required to enable safe development.

Pollution

If the proposed development use has the potential to pollute ground or surface water receptors then an assessment to establish whether the risk of pollution is acceptable or can be mitigated will be required within any planning application.

Foul Drainage

When drawing up wastewater treatment proposals for any development, the first presumption is to provide a system of foul drainage discharging into a public sewer to be treated at a public sewage treatment works (those provided and operated by the water and sewerage companies). This should be done in consultation with the sewerage company of the area prior to the submission of a formal planning application.

If connection to a public sewage treatment plant is not feasible, a package sewage treatment plant may be considered. If you would like further advice please call 03708 506 506.

Cemeteries

The development of new cemeteries in areas where groundwater vulnerability is high should be avoided, except where the thickness and nature of the unsaturated zone, or the impermeable formations beneath the site, protect groundwater; or where the long-term risk is mitigated by appropriate engineering methods.

Main Rivers

Ecology

In accordance with the National Planning Policy Framework (NPPF), any development proposal should avoid significant harm to biodiversity and seek to protect and enhance it. Opportunities to incorporate biodiversity in and around the development will be encouraged.

Your scheme should be designed with a naturalised buffer zone of at least 8 metres from the main river to protect and enhance the conservation value of the watercourse and ensure access for flood defence maintenance.

This buffer zone should be managed for the benefit of biodiversity for example by the planting of locally appropriate, UK native species. The buffer zone should be undisturbed by development with no fencing, footpaths or other structures. This buffer zone will help provide more space for flood waters, provide improved habitat for local biodiversity and allows access for any maintenance requirements.

To identify any Main Rivers in proximity to your proposed development please see our Main Rivers Consultation Map: http://apps.environment-agency.gov.uk/wiyby/151293.aspx

Culverting

The Environment Agency is likely to oppose culverting as it is damaging to the ecological integrity of the river channel and its corridor and acts as a barrier to the movement of wildlife, including fish and may also increase flood risk. If the proposal will impact an existing culvert the Environment Agency may oppose planning consent for development either over, or within 8 metres of an existing culvert. Wherever possible, existing culverts should be removed and the river channel and bankside habitat reinstated to restore the ecological continuity of the river channel and its corridor.

Water Framework Directive (WFD)

Any marine works below MHWS require an assessment of possible impacts on Water Framework Directive (WFD) . The assessment should include all elements of the works that fall within, or have the potential to affect, a WFD water body and any of the protected areas therein (including Bathing Waters and Shellfish Waters).

The WFD assessment should follow the 'Clearing the Waters for All' guidance available at https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters

Where appropriate, a WFD Assessment should assess any potential impacts and demonstrate that the required enhancements will be delivered. In some cases the requirements of a WFD assessment can be incorporated into an Environmental Impact Assessment (EIA). Any development that has the potential to cause deterioration in classification under WFD or that precludes the recommended actions from being delivered in the future is likely to be considered unacceptable to us.

Permits & Consents

Environmental Permitting Regulations

To see if your proposed development requires an Environmental Permit under the Environment Permitting Regulations please refer to our website: https://www.gov.uk/guidance/check-if-you-need-an-environmental-permit

From 6 April 2016 an Environmental Permit is required for any proposed works or structures, in, under, over or within 8 metres of the top of the bank of designated Main River, and within 16 metres of a tidal defence.

Ordinary Watercourse Consent

The prior written consent of the relevant Lead Local Flood Authority is required for the erection of any flow control structures, culverting or diversion of ordinary watercourses, including streams, land drains and ditches.

Marine Licence

A marine licence may be required for any activities at the mean high water spring tide up to the territorial limit.This also includes the waters of every estuary, river or channel where the tide flows at mean high water spring tide.

Any development must demonstrate how adverse impacts on migratory fish, bathing waters, shellfish waters, designated sites, protected and priority species and habitats will be avoided, minimised, mitigated and if necessary compensated for. Works within or affecting a Water Framework Directive (WFD) waterbody will need to demonstrate that compliance with WFD objectives will be achieved. 'Clearing the Waters for All' provides guidance on how the impacts on WFD should be addressed, and should be used when preparing an assessment, including the screening and scoping of activities. https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters

Further pre-application options

The information provided above details generic information which may or may not be applicable to your development. We are able to provide more detailed and bespoke advice and answer technical questions for a charged fee of £100 per person per hour +VAT.

If you are interested in finding out more about this service, please email:

planningssd@environment-agency.gov.uk

We can explain this service and provide you with a bespoke quote for further pre-application advice that you may require please see .gov - https://www.gov.uk/government/publications/pre- planning-application-enquiry-form-preliminary-opinion

Please note

Please note that the view expressed in this letter by the Environment Agency is in response to the enquiry only and does not represent our final view in relation to any future planning application made in relation to this site.

We reserve the right to change our position in relation to any such application.

As part of this preliminary response we have not technically reviewed any documents. This opinion is based on the information submitted and current planning policy and guidance.

If you have any questions please contact the Solent & South Downs Sustainable Places team:

planningssd@environment-agency.gov.uk

To make a request for data

Please submit your request for data to ssdenquiries@environment-agency.gov.uk. You should get the information within 20 working days. We will tell you when to expect the information if we need more time.

There are many datasets available online at www.data.gov.uk including flood maps, historic landfill, waste exemptions, consented discharges to controlled waters, and much more.

Hampshire County Council

Universal Services
The Castle
Winchester, Hampshire SO23 8UD

Tel: 0300 555 1375
Fax 01962 847055
www.hants.gov.uk

Enquiries to	Thomas Callaway	*My reference*	SWM-PRE/2022/0676
Direct Line	03707 798982	*Your reference*	
Date	17 January 2023	*Email*	swm.consultee@hants.gov.uk

Dear Mr Burgess,

Proposed development/FRA at Southleigh Road Southleigh Road, HAVANT, HAMPSHIRE PO9 2PE(Application No.

Hampshire County Council as Lead Local Flood Authority has provided comments in relation to the above pre-application in our role as statutory consultee on surface water drainage for major developments.

In order to assist applicants in providing the correct information to their Local Planning Authority for planning permission, Hampshire County Council has set out the information it requires to provide a substantive response at https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/planning

Assessment of Flooding

The site is mostly within Flood Zone 1, generally meaning a low risk of flooding from rivers and tidal influences, however there are areas of the southern part of the site within Flood Zones 2 and 3. The site is generally at very low risk of flooding from surface water, however a flow route exists which has areas at low, medium and high risk through the site. Development should be sited outside of areas at an elevated risk of flooding in accordance with the National Planning Policy Framework. Existing surface water flow routes should be maintained to reduce the risk of flooding both on and off site.

Surface Water Management

Director of Universal Services
Patrick Blogg

ONEOFF

The ground is predominantly clay which is likely to indicate low permeability at the application site, and infiltration testing should be undertaken to determine whether an infiltration drainage strategy is viable. Groundwater monitoring should be undertaken in the winter months to show that any proposed infiltration features will be at least one metre above the highest groundwater levels. Drainage systems should be designed for the 1 in 100 year storm event plus a peak rainfall allowance, and half drain times should be assessed.

Should infiltration be unviable as a strategy, attenuation of runoff with a restricted discharge to a watercourse or surface water sewer may be acceptable. An assessment of greenfield runoff rates should be made for the existing site, and any proposed discharges off site should be restricted to Qbar or should not exceed the equivalent greenfield rates for storms up to the 1 in 100 year event plus a climate change allowance for peak rainfall.

Urban creep, flood exceedance flow routes and allowable flooded extents should be provided for all drainage strategies, along with maintenance information.

SuDS Design and Selection of Drainage Features

SuDS should be provided to include an element of biodiversity and amenity as well as managing water quality and quantity. Quantity should be assessed through hydraulic calculations for the relevant modelled storm events. Network calculations should be provided as appropriate to determine whether flooding occurs at manholes in piped parts of the system. Water treatment should be assessed through the simple index approach.

Surface Water Checklist

Please refer to the Surface Water Checklist for the information required by the LLFA for different types of planning application:
https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/planning

Yours sincerely,

Thomas Callaway
Senior FWM Project Officer

Hampshire County Council

Economy, Transport and Environment Department
Elizabeth II Court West, The Castle
Winchester, Hampshire SO23 8UD

Tel: 0300 555 1375 (General Enquiries)
0300 555 1388 (Roads and Transport)
0300 555 1389 (Planning)
Textphone 0300 555 1390
Fax 01962 847055
www.hants.gov.uk

Mr D Burgess
Stantec
10 Queen Square
Bristol
BS1 4NT

Enquiries to	Flood & Water Management	*My reference*	HFI-2023-0004
Direct line	01962 846730	*Your reference*	
Date	17/01/2023	*E-mail*	fwm@hants.gov.uk

Dear Mr Burgess,

Re: Historic Flood information request for Southleigh Road, Havant

We refer to your request for historic flood information on 19/12/2022.

Thank you for your application for historic flood information for this site. Please find below the information we have on our systems that we believe to be relevant for this request. Kindly note the declaration on the final page with regards to this information.

Historic flooding information

We have reviewed our records of flood incidents for this area and have seven records of flooding within a 250m radius of the site. This does not necessarily mean that other flood events have not occurred, they either may not have been reported or events may have occurred prior to 2012 – Hampshire County Council as Lead Local Flood Authority have only been maintaining flood records since then following the establishment of the Flood and Water Management Act 2010. The Environment Agency (EA) may hold data on flood events prior to this date.

Reference	Source	Date	Flood Source	Details
331-13021	HCC Highways	2011-12	Fluvial	Lack of capacity in EA culvert
712-13044	HCC Highways	2013	-	Flooding in bellmouths on both sides of A30, capacity issue
784-13045	HCC Highways	2014	Groundwater	High water table

785-13046	HCC Highways	2014	Pluvial	Surface water outfall in poor condition, insufficient capacity
787-13048	HCC Highways	2014	Groundwater	High water table
21574068	HCC FWM	2/8/21	-	-
21637495	HCC FWM	4/1/23	-	Washington Road footpath

Please refer to attached map for the location of this flood event(s). Kindly note that outlines of areas highlighted as highway flooding on the map may include properties or other off-highway areas that were not impacted by flooding.

There have been no flood reports undertaken for this area under Section 19 of the Flood and Water Management Act where significant flooding was reported.

Flood risk from surface water

The EA's Updated Flood Map for Surface Water illustrates the potential area of surface water flooding taking into account the topography and permeability of the area. It also includes factors to take into account drainage provision. This information is designed to be high level and should not be used to indicate specific properties and risk but identify low points and potential flow routing. The mapping indicates that this address is generally at very low risk of flooding from surface water, however a significant flow route of low to high risk passes through the site. High risk means that each year this area has a chance of flooding of greater than 3.3%, and some parts of the site may flood to a depth of 1.2m.

For more information on this flood risk, please see https://flood-warning-information.service.gov.uk/long-term-flood-risk/map

HCC has prepared Surface Water Management Plans which are available on our website. For more detailed information on flooding in the Havant Borough Council administrative area, please see their Strategic Flood Risk Assessment, which can be found at https://www.push.gov.uk/wp-content/uploads/2018/05/Havant.pdf.

Flood risk from watercourses

Watercourses are any natural or artificial channel above or below ground through which water flows. Watercourses are classified as either 'Ordinary Watercourse' or 'Main River'. Ordinary watercourses are watercourses that are not part of a Main River and include streams, ditches, drains, culverts etc. through which water flows. The Lead Local Flood Authority (LLFA - in this instance Hampshire County Council) are responsible for managing the risk from ordinary watercourses and have powers to ensure maintenance is undertaken by the relevant body, usually the adjacent landowner. For more information, see http://documents.hants.gov.uk/flood-water-management/HCCFloodRiskManagement-Landowners.pdf.

Main Rivers are typically larger streams and rivers, but some are smaller watercourses of local significance. Main Rivers are nationally managed by the Environment Agency, but responsibility for maintenance remains with the landowner.

There are two Main Rivers within 250m of this site. Known Ordinary watercourses are marked on the attached map(s); however it should be noted that many ordinary watercourses are not recorded centrally (such as small ditches etc.). The site is located within the water body catchment of the River Lavant.

For more information regarding fluvial (river) and tidal flooding and flood risk please contact the Environment Agency or refer to the following website: https://flood-map-for-planning.service.gov.uk/

Ordinary Watercourse Consenting

Hampshire County Council is responsible for issuing Ordinary Watercourse Consents. These consents assess the flood risk of proposed changes (both permanent and temporary) to ordinary watercourses and are a legal requirement of such work. We have one record of Ordinary Watercourse Consents (OWCs) within the search area.

Please refer to the Hampshire County Council OWC website for further information and the forms for consents:

https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/changewatercourse

The consenting process has a statutory timeframe of two months from when the application is validated. To request data relating to consents prior to 2012 please contact the EA on: psohiow@environment-agency.gov.uk

Any works proposed within eight metres of a main river are likely to require a flood risk permit from the Environment Agency. Please refer to the following for further information: https://www.gov.uk/guidance/flood-risk-activities-environmental-permits

Flood risk from sewers

For information regarding foul flooding, please contact Southern Water.

Vulnerability of site from groundwater

Groundwater is by definition hard to predict and difficult to manage. The geology of the site in question is primarily London Clay Formation clay, silt and sand.

Hampshire County Council hold two records of groundwater flooding in the area, however this does not necessarily mean that other flood events have not occurred. It can be difficult to define flooding as a result of groundwater particularly in those areas where silt, gravel and sand can lead to a perched watertable which can prevent

infiltration drainage from working as opposed to being a groundwater emergence flood event which tends to be seen linked to chalk aquifers.

Please note this information should only be used to establish relative, but not absolute, risk of groundwater flooding. A more detailed assessment including groundwater monitoring may be required.

More detailed information is available in relation to potential groundwater flood risk from the British Geological Society however it should be noted that this is a chargeable service. For further information please refer to:

https://www.bgs.ac.uk/research/groundwater/datainfo/GFSD.html

Hampshire County Council has a draft Groundwater Management Plan that is available on our website which contains useful information. It can be found at:

https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/strategies/groundwater-management-plan

Environmentally designated sites

We note that the site is within 250m of designated environmental sites:

- Southleigh Forest (South) SINC

Drainage Assets

We do not hold information in relation to private or third party drainage assets but are aware that Hampshire County Council as Highways Authority are responsible for many assets within and draining the Highway.

It is the responsibility of Hampshire Highways to maintain their assets on the highway, and they are on a regular cleansing schedule. If there are any issues with any highway gullies, soakaways, culverts etc. from a maintenance perspective, this can be flagged on the online system:

https://www.hants.gov.uk/transport/roadmaintenance/roadproblems

If flooding issues are reported to Highways and are in relation to Highway infrastructure, we as LLFA may not have access to these records and you may need to place a request for this information using the above link.

If you have any further queries, please contact the Flood and Water Management (FWM) Team quoting the above reference

Kind regards

FWM Team
fwm@hants.gov.uk

Please Note: The data supplied has been compiled from a variety of sources of varying reliability. The data is constantly being revised and validated to ensure the highest accuracy possible. However, the data should not be relied upon or considered completely accurate and the data is provided on the understanding that neither the County Council nor the disclosing officer is to be held responsible should you rely on this data and consequently suffer damage.

This response has been provided using the best knowledge and information submitted as part of the planning application at the time of responding and is reliant on the accuracy of that information.

Hampshire County Council defines significant flooding as 'flooding that affects 20 or more properties internally in one flood event within the same location OR flooding that affects significant lengths of highways affecting 20 or more properties and lasts for a period of 3 hours from the onset of flooding'. For more information on how we define flooding, please see our guidance on our website http://documents.hants.gov.uk/flood-water-management/FloodInvestigationsguidance.pdf

You may find the following websites useful –

- http://bluepages.org.uk/
- https://nationalfloodforum.org.uk
- https://nationalfloodforum.org.uk/about-flooding/reducing-your-risk/protecting-your-property/
- http://hummedia.manchester.ac.uk/institutes/mui/cure/research/documents/Property_owners_booklet_web_000.pdf (linked from the National Flood Forum)
- https://www.floodre.co.uk/

Users' Disclaimer

I understand that in using advice provided by the Hampshire Flood and Water Management Team I am aware of the following:

1. The Flood and Water Management (FWM) Team is part of Hampshire County Council ("We/Us/Our"). The Council holds copyright of this information and advice on behalf of the FWM team except where service level agreements state otherwise. No direct reproduction of this advice will be allowed as a direct copy, except for the purpose of Environment Information Requests.

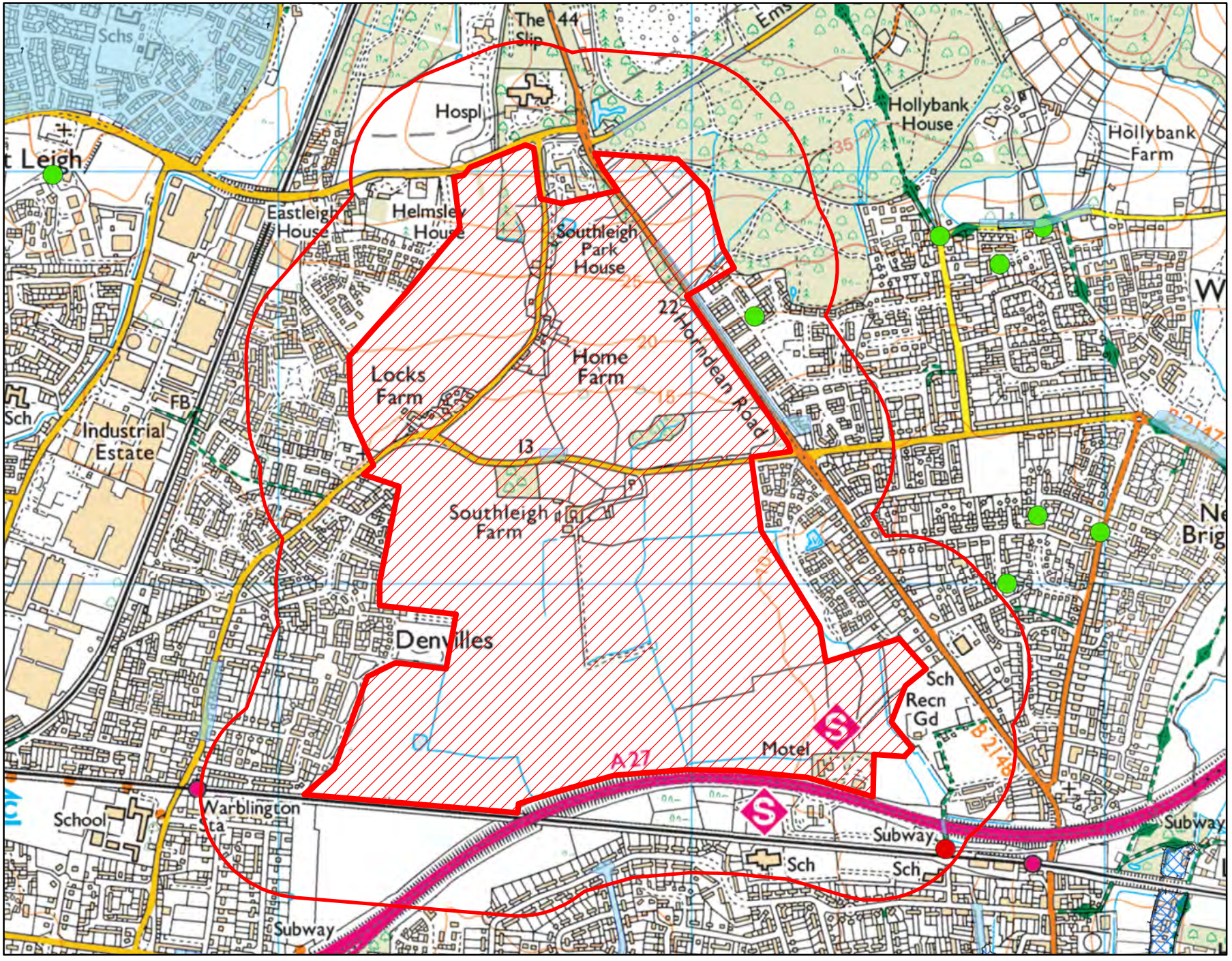
2. Advice provided by the Hampshire FWM Team will only be used for the purpose stated and will not be stored beyond the life of the project for which it was acquired.

3. Any personal information supplied in association with these records will not be used, copied, or passed to any third party without the consent of the Hampshire FWM Team and in accordance with the GDPR.

4. Whilst every reasonable effort is made to validate information supplied to and by the Hampshire FWM Team owing to the dynamic and judgmental nature of information relating to flooding, the Hampshire disclaims any responsibility for the accuracy or comprehensiveness of the information supplied, and accepts no liability for any indirect, consequential, or incidental damages or losses arising from use of the information.

5. I am aware of the Hampshire FWM Team charging schedule and understand I may be charged for the advice.

6. All web links are accurate as on the day they were accessed.



Legend

- Site
- 250m Buffer
- EA Recorded Flood Outlines
- Recorded Highway Flooding in Hampshire
- Surface Water Flooding

Hampshire Flood Enquiries

enq_status_name

- Enquiry Raised
- Resolved Flood Enquiry
- Historic Flood Map

Historic Flood Information Request

Historic Flooding Records

Stantec

Southleigh Road, Havant

Notes:

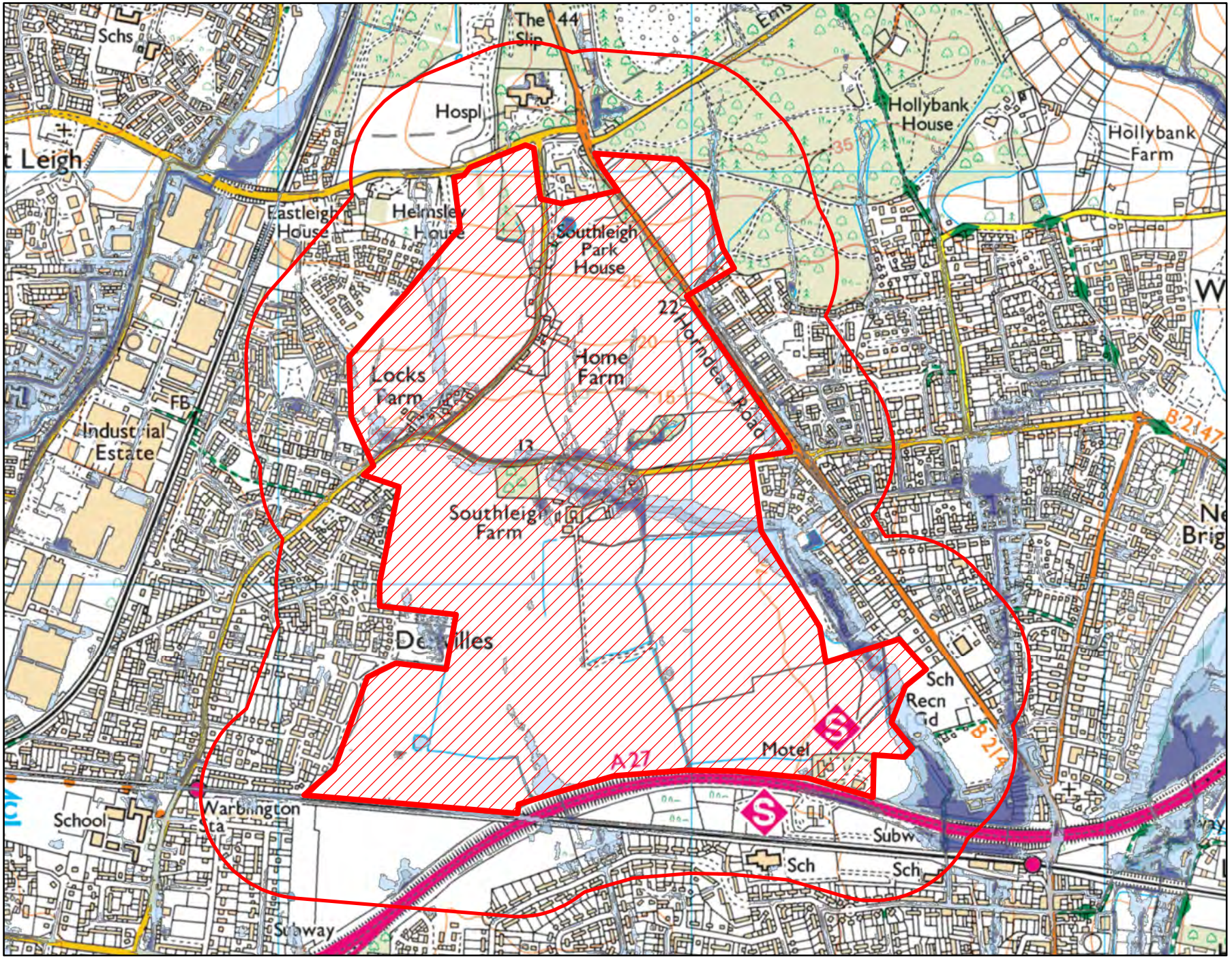
0 0.25 0.5 Kilometers

© Crown copyright and database rights 2020 Ordnance Survey [100019180]
© Environment Agency 2020, All Rights Reserved
© Natural England 2020, reproduced with the permission of Natural England

1:12,500

Date:	17/01/2023	Sheet:	1 of 1
Revision:	1	Initials:	TC

Hampshire County Council



Legend

- Site
- 250m Buffer
- Flood Maps for Surface Water (High)
- Flood Maps for Surface Water (Medium)
- Flood Maps for Surface Water (Low)

Historic Flood Information Request

Flood Map for Surface Water

Stantec

Southleigh Road, Havant

Notes:

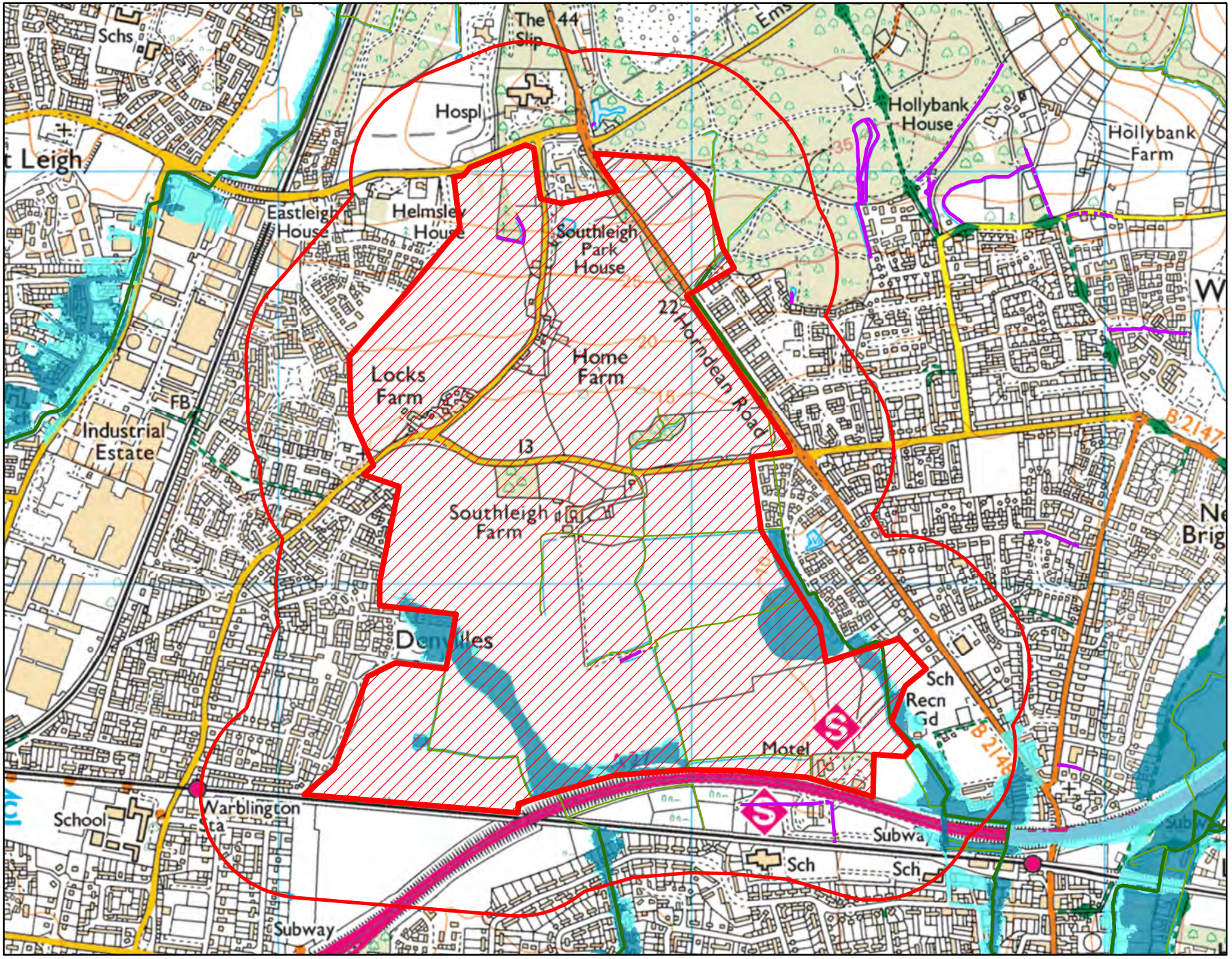
0 0.25 0.5 Kilometers

© Crown copyright and database rights 2020 Ordnance Survey [100019180]
© Environment Agency 2020, All Rights Reserved
© Natural England 2020, reproduced with the permission of Natural England

1:12,500

Date:	17/01/2023	Sheet:	1 of 1
Revision:	1	Initials:	TC

Hampshire County Council



Legend

- Site
- 250m Buffer
- non main river

mainriv

- FRM Indicative Main River
- Detailed River Network - Offline Drainage
- Flood Zone 3
- Flood Zone 2

Historic Flood Information Request

EA Flood Zones and Detailed River Network

Stantec

Southleigh Road, Havant

Notes:

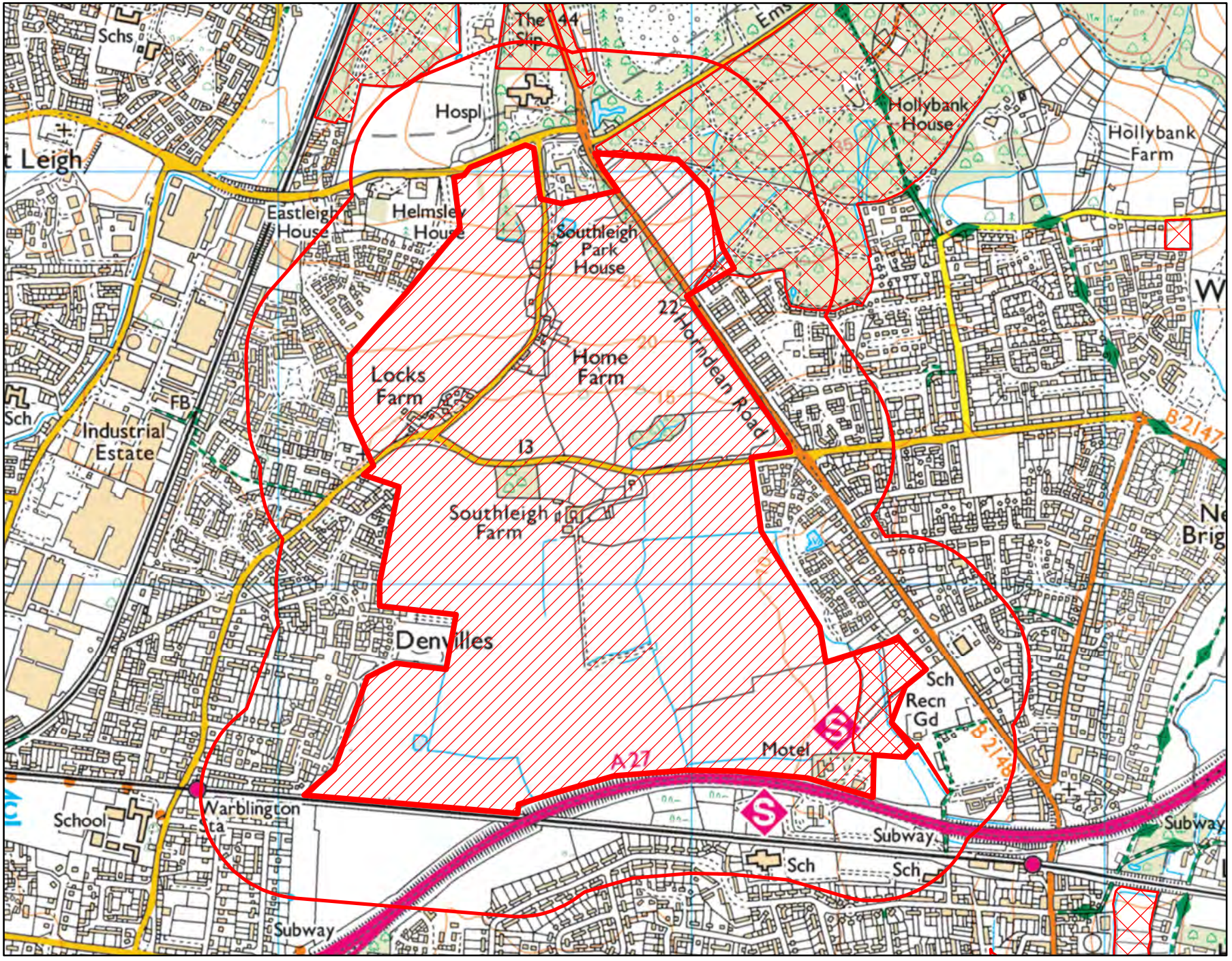
0 0.25 0.5 Kilometers

© Crown copyright and database rights 2020 Ordnance Survey [100019180]
© Environment Agency 2020, All Rights Reserved
© Natural England 2020, reproduced with the permission of Natural England

1:12,500

Date:	17/01/2023	Sheet:	1 of 1
Revision:	1	Initials:	TC

Hampshire County Council



Historic Flood Information Request

Environmental Designations

Stantec

Southleigh Road, Havant

Notes:

0 0.25 0.5 Kilometers

© Crown copyright and database rights 2020 Ordnance Survey [100019180]
© Environment Agency 2020, All Rights Reserved
© Natural England 2020, reproduced with the permission of Natural England

1:12,500

Date:	17/01/2023	Sheet:	1 of 1
Revision:	1	Initials:	TC

Hampshire County Council

Barker, Doug

From: PSO West Sussex <PSOWestSussex@environment-agency.gov.uk>
Sent: 27 January 2023 10:34
To: Barker, Doug
Cc: SSD Enquiries
Subject: RE: SSD286562 - Product 5,6,7 Data - Land South Of Bartons Road, Havant, PO9 2PE
Attachments: P5 6 7 Covering Letter.pdf; FRA Advisory Text.pdf; SSD Pre-app advice note September 2019.pdf

Dear Doug,

Thank you for your Product 5, 6 & 7 data request for **Land South Of Bartons Road, Havant, PO9 2PE**. Apologies for the extended delay in responding to your request.

Unfortunately, for the modelling that was used to update our Flood Map for Planning in this area, we only have the model outputs and report (Product 5 & 6 data) available to share. This is because the model was developed for the nearby flood alleviation scheme, and therefore may not be suitable for use in site specific flood risk assessments.

You can download the Product 5 & 6 data from this link: https://ea.sharefile.com/d-s0c18edd9f62446b1bf95c09ee54700c4
Please note the link will expire in 30 days.

We do not hold any official recorded flooding history for this site or any neighbouring properties. Please be aware that our records are not comprehensive and may not include all events.

For FRA and pre-planning advice please see attached 'FRA Advisory Text' and 'SSD Pre-app advice note September 2019'.

For information on flooding from other sources such as surface water please contact the Lead Local Flood Authority, West Sussex County Council.

If you have any further queries about this request, please do not hesitate to contact us at psowestsussex@environment-agency.gov.uk.

Kind regards,

Amy O'Donnell (*she/her*)
Partnership and Strategic Overview West Sussex, Solent and South Downs
Environment Agency | Guildbourne House, Chatsworth Road, Worthing, West Sussex, BN11 1LD
PSOWestSussex@environment-agency.gov.uk

From: Barker, Doug <Doug.Barker@stantec.com>
Sent: 31 October 2022 15:42

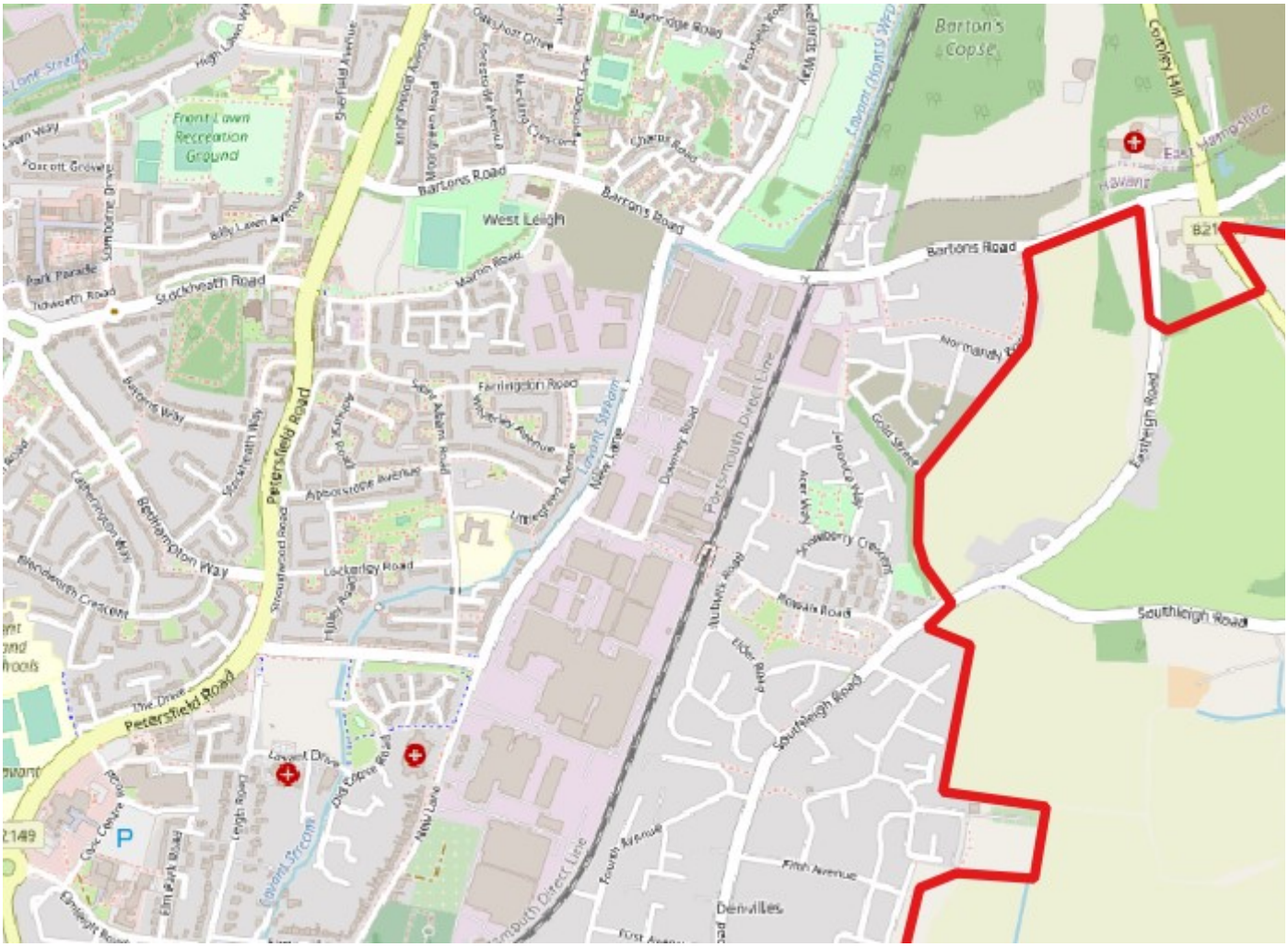
To: SSD Enquiries <SSDEnquiries@environment-agency.gov.uk>
Subject: Havant - Hydraulic Model Data Request

Hi,

We are looking at a proposed development site located to the east of Havant and west of Ermsworth near Southampton. An indicative site boundary is shown below and is bounded to the south by the A27 and the north by Bartons Road. The site in near postcode PO9 2PE. There is a Main River along the eastern boundary of the site and an ordinary watercourse to the west of the site.

Please can you provide us with the following information:

- A copy of Products 5, 6 & 7 for the watercourses that pass through the site
- Details of any flood defences in the vicinity of the site, including design and performance information. We understand that the Environment Agency may have recently undertaken flood alleviation works in this area. It would be useful if details of the scheme can be provided in terms of the design and operation of the scheme.
- Details of any historical flood incidents at or in the vicinity of the site.



Regards,
Doug Barker
Senior Associate

Direct: +44 1173 327919
Doug.Barker@stantec.com

10 Queen Square
Bristol BS1 4NT

Stantec

The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

Doug Barker
Stantec
10 Queen Square
Bristol
BS1 4NT

Our ref: SSD286562
Date: 27/01/2023

Dear Doug,

Enquiry Regarding Product 5, 6 & 7 for Land South Of Bartons Road, Havant, PO9 2PE.

Thank you for your enquiry which was received on 31 October 2022.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004. The information is attached.

FRA advisory text

Name	Product 5, 6 & 7
Description	• Nore Farm Stream Modelling (2015), by Mott MacDonald. [*P5.zip*, *P6.zip*]
Licence	Environment Agency Conditional Licence
Conditions	1.0 You may use the Information for your internal or personal purposes and may only sublicense others to use it if you do so under a written licence which includes the terms of these conditions and the agreement and in particular may not allow any period of use longer than the period licensed to you. 2.0 Notwithstanding the fact that the standard wording of the Environment Agency Conditional Licence indicates that it is perpetual, this Licence has a limited duration of 5 years at the end of which it will terminate automatically without notice. 3.0 We have restricted use of the Information as a result of legal restrictions placed upon us to protect the rights or confidentialities of others. In this instance it is because of third party data. If you contact us in writing (this includes email) we will, as far as confidentiality rules allow, provide you with details including, if available, how you might seek permission from a third party to extend your use rights. 4.1 The Information may contain some data that we believe is within the definition of “personal data” under the Data

	Protection Act 1998 but we consider that we will not be in breach of the Act if we disclose it to you with conditions set out in this condition and the conditions above. This personal data comprises names of individuals or commentary relating to property that may be owned by an individual or commentary relating to the activities of an individual. 4.2 Under the Act a person who holds and uses or passes to others personal data is responsible for any compliance with the Act and so we have no option but to warn you that this means you have responsibility to check that you are compliant with the Act in respect of this personal data. 5.0 The location of public water supply abstraction sources must not be published to a resolution more detailed than 1km2. Information about the operation of flood assets should not be published. 6.1 Where we have supplied model data which may include model inputs or outputs you agree to supply to the Environment Agency copies of any assessments/studies and related outputs, modifications or derivatives created pursuant to the supply to you of the Information, all of which are hereinafter referred to as “the Data”. 6.2 You agree, in the public interest to grant to the Environment Agency a perpetual royalty free non-exclusive licence to use the Data or any part thereof for its internal purposes or to use it in any way as part of Environment Agency derivative products which it supplies free of charge to others such as incorporation into the Environment Agency's Open Data mapping products.
Information Warnings	The flood risk data provided is based on existing EA hydraulic models with an allowance for climate change. Please note the climate change allowances provided are not up to date. These were updated on 27 July 2021. You should refer to 'Flood risk assessments: climate change allowances' for the most up to date allowances. You will need to undertake further assessment of future flood risk using different allowances to ensure your assessment of future flood risk is based on best available evidence.
Attribution	Contains Environment Agency information © Environment Agency and/or database rights. May contain Ordnance Survey data © Crown copyright 2022 Ordnance Survey 100024198.

Data Available Online

Many of our flood datasets are available online:

- Flood Map For Planning (Flood Zone 2, Flood Zone 3 ,Flood Storage Areas, Flood Defences, Areas Benefiting from Defences)
- Risk of Flooding from Rivers and Sea
- Historic Flood Map
- Current Flood Warnings

Please get in touch if you have any further queries or contact us within two months if you'd like us to review the information we have sent.

Yours sincerely,

Amy O'Donnell
Partnership and Strategic Overview West Sussex, Solent and South Downs
Environment Agency | Guildbourne House, Chatsworth Road, Worthing, West Sussex, BN11 1LD

Meeting minutes and actions

Environment Agency - Pre-application meeting

Location: **Southleigh Road, Havant**
Date: **30 March 2023**

Attendees: James Matcham (Bloor Homes), Adam Rickenbach (Bloor Homes), Rob White (White Peak Planning), Sophie Brown (Environment Agency Sustainable Places team), Jon Denman (Environment Agency PSO Team), Edward Conway (Environment Agency PSO Team), Doug Barker (Stantec), Juliette Pout (Stantec),

	Item	Actions
1.	**Introductions**	
2.	**Development Overview (Bloor Homes)** JM gave an overview of the site. It has been identified in the local plan process. The site forms part of a wider allocation of land which is largely owned by the White family (80%). Third party land in the north, south east and south west (outlined in blue). An indicative Masterplan advanced by Havant Council themselves, represents an extension to Denvilles, not Emsworth. Currently building up evidence base to submit a planning application. The Local Authority is supportive of this submission. Input from the EA is required to ensure that the current masterplan reflects the site constraints and requirements.	
3.	**Flood risk overview (Stantec)** <u>Local watercourses and Fluvial flood risk</u> West Brook (EA Main river) drains to the Emsworth Mill Pond and runs along eastern site boundary. Nore Farm stream is an ordinary watercourse passing through the site along the western site boundary but as it reaches the railway it becomes a Main River. The Flood Map for Planning indicates that the corridor for the watercourse is along the site boundary but an out of bank flowpath cuts across the corner of the site. We are aware of an FAS scheme in this location but do not currently have much information for it in relation to operation and design etc.	Stantec need to submit a list of requested information following the meeting. EA anticipate that a response to the data requests can be provided in a couple of weeks. More information on FAS schemes required from the EA for modelling purposes.

	Item	Actions
	Surface water flood risk A number of surface water flow routes pass through the site in particular around Southleigh Road and Southleigh Farm. Surface water flood risk, discussed with Hampshire as the LLFA. There are a number of flow routes that do not follow the watercourses / drain network and therefore more detailed modelling will be undertaken to better represent these routes and conveyance features. More detailed modelling is anticipated to better represent risk through the site. Catchments Western side of the site is largely a self contained catchment, with only a small area draining in from the north-west. Eastern side of the site is a relatively small catchment with some rural area draining from woodland in north-east and some of the urban area to the east of Horndean Road. FAS Stantec has received themodelling report which provides some information for the FAS scheme on the Nore Farm Stream, which protects Emsworth to a 1 in 75yr standard of protection. There is an orifice plate fitted onto the structure under the A27. The Nore Farm Stream is largely culverted through Emsworth. There are a couple of flapped outfalls along the Nore Farm Stream (network rail ditch and stop log boards in channel to contain flow). The Nore Farm Stream modelling report indicated that high levels can result in water flowing east along the ditch into the West Brook catchment. West Brook has a flood alleviation scheme associated with the development to the east. There is limited information available on this scheme in relation to performance, design drawings, operation, maintenance approach etc. Further information to be requested by Stantec. The EA explanted that the boundary between Hampshire and South Sussex operating regions had changed recently. The boundaries are partially from hydrological perspective but also with links to local government boundary changes. These areas are within the same EA region and therefore easy to liaise with other colleagues who are more familiar with this area. Summary of flood risk Fluvial flood risk is generally low with areas at medium and high risk associated with the watercourses. Tidal flood risk is low,	Explore risk of surface water flooding further with LLFA. Fluvial and surface water flood risk need to be investigated further within the FRA.

	Item	Actions
	surface water - generally very low risk but with areas of low to high risk associated with flow pathways. Reservoir, groundwater and sewer are low risk. EA agree with these broad conclusions in terms of flood risk and that fluvial and surface water flooding are key issues to consider in further detail.	
4.	**Data requests (Stantec)** <u>Hydraulic models</u> West Brook – no hydraulic model available. Stantec holds a copy of the survey commissioned by Stantec (formerly as PBA) and Eddie has confirmed that the EA are happy for Stantec to use this data. Nore Farm Stream – EA commissioned modelling but do not hold the model, probably as this was for a flood alleviation scheme rather than a flood mapping project. JD explained that different outputs are needed to justify a scheme, but this would still have been reviewed by Evidence and Risk. EA will engage with Mott MacDonald who prepared this model to try and obtain a copy that can then be used within this project. <u>Survey</u> Stantec explained that survey access is likely to be problematic along Nore Farm Stream and West Brook downstream of the A27. Both watercourses are heavily culverted and pass through private residential areas. These access issues are why obtaining the EA model is fundamental to the project. The EA has agreed that this is a sensible approach and understand why we are seeking the model to inform this area. <u>Flood defence information</u> Emsworth Mill Pond – EA explained that water levels within the pond are lowered in the advance of specific rainfall events. The EA has a set of procedures that will dictate the water level e.g. rainfall forecast/river level. Stantec explained that the ground elevation at Emsworth Mill Pond is a lot lower than the site of interest, therefore it will not necessarily need to be modelled. However, understanding the operation of this will inform the FRA and modelling justification.	EA to find out more information for the Nore Farm Stream and request the model from Mott MacDonald EA to provide a copy of the could obtain operational procedures for Emsworth Mill Pond to inform the assessment of flood risk.

	Item	Actions
	Watercourse connectivity Horndean Road – The Flood Map for Planning shows a short section of Main River on the West Brook to the north east of Horndean Road (near Spencer Road). Stantec has undertaken a site visit and it is not clear how this reach of the watercourse is connected to the West Brook (near West Brook View). The sewer records show a surface water sewer in this area, but it is not clear whether the watercourse is culverted through this reach, potentially within the area of woodland to the west of Horndean Road. The watercourse can be seen to pass under Horndean Road. Background information on the connectivity reach would be beneficial to inform the survey brief – EA can try to find this information. Gauge data Stantec explained that there are no gauges in the catchment based on the NRFA. JB explained that there might be a level only gauge on the West Brook near the Emsworth Mill Pond and can potentially supply further information.	EA to provide information regarding connectivity between Horndean Road structure and where it connects. EA to supply local gauge data.
5.	**Flood modelling approach (Stantec)** Hydrological assessment A new hydrological assessment will be undertaken for both the West Brook and Nore Farm Stream catchments. Both catchments are relatively small, are not influenced by reservoirs and lakes, are not gauged, pumped or permeable and therefore is a relatively simple study. Standard FEH approaches will be applied based on FEH Statistical Method and ReFH2 using the latest versions of the software and NRFA datasets. Present day 30-year, 100 year and 1,000 year events are to be assessed. Central and higher central allowances peak river flow allowances will be applied for the Arun and Western Streams Management Catchment. The hydrological assessment will be recorded in EA FEH calculation record proforma.	

	Item	Actions
	Hydraulic Model Stantec explained the approach to the hydraulic model development. New watercourse survey data to be collected to the north of A27 within client land ownership boundary. This will be supplemented with EA survey data for the West Brook downstream of the A27. Nore Farm Stream will be based on EA model from Motts when provided. Building on existing EA model would be very helpful for Nore Farm Stream so that we can included area south of A27. Will be hard to get surveyed otherwise. The orifice used to restrict flows here limits downstream flow and therefore a simplified approach could be taken here if the EA model is not provided, i.e., by monitoring downstream flow rather than detailed model of the Nore Farm Stream. JD explained that they have been checking the Main River alignment through this area and it is hard to track. EA agreed that this broad approach is appropriate in terms of obtaining model. ESTRY-TUFLOW model of the area will be developed with a 1D representation of the channel and 2D representation of the floodplain. EA confirmed that for a more detailed review of proposed hydrological assessment methodology and modelling approach a scoping note can be submitted for review by the Evidence and Risk team. This would help reduce project risks. Review should take approximately 2 weeks and this is a charged for service. EA can also review flood models when these are completed prior to submission.	Estimate of charge for pre-app model scoping check to be provided by EA.
6.	**Flood defence operation** Flood defences discussed as part of Items 3 & 4 above.	

7.	**Development planning & constraints (Stantec / Environment Agency)** Development will be located outside Flood Zone 1 in the present day and outside Flood Zone 3 with climate change. Development will be designed to ensure there is no impact to third parties / off site receptors, preserving function of downstream flood alleviation schemes. As part of the development there might be opportunities to realign the Nore Farm Stream as flood risk could be managed more appropriately in terms of development layout. Need to understand how overland flow paths should be taken into account and there would be layout benefits by aligning this with the watercourses. SB explained that there is an easement associated with the Nore Farm Stream flood alleviation scheme to allow overland flooding in this area. The easement was agreed with the landowner and Havant. This might contain information that relates to this flow route being retained and implications for realignment. The easement is based on the shape of the flood outline. Any potential realignment (subject to easement constraints) would need to have capacity to hold flow route, demonstrate that storage could still be achieved without causing other offsite impacts. Flood risk is associated by backing up within the site at the A27 and not from flows backing up from downstream areas. Realignment beneficial to consider how these areas can be progressed. Site is relatively flat in this area rather than a defined channel. Potential benefits from formalising this with then suitable structures for crossing. EA agreed that there is potential to reprofile the Nore Farm Stream and overland flow subject to the easements and appropriate evidence supporting the approach. JD identified that seeing betterment through this process would be preferred. To support the development design it would be beneficial to understand the existing maintenance activities completed by the EA in relation to the scheme and sections of main river through the site. EA can confirm they can provide details of the activities and operations they undertake and types of machines used.	Bloor to obtain details of the easement from the landowner to understand opportunities and requirements in this area. EA maintenance requirements and therefore what access is still required. Ask operations team to inform whether

	Details of site access still being determined as part of the masterplanning process and consideration of how site links to the wider allocation, i.e. potentially across Nore Farm Stream. Any need for watercourse crossings will be designed with appropriate freeboard above the design flood event (1 in 100 year + climate change). There is the potential for an access across the West Brook. Any structures would be designed with appropriate flood levels and informed by modelled flood levels. The EA will identify the maintenance activities that are undertaken and how this impacts development near the top of the watercourse banks. EA typically require an 8m easement from the top of each bank of the watercourses and in the vicinity of flood defences. EA to discuss constraints on development in this zone with the Asset Performance Team. Any works within 8m of the top of banks and watercourse crossings would require a Flood Risk Activity Permit (FRAP). EA confirmed that finished floor levels should be set 300mm above the design flood level.	hardstanding/green areas are appropriate. EA to provide details of access requirements for Nore Farm Stream and West Brook and confirm development requirements within 8m of banks.
8.	**Flood Risk Assessment requirements** Planning submission would be an FRA supported by FEH calculation record, modelling report, surface water drainage strategy. Surface water modelling also being undertaken and will be discussed with the LLFA to gain greater understanding of these risks. FRA will cover local and national policy requirements, flood risk appraisal from all sources, assessment of development impacts and any mitigation measures required. EA model review – all model files will be required following FRA submission. The EA would review model and FRA together. EA can review models in advance of submission if requested which can simplify process through application. Model reviews typically take 8 weeks to complete. This is done by a National Team.	
9.	**Pre-application liaison timescales** Further meetings to discuss site and available data can be arranged through SB at the EA.	

	Options to submit hydrological assessment and flood modelling for review in advance of an application. JM identified that Bloor could fund the necessary pre-application charges.	
10.	**AOB** Stantec to prepare minutes and create a list of the data that is required. Minutes to be shared with all attendees with email addresses within the meeting invite. Wastewater needs to be discussed with Havant Borough and Natural England.	Stantec to put together meeting minutes and list data requirements. and request to EA.