GeoSmart Information

# FloodSmart Plus

## Flood Risk Assessment

### Site Address

51 Pier Road
Littlehampton
BN17 5LW

### Grid Reference

502784, 101654

### Report Prepared for

Fresh Carvery Ltd
46 Pier Road
Littlehampton
BN17 5LW

### Date

2025-04-29

### Report Status

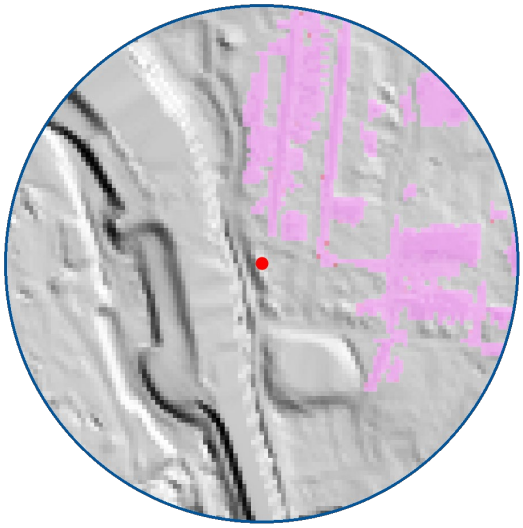
FINAL

### Site Area

160 $m^2$

### Report Reference

84904R2



## RISK – Very Low to Low

The Site is located in Flood Zone 3, which equates to a High probability of flooding from the River Arun.

Further analysis of detailed model data obtained from the EA indicates that the risk of fluvial and tidal flooding to the proposed development is Very Low in both the present day and future scenario, due to the existing raised FFL.

The area proposed for development is at Very Low risk from surface water flooding. A Very Low risk of flooding has been identified from artificial sources (sewers, reservoirs and canals). The risk of flooding from groundwater is considered to be Low.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# 1. Executive summary

A review has been undertaken of national environmental data sets to assess the flood risk to the Site from all sources of flooding in accordance with the National Planning Policy Framework (NPPF) (2024) and National Planning Practice Guidance (NPPG) (published in 2014 and updated in August 2022). A site-specific flood risk assessment, to assess the flood risk to and from the development Site, is provided within this concise interpretative report written by an experienced GeoSmart consultant. Baseline flood risk and residual risks that remain after the flood risk management and mitigation measures are implemented are summarised in the table below.

## Site analysis

| Source of Flood Risk | Baseline[1] | After analysis[2] | After Mitigation[3] |
|---|---|---|---|
| River (fluvial) flooding | Very Low | | N/A |
| Sea (coastal/tidal) flooding | Low | Very Low | Low to Medium |
| Surface water (pluvial) flooding | Very Low | | N/A |
| Groundwater flooding | Low | | Negligible |
| Other flood risk factors present | No | | N/A |
| Is any other further work recommended? | Yes | | Yes (see below) |

1 BASELINE risks assigned for the whole Site, using national risk maps, including the benefit of EA flood defences.

2 AFTER ANALYSIS modification of risk assessment based on detailed site specific analysis including some or all of the following: flood model data, high resolution mapping, building location, access routes, topographic and CCTV surveys. Reasons for the change in classification are provided in the text.

3 AFTER MITIGATION risks include risks to proposed development / asset and occupants if mitigation measures recommended in this report are implemented, including the impacts of climate change.

*N/A indicates where mitigation is not required.

### Summary of existing and proposed development

The Site currently comprises a two storey terraced building with a dormer level, used within a commercial capacity on the ground floor and as a residential unit above, including rear garden, detached garage and access.

Development proposals comprise the conversion of the existing commercial unit to a one bedroom flat. This involves the reconfiguration of the internal layout of the building, as well as changing the location of the rear door. Based on information provided by the Client, the existing FFL of the development is understood to be set at 4.43 mAOD.

## Summary of flood risks

The flood risks from all sources have been assessed as part of this report and are as follows:

## River (fluvial) and Sea (Estuarine/Coastal) flooding

According to the Environment Agency's (EA) Flood Map for Planning Purposes, the Site is located within a fluvial and tidal Flood Zone 3 (High probability), with the flood risk originating from the River Arun, c. 20 m west.

The Site benefits from the presence of flood defences, 20 m away in good condition, designed to provide a 1 in 300 year event standard of protection.

According to the EA's Risk of Flooding from Rivers and Sea (RoFRS) map, which considers the type, condition and crest height of flood defences, the Site has a Low risk of flooding.

- Baseline mapping indicates a Low risk however on review of the flood model data and the existing FFL of the property the risk rating has been reduced to Very Low.

Modelled flood data obtained from the EA has been analysed in line with the most up to date guidance on climate change (EA, 2022), to confirm a maximum "design" flood level at the Site.

- During a defended 1 in 200 year 2125 scenario tidal flood event, the flood level at the Site would be 3.83 mAOD for the higher central allowance. Given the raised nature of the existing property FFL, internal flooding is not anticipated in this instance.
- During a undefended 1 in 200 year scenario tidal flood event, the flood level at the Site would be 3.96 mAOD. Given the raised nature of the existing property FFL, internal flooding is not anticipated in this instance.
- During a undefended 1 in 200 year 2115 scenario tidal flood event, the flood level at the Site would be 5.03 mAOD. This future scenario is considered a residual risk however and is not needed to be mitigated against.

Emergency evacuation routes and safe refuge are available to the east.

The Site is located within a Coastal Change Management Area (CCMA). The SMP for the area suggests that defences will be raised with climate change which will be beneficial to the Site.

## Surface water (pluvial) flooding

According to the EA's Risk of Flooding from Surface Water (pluvial) flood mapping, the Site has a Very Low risk of pluvial flooding in both the present day and climate change scenarios.

## Groundwater flooding

Groundwater Flood Risk screening data indicates there is a Low potential risk of groundwater flooding at the surface in the vicinity of the Site during a 1 in 100 year event.

- The Site is underlain by permeable superficial deposits (Raised Beach Deposits) above permeable bedrock (Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver Chalk Formation And Portsdown Chalk Formation (Undifferentiated)). Groundwater levels may rise in bedrock and superficial aquifers in response to rainfall recharge and hydraulic continuity with the nearby River Arun.

## Artificial sources of flooding

The risk of flooding from artificial (man-made) sources such as reservoirs, sewers and canals has been assessed:

- The EA's Risk of Flooding from Reservoir map confirms the Site is not at risk of reservoir flooding.
- Ordnance Survey (OS) data confirms there are no canals near to the Site.
- The Strategic Flood Risk Assessment (SFRA) (JBA Consulting, 2016) has identified 10 incidences of flooding as a result of surcharging sewers within the BN12 5 postcode.

The risk of flooding from artificial sources is considered to be Negligible.

The risk to the development has been assessed over its expected 100 year lifetime, including appropriate allowances for the impacts of climate change which could increase the flood risk to the Site. Risks identified include sea level rise and increases in river flooding, and appropriate mitigation measures are proposed.

# Recommendations

Recommendations for flood mitigation are provided below, based upon the proposed development and the flood risk identified at the Site.

- Based on information from the Client, it is understood that the existing Finished Floor Level (FFL) of the building is set at 4.43 mAOD. Therefore, there should be no requirement to raise the FFL further, as the current height provides sufficient freeboard against the design flood level for both the present day undefended, present day defended and future defended up to and including the 1 in 200 year event.
- As part of the development, FFLs should be set no lower than the existing level. Where possible, flood resilience measures could be considered to further reduce residual risk.
- As there is a risk of flooding from groundwater sources at the surface, external ground levels should be designed to slope away from buildings. Risk to buried infrastructure should be considered along with water proofing of ground floor areas and non-return valves on the sewer inlet. French drains and/or pumping systems may also be considered.

- Occupants of the Site should be signed up to receive EA Flood Alerts and Flood Warnings.
- The ongoing management and maintenance of existing and any proposed drainage networks, under the riparian ownership of the developer, should be undertaken in perpetuity with the development.

GeoSmart recommend the mitigation measures discussed within this report are considered as part of the proposed development where possible and evidence of this is provided to the Local Planning Authority as part of the planning application.

# 2. Introduction

## Background and purpose

A site-specific flood risk assessment has been undertaken, to assess the flood risk to and from the development Site. This assessment has been undertaken by firstly compiling information concerning the Site and the surrounding area. The information gathered was then used to construct a 'conceptual site model', including an understanding of the appropriateness of the development as defined in the NPPF (2024) and the source(s) of any flood risk present, guided by the NPPG (Published in 2014 and updated in August 2022). Finally, a preliminary assessment of the steps that can be taken to manage flood risk to the development was undertaken.

This report has been prepared with reference to the NPPF (2024) and NPPG (2022).

"*The National Planning Policy Framework set out the Government's planning policies for England and how these are expected to be applied*" (NPPF, 2024).

The NPPF (2024) and NPPG (2022) promote a sequential, risk based approach to the location of development. This also applies to locating a development within a Site which has a variable risk of flooding.

"*The approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. This means avoiding, so far as possible, development in current and future medium and high flood risk areas considering all sources of flooding including areas at risk of surface water flooding*" (Paragraph: 023. NPPG, 2022).

The purpose of this report is to provide clear and pragmatic advice regarding the nature and potential significance of flood hazards which may be present at the Site.

## Report scope

In accordance with the requirements set out within NPPG 2022 (Paragraph: 021 Reference ID: 7-021-20220825), a thorough review of publicly and commercially available flood risk data and EA supplied data indicating potential sources of flood risk to the Site from rivers and coastal sources, surface run-off (pluvial), groundwater and reservoirs, including historical flood information and modelled flood extent. Appropriate measures are recommended to manage and mitigate the flood risk to the property.

Information obtained from the EA and a review of the Arun Strategic Flood Risk Assessment (SFRA) (JBA Consulting, 2016) and Local Plan (Arun District Council, 2018) are used to ascertain local flooding issues and, where appropriate, identify information to support a Sequential and/or Exception test required as part of the NPPF (2024).

The existing and future flood risk to and from the Site from all flood sources is assessed in line with current best practice using the best available data. The risk to the development has been assessed over its expected lifetime, including appropriate allowances for the impacts of climate change. Residual risks that remain after the flood risk management and mitigation

measures are implemented, are considered with an explanation of how these risks can be managed to keep the users of the development safe over its lifetime.

An indication of whether the Site will potentially increase flood risk elsewhere is provided, including where the proposed development increases the building footprint at the Site. A drainage strategy to control runoff can be commissioned separately if identified as a requirement within this report.

# Report limitations

It is noted that the findings presented in this report are based on a desk study of information supplied by third parties. Whilst we assume that all information is representative of past and present conditions, we can offer no guarantee as to its validity and a proportionate programme of site investigations would be required to fully verify these findings.

The basemap used is the OS Street View 1:10,000 scale, however the Site boundary has been drawn using BlueSky aerial imagery to ensure the correct extent and proportion of the Site is analysed.

This report excludes consideration of potential hazards arising from any activities at the Site other than normal use and occupancy for the intended land uses. Hazards associated with any other activities have not been assessed and must be subject to a specific risk assessment by the parties responsible for those activities.

# Datasets

The following table shows the sources of information that have been consulted as part of this report:

### Table 1. Datasets consulted to obtain confirmation of sources of flooding and risk

| Source of flooding | Datasets consulted | | | |
|---|---|---|---|---|
| | Commercial Flood Maps | Local Policy & Guidance Documents* | Environment Agency (Appendix B) | OS Data |
| Historical | X | X | X | |
| River (fluvial) / Sea (tidal/coastal) | X | X | X | |

| Source of flooding | Datasets consulted | | | |
|---|---|---|---|---|
| | Commercial Flood Maps | Local Policy & Guidance Documents* | Environment Agency (Appendix B) | OS Data |
| Surface water (pluvial) | X | X | X | |
| Groundwater | X | X | | |
| Sewer | | X | | |
| Culvert/bridges | | X | | X |
| Reservoir | | X | X | |

*Local guidance and policy, referenced in the section below, has been consulted to determine local flood conditions and requirements for flood mitigation measures.

# Local policy and guidance

For this report, several documents have been consulted for local policy and guidance and relevant information is outlined below:

## *Arun Local Plan 2011-2031 (Arun District Council, 2018):*

### Policy H SP2b

### Greater Littlehampton Urban Area Littlehampton – West Bank (SD4)

Located on the estuary with the River Arun, flanked by the coast and Littlehampton Harbour, this site has unique opportunities due to its location along with constraints. The site is functionally connected to Arun Valley SPA and development should avoid adverse effects on this designated area. Development proposals in the Littlehampton Strategic Allocation will provide at least 1,000 dwellings over the plan period, which will be key to supporting the future regeneration of the town and the Littlehampton Economic Growth Area. Development proposals must demonstrate compliance with the following key land use, design and infrastructure requirements which are specific to the allocation:

a. exploit and have regard to its location on the estuary with the river Arun, flanked by the coast and countryside,

b. incorporate views to the SDNP,

c. accord with Policies EMP SP2 in order to meet the objectives and requirements for the Littlehampton Economic Growth Area,

d. provide the West Bank Flood Defence improvements including flood protection works, land raising, new access points, remediation and land assembly,

e. provide a suitable buffer zone between the development and the river to allow for access for maintenance of flood defences and recreational use near to the river and ensure the integrity of the river banks is maintained,

f. provide a new 1.5-form (expandable to two-form) entry primary school and nursery places,

g. provide a Community Hub to meet identified local need on-site which includes;

i. shops,

ii. a new Tier 7 library facility, and

iii. new healthcare facilities,

h. provide open space at the western end of the allocation (north of Ferry Road and South of A259)

i. improve and develop marina berthing, including additional moorings, providing that the development is not detrimental to the integrity of tidal defences or the ability to maintain or improve them,

j. provide for boat building or other marine related commercial uses,

k. acknowledge the historic context of the Rope Walk area,

l. provide new linkages between the East and West Bank areas at appropriate locations,

m. deliver improved access to the river and town centre,

n. provide gate free cycle and pedestrian links along the West Bank to contribute to the Littlehampton to Arundel West Bank cycle path,

o. protect and improve the adjoining environment and habitats, in respect of the water and air environments serving them,

p. improvements to the A259 between Climping and Littlehampton

q. enable where possible the reduction of flood risk to the existing communities on the West Bank, and

r. all developments shall provide improvements to habitats for notable species in the area.

## Policy W DM2

## Flood risk

Development in areas at risk from flooding, identified on the latest Environment Agency flood risk maps and the Council's Strategic Flood Risk Assessment (SFRA) , will only be permitted where all of the following criteria have been satisfied:

a. The sequential test in accordance with the National Planning Policy Guidance has been met.

b. A site specific Flood Risk Assessment demonstrates that the development will be

safe, including access and egress, without increasing flood risk elsewhere and reduce flood risk overall.

c. The sustainability benefits to the wider community are clearly identified.

d. The scheme identifies adaptation and mitigation measures.

e. Appropriate flood warning and evacuation plans are in place; and

f. New site drainage systems are designed to take account of events which exceed the normal design standard i.e. consideration of flood flow routing and utilising temporary storage areas.

The reports prepared as part of the criteria above must take into account contingency allowances, taking climate change into account as set out in Flood Risk Assessments: climate change allowances section of the NPPG. In locations where strategic flood defence or resilient and resistant construction measures are necessary within the site itself, proposals will be required to demonstrate how

measures have been incorporated as an intrinsic part of the scheme in a manner which is compatible with the latest Strategic Flood Risk Assessment.

All development proposals must take account of relevant Surface Water Management Plans, Catchment Flood Management Plans and related Flood Defence Plans and strategies such as the Lower Tidal River Arun Strategy. The council may require financial contributions from development on sites where measures to address flood risk or to improve the environmental quality of watercourses have been identified by these Plans and Strategies.

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## *Arun District Council – Level 1 Strategic Flood Risk Assessment (JBA Consulting, 2016):*

4.3 Applying the Sequential Test and Exception Test to individual planning applications

The NPPF Planning Practice Guidance16 sets out how developers and planners need to consider flood risk to, and from, the development site, following the broad approach of assessing, avoiding, managing and mitigating flood risk. A checklist for site-specific Flood Risk Assessments is provided in Paragraph 68 of the Guidance.

A site-specific Flood Risk Assessment should be carried out to assess flood risk to, and from, a development. The assessment should demonstrate how flood risk will be managed over a development's lifetime, taking climate change and the user vulnerability into account.

The NPPF Planning Practice Guidance sets out the following objectives for a site-specific Flood Risk Assessment (FRA) and states it should establish

- whether a proposed development is likely to be affected by current or future flooding from any source;
- whether it will increase flood risk elsewhere;
- whether the measures proposed to deal with these effects and risks are appropriate;
- the evidence for the local planning authority to apply (if required) the Sequential Test; and
- whether the development will be safe and pass the Exception Test (where applicable).

4.3.1 Sequential Test

The Sequential Test must be performed when considering the placement of future development and for planning application proposals. The sequential approach to locating development should be followed for all sources of flooding. The Flooding and Coastal Change Planning Practice Guidance to the NPPF gives detailed instructions on how to perform the test.

The Sequential Test does not need to be applied for individual developments under the following circumstances:

- The site has been identified in development plans through the Sequential Test.

- Applications for minor development or change of use (except for a change of use to a caravan, camping or chalet site, or to a mobile home or park home site).

It is normally reasonable to presume and state that individual sites that lie in Zone 1 satisfy the requirements of the Sequential Test; however, consideration should be given to risks from all sources, areas with critical drainage problems and critical drainage areas (as defined in SWMPs).

For developments that do not fall under the above categories, local circumstances must be used to define the area of application of the Sequential Test (within which it is appropriate to identify reasonably available alternatives). The criteria used to determine the appropriate search area relate to the catchment area for the type of development being proposed. For some sites this may be clear, in other cases it may be identified by other Local Plan policies16. A pragmatic approach should be taken when applying the Sequential Test.

Arun District Council, with advice from the Environment Agency, are responsible for considering the extent to which Sequential Test considerations have been satisfied, and will need to be satisfied that the proposed development would be safe and not lead to increased flood risk elsewhere.

The information provided in this SFRA can be used to:

- Identify the area to be assessed (including alternatives) on the Flood Zone maps that are provided with this assessment.
- Establish the risk of flooding from other sources.
- Follow the instructions given in the Planning Practice Guidance.

### 4.3.2 Exception Text

If, following application of the Sequential Test it is not possible for the development to be located in areas with a lower probability of flooding the Exception Test must then be applied if deemed appropriate. The aim of the Exception Test is to ensure that more vulnerable property types, such as residential development can be implemented safely and are not located in areas where the hazards and consequences of flooding are inappropriate. For the Test to be satisfied, both of the following elements have to be accepted for development to be allocated or permitted:

1. It must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a SFRA where one has been prepared.

Local Planning Authorities will need to consider what criteria they will use to assess whether this part of the Exception Test has been satisfied, and give advice to enable applicants to provide evidence to demonstrate that it has been passed. If the application fails to prove this, the Local Planning Authority should consider whether the use of planning conditions and / or planning obligations could allow it to pass. If this is not possible, this part of the Exception Test has not been passed and planning permission should be refused17 .

2. A site-specific Flood Risk Assessment must demonstrate that the development will be safe for its lifetime, taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

The site-specific Flood Risk Assessment should demonstrate that the site will be safe and the people will not be exposed to hazardous flooding from any source. The following should be considered18:

- The design of any flood defence infrastructure.
- Access and egress.
- Operation and maintenance.
- Design of the development to manage and reduce flood risk wherever possible
- Resident awareness.
- Flood warning and evacuation procedures.
- Any funding arrangements required for implementing measures.

The NPPF and Technical Guidance provide detailed information on how the Test can be applied.

## 5.1 Historic flooding

The Arun District has a long history of flood events, with multiple sources of flooding. In particular, three notable flood events have affected the district in the last 60 years and these have been associated primarily with heavy rainfall, high groundwater levels, high river flows and high tides (but not necessarily in combination). The most recent events of 1974, 2000 and 2012 caused widespread flooding in the district after significantly high rainfall over an extensive period.

Data collated from the Environment Agency, Arun District Council and West Sussex County Council were provided for assessment of flooding in the Arun District. Figure 5-1 below shows the recorded historic flood points and historic flood extents provided. Not all of the historic data provided had a source of flooding and was therefore classified as 'Unknown'. Also not all of the data collected for this assessment had dates or a description of flooding recorded.

The historical flooding identified in Figure 5-1 is summarised as follows:

- September 1968: A fluvial flood in Barnham caused several properties to flood and a road to close. The recorded flood level for the road for this event was 5.63m AOD.
- November 1974: Heavy rainfall resulted in significant surface water and fluvial flooding throughout the district. Tidal flooding also occurred in Arundel when heavy rainfall coincided with a high tide. This caused the river to overtop defences and flood several properties and roads.
- October 1980: Fluvial flooding of the Ferring Rife caused several properties to flood on Downview Avenue and Langbury Lane in Ferring.

- 1980/81: Angmering village flooded on three separate occasion: 20 September 1980, 10 October 1980 and 2 June 1981 due to combination of heavy rainfall and blockages of drainage ditches and culverts. The June 1981 flood was the most severe of the three, with sewage being reported to be within the flood water19.
- February 1983: Flooding of more than 150 properties in Littlehampton following a tidal surge on 1 February 198320.
- January 2008: Flooding north of Angmering after heaving rainfall (32mm) resulted in the flooding of two properties in the Hammerpot area21.
- May 2009: District wide flooding reported, but particularly at Yapton, Felpham, Walberton and Bersted. This is reported to have been primarily a surface water flooding issue brought about by intense rainfall, although fluvial flooding issues were also reported22.
- November 2010: Tide locking of surface water drainage systems and intense rainfall resulted in extensive surface water ponding around the Elmer Sands estate and wider areas within the district. At Elmer Sands estate, soakaway systems and highway drainage were unable to effectively drain the estate and inundation of the foul system was evident. Floodwaters were high in Middleton and there was flooding on the A259 in between Flansham and Felpham. and surface water flooding23.

Other significant flooding events noted to affect Arun District are summarised as follows:

- Significant groundwater flooding has been observed across Sussex in 1993/94, 2000/01 and 2002/03. The areas subjected to this flooding were mainly the upper reaches of Chalk catchments, in areas of localised low topography, and in areas of drift cover absence24.
- On the 14 February 2014, at least eight properties in the vicinity of Northfield Lane in Aldingbourne flooded25.

**Guidance**

Strategic Flood Risk Assessments are carried out by local authorities, in consultation with the Environment Agency, to assess the flood risk to the area from all sources both now and in the future due to climate change. They are used to inform planning decisions to ensure inappropriate development is avoided (NPPF, 2024).

[redacted]

# 3. Site analysis

## Site information

The Site is located on Pier Road, Littlehampton in a setting of commercial and residential land use at National Grid Reference TQ 02784 01654.

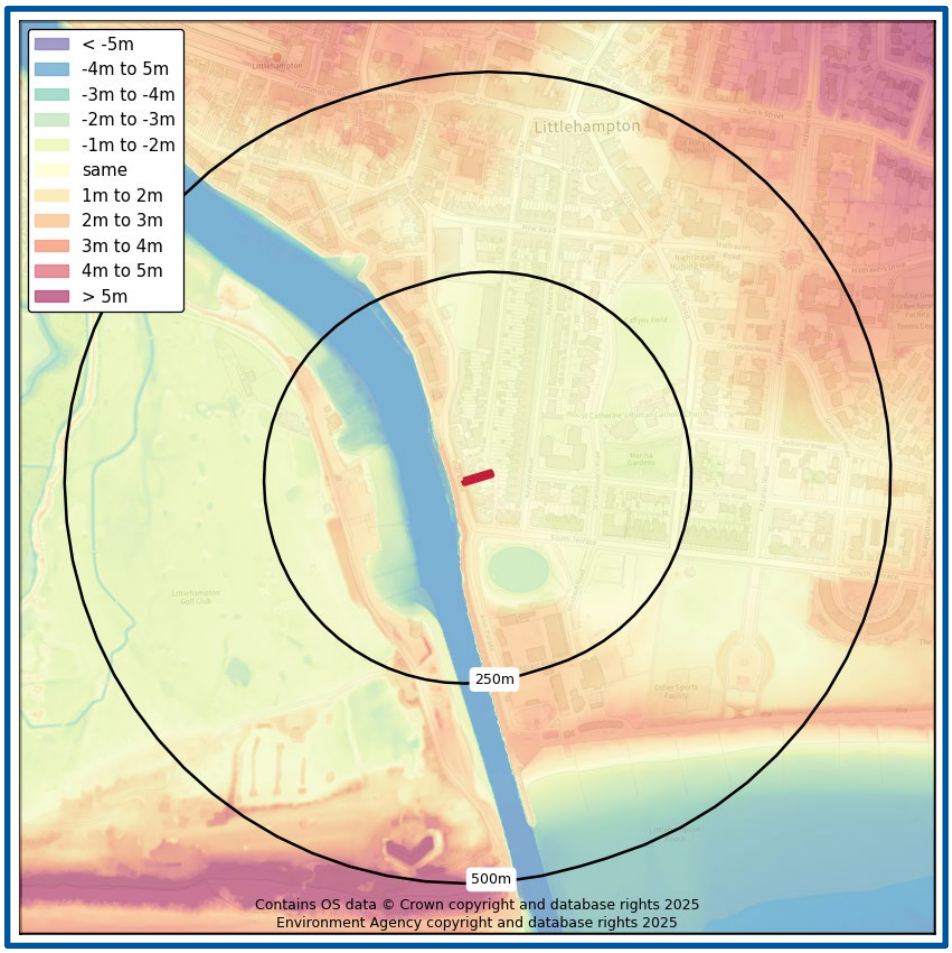
Figure 1. Aerial imagery of the Site (Bluesky, 2025)


Figure 2 (overleaf) indicates ground levels within 500m of the Site generally fall in a southerly / south-westerly direction towards the coast. However, there are also areas of high ground (dunes) along the coastline, as well as the presence of high ground surrounding the River Arun.

The general ground levels on the Site are between 2.25 and 4.03 mAOD with the Site rising gradually in a westerly and easterly direction. This is based on EA elevation data obtained for the Site to a 1 m resolution with a vertical accuracy of ±0.15 m (Appendix C).

Based on information provided by the Client, the existing FFL of the development is understood to be set at 4.43 mAOD.

Figure 2. Site Location and Relative Elevations (GeoSmart, 2025)




# Development

The Site currently comprises a two storey terraced building with a dormer level, used within a commercial capacity on the ground floor and as a residential unit above, including rear garden, detached garage and access.

Development proposals comprise the conversion of the existing commercial unit to a one bedroom flat. This involves the reconfiguration of the internal layout of the building, as well as changing the location of the rear door. Site plans are included within Appendix A.

The effect of the overall development will result in an increase in number of occupants and/or users of the building and will result in the change of use, nature or times of occupation. According to Annex 3 of the NPPG (2022), the vulnerability classification of the existing development is More Vulnerable and proposed development is More Vulnerable. The estimated lifespan of the development is 100 years.

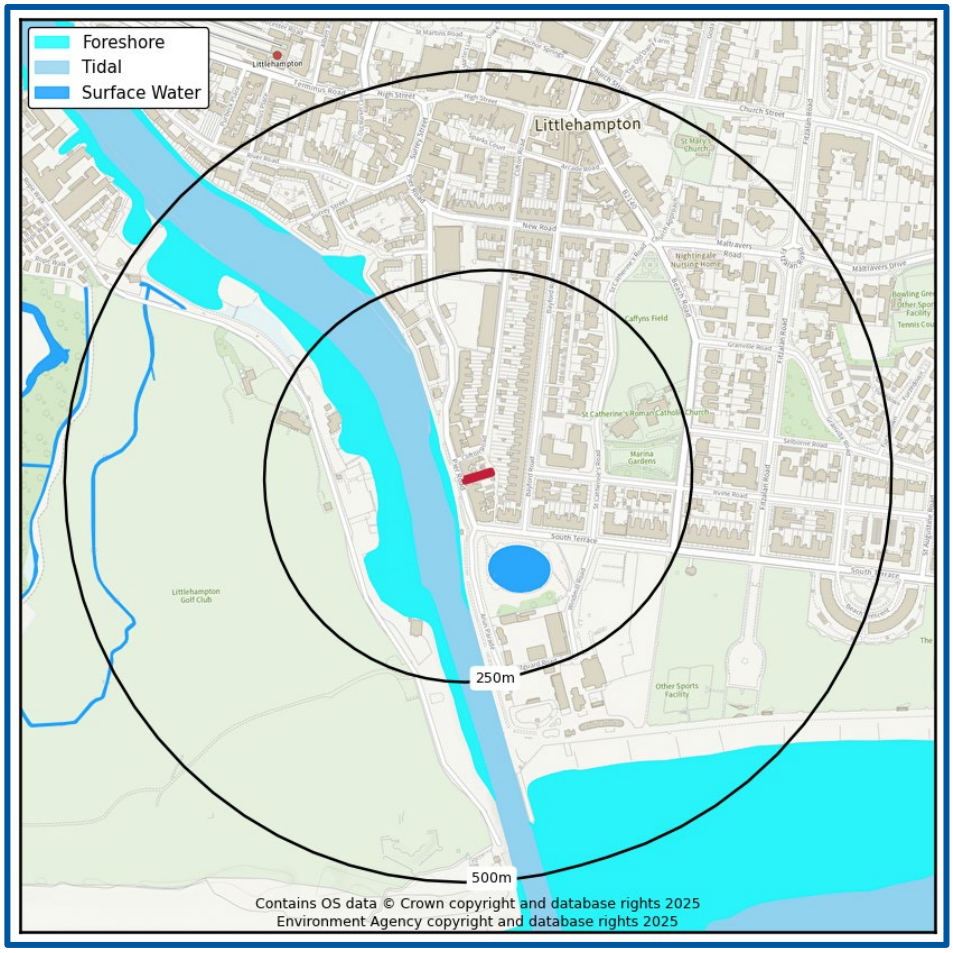
[redacted]

# Hydrological features

According to Ordnance Survey (OS) mapping included in Figure 3, there are numerous surface water features within 500 m of the Site.

- The River Arun is located approximately 20 m to the west of the Site, flowing in a southerly direction. The River Arun discharges into the English Channel approximately 400 m to the south of the Site.
- Multiple drains are located at approximately 420 m to the west of the Site.
- A pond is located approximately 100 m to the south of the Site.

Figure 3. Surface water features (EA, 2025)




# Proximity to relevant infrastructure

Infrastructure has been identified within 500 m of the Site which could influence the risks of flooding to existing or future occupants. These include:

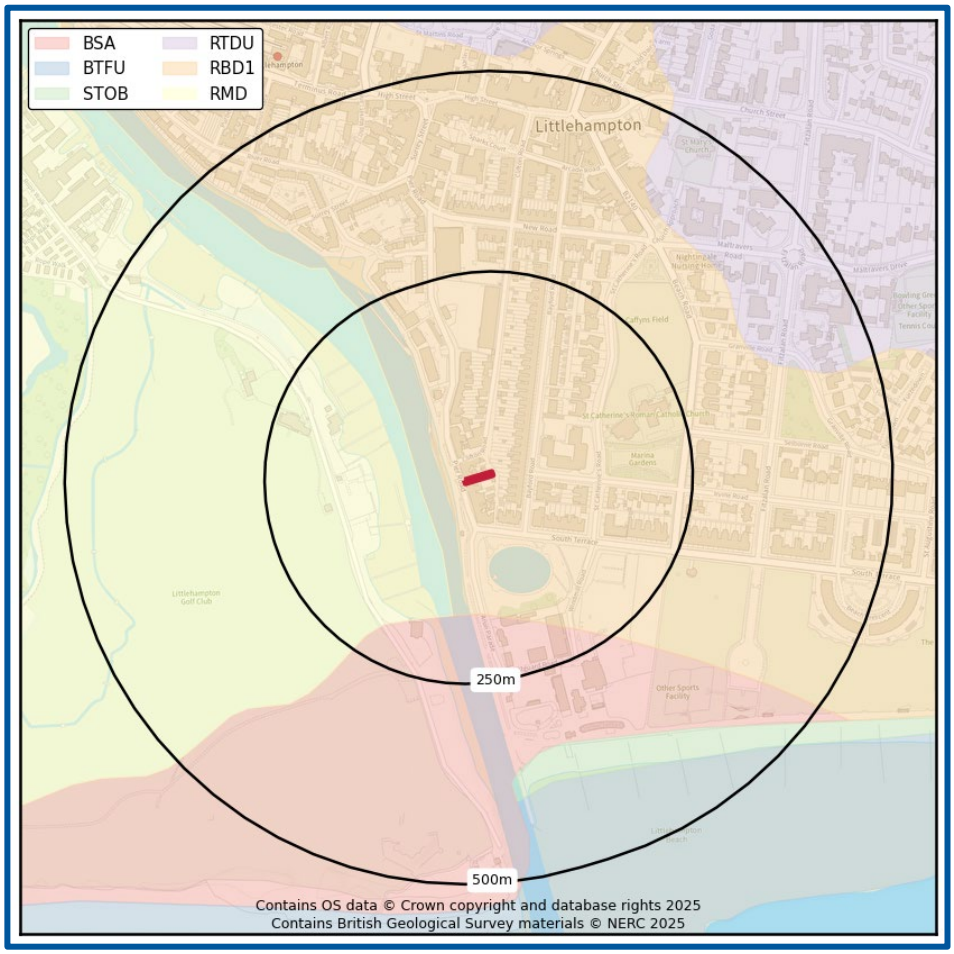
- Littlehampton Harbour Bridge is located approximately 750 m to the north west of the Site over the River Arun, upstream of the Site.
- Littlehampton Pier is located 375 m to the south of the Site, downstream of the Site.

- Groynes are located 375 m south east of the Site on East Beach.

# Hydrogeological features

British Geological Survey (BGS) mapping indicates the underlying superficial geology (Figure 4) consists of Raised Beach Deposits (RBD1) (BGS, 2025) and is classified as a Secondary (A) Aquifer (EA, 2025).

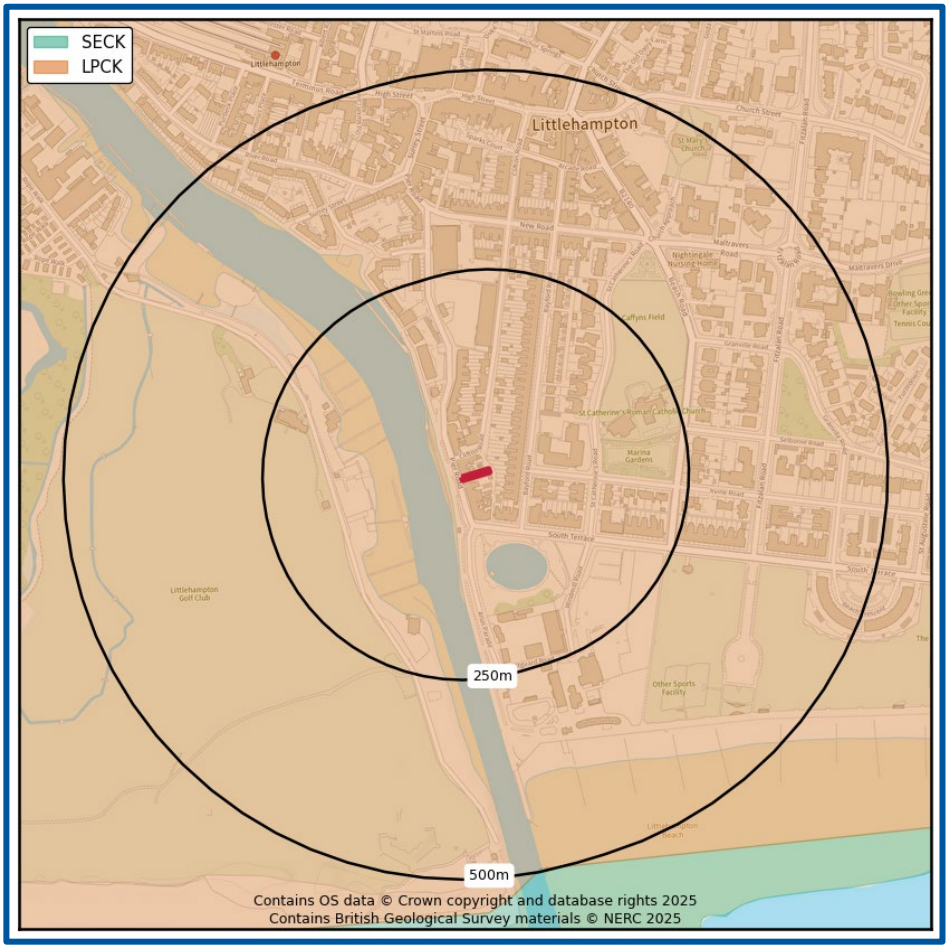
Figure 4. Superficial Geology (BGS, 2025)




BGS mapping indicates the underlying bedrock geology (Figure 5, overleaf) consists of the Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver Chalk Formation And Portsdown Chalk Formation (Undifferentiated) (LPCK) (BGS, 2025) and is classified as a Principal Aquifer (EA, 2025).

[redacted]

Figure 5. Bedrock Geology (BGS, 2025)




## *Geological conditions*

A review of the BGS borehole database (BGS, 2025) indicates the nearest and most relevant borehole to the Site (ref: TQ00SW269) is located 40 m to the north west of the Site boundary at an elevation of 3.48 mAOD, and indicates the underlying geology to consist of

- Made Ground to a depth of 1.20 m below ground level (bgl);
- Sandy gravel to a depth of 3.50 m bgl;
- Gravelly sand to a depth of 4.60 m bgl;
- Slightly sandy slightly gravelly clay to a depth of 6.50 m bgl;
- Chalk to a depth of 30.30 m bgl, where the borehole was terminated.

## *Groundwater*

Borehole ref: TQ00SW269 did not encounter groundwater during its depth of 30.30 m below ground level on 08/10/2012, subject to seasonal variations.

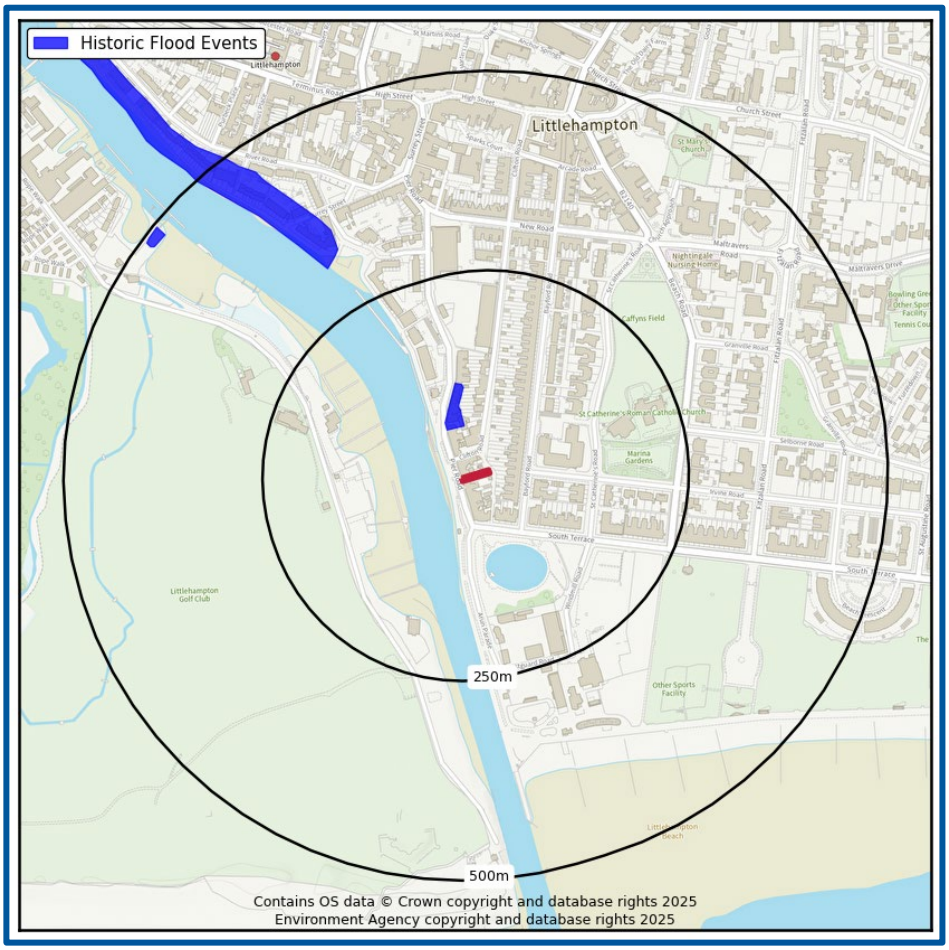
# 4. Flood risk to the development

## Historical flood events

According to the EA's Historical Flood Map (Figure 6) and Figure 5-1 of the SFRA (JBA Consulting), no historical fluvial or tidal flood events have affected the Site. The mapping does however show historical flooding within 65 m to the north of the Site. The area highlighted on Figure 6 is understood to have been related to minor flooding due to a combination of high tide and strong winds in April 1985 (EA, 2025).

The purpose of historical flood data is to provide information on where and why flooding may have occurred in the past. The absence of any recorded events does not mean flooding has never occurred on-Site or that flooding will never occur at the Site.

Figure 6. EA Historic Flood Map (EA, 2025)




[redacted]

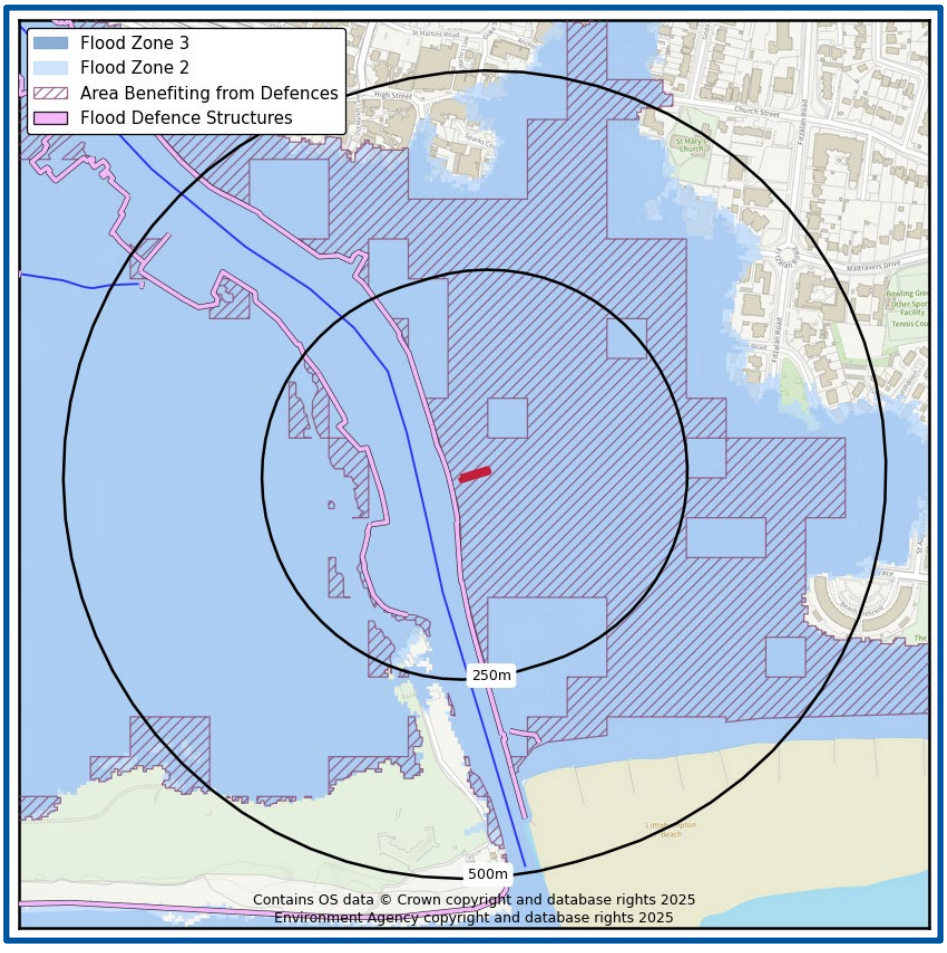
# Rivers (fluvial) / Sea (coastal) / Estuarine (tidal) flooding

The Site is located in an estuarine location and flooding could occur from a combination of the sea, termed as coastal flooding and from rivers, termed as fluvial flooding. There may be a predominant effect from either the sea or from the river, through the following processes:

- High tide levels – variations in tidal levels due to gravitational effects of the sun and moon can result in higher sea levels. There is an approximate twice daily variation between high and low tide, onto which is superimposed a spring-neap tide cycle when extra high and low tides occur;
- Surge – an increase in sea level above tidal level caused by low atmospheric pressure which may be exacerbated by the wind acting on the sea. Tidal flooding is of greatest risk when tidal surges combine with high tides.

According to the EA's Flood Map for Planning Purposes (Figure 7), the Site is located within fluvial and tidal Flood Zone 3 and is therefore classified as having a High probability of fluvial and tidal (coastal) flooding from the River Arun / Sea.

Figure 7. EA Flood Map for Planning Purposes (EA, 2025)




[redacted]

Guidance

As defined in the NPPF (2024):

Ignoring the presence of any defences, land located in a Flood Zone 3 is considered to have High probability of flooding with a 1 in 100 year or greater annual probability of fluvial flooding or a 1 in 200 or greater annual probability of coastal flooding in any one year.

Development of "Water-Compatible" and "Less Vulnerable" land uses are suitable for this zone with "More Vulnerable" and "Essential Infrastructure" requiring an Exception test to be passed prior to development taking place. (see glossary for terminology).

# Flood defences

Guidance

Sites that are located close to flood defences are likely to be zones where rapid inundation will occur in the event of the flood defences being overtopped or breached. A Site located close to flood defences (within 250 m) may require a more detailed FRA subject to local topography.

The Site is in an area which benefits from flood defences, but is not covered by the EA's 'Reduction in Risk' dataset.

The Environment Agency Asset Information Management Systems (AIMS) dataset identifies the following defences:

- The defences along the River Arun take the form of a wall, which is designed to defend up to a 1 in 300 year flood event and has a minimum crest level of 4.76 mAOD. The EA inspects the defences once a year and classifies their current condition as "Good (Condition Grade: 2)".
- Upstream of the Site (c. 60m), the standard of defence for the flood wall is noted to decrease, only designed to defend against a 1 in 75 year flood. The effective crest height of this feature is understood to be 4.30 mAOD.

The Shoreline Management Plan (SMP) (River Arun 4D19) confirms the policy for defences along the River Arun at Littlehampton over the next 100 years is to hold the line. This means that the Site will remain protected by flood defences currently and over the majority of the lifetime of the development. It is assumed the defences will continue to be maintained thereafter until 2125, but freeboard will be provided to provide an allowance, should the defence policy change between 2105 and 2125.

# Model data

As the Site is located within the EA's tidal floodplain, modelled flood elevation data was obtained from the EA. This data is more up to date than that which is included in the Arun District Council SFRA (2016) and has been used to assess flood risk and to provide recommendations for mitigation for the proposed development. The data is provided in Table 2 below and included with Appendix B.

## *Defended Scenario*

Modelled flood level data have been taken from the Littlehampton Defended Update (JBA Consulting, 2017) (Table 2 and Figure 8). The defended outputs include the combined impacts from sea level inundation and wave overtopping.

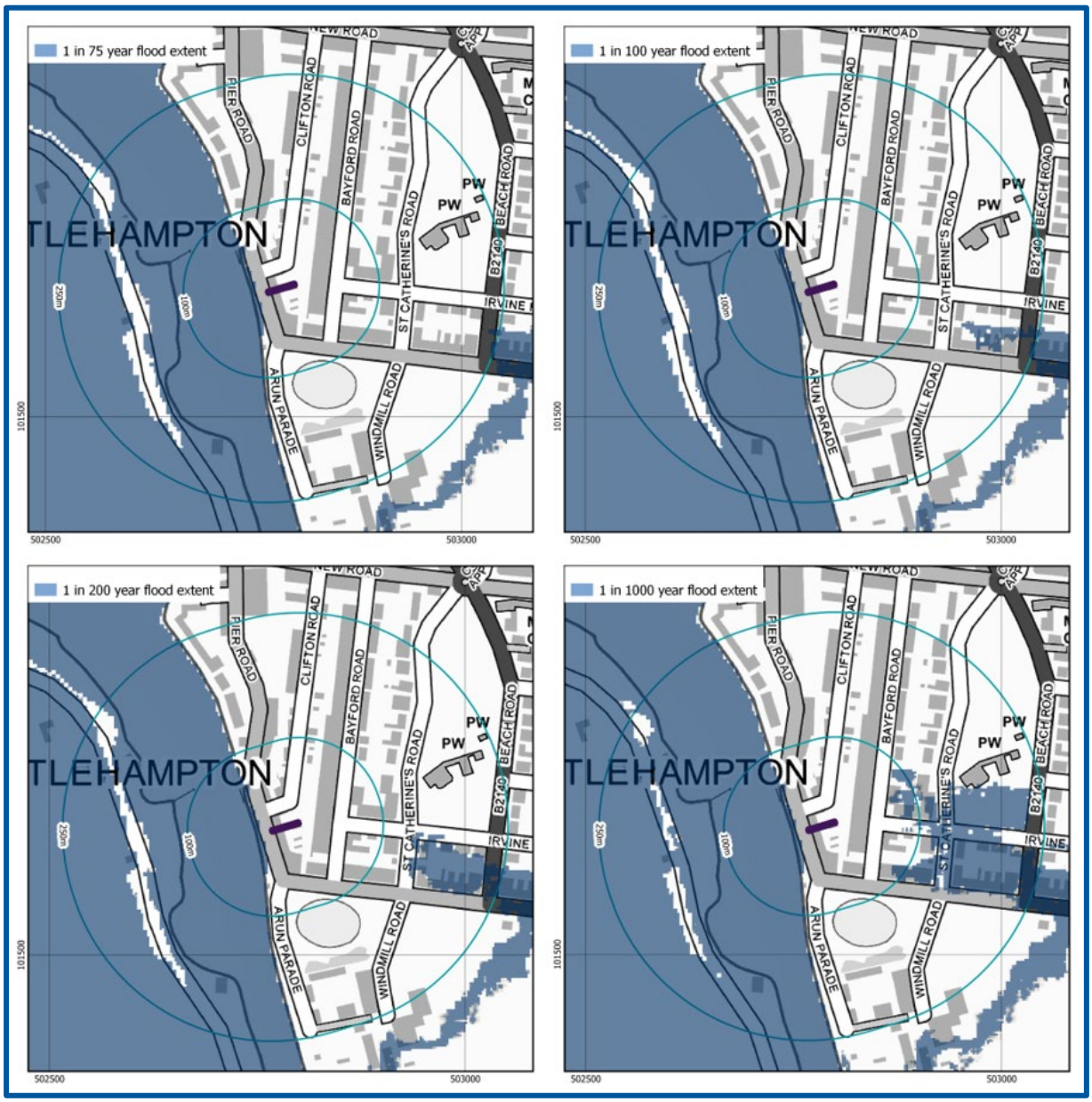
The flood level data have been taken from the EA's 2D floodplain grid data using QGIS (v3.16.10).

Table 2. Modelled Flood Levels

| Finished floor level of the property (mAOD) | Defended scenario flood levels (mAOD) | | | |
|---|---|---|---|---|
| | 1 in 75 year | 1 in 100 year | 1 in 200 year | 1 in 1000 year |
| 4.43 | N/A | N/A | N/A | N/A |
| Flood depths (m) | No flooding anticipated | | | |

[redacted]

Figure 8. Present Day Modelled Flood Extents






## *Undefended Scenario*

Modelled flood level data have been taken from the Arun to Adur Flood Modelling (JBA Consulting, 2012) (Table 5-1, Table 6-1 and Table 6-2). The flood level data have been taken from the EA's 2D floodplain grid data using QGIS (v3.16.10).

[redacted]

### Table 3. Undefended Modelled Flood Levels

| Finished floor level of the property (mAOD) | Undefended scenario flood levels (mAOD) | | | |
|---|---|---|---|---|
| | 1 in 20 year | 1 in 75 year | 1 in 200 year | 1 in 1000 year |
| 4.43 | 2.68 | 3.21 | 3.96 | 4.19 |
| Flood depths (m) | No flooding anticipated | | | |

With reference to the tidal levels provided in the table above (Table 3), the 1 in 1000 (0.1% AEP) year extreme flood event, the peak tidal level at the Site will be 4.18 mAOD. The levels for the 1 in 200 year flood event will be 3.96 mAOD. As FFLs of the proposed development will sit at 4.43 mAOD, this will achieve a freeboard of 0.24 m above the current 0.1% AEP undefended scenario and a freeboard of 0.47 m above the current 0.5% AEP undefended scenario.

The following table (Table 4) provides flood depths for the 2115 undefended scenario for a 1 in 200 (0.5% AEP) and 1 in 1000 (0.1% AEP) year flood event.

### Table 4. 2115 Undefended Modelled Flood Levels

| Finished floor level of the property (mAOD) | Undefended 2115 scenario flood levels (mAOD) | |
|---|---|---|
| | 1 in 200 year | 1 in 1000 year |
| 4.43 | 5.03 | 5.24 |
| Flood depths (m) | 0.60 | 0.81 |

With reference to the tidal levels provided in the table above (Table 4), the 1 in 1000 (0.1% AEP) year 2115 extreme flood event, the peak tidal level at the Site will be 5.24 mAOD. The levels for the 1 in 200 year flood event will be 5.03 mAOD. As FFLs of the proposed development will sit at 4.43 mAOD, flood depths within the proposed development will be 0.60 m in the 2115 0.1% AEP undefended scenario and 0.81 m in the 2115 0.5% AEP undefended scenario. This undefended scenario is a residual risk and is not considered a likely scenario and beyond a reasonable expectation of the developer to mitigate against.

[redacted]

# Climate change factors

The EA's *Flood risk assessments: climate change allowances* guidance (Published 19 February 2016 and updated May, 2022) has been used to inform a suitable increase in sea level and to allow for surge and wave action for the proposed development. The updated guidance confirms 'More Vulnerable' developments are required to undertake a Basic assessment approach.

As the Site is located within the Arun and Western Management Catchment within the South East Region and the proposed development is classed as More Vulnerable, where the proposed lifespan is approximately 100 years, the Higher Central and Upper End allowances have been used to determine a suitable climate change factor to apply to sea levels.

In this case, the climate change allowances relevant to the proposed development have already been modelled to 2115. An allowance for climate change has been added onto the modelled flood levels to account for sea level rise up to 2125, as provided within the table below and Figure 9 overleaf.

### Table 5. Modelled flood levels plus Higher Central climate change allowances

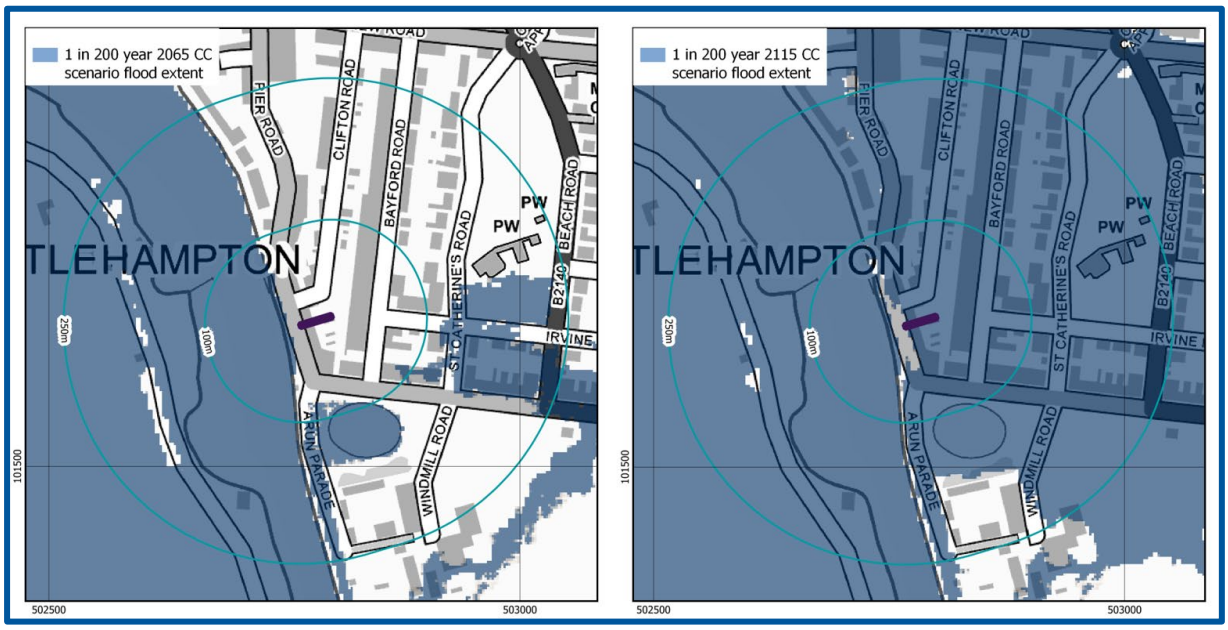
| Finished floor level of the property (mAOD) | Modelled Flood Levels (mAOD) | | | | |
|---|---|---|---|---|---|
| | 1 in 200 (2065 year scenario) | Higher central allowance (2125 scenario)* | | Upper End allowance (2125 scenario)** | |
| | | 1 in 200 year | 1 in 1000 year | 1 in 200 year | 1 in 1000 year |
| 4.43 | N/A | 3.83 | 4.83 | 3.88 | 4.88 |
| Flood depths (m) | No flooding anticipated | No internal flooding anticipated | Up to 0.40 internal flooding | No internal flooding anticipated | Up to 0.45 internal flooding |

*The 1 in 200 year 2115 modelled flood level is 3.70 mAOD, whilst the 1 in 1000 year 2115 flood level is 4.70 mAOD. The Higher Central allowance of 13.1 mm per year has been applied to the flood level to account for climate change up to 2125.

**The Upper End allowance of 18.2 mm per year has been applied to the 2115 scenario modelled flood levels to account for climate change up to 2125.

[redacted]

## Figure 9. Future Modelled Flood Extents





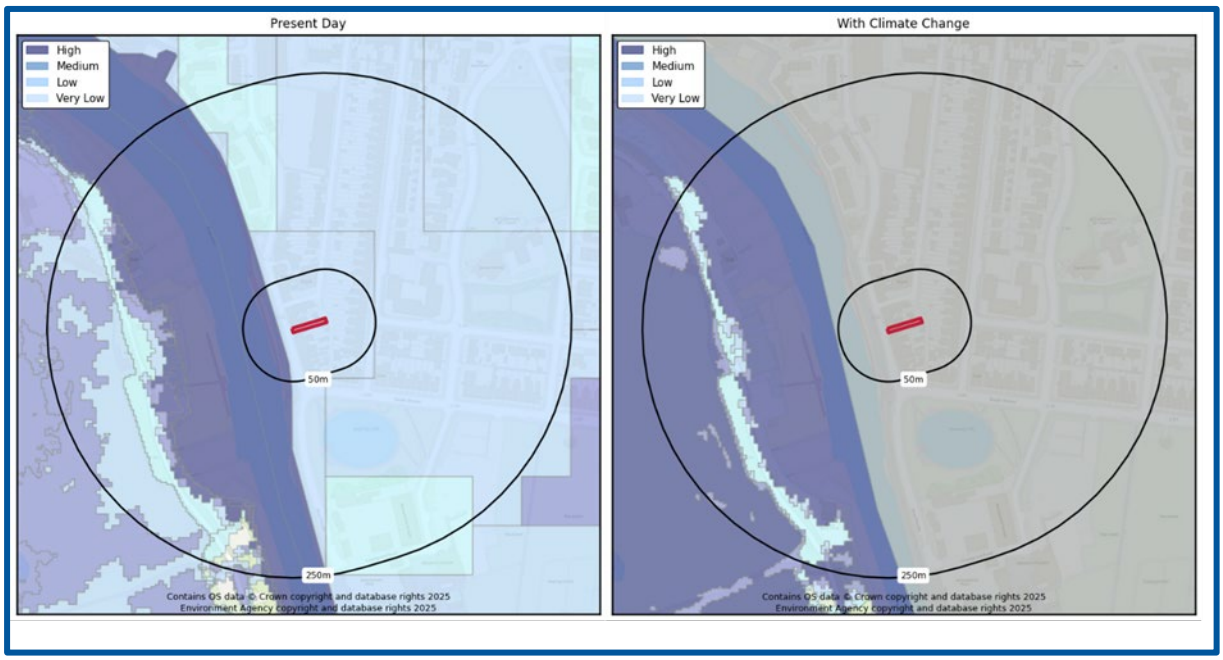

[redacted]

# Flood risk including the benefit of defences

The type and condition of existing flood defences influence the 'actual' risk of fluvial flooding to the Site, albeit the long-term residual risk of flooding (ignoring the defences) should be considered when proposing new development.

According to the EA's Risk of Flooding from Rivers and Sea (RoFRS) map (Figure 10), which considers the type, condition and crest height of flood defences, the Site has a Low risk of tidal flooding from the River Arun in the present day. According to the RoFRS climate change mapping, the future flood risk is 'Unavailable'.

Figure 10. Risk of Flooding from Rivers and Sea map (EA, 2025)



# Surface water (pluvial) flooding

Surface water flooding occurs when intense rainfall exceeds the infiltration capacity of the ground and overwhelms the drainage systems. It can occur in most locations even at higher elevations and at significant distances from river and coastal floodplains.

According to the EA's Risk of Flooding from Surface Water (pluvial) flood mapping, the Site has a Very Low risk of pluvial flooding in the present day[1].

Figure 11 confirms the extent and depth of flooding in multiple modelled flood scenarios indicating the Site is likely to be flood free in all events.

**Guidance**

According to EA's surface water flood risk map the Site is at:

- Very Low risk - chance of flooding of less than 1 in 1000 (0.1%).

The SFRA does not record any reported incidents of historical surface water flooding within 100 m of the Site and does not confirm whether the Site is located within a Critical Drainage Area (CDA)[2] (JBA Consulting, 2016).

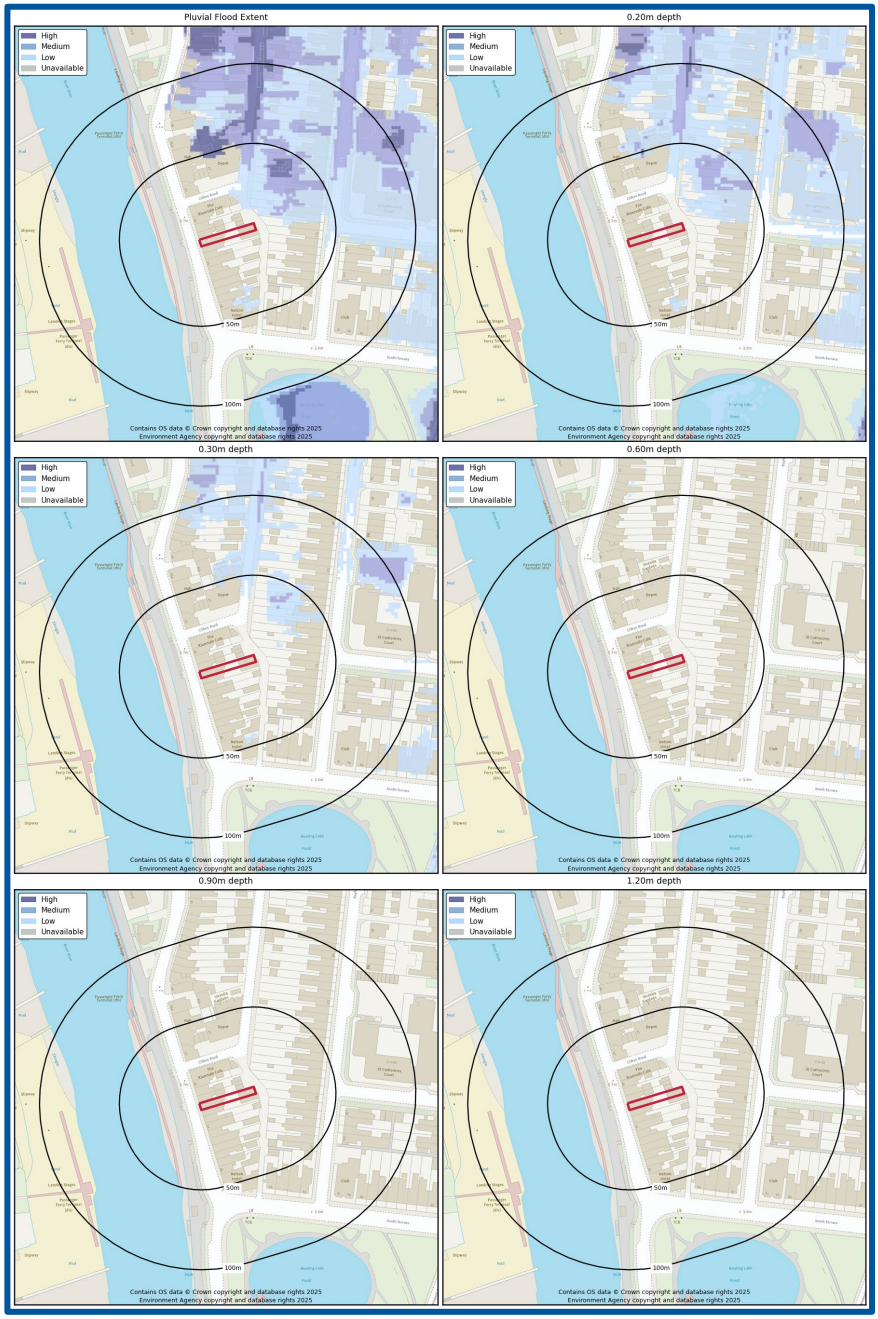
## *Surface water flooding flow routes*

Analysis of OS mapping, ground elevation data and the EA's pluvial flow route mapping in the 1 in 1000 year (Low probability) event confirms the Site is not located on a potential overland flow route.

[1] Environment Agency. April 2019. What is the Risk of Flooding from Surface Water map? Version 2.0. Accessed from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/842485/What-is-the-Risk-of-Flooding-from-Surface-Water-Map.pdf

[2] A Critical Drainage Area (CDA) is an area that has critical drainage problems and which has been notified to the local planning authority as such by the Environment Agency in line with the National Planning Policy Framework (NPPF, 2024). CDA's are specific to Flood Zone 1, defined as areas where runoff can and may have historically contributed to flooding downstream, although they are not necessarily areas where flooding problems may occur. Where a Site is located in Flood Zone 1 and within a CDA, a Flood Risk Assessment (FRA) is required and the Council may also request Sustainable Drainage Scheme (SuDS) features to be included within the proposed development.

Figure 11. EA present day surface water flood extent and depth map (EA, 2025)




# Climate change factors

Paragraph 002 of the National Planning Practice Guidance (August, 2022) requires consideration of the 1% AP (1 in 100 year) event, including an appropriate allowance for climate change.

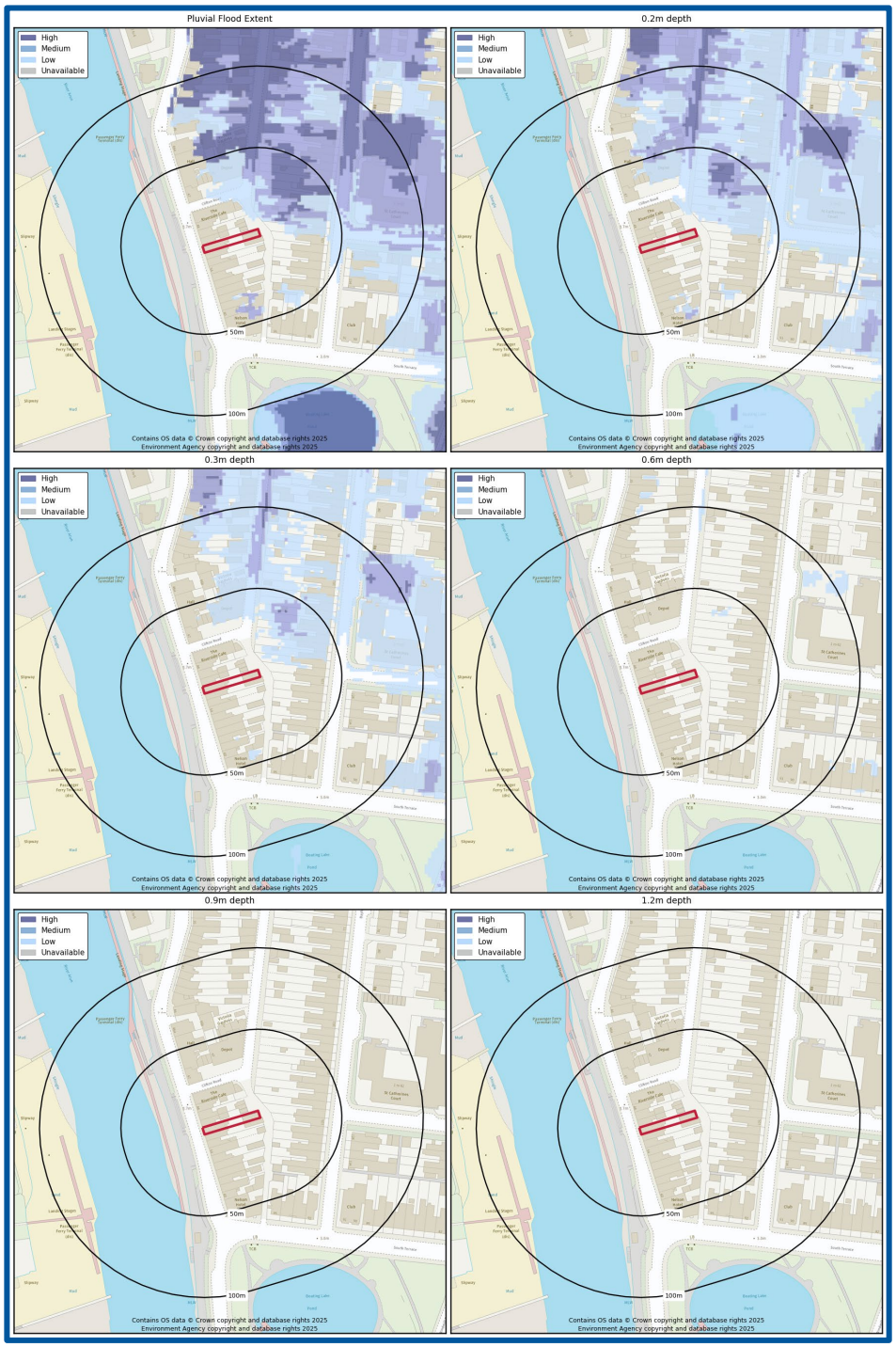
As the Site is located within the Arun and Western Streams Management Catchment and the proposed development is classed as More Vulnerable, where the proposed lifespan is approximately 100 years, the Upper End (45%) allowance is required to determine a suitable climate change factor to apply to rainfall data.

[redacted]

As part of RoFSW mapping, climate change modelling has been applied exclusively for the central allowance up to the 2050s epoch. Whilst it should be noted that the risk of pluvial flooding is likely to be greater than this dataset indicates for the lifetime of the development, in the absence of more extensive modelling scenarios this data is considered the best resource at the time of writing.

According to the RoFSW climate change modelling (Figure 12), the Site is modelled to be unaffected by pluvial flooding.

Figure 12. EA future surface water flood extent and depth map (EA, 2025)

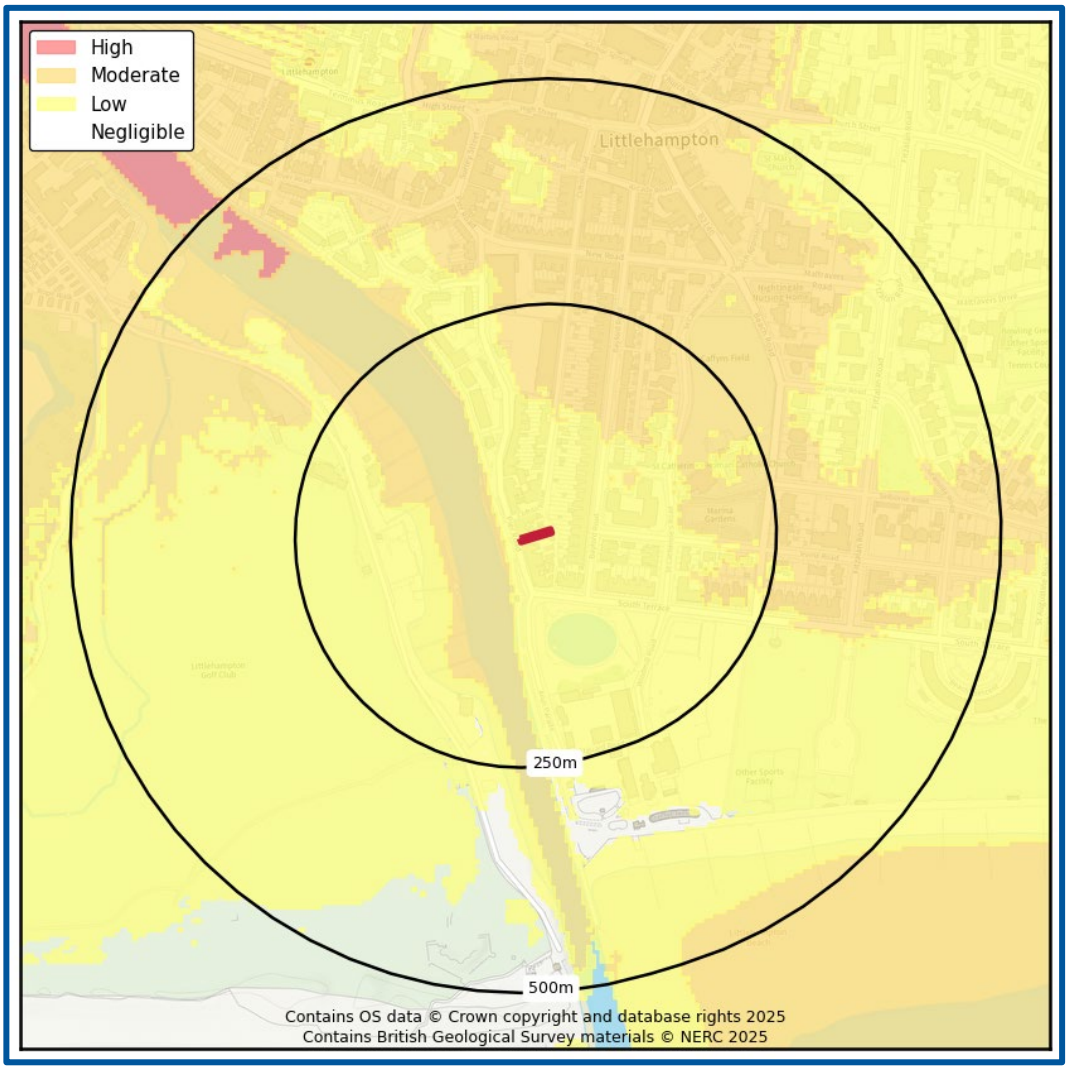


# Groundwater flooding

Groundwater flooding occurs when sub-surface water emerges from the ground at the surface or into Made Ground and structures. This may be as a result of persistent rainfall that recharges aquifers until they are full; or may be as a result of high river levels, or tides, driving water through near-surface deposits. Flooding may last a long time compared to surface water flooding, from weeks to months. Hence the amount of damage that is caused to property may be substantially higher.

Groundwater Flood Risk screening data (Figure 13) indicates there is a Low risk of groundwater flooding at surface in the vicinity from permeable bedrock and superficial deposits during a 1 in 100 year event.

Figure 13. GeoSmart GW5 Groundwater Flood Risk Map (GeoSmart, 2025)




Mapped classes within the screening map combine likelihood, possible severity and the uncertainty associated with predicting the subsurface system. The map is a national scale screening tool to prompt site-specific assessment where the impact of groundwater flooding would have significant adverse consequences. Mapping limitations and a number of local

factors may reduce groundwater flood risk to land and property even where it lies within mapped groundwater flood risk zones, which do not mean that groundwater floods will occur across the whole of the risk area.

A site-specific assessment has been undertaken to refine the groundwater risk screening information on the basis of site-specific datasets (see Section 3) including BGS borehole data and the EA's fluvial and tidal floodplain data (where available) to develop a conceptual groundwater model. The risk rating is refined further using the vulnerability of receptors including occupants and the existing and proposed Site layout, including the presence of basements and buried infrastructure. The presence of any nearby or on-Site surface water features such as drainage ditches, which could intercept groundwater, have also been considered.

The Site does not contain a basement, and basements are not proposed as part of the development. The risks are higher for basements, buried infrastructure and soakaway systems which may be affected by high groundwater levels.

According to a review of the hydrogeology (Section 3), the Site is underlain by permeable superficial deposits above permeable bedrock. Groundwater levels may rise in the bedrock and superficial aquifers in a seasonal response to prolonged rainfall recharge which may cause an unusually high peak in groundwater levels during some years.

Groundwater levels may also rise in the superficial aquifer in response to high tidal events due to the potential hydraulic continuity with the nearby River Arun and sea. It is noted groundwater flooding may occur in response to prolonged high water levels, by-passing flood defences even if overtopping does not occur

Despite the presence of an aquifer the Site would only be at risk of groundwater flooding if the water table reaches the base of the Site development or the ground surface when groundwater seepage could lead to overland flow and ponding.

The nearby borehole (ref: TQ00SW269) did not encounter groundwater during its 30.30 m depth.

The hydrogeological characteristics suggest there is potential for a groundwater table beneath the Site.

The baseline groundwater flood risk rating is Low, which is considered to remain appropriate on the basis of the site-specific assessment.

| | Guidance |
|---|---|
| Low Risk - There will be a remote possibility that incidence of groundwater flooding could lead to damage to property or harm to other sensitive receptors at, or near, this location. | |

Climate change predictions suggest an increase in the frequency and intensity of extremes in groundwater levels.

- Rainfall recharge patterns will vary regionally resulting in changes to average groundwater levels.

- Sea level rises of between 0.4m and 1m are predicted by 2100, leading to a rise in average groundwater levels in the adjacent coastal aquifer systems, and potential increases in water levels in the associated drainage systems. The 'backing up' of groundwater levels from both coast and tidal estuary locations may extend a significant distance inland and affect infrastructure previously constructed above average groundwater levels.

The impact of climate change on groundwater levels beneath the Site is linked to the predicted rise in sea levels and the variation in rainfall recharge which is uncertain.

# Flooding from artificial sources

Artificial sources of flood risk include waterbodies or watercourses that have been amended by means of human intervention rather than natural processes. Examples include reservoirs (and associated water supply infrastructure), docks, sewers and canals. The flooding mechanism associated with flood risk from artificial sources is primarily related to breach or failure of structures (reservoir, lake, sewer, canal, flood storage areas, etc.)

## Sewer flooding

Table 5-2 of the SFRA has identified 10 incidences of flooding as a result of surcharging sewers within the BN12 5 postcode. However, it is recognised that this four digit postcode covers a large area and instances of flooding are not specific to the Site (JBA Consulting, 2016).

### Guidance

Properties classified as "at risk" are those that have suffered, or are likely to suffer, internal flooding from public foul, combined or surface water sewers due to overloading of the sewerage system either once or twice in the ten year reference period. Records held by the sewage utility company provide information relating to reported incidents, the absence of any records does not mean that the Site is not at risk of flooding.

## Canal failure

According to Ordnance Survey (OS) mapping, there are no canals within 500 m of the Site.

## Water supply infrastructure

Water supply infrastructure is comprised of a piped network to distribute water to private houses or industrial, commercial or institution establishments and other usage points. In urban areas, this represents a particular risk of flooding due to the large amount of water supply infrastructure, its condition and the density of buildings. The risks of flooding to properties from burst water mains cannot be readily assessed.

If more information regarding the condition and history of the water supply infrastructure within the vicinity of the Site is required, then it is advisable to contact the local water supplier (Southern Water).

[redacted]

## Culverts and bridges

The blockage of watercourses or structures by debris (that is, any material moved by a flowing stream including vegetation, sediment and man-made materials or refuse) reduces flow capacity and raises water levels, potentially increasing the risk of flooding. High water levels can cause saturation, seepage and percolation leading to failure of earth embankments or other structures. Debris accumulations can change flow patterns, leading to scour, sedimentation or structural failure.

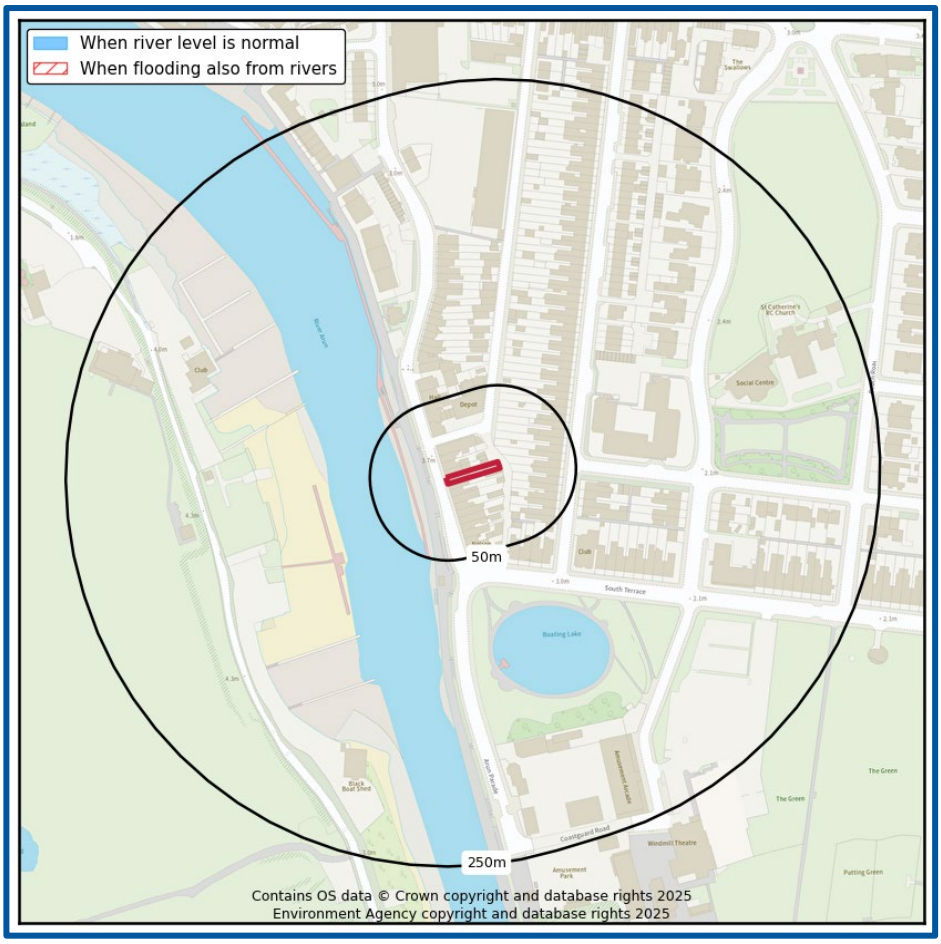
Culverts and bridges have not been identified within 50 m of the Site.

The SFRA has not identified any historic drainage issues within the Site area (JBA Consulting, 2016).

## Reservoir flooding

According to the EA's Risk of Flooding from Reservoir mapping, the Site is not at risk of flooding from reservoirs (Figure 14) (EA, 2025).

Figure 14. EA Risk of Reservoir Flooding (EA, 2025)



# 5. Flood risk from the development

## Floodplain storage

Where flood storage from any source of flooding is to be lost as a result of development, on-site level-for-level compensatory storage, accounting for the predicted impacts of climate change over the lifetime of the development, should be provided. Where it is not possible to provide compensatory storage on site, it may be acceptable to provide it off-site if it is hydraulically and hydrologically linked.

The loss of floodplain storage is less likely to be a concern in areas benefitting from appropriate flood risk management infrastructure or where the source of flood risk is solely tidal.

The development is located within a tidal Flood Zone 3, but does not involve an increase in building footprint. Therefore, there would be no displacement of flood water and compensatory flood storage is not required.

## Drainage and run-off

Based on the topography and low surface water flood risk in the vicinity, interference or interaction with overland flow paths and inflows from off-Site is considered unlikely.

The development proposals are for a change of use and will not involve the alteration of any external features (or any changes to existing impermeable and permeable areas). Therefore, an estimation of surface water runoff is not considered to be required.

Any changes to the existing drainage system will be undertaken in accordance with best practice and care will be taken to ensure the new development does not overload/block any existing drainage or flow pathways to/from the Site.

# 6. Suitability of the proposed development

The information below outlines the suitability of proposed development in relation to national and local planning policy.

## National policy and guidance

The aims of the national planning policies are achieved through application of the Sequential Test and in some cases the Exception Test.

**Guidance**

**Sequential test:** The aim of this test is to steer new development towards areas with the lowest risk of flooding (NPPF, 2024). Reasonably available sites located in Flood Zone 1 should be considered before those in Flood Zone 2 and only when there are no reasonably available sites in Flood Zones 1 and 2 should development in Flood Zone 3 be considered.

**Exception test:** In some cases, this may need to be applied once the Sequential Test has been considered. For the exception test to be passed it must be demonstrated that the development would provide wider sustainability benefits to the community that outweigh flood risk and a site-specific FRA must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

Suitability of the proposed development, and whether the Sequential and Exception Tests are required, is based on the Flood Zone the Site is located within and the flood risk vulnerability classification of the existing and proposed development. Some developments may contain different elements of vulnerability and the highest vulnerability category should be used, unless the development is considered in its component parts.

This report has been produced to assess all development types, prior to any development. The vulnerability classification and Flood Zones are compared within the table overleaf (Table 2 of the NPPG (2022)).

As the Site is located within Flood Zone 3a and the proposed development is defined as More Vulnerable, the proposals are acceptable, but may be subject to the Sequential and Exceptions Test.

The application is considered a 'Change of Use' of the existing building from commercial to residential and in line with Paragraph 174 of the NPPF (2024), it may not be subject to the Sequential or Exception Tests.

Paragraph 174 of the NPPF (2024) states: *"Applications for some minor development and changes of use [60] should not be subject to the sequential or exception tests but should still meet the requirements for site-specific flood risk assessments set out in footnote 59.*

Footnote 60 of the NPPF (2024) states: *This includes householder development, small non-residential extensions (with a footprint of less than 250m$^2$) and changes of use; except for changes*

*of use to a caravan, camping or chalet site, or to a mobile home or park home site, where the sequential and exception tests should be applied as appropriate".*

Table 6. Flood risk vulnerability and flood zone 'incompatibility (taken from NPPG, 2022)

| Flood risk vulnerability classification | | Essential infrastructure | Water compatible | Highly vulnerable | More vulnerable | Less vulnerable |
|---|---|---|---|---|---|---|
| Flood Zone | Zone 1 – low probability | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Zone 2 – medium probability | ✓ | ✓ | Exception test required | ✓ | ✓ |
| | Zone 3a - high probability | Exception test required | ✓ | X | Exception test required* | ✓ |
| | Zone 3b – functional flood plain | Exception test required | ✓ | X | X | X |

*As the development proposals are for the change of use of the existing building the Sequential and Exception Tests are not required.

# EA Flood Risk Standing Advice for vulnerable developments located in Flood Zones 2 or 3 (February, 2022)

For all relevant vulnerable developments (i.e. more vulnerable, less vulnerable and water compatible), advice on the points should be followed:

- Surface water management;
- Access and evacuation; and
- Floor levels.

## *Surface water management*

Plans for the management of surface water need to meet the requirements set out in either the local authority's:

[redacted]

- Surface water management plan where available; OR
- Strategic flood risk assessment.

They also need to meet the requirements of the approved building regulations Part H: drainage and water disposal. Read section H3 rainwater drainage.

Planning permission is required to use a material that can't absorb water (e.g. impermeable concrete) in a front garden larger than 5m$^2$.

## *Access and evacuation*

Details of emergency escape plans should be provided for any parts of a building that are below the estimated flood level:

Plans should show:

- Single storey buildings or ground floors that don't have access to higher floors can access a space above the estimated flood level, e.g. higher ground nearby;
- Basement rooms have clear internal access to an upper level, e.g. a staircase;
- Occupants can leave the building if there's a flood and there's enough time for them to leave after flood warnings.

## *Floor levels*

The following should be provided:

- average ground level of your site
- ground level of the access road(s) next to your building
- finished floor level of the lowest room in your building

Finished floor levels should be a minimum of whichever is higher of 300mm above the:

- average ground level of the site
- adjacent road level to the building
- estimated river or sea flood level

You should also use construction materials that have low permeability up to at least the same height as finished floor levels.

If you cannot raise floor levels to meet the minimum requirement, you will need to:

- raise them as much as possible
- consider moving vulnerable uses to upper floors
- include extra flood resistance and resilience measures

When considering the height of floor levels, you should also consider any additional requirements set out in the SFRA. Flood water can put pressure on buildings causing structural issues. If your design aims to keep out a depth of more than 600mm of water, you should get advice from a structural engineer. They will need to check the design is safe.

[redacted]

## *Extra flood resistance and resilience measures*

Follow the guidance in this section for developments in flood risk areas where you cannot raise the finished floor levels to the required height. You should design buildings to exclude flood water where possible and to speed recovery in case water gets in.

Make sure your flood resilience plans for the development follow the guidance in the CIRIA Property Flood Resilience Code of Practice. Please note that the code of practice uses the term 'recovery measures'. In this guide we use 'resilience measures'.

Flooding can affect the structural stability of buildings. If your building design would exclude more than 600mm of flood water, you should get advice from a structural engineer. They will need to check the design is safe. Only use resistance measures that will not cause structural stability issues during flooding. If it is not possible to safely exclude the estimated flood level, exclude it to the structural limit then allow additional water to flow through the property.

The design should be appropriately flood resistant and resilient by:

- Using flood resistant materials that have low permeability to at least 600mm above the estimated flood level
- Making sure any doors, windows or other openings are flood resistant to at least 600mm above the estimated flood level
- Using flood resilient materials (for example lime plaster) to at least 600mm above the estimated flood level
- By raising all sensitive electrical equipment, wiring and sockets to at least 600mm above the estimated flood level
- Making it easy for water to drain away after flooding such as installing a sump and a pump
- Making sure there is access to all spaces to enable drying and cleaning
- Ensuring that soil pipes are protected from back-flow such as by using non-return valves

Temporary or demountable flood barriers are not appropriate for new buildings. Only consider them for existing buildings when:

- There is clear evidence that it would be inappropriate to raise floor levels and include passive resistance measures
- An appropriate flood warning or other appropriate trigger is available

If proposals involve the development of buildings constructed before 1919, refer to Flooding and Historic Buildings guidance produced by Historic England.

# 7. Resilience and mitigation

Based on the flood risk identified at the Site, the national and local policies and guidance and proposed development, the mitigation measures outlined within this section of the report are likely to help protect the development from flooding.

## Rivers (fluvial) flood mitigation measures

As the proposed development is not identified as being at risk of flooding from fluvial sources, mitigation measures are not required.

## Sea (coastal/tidal) flood mitigation measures

The Site is located within an area which is affected by flooding from the sea and estuarine sources. The following table confirms the flood depths associated with the area proposed for development.

Table 7. Flood levels compared to ground levels on the Site

| Finished floor level of the property (mAOD) | Modelled Flood Levels (mAOD) | | |
|---|---|---|---|
| | 1 in 200 year | 1 in 200 year plus 2125 CC allowance | 1 in 1000 year |
| 4.43 | N/A | 3.83 | N/A |
| Flood depths (m) | No flooding anticipated | No **internal** flooding anticipated | No flooding anticipated |

*The 1 in 200 year 2115 modelled flood level is 4.88 mAOD, whilst the 1 in 1000 year 2115 flood level is 5.02 mAOD. The Higher Central allowance of 13.1 mm has been applied to the flood level to account for climate change up to 2125.

### Raising minimum floor levels

The vulnerability classification of the Site and the Flood Zone means proposals for the Site fall under the EA's Flood Risk Standing Advice (FRSA) for More Vulnerable developments.

Based on information from the Client, it is understood that the existing Finished Floor Level (FFL) of the building is set at 4.43 mAOD. Therefore, there should be no requirement to raise the FFL further, as the current height provides sufficient freeboard against the design flood level. Additionally, the present day 1 in 200 year undefended scenario provides a design flood

event of 3.96 mAOD and as such, there is no requirement to raise FFLs further than 4.43 mAOD.

As part of the development, FFLs should be set no lower than the existing level. Where possible, flood resilience measures could be considered to further reduce residual risk.

Given that the SMP for this section of the coastline is to hold the line for the foreseeable (up to 2105), it is reasonable to assume that the present standard of defence will be maintained and potentially upgraded as sea levels rise in line with climate change predictions. Whilst this cannot be stated for certain and is subject to the availability of funding, given the Site is located within a critical urban location, it must be anticipated that the design height of flood defences will be increased periodically as the future flood risk situation is assessed.

## Alternative Mitigation

To reduce the residual risk in the event of a tidal defence failure, it may be appropriate to adopt a water exclusion strategy for flood depths up to 0.3 m in line with the EA's Standing Advice. A water exclusion strategy, using avoidance and resistance measures, is appropriate where floods are expected to last for short durations. Potential water exclusion strategies include:

- Passive flood door systems;
- Temporary flood barriers;
- Air brick covers (manual or automatic closing);
- Non-return flap valves on sewer outfalls.

Avoidance and resistance measures are unlikely to completely prevent floodwater entering a property, particularly during longer duration flood events. Therefore, it is recommended that the following flood resilience measures are also considered.

- Flood resilient materials and designs:
    - Use of low permeability building materials up to 0.3 m such as engineering bricks (Classes A and B) or facing bricks;
    - Hard flooring and flood resilient metal staircases;
    - The use of internal lime plaster/render or where plasterboards are used these should be fitted horizontally instead of vertically and/or using moisture resistant plasterboard at lower levels;
    - Water, electricity and gas meters and electrical sockets should be located above the predicted flood level;
    - Communications wiring: wiring for telephone, TV, Internet and other services should be protected by suitable insulation in the distribution ducts to prevent damage.

# Surface water (pluvial) flood mitigation measures

As the Site is not identified as being at risk of pluvial flooding, mitigation measures are not required.

# Groundwater flood mitigation measures

It is likely the flood mitigation measures recommended for the tidal flood risk will reduce the groundwater flood risk at the development. However, specific additional groundwater measures that may also be considered for the Low risk identified, where deemed feasible:

- Waterproof tanking of the ground floor;
- Interceptor drains;
- Automatic sump to extract flood water; and
- Non-return flap valves on the proposed foul and surface water sewer lines.

If these mitigation measures are implemented this could reduce the flood risk to the development from Low to Negligible.

# Reservoir flood mitigation measures

The Site is not at risk of flooding from reservoirs; therefore, mitigation measures are not required.

# Other flood risk mitigation measures

As the Site is not identified as at risk from other sources, mitigation measures are not required.

# Residual flood risk mitigation measures

The risk to the Site has been assessed from all sources of flooding and appropriate mitigation and management measures proposed to keep the users of the development safe over its lifetime. There is, however, a residual risk of flooding associated with the potential for failure of mitigation measures if regular maintenance and upkeep are not undertaken. If mitigation measures are not implemented or maintained, the risk to the development will remain as the baseline risk.

# Further flood mitigation information

More information on flood resistance, resilience and water entry can be found here: http://www.planningportal.gov.uk/uploads/br/flood_performance.pdf

www.knowyourfloodrisk.co.uk

[redacted]

# Emergency evacuation - safe access / egress and safe refuge

Emergency evacuation to land outside of the floodplain should be provided if feasible. Where this is not possible, 'More Vulnerable' developments and, where possible, development in general (including basements), should have internal stair access to an area of safe refuge within the building to a level higher than the maximum likely water level. An area of safe refuge should be sufficient in size for all potential users and be reasonably accessible to the emergency services.

Emergency evacuation from the development and the Site should only be undertaken in strict accordance with any evacuation plans produced for the Site, with an understanding of the flood risks at the Site including available mitigation, the vulnerability of occupants and preferred evacuation routes.

## Flood warnings

The EA operates a flood warning service in all areas at risk of flooding; this is available on their website: https://www.gov.uk/check-flood-risk. The Site is located within an EA Flood Alerts/Warning coverage area so is able to receive alerts and warnings (Figure 15, overleaf):

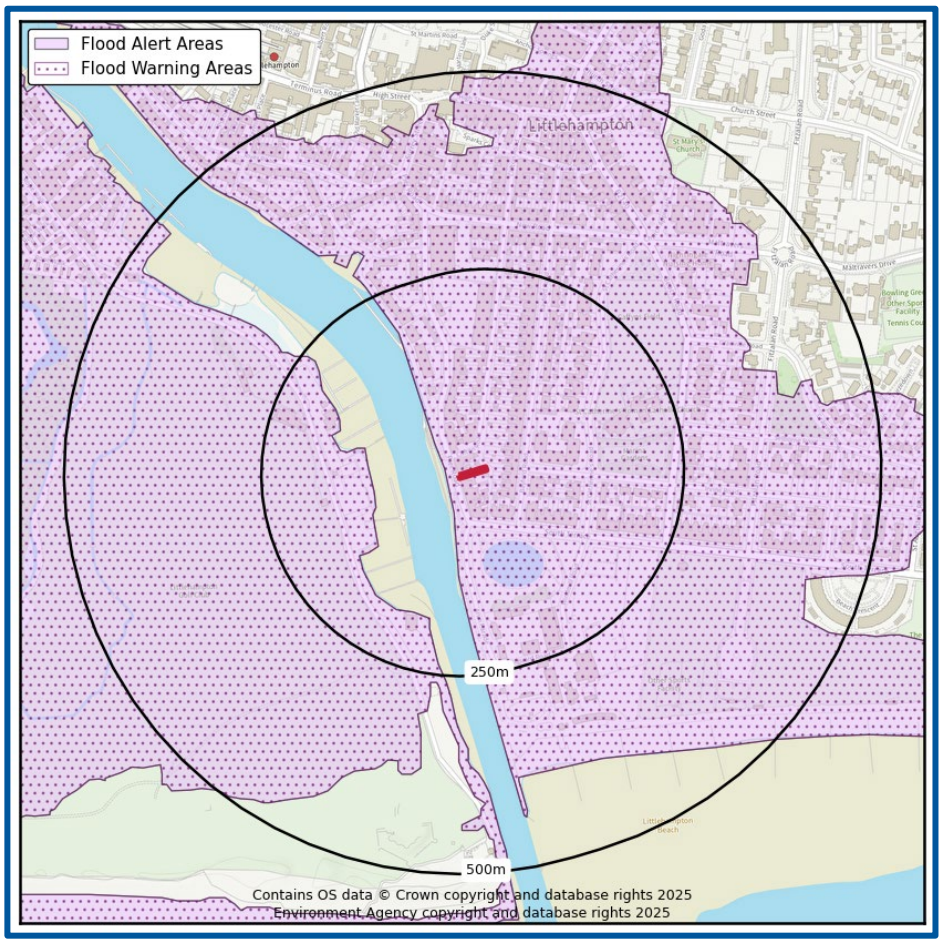
- Flood Alerts coverage area ref: 065WAC406; quick dial code: 216032
- Flood Warning coverage area ref: 065FWC2602; quick dial code: 316035

All warnings are also available through the EA's 24 hour Floodline Service (0345 988 1188).

The EA aims to issue Flood Warnings 2 hours in advance of a flood event. Flood Warnings can provide adequate time to enable protection of property and evacuation from a Site, reducing risk to life and property.

[redacted]

Figure 15. EA Flood Warning Coverage for the local area (EA, 2025).




## Emergency evacuation

Where possible, a safe access and egress route with a 'very low' hazard rating from areas within the floodplain to an area wholly outside the 1 in 200 year flood event including an allowance for climate change should be demonstrated.

Based on the EA's Flood Zone Map the closest dry evacuation area within Flood Zone 1 is along South Terrace (c.500 m east – direct measurement). It is advised that evacuation from the premises would be the preferred option in a flood event if safe to do so. It is recommended that residents prepare to evacuate as soon as an EA Flood Warning is issued in order to completely avoid flood waters.

## Other relevant information

Occupants should be signed up to receive EA Flood Alerts and Warnings.

Registration to the Environment Agency's flood warning scheme can be done by following this link: https://www.gov.uk/sign-up-for-flood-warnings.

It is recommended that main communication lines required for contacting the emergency services, electricity sockets/meters, water supply and first aid stations and supplies are not compromised by flood waters. Where possible these should all be raised above the extreme flood level.

[redacted]

# 8. Conclusions and recommendations

## Table 8. Risk ratings following Site analysis

| Source of Flood Risk | Baseline[1] | After analysis[2] | After Mitigation[3] |
|---|---|---|---|
| River (fluvial) flooding | Very Low | | N/A |
| Sea (coastal/tidal) flooding | Low | Very Low | Low to Medium |
| Surface water (pluvial) flooding | Very Low | | N/A |
| Groundwater flooding | Low | | Negligible |
| Other flood risk factors present | No | | N/A |
| Is any other further work recommended? | Yes | | Yes (see below) |

1 BASELINE risks assigned for the whole Site, using national risk maps, including the benefit of EA flood defences.

2 AFTER ANALYSIS modification of risk assessment based on detailed site specific analysis including some or all of the following: flood model data, high resolution mapping, building location, access routes, topographic and CCTV surveys. Reasons for the change in classification are provided in the text.

3 AFTER MITIGATION risks include risks to proposed development / asset and occupants if mitigation measures recommended in this report are implemented, including the impacts of climate change.

*N/A indicates where mitigation is not required.

The table below provides a summary of where the responses to key questions are discussed in this report. The Site is located in Flood Zone 3 and the development is classed as More Vulnerable which will require review and discussion of mitigation measures with the Local Authority

[redacted]

Table 9. Summary of responses to key questions in the report

| | |
|---|---|
| Key sources of flood risks identified | Tidal and groundwater flooding (see Section 4). |
| Are standard mitigation measures likely to provide protection from flooding to/from the Site? | Yes (see Section 7). |
| Is any further work recommended? | Yes (See exec summary and section 7) |

[redacted]

# 9. Further information

The following table includes a list of additional products by GeoSmart:

| Additional GeoSmart Products | | | |
|---|---|---|---|
| | Additional assessment:<br>SuDSmart Report | | The SuDSmart Report range assesses which drainage options are available for a Site. They build on technical detail starting from simple infiltration screening and work up to more complex SuDS Assessments detailing alternative options and designs.<br>Please contact info@geosmartinfo.co.uk for further information. |
| | Additional assessment:<br>EnviroSmart Report | | Provides a robust desk-based assessment of potential contaminated land issues, taking into account the regulatory perspective.<br>Our EnviroSmart reports are designed to be the most cost effective solution for planning conditions. Each report is individually prepared by a highly experienced consultant conversant with Local Authority requirements.<br>Ideal for pre-planning or for addressing planning conditions for small developments. Can also be used for land transactions.<br>Please contact info@geosmartinfo.co.uk for further information. |

# 10. References and glossary

## References

**Arun District Council (2018).** Local Plan. Accessed from: https://www.arun.gov.uk/download.cfm?doc=docm93jijm4n12844.pdf&ver=12984 on 23/01/25.

**British Geological Survey (BGS) (2025).** GeoIndex Onshore. Accessed from: http://mapapps.bgs.ac.uk/geoindex on 23/01/25.

**Defra/Environment Agency (2005).** Flood Risk Assessment Guidance for New Development. *Phase 2 Framework and Guidance for Assessing and Managing Flood Risk for New Development – Fill Documentation and Tools*. R & D Technical Report FD232-/TR2.

**Environment Agency [EA] (2022).** Flood risk assessments: climate change allowances. Accessed from: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances on 23/01/25.

**Environment Agency [EA] (2025).** MagicMap. Accessed from: http://magic.defra.gov.uk/MagicMap.aspx on 23/01/25.

**Environment Agency [EA] (2025).** Flood map for planning. Accessed from https://flood-map-for-planning.service.gov.uk/ on 23/01/25.

**Environment Agency [EA] (2025).** Long term flood risk assessment for locations in England. Accessed from https://flood-warning-information.service.gov.uk/long-term-flood-risk on 23/01/25.

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**JBA Consulting (2016).** Strategic Flood Risk Assessment. Accessed from: https://www.arun.gov.uk/download.cfm?doc=docm93jijm4n9414.pdf&ver=9270 on 23/01/25.

**LiDAR Survey Open Data (2025).** Accessed from: https://environment.data.gov.uk/DefraDataDownload/?Mode=survey on 23/01/25.

**Ministry of Housing, Communities & Local Government (2024).** National Planning Policy Framework (NPPF). Accessed from: https://assets.publishing.service.gov.uk/media/65829e99fc07f3000d8d4529/NPPF_December_2024.pdf on 23/01/25.

**Ministry of Housing, Communities & Local Government (2022).** Planning Practice Guidance (NPPG). Flood Risk and Coastal Change. Accessed from https://www.gov.uk/guidance/flood-risk-and-coastal-change on 23/01/25.

**Mott MacDonald (2016).** Strategic Surface Water Management Study. Accessed from: https://www.arun.gov.uk/download.cfm?doc=docm93jijm4n14209.pdf&ver=14458 on 23/01/25.

# Glossary

## General terms

| | |
|---|---|
| BGS | British Geological Survey |
| EA | Environment Agency |
| GeoSmart groundwater flood risk model | GeoSmart's national groundwater flood risk model takes advantage of all the available data and provides a preliminary indication of groundwater flood risk on a 50m grid covering England and Wales. The model indicates the risk of the water table coming within 1 m of the ground surface for an indicative 1 in 100 year return period scenario. |
| Dry-Island | An area considered at low risk of flooding (e.g. In a Flood Zone 1) that is entirely surrounded by areas at higher risk of flooding (e.g. Flood Zone 2 and 3) |
| Flood resilience | Flood resilience or wet-proofing accepts that water will enter the building, but through careful design will minimise damage and allow the re-occupancy of the building quickly. Mitigation measures that reduce the damage to a property caused by flooding can include water entry strategies, raising electrical sockets off the floor, hard flooring. |
| Flood resistance | Flood resistance, or dry-proofing, stops water entering a building. Mitigation measures that prevent or reduce the likelihood of water entering a property can include raising flood levels or installation of sandbags. |
| Flood Zone 1 | This zone has less than a 0.1% annual probability of river flooding |
| Flood Zone 2 | This zone has between 0.1 and 1% annual probability of river flooding and between 0.1% and 0.5 % annual probability sea flooding |
| Flood Zone 3 | This zone has more than a 1% annual probability of river flooding and 0.5% annual probability of sea flooding |
| Functional Flood Plain | An area of land where water has to flow or be stored in times of flood. |
| Hydrologic model | A computer model that simulates surface run-off or fluvial flow. The typical accuracy of hydrologic models such as this is ±0.25m for estimating flood levels at particular locations. |
| OS | Ordnance Survey |
| Residual Flood Risk | The flood risk remaining after taking mitigating actions. |

| | |
|---|---|
| SFRA | Strategic Flood Risk Assessment. This is a brief flood risk assessment provided by the local council |
| SuDS | A Sustainable drainage system (SuDS) is designed to replicate, as closely as possible, the natural drainage from the Site (before development) to ensure that the flood risk downstream of the Site does not increase as a result of the land being developed. SuDS also significantly improve the quality of water leaving the Site and can also improve the amenity and biodiversity that a Site has to offer. There are a range of SuDS options available to provide effective surface water management that intercept and store excess run-off. Sites over 1 Ha will usually require a sustainable drainage assessment if planning permission is required. The current proposal is that from April 2014 for more than a single dwelling the drainage system will require approval from the SuDS Approval Board (SABs). |

## Aquifer Types

| | |
|---|---|
| Principal aquifer | These are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. |
| Secondary A aquifer | Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. |
| Secondary B aquifer | Predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. |
| Secondary undifferentiated | Has been assigned in cases where it has not been possible to attribute either category A or B to a rock type due to the variable characteristics of the rock type. |
| Unproductive Strata | These are rock layers or drift deposits with low permeability that has negligible significance for water supply or river base flow. |

## NPPF (2024) terms

| | |
|---|---|
| Exception test | Applied once the sequential test has been passed. For the exception test to be passed it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk and a site-specific FRA must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall. |
| Sequential test | Aims to steer new development to areas with the lowest probability of flooding. |

[redacted]

| | |
|---|---|
| Essential infrastructure | Essential infrastructure includes essential transport infrastructure, essential utility infrastructure and wind turbines. |
| Water compatible | Water compatible land uses include flood control infrastructure, water-based recreation and lifeguard/coastal stations. |
| Less vulnerable | Less vulnerable land uses include police/ambulance/fire stations which are not required to be operational during flooding and buildings used for shops/financial/professional/other services. |
| More vulnerable | More vulnerable land uses include hospitals, residential institutions, buildings used for dwelling houses/student halls/drinking establishments/hotels and sites used for holiday or short-let caravans and camping. |
| Highly vulnerable | Highly vulnerable land uses include police/ambulance/fire stations which are required to be operational during flooding, basement dwellings and caravans/mobile homes/park homes intended for permanent residential use. |

# Data Sources

| | |
|---|---|
| Aerial Photography | Contains Ordnance Survey data © Crown copyright and database right 2025<br>BlueSky copyright and database rights 2025 |
| Bedrock & Superficial Geology | Contains British Geological Survey materials © NERC 2025<br>Ordnance Survey data © Crown copyright and database right 2025 |
| Flood Risk (Flood Zone/RoFRS/Historic Flooding/Pluvial/Surface Water Features/Reservoir/ Flood Alert & Warning) | Environment Agency copyright and database rights 2025<br>Ordnance Survey data © Crown copyright and database right 2025 |
| Flood Risk (Groundwater) | GeoSmart, BGS & OS<br>GW5 (v2.4) Map (GeoSmart, 2025)<br>Contains British Geological Survey materials © NERC 2025<br>Ordnance Survey data © Crown copyright and database right 2025 |
| Location Plan | Contains Ordnance Survey data © Crown copyright and database right 2025 |
| Topographic Data | OS LiDAR/EA |

| | |
|---|---|
| | Contains Ordnance Survey data © Crown copyright and database right 2025<br><br>Environment Agency copyright and database rights 2025 |

[redacted]

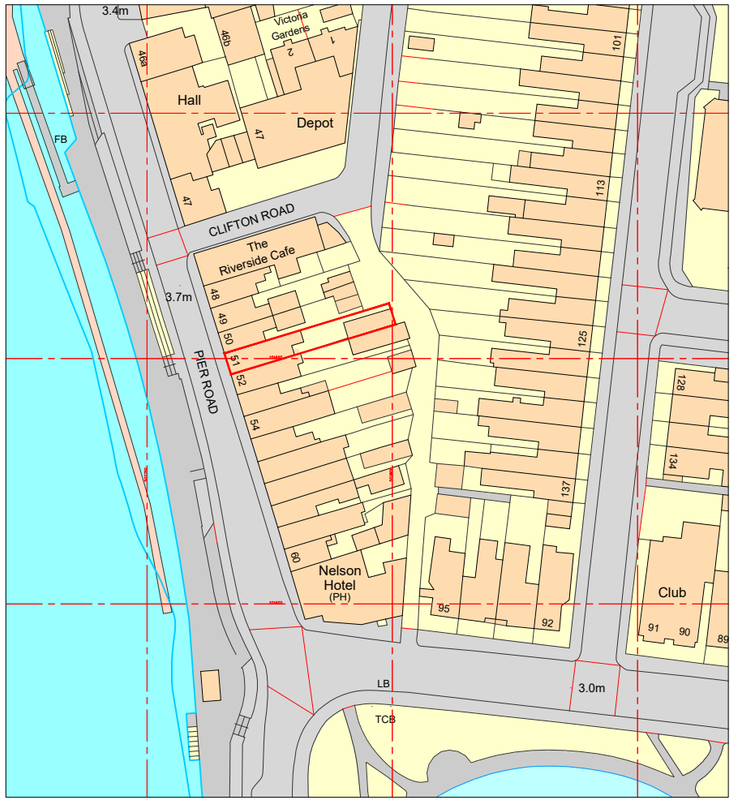
# 11. Appendices

GeoSmart Information

# Appendix A

## Site plans

[redacted]




## Location Plan

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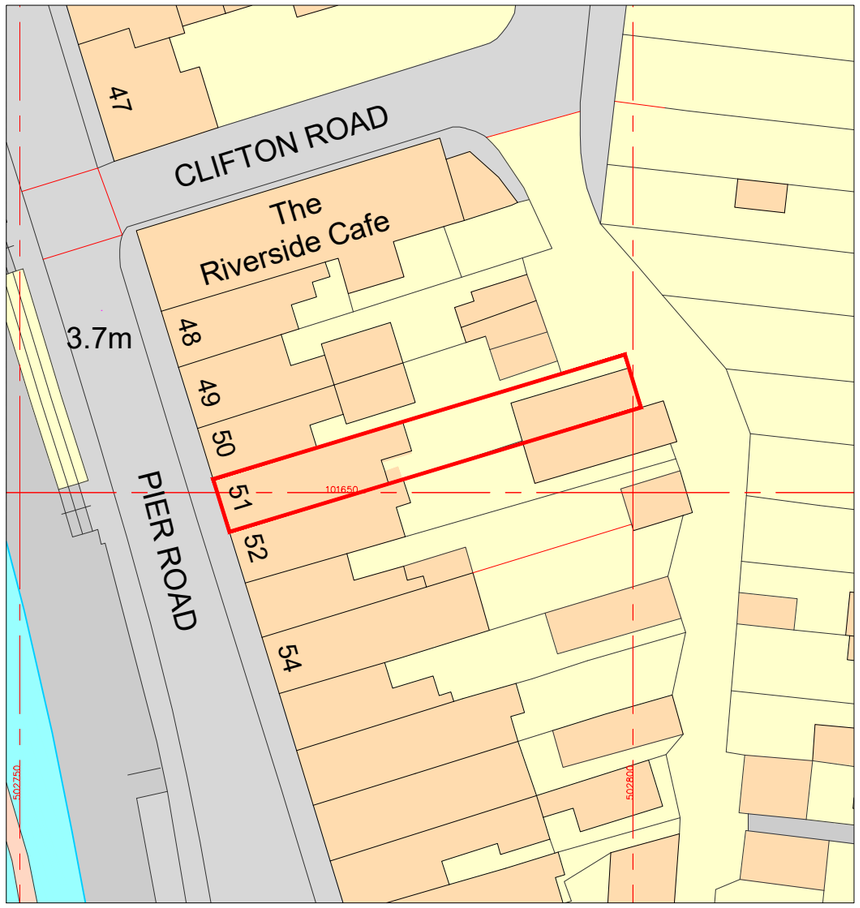



## Block Plan

1:500

N

1:1250 Scale Bar (Metres)
0 20 40 60

1:500 Scale Bar (Metres)
0 5 10 15 20 25 30

SANSOM CONSULTANTS LTD
Sansom Consultants Ltd.
44 Warley Rise, RG31 6FR
Company No. 13820639
Tel. 07927 039271

Client:
T and I Milosavljevic

Project Title:
51 Pier Road, BN17 5LP

Drawing Title:
Location & Block Plans

| Scale: | Size: |
|---|---|
| 1:500 & 1:1250 | A3 |
| Date: | Revision: |
| 21/06/2022 | – |

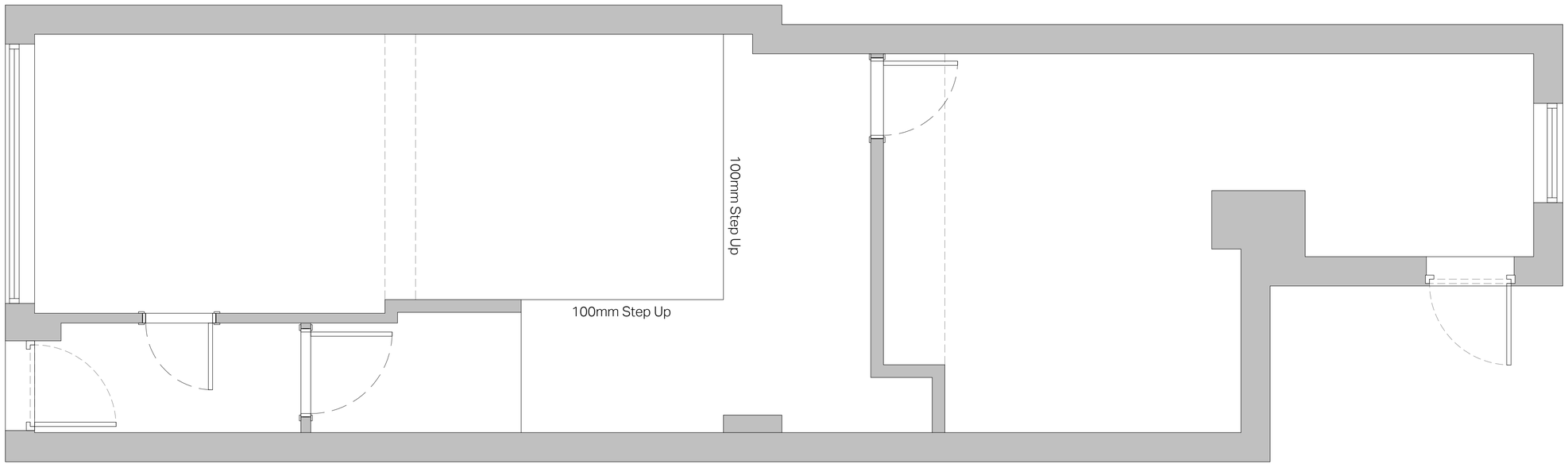
CAD FILE REF: 51 Pier Road – PLANNING Rev01

DO NOT SCALE FROM THIS DRAWING EXCEPT FOR PLANNING PURPOSES ONLY.

ALL DIMENSIONS RELATING TO SUB-CONTRACTOR OR SUPPLIERS WORK MUST BE CHECKED ON SITE AND AGREED BETWEEN THE GENERAL CONTRACTOR & THE SUB-CONTRACTORS \ SUPPLIERS. ALL DIMENSIONS ARE IN MILLIMETERS. IF IN DOUBT ASK.

ALL WORKS OR MATERIALS INDICATED ON THE DRAWING ARE TO BE TO THE LATEST BRITISH STANDARDS AND ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT CODES OF PRACTICE OR RECOGNISED TRADE ASSOCIATIONS RECOMMENDATIONS & PUBLICATIONS

| REV. | AMENDMENT | BY | DATE |
|---|---|---|---|




# Ground Floor Plan - Existing

**KEY**

- Existing Walls
- Proposed Walls
- Demolished Walls

Project
51 Pier Road
Littlehampton

Drawing
Existing Floor Plan

N

Date January 2025 | Drawn by TG

Scales 1:25/50 @ A1/A3 | Suitability Feasibility

Doc No 02441-ARM-01-00-DR-A-0002 | Revision

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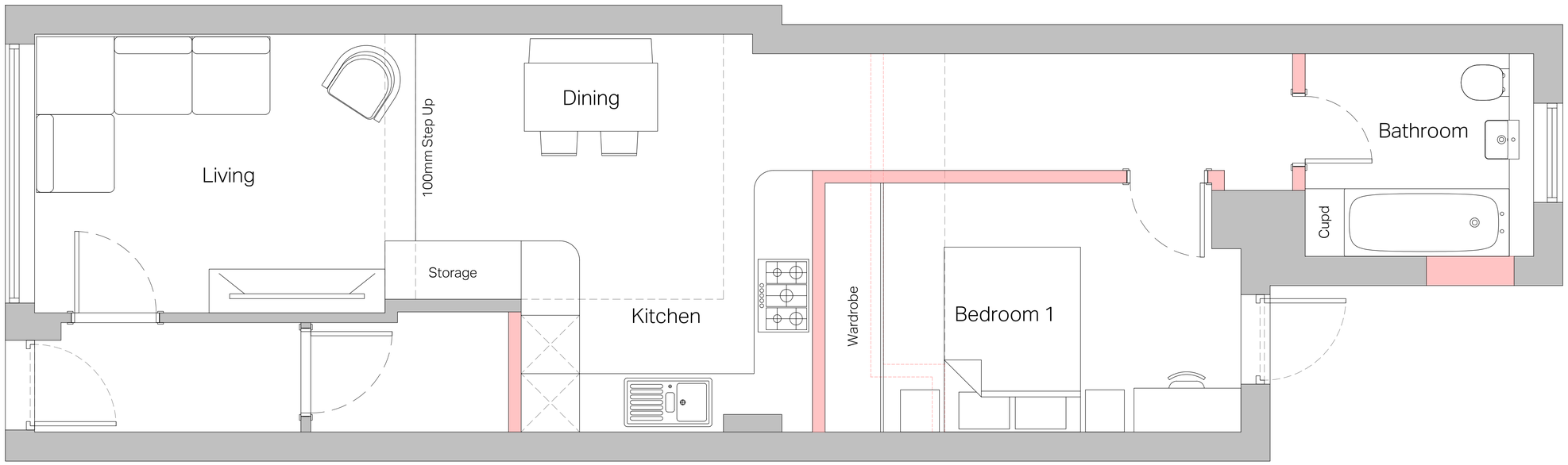
| REV. | AMENDMENT | BY | DATE |
|---|---|---|---|




# Ground Floor Plan - Proposed

**KEY**

- Existing Walls
- Proposed Walls
- Demolished Walls

Project
51 Pier Road
Littlehampton

Drawing
Proposed Floor Plan

N

Date January 2025 | Drawn by TG

Scales 1:25/50 @ A1/A3 | Suitability Feasibility

Doc No 02441-ARM-01-00-DR-A-0003 | Revision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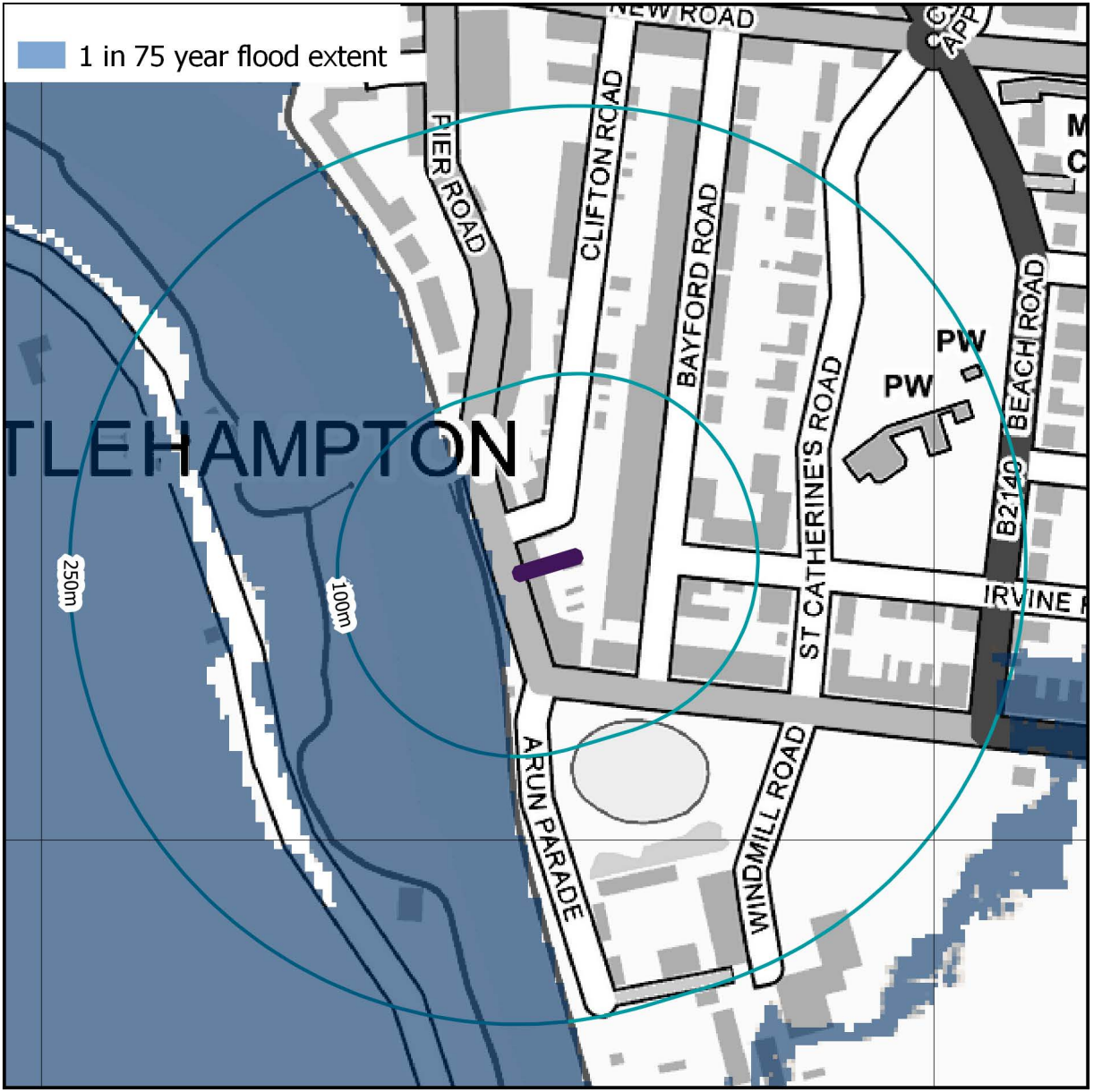
07584 191785
www.armoarchitecture.com

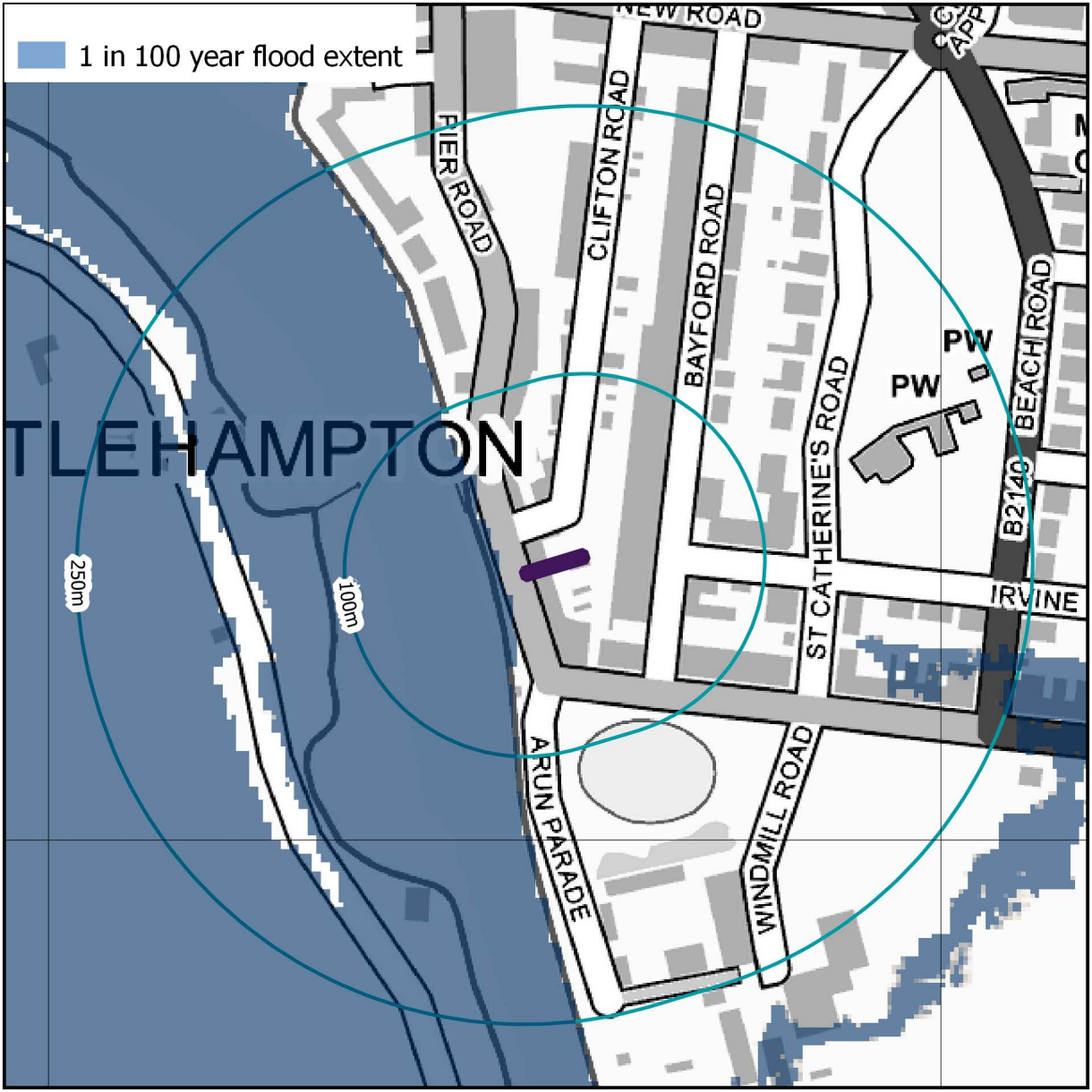
GeoSmart Information

# Appendix B

## Environment Agency data

[redacted]


1 in 75 year flood extent
NEW ROAD
PIER ROAD
CLIFTON ROAD
BAYFORD ROAD
ST CATHERINE'S ROAD
BEACH ROAD
B2140
IRVINE
ARUN PARADE
WINDMILL ROAD
PW
PW
TLEHAMPTON
250m
100m
101500
502500
503000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NEW ROAD
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250m
100m
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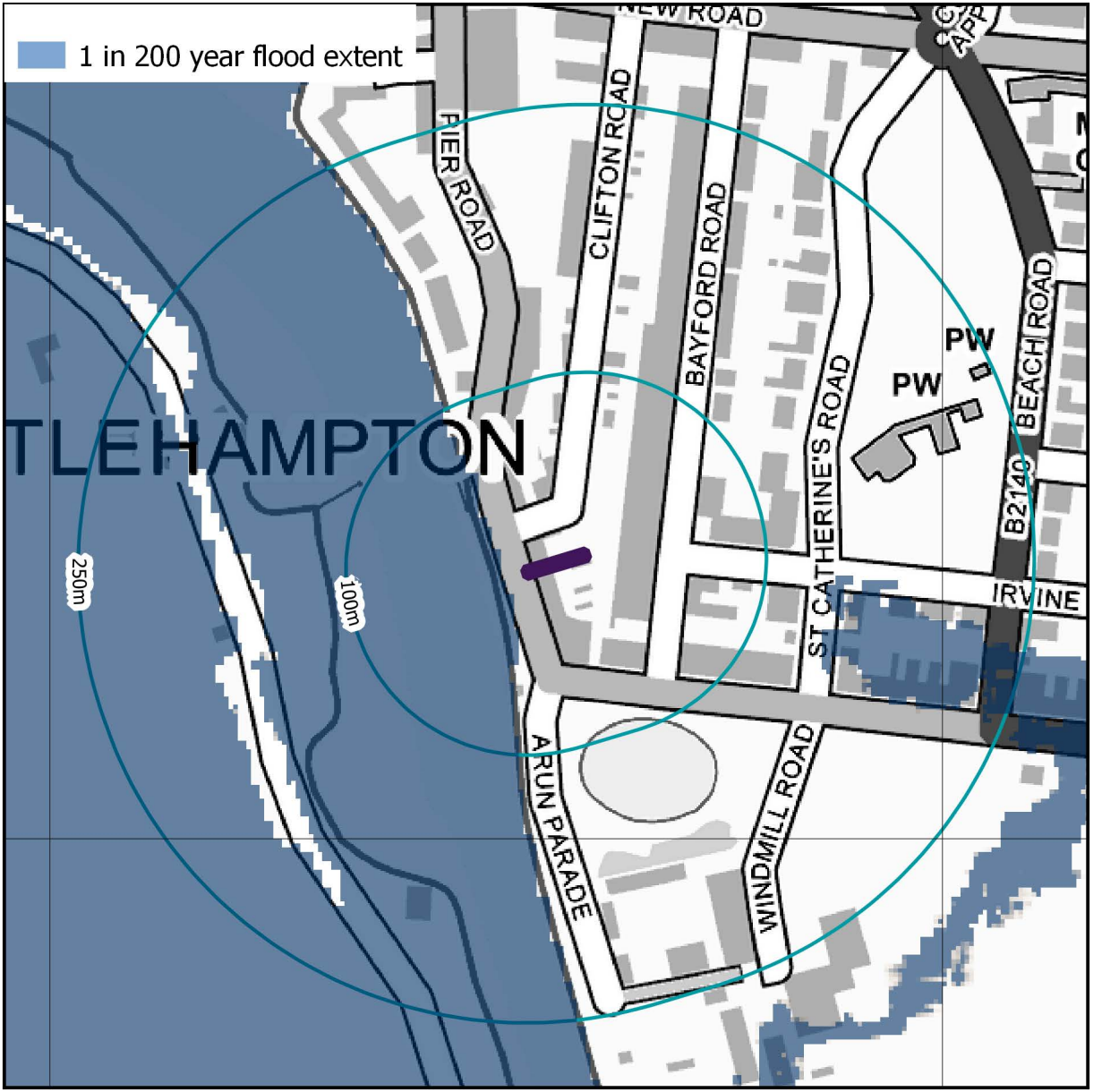
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PIER ROAD
CLIFTON ROAD
BAYFORD ROAD
ST CATHERINE'S ROAD
BEACH ROAD
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ARUN PARADE
WINDMILL ROAD
PW
PW
TLEHAMPTON
250m
100m
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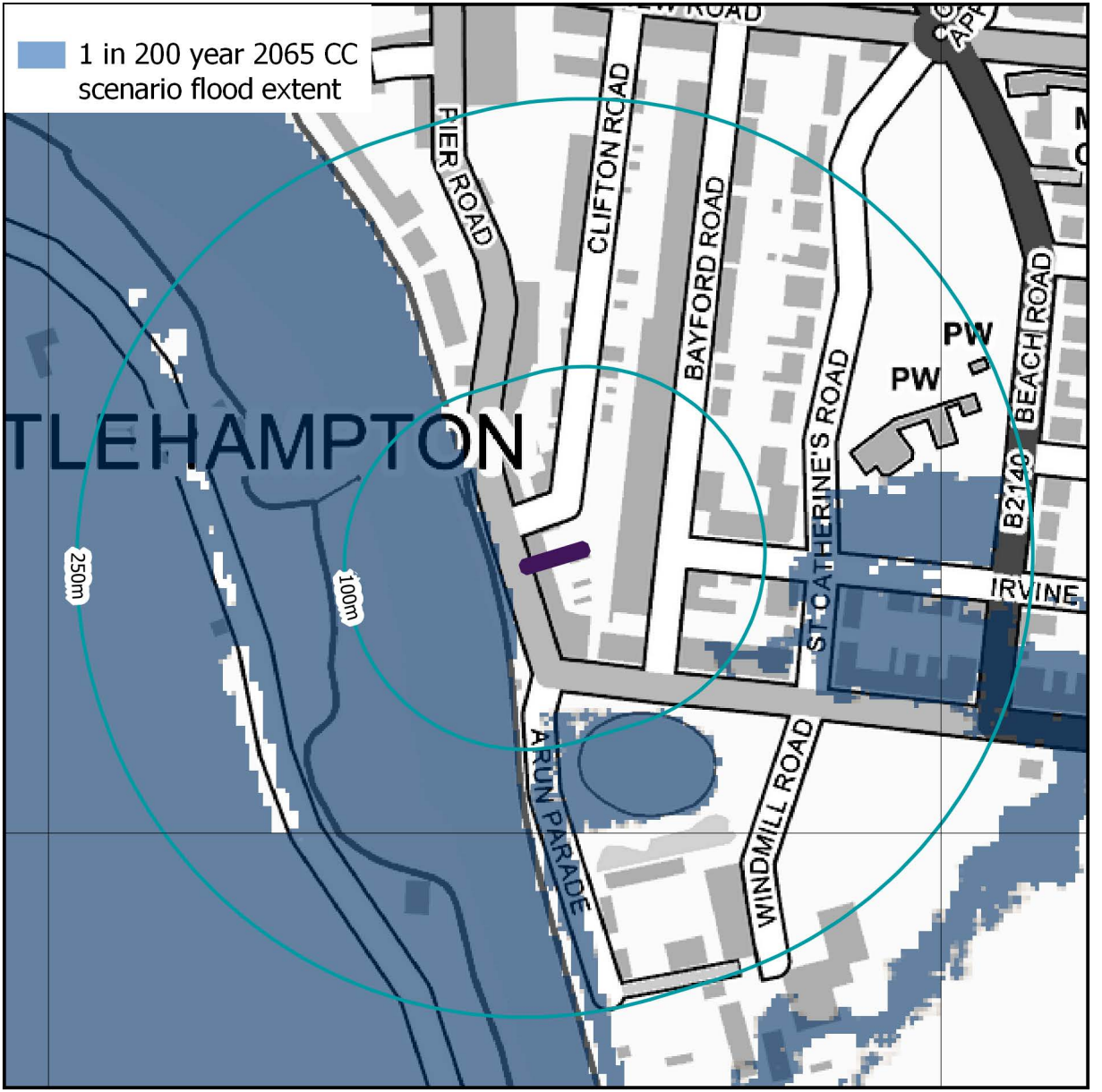
503000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WINDMILL ROAD
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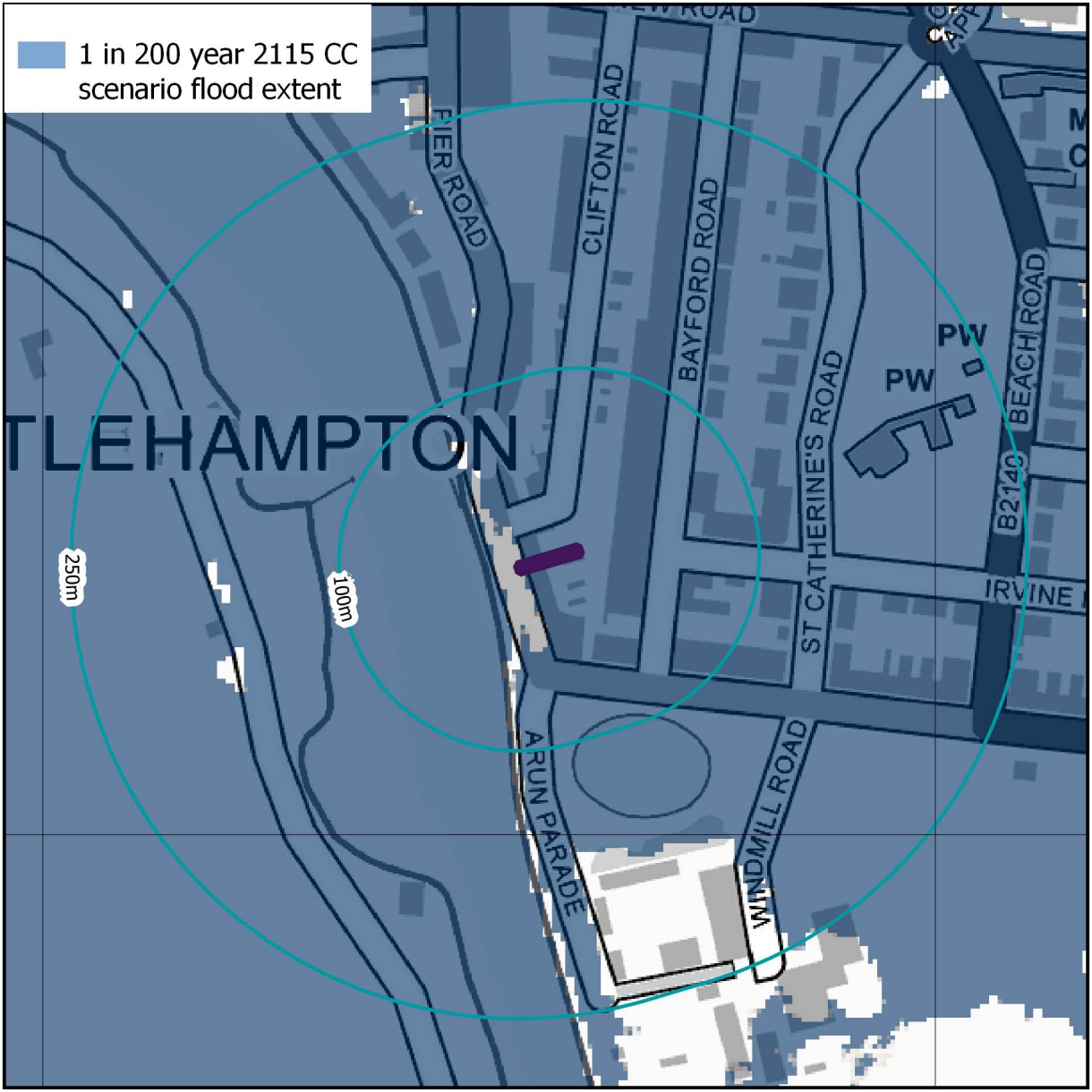
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250m
100m
ARUN PARADE
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502500
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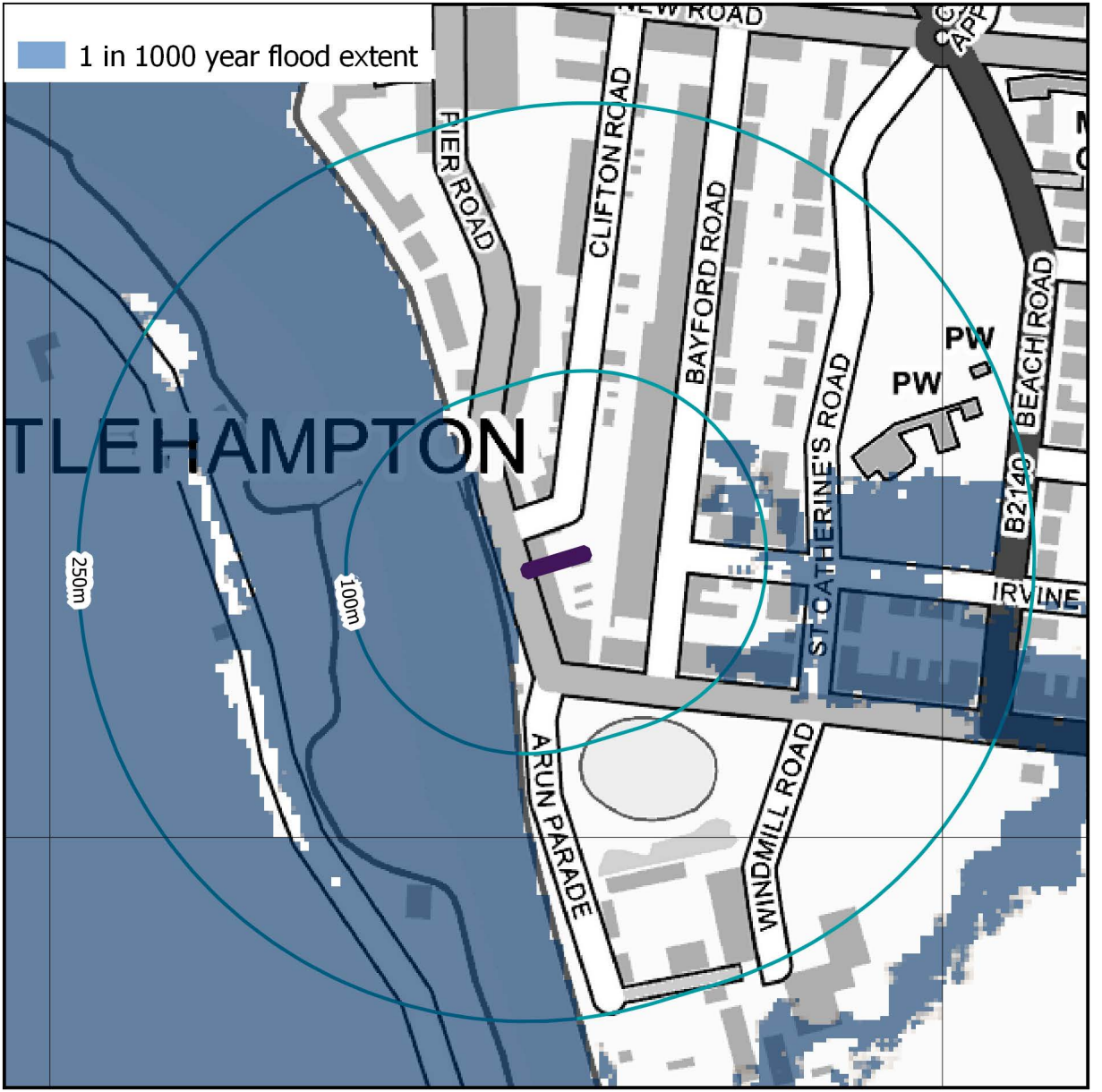
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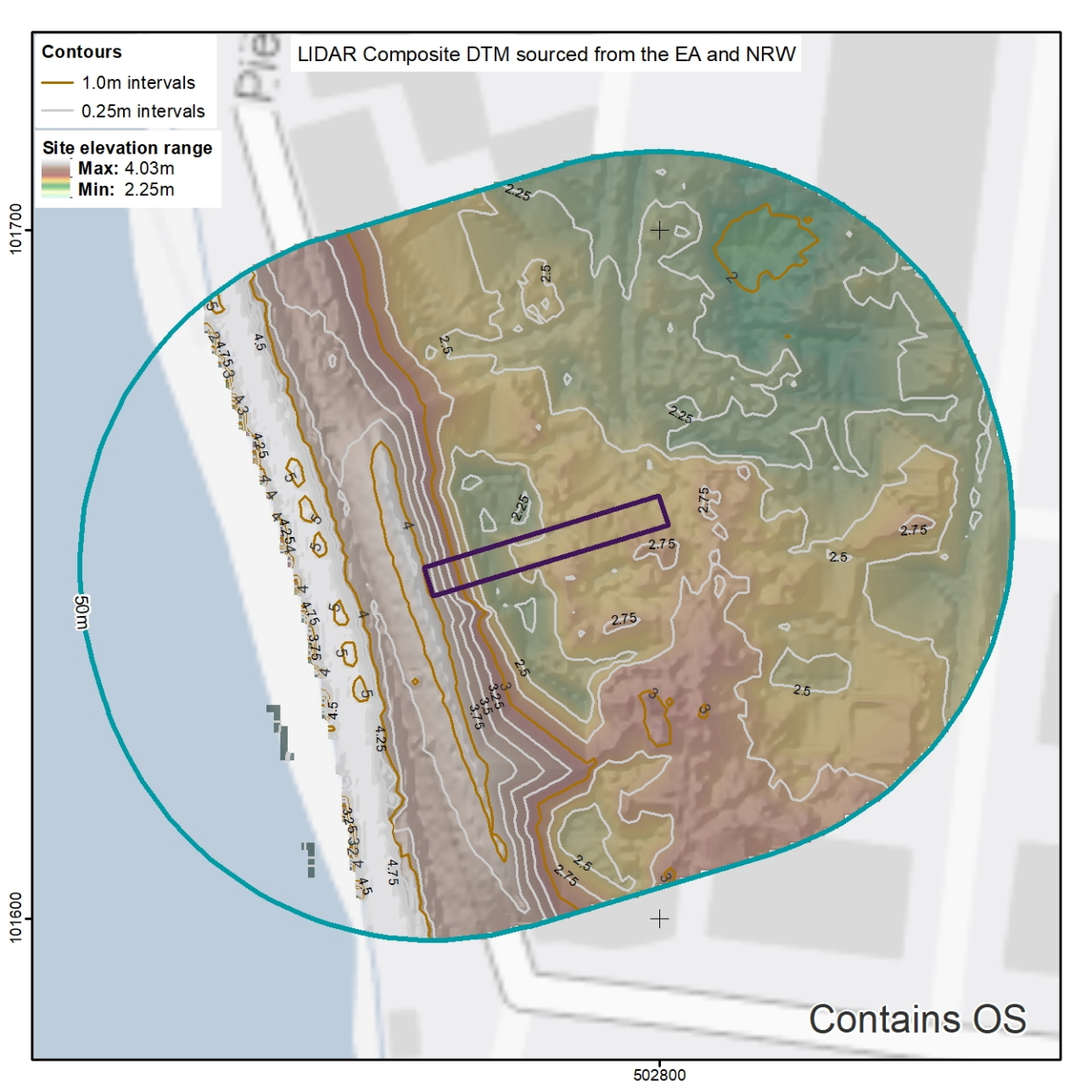
BAYFORD ROAD
ST CATHERINE'S ROAD
BEACH ROAD
B2140
IRVINE
ARUN PARADE
WINDMILL ROAD
PW
PW
TLEHAMPTON
250m
100m
101500
502500
503000

GeoSmart Information

# Appendix C

## Environment Agency LiDAR ground elevation data

[redacted]


Contours
1.0m intervals
0.25m intervals
Site elevation range
Max: 4.03m
Min: 2.25m
LIDAR Composite DTM sourced from the EA and NRW
101700
101600
50m
502800
Contains OS

# Disclaimer

This report has been prepared by GeoSmart in its professional capacity as soil, groundwater, flood risk and drainage specialists, with reasonable skill, care and diligence within the agreed scope and terms of contract and taking account of the manpower and resources devoted to it by agreement with its client and is provided by GeoSmart solely for the internal use of its client.

The advice and opinions in this report should be read and relied on only in the context of the report as a whole, taking account of the terms of reference agreed with the client. The findings are based on the information made available to GeoSmart at the date of the report (and will have been assumed to be correct) and on current UK standards, codes, technology and practices as at that time. They do not purport to include any manner of legal advice or opinion. New information or changes in conditions and regulatory requirements may occur in future, which will change the conclusions presented here.

This report is confidential to the client. The client may submit the report to regulatory bodies, where appropriate. Should the client wish to release this report to any other third party for that party's reliance, GeoSmart may, by prior written agreement, agree to such release, provided that it is acknowledged that GeoSmart accepts no responsibility of any nature to any third party to whom this report or any part thereof is made known. GeoSmart accepts no responsibility for any loss or damage incurred as a result, and the third party does not acquire any rights whatsoever, contractual or otherwise, against GeoSmart except as expressly agreed with GeoSmart in writing.

For full T&Cs see http://geosmartinfo.co.uk/terms-conditions

# Important consumer protection information

This search has been produced by GeoSmart Information Limited, Suite 9-11, 1st Floor, Old Bank Buildings, Bellstone, Shrewsbury, SY1 1HU.

Tel: 01743 298 100

Email: info@geosmartinfo.co.uk

GeoSmart Information Limited is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered search firms maintain compliance with the Code.

## The Search Code:

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom.
- sets out minimum standards which firms compiling and selling search reports have to meet.
- promotes the best practice and quality standards within the industry for the benefit of consumers and property professionals.
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.
- By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

## The Code's core principles

Firms which subscribe to the Search Code will:

- display the Search Code logo prominently on their search reports.
- act with integrity and carry out work with due skill, care and diligence.
- at all times maintain adequate and appropriate insurance to protect consumers.
- conduct business in an honest, fair and professional manner.
- handle complaints speedily and fairly.
- ensure that products and services comply with industry registration rules and standards and relevant laws.
- monitor their compliance with the Code.

[redacted]

GeoSmart Information

## Complaints

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award up to £5,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience as a result of your search provider failing to keep to the Code.

*Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.*

## TPOs contact details:

The Property Ombudsman scheme

Milford House

43-55 Milford Street

Salisbury

Wiltshire SP1 2BP

[redacted]

[redacted]

[redacted]

You can get more information about the PCCB from www.propertycodes.org.uk. Please ask your search provider if you would like a copy of the search code

## Complaints procedure

GeoSmart Information Limited is registered with the Property Codes Compliance Board as a subscriber to the Search Code. A key commitment under the Code is that firms will handle any complaints both speedily and fairly. If you want to make a complaint, we will:

- Acknowledge it within 5 working days of receipt.
- Normally deal with it fully and provide a final response, in writing, within 20 working days of receipt.
- Keep you informed by letter, telephone or e-mail, as you prefer, if we need more time.
- Provide a final response, in writing, at the latest within 40 working days of receipt.
- Liaise, at your request, with anyone acting formally on your behalf.

If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman scheme (TPOs)[redacted]

[redacted]

We will co-operate fully with the Ombudsman during an investigation and comply with his final decision. Complaints should be sent to:

Martin Lucass

Commercial Director

GeoSmart Information Limited

Suite 9-11, 1st Floor,

Old Bank Buildings,

Bellstone, Shrewsbury, SY1 1HU

[redacted]

[redacted]

[redacted]

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# 12. Terms and conditions, CDM regulations and data limitations

Terms and conditions can be found on our website:

http://geosmartinfo.co.uk/terms-conditions/

CDM regulations can be found on our website:

http://geosmartinfo.co.uk/knowledge-hub/cdm-2015/

Data use and limitations can be found on our website:

http://geosmartinfo.co.uk/data-limitations/

[redacted]