



**Strategic Flood Risk Assessment
Detailed Site Summary Tables**

Land East of Manor Close



Site details

Site Code	ADC/151/18
Address	Land East of Manor Close, New Salts Farm,
Area	2.7ha
Current land use	Greenfield (small storage depot).
Proposed land use	Residential
Flood Risk Vulnerability	More Vulnerable

Sources of flood risk

Location of the site within the administrative area	<p>The site is situated between Lancing and Shoreham-by-sea and is located south of Old Shoreham Road (A27). The existing site is greenfield with a small storage depot located in the southwest corner of the site. The site is bordered by existing residential land to the north and west. In the south and east of the site, the mixed-use New Monks Farm development is being constructed. The site is approximately 1.5km from the River Adur. Main access to the site is from Old Shoreham Road (A27) and Manor Close.</p>
Topography	<p>The Environment Agency's 1m resolution 2022 Composite LiDAR indicates that both northern area of the site is relatively flat, the southern area of the site gently slope towards the centre of the site with an average gradient of 2%. Site elevations range between 1.00-3.70mAOD. The lowest of elevations are located within the central areas of the site; following the channels of the unnamed ordinary watercourses which flow in an easterly direction through the site. The highest of elevations are located at the site's southern boundary nearby Small Copper Close.</p> <p><i>Land East of Manor Close – Topography</i></p>
Existing drainage features	<p>There are a number of existing drainage features within the site. Two unnamed ordinary watercourses flow in an easterly direction through the central areas of the site before converging and flowing through a culvert under Mash Barn Lane. Within the site there are also a number of connected drainage ditches which flow perpendicular to and then drain into the unnamed ordinary watercourses. Due to the relatively flat topography, siltation and blockages at the site are common. Due to the greenfield nature of the site, drainage should be investigated prior to development.</p>
Flood Map for Planning (Rivers and Sea)	<p>Available data and mapping: Environment Agency Flood Map for Planning for Rivers and Sea.</p> <p><i>Land East of Manor Close - FMfP</i></p> <p>Data analysis: Details of the sites location within each Flood Zone are provided within the SFRA Site Screening Appendix.</p> <p>Flood characteristics: The entire site is located within Flood Zone 3 of the Flood Map for Planning for Rivers and Sea.</p>



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- Flood Zone 3 representing an area greater than 1 in 100 (1%) chance of river flooding in a given year or greater than 1 in 200 (0.5%) chance of tidal flooding.

Surface Water flooding should be considered. It is understood that additional Surface Water datasets will be published in 2025.

Tidal

Available data and mapping: 2025 Arun-Adur modelling – defended scenario.

Depth

Land East of Manor Close – Tidal – Present Day – 3.3%

Land East of Manor Close – Tidal – Present Day – 0.5%

Land East of Manor Close – Tidal – Present Day – 0.1%

Hazard

Land East of Manor Close – Tidal – Present Day – 3.3%

Land East of Manor Close – Tidal – Present Day – 0.5%

Land East of Manor Close – Tidal – Present Day – 0.1%

Velocity

Land East of Manor Close – Tidal – Present Day – 3.3%

Land East of Manor Close – Tidal – Present Day – 0.5%

Land East of Manor Close – Tidal – Present Day – 0.1%

Data analysis: Details of the site’s location within the 2025 Arun-Adur modelling are provided within the Level 2 SFRA Site Screening Appendix.

Flood characteristics: The site has not been identified to be located within an area at risk of present-day tidal flooding.

Tidal with Climate Change

Available data and mapping: Arun-Adur modelling – defended. The Environment Agency guidance recommends that the Higher Central (55%) and Upper End (107%) allowance is considered.

Depth – 70th percentile (higher central)

Land East of Manor Close – Tidal – Future – 3.3%

Land East of Manor Close – Tidal – Future – 0.5%

Hazard - 70th percentile (higher central)

Land East of Manor Close – Tidal – Present Day – 3.3%

Land East of Manor Close – Tidal – Present Day – 0.5%

Velocity -70th percentile (higher central)

Land East of Manor Close – Tidal – Present Day – 3.3%

Land East of Manor Close – Tidal – Present Day – 0.5%

Depth – 95th percentile (upper end)

Land East of Manor Close – Tidal – Future – 3.3%

Land East of Manor Close – Tidal – Future – 0.5%

Hazard - 95th percentile (upper end)

Land East of Manor Close – Tidal – Present Day – 3.3%

Land East of Manor Close – Tidal – Present Day – 0.5%

Velocity -95th percentile (upper end)

Land East of Manor Close – Tidal – Present Day – 3.3%

Land East of Manor Close – Tidal – Present Day – 0.5%

Data analysis: Details of the site’s location within the 2025 Arun-Adur modelling are provided within the SFRA Site Screening Appendix.

3.3% AEP (1 in 30 year) + Higher Central Climate Change event:



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Proportion – 89%	Mean Depth – 0.61m
Max Depth – 1.77m	Mean Velocity – 0.12m/s
Max Velocity – 1.28m/s	Mean Hazard – 1.27 Danger to most
Max Hazard – 1.77 Danger to most	

3.3% AEP (1 in 30 year) + Upper End Climate Change event:

Proportion – 98%	Mean Depth – 1.10m
Max Depth – 2.33m	Mean Velocity – 0.14m/s
Max Velocity – 1.36m/s	Mean Hazard – 1.54 Danger to most
Max Hazard – 2.21 Danger to all	

0.5% AEP (1 in 200 year) + Higher Central Climate Change event:

Proportion – 96%	Mean Depth – 0.90m
Max Depth – 2.11m	Mean Velocity – 0.09
Max Velocity – 0.99	Mean Hazard – 1.44 Danger to most
Max Hazard – 2.10 Danger to all	

0.5% AEP (1 in 200 year) + Upper End Climate Change event:

Proportion – 100%	Mean Depth – 1.71m
Max Depth – 2.97m	Mean Velocity – 0.16
Max Velocity – 1.41	Mean Hazard – 1.86 Danger to most
Max Hazard – 2.50 Danger to all	

Flood characteristics:

The site is shown to flood in all climate change events. The mean hazard rating for the majority of the site is classified as 'Danger to most', with a mean depth of up to 1.71m. Areas of 'Danger to all' follow the unnamed watercourses where the maximum water depth increases to over 2m for the 0.5%AEP climate change scenarios.

Surface Water

Available data and mapping: Environment Agency Risk of Surface Water flooding for the 3.3%, 1% and 0.1% AEP events. It should be noted that the data discussed below relates to the available surface water data prior to March 2025, as the newly released data does not include depth, hazard and velocity information. Details on the coverage of the two surface water flooding datasets are discussed below and are detailed within the Site Screening document undertaken as part of the Level 2 SFRA.

- Land East of Manor Close – Surface Water Depth – Present Day – 3.3%*
- Land East of Manor Close – Surface Water Depth – Present Day – 1%*
- Land East of Manor Close – Surface Water Depth – Present Day – 0.1%*
- Land East of Manor Close – Surface Water Hazard – Present Day – 3.3%*
- Land East of Manor Close – Surface Water Hazard – Present Day – 1%*
- Land East of Manor Close – Surface Water Hazard – Present Day – 0.1%*
- Land East of Manor Close – Surface Water Velocity – Present Day – 3.3%*
- Land East of Manor Close – Surface Water Velocity – Present Day – 1%*
- Land East of Manor Close – Surface Water Velocity – Present Day – 0.1%*
- Land East of Manor Close – Surface Water – Present Day – NAFRA2*



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Data analysis:

3.3% AEP (1 in 30 year) event:

Proportion – 11%

Max Depth – 0.82m

Max Velocity – 1.31

Max Hazard – 1.52 Danger to most

Mean Depth – 0.32m

Mean Velocity – 0.27

Mean Hazard – 1.00 Danger to some

1% AEP (1 in 100 year) event:

Proportion – 38%

Max Depth – 1.00m

Max Velocity – 1.37

Max Hazard – 1.85 Danger to most

Mean Depth – 0.29m

Mean Velocity – 0.27

Mean Hazard – 0.91 Danger to some

0.1% AEP (1 in 1000 year) event:

Proportion – 78%

Max Depth – 1.28m

Max Velocity – 1.41

Max Hazard – 2.29 Danger to all

Mean Depth – 0.43m

Mean Velocity – 0.40

Mean Hazard – 1.27 Danger to most

NAFRA2 - 3% AEP (1 in 30 year) event:

Proportion – 9%

NAFRA2 - 1% AEP (1 in 100 year) event:

Proportion – 33%

NAFRA2 - 0.1% AEP (1 in 1000 year) event:

Proportion – 72%

Description of surface water flow paths: During the 3.3%AEP scenario, surface water flood extents follow the northern unnamed watercourse. The water flows in an easterly direction across the site and along Mash Barn Lane. The maximum hazard rating is Danger to most within the channels. Surface water flooding increases in the 1%AEP and 0.1%AEP scenarios with surface water flow paths following the unnamed watercourses, the mean depth is 0.29m and 0.40m respectively. The mean hazard rating reduces in the 1%AEP due to the increased extent of flooding. Surface water pools to the north of the site. 78% of the site is impacted in the 0.1% AEP scenario, the southern boundary is not affected.

NAFRA2 extents are similar to that of the superseded data. The previous datasets have greater coverage with existing watercourses in the site also shown to be at risk. The southern boundary is also not affected in the NAFRA2 dataset.

**Surface Water with
Climate Change**

Available data and mapping: Surface Water flooding for the 3.3%, 1% and 0.1% AEP events with climate change, using data available prior to March 2025. The Environment Agency guidance recommends that the Upper End allowance is considered for both the 3.3% and 1% AEPs for the 2070's epoch, unless the allowance for the 2050's epoch is higher, in



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which case this should be used. The recommended uplift on peak rainfall intensity for the 3.3% AEP is 40% and for the 1% AEP is 45%.

Land East of Manor Close – Surface Water – Future – 3.3%+20CC

Land East of Manor Close – Surface Water – Future – 3.3%+40CC

Land East of Manor Close – Surface Water – Future – 1%+25CC

Land East of Manor Close – Surface Water – Future – 1%+45CC

Land East of Manor Close – Surface Water – Future – 0.1%+25CC

Land East of Manor Close – Surface Water – Future – 0.1%+45CC

Hazard

Land East of Manor Close – Surface Water – Future – 3.3%+20CC

Land East of Manor Close – Surface Water – Future – 3.3%+40CC

Land East of Manor Close – Surface Water – Future – 1%+25CC

Land East of Manor Close – Surface Water – Future – 1%+45CC

Land East of Manor Close – Surface Water – Future – 0.1%+25CC

Land East of Manor Close – Surface Water – Future – 0.1%+45CC

Velocity

Land East of Manor Close – Surface Water – Future – 3.3%+20CC

Land East of Manor Close – Surface Water – Future – 3.3%+40CC

Land East of Manor Close – Surface Water – Future – 1%+25CC

Land East of Manor Close – Surface Water – Future – 1%+45CC

Land East of Manor Close – Surface Water – Future – 0.1%+25CC

Land East of Manor Close – Surface Water – Future – 0.1%+45CC

Data analysis:

3.3% AEP (1 in 30 year) + 20% Climate Change event:

Proportion – 19%

Max Depth – 0.91m

Max Velocity – 1.02

Max Hazard – 1.64 Danger to most

Mean Depth – 0.31m

Mean Velocity – 0.23

Mean Hazard – 0.97 Danger to some

3.3% AEP (1 in 30 year) + 40% Climate Change event:

Proportion – 34%

Max Depth – 0.98m

Max Velocity – 1

Max Hazard – 1.79 Danger to most

Mean Depth – 0.29m

Mean Velocity – 0.25

Mean Hazard – 0.91 Danger to some

1% AEP (1 in 100 year) + 25% Climate Change event:

Proportion – 77%

Max Depth – 1.28

Max Velocity – 1.41

Max Hazard – 2.29 Danger to all

Mean Depth – 0.42

Mean Velocity – 0.39

Mean Hazard – 1.27 Danger to most

1% AEP (1 in 100 year) + 45% Climate Change event:

Proportion – 80%

Max Depth – 1.35

Max Velocity – 1.44

Max Hazard – 2.34 Danger to all

Mean Depth – 0.47

Mean Velocity – 0.43

Mean Hazard – 1.35 Danger to most



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0.1% AEP (1 in 1000 year) + 25% Climate Change event:

Proportion – 86%

Max Depth – 1.58

Max Velocity – 1.67

Max Hazard – 2.61

Mean Depth – 0.65

Mean Velocity – 0.55

Mean Hazard – 1.6

0.1% AEP (1 in 1000 year) + 45% Climate Change event:

Proportion – 88%

Max Depth – 1.66

Max Velocity – 1.71

Max Hazard – 2.74

Mean Depth – 0.71

Mean Velocity – 0.59

Mean Hazard – 1.67

Description of surface water flow paths:

The site is shown to flood in all climate change events. In the 3.3%AEP plus climate change scenarios, the surface water flooding remains restricted to the unnamed watercourses. The maximum depth is 0.98m, velocity 1m/s and hazard rating of 'Danger to most'

The flood extent increases for the 0.5%AEP and 0.1%AEP scenarios with the majority of the site at risk. The southern site boundary remains unaffected. The hazard rating increases to 'Danger to all' along the watercourses in the 0.1% plus climate change scenarios. The maximum depth is 1.66mm.

**Tidally influenced
Surface Water Risk
Zone**

Available data and mapping: JBA's Tidally influenced Surface Water Risk Zones derived using the RoFSW data available prior to March 2025, the Present day 1% AEP extreme tidal level, LiDAR data and the Environment Agency's climate change sea level uplift allowance for South East England.

Land East of Manor Close – Tidal Drainage Risk Zones

Flood characteristics: The majority of the site is located within SW3 and SW4. Within the north eastern areas of the site, there are large areas of SW4, areas of SW4 also tend to follow the existing water courses. SW2 runs along the southern boundary.

Groundwater

Available data and mapping: The JBA Groundwater Flood Data Map (GW5) is provided as a 5m resolution grid.

Land East of Manor Close – Groundwater Flood Risk

Flood characteristics: During the 1% AEP groundwater flood event, the entire site and main access road is shown to be 'high risk', where groundwater levels are either at or very near (within 0.025m of) the ground surface.

**Tidally influenced
Groundwater Risk
Zone**

Available data and mapping: JBA's Tidally influenced Groundwater Risk Zones derived using the JBA Groundwater data, the British Geological Society 50k bedrock mapping, the Present day 1% AEP extreme tidal level, LiDAR data and the Environment Agency's climate change sea level uplift allowance for South East England.



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Land East of Manor Close – Groundwater Risk Zones

Flood characteristics: The majority of the site is located within GW4 of the Groundwater Risk Zone mapping. There are also some small patches (<30m²) of GW3 located near the eastern site boundary. The main access road is also located within GW4.

- GW0 - Above the future tidal level.
- GW1 - Groundwater level more than 0.5m below the surface and region is above the current tidal level but below the future tidal level.
- GW2 - Groundwater level more than 0.5m below the surface and region is below the present-day tidal level OR groundwater level between 0.025m and 0.5m below the surface and region is above the current tidal level but below the future tidal level.
- GW3 - Groundwater level between 0.025m and 0.5m below the surface and region is below the present-day tidal level OR Groundwater level within 0.025m of the surface and region is above the current tidal level but below the future tidal level.
- GW4 Groundwater level within 0.025m of the surface and region is below the present day tidal level.

Sewers

Available data and mapping: Drainage and Wastewater Management Plan (DWMP) [Overview of the Adur and Ouse River Basin Catchment](#) and Southern Water's Sewer Incident Report Form data (SIRF) at a five digit post code level.

Flood characteristics: 59 reportable sewer incidents have occurred since 1990 within the five-digit postcode area of the proposed development site. These incidents have been attributed to hydraulic overload following rainfall.

Flood history

Available data and mapping: The Environment Agency's Recorded Flood Outlines dataset and WSCC recorded flood incidents.

Land East of Adur Close – Historic Flooding

Flood characteristics: The site has been impacted by a number of flood incidents in the past. The Environment Agency's Recorded Flood Outlines dataset shows that flooding caused by local drainage/surface water in November 1960 occurred across the northern and western boundaries of the site. Another flood incident with an unknown - drainage cause occurred in November 1974 with similar flood extents.

Within a 50m radius from the site, there are also three WSCC recorded flood incidents. These are located to the north of the site and are attributed to poor drainage and flooded gardens in the 1960s.

Flood risk management infrastructure

Existing Defences

The Environment Agency's AIMS dataset shows there are no formal flood defences within the vicinity of the site.

Residual risk

Available data and mapping: The 2025 Arun-Adur breach modelling.

Depth



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*Land East of Adur Close – Breach A–3.3%
Land East of Adur Close – Breach A – 0.5%
Land East of Adur Close – Breach A – 0.1%
Land East of Adur Close – Breach B–3.3%
Land East of Adur Close – Breach B – 0.5%
Land East of Adur Close – Breach B – 0.1%
Land East of Adur Close – Breach C–3.3%
Land East of Adur Close – Breach C – 0.5%
Land East of Adur Close – Breach C – 0.1%
Land East of Adur Close – Breach D –3.3%
Land East of Adur Close – Breach D – 0.5%
Land East of Adur Close – Breach D – 0.1%
Land East of Adur Close – Breach E–3.3%
Land East of Adur Close – Breach E – 0.5%
Land East of Adur Close – Breach E – 0.1%*

Hazard

*Land East of Adur Close – Breach A–3.3%
Land East of Adur Close – Breach A – 0.5%
Land East of Adur Close – Breach A – 0.1%
Land East of Adur Close – Breach B–3.3%
Land East of Adur Close – Breach B – 0.5%
Land East of Adur Close – Breach B – 0.1%
Land East of Adur Close – Breach C–3.3%
Land East of Adur Close – Breach C – 0.5%
Land East of Adur Close – Breach C – 0.1%
Land East of Adur Close – Breach D –3.3%
Land East of Adur Close – Breach D – 0.5%
Land East of Adur Close – Breach D – 0.1%
Land East of Adur Close – Breach E–3.3%
Land East of Adur Close – Breach E – 0.5%
Land East of Adur Close – Breach E – 0.1%*

Velocity

*Land East of Adur Close – Breach A–3.3%
Land East of Adur Close – Breach A – 0.5%
Land East of Adur Close – Breach A – 0.1%
Land East of Adur Close – Breach B–3.3%
Land East of Adur Close – Breach B – 0.5%
Land East of Adur Close – Breach B – 0.1%
Land East of Adur Close – Breach C–3.3%
Land East of Adur Close – Breach C – 0.5%
Land East of Adur Close – Breach C – 0.1%
Land East of Adur Close – Breach D –3.3%
Land East of Adur Close – Breach D – 0.5%
Land East of Adur Close – Breach D – 0.1%
Land East of Adur Close – Breach E–3.3%
Land East of Adur Close – Breach E – 0.5%
Land East of Adur Close – Breach E – 0.1%*

Flood characteristics:

The site is not considered to be at risk in the breach scenarios tested.



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Flood warning

The site has been identified to be located within the Inland areas of Shoreham, Lancing and Southwick (065WAC409) Flood Alert Area and the Shoreham Town and Lancing (065FWC3002) Flood Warning Area.

Future residents should be encouraged to sign up to Environment Agency flood alerts and warnings.

Access and egress

Surface Water 1% AEP plus 45% climate change (upper end allowance)

Access and egress across the site is limited during the 1%AEP plus climate change scenario. Mash Barn Lane is impacted by surface water flooding, with surface water flow paths from the proposed development site flowing across the road and onto the adjacent land. Access is available via Small Copper Close, however, Hayley Road is shown to be at risk with depths of at risk of surface water flooding with depths of up to 0.4m and a hazard rating of 'Danger to some'

Tidal 0.5% AEP plus 55% climate change (higher central allowance)

Access and egress via Mash Barn Lane is not possible in the 0.5%AEP plus climate change scenario, with a hazard rating of 'Danger to all' and 'Danger to most'. Small Copper Close is at low risk in the detailed tidal modelling with access to Hayley Rd, then north on the A2025. However, the extent of the tidal flooding across the site may limit users access.

As a result of the affected access and egress and the severity of the hazard ratings throughout the design flood events it is necessary that a Flood Response Plan is developed in line with ADEPT Guidance.

Requirements for drainage control and impact mitigation

Broad-scale assessment of possible SuDS

Geology & Soils

The geology consists of the Newhaven Chalk Formation comprised of Chalk. The site is largely underlain by superficial deposits of Alluvium (clay, silt, sand and peat), with small patches of Head (clay, silt, sand and gravel) located along the site's southern boundary. The soils are shown to be loamy and clayey soils of coastal flats with naturally high groundwater. These soils are naturally wet and drain to local groundwater.

The geology of the Adur District is complex; areas of chalk are often capped with small sections of clay. This can result in groundwater being trapped beneath the clay layer and surface water pooling at the surface unable to infiltrate. Groundwater may find a fissure in the clay and rise to the surface resulting in flooding that is difficult to predict in terms of location and scale.

SuDS

Implementation of SuDS at the site could provide opportunities to deliver multiple benefits including volume control, water quality, amenity and biodiversity. Evidence should be given where multiple benefits are not provided to show that this is not possible.

Preference should be given to multi-functional sustainable drainage systems, and to solutions that allow surface water to be discharged



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according to the hierarchy of drainage options listed in the [PPG Flood Risk and Coastal Change paragraph 056](#).

The layout and function of drainage systems needs to be considered at the start of the design process for new development, as integration with road networks and other infrastructure can maximise the availability of developable land.

Suitability and considerations for sustainable drainage

In line with Defra's [National Standards for Sustainable Drainage Systems](#), runoff from the development shall be discharged to the following final destinations, to the maximum extent practicable, in accordance with the below hierarchy:

- Priority 1: collected for non-potable use
- Priority 2: infiltrated to ground
- Priority 3: discharged to an above ground surface water body
- Priority 4: discharged to a surface water sewer, or another piped surface water drainage system
- Priority 5: discharged to a combined sewer

SuDS measures should also follow West Sussex County Council's discharge hierarchy, and if it is proposed to discharge runoff to a watercourse or sewer system, the condition and capacity of the receiving watercourse or asset should be confirmed through surveys and the discharge rate agreed with the asset owner based on the National Standards for SuDS.

Surface water discharge rates should not exceed pre-development discharge rates for the site and should be designed to be as close to greenfield runoff rates as reasonably practical in consultation with the LLFA. Discharge to a watercourse or surface water sewer must be restricted to the estimated mean greenfield runoff rate (Q_{bar}) for all design storm events. The calculations must be based on the positively drained area, rather than the entire greenfield site area

It may be possible to reduce site runoff by maximising the permeable surfaces on site using a combination of permeable surfacing and soft landscaping techniques.

The site is at high risk groundwater flooding, with groundwater levels estimated to be at or very near (within 0.025m of) the ground surface. Groundwater flooding at the surface during a 1% AEP event may flow to and pool within topographic low spots. As a result, detention and attenuation features should be designed to prevent groundwater ingress from impacting hydraulic capacity and structural integrity. Additional site investigation work may be required to support the detailed design of the drainage system. This may include groundwater monitoring, in line with BRE 365 or similar, to demonstrate that a sufficient unsaturated zone has been provided above the highest occurring groundwater level. Below ground development such as basements are not appropriate at this site.

Groundwater levels are shown to be influenced by tide levels. The capacity for infiltration needs to take into account the impact of future sea levels.



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The influence of tide levels on groundwater levels should be investigated through groundwater monitoring.

Due to the site topography, any surface water not intercepted via infiltration will likely drain via gravity into the unnamed ordinary watercourses located centrally within the site. It is therefore recommended that the LLFA are consulted about viable discharge locations for surface water from the site and their attenuation potential.

Opportunities for wider sustainability benefits and integrated flood risk management

- Implementation of SuDS at the site could provide opportunities to deliver multiple benefits including volume control, water quality, amenity and biodiversity. This could also provide wider sustainability benefits to the site and surrounding area. Proposals to use SuDS techniques should be discussed with relevant stakeholders (LPA, LLFA and EA) at an early stage to understand possible constraints.
- The design of surface water management proposals should take into account the impacts of future climate change over the projected lifetime of development.
- Opportunities to incorporate source control techniques such as green roofs, permeable surfaces and rainwater harvesting must be considered in the design of the site.
- SuDS are to be designed so that they are easy to maintain, and it should be set out who will maintain the system, how the maintenance will be funded and should be supported by an appropriately detailed maintenance and operation manual.
- SuDS should be designed with a holistic approach, combining ecology, landscape and drainage requirements specific to the site, and incorporating Biodiversity Net Gain requirements.
- Opportunities to incorporate filtration techniques such as filter strips, filter drains and bioretention areas must be considered. Consideration should be made to the existing condition of receiving waterbodies and their Water Framework Directive objectives for water quality. The use of multistage SuDS treatment will improve water quality of surface water runoff discharged from the site and reduce the impact on receiving water bodies.
- The potential to utilise conveyance features such as swales to intercept and convey surface water runoff should be considered. Conveyance features should be located on common land or public open space to facilitate ease of access.
- SuDS should be designed in line with the National Standards for Sustainable Drainage Systems.

NPPF and planning implications

Exception Test requirements

(Local Authority considerations)

The Local Authority will need to confirm that the Sequential Test has been carried out in line with national guidelines. The Sequential Test will need to be passed before the Exception Test is applied. In addition, once the sequential test has been passed, a sequential approach to development should still be undertaken.

The site is located within Flood Zone 3 according to the Environment Agency's Flood Map for Planning. The NPPF classifies the usage as "More Vulnerable". The Exception Test is therefore required for this site due to the severity of flooding.

A site specific FRA will be required for this site.



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**Requirements and
guidance for site-
specific Flood Risk
Assessment**

**(Developer
considerations)**

Flood Risk Assessment:

The Level 1 SFRA has more guidance on this section and any relevant policies and information applicable to development within Adur District.

- All sources of flooding should be included as part of the site specific FRA.
- The most recent risk of Flooding from Surface Water dataset should be used.
- Consultation with Adur and Worthing Councils, West Sussex County Council, and where relevant the Environment Agency and Southern Water should be undertaken at an early stage.
- Development plans should consider the Level 1 and 2 SFRA for Adur, as well as the Local Flood Risk Management Strategies to identify cumulative flood risk issues. The Cumulative Impact Assessment (CIA) completed as part of the Level 1 SFRA, highlights that the East Adur catchment, is at a high risk of cumulative impacts. The risk of cumulative impacts of this development and others in the local area on flood risk should be considered within the site-specific flood risk assessment. It should also promote an integrated approach to water management.
- Developers should consult with Adur and Worthing Council to ensure that the development aims to help achieve the targets of the Drainage and Wastewater Management Plan. Drainage should be designed and implemented in ways that promote multiple benefits.

Guidance for site design and making development safe:

- The developer will need to show, through an FRA, that future users of the development will not be placed in danger from flood hazards throughout its lifetime. It is for the applicant to show that the development meets the objectives of the NPPF's policy on flood risk. For example, how the operation of any mitigation measures can be safeguarded and maintained effectively through the lifetime of the development. (Para 048 Flood Risk and Coastal Change PPG).
- The risk from surface water flow routes should be quantified as part of a site-specific FRA, including a drainage strategy, so runoff magnitudes from the development are not increased by development across any ephemeral surface water flow routes (temporary/seasonal surface water flow paths). A drainage strategy should help inform site layout and design to ensure runoff rates do not exceed greenfield rates.
- Development design should prioritise avoiding development within surface water flow paths, including off-site flow paths. Any loss in surface water flood storage will require on-site level for level compensatory storage, so that any displaced volumes of water do not increase surface water flood risk within the site or elsewhere
- The site is located within a surface water risk zone and therefore surface water drainage systems are likely to be influenced by tide levels. The drainage strategy should consider the risk of tide locking.
- Consideration of the risk of groundwater flooding at the site is required. Monitoring and ground investigations should be undertaken to determine the risk and inform site management.



**Strategic Flood Risk Assessment
Detailed Site Summary Tables**

Land East of Manor Close



- A drainage strategy should be prepared to understand infiltration capacity at the site given the underlying chalk geology and risk of groundwater emergence.
- Groundwater mapping indicates a high risk of groundwater flooding at the site. Following groundwater monitoring, development should be directed away from areas of high groundwater risk.
- Arrangements for safe access and egress will need to be considered further within a site-specific FRA for the tidal, surface water and fluvial events with an appropriate allowance for climate change, using the depth, velocity, and hazard outputs.
- The design and layout of development at the site will need to consider the impact of tidal and surface water flow paths. A sequential approach to development should be undertaken with development located in the areas of lowest risk within the site boundary. The site layout should make space for water and seek to avoid obstructing offsite flow paths and avoid off site detriment.
- To allow for maintenance, 3m easements will be required from the top of both banks along the ordinary watercourses.
- As outlined in the PPG, the Finished Floor Levels of the development should be raised to a minimum of whichever is higher of 600mm above the:
 - Average ground level of the site
 - Adjacent road level to the building
 - Estimated river or sea flood level
- It is suggested that flood resilient design is adopted in the construction of development. The PPG sets out that flood resistant material that have low permeability should be used to at least 600mm above the estimated flood level; flood resilient materials to at least 600mm above the estimated flood level and raising of electrical equipment at least 600mm above the estimated flood level.

Key messages

The Flood Map for Planning indicates the site is located in Flood Zone 3. According to the 2025 Arun-Adur modelling, 96% is at risk of tidal flooding in the design event (0.5% AEP plus 55% climate change allowance).

The site is at risk of surface water flooding during the 3.3%AEP scenario. Land with this probability is considered high risk and development in these areas should not take place. 80% of the site is shown to flood during the surface water design event (1% AEP plus 45% climate change allowance).

The key access routes to the site are via Mash Barn Lane and Small Copper Lane. Mash Barn Lane is susceptible to flooding in the design flood event, access via Small Copper Lane will need to be investigated further.

Given the flood risk posed to the site now and in the future. Development will only be able to progress if:

- The Exception Test is satisfied.



**Strategic Flood Risk Assessment
Detailed Site Summary Tables**

Land East of Manor Close



- A sequential approach to development is undertaken. Layout and design should aim to avoid developing in the areas of greatest flood risk.
- Mitigation measures are incorporated to reduce the risk of future flooding to the development. Early consultation should be held with the Environment Agency to discuss this.
- A site-specific Flood Risk Assessment, including detailed modelling, is undertaken to assess the risk of tidal, surface water and groundwater flooding in relation to the proposed development, and the access and egress arrangements.
- Specific investigation into the risk of blockages and siltation of the existing watercourses and drainage ditches is investigated.
- Infiltration rates and groundwater levels are assessed on site as part of a drainage strategy.
- Consideration is given to the safe access and egress to the site during the design flood event. A Flood Response Plan should be prepared in line with ADEPT guidance.
- Finished floor levels are raised to a minimum of whichever is higher of 600mm above the average ground level of the site, the adjacent road level to the building or the estimated river or sea flood level. The flood level is for the design event (tidal flood level plus higher central climate change allowance, surface water flood level plus upper end)

Sources of information

National Planning Policy Framework (NPPF)

https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf

Planning Practice Guidance (PPG), Flood Risk and Coastal Change

<https://www.gov.uk/guidance/flood-risk-and-coastal-change>

Flood Map for Planning (NaFRA2 2025)

<https://www.data.gov.uk/dataset/104434b0-5263-4c90-9b1e-e43b1d57c750/flood-map-for-planning-flood-zones1>

Long Term Flood Risk

[Where do you want to check? - Check your long term flood risk - GOV.UK](#)

British Geological Survey (BGS) Geology Viewer

<https://geologyviewer.bgs.ac.uk/>

Southern Water's Drainage and Wastewater Management Plan

<https://www.southernwater.co.uk/about-us/our-plans/drainage-and-wastewater-management-plans/>

National standards for sustainable drainage systems (SuDS)

<https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems/national-standards-for-sustainable-drainage-systems-suds>

Flood Warning sign up

<https://www.gov.uk/sign-up-for-flood-warnings>