	Strategic Flood Risk Assessment **Detailed Site Summary Tables** **Barns at New Salts Farm**	

Site details	
Site Code	**ADC/160/19**
Address	To the west of New Salts Farm Road between the airport and A259
Area	0.4ha
Current land use	Brownfield
Proposed land use	Residential
Flood Risk Vulnerability	More vulnerable
Sources of flood risk	
Location of the site within the administrative area	The site is situated to the north of Widewater Lagoon, in the south of the Adur District. The site is located to the west of New Salts Farm Road between the airport and A259. The current land use for the site is brownfield.
Topography	The Environment Agency's 1m resolution 2022 Composite LiDAR shows that the topography of the site declines from the east to the west with an average 5% gradient, declining from approximately 4.4m AOD to 2.4m AOD. The eastern extent of the site is raised approximately 1m higher that the west of the site *Barns at New Salts Farm – Topography*
Existing drainage features	There is an unnamed watercourse, approximately 110m northeast of the site. The watercourse flows in a south easterly direction towards the River Adur.
Flood Map for Planning (Rivers and Sea)	**Available data and mapping:** Environment Agency Flood Map for Planning for Rivers and Sea. *Barns at New Salts Farm - FMfP* **Data analysis:** Details of the sites location within each Flood Zone are provided within the SFRA Site Screening Appendix. **Flood characteristics:** The site is located within Flood Zone 3 of the Flood Map for Planning for Rivers and Sea. • 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* *Barns at New Salts Farm – Tidal – Present Day – 3.3%* *Barns at New Salts Farm – Tidal – Present Day – 0.5%*

	Barns at New Salts Farm – Tidal – Present Day – 0.1% *Hazard* *Barns at New Salts Farm – Tidal – Present Day – 3.3%* *Barns at New Salts Farm – Tidal – Present Day – 0.5%* *Barns at New Salts Farm – Tidal – Present Day – 0.1%* *Velocity* *Barns at New Salts Farm – Tidal – Present Day – 3.3%* *Barns at New Salts Farm – Tidal – Present Day – 0.5%* *Barns at New Salts Farm – 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 tidal flooding during present day events.
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)* *Barns at New Salts Farm – Tidal – Future – 3.3%* *Barns at New Salts Farm – Tidal – Future – 0.5%* *Hazard - 70th percentile (higher central)* *Barns at New Salts Farm – Tidal – Future – 3.3%* *Barns at New Salts Farm – Tidal – Future – 0.5%* *Velocity -70th percentile (higher central)* *Barns at New Salts Farm – Tidal – Future – 3.3%* *Barns at New Salts Farm – Tidal – Future – 0.5%* *Depth – 95th percentile (upper end)* *Barns at New Salts Farm – Tidal – Future – 3.3%* *Barns at New Salts Farm – Tidal – Future – 0.5%* *Hazard - 95th percentile (upper end)* *Barns at New Salts Farm – Tidal – Future – 3.3%* *Barns at New Salts Farm – Tidal – Future – 0.5%* *Velocity -95th percentile (upper end)* *Barns at New Salts Farm – Tidal – Future – 3.3%* *Barns at New Salts Farm – Tidal – Future – 0.5%* **Data analysis:** Details of the site's location within the 2025 Arun-Adur modelling are provided within the Level 2 SFRA Site Screening Appendix. **3.3% AEP (1 in 30 year) + Higher Central Climate Change event:** Proportion – 33% Max Depth – 0.62m Mean Depth – 0.19m Max Velocity – 0.05m/s Mean Velocity – 0.01m/s Max Hazard – 1.31 Danger for most Mean Hazard – 0.80 Danger for some **3.3% AEP (1 in 30 year) + Upper End Climate Change event:** Proportion – 83% Max Depth – 1.58m Mean Depth – 0.90m Max Velocity – 0.26m/s Mean Velocity – 0.07m/s

	Max Hazard – 1.38 Danger for most Mean Hazard – 0.80 Danger for some **0.5% AEP (1 in 200 year) + Higher Central Climate Change event:** Proportion – 75% Max Depth – 1.04m Mean Depth – 0.41m Max Velocity – 0.13m/s Mean Velocity – 0.02m/s Max Hazard – 1.53 Danger for most Mean Hazard – 1.08 Danger for some **0.5% AEP (1 in 200 year) + Upper End Climate Change event:** Proportion – 91% Max Depth – 2.25m Mean Depth – 1.45m Max Velocity – 1.01m/s Mean Velocity – 0.16m/s Max Hazard – 2.16 Danger for all Mean Hazard – 1.72 Danger for most **Flood characteristics:** The site is shown to flood in all climate change events. In the 3.3% AEP Higher Central End Climate Change event, water pools in to the western extent and centre of the site. The greatest depths impact the north west corner of the site, maximum depths are 0.62m. In all other climate change events the majority of the site is impacted; the eastern boundary of the site remains outside the area of risk. The mean velocity remains low, suggesting pooling water at the site. During the 0.5% AEP Upper End Climate Change event, 91% of the site is shown to flood. The mean depth, velocity and hazard are shown to be 1.45m, 0.16m/s and 1.08 (a 'danger for most'). As a result, access and egress will be limited and unavailable across the whole site.
Surface Water	**Available data and mapping:** Environment Agency Risk of Surface Water flooding for the 3.3%, 1% and 0.1% AEP events. t 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. *Barns at New Salts Farm – Surface Water Depth – Present Day – 3.3%* *Barns at New Salts Farm – Surface Water Depth – Present Day – 1%* *Barns at New Salts Farm – Surface Water Depth – Present Day – 0.1%* *Barns at New Salts Farm – Surface Water Hazard – Present Day – 3.3%* *Barns at New Salts Farm – Surface Water Hazard – Present Day – 1%* *Barns at New Salts Farm – Surface Water Hazard – Present Day – 0.1%* *Barns at New Salts Farm – Surface Water Velocity – Present Day – 3.3%* *Barns at New Salts Farm – Surface Water Velocity – Present Day – 1%* *Barns at New Salts Farm – Surface Water Velocity – Present Day – 0.1%* *Barns at New Salts Farm – Surface Water – Present Day – NAFRA2* **Description of surface water flow paths:** The site has not been identified to be located within an area at risk of surface water flooding

	during present day events. 2% of the site is shown to be at risk in the 0.1%AEP March 2025 Risk of Flooding from Surface Water dataset (NAFRA2).
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 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%. *Depth* *Barns at New Salts Farm – Surface Water – Future – 3.3%+20CC* *Barns at New Salts Farm – Surface Water – Future – 3.3%+40CC* *Barns at New Salts Farm – Surface Water – Future – 1%+25CC* *Barns at New Salts Farm – Surface Water – Future – 1%+45CC* *Barns at New Salts Farm – Surface Water – Future – 0.1%+25CC* *Barns at New Salts Farm – Surface Water – Future – 0.1%+45CC* *Hazard* *Barns at New Salts Farm – Surface Water – Future – 3.3%+20CC* *Barns at New Salts Farm – Surface Water – Future – 3.3%+40CC* *Barns at New Salts Farm – Surface Water – Future – 1%+25CC* *Barns at New Salts Farm – Surface Water – Future – 1%+45CC* *Barns at New Salts Farm – Surface Water – Future – 0.1%+25CC* *Barns at New Salts Farm – Surface Water – Future – 0.1%+45CC* *Velocity* *Barns at New Salts Farm – Surface Water – Future – 3.3%+20CC* *Barns at New Salts Farm – Surface Water – Future – 3.3%+40CC* *Barns at New Salts Farm – Surface Water – Future – 1%+25CC* *Barns at New Salts Farm – Surface Water – Future – 1%+45CC* *Barns at New Salts Farm – Surface Water – Future – 0.1%+25CC* *Barns at New Salts Farm – Surface Water – Future – 0.1%+45CC* **Data analysis:** **3.3% AEP (1 in 30 year) + 20% Climate Change event:** The site has not been identified to be at risk of surface water flooding during the 3.3% AEP plus 20% Climate Change event. **3.3% AEP (1 in 30 year) + 40% Climate Change event:** The site has not been identified to be at risk of surface water flooding during the 3.3% AEP plus 40% Climate Change event. **1% AEP (1 in 100 year) + 25% Climate Change event:** The site has not been identified to be at risk of surface water flooding during the 1% AEP plus 25% Climate Change event. **1% AEP (1 in 100 year) + 45% Climate Change event:** The site has not been identified to be at risk of surface water flooding during the 1% AEP plus 45% Climate Change event. **0.1% AEP (1 in 1000 year) + 25% Climate Change event:** Proportion – 0.2%

	Max Depth – 0.18m Max Velocity – 0.08m/s Max Hazard – 0.59 Caution Mean Depth – 0.16m Mean Velocity – 0.07m/s Mean Hazard – 0.58 Caution **0.1% AEP (1 in 1000 year) + 45% Climate Change event:** Proportion – 0.2% Max Depth – 0.2m Max Velocity – 0.1m/s Max Hazard – 0.6 Caution Mean Depth – 0.19m Mean Velocity – 0.09m/s Mean Hazard – 0.59 Caution **Description of surface water flow paths:** Surface water flooding is shown in the 0.1% climate change events; however, this only covers 0.2% of the site. There is a flow path to the west, outside of the site boundary. A small part of this path protrudes into the site. Almost the entire site remains unaffected by surface water flooding, including access and egress routes.
Tidally influenced Surface Water Risk Zone	**Available data and mapping:** JBA's Tidally influenced Surface Water Risk Zones derived using the RoFSW data, 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. *Barns at New Salts Farm – Tidal Drainage Risk Zones* **Flood characteristics:** The majority of the site is shown to be located within SW2 of the Surface Water Risk Zone mapping. The eastern boundary of the site is within SW1, as well as two small sections of land in the south eastern quarter of the site. No areas are located within SW0, SW3 or SW4. • SW0 - Above the future tidal level. • SW1 - Not at risk of SW flooding and above the current tidal level but below the future tidal level. • SW2 - Not at risk of SW flooding but below the present-day tidal level OR at risk of SW flooding from climate change only and above the current day tidal level but below future tidal level. • SW3 - At risk of SW flooding from climate change only and below the present-day tidal level OR At risk of SW flooding without climate change and above current day tidal level but below future tidal level. • SW4 - At risk of SW flooding without climate change and below present-day tidal level.
Groundwater	**Available data and mapping:** The JBA Groundwater Flood Data Map (GW5) is provided as a 5m resolution grid. *Barns at New Salts Farm – Groundwater Flood Risk* **Flood characteristics:** During a 1% AEP groundwater flood event, there is low risk of groundwater flooding across the majority of the western half of the site. This zone is deemed as having a low risk from groundwater flooding due to the nature of the local geological deposits.

	The rest of the site is located where there is a risk of groundwater flooding to both surface and subsurface assets. There is the possibility of groundwater emerging at the surface locally. Groundwater levels are between 0.025m and 0.5m below the ground surface. At the south of the site, there are two small areas where there is a risk of groundwater flooding to both surface and subsurface assets. Groundwater may emerge at significant rates and has the capacity to flow overland and/or pond within any topographic low spots. 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. *Barns at New Salts Farm – Groundwater Risk Zones* **Flood characteristics:** The site is half located within GW2, predominantly in the western half of the site, and half located in GW3, predominantly in the eastern half of the site. At the south of the site, there are two small spots located in GW4. No areas are shown to be located within GW0 or GW1. • 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:** 47 reportable sewer incidents have occurred since 1990 within the five-digit postcode area of the proposed development site. Thes 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.

	Strategic Flood Risk Assessment **Detailed Site Summary Tables** **Barns at New Salts Farm**	
	Barns at New Salts Farm – Historic Flooding **Flood characteristics:** The site is not shown to be located with the Environment Agency's Recorded Flood Outlines dataset or the WSCC recorded flood incidents dataset extents.	
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:** 2025 Arun-Adur modelling – breach scenario. Breach scenario 'c' and 'd'. <u>*Depth*</u> *Barns at New Salts Farm – Breach A–3.3%* *Barns at New Salts Farm – Breach A – 0.5%* *Barns at New Salts Farm – Breach A – 0.1%* *Barns at New Salts Farm – Breach B–3.3%* *Barns at New Salts Farm – Breach B – 0.5%* *Barns at New Salts Farm – Breach B – 0.1%* *Barns at New Salts Farm – Breach C–3.3%* *Barns at New Salts Farm – Breach C – 0.5%* *Barns at New Salts Farm – Breach C – 0.1%* *Barns at New Salts Farm – Breach D –3.3%* *Barns at New Salts Farm – Breach D – 0.5%* *Barns at New Salts Farm – Breach D – 0.1%* *Barns at New Salts Farm – Breach E–3.3%* *Barns at New Salts Farm – Breach E – 0.5%* *Barns at New Salts Farm – Breach E – 0.1%* <u>*Hazard*</u> *Barns at New Salts Farm – Breach A–3.3%* *Barns at New Salts Farm – Breach A – 0.5%* *Barns at New Salts Farm – Breach A – 0.1%* *Barns at New Salts Farm – Breach B–3.3%* *Barns at New Salts Farm – Breach B – 0.5%* *Barns at New Salts Farm – Breach B – 0.1%* *Barns at New Salts Farm – Breach C–3.3%* *Barns at New Salts Farm – Breach C – 0.5%* *Barns at New Salts Farm – Breach C – 0.1%* *Barns at New Salts Farm – Breach D –3.3%* *Barns at New Salts Farm – Breach D – 0.5%* *Barns at New Salts Farm – Breach D – 0.1%* *Barns at New Salts Farm – Breach E–3.3%* *Barns at New Salts Farm – Breach E – 0.5%* *Barns at New Salts Farm – Breach E – 0.1%* <u>*Velocity*</u> *Barns at New Salts Farm – Breach A–3.3%* *Barns at New Salts Farm – Breach A – 0.5%* *Barns at New Salts Farm – Breach A – 0.1%* *Barns at New Salts Farm – Breach B–3.3%* *Barns at New Salts Farm – Breach B – 0.5%* *Barns at New Salts Farm – Breach B – 0.1%* *Barns at New Salts Farm – Breach C–3.3%*	

	Barns at New Salts Farm – Breach C – 0.5% *Barns at New Salts Farm – Breach C – 0.1%* *Barns at New Salts Farm – Breach D –3.3%* *Barns at New Salts Farm – Breach D – 0.5%* *Barns at New Salts Farm – Breach D – 0.1%* *Barns at New Salts Farm – Breach E–3.3%* *Barns at New Salts Farm – Breach E – 0.5%* *Barns at New Salts Farm – Breach E – 0.1%* **Flood characteristics:** The site is impacted by a breach occurring at location 'c' and 'd' in the 0.5% and 0.1% AEP events. In breach scenario 'c', approximately 50% the site is impacted in the 1%AEP event, with onset occurring approximately 45 minutes after the breach at location 'c'. Water approaches the site from the south Maximum depths are up to 0.50m in the 0.5%AEP. A small area of the north western area of the site is impacted following a breach at location 'd' in the 0.5% AEP and 0.1% AEP. Maximum depths are 0.01m and 0.17m respectively. Due to the tidal nature of the River Adur, the extent of the breach impact is dependent on the tide height.
Emergency planning	
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. *Barns at New Salts Farm – Flood Warning* 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 are unlikely to be affected during the 1% AEP plus climate change surface water modelling with flood free access via New Salts Farm Road. Furthermore, the site has not been identified to be at risk of surface water flooding during the 1% AEP plus Climate Change events. **Tidal 0.5% AEP plus 55% climate change (higher central allowance)** Access and egress will be unavailable during the 0.5% AEP plus climate change tidal events due to the severity of flooding across the site and the local area. The hazard rating is danger to most. 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	

	Strategic Flood Risk Assessment **Detailed Site Summary Tables** **Barns at New Salts Farm**	
Broad-scale assessment of possible SuDS	**Geology & Soils** The geology consists of Newhaven Chalk Formation comprised of chalk. The superficial deposits are a combination of Raised Beach Deposits (sand and gravel) and alluvium (clay, silt, sand and peat). The soils are shown to be loamy and clayey soils of coastal flats with naturally high groundwater. This suggests that infiltration is unlikely across the majority of the site. 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 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 and aim to be restricted to Greenfield Qbar. If that is not	

	possible; flow should be restricted to as close to Qbar as is achievable. A relaxation factor shall be applied to the target 50% and 1% AEP greenfield runoff rates, this relaxation factor should be no greater than five times the greenfield runoff rate. This should be done in consultation with the LLFA. A concept drainage strategy has been completed for the site, with greenfield runoff rates calculated. The key findings of the concept drainage strategy are that following Standard 1 of the National SuDS Standards, that discharge from Barns at New Salts Farm will be into the tidal River Adur. It is likely that this site will require easements and third party permissions for both the connection and future maintenance of the surface water network. The concept strategy proposes that the site makes use of SuDS features to provide the required attenuation at the site. Further details are available in 'Concept Drainage Strategy for Lancing Meadows, New Salts Farm, Barns at New Salts Farm and Land East of Adur Close'. Although chalk is porous, the risk of medium to high groundwater levels on site suggests that infiltration may be limited. For Brownfield sites, infiltration should be investigated as the first option, but where evidence can be provided that this is unviable offsite discharge may be required for surface water runoff. The infiltration potential of the site should be confirmed through infiltration testing, in line with BRE 365 or similar. 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. The influence of tide levels on groundwater levels should be investigated through groundwater monitoring. The whole site is located within a Nitrate Vulnerable Zone. Therefore, early engagement with the LLFA and the Environment Agency is recommended to determine requirements for the site to manage the impact to surrounding watercourses. Consideration of water quality is likely to be of high importance and demonstrated through the use of the Simple Index Approach. The site has not been identified to be located within a historic landfill site or a groundwater Source Protection Zone.
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 the surface water management proposals should take into account the impacts of future climate change over the projected lifetime of the 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. It is recommended that future developers appoint suitable landscape architects and ecologists to ensure that the full amenity and biodiversity benefits are achieved. • 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 entirely located within Flood Zone 3 and the tidal climate change 0.5% AEP extents. The NPPF classifies the usage as "More Vulnerable"; this type is taken into consideration for the Exception Test. The Exception Test is therefore required for this site due to the severity of flooding. Detailed flood modelling should be assessed within a site-specific FRA and a Flood Response Plan should be developed.
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 West 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.

- Applicants are expected to provide fully detailed plans of the site's existing surface water drainage arrangements, including impermeable areas, gullies, outfalls, pipes & diameters, manholes, etc., to prove the extent of the existing positively drained areas and their associated points of discharge.

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, 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.
- 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.
- A drainage strategy should be prepared to understand infiltration capacity at the site given the underlying chalk geology and risk of groundwater emergence.
- Arrangements for safe access and egress are unlikely to be possible during tidal climate change 0.5% AEP events due to the severity of flooding and will need to be considered further within a site-specific FRA for the tidal 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 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.
- 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

Strategic Flood Risk Assessment
Detailed Site Summary Tables

Barns at New Salts Farm

Key messages

The site has generally been identified to be at high risk of flooding due to its location within Flood Zone 3. According to the 2025 Arun-Adur modelling, 75% of the site is at risk of tidal flooding in the design event (0.5% AEP plus 55% climate change allowance).

The key access routes to the site is via New Salts Farm Road. During the design event access to the site is unavailable, with a hazard rating of 'Danger to most'. Detailed consideration into site access and egress will be required.

Development will only be able to progress if:

- The Exception Test is satisfied.
- 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 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 and surface water flooding in relation to the proposed development, and the access and egress arrangements.
- The recommendations included in the drainage strategy are implemented. Early engagement will be required as it is likely that third party easement will be required for drainage at this site.
- 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