Interim Strategic Flood Risk Assessment (Level 1)

Gosport Borough Local Plan 2038 (Consultation Draft) Town and Country Planning (Local Plan) (England) Regulations 2012 (as amended) Regulation 18

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CONTENTS

1.0	BACKGROUND	. 3
INTRO CONT NATIO APPL OTHE	ODUCTION TEXT ONAL POLICY YING THE SEQUENTIAL AND EXCEPTION TESTS	. 3 . 6 . 7 11 13
2.0	OVERVIEW OF THE STRATEGIC FLOOD RISK ASSESSMENT	15
METH APPR ASSE USE (OD APPLIED IN THIS ASSESSMENT	15 2 17 24
3.0	REGENERATION AREAS PROPOSED FOR DEVELOPMENT	29
APPL MEET	YING THE SEQUENTIAL TEST	29 33
4.0	INTERIM STRATEGIC FLOOD RISK ASSESSMENT FOR PROPOSED DRAF ALLOCATIONS	T 38
5.0	SITES OUTSIDE OF THE PROPOSED REGENERATION AREAS	3 7
6.0	INFRASTRUCTURE	29

The PfSH SFRA mapping layers can be viewed from: www.gosport.gov.uk/article/1299/Strategic-Flood-Risk-Assessment

1.0 BACKGROUND

INTRODUCTION

- 1.1 The Partnership for South Hampshire (PfSH)) published a Strategic Flood Risk Assessment (PfSH SFRA) for the South Hampshire sub region in 2007 with further update at 2012. The PfSH SFRA (2016) has been used to inform the preparation of development plans in South Hampshire and to assist developers in the preparation of site-specific flood risk assessments where these are required in line with national planning guidance.
- 1.2 In 2016 the PfSH SFRA was updated by the Eastern Solent Coastal Partnership (ESCP) (now Coastal Partners) on behalf of PfSH and the mapping layers and 2016 Guidance Document for Gosport have been used to prepare this Stage 1 Interim SFRA (iSFRA) report by the Borough Council for the proposed allocations in the draft Gosport Borough Local Plan 2038 (Regulation 18, 2021). The Council has used the PfSH SFRA to assist in carrying out the sequential test for those areas identified in the consultation draft Gosport Borough Local Plan 2038 (GBLP2038) as suitable for mixed-use development including residential. The findings of this iSFRA have been used to inform the Sustainability Appraisal (SA) for the draft Local Plan as appropriate. The PfSH PFSH SFRA (2016) produced a new Local Authority Guidance Report and mapping layers. These are available on the Council's website at: www.gosport.gov.uk/PfSH SFRA
- 1.3 The Borough Council has used the PfSH SFRA (2016) to prepare this iPFSH SFRA (Level 1) report with close assistance from the Coastal Partners. This interim Report follows a similar format to previous reports. The PfSH have commissioned consultants to undertake a new PfSH SFRA for the PfSH area to include the latest planned growth for the sub-region, update existing data including taking into account the latest UKCP18 Climate Change predictions.
- 1.4 The new PSH SFRA has been prepared in consultation with the Environment Agency and Hampshire County Council as both PfSH member and Lead Local Flood Authority. The study is expected to be completed by winter/spring 2022 and consequently the findings of the Council's iPFSH SFRA will need to be reviewed for the Regulation 19 consultation of the draft Gosport Borough Local Plan 2038 (GBLP2038) in line with the new PfSH SFRA. The Regulation 19 consultation is currently scheduled to commence in Summer or Autumn 2022.
- 1.5 The Council's iSFRA report is structured in five parts setting out the following matters:
 - a) A broad background of the Borough within the context of the Borough's planning profile and identifies key national planning policy objectives in respect of development and flood risk;
 - b) An overview of the approach taken by the Council;
 - c) Identification of the proposed Regeneration Areas and strategic sites within for development and works through the sequential test undertaken in respect of Flood Zones. This section also includes other residential allocations (excluding those already with a current outstanding planning permission);
 - d) An assessment of the potential flood risk issues for each of the proposed areas using the PfSH SFRA 'Guidance for Gosport Borough' report and

relevant mapping layers. This section identifies key flooding issues that will need to be addressed in more detailed through site-specific Flood Risk Assessments (FRAs);

- e) A broad overview of the Council's preferred approach for managing flood risk; and
- f) Sets out in broad terms other relevant infrastructure needs (further details of these are contained in the Borough Council's Infrastructure Assessment Report (September 2021) and Infrastructure Delivery Plan (November 2020 with relevant updates for 2021) prepared in consultation with the relevant key infrastructure providers).
- 1.4 Accompanying the Borough Council's study is a series of maps showing the findings of the PfSH SFRA for the following Regeneration Areas:
 - Harbour Regeneration Area (policy R1) (which includes a number of key Strategic Sites: the Gosport Waterfront and Gosport Town Centre; and the Haslar Peninsula);
 - Rower and HMS Sultan Regeneration Area (policy R2)
 - Daedalus Regeneration Area (policy R3)
- 1.5 There are extensive areas of land within the Harbour Regeneration Area which are in Flood Zone 3 as shown in the latest Environment Agency Flood Zone maps for 2021.
- 1.6 In addition to the proposed Regeneration Areas, there are a number of additional proposed allocations identified through the Strategic Housing Land Availability Assessment. These sites will contribute towards delivering regeneration benefits within the Borough and are located primarily in Flood Zone 1. The proposed sites are set out under policies A1: Enabling Development and A2: Housing of the GBLP2038 and shown in Table 5a: Housing supply on pages 32-33 of this Report.
- 1.7 In addition to the above, draft policy D6: Gosport Strategic Open Spaces identifies significant areas of strategic open space including the Alver Valley Country Park, Browndown, Stokes Bay and Lee Beach and Clifflands. These offer opportunities to provide:

'Access to a network of high quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities, and can deliver wider benefits for nature and support efforts to address climate change.' (Paragraph 98, NPPF, July 2021)



Fluvial Flood Zones in Gosport Borough

CONTEXT

- 1.8 The PfSH SFRA identified the primary source of flood risk to Gosport Borough is from the sea. The key parts of the Borough which are currently at risk of flooding from the sea are frontages around Haslar Creek, Forton Lake, Stokes Bay and areas fronting the western side of Portsmouth Harbour. The secondary source of flood risk to the Borough is from fluvial sources to the River Alver. A total of 363 hectares of land is within Flood Zones 2 and 3 representing 14% of the total land area in the Borough. Flood risk and the impacts of climate change are considered throughout the draft Local Plan, particularly given the predicted increases in the frequency and intensity of storms which will have implications for the Borough's coastal defences. Historically, Gosport has also been susceptible to flooding from other sources including surface water and flooding caused by infrastructure failure.
- 1.9 The population of the Borough in 2011 was 82,600 people¹, an increase of 8.1% from 2001. The latest estimates in 2019 show a population of 84,838 people². Long-term projections show a slight increase in the population of 0.1% by 2038; an increase of only 95 people. The Borough is densely populated with almost 33 people per hectare, nine times the England average at 3.7.
- 1.10 There are approximately 37,500 households with an average household size of 2.3 people. The number of households increased by 13.1% between 2001 and 2011. By 2038, the number of households is projected to increase by 4.4%; at the same time household size is projected to decrease to 2.14 people.
- 1.11 The population is ageing due largely to longer life expectancy. The proportion of the population over 65 is projected to increase from 21% in 2021 to 28.5% in 2038³, this represents nearly 6,200 additional over 65s. The proportion living beyond 85 is projected to increase from 2.8% in 2021 to 4.6% in 2038. At the same time the number aged under 16 is projected to decrease from 19.3% in 2021 to 16.8% in 2038. The working age population (16-64) is projected to decrease from 61% in 2021 to 55.7% in 2038, representing a reduction of 4,500 people.
- 1.12 One of the key aims of the draft GBLP2038 is to set out the broad locations and site-specific allocations to meet the development needs of the Borough for the plan period to 2038. It is clear from the local plan evidence that genuine options relating to the location of development are limited due to the size and urban character of the Borough together with a number of significant environmental constraints.
- 1.13 As a coastal local planning authority (LPA), managing development, flood risk and coastal erosion are important issues to address. Development proposals must accord with the requirements of the National Planning Policy Statement (NPPF) July 2021. The key policy message of the NPPF is to guide development to those areas at lowest risk from flooding where other sites may be appropriate and reasonably available exist⁴. Where it is not possible to do this, it needs to be

¹ ONS Census (2011)

² ONS mid-year population estimates (mid-2019)

³ ONS Sub-national population projections (2018-based)

⁴ NPPF,2021, paragraphs 162 -163.

demonstrated why that is not the case and steps need to be taken to manage those risks that have been identified and mitigate accordingly. Where development is necessary the development should be made safe for its lifetime without increasing flood risk elsewhere.

- 1.14 The basic starting point for any assessment of development and flood risk starts with the Environment Agency's Flood Zone maps which are regularly updated and this information shows the extent of potential flooding events. There are significant areas of land in Gosport that fall within the Environment Agency's defined Flood Zone 2 and 3 maps. Appraising flood risk at all stages of the planning process and in all its forms is a key part of development planning
- 1.15 Draft Local Plan policy D2: Development Strategy sets out the spatial planning strategy for the Borough up to 2038. The draft Local Plan makes provision for 3,500 net additional dwellings over the plan period 2021-2038. A number of Regeneration Areas and other smaller allocations have been identified as being capable of delivering the Borough Council's development strategy. Each regeneration area has been assessed to identify potential flood risk issues from all sources of flooding. The findings of the PfSH SFRA are set out in this Report for each proposed allocation and this information has been used to inform both the sequential test process and to highlight potential flood risk issues that may require further investigation through detailed site-specific Flood Risk Assessments (FRA). Where it has not been possible to allocate development in a lower flood risk location, the Exception Test has been applied in accordance with the NPPF.
- 1.16 In addition to the NPPF, a Shoreline Management Plan (North Solent SMP (2010) and subsequent River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy (2015) (CFERM) have been prepared and cover the whole of the Gosport coastline. These documents provide a more detailed consideration of the information regarding the effects of coastal change along the Borough's coastline and its long term management. The CFERM was prepared by the Coastal Partners⁵ and adopted by the Borough Council in 2015 and approved by the Environment Agency in 2016.

NATIONAL POLICY

National Planning Policy Framework

1.17 The National Planning Policy Framework (NPPF) sets out the national policy for managing flood risk at all stages of the planning process and from all sources of flooding. Planning Practice Guidance (PPG) accompanies the NPPF and provides detailed guidance on development and flood risk matters. The PPG

⁵ Coastal Partners (CP) is a partnership between four councils (Gosport, Portsmouth, Havant and Fareham) who manage 162km of Hampshire's coastline. On behalf of each council the CP lead on coastal issues, such as managing flooding and erosion risk, plan design and manage construction of new coastal defence schemes and inspect, manage and maintain existing coastal assets whilst planning for the future. It has evolved its expertise to support and enhance: community resilience, habitat and environmental issues, research, ecology, data analysis, geomatics, environmental protection and funding skills, in addition to its core coastal engineering services. Advice is available on project strategy, planning, design, monitoring, implementation and maintenance and stretches beyond coastlines to on land, highways and flood risk areas. Further information about the work of the CP can be found here: https://coastalpartners.org.uk/

sets out detailed information relating to the compatibility of development in particular Flood Zones and this is set out in the tables below. The tables also include relevant policy information from the NPPF and the PPG in relation to the requirements for site-specific flood risk assessments and appropriateness of particular uses in each Flood Zone.

Definition of Flood Zones

1.18 Flood Zones are defined in the NPPG as follows:

Table 1: Flood Zones

Flood Zone	Definition
Flood Zone 1 (Low probability)	Land having a less than 1 in 1000 annual probability of river or sea flooding All land uses are considered appropriate in this zone. Flood Risk Assessments are required
	on sites one hectare or above.
Flood Zone 2 (Medium probability)	This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding or between a 1 in 200 and 1 in 1000 annual probability of sea flooding The water–compatible, less vulnerable and more vulnerable uses of land and essential infrastructure are appropriate in this zone. The highly vulnerable uses identified in Table 2 are only appropriate in this zone if the Exception Test is passed. All development proposals in this zone should be accompanied by a FRA.
Flood Zone 3a (High probability)	This zone comprises land assessed as having a 1 in 100 or greater annual probability of river flooding or a 1 in 200 or greater annual probability of flooding from the sea.
	The water-compatible and less vulnerable uses in Table 2 are appropriate in this zone. The highly vulnerable uses should not be permitted in this zone.
	The more vulnerable and essential infrastructure uses should only be permitted in this zone if the Exception Test is passed. Essential infrastructure permitted in this zone should be designed and constructed

		to remain operational and safe for
		users in time of flood
		All development proposals in this zone
		should be accompanied by a FRA.
Flood Zone 3	3b (Functional	This zone comprises land where
floodplain)	,	water has to flow or be stored in
		times of flood. LPAs should identify in
		their PFSH SFRA s areas of functional
		floodplain and its boundaries
		accordingly, in agreement with the EA.
		The identification of functional
		tioodplain should take account of local
		circumstances and not be defined
		However land that would flood with an
		annual probability of 1 in 20 (5%) or
		areater in any year or is designed to
		flood in an extreme (0.1%) flood, should
		provide a starting point for
		consideration and discussions to
		identify the functional floodplain.
		Only the water-compatible uses and the
		essential infrastructure listed in Table 2
		that has to be there should be permitted
		in this zone. It should be designed and
		constructed to:
		 Remain operational and safe for users in times of flood;
		• Result in no net loss of floodplain
		storage;
		INOT IMPEDE WATER FIOWS; and
		 INOT INCREASE FLOOD FISK EISEWHERE.
		Essential infrastructure in this zone
		should pass the Exception Test.
		All development proposals in this zone
		should be accompanied by a FRA,

Source: Planning Practice Guidance⁶

Table 2: Flood risk vulnerability classification

Essential infrastructure

- Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk.
- Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works

⁶ The national Planning Practice Guidance for Flood Risk and Coastal Change can be found at: <u>https://www.gov.uk/guidance/flood-risk-and-coastal-change</u>

that need to remain operational in times of flood.

• Wind turbines. Highly vulnerable

- Police and ambulance stations; fire stations and command centres; telecommunications installations required to be operational during flooding.
- Emergency dispersal points.
- Basement dwellings.
- Caravans, mobile homes and park homes intended for permanent residential use
- Installations requiring hazardous substances consent. (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as "essential infrastructure").

More vulnerable

- Hospitals.
- Residential institutions such as residential care homes, children's homes, social services homes, prisons and hostels.
- Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels.
- Non-residential uses for health services, nurseries and educational establishments.
- Landfill⁷ and sites used for waste management facilities for hazardous waste.
- Sites used for holiday or short-let caravans and camping, *subject to a specific warning and evacuation plan.*

Less vulnerable

- Police, ambulance and fire stations which are not required to be operational during flooding.
- Buildings used for shops, financial, professional and other services, restaurants and cafes, hot food takeaways, offices, general industry, storage and distribution, non-residential institutions not included in the "more vulnerable" class; and assembly and leisure.
- Land and buildings used for agriculture and forestry.
- Waste treatment (except landfill and hazardous waste facilities).
- Minerals working and processing (except for sand and gravel working).
- Water treatment works which do not need to remain operational during times of flood.
- Sewage treatment works (if adequate measures to control pollution and manage sewage during flooding events are in place).

Water-compatible development

- Flood control infrastructure.
- Water transmission infrastructure and pumping stations.
- Sewage transmission infrastructure and pumping stations.
- Sand and gravel working.

⁷ Landfill is as defined in Schedule 10 of the Environmental Permitting (England and Wales) Regulations 2010.

- Docks, marinas and wharves.
- Navigation facilities.
- Ministry of Defence, defence installations.
- Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location.
- Water-based recreation (excluding sleeping accommodation).
- Lifeguard and coastguard stations.
- Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms.
- Essential ancillary sleeping or residential accommodation for staff required by uses in this category, *subject to a specific warning and evacuation plan.*

Source: Planning Practice Guidance

- 1.19 The effects of changing climate conditions on the UK's weather patterns means there will be more frequent periods of intense rainfall and this can cause flooding which will have an impact on surface water management. In addition to this, sea levels will continue to rise. Changes to those factors associated with coastal erosion such as storm surges, wave action and coastal transport sediment are likely to affect the probability of flooding to new developments.
- 1.20 The Table below shows the Flood Risk Vulnerability and Flood Zone compatibility classifications as set out in national policy. The Table is provided to illustrate what broad classifications are compatible in the different Flood Zones.

Flood Risk Vulnerability Classification	Essential Infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Zone 2	V	Exception test required	 ✓ 	V	V
Zone 3a	Exception test required	×	Exception Test required	✓	√
Zone 3b (functional floodplain)	Exception test required	×	×	×	V

Table 3: Flood risk vulnerability and flood zone compatibility

Source: Planning Practice Guidance

APPLYING THE SEQUENTIAL AND EXCEPTION TESTS

1.21 The NPPF sets out the requirement for proposed allocations to undergo a sequential, risk-based approach to site location. The Sequential Test must be applied in the first instance to the site selection process and the Exception Test is not an alternative to sequential testing. The principle aim is to steer

development to those areas at the lowest probability of flooding. If there are no reasonably available sites in Flood Zone 1 then, taking into account the vulnerability of uses, sites in Flood Zone 2 may be considered.

1.22 The Exception Test is applied where qualifying development i.e. 'More vulnerable' cannot be allocated to a lower flood risk area as shown on Table 3 above. There are two parts to the Exception Test and both parts must be met before a site can be allocated in a Local Plan. The requirements to meet the Exception Test are set out below:

'a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and

b) 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.' (*Paragraph 163, NPPF, 2021*).

Coastal Change

1.23 Local Plans should:

"...reduce risk from coastal change by avoiding inappropriate development in vulnerable areas and not exacerbating the impacts of physical changes to the coast. They should identify as a Coastal Change Management Area and any area likely to be affected by physical changes to the coast." (*Paragraph 171, NPPF, 2021*).

- 1.24 The starting point for determining whether such an area is required is the adopted North Solent Shoreline Management Plan (SMP). The SMP's adopted policy for the Borough's coastline is one of 'Hold the Line'. In the PPG, a CCMA will only be defined where rates of shoreline change are deemed to be significant over the next 100 years. In addition, CCMAs will not have to be defined where the SMP policy is to hold or advance the line for the whole period covered by the SMP. Therefore at this present time, it is not considered necessary for the Borough Council to identify a CCMA for the plan period 2021-2038.
- 1.25 Shoreline Management Plans (SMPs) will play a key role in providing a significant part of the evidence base for the iSFRA as it indicates areas susceptible to coastal flood and erosion risks. For Gosport the key evidence base for considering flood risk and coastal change issues comes from the adopted North Solent Shoreline Management Plan (2010), the River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy (2015) and the PfSH SFRA (2016) supplemented by the latest available Environment Agency maps particularly for identifying present day (2021) Flood Zones and areas susceptible to surface water flooding.
- 1.26 The Borough Council regards partnership working with neighbouring local authorities and relevant agencies with an interest in the coast an important element for formulating policy and establishing good practices on a range of coastal and flood risk management issues. The Borough Council participates in a number of partnership arrangements: through PfSH, the Coastal Partners, membership of the Solent Forum and the Southern Coastal Group and SCOPAC

as well as through other working groups as appropriate for example the Hampshire and Isle of Wight Planning Officers Group. This has helped the Borough Council fulfil both its duty to co-operate and to engage with current best practice.

OTHER POLICY CONSIDERATIONS

- 1.27 The North Solent Shoreline Management Plan was adopted in December 2010⁸. The proposed policy management option for the Gosport coastline is to 'hold the line'. The recommendation is the existing defence line should be maintained. The North Solent SMP identifies three time periods: Epoch 1: 0-20 years, Epoch 2: 20-50 years and Epoch 3: 50-100 years. It is important to recognise that even where a 'hold the line' policy approach is advocated, this does not guarantee public funding through the Coastal Flood and Erosion Risk Management (CFERM) budget for maintenance or capital works. Therefore other funding mechanisms for ensuring delivery of necessary coastal asset management measures will need to be explored.
- 1.28 A national review of Shoreline Management Plans, led by the Environment Agency (EA) is underway (Shoreline Management Plan Refresh (SMP-R)) as part of the national programme under the Flood and Coastal Erosion Risk Management (FCERM) Strategy for England It is intended that local Coastal Groups and the EA will work together to review and improve the Shoreline Management Plans to help communities adapt to future coastal change the work is scheduled for completion in 2022.⁹
- Under the Flood and Water Management Act 2010, Hampshire County Council is 1.29 a Lead Local Flood Authority (LLFA). Amongst its responsibilities is the preparation of a Preliminary Flood Risk Assessment for Hampshire. This document compiles information on significant local flood risk based on historical trends and potential for future floods. This in turn informs the preparation of area specific Surface Water Management Plans (SWMPs) and develops the Local Flood Risk Management Strategy (LFMS). A Local Flood Risk Management Strategy (2013) was prepared and identifies both the flood risks in Hampshire and the measures and actions needed to address these risks. The County Council in consultation with the relevant Hampshire districts have prepared a number of SWMPs which provided additional key areas of information assisting in improved understanding and management of surface water across Hampshire. Further information about the role of the County Council as Lead Local Flood Authority and the different strategies and plans can be found at: www.hants.gov.uk/landplanningandenvironment/environment/flooding/strategies
- 1.30 Although a SWMP was not identified by the LLFA for Gosport, the Council has used the published Environment Agency data to supplement the information in the PfSH SFRA relating to surface water flooding in the Borough. Hampshire County Council as Lead Local Flood Authority will be consulted on, and have the opportunity to comment on this iSFRA along with the draft policies in the

⁸ Further information about the North Solent SMP can be found here: <u>https://www.northsolentsmp.co.uk/</u>

⁹ Further information about the Shoreline Management Plan Refresh can be found on the Southern Coastal Group's website at: <u>https://southerncoastalgroup-scopac.org.uk/smps/</u>

The Borough Council is a member of the Southern Coastal Group and SCOPAC (Standing Conference on Problems Associated with the Coastline).

GBLP2038 notably draft policy D7: Flooding and Coastal Erosion. The County Council have recently completed public consultation on its new draft Local Flood and Water Management Strategy (2020)¹⁰. The draft Strategy sets out the County Council's partnership approach for protecting homes, businesses and infrastructure through:

- Avoiding risks and managing water resources through effective planning and design;
- Preventing future flooding by reducing or removing future risks;
- Adapting to flood risk in order to minimising the impact and enable normal life to return as soon as possible;
- Enabling communities to be better prepared to react to flood events and recover more easily; and
- Adopting effective practices that are sustainable and affordable now and in the future.
- 1.31 Work undertaken by Hampshire County Council so far indicates surface water flooding is a potential Borough wide issue and appropriate management and mitigation should be investigated and addressed in site-specific FRAs. Work is currently being undertaken to prepare new catchment plans which will replace Surface Water Management Plans in due course.
- 1.32 The draft Local Plan is supported by a Sustainability Appraisal Report (SA). The SA incorporates the findings of the Habitats Regulations Assessment (HRA) required under the European Habitats Directives. The SA has been informed by the findings of this iSFRA.

¹⁰ Further information about the draft Local Flood and Water Management Strategy can be found on Hampshire County Council's website at: https://www.hants.gov.uk/aboutthecouncil/haveyoursay/consultations/localflood-watermanagement-strategy

2.0 OVERVIEW OF THE STRATEGIC FLOOD RISK ASSESSMENT

- 2.1 The PfSH has worked, together, with a number of partners on a range of important projects for the South Hampshire sub region including working in partnership with the Environment Agency, Hampshire County Council and the Water Authorities on Strategic Flood Risk Assessments undertaken in 2007 with a number of updates carried out in 2012 and 2016.
- 2.2 PfSH has recently commissioned consultants to undertake a new SFRA for the South Hampshire sub-region and this will replace the existing SFRA. The sub region covers almost 600 km² and includes 270 km of tidal coastline. It includes the urban areas of Eastleigh, Fareham, Gosport, Havant, Portsmouth and Southampton. The sub region is also subject to a number of sources of flooding besides tidal these are river, surface water and groundwater making the assessment of flood risk a key issue across the sub region.
- 2.3 The PfSH SFRA (2016) includes a main report as well as individual district council reports. For Gosport, the main source of flood risk to the Borough comes from tidal flooding. The main areas of the Borough at risk from tidal flooding are:
 - The entire frontage of Haslar Creek;
 - Stokes Bay;
 - The Alver Valley; and
 - The southern half of Portsmouth Harbour particularly Priddy's Hard.
- 2.4 A secondary source of flood risk is from the River Alver. The River Alver discharges into the sea via a tidal outflow which is flapped to prevent tidal inundation of the river valley. The PfSH SFRA concluded that if this defence were to fail then the Alver Valley would experience regular inundation from the sea. Therefore the PfSH SFRA shows the Alver Valley as predominantly at risk from tidal flooding. However the river comes from a very small catchment and flows largely through an unconstrained and undeveloped floodplain hence the risk of fluvial flooding to properties is very small.
- 2.5 There have been some historical incidences of flooding occurring from other sources of flooding within the Borough namely flooding through surface water run-off due to the Borough's urban nature and flooding caused by infrastructure failure (drains).

METHOD APPLIED IN THIS ASSESSMENT

2.6 The assessment method for the proposed Regeneration Areas uses the sequential test and this is set out in more detail on page 31 of this Report. As part of the Borough Council's interim work, the PfSH SFRA's detailed flood maps were used to assess where further work may be required before the publication of the Regulation 19 version of the GBLP2038 and also identify issues that need to be addressed through a detailed site-specific FRA(s). This is set out for each proposed Regeneration Area in part four of this report. In addition to this, the iSFRA has been extended to cover other smaller allocations proposed for residential/mixed use development. These proposed allocations are smaller in scale and mostly within Flood Zone 1 (Draft Policies A1: Enabling Development and A2: Housing). Where sites are allocated but already have an outstanding

planning permission this assessment has not been carried out as consideration of flood risk would have been addressed at the time of granting planning permission. The exceptions to this are the Royal Hospital Haslar, where given the length of time the development has taken to complete various phases and with various elements subject to proposed change and potential to accommodate additional development for residential where this is appropriate it is considered appropriate to undertake a iSFRA for this site.

- 2.7 Secondly, an iSFRA has been carried out for the proposed allocation at Fort Gilkicker which is a Grade II* listed Scheduled Ancient Monument (Palmerston Fort) located at the apex of Stokes Bay overlooking the Solent. Fort Gilkicker has a complex planning history Fort Gilkicker has had two prior residential planning applications. Consent was granted (application reference 9316/5) in 2001 permitting restoration and conversion to 17 dwellings with car parking, Museum with public access, new road junction and access road and improvement including new revetment and earth mounding. This consent was not implemented. A second consent was granted in 2010 (application reference 08/00423/Full) for the restoration of the fort and conversion to 26 dwellings, residents stores and interpretation room. This consent has subsequently been extended twice and implementation has commenced. However, notwithstanding this, given the site's planning history, the draft Local Plan allocates Fort Gilkicker in the event that extent applications are not implemented and therefore it is considered appropriate to undertake an iSFRA for the site.
- 2.8 The PfSH SFRA uses a series of flood models to map flood risks and the outcomes of these are set out in a series of output packages. These output packages can be used to inform different types of spatial planning, coastal engineering and emergency planning functions. Details of these Map Sets are set out briefly below. Further information about the methodology and output package details used to prepare the PfSH SFRA (2007 and 2016¹¹) can be found in the final PfSH SFRA report on the Local Plan 2038 evidence page at: www.gosport.gov.uk/gblp2038
- 2.9 The combination of Gosport's coastal geography and the location and extent of former Ministry of Defence and other major public sector land holdings, now considered surplus to the requirements of these organisations, means the Borough Council has a significant opportunity to continue to deliver major regeneration benefits both to the local community as well as assisting the delivery of economic regeneration in south Hampshire through the PfSH.
- 2.10 A key issue is to consider how to balance the need for regeneration through making efficient use of brownfield land in Gosport in order to deliver homes and employment and to utilise and capitalise on Gosport's unique heritage assets whilst understanding what the potential risks from flooding from all sources are (including the residual risks), and how to manage and mitigate these in order to deliver development that will be safe over its lifetime.
- 2.11 Consequently, the Borough Council considers it is necessary to develop a practical and collaborative approach with experts in this field. During the preparation of its draft flood and coastal erosion policy (policy D7) and

¹¹ The PFSH SFRA 2016 update uses a number of the PFSH SFRA 2007 map layers.

supporting evidence, the Borough Council engaged in informal contact with the Environment Agency and Coastal Partners (formerly Eastern Solent Coastal Partnership) and the water companies through the preparation of both this iSFRA and Infrastructure Assessment Report. Further more detailed discussions will be required between the Council and these key stakeholders during the preparation of the Regulation 19 consultation version of the draft GBLP2038 in order to find pragmatic solutions to meeting these challenges. These discussions will be informed by the outcomes of the new PfSH SFRA (2022) and will be set out through a Level 2 SFRA where this is required.

APPROACH TAKEN TO INCORPORATING INFORMATION FROM A SFRA LEVEL 2 ASSESSMENT

- 2.12 This iSFRA covers the information requirements of a Level 1 SFRA. However, when the Council carried out work in partnership with the Environment Agency and the Coastal Partners for the adopted Gosport Borough Local Plan 2011-2029 (2015) further additional work was prepared to support the findings of the Level 1 SFRA in respect of the Regeneration Areas at that time. Due to the time and complexity of bringing sites forward a number of sites identified within the Harbour Regeneration Area (draft policies SS1-SS9) are within the present regeneration area boundaries identified through adopted policies LP4: Gosport Waterfront, LP6: Haslar Peninsula and LP9A: Priddy's Hard Heritage Area.
- 2.13 Therefore, it is considered appropriate to incorporate the relevant findings of that SFRA Level 2 Technical Report into this interim Report in order to set out the Council's preferred approach (at this Regulation 18 stage) to managing flood risk and identify flood risk management measures. This represents the best available information to the Council at this time and will form the basis of future work pending the completion of the new sub regional work to inform the final version of the Council's SFRA for the Regulation 19 stage of plan preparation.
- 2.14 The Borough Council's assessment has encompassed all the mapping information from the PfSH SFRA. This has been supplemented with information from the latest Environment Agency maps on flood zones at 2021, groundwater and surface water flooding. Detailed assessments of the proposed allocations have been prepared with assistance from the Coastal Partners. This means a more comprehensive assessment of potential issues has been considered and has been applied to all the Regeneration Areas and the smaller allocations identified through the Strategic Housing Land Availability Assessment (2021) (SHLAA).
- 2.15 The following paragraphs explain how the Borough Council's interim assessment incorporates the SFRA level 2 requirements which are in bold type. Where there are limitations in the data this is also explained.

- 2.16 Outputs for a Level 2 SFRA:
 - An appraisal of the current condition of flood defence infrastructure and of likely future flood management policy with regard to its maintenance and upgrade;
 - An appraisal of the probability and consequences of overtopping or failure of flood risk management infrastructure, including an appropriate allowance for climate change;
 - c) Definition and mapping of the functional floodplain in locations where this is required;
 - d) Maps showing the distribution of flood risk across all flood zones from all sources of flooding taking climate change into account;
 - e) Advice on appropriate policies for sites which could satisfy the first part of the Exception Test (sustainability benefits to the community that outweigh flood risk), and on the requirements that would be necessary for a site-specific flood risk assessment supporting a planning application for a particular application to pass the second part of the Exception Test.
 - f) Advice on the preparation of flood risk assessments for sites of varying risk across the flood zones, including information about the use of sustainable drainage techniques; and
 - g) Meaningful recommendations to inform policy, development control and technical issues.

An appraisal of the current condition of flood defence infrastructure and of likely future flood management policy with regard to its maintenance and upgrade

- 2.17 The PfSH SFRA (2016) does not contain specific information regarding the condition of sea defences. It does provide information comparing the crest level/natural ground to the range of extreme sea level return periods for both the present day and 2115 using Environment Agency (EA) data. It does not take account of the following defence related factors:
 - Defence type;
 - Defence age, condition and residual life;
 - The freeboard allowance built into the design of the defences; and
 - The potential for wave overtopping of the defences.
- 2.18 However further details can be found in the North Solent Shoreline Management Plan (SMP) which adopted a *Hold the Line* policy for the Borough's entire coastline. Appendix C of the SMP provides basic information about the condition and lifespan of coastal defences. The preparation of coastal management strategies are linked to the implementation of the SMP policies. The details of the SMP and the policies related to Gosport can be found at: <u>https://www.northsolentsmp.co.uk/</u>
- 2.19 The Coastal Partners (formerly the Eastern Solent Coastal Partnership) prepared a River Hamble to Portchester Coastal Flood and Erosion Risk Management

Strategy. This Strategy developed the SMP policy for the Gosport area and provides long-term sustainable management of the coastline. The Strategy does contain detailed information on asset condition, the current and future standards of protection and an implementation plan (when the asset will require intervention). It is used to inform the preparation of detailed coastal defence projects. Annual asset inspections of coastal flood and erosion risk infrastructure are carried out regularly by the Coastal Partners. Fluvial flood risk assets are inspected by the Environment Agency. Asset data can be obtained from the corresponding responsible authority. Further information can be obtained from Coastal Partners this address: the at https://coastalpartners.org.uk/authority/gosport/. The supporting information from both of these strategies can be used to supplement the information of the current PfSH SFRA.

An appraisal of the probability and consequences of overtopping or failure of flood risk management infrastructure, including an appropriate allowance for climate change

- 2.20 Output package 3 of the PfSH SFRA 'Appropriate Defence Standards and Levels of Investment, identifies shortfalls in existing defences in terms of providing appropriate standards of defence (both present day and taking into account climate change information). Map Set 1F-1: Wave overtopping shows how exposure to wave energy varies along the frontage of the study area. This information can be used to assess (at a high level) the risk of flooding caused by extreme wave overtopping. In the case of Gosport, the PfSH SFRA considered that Gosport's harbour frontages experienced low wave energies whereas the Borough's open coast frontage was more likely to experience moderate wave energies. The PfSH SFRA findings for Gosport recommend that all applications for development within the vicinity of the open coast frontage includes an assessment of extreme wave overtopping regardless of which Flood Zone the site is in even if it is not identified as a significant risk.
- 2.21 Since the PfSH SFRA was updated in 2016, SCOPAC have undertaken further research on storm surge analysis and there is further on-going work to understand overtopping and the impact of bimodal waves.¹²
- 2.22 A high level assessment of the current and future climate change impacts on the Borough were factored into the adopted North Solent Shoreline Management Plan using the PfSH SFRA mapping layers; this information builds on climate change data used to inform earlier Shoreline Management Plans and is a key factor in determining the preferred coastal management policy. The River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy takes this further in developing preferred options for each coastal management unit.

¹² Further information can be found on the Southern Coastal Group and SCOPAC website at: <u>https://southerncoastalgroup-scopac.org.uk/scopac-research/</u>

Definition and mapping of the functional floodplain in locations where this is required

- 2.23 This refers to the Flood Zone 3b which is land where water has to flow or be stored in times of flood. However the PfSH SFRA states that this definition of Flood Zone 3b is not relevant to coastal floodplains as the reduction in flood storage in these areas is not relevant to coastal floodplains as reduction in flood storage in these areas would not cause water to be displaced elsewhere.¹³
- 2.24 The River Alver occupies a large open floodplain and runs through the Alver Valley Country Park. The Country Park forms a significant part of the Gosport Strategic Open Space (draft policy D6) which provides community, education, health and nature conservation benefits, a range of informal recreational opportunities and limited associated commercial uses appropriate to its setting outside the urban area. (Any associated development will have to satisfy the policy requirements of draft policy D7: Flood Risk and Coastal Erosion.) The PfSH SFRA (2016) concluded that aside from the River Alver, fluvial flooding was not a key issue to be considered in site-specific Flood Risk Assessments in Gosport.

Maps showing the distribution of flood risk across all flood zones from all sources of flooding taking climate change into account

- 2.25 This information for Gosport can be obtained by using the PfSH SFRA. The NPPF recognises the importance of considering the effects of climate change in making decisions about the location of new development. In the PfSH SFRA, Map set 1E shows the climate change mapping layers for the effects of climate change on Flood Zone outlines for 2025, 2055, 2085 and 2115. These outlines were prepared in line with Defra guidance on climate change (at that time) which provided allowances for sea level rise and increased river flows. In the methodology, the assumptions made about these climate change outlines were put together by projecting the EA's extreme sea level data inland using EA modelled approach.
- 2.26 This approach means that the effects of climate change can be factored in throughout the lifetime of a development based on the best information at the time. This information has been factored into the assessment relating to climate change in this report. The Borough Council took the view that when looking at the implications of climate change on a specific allocation, the assessment would focus on the 2115 climate change layers in order to identify any long term issues that could then be addressed in local plan policies.
- 2.27 Since these maps were created, the allowances for climate change and sea level rise were updated by the Environment Agency in July 2020 UKCP018. This will be taken into account in the new PfSH SFRA and will inform the Council's revised SFRA for the Regulation 19 version of the draft GBLP2038.

¹³ The modelling information to define the fluvial functional floodplain (Food Zone 3b) was not available for this area. Therefore the PUSH SFRA assumed that the functional floodplain was the same as Flood Zone 3a. Source: page vii PUSH SFRA Final Report, Atkins (December 2007) and this approach was not changed for the 2016 update.

2.28 The Borough Council would expect to see any site-specific Flood Risk Assessments on planning proposals coming forward to address the issue of climate change utilising the most up-to date datasets available to do this and seeking advice from the Environment Agency where appropriate.

Guidance on appropriate policies for sites which could satisfy parts a) and b) of the Exception Test, and on the requirements that would be necessary for a flood risk assessment supporting a planning application for a particular application to pass part c) of the Exception Test

2.29 The Planning Practice Guidance (PPG) provides guidance to local authorities on site selection taking into account flood risk. The flow chart in NPPG sets out how this can be done. The mapping outputs can be used to inform the Sequential and Exceptions Tests and has informed the policy approach set out for the proposed strategic sites within each Regeneration Area in the draft Local Plan.

Guidance on the preparation of flood risk assessments for sites of varying risk across the flood zones, including information about the use of sustainable drainage techniques

- 2.30 The PfSH SFRA also provided tailored reports each local authority within the PfSH area, making recommendations for site-specific FRAs including advice on the use of sustainable drainage systems (SuDS)¹⁴. In the case of Gosport, the PfSH SFRA notes that new development on any small area of 'greenfield land' is likely to have a moderate or high impact on the surface water runoff regime.
- 2.31 Therefore site-specific FRAs are recommended to investigate SuDS options to manage surface water management where this is achievable. The 1F mapsets provide more detailed information (this is explained in more detail on pages 25-30) and has been used to inform the Borough Council's decision making for its proposed allocations. This information has been incorporated into the individual site iPFSH SFRA s identifying where this may require further investigation as part of a site-specific Flood Risk Assessment at the planning application stage. Further information relating to site-specific Flood Risk Assessments can be found in the Council's 'Guidance for New Development in Flood Risk Areas' available from the Council's website at: www.gosport.gov.uk/1220/Preapplication-advice. In addition to this local information, the National Planning Practice Guidance provides detailed guidance for both Local Planning Authorities and developers for preparing Strategic Flood Risk Assessments and site-specific Flood Risk Assessments respectively. Further information on these can be National Planning Practice Guidance found in the web pages at: www.gov.uk/guidance/flood-risk-and-coastal-change

Identification of the location of critical drainage areas and identification of the need for Surface Water Management Plans

2.32 Southern Water was a key stakeholder in the original PfSH SFRA process and map set 1F shows any historic incidences of surface water flooding in the Borough. The dataset was re-used in the 2016 update. Further to this

¹⁴ For further information see supporting evidence base at: <u>www.gosport.gov.uk/gblp2038</u>

information, the Council has also used in its analysis the Environment Agency's surface water flood maps <u>https://flood-map-for-planning.service.gov.uk/</u>

2.33 The Environment Agency has published the most recent South East Hampshire Catchment Flood Management Plan (CFMP) (December 2009). Gosport falls within sub area 1: Portsmouth and Langstone Harbours this sub area covers: Fareham, Gosport, Havant and Portsmouth. The SEHCFMP identified the main inland flood risk comes from surface water flooding. In terms of surface water management, the SEHCFMP recognised that surface water flooding is likely to worsen as a result of increased rainfall and more intense storms as effects of climate change take effect. The management plan also states that opportunities for drains to discharge to the sea will be limited by future sea level rise. The SECHFMP has a policy approach for each sub area. For sub area 1, this is known as Policy 5. Policy 5 refers to:

'Areas of moderate to high flood risk where we can generally take further action to reduce flood risk'

2.34 The SECHFMP further adds:

'This policy will tend to be applied to those areas where the case for further action to reduce flood risk is most compelling, for example where there are many people at high risk, or where changes in the environment have already increased risk. Taking further action to reduce risk will require additional appraisal to assess whether there are socially and environmentally sustainable, technically viable and economically justified options.'

- 2.35 To provide more detailed information relating to address current and future pressures on the existing drainage network, Hampshire County Council prepared Surface Water Management Plans for areas of the County where this was a pressing issue. Hampshire County Council is the Lead Local Flood Authority covering the Gosport Borough area. The County Council have recently published a new draft Local Flood and Water Management Strategy (2020) for consultation. No Surface Water Management Plans have been identified for the Gosport area. Hampshire County Council is updating the local catchment plans, which will replace the Surface Water Management Plans. In the meantime, and for the purposes of providing an assessment relating to the potential of flooding from surface water the Borough Council has used the PfSH SFRA and also incorporated the available Environment Agency mapping from its Flood Map for Planning service.
- 2.36 The East Hampshire Catchment Partnership¹⁵ published a Catchment Management Plan (CMP) for the period 2021 2027. The CMP provides an overview of the East Hampshire Catchment, outlines the main issue affecting the catchment's waters and sets out the objectives, targets and actions to deliver a

¹⁵ The Borough Council is a member of The East Hampshire Catchment Partnership. The Partnership work closely with a wide range of organisations (including Local Authorities), businesses, community groups and landowners including the Environment Agency, Natural England, Hampshire and Isle of Wight Wildlife Trust, Coastal Partners, Portsmouth Water, Southern Water and University of Portsmouth. The Partnership is not a statutory bodies and do not hold any power or specific duties. The Partnership represents a collaboration between a number of agencies (statutory and non-statutory) with roles to play in the planning, management and maintenance of water resources within the catchment.

range of coordinated and integrated improvements within the catchment. Key objectives include developing ecological enhancements and flood resilience opportunities from new development to assist in the delivery of sustainable water management. The River Alver and Portsmouth Harbour are within the catchment area boundary and flow into The Solent.

- 2.37 East Hampshire's river system and coastal edges have been heavily modified to provide protection from flooding and allow town expansion over many years. It is recognised that significant funding is required to maintain and upgrade these defences, especially along the coast of low-lying areas such as Gosport which are at potential risk from sea level rise in the future. In many cases it is considered possible to introduce features to these defences that will support marine organisms as part of a broader consideration of flood risk management measures. Current examples of this in Gosport relate to the creation of a small saltmarsh at Stoke Lake¹⁶ and vertipools pools to be installed at Forton Lake as part of planned coastal defence works.¹⁷.
- 2.38 There are also proposals to bring improvements to the drainage at the River Alver identified as one of a number of key projects set out in draft policy D6: Gosport Strategic Open Spaces (GSOS). The Council has identified a number of key improvement projects it will seek to bring forward in the plan period with regard to the GSOS. These include improved drainage in the Alver Valley because of the extent of localised flood events caused by periodic blockages of the Alver outfall. This will be delivered through a beach management scheme and an enhanced management regime of removing shingle from the outfall.
- 2.39 The role of SuDS in managing flood risk is also recognised in the CMP by assisting in filtering pollutants in surface water run-off but may also be used to reduce and stagger flows to areas prone to flooding.
- 2.40 Draft policy D7: Flood Risk and Coastal Erosion expects all new development must ensure there will be no net increase in surface water run-off and where appropriate, new development should incorporate Sustainable Drainage Systems (SuDS) or other water retention or water storage measures to assist in managing surface water drainage where this is possible. In addition to this where SuDS systems are included in a scheme, that arrangements must be put in place for their ownership and whole life maintenance and management.

Meaningful recommendations to inform policy, development control and technical issues

2.41 In addition to identifying specific issues the assessment identifies implications for the draft Local Plan to consider. The findings of the PfSH SFRA have been used to inform proposed allocations and development management policy.

¹⁶ Further information can be found on the Council's Planning Portal - 20/00298/FULL Flood And Coastal Erosion Risk Management Scheme Little Anglesey Road Gosport : <u>www.gosport.gov.uk/article/1221/View-and-comment-on-planning-applications</u>

 ¹⁷ Further information can be found on the Council's Planning Portal – 20.00429/FULL Flood And Coastal Erosion Risk Management Scheme Forton Lake St Vincent College Mill Lane Gosport: <u>www.gosport.gov.uk/article/1221/View-and-comment-on-planning-applications</u>

USE OF MAP SETS

2.42 Table 4(a) cross references the proposed draft allocation Regeneration Areas (and their sites within) and the relevant SFRA map sets. In the case of Daedalus and Rowner and HMS Sultan which are in Flood Zone 1. The chart below is simply provided to assist users of this Report to see what information was used to assess which draft allocation.¹⁸ It should be noted that Mapsets 1B – 3D are derived from the 2007 as these were not updated as part of the PfSH SFRA 2016.

Environment Agency						
	Harbour	Rowner and HMS	Daedalus			
	Regeneration	Sultan Regeneration	Regeneration			
	Area	Area	Area			
Flood Zones 2 and 3						
(present day 2021)						
Surface water flooding						
– Pluvial						
Flood map for surface						
water						
Groundwater						
vulnerability zones						
PUSH SFRA Map sets						
Surface water map 1 in						
30 year rainfall						
1B Undefended Hazard						
Map Flood Zone 2						
1B Undefended Hazard						
Map Flood Zone 3						
1C Indicative Areas						
Benefiting from						
defences						
1D Danger from						
Breaching Flood Zone						
2						
1D Danger from						
Breaching Flood Zone						
3						
1E Climate Change						
2115						
1F Wave Energy						
1F Groundwater						
Flooding						
1F Impact of Land-Use						
Change						
1F Potential source of						
Overland Flow						
3A Crest/Tide Level						
('present day' as at						
2007)						
3C Crest/Tide Level						
2115						

 Table 4(a): PfSH SFRA Map Sets (Regeneration Areas)

¹⁸ Key: Yellow shows where a given map layer had information relevant to a specific allocation site(s) within the boundaries of the Regeneration Areas.

Red indicates nothing of relevance was shown within the defined boundary of each allocation site(s) within the boundaries of the Regeneration Areas.

- 2.43 Tables 5(a) and 5(b) on pages 32-36 show the latest housing supply information as at 1st April 2021 and the location of each proposed allocation within the three Flood Zones).
- 2.44 Where relevant, an iSFRA has also been carried out for a small number of sites which lie outside of Flood Zone 1. Table 4(b) below sets out which mapsets were used for each assessed site.

Environment Agency						
	Fort Gilkicker	Land at Fort Road (QinetiQ)	Land at Forton Road	Land at Grove Road	Land at the Gasworks, Mariners Way	
Flood Zones 2 and 3						
(present day 2021)						
Surface water						
flooding – Pluvial						
Flood map for						
surface water						
Groundwater						
vulnerability zones						
Surface water map						
1 in 30 year rainfall						
PUSH SFRA Map sets	S					
1B Undefended						
Hazard Map Flood						
Zone 2						
1B Undefended						
Hazard Map Flood						
Zone 3						
1C Indicative Areas						
Benefiting from						
defences						
1D Danger from						
Breaching Flood						
Zone 2						
1D Danger from						
Breaching Flood						
Zone 3						
1E Climate Change						
2115						
1F Wave Energy						
1F Groundwater						
Flooding						
1F Impact of Land-						
Use Change						
1F Potential source						
of Overland Flow						
3A Crest/Tide Level						
('present day' as at						
2007)						
3C Crest/Tide Level						
2115						

Table 4(b) Areas outside of the proposed Regeneration Areas

2.45 The NPPF SFRAs to be an important component for applying the Sequential Test when allocating sites. This interim Report contains descriptions of the map

sets used and these are described below. It is important to note that the SFRA 2016 update did not update Map Sets 1B – 3D and so this iSFRA Report uses this information from the baseline 2007 PfSH SFRA for these map-sets.

Map Set 1B: Undefended Flood Hazard

2.46 The PfSH SFRA (2007) sets out in detail the methodology and data sets used for modelling this layer. In short the undefended flood hazard is assessed using a combination of flood depths and velocities. Its purpose is to assist in applying the sequential approach within Flood Zones 2 and 3. It helps to identify those areas within a specific Flood Zone where a flood event may have different consequences for those affected depending upon their specific location. The PfSH SFRA recommends that site-specific FRAs undertake a quantitative assessment of flood hazard based on more detailed assessments of defence standards, defence failure scenarios and overland conveyance of flood flow. A description of each hazard classification is set out in the table below.

Classification	Description				
Low	Caution				
	Flood Zone with shallow flowing or deep standing water				
Moderate	Dangerous for some (i.e. children)				
	Danger Flood Zone with deep fast flowing water				
High	Dangerous for most people				
	Flood Zone with deep fast flowing water				
Very high	Dangerous for all				
	Extreme danger Flood Zone with deep fast flowing water				

Map Set 1C: Indicative Areas Benefiting from Defences

2.47 Map set 1C shows those areas benefiting from 'Indicative Areas Benefiting from Flood Defences' (iABD). These areas are defined by identifying the Standard of Protection provided by current defences as shown in Map Set 3a (Present day indicative standards of protection) and comparing them to the Flood zones. A minimum of a 1:200 year standard of protection for new development is required, therefore where existing defences provided a consistent line of defences at a 1: 200 year standard or above the area <u>behind</u> the defences was classified as an iABD. It is important to note that these areas are only identified if the <u>whole</u> flood cell was protected to the minimum standard. Importantly, if Map Set 3A showed a small section of defence fell below the required standard for new development, the area behind would not be shown as an iABD. It is important to note that the existing defences provide no benefit but they do not meet the 1:200 year standard of protection for new development.

Map Set 1D: Danger to People from Breaching

2.48 The approach used for this Map Set is derived from the method described in 'Flood Risk Assessment Guidance for New Development Phase 2 R&D Technical report' (FD2320). This Map Set identifies the consequences of breaching <u>it does not</u> assess the probability of occurrence. The purpose of this information is to indicate where a problem could arise and identify where more detailed work is necessary.

- 2.49 The breach hazard assumes that there has been a continuous breach in the coastal defences and works out the danger to people as a consequence of that breach according to the depth of water at different distances from a defence line; i.e. the closer to the defence, the higher the danger to people for a specific depth of flood water. Danger is defined as follows (source DEFRA document):
 - Danger for some: This includes children, the elderly and the infirm;
 - Danger for most: This includes the general public; and
 - Danger for all: This includes the emergency services.

Map Set 1E: Climate Change Outlines

2.50 Climate change outlines were produced for 2025, 2055, 2085 and 2115.

Map Set 1F: Other Sources of Flooding

- 2.51 A number of important flooding issues are also mapped these are:
 - Wave overtopping;
 - Groundwater flooding;
 - Impact of land-use change on surface water runoff; and
 - Potential sources of overland flow.
- 2.52 As well as assisting local planning authorities in undertaking a sequential assessment for site allocations and planning applications, the PfSH SFRA also provides detailed information on flood hazard and vulnerability to flooding to help Flood Risk Managers identify where future flood defence investments can be focused as part of their CFERMS.
- 2.53 In addition to the SFRA mapsets, the Environment Agency produced more recent mapping for groundwater and surface water flooding. However it is important to note that these maps in the context of this assessment have only been used to assist the Borough Council in understanding the potential flood issues at a strategic level for the purposes of preparing the draft Local Plan. They can be used as a starting point for more technical work that may be required as part of site-specific Flood Risk Assessments but the Environment Agency recommend they should be used in combination with other data sources and not in isolation.

Map Sets 3A and 3C: Present Day Defence Crest Levels and Climate Change at 2115

2.54 These mapsets provide indicative information on present day defence crest levels based on the equivalent tidal return period of the existing defence crest levels of the defence/natural ground to the range of extreme sea level return periods for both 2010 and 2115. The assessment was based only on a comparison of the crest/natural ground level with extreme sea levels, it provide information on the standards of service provided by existing defences.

Map Set 3B and 3D: Investment Indices to provide protection to a 1 in 200 year level

2.55 The difference between the actual defence crest level for a 1 in 200 year extreme sea level for both 2010 (present day) and 2115 was used to calculate the investment index. The unit cost is based on the assumption that the key factor in calculating the investment index is the difference in height between the desired level of defence and the actual level of defence.

3.0 REGENERATION AREAS PROPOSED FOR DEVELOPMENT

- 3.1 The draft Local Plan proposes housing provision is made for 3,500 net additional dwellings. The PfSH SFRA has been an important tool in assessing appropriate locations to accommodate these dwellings. In order to deliver this level of growth, a number of key Regeneration Areas have been put forward. The scale and mix of development is set out in draft policies D2: Development Strategy and D3: Urban Regeneration Areas of the draft Local Plan and is supported by a number of evidence studies including a Sustainability Appraisal (SA) and a Habitats Regulation Assessment (HRA). Further information can be found on the Local Plan 2038 evidence page at: www.gosport.gov.uk/gblp2038
- 3.2 Smaller sites in accessible locations will be promoted through draft policies A1: Enabling Allocations and A2: Housing. These sites have been tested through the SA process. The Council's SHLAA (2021) assessed the potential suitability of each site to accommodate residential development this included a consideration of flood risk as part of this assessment.
- 3.3 In accordance with the NPPF and the guidance in the PPG, the Council has followed the sequential approach in considering its development allocation choices. This is set out in Tables 5(a) and 5(b) below.

APPLYING THE SEQUENTIAL TEST

- 3.4 The tables 5(a) and 5(b) below show how the proposed allocations in the draft Local Plan have been sequentially tested in order to deliver the long term planning strategy to meet the housing figure (further details explaining the long term planning strategy for the Borough are set out in this section of the interim Report. Table 5 (a) shows the housing supply position as at the 1st April 2021 and shows the overall quantum of residential development planned for, total completions to date and existing planning permissions, identified housing supply within and outside of the proposed Regeneration Areas and an allowance for windfall. Table 5(b) breaks the supply down further to show where new development proposals sit in relation to each Flood Zone and apportions, based on the Borough Council's best estimates, the amount of new development anticipated on each site within each Flood Zone.
- 3.5 Site-specific details relating to individual scheme layout, design and mix of uses will refine this process further at the pre-application and planning application stage, however for the purposes of applying the sequential test to site allocations in the draft Local Plan, the Borough Council considers the approach shown in the tables below to be reasonable and sound.

 Table 5(a): Housing requirement and supply (as at 1st April 2021)

Housing Requirement 2021-2038	Net additional dwellings
	3,500

Source of sup	Dwellings (net)						
Existing plann	Existing planning permissions not built-out at 1 April 2021						
	C3 dwelling houses* ¹						
	Land at Rowner Renewal*2	18					
	Royal Haslar Hospital	262					
	Former Crewsaver Site	31					
Within GBLP	Land at Former HMS Daedalus	20					
2038 Regeneration	9 -11 High Street	7					
Aroas	17A High Street	9					
Aleas	Land at Priddy's Hard	29					
Sub total: 548	Other small sites (4 dwellings and under)	3					
	C2 units as C3 equivalent* ³						
	Royal Haslar Hospital (272 C2 units)	151					
	Land at Former HMS Daedalus (32 C2 units)	18					
	C3 dwelling houses* ¹						
	Fort Gilkicker, Fort Road	26					
Outside	39-45a and 79-81 Jamaica Place, Stoke Road	11					
GBLP 2038	1 – 1a TML House, The Anchorage	5					
Areas	116 - 118 Priory Road	5					
Aleas	Land at Addenbrooke House, Willis Road	60					
Sub total: 151	Other small sites (4 dwellings and under)	33					
	C2 units as C3 equivalent* ³						
	Anglesey Lodge, Anglesey Road (20 C2 units)	11					
Sub total		699					
Regeneration A	Areas GBLP 2038 – Policy D3 and Policies	s SS1-SS11					
Harbour	Land at Mumby Road Lorry Park	50					
Regeneration	Land at Gosport Marina	190					
Area:	Former Crewsaver site	10					
Gosport	(in addition to 31 units permitted)	10					
Waterfront	Land at Priddy's Hard (in addition to 29 permitted)	120					
Sub total: 440	West of Harbour Road	70					
Harbour	Land at Gosport Bus Station	240					
Regeneration	Former Police Station Site	90					
Area:	Gosport Precinct	24					
Gosport Town Centre	Barclay House and Land to the East of Barclay House	80					

Source of supply Dwellings (net)					
Sub total: 572	Various sources of supply including surplus car parks, increasing heights of appropriate buildings and sites behind the High Street	138			
Harbour	Blockhouse	325			
Regeneration	Fort Blockhouse	150			
Area: Haslar	The Piggeries	60			
Sub total: 760	Haslar Barracks	225			
Daedalus Regeneration Area	Site C – Historic Core	300			
Sub total. 500		0.070			
Sub total		2,072			
Other allocatio	on sites in GBLP 2038 without permission	– Policies A1-2			
Anglesey	Land south of Fort Road	15			
	Land at Stoners Close	8			
Bridgemary	Land at Lapthorn Close	10			
North	Land at Prideaux Brune Avenue	5			
	Land between Woodside and Wych Lane	5			
	Land at Bridgemary Road	6			
Bridgemary	Land at Rowner Road Service Station	20			
South	Land at Montgomery Road	8			
Elson	Land at Heritage Way and Frater Lane	55			
Forton	Land at Forton Road	23			
	Land at Wheeler Close	6			
Hardway	Land at Grove Road	28			
Leesland	Land at Whitworth Close	18			
Town	Land at Gasworks Site, Mariners Way	60			
Sub total	267				
Windfall allowance					
Small unalloca 2037/38	306				
Total supply 2021 – 2038					
Total supply	Total supply 3,344				
Dwellings per	Dwellings per annum 197				

Table notes:

*¹ Sites with over 5 dwellings with existing planning permission are allocated in this Local Plan so that in the event they are not built-out a new planning application can be submitted and the principle of development established. For example this includes Royal Hospital Haslar, Anglesey Lodge and Addenbrooke House. *² The number of implementable dwellings from consented schemes.

*² The number of implementable dwellings from consented schemes.
 *³ C2 units shown as C3 by adjustment using method in HDT Measurement Rule Book: www.gov.uk/government/publications/housing-delivery-test-measurement-rule-book

Table 5b: Future housing supply by Flood Zones (net dwellings as at 1st April 2021) (indicative split using PfSH PFSH SFRA (2016) climate change maps for 2115)

	Flood Zone 1	Flood Zone 2	Flood Zone 3	Total dwellings			
Harbour Regeneration Area: Gosport	Waterfro	nt		awenings			
Land at Mumby Road Lorry Park	0	30	20	50			
Land at Gosport Marina			190	190			
Crewsaver (in addition to 31 units			40	40			
permitted)			10	10			
Priddy's Hard (in addition to 29			120	120			
permitted)				120			
West of Harbour Road			70	70			
Harbour Regeneration Area: Gosport	: Town Ce	entre					
	1	1					
Land at Gosport Bus Station			240	240			
Former Police Station Site ¹⁹		90		90			
Barclay House and Land to the East of			80	80			
Barclay House ²⁰			•••				
Other sources of supply including							
development of a mix of car parks,	00	40	10	400			
increasing neight of certain buildings,	80	40	42	162			
other small sites and more intensive							
Sile options							
Harbour Regeneration Area: Hasiar Peninsula							
Blockhouse	25		300	325			
Fort Blockhouse	20		150	150			
The Piggeries			60	60			
Haslar Barracks	225			225			
Daedalus Regeneration Area							
Primarily Site C – Historic Core	300			300			
Other allocation sites in GBLP 2038 v	vithout p	ermissior	– Polici	es A1-A2			
Land south of Fort Road	15			15			
Land at Stoners Close	8			8			
Land at Lapthorn Close	10			10			
Land at Prideaux Brune Avenue	5			5			
Land between Woodside and Wych	5			F			
Lane	5			5			
Land at Bridgemary Road	6			6			
Land at Rowner Road Service Station	20			20			
Land at Montgomery Road	8			8			
Land at Heritage Way and Frater Lane	55			55			
Land at Forton Road		23		23			

¹⁹ Flood Zone 1 at 2021 partial inclusion in Flood Zones 2 and 3 at 2115 ²⁰ Flood Zone 1 at 2021 Flood Zone 3 at 2115

Land at Wheeler Close	6			6
Land at Grove Road		28		28
Land at Whitworth Close	18			18
Land at Gasworks Site, Mariners Way			60	60
Windfall allowance				
Small unallocated sites under 4	306			306
dwellings 2023/24 – 2037/38	300			500
Total	1,092	211	1,342	2,645

MEETING THE EXCEPTION TEST

3.6 Paragraphs 163-165 of the NPPF states:

'If it is not possible for development to be located in areas with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in Annex 3. The application of the exception test should be informed by a strategic or site-specific flood risk assessment, depending on whether it is being applied during plan production or at the application stage. To pass the exception test it should be demonstrated that:

a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; andb) 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.

Both elements of the exception test should be satisfied for development to be allocated or permitted.'

Meeting Part A - the development would provide wider sustainability benefits to the community that outweigh the flood risk

- 3.7 The Borough Council considers the sites identified within the Harbour Regeneration Area (HBRA) are capable of meeting both parts of the Exception test and the reasons for being able to do this are set out below.
- 3.8 The Council's planning strategy has been largely determined by the availability of brownfield sites in the Borough, primarily as a result of the Ministry of Defence (MoD) legacy. The Borough Council considers that the identified Regeneration Areas should be redeveloped to stimulate the local economy and provide new homes. The Development Strategy aims to ensure that the local economic, housing and community needs are addressed whilst fully taking account of heritage and design considerations and environmental constraints including flood risk.
- 3.9 The quantum of development proposed in the Development Strategy is the result of significant collaborative work with the other Partnership for South Hampshire

(PfSH) local authorities in the South Hampshire sub-region and the Council's own evidence studies. The Development Strategy is based on the PUSH (now PfSH) Spatial Position Statement (June 2016) and emerging evidence for the latest sub-regional plan. This places significant emphasis on the need to increase the economic performance of the sub-region by increasing jobs and productivity as well as overall job density which is the lowest in South East England and one of the lowest in the country.

- 3.10 Alongside the work of PfSH, the Solent Local Enterprise Partnership (Solent LEP) prepared The Gosport Infrastructure Investment Plan (GIIP) (2019)²¹. The GIIP recognises the key opportunities for regeneration in Gosport in order to identify future "economic infrastructure" needs of the Borough to support the work of the Gosport Task Force which has been set up to consider the potential growth opportunities that may be realisable as a result of the disposal of various public sector sites in the Borough. A number of prominent public sector sites in Gosport currently or previously owned by the MoD or Ministry of Justice (MoJ) are due for disposal over the next few years. This represents a significant opportunity to secure transformative economic growth and regeneration within the Borough.
- 3.11 The NPPF states that for plan-making: 'all plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects' (NPPF, 2021, paragraph 11).
- 3.12 Brownfield sites will also be required to deliver sufficient housing to meet as far as possible the housing need identified by the Government's standard method. This needs to be balanced with the need to provide sufficient land for employment and commercial floorspace, open space and community facilities to ensure that Gosport becomes more of a sustainable Borough through improving the jobs density (the lowest in South East England).
- 3.13 Deliverable options relating to the broad location of development are limited in the Borough due to its small size and the built-up nature as well as significant environmental considerations including internationally and nationally important habitats and areas identified as being subject to flood risk. However there are significant opportunities for the development of brownfield land under institutional ownership within the Borough which can contribute to its future regeneration.
- 3.15 It is important to recognise that it will not be possible to accommodate the Borough's entire housing requirement within Flood Zones 1 and 2.
- 3.16 Paragraph 60 of the NPPF sets out that Local Plans will allow for a sufficient amount and variety of land to come forward where it is needed. To determine the minimum number of homes needed, the NPPF requires that strategic policies should be informed by a local housing need assessment, conducted using the standard method in national planning guidance unless exceptional circumstances justify an alternative approach which also reflects current and

²¹ Further detailed information about the Gosport Infrastructure Investment Plan (2019) can be found on the Council's Local Plan 2038 evidence page at: www.gosport.gov.uk/gblp2038

future demographic trends and market signals. The NPPF introduces the standard method for calculating the housing requirement for each local authority area.

- 3.17 The standard method uses a formula to identify the minimum number of homes the Government expects to be planned for. The Government's latest standard method for assessing Gosport Borough's local housing need shows that the local housing need is 5,576 homes between 2021 and 2038 which works out at 328 homes every year. The method requires local authorities to use the 2014 household projections rather than the 2018 household projections.
- 3.18 The Housing Background Paper sets out the key evidence relating to this matter which includes the findings of the SHLAA.. The evidence shows that the standard method figure of 5,576 homes is not achievable and instead a figure of approaching **3,500 homes** would be deliverable within the Borough. This would represent 206 dwellings per annum (dpa) (over a 17 year period between 2021 and 2038) and would be an increase in the delivery rate when compared with the current Adopted Local Plan (GBLP 2011-2029) which requires 170 dpa.
- 3.19 It is clear that given the sites available, the Borough's already built-up nature and various ecological and other environmental constraints as well as the need to provide a balanced community with sufficient employment opportunities that it will not be possible to provide a sufficient amount of land to accommodate 5,576 homes in the Borough. This would currently mean that the Borough has an unmet need of 2,076 dwellings (assuming a supply of 3,500 dwellings is achieved).
- 3.20 In accordance with the NPPF the Borough Council is working with its subregional partners through PfSH to consider Strategic Development Opportunity Areas (SDOAs) to meet the unmet need of Gosport Borough as well as other local planning authority areas in a similar position. It is important that this matter is considered on a multi-lateral basis to determine the most sustainable and appropriate sites across the sub-region. The Borough Council has identified these figures to PfSH as part of the ongoing study and has not requested any single local authority to meet its unmet need until such time as the PfSH evidence has been reported.
- 3.21 The Local Plan allocation of 3,500 net additional dwellings will provide an achievable and realistic housing allocation, although it is recognised at this point in time there is a significant shortfall. The proposed allocations will make a positive contribution towards meeting the wider draft Local Plan objectives to the community. It is considered that these benefits outweigh the flood risk which can be managed over the lifetime of the proposed developments.

Meeting Part B - 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.

3.22 An iSFRA has been carried out for all the proposed Strategic Site allocations in the draft GBLP2038. Each site has been assessed in detail using the mapping layers SFRA (2016) supplemented by other sources of information where applicable. The findings are set out in more detail in this report under section

4.0: Interim Strategic Flood Risk Assessment for Draft Allocations. An iSFRA has been undertaken for allocations across all three Flood Zones in order to assess flooding from all sources in accordance with the NPPF. The analysis from the PfSH SFRA has been supplemented with information from the adopted River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (2015). The coastal strategy is integral to coastal management in the Borough during the plan period.

- 3.23 The Borough Council's iSFRA has also used previous work, where relevant from its SFRA Level 2 Technical Report (2014) which used additional mapping provided by the Environment Agency taken from their 'Stubbington, Fareham and Gosport ABD (Areas Benefitting from Defences) and Hazard Mapping Modelling Report' (Environment Agency, March 2011). This modelling work took account of defences and openings along the coast and included an allowance for wave overtopping. The additional maps reproduced in the Borough Council's additional flood risk report (2014), took account of flood level, velocity and hazard.
- 3.24 The tidal events considered in the Environment Agency's study ranged from 3.0m AOD and 4.3m AOD peak tide levels and were informed by the minimum height of the study areas coastal defences and includes a number of intermediate levels including the 1 in 200 year and 1 in 1000 year return period tides in the present day and the 1 in 200 year return period tide taking into account the effects of climate change estimated for 2115. The model showed the effects of water level conditions and wave height have on wave overtopping based on a 40 hour, 3 tide cycle. This information was also used to inform the Coastal Processes Report (December 2012) prepared as part of the work on the River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy. This information has been incorporated into this iSFRA.
- 3.25 The Council has worked with the Coastal Partners on the iSFRA for each Strategic Site to identify potential flood risk management requirements as part of the Council's approach to site mitigation and what information a site-specific will need to address this is set out in the individual site analysis in section 4.0 and represents the best available information at this time.
- 3.26 As part of a local approach to managing flood risk and development in the Borough; the Borough Council, in partnership with the Environment Agency and the Eastern Solent Coastal Partnership (now Coastal Partners), published '*Guidance for New Development in Flood Risk Areas (More Vulnerable Development*)'.²² This document has been used to guide the formulation of this work and prospective applicants should draw on it when preparing site- specific FRAs.
- 3.27 Draft Local Plan Policy D7: Flood Risk and Coastal Erosion includes the requirement for applicants to submit detailed site-specific Flood Risk Assessments (FRAs) in line with national planning guidance. The findings of this interim Report, the new PfSH SFRA mapping layers and supplementary

²² Further information can be found on the Borough Council's website at: <u>www.gosport.gov.uk/media/1216/Guidance-for-New-Development-in-Flood-Risk-</u>

Areas/pdf/LP_E6_10_Guidance_for_New_Development_in_Flood_Risk_Areas_More_Vulnerable_Development_GBC__Environ.pd f?m=636971657760030000
information provided by the EA will act as the starting point for more detailed assessments to be carried out. It is likely that a combination of measures will be appropriate as part of an overall strategy for flood protection in Gosport particularly within the Harbour Regeneration Area.

- 3.28 The emerging PfSH SFRA which will take into account the latest climate change allowances (UKCP18) to produce new climate change outlines to 2122. The Council's approach to managing flood risk will be reviewed to take account of the latest climate change information from the new PfSH work as part of the plan preparation prior to Regulation 19 consultation stage working with the Environment Agency and Coastal Partners.
- 3.29 In order to understand the issues involved in terms of flood risk and flood risk management and mitigation. It is expected that developers should engage in early discussions with the Council, the Environment Agency and the Coastal Partners to identify what specific issues and flood risk management measures will need to be addressed in site-specific Flood Risk Assessments. It may also be appropriate to liaise with other key organisations notably HCC as LLFA and the relevant utility providers to identify any further flood risk issues as part of the pre-application process. The findings of the adopted version of this SFRA could act as a starting point for these detailed discussions for site-specific FRA.

4.0 INTERIM STRATEGIC FLOOD RISK ASSESSMENT FOR PROPOSED DRAFT ALLOCATIONS

- 4.1 Using the PfSH SFRA mapping and issues raised in the PfSH SFRA Final Report, the approach for site selection advocated by the PPG²³ was used to carry out the Borough Council's assessment.
- 4.2 The assessment for each of the proposed strategic site follows the sequential test approach is set out in the paragraphs below. In addition to these, an iSFRA was carried out for some additional smaller site allocations outside of the Regeneration Areas to identify key flooding issues that would need to be considered and resolved.
- 4.3 The following diagram is taken from the PPG and shows the approach to be taken for site selection in the iSFRA.



Diagram 2: Application of the Sequential Test for Local Plan preparation²⁴

 ²³ Planning Practice Guidance sets out the details of how to undertake a SFRA for plan making in Paragraph: 010 Reference ID:
7-010-20140306. Further details can be found at: <u>https://www.gov.uk/guidance/flood-risk-and-coastal-change#Strategic-Flood-Risk-Assessment-section</u>

²⁴ Source: Planning Practice Guide (2014) Paragraph: 021 Reference ID: 7-021-20140306



Figure 2: Proposed Regeneration Areas

Figure 3: Harbour Regeneration Area and strategic sites within it



Gosport Borough Local Plan 2038, (Regulation 18 consultation draft)

POLICY SS2: GOSPORT WATERFRONT – MIXED-USE Background

4.6 The area known as Gosport Waterfront as shown on the above plan is one of the Borough's key planning sites and forms a significant part of the wider Harbour Regeneration Area and includes Gosport Marina and Priddy's Hard Heritage Area.

Draft policy SS2 permits the following uses:

POLICY SS2: GOSPORT WATERFRONT – MIXED-USE REDEVELOPMENT

- 1. Outside the designated area for Marine Employment, Gosport Waterfront, as shown on the Policies Map, is allocated for mixed-use development. Development proposals should make the best possible use of land resources to provide accessible, higher density residential dwellings and viable commercial uses. This will be achieved through the following development and planned change at the following sites:
 - a) Land at Priddy's Hard Heritage Area is allocated for mixed-use development including:
 - i. Approximately 120 residential dwellings;
 - ii. Main town centre commercial uses (up to 1500 sq.m.) complementary to the adjacent Explosion Museum; and
 - iii. New public open space on the Ramparts.
 - b) Land at Mumby Road Lorry Park is allocated for up to 50 residential dwellings.
 - c) Land at Gosport Marina, outside the safeguarded marine employment area, is allocated for the following mixed-use development:
 - i. Up to 290 residential dwellings; and
 - ii. Commercial uses and/or undercroft parking at ground floor level;
- 3. All development proposals should accord with Policy D3 (Urban Regeneration Areas), the detailed guidance for the site set out in the Gosport Waterfront and Town Centre Supplementary Planning Document (March 2018) where the site falls within the SPD area, and be informed by a Site Masterplan. In order for planning permission to be granted the following material considerations, in addition to those set out in Policy D1, should be fully addressed:
 - a) No significant impact on the ongoing operation of adjacent marine operations; and
 - b) Fully address the amenity of future occupiers given the local marine context.
- 4. Flood risk from all sources of flooding must be fully taken into

account for development proposals at sites identified within the Gosport Waterfront through site-specific FRA(s). New development will be safely managed through the application of appropriate flood risk mitigation measures.

4.7 The site is located in Flood Zone 3 and is identified as a mixed-use allocation in the GBLPR and is in a sustainable location situated close to a major transport hub in the Borough with easy access via the Gosport Ferry to Portsmouth Harbour Railway Station. The site provides a significant regeneration opportunity for the Council to capitalise on its unique waterfront location and opportunities to link the regeneration of this area to the adjacent Town Centre and surrounding areas. It has the potential to accommodate significant levels of development. The regeneration of the waterfront is a strategic priority of the Borough Council as set out in the Council's Corporate Plan²⁵.

Strategic Flood Risk Assessment for the Gosport Waterfront

- 4.8 The findings of the iSFRA in respect to policy SS2: Gosport Waterfront mixed use site are set out below.
- 4.9 *Is the potential allocation site in an area at low risk of flooding?* No. The site is located in Flood Zones 2 and 3.

4.10 Is there an alternative potential allocation site in an area at low risk of flooding?

There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:

- (i) Rowner and HMS Sultan are located in Flood Zone 1.
- (ii) Daedalus is located in Flood Zone 1.
- (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
- (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
- (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane
 - Land at Wheeler Close; and
 - Land at Whitworth Close.

4.11 Are these alternative sites less suitable, taking into account other planning issues?

²⁵ Further information can be found in the summary page of the Corporate Plan on: www.gosport.gov.uk/media/2221/Council-Plan/pdf/GBC_Plan_On_A_Page_summary.pdf?m=637000090856130000

The alternative sites considered are unsuitable for a number of reasons, these are set out below:

Land at Rowner (policy SS10)

4.12 Significant areas of land at Rowner have already been brought forward for regeneration. Outline planning permission was granted in April 2009 for a mixed-use proposal. The site has delivered 700 residential units in total and policy SS10: Rowner and HMS Sultan allows for further residential development (unspecified quantum) to come forward to complete the regeneration of Rowner. There is no residential units proposed on HMS Sultan should that site come forward for disposal as the Council's preferred option for that site is to support employment and training.

Daedalus (policy SS11)

- 4.13 The Daedalus site is already a successful regeneration area in the adopted Gosport Borough Local Plan 2011-2029. Outline planning permission (planning application: 11/00282/OUT) with all matters reserved except access was granted in January 2016 for the following development:
 - Up to 69,992 sq.m. of commercial floor space in new buildings and reuse of existing buildings (Class B1, B2 and B8 use);
 - Up to 1,075 sq.m. of retail use (Class A1, A2, A3 and/or A4 use);
 - Up to 200 residential units (Class C3 use);
 - Up to 32 units of care accommodation (Class C2 use);
 - Up to 1,839 sq.m. of community use (Class D1 use);
 - Up to 8,320 sq.m. of hotel use (Class C1 use);
 - Up to 2,321 sq.m. of leisure (Class D2 use);
 - Access, parking and landscaping.
- 4.14 To date (2021) subsequent applications have been submitted and approved for the discharge of conditions for this outline consent including additional consents outside the outline application site. As of 31st March 2021 the completion position for 11/00282/OUT is:
 - Dwellings C3: 180 complete with 20 outstanding permissions and 49 outstanding from the Policy LP5 allocation (this will reduce to 20 if the Wykham Hall, Frobisher House application is permitted);
 - Care Units C2: 32 C2 units outstanding and not yet started;
 - Employment floorspace: 69,992 m2 floorspace outstanding from 11/00282/OUT (5,173 m2 has been completed within the extent of 11/00282/OUT however these are separate schemes and do not pertain to the outline permission);
 - Retail floorspace: 1,075 m2 of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m2.
- 4.15 Policy SS11 proposes a further 300 Class C3 and/or C2 residential dwellings on Site B of the strategic site and an additional 35,000m² (gross) employment floorspace as part of a wider heritage-led regeneration scheme.

- 4.16 The smaller allocations make an important contribution towards meeting the overall planning strategy but are insufficient on their own to meet the regeneration benefits afforded by the Gosport Town Centre allocation.
- 4.17 Consider Gosport Waterfront Mixed Use strategic site. Will the proposed development type(s) be acceptable in this Flood Zone?

All developments in the Flood Zones will require Site-specific FRA. The whole of the development area falls within Flood Zones 2 and 3 with the majority of the site falling within Flood Zone 3. The NPPF states for areas where residential uses are proposed, it will be necessary to meet the requirements of the Exception Test. Where residential elements are located within Flood Zone 2, residential development is considered appropriate but would require a FRA. Should other uses classified as 'more vulnerable' that may form art of a submitted planning application would also need to be considered against the Exceptions Test. Uses falling into this category would include, non-residential uses such as health services, nurseries residential care homes etc. The table below sets out the types of uses that could be accommodated on the site and the NPPF vulnerability classification:

Proposed Land – uses	NPPG vulnerability classification
Retail, Leisure and commercial	Less vulnerable
Residential	More vulnerable
Public open space	Water-compatible development

4.18 The less vulnerable uses envisaged on the site would not require the Exception Test to be passed nor would the water-compatible development. The residential elements which fall outside of flood zones 1 and 2 would. A Site-specific FRA would be required for those developments within Flood Zones 2 and 3. National Planning Policy Guidance for flooding provides detailed advice on what a Sitespecific FRA should contain. It is also recommended that applicants undertake pre-application discussions with the Council, EA and Coastal Partners.

4.19 Is the Exception Test satisfied?

Yes see the section on Meeting the Exception Test on page 35.

4.20 Are there other potential allocation sites in the same FZ?

Harbour Regeneration Area - Haslar Peninsula. This area was largely in Ministry of Defence ownership. There are a number of strategic sites proposed within this location. Significant areas are within Flood Zones 2 and 3 against this backdrop there are opportunities to deliver substantial regeneration benefits.

4.21 The Haslar Peninsula ('Haslar') is separated from the Waterfront and Town Centre by the saline Haslar Lake. Haslar is still predominantly under institutional ownership (including the Ministry of Defence and Ministry of Justice). It is comprised of mostly previously developed land and includes a set of internationally important heritage assets including Haslar Hospital, Haslar Barracks and Fort Blockhouse which taken together with the large range of military sites around Portsmouth Harbour are potentially of international significance.

- 4.22 Haslar includes six Strategic Development Site policies:
 - SS4: Blockhouse and Haslar Gunboat Yard
 - SS5: Fort Blockhouse
 - SS6: Royal Haslar Hospital
 - SS7: Haslar Barracks
 - SS8: The Piggeries
 - SS9: Haslar Marine Technology Park
- 4.23 There are a number of planning constraints to the former hospital site including poor access to the peninsular. Within the Haslar peninsular, there is the Haslar Peninsula Conservation Area, Scheduled Ancient Monuments (SAMs) at Haslar Gunboat Yard and parts of Fort Blockhouse. The former hospital site also has a number of important historic buildings listed at Grades II and II*, and a historic Grade II Listed Park. The draft Local Plan specifies that high quality new developments should be focused on the coastline, public spaces and creating places where people want to be and stay. High quality public spaces should also be multifunctional. As well as access, they can provide places for younger residents to play, and can address flood risk mitigation and biodiversity enhancements through good design.

Other Key Considerations

4.24 These considerations are taken from existing information from the PfSH SFRA 2016 update and are based on the original 2007 SFRA. A new SFRA for the PfSH area has been commissioned. The project is expected to be complete in winter/spring 2022 and will be used to update the information shown for this iSFRA where this applies.

Undefended flood hazard (1B)

- 4.25 There are 'moderate' to 'high' areas with some smaller pockets of 'very high' areas of undefended flood hazard. Those are areas where the undefended flood hazard represents a higher danger. The best available information for this layer is still the 2007 PfSH SFRA as the 2016 update of the PfSH SFRA did not review this mapping. The map set shows the Standard of Protection (SOP) as less than a 1: 200 SOP in this location. In other parts of the wider Gosport Waterfront area where the SOP is higher the flood hazard risk is shown as low.
- 4.26 This site formed part of the Gosport Waterfront and Town Centre Regeneration Area (Policy LP4: Gosport Waterfront and Town Centre) in the adopted GBLP.

Indicative areas benefiting from flood defences (1C)

4.27 Mapset 1C does not show the area as benefiting from indicative Areas Benefiting from Defences (iABDs). However the main PfSH SFRA report explains that it is only in those areas where sea defences are **consistently** benefiting from the present day 1:200 year SOP along the frontage of the flood cell being assessed will show the hatching of the iABD. The PfSH SFRA acknowledges that the high level strategic modelling and assessment does not take into account the benefit provided by all defences. The coastal defences along the bus station frontage show crest levels (shown as pink lines) higher than 1:200 year extreme sea level. These could potentially be identified as ABDs if more detailed assessments of

the defences are undertaken. This however would be beyond the scope of the SFRA.

4.28 The PfSH SFRA shows that for almost the whole of the harbour frontage (except for a small section opposite Falkland Gardens) is protected from a tidal 0.5% annual exceedance probability. What the PfSH SFRA does not show for this part of the town are indicative areas benefiting from defences. It is important to note that these are only shown if the entire frontage of a flood cell is connected to a 1:200 year standard, where this may not be the case the areas are not shown even if the majority of it is protected to that standard. This does not imply that land not shown does not benefit from any defences just not necessarily to the 1:200 Standard in a continuous block.

Danger to people from breaching (1D)

4.29 Where the PfSH SFRA shows that the SOP along part of the Gosport Waterfront frontage is less than a 1:200 year standard, there are quite large areas where danger from breaching could occur in an extreme flood event. Most of the colour is yellow representing a 'danger for some'. However there are also some areas identified as posing a 'danger for all' should breaching of the defences occur.

Other sources of flooding (1F1 series of mapsets)

- 4.30 **Wave overtopping (1F1):** There are no incidences of historical wave overtopping in this location. The mapping shows that this part of Portsmouth Harbour is subject to low wave energy.
- 4.31 **Groundwater flooding (1F2):** The PfSH SFRA shows the local geology as being of being of 'moderate permeability' with no historical incidences of groundwater flooding. The PfSH SFRA guidance notes specific to Gosport indicate that site-specific FRAs do not need to take into account this form of flooding.
- 4.32 **Impact of land use change on surface water run-off (1F3):** The impact of existing land use change on surface water run-off is shown as being moderate across the whole of the study area.
- 4.33 In addition to the above information, the Council has used the EA's Flood Map for Planning. This shows the latest published information for surface water flooding.²⁶ In this location this mapping shows that there are surface water considerations applicable across the site for all three surface water risk scenarios. To the north of the site at Priddy's Hard Heritage Area, the mapset identifies the 'high', 'medium' and 'low' risk scenarios within the site at Heritage Way and adjacent to the Explosion Museum with potential depths of below 300mm for the 'high' and 'medium' risk scenarios and potential depths for the 'low' risk scenario of below 300mm with small areas along Heritage Way which show a potential depth range of between 300 900mm.
- 4.34 The potential for surface water flooding is also shown within the broad locations of Harbour Road, Quay Lane and along parts of Mumby Road. The risk scenario

²⁶ It should be noted that the Environment Agency have published its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's PfSH SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

from surface water flooding in these broad locations is shown as small pockets along Mumby Road for the 'high' risk scenario with potential depths of less than 300 mm and with a speed of less than 25m/s. The 'medium' risk scenario shows depths of less than 300mm in areas north of Harbour Road, Quay Lane and Mumby Road with a potential water speed of 0.25m/s; whilst a 'low' risk scenario is shown across larger areas of the Regeneration Area within Harbour Road, Quay Lane and Mumby Road and to the north of Mumby Road Lorry Car Park adjoining Weevil Lane. Potential speed of the water is shown for both velocity ranges - +/-0.25m/s depending on site topography. It is considered that a sitespecific FRA(s) should investigate further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council). In addition to this, site-specific FRA(s) must also take into consideration the recently published Climate Change Allowances including peak rainfall intensity allowance by the Environment Agency (July 2021). Further information can be obtained from: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances and the Environment Agency's Standing Advice on site-specific Flood Risk applicants Assessments for in: https://www.gov.uk/guidance/flood-riskassessment-standing-advice

- 4.35 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. These areas include parts of the Gosport Waterfront area. The PfSH SFRA recommends that for site-specific FRAs either within or close by to these areas this should be further investigated. The Surface Water maps prepared by the Environment Agency do identify pockets of areas where this may be an issue and therefore the Borough Council's assessment recommends potential applicants to discuss this as part of any early discussions with the Environment Agency.
- 4.36 **Surface water sewer flooding (1F5):** The PfSH SFRA does not show any recorded incidents of sewer flooding in this location, however, because of the scale of development potential under consideration, site-specific FRAs would need to consult Southern Water to investigate the development impact on the existing drainage network.
- 4.37 **Present Day Defence Crest Levels (2016):** The equivalent tidal return period of the existing defence crest levels was calculated for the PfSH SFRA by comparing the crest level of the defence/natural ground to the range of extreme sea level return periods for both 2010 and 2115, provided by the Environment Agency at that time. Each length of defence or natural ground defence was then allocated an equivalent surge tide return period. This is the best available information at the present time.
- 4.38 The assessment was based solely on a comparison of the crest/natural ground level with extreme sea levels and does not take account of the following:
 - Defence type.
 - Defence age, condition and residual life.
 - Freeboard allowance built into the design of the defences.
 - The potential for wave overtopping of the defences.

The assessment therefore, does not provided information on the standard of service provided by existing defences.

- 4.39 In terms of Gosport Waterfront the PfSH SFRA shows that for most of the frontage along Mumby Road the SOP is mixed, investment priority to bring the SOP up to a 1:200 year standard (which are dated as they are set at 2007) is considered to be low priority (represented by a yellow solid line) because of the relatively high standards of defences currently in place along this coastal frontage. There is a small section between Mumby Road and the Bus Station (within policy SS3: Gosport Town Centre) (represented by the orange solid line) requiring a medium term investment priority; and south towards the Bus Station where the Map Sets indicate no current investment is required as indicated by the solid green lines.
- 4.40 However when the SOP layer is applied at 2115, the position is rather different. The main stretch of the Gosport Waterfront frontage is shown as a solid red line indicating in general a less than 20 year SOP with some isolated pockets of defences being of a higher standard (see printed map). Despite this, in terms of investment priority at 2115, the frontage along Gosport Waterfront is shown as a medium priority for investment purposes. This report recommends that further work is required to investigate the necessary levels of investment needed to protect any proposed development along the Gosport Waterfront for the duration of its design life i.e. 100 years.
- 4.41 Where proposed development is likely to include the provision of new flood mitigation measures, the PFSH SFRA recommends that these should be funded by the developer and developers proposing new mitigation measures which solely benefit new development should not call on the public purse as a means to secure funding. In addition defences funded through public resources may only defend to an existing standard that could be unsafe for development. This needs to be considered when looking at the effects of standards of protection in the light of increasing sea level rise. It may be necessary to secure some funding through alternative funding sources such as Community Infrastructure Levy.
- 4.42 **Climate change implications (for 2115):** The map layers in the PfSH SFRA shows that as would be expected using current climate change data that the risk of flooding in a higher flood risk zone increases for both Flood Zones 2 and 3.
- 4.43 The River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy addresses coastal management issues over a 100 year time frame and is consistent with the actions arising from the North Solent Shoreline Management Plan. The Strategy identifies the preferred technically, economically and environmentally sound and sustainable strategic options for managing those risks over a 100 year appraisal period as well as defining an implementation plan. Flood defence schemes covering Alverstoke (Stoke Lake, Forton Lake and Seafield are proposed as part of the actions arising from the CFERMS. Planning permission for the schemes at Stoke and Forton Lakes were granted in 2020. Further details are available on the Coastal Partners website at: <u>https://coastalpartners.org.uk/project/gosport-coastal-defence-schemes/</u>

Conclusions

4.44 **Q:** Consider site details and flood risk management requirements. Is the proposed development site likely to be safe and appropriate?

- A: This strategic area satisfies all of the criteria set out in the Exception Test. Through the work on the PfSH SFRA a number of important issues have been identified on this aspect. Site-specific FRAs will need to demonstrate how the following matters can be addressed. These are set out below:
 - Safe entry and exit to and from the site should a severe flooding event occur;
 - Flood defence infrastructure;
 - Possibility of identifying a larger footprint for development; and
 - Raising infrastructure levels i.e. raising Mumby Road to allow for safe exit and entry for site users and emergency services.
- 4.45 Taking on board all the information set out in the assessment above. Further consideration of flood risks and options for management at this strategic are set out in the paragraphs below. In conclusion, it is considered the development is considered capable of being made safe in the event of a severe flood event and is therefore likely to be acceptable in this location.

The Council's interim preferred approach for managing flood risk at Gosport Waterfront

Options for addressing Flood Risk and their feasibility

4.46 1. Off-site strategic measures: The Shoreline Management Plan's (SMP) longterm (100 year) policy for this frontage is 'Hold the Line'. The evolving Coastal Strategy for this area is likely to support the SMP's Hold the Line policy. Both the SMP and Coastal Strategy identify that landowners and/or developers will need to make suitable arrangements to provide onsite measures to an agreed standard of protection. The site is also located within Strategy Management Zone 2 - Upper Quay (Fareham) to Fort Monckton (Gosport) - of the River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (RHPS, 2015)²⁷. The Strategy was developed to provide strategic recommendations for how to implement the policies recommended within the NSSMP.4.47 Within SMZ2, this proposed development site is located with Option Development Units 12 (Parham Road to Rolling Bridge), ODU 13 (Rolling Bridge to Jamaica Drive), ODU 14 Jamaica Drive to Rope Quays). The RHPS makes a number of recommendations for each ODU. The Strategy recommends that in ODU 12 the MOD conduct maintenance and repairs to their existing defences, to manage coastal flood and erosion risk to nationally important assets and the wider community. In ODU 13, scheduled maintenance is required to maintain defences. Capital works (i.e. new floodwall) will be required from 2060 when existing defences are expected to reach the end of their service life and the SOP reduces. In ODU 14 the site is identified for regeneration and new assets are required to mitigate present day flood risk. Opportunities to deliver 'passive defences' i.e. land raising should be explored. Other capital works are

²⁷ This study can be seen on the Council's evidence base at: <u>www.gosport.gov.uk/gblp2038</u>

recommended to take place locally, with upgrades to all defences recommended to take place from 2060.

- 4.48 The Borough Council's Infrastructure Delivery Plan (2020) has identified future flood schemes in the Borough to assist with the strategic management of flood risk Borough-wide. In addition to these identified schemes, there will also be a need to develop site-specific measures. Proposals for flood risk management will need to contribute to the overall strategy for reducing flood risk to the existing community over the next 100 years, and that any proposals that come forward will need to contribute positively to the River Hamble to Portchester Flood & Coastal Erosion Risk Management Strategy amongst other objectives.
- 4.49 **2. On-site strategic measures:** The developer could improve defences within the boundary of their site and raise the Standard of Protection (see details in option 3 below). This would reduce the likelihood of breach and wave overtopping. The preferred option for flood risk management has been identified in the coastal defence strategy for this frontage; and may include options such as construction of seawalls, flood defence walls and access gates, ground raising alongside onsite resistance and resilience measures... It is recommended that developers should discuss through pre-application discussions, appropriate options for flood risk management of development proposals with the Borough Council, the Environment Agency and the Coastal Partners.
- 4.50 **3. On site measures:** The site should be designed so that flooding would not impact on the buildings. A sequential approach across the site could locate the more vulnerable parts of the development in the areas of lowest flood hazard. If necessary finished floor levels of the site could be raised so that the internals of the building would remain dry during the design extreme tidal flood events. Therefore all residential buildings could have a safe place of refuge. A flood response plan would also need to be prepared & accepted by the Local Planning Authority, taking advice from the Emergency Planner and Emergency Services, and would need to look at conditions experienced in a design and extreme flood event. The whole of the allocation area is in an EA Flood Warning Area.
- 4.51 On-site measures should be designed such that they will not prohibit the use of adjacent water compatible uses such as boat yards and marinas which require on-going access to the waterfront. The developer will need to prepare a comprehensive flood risk management strategy which will manage risk for the allocation site across the plan period whilst all phases of development are being delivered. It would generally be expected to deliver a standard of safety to keep people safe from the 0.5% probability tidal flood event in 2115 (to take account of climate change over the lifetime of the development) during which the tide level is predicted to reach 4.3m AOD. There is an aspiration that people will be safe from a 0.1% event and if this cannot be achieved then a minimum standard of safety of resisting the 0.5% will be required. The 0.1% probability tidal flood event in 2115 is 4.5m AOD which does not account for wave action which will still be an important consideration at this site²⁸.

²⁸ The Gosport Waterfront and Town Centre SPD (2018) included further detail on the requirements for flood risk management measures.

4.52 **4. Adjacent off site measures:** There may be opportunities to raise the levels of Mumby Road to ensure that access is maintained during a flood event. The viability of this has not been assessed at present and will need to be determined. Any flood risk management measures will also be required to be designed in order to tie in with existing defences to the north and south of the allocation site at Royal Clarence Yard and Falkland Gardens respectively.

4.53 **Preferred Option(s)**

A combination of **options 2 & 3** are preferred solutions to ensure that the development is safe in this location. The Borough Council would expect the developer to provide these flood risk management measures.

- 4.54 Prior to the provision of a continuous sea defence for the allocation site and safe access and exit, there will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Emergency Planner and Emergency Services.
- 4.55 Any Site-specific FRA will need to assess the residual flood risk behind the defences delivered (i.e. if the defences are breached or overtopped) or risks until a full continuous flood defence is delivered and the development employs appropriate mitigation techniques. The FRA must show if this site is within a Rapid Inundation Zone should the defence breach or be overtopped. Any Site-specific FRA will need to assess the residual flood risk behind the defences.

Conclusion on deliverability of site in terms of flood risk considerations

4.56 A combination of feasible measures should ensure that the site can be made safe. Therefore it is considered that the preferred measures set out have a reasonable prospect of delivery. It should be noted that this is a high level assessment setting out the Borough Council's preferred option for the delivery of flood risk management measures and the conclusion does not remove the need for a full site level FRA when a planning application is made. The information in the assessment shows development on these sites have a reasonable prospect of delivery and a package of measures, both structural and non-structural, can be used to ensure that development is safe.

Implications for the draft Gosport Borough Local Plan 2038

4.57 The regeneration of the Gosport Waterfront strategic area is a major part of delivering the Council's spatial strategy for the Borough. The Gosport Waterfront is in Flood Zones 2 and 3 and has been subject to a PfSH SFRA. Using the sequential approach set out in the NPPF there are no alternative sites in the Borough to deliver the quantum and mix of commercial and residential uses. It is necessary to ensure that the area fully accords with the requirements of the Exception Test. The site provides wider sustainability benefits these matters are addressed more fully addressed in the relevant background papers to accompany the draft Local Plan. It is located on previously developed land and that there are no reasonably available sites on previously developed land capable of providing the wide regeneration benefits associated with it.

- 4.58 A flood risk assessment will be required demonstrating that development is safe from flooding without increasing flood risk elsewhere and where possible will reduce flood risk overall. Any site-specific FRA will need to address the following matters (in addition to the flood risk issues identified in this iSFRA):
 - Safe entry and exit to and from the site should a severe flooding event occur (this could include raising the level of local roads); and
 - Appropriate flood defence infrastructure is in place including dealing with the effects of sea-level rise. Significant further work will be required to demonstrate the deliverability and suitability of flood defences for the Gosport Waterfront area.
- 4.59 Early discussions with the Council, the Environment Agency and the Coastal Partners regarding proposed new development within Gosport Waterfront Regeneration Area will be necessary for development proposals within Flood Zones 2 and 3.

POLICY SS3: GOSPORT TOWN CENTRE

Background

- 4.60 Gosport Town Centre forms a significant part of the wider Harbour Regeneration Area and includes Gosport Marina and Priddy's Hard Heritage Area.
- 4.61 Draft policy SS3 permits the following uses:

POLICY SS3: GOSPORT TOWN CENTRE

- 1. Gosport Town Centre, as shown on the Proposals Map, will be regenerated in the plan period through a combination of the following development and planned change:
 - a) A flexible approach to planning for retail and other main town centre uses in the Principal Shopping Centre;
 - b) Support for development which provides a more diverse and active evening economy which caters all of the community and visitors including an expanded Cultural Quarter centred on the Discovery Centre and Old Grammar School;
 - c) The retention of sufficient high quality, accessible public car parks in key locations to support the future vitality of the Town Centre;
 - d) Supporting appropriate deliverable opportunities to use the airspace above existing buildings, car parks and service yards to provide new development without detriment to operation of commercial functions; and
 - e) The creation of fully accessible and linked public open spaces along the route of the 'Gosport Lines' including the Northern Ramparts, St. George's Field, Walpole Park and Bastion No.1.
- 2. The delivery of approximately 550 new residential dwellings, primarily concentrated on the High Street and South Street, is to be provided through a combination of the following strategic development approaches:
 - a) Comprehensive redevelopment of urban blocks to provide mixeduse schemes with higher density housing on upper floors;
 - b) Conversions to residential above the ground floor;
 - c) Increasing the height and massing of existing buildings; and
 - d) Developing other areas including some surface car parks.
- 3. Land at Gosport Bus Station (and adjacent taxi rank and drop-off area) is suitable for strategic mixed-use development. Redevelopment of the site should provide for a well-designed landmark building which

capitalises on the prominent waterfront location over Portsmouth Harbour. All development proposals should comprise and address the following:

- a) A purpose-built facility incorporating a new multi-modal transport hub and focus point for Gosport's visitor offer with uses that create activity around the station during the day and evening;
- b) Main town centre uses including food and drink, hotel, small-scale retail, cultural and leisure facilities, and commercial floorspace;
- c) Between 150 and 240 residential dwellings;
- d) High quality and accessible interchange facilities including public conveniences, visitor information and ticket facilities on the ground floor;
- e) Well-designed and accessible bus station on the current taxi-rank site;
- f) Provision of sustainable transport choices including cycle and motorcycle storage, cycle hire, a resident car club and electric vehicle charge points as well as a relocated taxi rank and drop-off area;
- g) A public viewing facility on an upper floor to facilitate views over Portsmouth Harbour and the Haslar Peninsula; and
- h) A site-specific design strategy which addresses the following:
 - i. The impact of development on adjacent public spaces;
 - ii. The retention of an open axis between the High Street and the ferry pontoon; and
 - iii. The amenity of residents taking into account the transport hub, town centre and proximity to the waterfront.
- 4. The former Police Station Site and Barclay House/Land East of Barclay House are each suitable for comprehensive redevelopment. Proposals should comprise up to 90 residential dwellings at the former Police Station Site and up to 80 residential dwellings at Barclay House/Land East of Barclay House.
- 5. The Council also encourages residential development through upper floor conversions within the Town Centre. The following such sites are identified as being deliverable:
 - a) 9 to 11 High Street
 - b) 17 High Street
 - c) 57 to 59 High Street
 - d) 84 to 86 High Street
- 6. Town Centre development proposals should address the following

detailed design critera:

- a) Sufficient vehicular parking spaces, refuse storage and cycle storage;
- b) Semi-private or private amenity spaces for residential uses;
- c) Positive contributions to the wider townscape and street scene though positive design;
- d) Provision of high quality residential amenity through addressing privacy, light levels and overbearing impacts; and
- e) No significant impacts on the ongoing operation of commercial functions including ground floor retail units.
- 7. Flood risk from all sources of flooding must be fully taken into account for sites within Gosport Town Centre through site-specific FRA(s). New development will be safely managed through the application of appropriate flood risk mitigation measures.
- 4.62 The site's location overlooking Portsmouth Harbour makes this location a very desirable residential setting. There are no other alternative sites in the Borough that can deliver the level and mix of uses that the Gosport Waterfront as a whole is able to do as part of the wider Harbour Regeneration Area.
- 4.63 The site is identified as a mixed-use allocation in the draft GBLP2038 and is in a sustainable location situated close to a major transport hub in the Borough with easy access via the Gosport Ferry to Portsmouth Harbour Railway Station. The site provides a significant regeneration opportunity for the Council to capitalise on its unique waterfront location and opportunities to link the regeneration of this area to the adjacent Haslar Peninsula and surrounding areas. It has the potential to accommodate significant levels of development. The regeneration of the Town Centre is a strategic priority of the Borough Council.
- 4.64 The NPPF (2021) (Paragraph 86 criterion f) recognises that new residential development often plays an important role in ensuring the vitality of centres and is encouraged on appropriate sites. Therefore new dwellings in the town centre have the potential benefits of bringing more people and potential customers for existing and future businesses without the need for private vehicular trips and making an effective and efficient use of previously developed land.
- 4.65 South Street is located parallel to the High Street and provides the most significant development opportunities in the town centre, some of which could be developed comprehensively for either mixed-use or residential. This includes the former Police Station site, the Precinct and the Coates Road Car Park.
- 4.66 Three strategic development sites identified in the draft Local Plan in Gosport Town Centre are Gosport Bus Station, the former Gosport Police Station and Barclay House/Land East of Barclay House.
- 4.67 This site formed part of the Gosport Waterfront and Town Centre Regeneration Area (Policy LP4: Gosport Waterfront and Town Centre) in the adopted GBLP.

Strategic Flood Risk Assessment for the Gosport Town Centre

4.68 The findings of the iSFRA in respect to policy SS3: Gosport Town Centre site are set out below.

4.69 Is the potential allocation site in an area at low risk of flooding?

The site is located mainly in Flood Zone 1 at 2021, however there are areas of the strategic allocation that are within in Flood Zones 2 and 3 these are at the Bus Station, Bastion No 1, the Cockle Ponds by Walpole Park and the northern extremity of the allocation by Forton Lake.

4.70 Is there an alternative potential allocation site in an area at low risk of flooding?

There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:

- (i) Rowner and HMS Sultan are located in Flood Zone 1.
- (ii) Daedalus is located in Flood Zone 1.
- (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
- (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
- (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane
 - Land at Wheeler Close: and
 - Land at Whitworth Close.
- 4.71 Are these alternative sites less suitable, taking into account other planning issues?

The alternative sites considered are unsuitable for a number of reasons, these are set out below:

Land at Rowner (policy SS10)

4.72 Significant areas of land at Rowner have already been brought forward for regeneration. Outline planning permission was granted in April 2009 for a mixed-use proposal. The site has delivered 700 residential units in total and policy SS10: Rowner and HMS Sultan allows for further residential development (unspecified quantum) to come forward to complete the regeneration of Rowner. There is no residential units proposed on HMS Sultan should that site come forward for disposal as the Council's preferred option for that site is to support employment and training.

Daedalus (policy SS11)

- 4.73 The Daedalus site is already a successful regeneration area in the adopted Gosport Borough Local Plan 2011-2029. Outline planning permission (planning application: 11/00282/OUT) with all matters reserved except access was granted in January 2016 for the following development:
 - Up to 69,992 sq.m. of commercial floor space in new buildings and reuse of existing buildings (Class B1, B2 and B8 use);
 - Up to 1,075 sq.m. of retail use (Class A1, A2, A3 and/or A4 use);
 - Up to 200 residential units (Class C3 use);
 - Up to 32 units of care accommodation (Class C2 use);
 - Up to 1,839 sq.m. of community use (Class D1 use);
 - Up to 8,320 sq.m. of hotel use (Class C1 use);
 - Up to 2,321 sq.m. of leisure (Class D2 use);
 - Access, parking and landscaping.
- 4.74 To date (2021) subsequent applications have been submitted and approved for the discharge of conditions for this outline consent including additional consents outside the outline application site. As of 31st March 2021 the completion position for 11/00282/OUT is:
 - Dwellings C3: 180 complete with 20 outstanding permissions and 49 outstanding from the Policy LP5 allocation (this will reduce to 20 if the Wykham Hall, Frobisher House application is permitted);
 - Care Units C2: 32 C2 units outstanding and not yet started;
 - Employment floorspace: 69,992 m2 floorspace outstanding from 11/00282/OUT (5,173 m2 has been completed within the extent of 11/00282/OUT however these are separate schemes and do not pertain to the outline permission);
 - Retail floorspace: 1,075 m2 of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m2.
- 4.75 Policy SS11 proposes a further 300 Class C3 and/or C2 residential dwellings on Site B of the strategic site and an additional 35,000m² (gross) employment floorspace as part of a wider heritage-led regeneration scheme.
- 4.76 Royal Haslar Hospital is located in Flood Zone 1 however this already has consent granted in September 2014 for the comprehensive redevelopment and re-use of the site (planning application 12/00591/OUT). The proposed scheme includes a wide range of uses and incorporates medical and care facilities, a hotel (with up to 78 beds), a church, convenience store, health centre, tearoom, restaurant, office and business units, 286 residential units and 244 self-contained retirement units.
- 4.77 The smaller allocations make an important contribution towards meeting the overall planning strategy but are insufficient on their own to meet the regeneration benefits afforded by the Gosport Town Centre allocation.

4.78 Consider Gosport Town Centre strategic site. Will the proposed development type(s) be acceptable in this Flood Zone?

It is considered that development proposals in those areas within Flood Zones 2 and 3 will require site-specific FRA. In particular Gosport Bus Station, and sites along South Street and the High Street which fall within Flood Zone 3 when applying the 2115 climate change layers. The NPPF states for areas where residential uses are proposed, it will be necessary to meet the requirements of the Exception Test. Where residential elements are located within Flood Zone 2, residential development is considered appropriate but would require a FRA. Should other uses classified as 'more vulnerable' that may form part of a submitted planning application would also need to be considered against the Exceptions Test. Uses falling into this category would include, non-residential uses such as health services, nurseries residential care homes etc. The table below sets out the types of uses that could be accommodated on the site and the NPPF vulnerability classification:

Proposed Land – uses	NPPG vulnerability classification
Retail, Leisure and	Less vulnerable
commercial	
Residential	More vulnerable
Public open space	Water-compatible development

4.79 The less vulnerable uses envisaged on the site would not require the Exception Test to be passed nor would the water-compatible development. The residential elements which fall outside of flood zones 1 and 2 would. A site-specific FRA would be required for those developments within Flood Zones 2 and 3. National Planning Policy Guidance for flooding provides detailed advice on what a site-specific FRA should contain. It is also recommended that applicants undertake pre-application discussions with the Council, EA and Coastal Partners.

4.80 Is the Exception Test satisfied?

This is explained in the section on Meeting the Exception Test.

4.81 Are there other potential allocation sites in the same FZ?

There are a number of potential allocations in the same Flood Zones and these are identified in Table 5(a) and include a number of smaller allocations alongside the strategic sites.

4.82 The Haslar Peninsula ('Haslar') is separated from the Waterfront and Town Centre by the saline Haslar Lake and Stoke Lake. Haslar comprises of mostly previously developed land and includes internationally important heritage assets including Haslar Hospital, Haslar Barracks and Fort Blockhouse which taken together with the large range of military sites around Portsmouth Harbour are potentially of international significance.

- 4.83 The Haslar part of the Harbour Regeneration Area includes six Strategic Development Site policies:
 - SS4: Blockhouse and Haslar Gunboat Yard
 - SS5: Fort Blockhouse
 - SS6: Royal Haslar Hospital
 - SS7: Haslar Barracks
 - SS8: The Piggeries
 - SS9: Haslar Marine Technology Park
- 4.84 There are a number of planning constraints to the former hospital site including poor access to the peninsular. Within the Haslar peninsular, there is the Haslar Peninsula Conservation Area, Scheduled Ancient Monuments (SAMs) at Haslar Gunboat Yard and parts of Fort Blockhouse. The former hospital site also has a number of important historic buildings listed at Grades II and II*, and a historic Grade II Listed Park. The draft Local Plan specifies that high quality new developments should be focused on the coastline, public spaces and creating places where people want to be and stay. High quality public spaces should also be multifunctional. As well as access, they can provide places for younger residents to play, and can address flood risk mitigation and biodiversity enhancements through good design.

Other Key Considerations

4.85 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 SFRA. A new SFRA is expected to be completed in winter/spring 2022 and will be used to update the information shown for this iSFRA.

Undefended flood hazard (1B)

4.86 There are smaller areas of 'very high risk' and 'high' areas adjacent to the Cockle Pond and on the Harbour frontage. However, identified sites within the High Street and South Street are shown as having a 'low' hazard risk. The best available information for this layer is still the 2007 PfSH SFRA as the 2016 update of the PfSH SFRA did not review this mapping. The map set shows the Standard of Protection (SOP) as less than a 1: 200 SOP in this location.

Indicative areas benefiting from flood defences (1C)

- 4.87 Under the PfSH SFRA model, the Gosport Town Centre area does not show any areas benefiting from indicative Areas Benefiting from Defences (iABDs). However the main PfSH SFRA report explains that it is only in those areas where sea defences are consistently benefiting from the present day 1:200 year SOP along the frontage of the flood cell being assessed will show the hatching of the iABD. The PfSH SFRA acknowledges that the high level strategic modelling and assessment does not take into account the benefit provided by all defences. Note the coastal defences along the bus station frontage show crest levels (i.e. the pink lines) higher than 1:200 year extreme sea level. These can be potentially identified as ABDs if more detailed assessments (beyond the scope of the PfSH SFRA) of the defences are undertaken.
- 4.88 The PfSH SFRA shows that for almost the whole of the harbour frontage (except for a small section opposite Falkland Gardens and Gosport Marina (see PfSH

SFRA for policy SS2 Gosport Waterfront)), site location is protected from a tidal 0.5% annual exceedance probability. What the PfSH SFRA does not show for this part of the town are indicative areas benefiting from defences. It is important to note that these are only shown if the entire frontage of a flood cell is connected to a 1:200 year standard, where this may not be the case the areas are not shown even if the majority of it is protected to that standard. This does not imply that land not shown does not benefit from any defences just not necessarily to the 1:200 Standard in a continuous block.

Danger to people from breaching (1D)

4.89 Where the PfSH SFRA shows that the SOP along part of the Gosport Town Centre frontage there are large areas where danger from breaching in an extreme flood event are 'low' in this context 'low' means shallow flowing or deep standing water along South Street, the High Street is shown as unaffected. As would be expected where there are areas of yellow in locations to the south of South Street adjacent to the South Street Car Park nearest to the Cockle Pond and at the Bus Station site and Falklands Gardens representing a 'danger for some'. However there are also some smaller areas within the South Street Car Park, Bastion No 1 and the Bus Station (i.e. those locations immediately adjacent to water) identified as posing a 'danger for all' should breaching of the defences occur.

Other sources of flooding (1F1 series of map-sets)

- 4.90 **Wave overtopping (1F1):** There are no incidences of historical wave overtopping in this location shown on the PfSH SFRA.
- 4.91 The PfSH SFRA shows that this part of Portsmouth Harbour is subject to low wave energy. The PfSH SFRA recommends that for those sites located along the open coast, should include an assessment of extreme wave overtopping irrespective of the Flood Zone. Even if the risk is low the assessment still needs to be done.
- 4.92 **Groundwater flooding (1F2):** The PfSH SFRA shows the local geology as being of being of 'moderate permeability' with no historical incidences of groundwater flooding. The PfSH SFRA guidance notes specific to Gosport indicate that site-specific FRAs do not need to take into account this form of flooding. It is worth noting however that the EA's MAGIC mapping system²⁹ show this area as falling within a Medium/Medium-High classification (due to its location close to Portsmouth Harbour). The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:
- 4.93 'The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid.

²⁹ <u>https://magic.defra.gov.uk/MagicMap.aspx</u>

- 4.94 The potential impact of groundwater pollution is considered using the aquifer designation status which provides an indication of the scale and importance of groundwater for potable water supply and/or in supporting baseflow to rivers, lakes and wetlands.
- 4.95 Groundwater vulnerability to pollution risk classification is defined as:

• High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.

• Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.

• Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits.³⁰

- 4.96 This provides a high level analysis only and may need to be considered further as part of a site-specific FRA for individual planning applications and preapplication discussions with the Environment Agency and the Local Planning Authority.
- 4.97 **Impact of land use change on surface water run-off (1F3):** The impact of existing land use change on surface water run-off is shown as being moderate across the whole of the study area. In addition to the above information, the Council has used the EA's Flood Map for Planning³¹ which shows the latest published information for surface water flooding³². In this location this mapping shows the Bus Station site could be subject to areas of deeper surface water pooling on the site which will need to be investigated further and addressed as part of a site-specific FRA.³³ There are pockets within the eastern end of the High Street adjoining the Bus Station, South Street, Walpole Road and in the vicinity of Trinity Green that are shown a susceptible to a low/ shallow risk of surface water flood with depths around 300 900 mm and areas below 300mm and a velocity of 0.25m/s.³⁴

There are four levels of flood risk. These are:

³⁰ Groundwater vulnerability maps technical summary

Project summary SC040016, Environment Agency,

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwater_va_riability_summary.pdf

³¹ https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?easting=457862&northing=104479

³² It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's PFSH SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

³³ It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's PFSH SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

³⁴ The EA surface water maps are high level maps designed to provide an indication of whether an area may be affected by surface water flooding and to what extent.

[•] High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)

[•] Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30 (3.3%)

[•] Low - each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%)

[•] Very low - each year, the area has a chance of flooding of less than 1 in 1000 (0.1%)

Further information can be found at: <u>https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?easting=461850&northing=99848&map=SurfaceWater</u>

- 4.98 Therefore it is considered that a site-specific FRA(s) should investigate further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council). In addition to this, site-specific FRA(s) must also take into consideration the recently published Climate Change Allowances including peak rainfall intensity allowances by the Environment Agency (July 2021). Further information can be obtained from: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances and the Environment Agency's Standing Advice on site-specific Flood Risk Assessments for applicants in: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances and the Environment Agency's Standing Advice on site-specific Flood Risk Assessments for applicants in: https://www.gov.uk/guidance/flood-risk-assessment-standing-advice
- 4.99 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. These areas include parts of the Gosport Waterfront area. The PfSH SFRA recommends that for site-specific FRAs either within or close by to these areas this should be further investigated. The Surface Water maps prepared by the Environment Agency do identify pockets of areas where this may be an issue and therefore the Borough Council's assessment recommends potential applicants to discuss this as part of any early discussions with the Environment Agency.
- 4.100 **Surface water sewer flooding (1F5):** The PfSH SFRA does not show any recorded incidents of sewer flooding in this location, however, because of the scale of development potential under consideration, site-specific FRAs would need to consult Southern Water to investigate the development impact on the existing drainage network.
- 4.101 **Present Day Defence Crest Levels (2016):** The equivalent tidal return period of the existing defence crest levels was calculated for the PfSH SFRA by comparing the crest level of the defence/natural ground to the range of extreme sea level return periods for both 2010 and 2115, provided by the Environment Agency at that time. Each length of defence or natural ground defence was then allocated an equivalent surge tide return period. This is the best available information at the present time.
- 4.102 The assessment was based solely on a comparison of the crest/natural ground level with extreme sea levels and does not take account of the following:
 - Defence type.
 - Defence age, condition and residual life.
 - Freeboard allowance built into the design of the defences.
 - The potential for wave overtopping of the defences.
- 4.103 Therefore, the assessment does not provide information on the standard of service provided by existing defences.
- 4.104 For Gosport Town Centre most of the frontage along South Street the investment priority to bring the SOP up to a 1:200 year standard is considered to be low priority (represented by a yellow solid line) or none (represented by the solid

green line) because of the higher standards of defences currently in place along this coastal frontage. This report recommends that further work is required to investigate the necessary levels of investment needed to protect any proposed development along the Gosport Town Centre for the duration of its design life i.e. 100 years taking into account the latest information related to climate change allowances.

- 4.105 Where proposed development is likely to include the provision of new flood mitigation measures, the iSFRA recommends that these should be funded by the developer and developers proposing new mitigation measures which solely benefit new development should not call on the public purse as a means to secure funding. In addition defences funded through public resources may only defend to an existing standard that could be unsafe for development. This needs to be considered when looking at the effects of standards of protection in the light of increasing sea level rise. It may be necessary to secure some funding through alternative funding sources such as Community Infrastructure Levy.
- 4.106 **Climate change implications (for 2115):** The map layers in the PfSH SFRA show that as would be expected using current climate change data that the risk of flooding in a higher flood risk zone increases for both Flood Zones 2 and 3. This information will need to be reviewed once the PfSH SFRA is complete.

Conclusions

- 4.107 **Consider site details and flood risk management requirements. Is the proposed development site likely to be safe and appropriate?** This strategic area satisfies all of the criteria set out in the Exception Test. Through the work on the iSFRA a number of important issues have been identified on this aspect. Site-specific FRAs will need to demonstrate how the following matters can be addressed. These are set out below:
 - Safe entry and exit to and from the site should a severe flooding event occur;
 - Flood defence infrastructure;
 - Possibility of identifying a larger footprint for development; and
 - Raising infrastructure levels i.e. raising Mumby Road to allow for safe exit and entry for site users and emergency services for strategic sites SS1, 2 and 3.

The Council's interim preferred approach for managing flood risk at Gosport Town Centre

4.108 **1. Off-site strategic measures**: The Shoreline Management Plan's (SMP) longterm (100 year) policy for this frontage is 'Hold the Line'. The evolving Coastal Strategy for this area is likely to support the SMP's Hold the Line policy. However based on early evidence, any proposed coastal defence schemes are not currently eligible for full government funding. Both the SMP and Coastal Strategy will identify that landowners and/or developers will need to make suitable arrangements to provide onsite measures to an agreed standard of protection.

- 4.109 The site is also located within Strategy Management Zone 2 Upper Quay (Fareham) to Fort Monckton (Gosport) of the River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (RHPS, 2015). The Strategy was developed to provide strategic recommendations for how to implement the policies recommended within the NSSMP.
- 4.110 Within SMZ2, this proposed development site is located with Option Development Unit 15 Rope Quays to Haslar Bridge. The RHPS recommends that present day flood risk is localised and can be managed with maintenance and property level protection until 2030 opportunities to bring forward improvements and new defences should be explored through redevelopment opportunities.
- 4.111 The Borough Council's Infrastructure Delivery Plan (2020) has identified future flood schemes to assist in the strategic management of flood risk across the Borough. In addition to these identified schemes, there will also be a need to develop site-specific measures which will be sought through the development control process. Proposals for flood risk management will need to contribute to the overall strategy for reducing flood risk to the existing community over the next 100 years, and that any proposals that come forward will need to contribute positively to the River Hamble to Portchester Coastal Erosion Risk Management Strategy.
- 4.112 **2. On-site strategic measures:** The developer could improve defences within the boundary of their site and raise the Standard of Protection (see details in option 3 below). This would reduce the likelihood of breach and wave overtopping. The preferred option for flood risk management is set out in the adopted Coastal Strategy for this frontage. Options may include the construction of seawalls, flood defence walls and access gates, ground-raising alongside onsite resistance and resilience measures. It is recommended that developers should discuss through pre-application discussions, appropriate options for flood risk management of development proposals with the Borough Council, the Environment Agency and Coastal Partners.
- 4.113 **3. On site measures:** The site should be designed so that flooding would not impact on the buildings. A sequential approach across the site could locate the more vulnerable parts of the development in the areas of lowest flood hazard. If necessary finished floor levels of the site could be raised so that the internals of the building would remain dry during the design extreme tidal flood events. Therefore all residential buildings would have a safe place of refuge.
- 4.114 A flood response plan would also need to be prepared & accepted by the Local Planning Authority, taking advice from the Emergency Planner and Emergency Services, and would need to look at conditions experienced in a design and extreme flood event. On-site measures should be designed such that they will not prohibit the use of adjacent water compatible uses such as boat yards and marinas which require on-going access to the waterfront. The developer will need to prepare a comprehensive flood risk management strategy which will manage risk for the allocation site across the plan period whilst all phases of development are being delivered. It would generally be expected to deliver a standard of safety to keep people safe from the 0.5% probability tidal flood event in 2115 (to take account of climate change over the lifetime of the development) during which the

tide level is predicted to reach 4.3m AOD. There is an aspiration that people will be safe from a 0.1% event and if this cannot be achieved then a minimum standard of safety of resisting the 0.5% will be required. The 0.1% probability tidal flood event in 2115 is 4.5m AOD which does not account for wave action which will still be an important consideration at this site.

4.115 **4. Adjacent off site measures:** There may be opportunities to raise the levels of Mumby Road to ensure that access is maintained during a flood event. The viability of this has not been assessed at present and will need to be determined. Whilst this measure is identified for the proposed Gosport Waterfront allocation (policy SS2) such measures may also benefit areas of Gosport Town Centre by reducing the potential of flood risk from elsewhere. Any flood risk management measures will also be required to be designed in order to tie in with existing defences to the north of the allocation site in proposed policy SS2 at Falkland Gardens.

4.116 **Preferred Option(s)**

A combination of **options 2 & 3** are preferred solutions to ensure that the development is safe in this location. The Borough Council would expect the developer to provide these flood risk management measures.

- 4.117 Prior to the provision of a continuous sea defence for the allocation site and safe access and exit, there will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Emergency Planner and Emergency Services.
- 4.118 Any site-specific FRA will need to assess the residual flood risk behind the defences delivered (i.e. if the defences are breached or overtopped) or risks until a full continuous flood defence is delivered and the development employs appropriate mitigation techniques. The FRA must show if this site is within a Rapid Inundation Zone should the defence breach or be overtopped. Any site-specific FRA will need to assess the residual flood risk behind the defences

Conclusion on deliverability of site in terms of flood risk considerations

4.119 A combination of feasible measures should ensure that the site can be made safe. Therefore it is considered that the preferred measures set out have a reasonable prospect of delivery. It should be noted that this is a high level assessment setting out the Borough Council's preferred option for the delivery of flood risk management measures and the conclusion does not remove the need for a full site-specific FRA when a planning application is made.

Overall Conclusion:

4.120 The information in the assessment shows development on these sites have a reasonable prospect of delivery and a package of measures, both structural and non-structural, can be used to ensure that development is safe.

Implications for the draft Gosport Borough Local Plan 2038

4.121 The regeneration of the Gosport Town Centre strategic area is a major component of delivering the Council's spatial strategy for the Borough. In terms of its role within the sub region, the rationalisation of MoD operations has led to a

contraction of local jobs and increased out-commuting to other parts of South Hampshire. If these trends are allowed to continue the situation in Gosport will be exacerbated with significant social, economic and environmental consequences not only for the residents of Gosport but also for others within the sub region.

- 4.122 Consequently in order to achieve the PfSH vision of employment-led regeneration in South Hampshire, the 'city centres first' and the 'regeneration of urban areas' policy initiatives need to be fully delivered. For Gosport, the regeneration opportunities presented by the Harbour Regeneration Area and other key Regeneration areas for example at Daedalus which includes major employment opportunities, will make a significant contribution towards delivering the strategic vision for the south Hampshire sub region as a whole.
- 4.123 The Gosport Town Centre is in Flood Zone 1 with some parts towards the east, nearest Portsmouth Harbour and Forton Lake within Waterfront is in Flood Zones 2 and 3 and has been subject to an interim PfSH SFRA. It is considered that the site offers significant regeneration benefits to enhance the uses within the Town Centre and provide needed homes and commercial and community facilities that are unrivalled anywhere else in the Borough. Consequently using the sequential approach set out in the NPPF there are no alternative sites in the Borough to deliver the quantum and mix of uses. It is necessary to ensure that the site fully accords with the requirements of the Exception Test. The site provides wider sustainability benefits these matters are addressed more fully addressed in the relevant background papers to accompany the draft Local Plan. It is located on previously developed land and that there are no reasonably available sites on previously developed land capable of providing the regeneration benefits associated with this site.
- 4.124 A flood risk assessment will be required demonstrating that the development is safe from flooding without increasing flood risk elsewhere and where possible will reduce flood risk overall. Any site-specific FRA will need to address the following matters:
 - Safe entry and exit to and from the site should a severe flooding event occur (this could include raising the level of local roads); and
 - Appropriate flood defence infrastructure is in place including dealing with the effects of sea-level rise. Significant further work will be required to demonstrate the deliverability and suitability of flood defences for the Gosport Town Centre and wider Waterfront area.
- 4.125 Early discussions with the Council, the Environment Agency and the Coastal Partners regarding development on sites within draft policy SS3: Gosport Town Centre will be necessary as part of the pre-application process.
- 4.126 Most of the adjoining Town Centre is within Flood Zone 1, with parts in Flood Zone 2 and a very small area within Flood Zone 3 at the eastern end of the High Street. However following expected changes in sea level rise. Where proposals come forward within the Town Centre these will need to meet the flood risk requirements of the NPPF and the latest NPPG. Applicants will be advised to use the latest PfSH SFRA (2022) which takes into account the latest climate change allowances as a starting point for site-specific FRAs.

HASLAR PENINSULA

POLICY SS4: BLOCKHOUSE AND HASLAR



Gosport Borough Local Plan 2038, (Regulation 18 consultation draft)

Background

- 4.127 Blockhouse and Haslar Gunboat Sheds forms a significant part of the wider Harbour Regeneration Area. Blockhouse in this policy refers to the area immediately north east of Royal Haslar Hospital (Policy SS6) outside Gosport Waterfront (Policies SS1-SS3) and Fort Blockhouse (Policy SS5). The following environmental constraints have been identified:
- 4.128 The site is located close to the international environmental designations of Portsmouth Harbour SSSI, SPA and Ramsar site and is in close proximity to the G64 & G41 Low Use sites, G45 SPA site and G66 Candidate Site under the Solent Waders and Brent Goose Strategy (2020).
- 4.129 The Haslar Gunboat Sheds part of the draft allocation lies to the north east of Haslar Lake and to the north west of Stoke Lake forming part of Portsmouth Harbour SPA, SSSI and Ramsar site. To the east of the site lies Haslar Marina.

4.130 Draft policy SS4 permits the following uses:

POLICY SS4: BLOCKHOUSE AND HASLAR GUNBOAT SHEDS

- 1. Regeneration of the Blockhouse, and the Haslar Gunboat Sheds and Traverser area, should protect and enhance its unique heritage assets and waterfront location, and make the best possible use of its land resources to provide a set of accessible mixed-use neighbourhoods. This will be achieved through the following development and planned change.
- 2. Blockhouse as shown on the Policies Map and the supporting Parameters Plan, is allocated for the following mixed-use regeneration:
 - a) Approximately 325 new residential dwellings;
 - b) Strategic open space providing new capacity for flood risk mitigation, childrens play areas and habitats for protected species;
 - c) A mixed-use neighbourhood centre with frontage onto Haslar Road and an off-road bus stop to serve the site;
 - d) Strategic surface vehicular parking area sited south of Haslar Road to support the future viability of employment, leisure, visitor attractions and the future redevelopment of Fort Blockhouse; and
 - e) A network of fully accessible pedestrian and cycle routes.
- 3. The redevelopment of Blockhouse should be in accordance with a Strategic Masterplan to be agreed between the Local Planning Authority and the Site Promoters. The Strategic Masterplan should:
 - a) Reflect the principles set out in the Blockhouse Parameters Plan (below);
 - b) By supplemented by a Design Code which takes account of national design guidance and the Haslar Peninsula Conservation Area Appraisal (March 2007);
 - c) Identify the phasing of development and set out an supporting Infrastructure Delivery Schedule to identify key infrastructure needs and delivery;
 - d) Retain the existing road network and accesses for vehicular access and egress onto the wider road network and not preclude the commercial redevelopment of the adjacent Haslar Gunboat Yard;
 - e) Take account of the potential for a park and ride scheme at

Walpole Car Park adjacent to Gosport Town Centre; and

- f) Suitable mitigation to address the protected Brent geese.
- 4. The Council will positively consider the re-use of the Haslar Gunboat Sheds and Traverser area, for any viable use where it is clearly demonstrated that:
 - a) The significance of heritage assets is sustained and enhanced and is consistent with their long-term conservation;
 - b) The proposed uses would not give rise to significant harm to the amenity of neighbouring residents; and
 - c) The site can be suitably accessed by vehicles, pedestrians and cyclists.
- 5. Support will be given for cultural development proposals which protect and enhance existing facilities, including the Royal Navy Submarine Museum, and provide appropriately designed new cultural and community facilities.
- 6. Flood risk from all sources of flooding must be fully taken into account for both the Blockhouse and the Haslar Gunboat Shed sites through site-specific FRA(s). New development will be safely managed through the application of appropriate mitigation.
- 4.131 Key development outcomes that should be delivered at Blockhouse include:
 - New viable uses for heritage assets consistent with their long-term conservation and enhance their setting;
 - A safeguarded zone at Blockhouse Marina to enable the long-term growth of marine employment and leisure (see Policy SS1);
 - Delivery of approximately 325 new homes that offer the opportunity for all to live in the area;
 - A public realm strategy that delivers an accessible network of pedestrian and cycle routes, and open spaces;
 - Provision of public transport alternatives to the private car;
 - Development compatible with current and future flood risk that provides appropriate mitigation; and
 - Delivery of multifunctional open spaces that provide for public access, flood risk and biodiversity enhancements.
- 4.132 For the Haslar Gunboat Sheds and associated traverse system form part of the Haslar Gunboat Yard. The gunboat sheds are listed Grade I and scheduled and the remaining brick structures, contemporary to the sheds, are curtilage listed. The Council will take a positive approach to proposals for suitable viable uses in which the heritage assets and their setting is sustained and enhanced. This could include commercial uses such as marine employment, leisure uses or

open air sales. Marine employment and related uses could complement uses at the adjacent Gunboat Yard site and the Qinetiq Haslar Marine Technology Park.

4.133 The site may also be appropriate as a heritage attraction benefiting from being in close proximity to other naval heritage attractions in the area. The long-term viability of such an operation would need to be considered and preferably it would be linked to an established attraction in the area or a national charity. The potential for residential use will be limited given the constraints of the site in terms of the building form of the Grade I listed structures, their setting and access arrangements

Strategic Flood Risk Assessment for Blockhouse and Haslar Gunboat Sheds

4.134 The findings of the iSFRA in respect to policy SS4: Blockhouse and Haslar Gunboat Sheds are set out below.

Is the potential allocation site in an area at low risk of flooding?

- 4.135 This allocation is within present day Flood Zones 2 and 3, therefore any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, demonstrating that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall.
- 4.136 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
- 4.137 Future safe access and egress for the site may not be possible during an extreme tidal flood event, therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable roomsalso be set above this level.
- 4.138 Whilst the allocation is for mixed-use including marine employment requiring deep water access, there is still a significant level of residential use proposed at Blockhouse. Therefore prospective developers are encouraged to engage with Borough Council from an early stage to determine whether the proposals constitute EIA development. In these cases, an Environmental Statement will be required in support of any planning application.

4.139 Is there an alternative potential allocation site in an area at low risk of flooding?

There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:

- (i) Rowner and HMS Sultan are located in Flood Zone 1.
- (ii) Daedalus is located in Flood Zone 1.
- (iii) Parts of Gosport Town Centre are located in Flood Zone 1.

- (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
- (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane
 - Land at Wheeler Close; and
 - Land at Whitworth Close.

4.140 **Q:** Are these alternative sites less suitable, taking into account other planning issues?

A: The alternative sites considered are unsuitable for a number of reasons, these are set out below:

Land at Rowner and HMS Sultan (policy SS10)

4.141 Significant areas of land at Rowner have already been brought forward for regeneration. Outline planning permission was granted in April 2009 for a mixed-use proposal. The site has delivered 700 residential units in total and policy SS10: Rowner and HMS Sultan allows for further residential development (unspecified quantum) to come forward to complete the regeneration of Rowner this is a long-term project that would likely extend into the next plan period. As such, the change in the number of residential dwellings is not currently known. There are no residential units proposed on HMS Sultan. The Council's preferred option for that site is to support employment and training and the anticipated disposal for the site is now unlikely to come forward before 2029.

Daedalus (policy SS11)

- 4.142 The Daedalus site is already a successful regeneration area in the adopted Gosport Borough Local Plan 2011-2029. Outline planning permission (planning application: 11/00282/OUT) with all matters reserved except access was granted in January 2016 for the following development:
 - Up to 69,992 sq.m. of commercial floor space in new buildings and reuse of existing buildings (Class B1, B2 and B8 use);
 - Up to 1,075 sq.m. of retail use (Class A1, A2, A3 and/or A4 use);
 - Up to 200 residential units (Class C3 use);
 - Up to 32 units of care accommodation (Class C2 use);
 - Up to 1,839 sq.m. of community use (Class D1 use);
 - Up to 8,320 sq.m. of hotel use (Class C1 use);
 - Up to 2,321 sq.m. of leisure (Class D2 use);
 - Access, parking and landscaping.

- 4.143 To date (2021) subsequent applications have been submitted and approved for the discharge of conditions for this outline consent including additional consents outside the outline application site. As of 31st March 2021 the completion position for 11/00282/OUT is:
 - Dwellings C3: 180 complete with 20 outstanding permissions and 49 outstanding from the Policy LP5 allocation (this will reduce to 20 if the Wykham Hall, Frobisher House application is permitted);
 - Care Units C2: 32 C2 units outstanding and not yet started;
 - Employment floorspace: 69,992 m2 floorspace outstanding from 11/00282/OUT (5,173 m2 has been completed within the extent of 11/00282/OUT however these are separate schemes and do not pertain to the outline permission);
 - Retail floorspace: 1,075 m2 of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m2.
- 4.144 Policy SS11 proposes a further 300 Class C3 and/or C2 residential dwellings on Site B of the strategic site and an additional 35,000m² (gross) employment floorspace as part of a wider heritage-led regeneration scheme.
- 4.145 Gosport Town Centre (Policy SS3) makes provision for a significant number of new homes in the draft plan period both within the High Street and surrounding areas and at Gosport Bus Station. As the Town's principal retail, commercial and service centre, Gosport Town Centre has a number of strengths and weaknesses. The High Street is pedestrianised, level and accessible and there is a range of parking options. However, the range of shops is somewhat limited and does not attract many visitors from outside the Borough. The range of food and drink offers is lacking variety and there are, in common with many High Streets nationally, a number of vacant retail units which has been exacerbated by the economic impact of the political response to the COVID-19 pandemic which has accelerated trends for online shopping. In addition the proximity to the larger centres of Fareham and Portsmouth provides significant competition and associated leakages of retail spend.
- 4.146 Royal Haslar Hospital (Policy SS6) is located in Flood Zone 1 however this already has consent granted in September 2014 for the comprehensive redevelopment and re-use of the site (planning application 12/00591/OUT). The proposed scheme includes a wide range of uses and incorporates medical and care facilities, a hotel (with up to 78 beds), a church, convenience store, health centre, tearoom, restaurant, office and business units, 286 residential units and 244 self-contained retirement units.
- 4.147 The smaller allocations make an important contribution towards meeting the overall planning strategy but are insufficient on their own to meet the regeneration benefits afforded by the Blockhouse and Haslar Gunboat Sheds allocation.

4.148 **Consider Blockhouse and Haslar Gunboat Sheds as a strategic site.** Will the proposed development type(s) be acceptable in this Flood Zone?
It is considered that development proposals in those areas within Flood Zones 2 and 3 will require site-specific FRA in accordance with draft policies D3: Urban Regeneration Areas and D7: Flood Risk and Coastal Erosion. Where residential elements are located within Flood Zone 2, residential development is considered appropriate but would require a FRA. Should other uses classified as 'more vulnerable' that may form part of a submitted planning application would also need to be considered against the Exceptions Test. Uses falling into this category would include, non-residential uses such as health services, nurseries residential care homes etc. The table below sets out the types of uses that could be accommodated on the site and the NPPF vulnerability classification:

Proposed Land – uses	NPPG vulnerability classification
Retail, Leisure and commercial	Less vulnerable
Residential	More vulnerable
Public open space	Water-compatible development

4.149 The less vulnerable uses envisaged on the site would not require the Exception Test to be passed nor would the water-compatible development. The residential elements which fall outside of flood zones 1 and 2 would. A site-specific FRA would be required for those developments within Flood Zones 2 and 3. National Planning Policy Guidance for flooding provides detailed advice on what a site-specific FRA should contain. It is also recommended that applicants undertake pre-application discussions with the Council, Environment Agency and Coastal Partners.

Is the Exception Test satisfied?

4.150 Yes see the section on Meeting the Exception Test.

Are there other potential allocation sites in the same FZ?

4.151 Harbour Regeneration Area - Haslar Peninsula.

This area was largely in Ministry of Defence ownership. There are a number of strategic sites proposed within this location. Significant areas are within Flood Zones 3 against this backdrop there are significant opportunities to deliver substantial regeneration benefits.

4.152 The Haslar Peninsula ('Haslar') is separated from the Waterfront and Town Centre by the saline Haslar Lake and Stoke Lake. Haslar comprises of mostly previously developed land and includes internationally important heritage assets including Haslar Hospital, Haslar Barracks and Fort Blockhouse which taken together with the large range of military sites around Portsmouth Harbour are potentially of international significance.

- 4.153 The Haslar part of the Harbour Regeneration Area includes six Strategic Development Site policies (including policy SS4). The other five locations are:
 - SS5: Fort Blockhouse
 - SS6: Royal Haslar Hospital
 - SS7: Haslar Barracks
 - SS8: The Piggeries
 - SS9: Haslar Marine Technology Park

- 4.154 With the exception of Royal Haslar Hospital which is located in Flood Zone 1 (present day) significant areas of the remaining allocations within the Haslar area are located in Flood Zones 2 and 3.
- 4.155 The Gosport Waterfront (policies SS1 and SS2) and parts of the Gosport Town Centre (policy SS3) draft allocations are also within Flood Zones 2 and 3.

Other Key Considerations

4.156 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 SFRA. A new SFRA is expected to be completed in winter/spring 2022 and will be used to update the information shown for this iSFRA.

Undefended flood hazard (1B)

- 4.157 The majority of the Blockhouse part of the allocation is shown as a 'low' risk as the site is protected by the Haslar Sea Wall. The PfSH SFRA identifies large areas of green or 'low' flood hazard. This is defined in the PfSH SFRA as areas where there may still be shallow flowing water or deep standing water. However interspersed with this are pockets of moderate through to very high risks where there could be extreme danger with deep flowing fast water particularly around the slipway area of the Haslar Gunboat Sheds area of the draft allocation. It is therefore recommended that site-specific FRAs for proposals within these areas should undertake a quantitative assessment of defence standards, defence failure scenarios and overland flood flow.
- 4.158 Coastal defences in the Borough are not within a single ownership. In the case of the Haslar Peninsula coastal defences are in the ownership of the MOD and others landowners. It has not been possible to date to ascertain a comprehensive picture of the condition of coastal defences along this peninsula. Where information about defence data exists, the PfSH SFRA shows that for the Haslar Sea Wall the present day defences appear as being greater than 1:200 year standard. However it is considered more detailed information about the current condition of the sea wall are likely to be needed both as part wider discussions regarding infrastructure and delivery and to inform the preparation of detailed site-specific FRAs. The River Hamble to Portchester Coastal Strategy includes information on the defence assets at this location for 2013 and sets out a preferred long-term strategic option for managing this coastline which is existing defences would need to be maintained over the longer term.

Indicative areas benefiting from flood defences (1C)

4.159 Under the PfSH SFRA model, the site area does not show any areas benefiting from indicative Areas Benefiting from Defences (iABDs). The site does however benefit from having a protected frontage and this is shown within this mapping layer. However, it is only in those areas where sea defences are **consistently** benefiting from the present day 1:200 year SOP along the frontage of the flood cell being assessed will show the hatching of the iABD. The PfSH SFRA acknowledges that the high level strategic modelling and assessment does not take into account the benefit provided by all defences. It is important to note that these are only shown if the entire frontage of a flood cell is connected to a 1:200

year standard, where this may not be the case the areas are not shown even if the majority of it is protected to that standard or above.

- 4.160 This does not imply that any land not shown does not benefit from any defences, just not necessarily to the 1:200 Standard in a continuous block. In the case of Blockhouse and Haslar Gunboat Shed, the Blockhouse part of the draft allocation is shown as having a continuous protected frontage and therefore the PfSH SFRA shows the eastern Sea Wall part of the site and on the northern part of the site adjoining the marina as areas benefiting from iABDs.
- 4.161 However, on the Haslar Gunboat Shed side at the slipway there is no continuous defence in this flood cell and therefore this area (at the slipway) is not shown as an iABD. There may be the potential to identify parts of this area as ABDs if more detailed assessments (beyond the scope of the PfSH SFRA or this assessment) of the defences are undertaken.

Danger to people from breaching (1D)

- 4.162 Map set 1D only provides a guide as to where further detailed breaching may occur and where detailed analysis may be required in site-specific FRAs as part of assessing the residual risk posed by development. Only the potential hazard due to breaching is estimated and the assessment does not consider the probability of occurrence, nor does it identify the most likely locations for a breach. The findings of this assessment should be used as an initial guide and useful information to identify where more detailed breach assessments may be required. In general terms, along the Blockhouse frontage, the mapping shows that along the sea wall there are some areas where if the sea wall were breached there is potential for danger to people from breaching shown as areas for 'danger for some' and 'danger for most'. Proposed development would need to be set back to avoid these areas and would need to be considered further as part of a site-specific FRA.
- 4.163 Along the frontage of the Haslar Gunboat Shed, the danger from breaching mapping layer and the hazard risk mapping layer shows a more extensive risk from potential breaching as the SOP along this part of Haslar Lake particularly around the slipway. It should be noted that in the current work underway for the 2022 PfSH SFRA new breach modelling will be undertaken for the Blockhouse area and this section of the Council's interim work will be reviewed to take account of the latest available information and this will inform a review of this iSFRA for Regulation 19.
- 4.164 In the meantime it is recommended that FRAs for proposals at Blockhouse and Haslar Gunboat Shed should still undertake detailed topographic survey and undertake a quantitative assessment of flood hazard based on more detailed assessments of defence standards, defence failure scenarios and overland conveyance of flood flows.

Other sources of flooding (1F1 series of mapsets)

- 4.165 **Wave overtopping (1F1):** This layer addresses the issue of flood risk from potential wave overtopping. The Haslar peninsula experiences both types of wave energy action. The western boundary alongside Haslar Gunboat Shed and the northern part of Blockhouse are located in the sheltered parts of Portsmouth Harbour and Haslar Lake. The south eastern seaward length of Blockhouse to Royal Haslar Hospital experiences 'medium wave energy' frontage.
- 4.166 The PfSH SFRA recommends that development sites adjacent to 'medium wave energy' coastal frontages take into account the potential risk of wave overtopping and carry out site-specific assessments for this issue. Therefore any site-specific FRAs will need to address this matter. The PfSH SFRA did not show any historical incidences of wave overtopping. However it should be noted that the work on extreme water levels assumed a 'still water' level on which the effects of wave action were added. This is an important caveat because this part of the Borough is on the open coast and although the topography here is high it is possible that additional wave action could cause potential for flooding previous anecdotal evidence suggests this may be the case. There is on-going work through the Southern Coastal Group and SCOPAC to understand overtopping and the impact of bimodal waves and the recent SCOPAC Storm Analysis Study has been published (January 2021³⁵), and therefore site-specific FRAs should also examine this issue as part of a detailed assessment.
- 4.167 **Groundwater flooding (1F2):** The local geology is shown as being of being of 'moderate permeability' with no historical incidences of groundwater flooding. The PfSH SFRA guidance notes specific to Gosport indicate that site-specific FRAs do not need to take into account this form of flooding. It is worth noting however that the EA's MAGIC mapping system³⁶ show this area as falling within a Medium/Medium-High classification (due to its location close to Portsmouth Harbour). The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:
- 4.168 'The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, and hydrogeological and soil properties within a one kilometre square grid.
- 4.169 The potential impact of groundwater pollution is considered using the aquifer designation status which provides an indication of the scale and importance of groundwater for potable water supply and/or in supporting base-flow to rivers, lakes and wetlands.
- 4.170 Groundwater vulnerability to pollution risk classification is defined as:
 - High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.

³⁵ Details of the SCOPAC Storm Analysis Study can be found here: <u>https://southerncoastalgroup-scopac.org.uk/scopac-research/</u>

³⁶ https://magic.defra.gov.uk/MagicMap.aspx

• Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.

• Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits.³⁷

- 4.171 This provides a high level analysis only and may need to be considered in further detail as part of a site-specific FRA for individual planning applications. Preapplication discussions with the Environment Agency and the Local Planning Authority are advised.
- 4.172 Impact of land use change on surface water run-off (1F3): The impact of existing land use change on surface water run-off is shown as being moderate for the whole of the Haslar Gunboat Shed part of the draft allocation. For the Blockhouse, the south western landward section of the site, the impact of land use change on surface water is shown as moderate. However, the top north eastern corner of the allocation this is shown as a 'low' impact whilst a small area of land on the eastern seaward part of the site, the impact of land use change on surface water is shown as having a 'high' impact and this would need to be taken into consideration in the location of new development on-site. Draft policy SS4, identifies opportunities to reconfigure the existing open space on Blockhouse. this could be used to accommodate SuDS as part of a package of flood risk mitigation measures, and would assist with the management of surface water on site, reducing the risk of flooding from surface water.
- 4.173 In addition to the above information, the Council has used the EA's Flood Map for Planning which shows the latest published information for surface water flooding.³⁸ In this location this mapping shows there is a small area of the site on the eastern landward side of the Haslar Gunboat Shed part of the draft allocation where it is shown there is a potential higher risk³⁹ of flooding from surface water but where the depth of water is below 300mm and the velocity is shown for this part of the site as less than 25m/s for this level of risk. The EA surface water maps also show potential from surface water flood risk in a medium risk scenario with water depth between 300 – 900 mm and a velocity of less than 25m/s. The EA surface water map layers do not show the main Blockhouse site within either the 'high risk' or 'medium risk' scenarios. These matters should be addressed in any site-specific FRA.

³⁷ Groundwater vulnerability maps technical summary

Project summary SC040016, Environment Agency, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwater_variability_ summary.pdf

It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's PFSH SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

³⁹ The EA surface water maps are high level maps designed to provide an indication of whether an area may be affected by surface water flooding and to what extent.

There are four levels of flood risk. These are:

[•] High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)

[•] Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30

^(3.3%)

[•] Low - each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%)

[•] Very low - each year, the area has a chance of flooding of less than 1 in 1000 (0.1%) Further information can be found at: https://flood-warning-information.service.gov.uk/long-term-flood-

risk/map?easting=461850&northing=99848&map=SurfaceWater

- 4.174 A more extensive area within the Haslar Gunboat Sheds and within the north eastern built-up quarter of Blockhouse (where the existing accommodation and office blocks are situated) are shown as having a potential for flooding from surface water flooding in a 'low risk' scenario with a flood depth of below 300mm and a velocity of less than 25m/s with the exception of some isolated small pockets within the existing accommodation and office block areas where the velocity of the surface water in this scenario is shown as greater than 0.25m/s'. It is considered that a site-specific FRA(s) should investigate further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council).
- 4.175 In addition, site-specific FRA(s) will need to address the impacts of surface water flooding taking into account the latest Climate Change Allowances including for peak rainfall intensity allowances recently published by the Environment Agency 2021). Further information obtained (July can be from: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances and the Environment Agency's Standing Advice on site-specific Flood Risk in: https://www.gov.uk/guidance/flood-riskapplicants Assessments for assessment-standing-advice
- 4.176 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. The PfSH SFRA identifies substantial areas of 'high' to 'very high' potential susceptible to overland flow. However whilst this is not unusual in urban areas in coastal locations such as Gosport, it is considered to be an issue that would need to be addressed in detail through a site-specific FRA and should consider the impacts and management of flooding due to overland flow.
- 4.177 **Surface water sewer flooding (1F5):** The PfSH SFRA does not show any recorded incidents of sewer flooding in this location, however, because of the scale of development potential under consideration, site-specific FRAs would need to consult Southern Water to investigate the impact of any proposed development on the existing drainage network.
- 4.178 **Present Day Defence Crest Levels (2016):** The equivalent tidal return period of the existing defence crest levels was calculated for the PfSH SFRA by comparing the crest level of the defence/natural ground to the range of extreme sea level return periods for both 2010 and 2115, provided by the Environment Agency at that time. Each length of defence or natural ground defence was then allocated an equivalent surge tide return period. This is the best available information at the present time.
- 4.179 The assessment was based solely on a comparison of the crest/natural ground level with extreme sea levels and does not take account of the following:
 - Defence type.
 - Defence age, condition and residual life.
 - Freeboard allowance built into the design of the defences.
 - The potential for wave overtopping of the defences.

- 4.180 The assessment therefore, does not provided information on the standard of service provided by existing defences.
- 4.181 For the draft allocation area, the PfSH SFRA shows a range in SOP from 1:100 along the Haslar Gunboat Shed to 1:1000 (Haslar Sea Wall) however the longer term maintenance of the Haslar Sea Wall will be a key consideration and detailed investigations will be required to understand the condition and longevity of the existing defence assets particularly along the Haslar Sea Wall and detailed discussions with the Coastal Partners will be required as part of the planning applications process.
- 4.182 The PfSH SFRA has identified a number of important issues which are likely to need further investigation as future development opportunities on the peninsula emerge.
- 4.183 The provision of new flood mitigation measures will be required and the PfSH SFRA recommends that these should be funded by the developer and developers proposing new mitigation measures which solely benefit new development should not call on the public purse as a means to secure funding. In addition defences funded through public resources may only defend to an existing standard that could be unsafe for development. This needs to be considered when looking at the effects of standards of protection in the light of increasing sea level rise. It may be necessary to secure some funding through alternative funding sources.
- 4.184 Proposed development is likely to include the provision of new flood mitigation measures, the PfSH SFRA recommends that these should be funded by the developer and developers proposing new mitigation measures which solely benefit new development should not call on the public purse as a means to secure funding. In addition defences funded through public resources may only defend to an existing standard that could be unsafe for development. This needs to be considered when looking at the effects of standards of protection in the light of increasing sea level rise. It may be necessary to secure some funding through alternative funding sources. Further advice should be sought from the Coastal Partners.
- 4.185 **Climate change implications (for 2115):** The map layers show that as would be expected, the risk of flooding in a higher flood risk zone increases for both Flood Zones 2 and 3 at 2115.
- 4.186 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
- 4.187 As the site is shown to lie within present day (2021) Flood Zones 2 and 3, any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, it will need to undertake an assessment of the residual risk and demonstrate that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall. The Council would

expect new development to remain safe during the design event, which is the 1:200 year event, taking into account the latest climate change allowances.

- 4.188 Given the scale of the proposed development, applicants are encouraged to engage with the Council from an early stage to determine whether the proposals constitute EIA development as part of the recommended pre-application process.
- 4.189 This information will need to be reviewed once the new PfSH SFRA is complete in winter/spring 2022.

Conclusions

4.190 Consider site details and flood risk management requirements. Is the proposed development site likely to be safe and appropriate?

This strategic area satisfies all of the criteria set out in the Exception Test. Through the work on the PfSH SFRA a number of important issues have been identified on this aspect. Site-specific FRAs will need to demonstrate how the following matters can be addressed. These are set out below:

- The Flood Zone(s) within which the proposed development is located;
- The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
- How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
- Safe access and egress routes for the site, including during a potential extreme tidal flood event ⁴⁰;
- The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum - mAOD);
- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures⁴¹, where appropriate, and the preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and GBC Emergency Planners. (The whole site is in an EA Flood Warning Area).

- Keeping valuable items at higher levels

⁴⁰ Future safe access and egress for some areas of the site may not be possible during an extreme tidal flood event, therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable roomsalso be set above this level.

¹ Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:

⁻ Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

⁻ Flood doors and windows;

⁻ Flood barriers

⁻ Concrete floors with damp-proof membranes;

⁻ Airbricks, airbrick covers & vents;

⁻ Water-resistant walls;

Fitting non-return valves to pipes;

⁻ Land and floor level raising.

- 4.191 In conclusion, it is considered the development is considered capable of being made safe in the event of a severe flood event. The whole site was previously allocated in policy LP6: Haslar Peninsula in the Gosport Borough Local Plan 2011-2029 (GBLP); joint working between the Council, the Environment Agency and the Eastern Solent Coastal Partnership (now Coastal Partners), undertook further considerations on flood risk in this area. This resulted in the publication of a Strategic Flood Risk Assessment Technical Report (2014) which was prepared to accompany the Publication (Regulation 19) stage of plan preparation for the GBLP. This document set out in further detail the flood hazard risks for the Regeneration Areas in the adopted GBLP and identifies the preferred strategic and on-site mitigation to manage flood risks in the Regeneration Areas.
- 4.192 It is considered that whilst this work will need to be reviewed following the completion of the PfSH SFRA it still remains relevant for this iSFRA Report; providing further interim guidance on how the Council would expect to see flood risk managed in this location. Further discussions between the Council, the Environment Agency and the Coastal Partners to take account of the new PfSH SFRA will inform a further iteration of this work prior to the publication of the Regulation 19 stage of the draft Local Plan.

The Council's interim preferred approach for managing flood risk at Blockhouse and Haslar Gunboat Sheds

- 4.193 **1.Off-site strategic measures:** The North Solent Shoreline Management Plan's (NSSMP) long-term (100 year) policy for this frontage is 'Hold the Line'. The adopted Coastal Strategy supports the SMP's Hold the Line policy. Developer contributions will be sought to deliver flood risk management measures for this location to an agreed standard of protection.
- 4.194 The proposed development site is located within the overarching North Solent Shoreline Management Plan's (NSSMP) Policy Unit 5b01 (Portsmouth Harbour Entrance to Gilkicker Point).
- 4.195 The NSSMP recommends a policy of 'Hold the Line' (HTL maintain or upgrade the standard of protection offered by the existing coastal defences) for this policy unit throughout Epochs 1-3, for at least the next 100 years.
- 4.196 The site is also located within Strategy Management Zone 2 Upper Quay (Fareham) to Fort Monckton (Gosport) of the River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (RHPS, 2015). The Strategy was developed to provide strategic recommendations for how to implement the policies recommended within the NSSMP.
- 4.197 Within SMZ2, this proposed development site is located with Option Development Unit 20 Haslar Royal Naval Cemetery to Fort Monckton. For ODU 20, the RHPS recommends that the MOD conduct maintenance and repairs to their existing defences, to manage coastal flood and erosion risk to nationally important assets and the wider community. Other capital works are recommended to take place locally, with upgrades to all defences recommended to take place from 2060.

- 4.198 **2. On-site strategic measures:** The developer could improve defences within the boundary of their site and raise the Standard of Protection (SOP). This would reduce the likelihood of breach and wave overtopping. The sea wall is in private ownership and the Borough Council would expect contributions to the maintenance and enhancements to the sea wall to be met by the developer. The River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy identifies the preferred options for management over the longer term.
- 4.199 3. On-site measures: The site should be designed so that flooding would not impact on the buildings. A sequential approach across the site could locate the more vulnerable parts of the development in the areas of lowest flood hazard. If necessary finished floor levels of the site could be raised so that the internals of the building would remain dry during the design and extreme tidal flood events. (The preferred approach to managing risk is to raise land where appropriate the presence of listed buildings may restrict this opportunity to do this here.) Therefore all residential buildings would have a safe place of refuge. A Flood Response Plan would also need to be prepared & accepted by the Local Planning Authority taking advice from the Emergency Planner and Emergency Services looking at conditions experienced in a design extreme flood event.
- 4.200 The developer will need to prepare a comprehensive flood risk management strategy which will manage risk for the allocation site across the plan period whilst all phases of development are being delivered. It would generally be expected to deliver a standard of safety of to keep people and property safer from the 0.5% probability tidal flood event in 2115 (to take account of climate change over the development lifetime) during which the tide level is predicted to reach 4.3m AOD. There is an aspiration that people will be safe from a 0.1% event and if this cannot be achieved, a minimum standard of safety of resisting the 0.5% event. The 0.1% probability tidal flood event in 2115 is 4.5m AOD which does not account for wave action which will be an important consideration at this site.
- 4.201 **4. Adjacent off-site measures:** A number of options for adjacent off site measures could include land raising of access routes. These may be considered less likely to be deliverable. The viability of this has not been assessed at present and will need to be determined. There will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Emergency Planner and Emergency Services.

Preferred Option(s)

- 4.202 The flood risk issues at Blockhouse will be a determining factor on the location, type and scale of uses within the site. Significant parts of the proposed allocation within present day (2021) Flood Zones 2 and 3. Consequently the FRA will need to consider whether it is appropriate to locate particular uses (as defined by the NPPF) on certain parts of the site. An FRA will need to address a number of issues including the following:
 - The condition of the existing Solent seawall defences and the risks of defence failure;
 - Whether the sea defences are adequate to deal with future climatic condition and what improvements would be required;

- The potential of overtopping of sea defences; and
- The capacity of the site to deal with surface water and whether sustainable drainage systems can assist.
- 4.203 Any site-specific FRA will need to assess the residual flood risk behind the defences delivered (i.e. if the defences are breached or overtopped) or risks until a full continuous flood defence is delivered and the development employs appropriate mitigation techniques. The FRA must show if this site is within a Rapid Inundation Zone should the defence breach or be overtopped. Any site-specific FRA will need to assess the residual flood risk behind the defences.
- 4.204 The FRA analysis will clearly demonstrate the potential severity of risk and location of risk to the site including flood depths, velocities and extents; and
- 4.205 Demonstrate how any buildings located within identified areas potentially at risk from wave overtopping of defences, over the full lifetime of the development can remain safe from the risk identified.
- 4.206 In terms of preferred options, a combination of options 2 & 3 are preferred solutions to ensure that the development is safe in this location. The Council would expect the developer to provide these flood risk management measures as part of the development proposals on the site. Although the potential costs associated in delivering option 2 may be high, it is considered that with the engineering options available, and with sufficient funding measures in place, be feasible to protect the site.
- 4.207 Prior to the provision of a continuous sea defence for the allocation site and safe access and exit, there will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Council's Emergency Planning Officer and the Emergency Services.

Implications for the draft Gosport Borough Local Plan 2038

- 4.208 The regeneration of the Harbour Regeneration Area is a major component of delivering the Council's spatial strategy for the Borough. The rationalisation of MoD operations has led to a contraction of local jobs and increased out-commuting to other parts of South Hampshire. If these trends are allowed to continue the situation in Gosport will be exacerbated with significant social, economic and environmental consequences not only for the residents of Gosport but also for others within the sub-region. Consequently in order to achieve the PfSH vision of employment-led regeneration in South Hampshire, the 'city centres first' and the 'regeneration of urban areas' policy initiatives need to be fully delivered.
- 4.209 For Gosport, the regeneration opportunities presented by the Harbour Regeneration Area and other key Regeneration areas for example at Daedalus which includes major employment opportunities, will make a significant contribution towards delivering the strategic vision for the south Hampshire sub region as a whole as well as meeting major planning objectives set out in the draft GBLP 2038. This is set out in further detail in the Meeting the Sequential and Exceptions Tests section of this Report.

- 4.210 Blockhouse and Haslar Gunboat Sheds are situated in Flood Zones 2 and 3 and has been subject to an interim PfSH SFRA. It is considered that this site will contribute towards delivering significant regeneration benefits to re-use a key historic site and capitalise on its maritime heritage and provide much needed homes and commercial and community facilities in a unique heritage setting that are unrivalled anywhere else in the Borough. Consequently using the sequential approach set out in the NPPF there are no alternative sites in the Borough to deliver the quantum and mix of uses. It is necessary to ensure that the site fully accords with the requirements of the Exception Test. The site provides wider sustainability benefits these matters are addressed more fully addressed in the relevant background papers to accompany the draft Local Plan. It is located on previously developed land and that there are no reasonably available sites on previously developed land capable of providing the regeneration benefits associated with this site.
- 4.211 Requirements for a site-specific FRA(s) are set out in the preceding paragraphs. Early discussions with the Council, the Environment Agency and the Coastal Partners regarding development on sites within draft policy SS4: Blockhouse and Haslar Gunboat Sheds will be necessary as part of the planning application process.

POLICY SS5: FORT BLOCKHOUSE

Background

- 4.212 Fort Blockhouse forms a significant part of the wider Harbour Regeneration Area. Blockhouse in this policy refers to the area immediately located at the eastern apex of the Haslar Peninsula overlooking the Solent and the entrance to Portsmouth Harbour and east of Blockhouse and Haslar Gunboat Sheds (policy SS4). The site is surrounded on all sides by the Portsmouth Harbour SPA, SSSI and Ramsar site. Haslar Marina lies adjacent west to the site.
- 4.213 Draft policy SS5 permits the following uses:

POLICY SS5: FORT BLOCKHOUSE

- 1. Fort Blockhouse, as shown on the Policies Map, is allocated for heritage-led regeneration. The Council will positively consider the reuse of Fort Blockhouse's heritage assets for approximately 150 residential dwellings and any viable Main Town Centre use or sui generis uses where it is clearly demonstrated that the significance of heritage assets is sustained and enhanced and is consistent with their long-term conservation.
- 2. The demolition and redevelopment of existing buildings which are not identified as designated heritage assets or undesignated buildings of historic interest in the Haslar Peninsula Conservation Area Appraisal (March 2007) is acceptable in principle. Proposals should however be of the highest quality urban design and architecture and compatible with the unique heritage of the site and its setting.

- 3. In line with the Haslar Peninsula Conservation Area Appraisal (March 2007), Buildings 64 (Clyde Block) and 65 (Clyde Block North) could be demolished to form a formally landscaped public open space upon their footprint and hence provide a new long vista across Portsmouth Harbour to significantly better reveal the historic significance of the adjacent listed North Bastion. Appropriate recording will be necessary.
- 4. Redevelopment proposals should provide integrated and publicly accessible pedestrian routes onto and around the Haslar, Portsmouth Harbour and Solent waterfronts, and high quality landscaped public open spaces within and around the Fort Blockhouse Scheduled Ancient Monument.
- 5. Fort Blockhouse has significant archaeological assets. Further archaeological investigations should be undertaken to inform development proposals and mitigation strategies set out.
- 6. Flood risk from all sources of flooding must be fully taken into account at Fort Blockhouse through site-specific FRA(s). New development will be safely managed through the application of appropriate flood risk mitigation measures.
- 4.214 Key development outcomes that should be delivered at Blockhouse include:
 - High quality mixed-use scheme compatible with Fort Blockhouse's special heritage assets and conservation setting; and
 - New public open space and greater public access to the foreshore.

Strategic Flood Risk Assessment for Fort Blockhouse

- 4.215 The findings of the iSFRA in respect to policy SS5: Fort Blockhouse is set out below.
- 4.216 **Q:** Is the potential allocation site in an area at low risk of flooding? This allocation is within present day (2021) Flood Zones 2 and 3, therefore any development within this area would need to be accompanied by a site-specific FRA(s), appropriate to the scale and nature of the proposed development, demonstrating that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall.
- 4.217 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
- 4.218 Future safe access and egress for the site may not be possible during an extreme tidal flood event therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for

Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms are set above this level.

4.219 The allocation is for mixed-use including residential and Town Centre uses. There is a significant level of residential use proposed at Fort Blockhouse - 150 units. Therefore prospective developers are encouraged to engage with Borough Council from an early stage to determine whether the proposals constitute EIA development. In these cases, an Environmental Statement will be required in support of any planning application.

4.220 Is there an alternative potential allocation site in an area at low risk of flooding?

There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:

- (i) Rowner and HMS Sultan are located in Flood Zone 1.
- (ii) Daedalus is located in Flood Zone 1.
- (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
- (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
- (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane
 - Land at Wheeler Close; and
 - Land at Whitworth Close.

4.221 Are these alternative sites less suitable, taking into account other planning issues?

The alternative sites considered are unsuitable for a number of reasons, these are set out below:

Land at Rowner and HMS Sultan (policy SS10)

4.222 Significant areas of land at Rowner have already been brought forward for regeneration. Outline planning permission was granted in April 2009 for a mixed-use proposal. The site has delivered 700 residential units in total and policy SS10: Rowner and HMS Sultan allows for further residential development (unspecified quantum) to come forward to complete the regeneration of Rowner this is a long-term project that would likely extend into the next plan period. As such, the change in the number of residential dwellings is not currently known. There are no residential units proposed on HMS Sultan. The Council's preferred option for that site is to support employment and training and the anticipated disposal for the site is now unlikely to come forward before 2029

Daedalus (policy SS11)

- 4.223 The Daedalus site is already a successful regeneration area in the adopted Gosport Borough Local Plan 2011-2029. Outline planning permission (planning application: 11/00282/OUT) with all matters reserved except access was granted in January 2016 for the following development:
 - Up to 69,992 sq.m. of commercial floor space in new buildings and reuse of existing buildings (Class B1, B2 and B8 use);
 - Up to 1,075 sq.m. of retail use (Class A1, A2, A3 and/or A4 use);
 - Up to 200 residential units (Class C3 use);
 - Up to 32 units of care accommodation (Class C2 use);
 - Up to 1,839 sq.m. of community use (Class D1 use);
 - Up to 8,320 sq.m. of hotel use (Class C1 use);
 - Up to 2,321 sq.m. of leisure (Class D2 use);
 - Access, parking and landscaping.
- 4.224 To date (2021) subsequent applications have been submitted and approved for the discharge of conditions for this outline consent including additional consents outside the outline application site. As of 31st March 2021 the completion position for 11/00282/OUT is:
 - Dwellings C3: 180 complete with 20 outstanding permissions and 49 outstanding from the Policy LP5 allocation (this will reduce to 20 if the Wykham Hall, Frobisher House application is permitted);
 - Care Units C2: 32 C2 units outstanding and not yet started;
 - Employment floorspace: 69,992 m2 floorspace outstanding from 11/00282/OUT (5,173 m2 has been completed within the extent of 11/00282/OUT however these are separate schemes and do not pertain to the outline permission);
 - Retail floorspace: 1,075 m2 of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m2.
- 4.225 Policy SS11 proposes a further 300 Class C3 and/or C2 residential dwellings on Site B of the strategic site and an additional 35,000m² (gross) employment floorspace as part of a wider heritage-led regeneration scheme.
- 4.226 Gosport Town Centre (Policy SS3) makes provision for a significant number of new homes in the draft plan period both within the High Street and surrounding areas and at Gosport Bus Station. As the Town's principal retail, commercial and service centre, Gosport Town Centre has a number of strengths and weaknesses. The High Street is pedestrianised, level and accessible and there is a range of parking options. However, the range of shops is somewhat limited and does not attract many visitors from outside the Borough. The range of food and drink offers is lacking variety and there are, in common with many High Streets nationally, a number of vacant retail units which has been exacerbated by the economic impact of the political response to the COVID-19 pandemic which has accelerated trends for online shopping. In addition the proximity to the larger centres of Fareham and Portsmouth provides significant competition and associated leakages of retail spend.

- 4.227 Royal Haslar Hospital (Policy SS6) is located in Flood Zone 1 however this already has consent granted in September 2014 for the comprehensive redevelopment and re-use of the site (planning application 12/00591/OUT). The proposed scheme includes a wide range of uses and incorporates medical and care facilities, a hotel (with up to 78 beds), a church, convenience store, health centre, tearoom, restaurant, office and business units, 286 residential units and 244 self-contained retirement units.
- 4.228 The smaller allocations make an important contribution towards meeting the overall planning strategy but are insufficient on their own to meet the regeneration benefits afforded by the Fort Blockhouse allocation.
- 4.229 **Consider Fort Blockhouse as a strategic site.** Will the proposed development type(s) be acceptable in this Flood Zone? It is considered that development proposals in those areas within Flood Zones 2 and 3 will require site-specific FRA in accordance with draft policies D3: Urban Regeneration Areas and D7: Flood Risk and Coastal Erosion. Where residential elements are located within Flood Zone 2, residential development is considered appropriate but would require a FRA. Should other uses classified as 'more vulnerable' that may form art of a submitted planning application would also need to be considered against the Exceptions Test. Uses falling into this category would include, non-residential uses such as health services, nurseries residential care homes etc. The table below sets out the types of uses that could be accommodated on the site and the NPPF vulnerability classification:

Proposed Land – uses	NPPG vulnerability classification
Retail, Leisure and	Less vulnerable
commercial	
Residential	More vulnerable
Public open space	Water-compatible development

4.230 The NPPF states for areas where residential uses are proposed, it will be necessary to meet the requirements of the Exception Test. The less vulnerable uses envisaged on the site would not require the Exception Test to be passed nor would the water-compatible development. The residential elements which fall outside of flood zones 1 and 2 would. A site-specific FRA would be required for those developments within Flood Zones 2 and 3. National Planning Policy Guidance for flooding provides detailed advice on what a site-specific FRA should contain. It is also recommended that applicants undertake pre-application discussions with the Council, EA and Coastal Partners.

4.231 Is the Exception Test satisfied?

Yes see the section on Meeting the Exception Test on page 35.

4.232 Are there other potential allocation sites in the same FZ?

Harbour Regeneration Area - Haslar Peninsula.

This area was largely in Ministry of Defence ownership. There are a number of strategic sites proposed within this location. Significant areas are within Flood Zones 3 against this backdrop there are significant opportunities to deliver substantial regeneration benefits.

- 4.233 The Haslar Peninsula ('Haslar') is separated from the Waterfront and Town Centre by the saline Haslar Lake and Stoke Lake. Haslar comprises of mostly previously developed land and includes internationally important heritage assets including Haslar Hospital, Blockhouse and Haslar Gunboat Sheds and Haslar Barracks which taken together with the large range of military sites around Portsmouth Harbour are potentially of international significance.
- 4.234 The Haslar part of the Harbour Regeneration Area includes six Strategic Development Site policies (including policy SS5). The other five locations are:
 - SS4: Blockhouse and Haslar Gunboat Sheds
 - SS6: Royal Haslar Hospital
 - SS7: Haslar Barracks
 - SS8: The Piggeries
 - SS9: Haslar Marine Technology Park
- 4.235 With the exception of Royal Haslar Hospital which is located in Flood Zone 1 (present day) significant areas of the remaining allocations within the Haslar area are located in Flood Zones 2 and 3.
- 4.236 The Gosport Waterfront (policies SS1 and SS2) and parts of the Gosport Town Centre (policy SS3) draft allocations are also within Flood Zones 2 and 3.

Other Key Considerations

4.237 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 SFRA. A new SFRA is expected to be completed in winter/spring 2022 and will be used to update the information shown for this iSFRA

Undefended flood hazard (1B)

- 4.238 The majority of the Fort Blockhouse allocation is shown as a 'low' risk as the site is protected by the Haslar Sea Wall. Large areas of green or 'low' flood hazard are identified in the mapping. This is defined in the PfSH SFRA as areas where there may still be shallow flowing water or deep standing water. However interspersed with this are pockets of 'moderate' through to 'very high' risks where there could be extreme danger with deep flowing fast water particularly to the west of the Chapel near the North Bastion and to the west of West Demi Bastion and to the northern 'toe' of the site where this is shown as ranging from 'very high' risk to 'moderate' risk, It is therefore recommended that site-specific FRAs for proposals within these areas should undertake a quantitative assessment of defence standards, defence failure scenarios and overland flood flow.
- 4.239 Coastal defences in the Borough are not within a single ownership. In the case of the Fort Blockhouse coastal defences are in the ownership of the MOD. It has not been possible to date to ascertain a comprehensive picture of the condition of coastal defences along this peninsula. Where information about defence data exists, this is shows that for the Haslar Sea Wall the present day defences appear as being greater than 1:200 year standard. However it is considered more detailed information about the conditions of the sea wall are likely to be needed as part of detailed site-specific FRAs. The River Hamble to Portchester Coastal Strategy includes information on the defence assets at this location for

2013 and sets out a preferred long-term strategic option for managing this coastline which is existing defences would need to be maintained over the longer term.

Indicative areas benefiting from flood defences (1C)

- 4.240 Under the PfSH SFRA model, the site area does not show any areas benefiting from indicative Areas Benefiting from Defences (iABDs). The site does however benefit from having a protected frontage and this is shown within the PfSH SFRA layer. However, it is only in those areas where sea defences are **consistently** benefiting from the present day 1:200 year SOP along the frontage of the flood cell being assessed will show the hatching of the iABD. The PfSH SFRA acknowledges that the high level strategic modelling and assessment does not take into account the benefit provided by all defences. It is important to note that these are only shown if the entire frontage of a flood cell is connected to a 1:200 year standard, where this may not be the case the areas are not shown even if the majority of it is protected to that standard or above. This does not imply that any land not shown does not benefit from any defences, just not necessarily to the 1:200 Standard in a continuous block.
- 4.241 In the case of Fort Blockhouse iABDs are shown as having a continuous protected frontage for a significant part of the site, however there are areas of the site where iABDs are not shown, including land to the east of the berthing facilities of the Joint Services Adventurous Sail Training Centre; land to the north west of West Demi Bastion and the north eastern seaward corner at the Portsmouth Harbour mouth. It is important to recognise these may be the potential to identify parts of this area as ABDs if more detailed assessments (beyond the scope of the PfSH SFRA or this assessment) of the defences are undertaken. The PfSH SFRA shows that the whole site benefits from protected frontage however there may be variations in the standards of protection offered by these.

Danger to people from breaching (1D)

- Map (1D) only provides a guide as to where further detailed breaching may occur 4.242 and where detailed analysis may be required in site-specific FRAs as part of assessing the residual risk posed by development. Only the potential hazard due to breaching is estimated and the assessment does not consider the probability of occurrence, nor does it identify the most likely locations for a breach. The findings of this assessment should be used as an initial guide and useful information to identify where more detailed breach assessments may be required. In general terms, along the Blockhouse frontage, the PfSH SFRA shows that the hatched areas along the sea wall the north eastern seaward corner at the Portsmouth Harbour mouth there are some areas where if the sea wall were breached there is potential for danger to people from breaching shown as areas for 'danger for some' and 'danger for most'. Proposed development would need to be set back to avoid these areas and would need to be considered further as part of a site-specific FRA. The new PfSH SFRA will undertake new breach modelling at a number of locations including several points along the Haslar Sea Wall.
- 4.243 Along the Fort Blockhouse frontage, the danger from breaching mapping layer and the hazard risk mapping layer shows a more extensive risk from potential

breaching as the SOP along this part of Haslar Lake particularly around the slipway. It should be noted that in the current work underway for the 2021 PfSH SFRA new breach modelling will be undertaken for the Blockhouse area and this section of the iSFRA will be reviewed to take account of the latest available information.

4.244 In the meantime it is recommended that FRAs for proposals at Fort Blockhouse should still undertake a detailed topographic survey and undertake a quantitative assessment of flood hazard based on more detailed assessments of defence standards, defence failure scenarios and overland conveyance of flood flows.

Other sources of flooding (1F1 series of mapsets)

- 4.245 **Wave overtopping (1F1):** This layer addresses the issue of flood risk from potential wave overtopping. The Haslar peninsula experiences both types of wave energy action. The western boundary of Fort Blockhouse is located in the more sheltered parts of Portsmouth Harbour and Haslar Lake. The eastern seaward length of Blockhouse to Royal Haslar Hospital experiences 'medium wave energy' frontage.
- 4.246 The PfSH SFRA recommends that development sites adjacent to 'medium wave energy' coastal frontages take into account the potential risk of wave overtopping and carry out site-specific assessments for this issue. Therefore any site-specific FRAs will need to address this matter. The PfSH SFRA did not show any historical incidences of wave overtopping, however in the PfSH SFRA, the work on extreme water levels assumed a 'still water' level on which the effects of wave action were added. This is an important caveat because a significant part of the site is on the open coast therefore it is possible that additional wave action through storm surge could cause potential for flooding previous anecdotal evidence suggests this may be the case. There is on-going work through the Southern Coastal Group and SCOPAC to understand overtopping and the impact of bimodal waves and the recent SCOPAC Storm Analysis Study has been published (January 2021⁴²), and therefore site-specific FRAs should also examine this issue as part of a detailed assessment.
- 4.247 **Groundwater flooding (1F2):** The local geology is shown as being of being of 'moderate permeability' with no historical incidences of groundwater flooding. The PfSH SFRA guidance notes specific to Gosport indicate that site-specific FRAs do not need to take into account this form of flooding. It is worth noting however that the EA's MAGIC mapping system⁴³ show this area as falling within a Medium/Medium-High classification (due to its location close to Portsmouth Harbour). The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:
- 4.248 'The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid.

⁴² Details of the SCOPAC Storm Analysis Study can be found here: <u>https://southerncoastalgroup-scopac.org.uk/scopac-research/</u> ⁴³ https://magia.defra.gov.uk/MagiaMap.gopy

⁴³ https://magic.defra.gov.uk/MagicMap.aspx

- 4.249 The potential impact of groundwater pollution is considered using the aquifer designation status which provides an indication of the scale and importance of groundwater for potable water supply and/or in supporting baseflow to rivers, lakes and wetlands.
- 4.250 Groundwater vulnerability to pollution risk classification is defined as:

• High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.

• Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.

• Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits.⁴⁴

- 4.251 This provides a high level analysis only and may need to be considered in further detail as part of a site-specific FRA for individual planning applications. Preapplication discussions with the Environment Agency and the Local Planning Authority are advised.
- 4.252 Impact of land use change on surface water run-off (1F3): The impact of existing land use change on surface water run-off is shown as being a high impact for the whole of the Fort Blockhouse site. This would need to be taken into consideration with regard to future proposals and mitigation required on-site which would also need to be managed in a way that respects the unique heritage assets of the site. Draft policy SS5, identifies opportunities to include open spaces within the site which can contribute towards a package of flood risk mitigation measures, and would assist with the management of surface water on site, reducing the risk of flooding from surface water. However, the specific nature of planned development may influence the type of drainage systems to be implemented. This layer of information provides a high level relative assessment of the magnitude of surface water mitigation required and allows for a comparison between sites with one another with regard to surface water runoff mitigation measures.
- In addition to the above information, the Council has used the EA's Flood Map 4.253 for Planning which shows the latest published information for surface water flooding.⁴⁵ In this location this mapping does not show any part of the site as being susceptible to surface water flooding. However, the surface water map layers (EA 2013) on the Council's GIS, shows there are small areas to the north and west of West Demi Bastion where this may be an issue and therefore it is considered that a site-specific FRA(s) should investigate further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council). In addition to this, site-specific FRA(s) must also take into consideration

⁴⁴ Groundwater vulnerability maps technical summary

Project summary SC040016, Environment Agency, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwater_variability_ summary.pdf

⁴⁵ It should be noted that the Environment Agency have published its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's PFSH SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

the recently published Climate Change Allowances including peak rainfall intensity allowances by the Environment Agency (July 2021). Further information can be obtained from: <u>https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances</u> and the Environment Agency's Standing Advice on site-specific Flood Risk Assessments for applicants in: <u>https://www.gov.uk/guidance/flood-risk-assessment-standing-advice</u>

- 4.254 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. The PfSH SFRA identifies substantial areas of 'high' to 'very high' potential susceptible to overland flow. However whilst this is not unusual in urban areas such as Gosport, it is considered to be an issue that would need to be addressed in detail through a site-specific FRA and should consider the impacts and management of flooding due to overland flow.
- 4.255 **Surface water sewer flooding (1F5):** The PfSH SFRA does not show any recorded incidents of sewer flooding in this location, however, because of the scale of development potential under consideration, site-specific FRA(s) would need to consult Southern Water to investigate the development impact on the existing drainage network.
- 4.256 **Present Day Defence Crest Levels (2016):** The equivalent tidal return period of the existing defence crest levels was calculated by comparing the crest level of the defence/natural ground to the range of extreme sea level return periods for both 2010 and 2115, provided by the Environment Agency at that time. Each length of defence or natural ground defence was then allocated an equivalent surge tide return period. This is the best available information at the present time.
- 4.257 The assessment was based solely on a comparison of the crest/natural ground level with extreme sea levels and does not take account of the following:
 - Defence type.
 - Defence age, condition and residual life.
 - Freeboard allowance built into the design of the defences.
 - The potential for wave overtopping of the defences.
- 4.258 The assessment therefore, does not provided information on the standard of service provided by existing defences.
- 4.259 For the draft allocation area, a range in SOP from 1:200 along the western part of the site adjacent to the Joint Services Adventurous Training Centre to 1:1000 (Haslar Sea Wall) is shown; however the longer term maintenance of the Haslar Sea Wall will be a key consideration and detailed investigations will be required to understand the condition and longevity of the existing defence assets particularly along the Haslar Sea Wall and detailed discussions with the Coastal Partners will be required as part of the planning applications process.
- 4.260 The PfSH SFRA has identified a number of important issues which are likely to need further investigation as future development opportunities on the peninsula emerge.

- 4.261 The provision of new flood mitigation measures will be required and the PfSH SFRA recommends that these should be funded by the developer and developers proposing new mitigation measures which solely benefit new development should not call on the public purse as a means to secure funding. In addition defences funded through public resources may only defend to an existing standard that could be unsafe for development and higher SOP may be required. This needs to be considered when looking at the effects of standards of protection in the light of increasing sea level rise. It may be necessary to secure some funding through alternative funding sources.
- 4.262 The PfSH SFRA has identified a number of important issues which are likely to need further investigation as future development opportunities on the peninsula emerge.
- 4.263 **Climate change implications (for 2115):** The map layers show that as would be expected, the risk of flooding in a higher flood risk zone increases for both Flood Zones 2 and 3 at 2115. With the exception of a small amount of land to the west of West Demi Bastion and a small area of land on the seaward side of the site, the remainder of the site is within Flood Zone 3 at 2115.
- 4.264 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115. This will be revised in accordance with the findings of the new sub regional SFRA which takes into account the latest climate change allowances.
- 4.265 As the site is shown to lie within present day Flood Zones 2 and 3, any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, it will need to undertake an assessment of the residual risk and demonstrate that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall. The Council would expect new development to remain safe during the design event, which is the 1:200 year event, taking into account the latest climate change allowances.
- 4.266 Given the scale of the proposed development, applicants are encouraged to engage with the Council from an early stage to determine whether the proposals constitute EIA development as part of the recommended pre-application process.
- 4.267 This information will need to be reviewed once the new PfSH SFRA is complete in winter/spring 2022.

Conclusions

- 4.268 **Q:** Consider site details and flood risk management requirements. Is the proposed development site likely to be safe and appropriate?
 - A: This strategic site satisfies all of the criteria set out in the Exception Test. Through the work on the PfSH SFRA a number of important issues have

been identified on this aspect. Site-specific FRAs will need to demonstrate how the following matters can be addressed. These are set out below:

- The Flood Zone(s) within which the proposed development is located; •
- The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
- How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
- Safe access and egress routes for the site, including during a potential extreme tidal flood event ⁴⁶:
- The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum - mAOD); and
- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures⁴⁷, where appropriate, and the preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and GBC Emergency Planners. (The whole site is in an EA Flood Warning Area).
- 4.269 In conclusion, it is considered the development is considered capable of being made safe in the event of a severe flood event. The whole site was previously allocated in policy LP6: Haslar Peninsula in the Gosport Borough Local Plan 2011-2029 (GBLP); joint working between the Council, the Environment Agency and the Eastern Solent Coastal Partnership (now Coastal Partners), undertook further considerations on flood risk in this area. This resulted in the publication of a Strategic Flood Risk Assessment Technical Report (2014) which was prepared to accompany the Publication (Regulation 19) stage of plan preparation for the GBLP. This document set out in further detail the flood hazard risks for the Regeneration Areas in the adopted GBLP and identifies the preferred strategic and on-site mitigation to manage flood risks in the Regeneration Areas.
- 4.270 It is considered that whilst this work will need to be reviewed following the completion of the PfSH SFRA in winter/spring 2022 it still remains relevant for this iSFRA; providing further interim guidance on how the Council would expect to see flood risk managed in this location, prior to the completion of the new

- Keeping valuable items at higher levels

⁴⁶ Safe access and egress for the whole is unlikely to be possible during an extreme tidal flood event, therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable roomsalso be set above this level. Discussions should take place with the emergency services to determine whether accessibility to the site during an extreme tidal flood event would be possible.

Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:

⁻ Raised electrics and sockets:

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

⁻ Flood doors and windows;

⁻ Flood barriers

⁻ Concrete floors with damp-proof membranes;

⁻ Airbricks, airbrick covers & vents;

⁻ Water-resistant walls;

Fitting non-return valves to pipes;

⁻ Land and floor level raising.

PfSH SFRA. Further discussions between the Council, the Environment Agency and the Coastal Partners to take account of the findings of the new PfSH SFRA will inform a further iteration of this work prior to the publication of the Regulation 19 stage of the draft Local Plan.

The Council's interim preferred approach for managing flood risk at Fort Blockhouse

- 4.271 **1. Off-site strategic measures:** The North Solent Shoreline Management Plan's (NSSMP) long-term (100 year) policy for this frontage is 'Hold the Line'. The adopted Coastal Strategy supports the SMP's Hold the Line policy. However, based on early evidence, any proposed coastal defence schemes are not currently eligible for full government funding therefore developer contributions will be sought to deliver flood risk management measures for this location to an agreed standard of protection.
- 4.272 The proposed development site is located within the overarching North Solent Shoreline Management Plan's (NSSMP) Policy Unit 5b01 (Portsmouth Harbour Entrance to Gilkicker Point). The NSSMP recommends a policy of 'Hold the Line' (HTL - maintain or upgrade the standard of protection offered by the existing coastal defences) for this policy unit throughout Epochs 1-3, for at least the next 100 years.
- 4.273 The site is also located within Strategy Management Zone 2 Upper Quay (Fareham) to Fort Monckton (Gosport) of the River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (RHPS, 2015). The Strategy was developed to provide strategic recommendations for how to implement the policies recommended within the NSSMP.
- 4.274 Within SMZ2, this proposed development site is located with Option Development Unit 20 Haslar Royal Naval Cemetery to Fort Monckton. For ODU 20, the RHPS recommends that the MOD conduct maintenance and repairs to their existing defences, to manage coastal flood and erosion risk to nationally important assets and the wider community. Other capital works are recommended to take place locally, with upgrades to all defences recommended to take place from 2060.
- 4.275 **2. On-site strategic measures:** The developer could improve defences within the boundary of their site and raise the Standard of Protection (SOP) on the western side of the site and on the northern frontage of the site at Portsmouth Harbour. This would reduce the likelihood of breach and wave overtopping. The sea wall is in private ownership and the Borough Council would expect contributions to the maintenance and enhancements to the sea wall to be met by the developer. The River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy identifies the preferred options for management over the longer term.
- 4.276 **3. On-site measures:** The site should be designed so that flooding would not impact on the buildings. A sequential approach across the site could locate the more vulnerable parts of the development in the areas of lowest flood hazard. If necessary finished floor levels of the site could be raised so that the internals of

the building would remain dry during the design and extreme tidal flood events. (The preferred approach to managing risk is to raise land where appropriate the presence of listed buildings may restrict this opportunity to do this here.) Therefore <u>all</u> residential buildings would require a safe place of refuge. A Flood Response Plan would also need to be prepared & accepted by the Local Planning Authority taking advice from the Emergency Planner and Emergency Services looking at conditions experienced in a design extreme flood event.

- 4.277 The developer will need to prepare a comprehensive flood risk management strategy which will manage risk for the allocation site across the plan period whilst all phases of development are being delivered. It would generally be expected to deliver a standard of safety of to keep people and property safer from the 0.5% probability tidal flood event in 2115 (to take account of climate change over the development lifetime) during which the tide level is predicted to reach 4.3m AOD. There is an aspiration that people will be safe from a 0.1% event and if this cannot be achieved, a minimum standard of safety of resisting the 0.5% event. The 0.1% probability tidal flood event in 2115 is 4.5m AOD which does not account for wave action which will be an important consideration at this site.
- 4.278 **4. Adjacent off-site measures:** A number of options for adjacent off site measures could include land raising of access routes. These may be considered less likely to be deliverable. The viability of this has not been assessed at present and will need to be determined. There will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Emergency Planner and Emergency Services.

Preferred Option(s)

- 4.279 The flood risk issues at Fort Blockhouse will be a determining factor on the location, type and scale of uses within the site. Significant parts of the proposed allocation within present day (2021) Flood Zones 2 and 3. Consequently the FRA will need to consider whether it is appropriate to locate particular uses (as defined by the NPPF) on certain parts of the site. A FRA will need to address a number of issues including the following:
 - The condition of the existing Haslar Sea Wall and other defences within the site and the risks of defence failure;
 - Whether the sea defences are adequate to deal with future climatic condition and what improvements would be required;
 - The potential of overtopping of sea defences; and
 - The capacity of the site to deal with surface water and whether sustainable drainage systems can assist.
- 4.280 Any site-specific FRA will need to assess the residual flood risk behind the defences delivered (i.e. if the defences are breached or overtopped) or risks until a full continuous flood defence is delivered and the development employs appropriate mitigation techniques. The FRA must show if this site is within a Rapid Inundation Zone⁴⁸ should the defence breach or be overtopped. Any site-specific FRA will need to assess the residual flood risk behind the defences.

⁴⁸ Rapid Inundation Zones

- 4.281 The FRA analysis will clearly demonstrate the potential severity of risk and location of risk to the site including flood depths, velocities and extents; and
- 4.282 Demonstrate how any buildings located within identified areas potentially at risk from wave overtopping of defences, over the full lifetime of the development can remain safe from the risk identified.
- 4.283 In terms of preferred options, a combination of options 2 & 3 are preferred solutions to ensure that the development is safe in this location. The Council would expect the developer to provide these flood risk management measures as part of the development proposals on the site. Although the potential costs associated in delivering option 2 may be high, it is considered that with the engineering options available, and with sufficient funding measures in place, be feasible to protect the site.
- 4.284 Prior to the provision of a continuous sea defence for the allocation site and safe access and exit, there will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Council's Emergency Planning Officer and the Emergency Services.

Implications for the draft Gosport Borough Local Plan 2038

- 4.270 The regeneration of the Harbour Regeneration Area is a major component of delivering the Council's spatial strategy for the Borough. The rationalisation of MoD operations has led to a contraction of local jobs and increased out-commuting to other parts of South Hampshire. If these trends are allowed to continue the situation in Gosport will be exacerbated with significant social, economic and environmental consequences not only for the residents of Gosport but also for others within the sub region. Consequently in order to achieve the PfSH vision of employment-led regeneration in South Hampshire, the 'city centres first' and the 'regeneration of urban areas' policy initiatives need to be fully delivered.
- 4.271 For Gosport, the regeneration opportunities presented by the Harbour Regeneration Area and other key Regeneration areas for example at Daedalus which includes major employment opportunities, will make a significant contribution towards delivering the strategic vision for the south Hampshire sub region as a whole as well as meeting major planning objectives set out in the draft GBLP 2038. This is set out in further detail in the Meeting the Sequential and Exceptions Tests section of this Report.
- 4.272 Fort Blockhouse is situated in Flood Zones 2 and 3 and has been subject to an iSFRA. It is considered that this site will contribute towards delivering significant regeneration benefits to re-use a key historic site and capitalise on its maritime heritage and provide much needed homes and commercial and community facilities in a unique heritage setting that are unrivalled anywhere else in the

A Rapid Inundation Zone is an area which is at risk of rapid flooding should a flood defence structure be breached or overtopped. The zones at highest risk of rapid inundation are typically located close behind the flood defences. New development should be sited away from existing flood defences except in exceptional circumstances, where a FRA shows how the building and its users will be made safe.

Borough. Consequently using the sequential approach set out in the NPPF there are no alternative sites in the Borough to deliver the quantum and mix of uses. It is necessary to ensure that the site fully accords with the requirements of the Exception Test. The site provides wider sustainability benefits these matters are addressed more fully addressed in the relevant background papers to accompany the draft Local Plan. It is located on previously developed land and that there are no reasonably available sites on previously developed land capable of providing the regeneration benefits associated with this site.

4.273 Requirements for a site-specific FRA(s) are set out in the preceding paragraphs. Early discussions with the Council, the Environment Agency and the Coastal Partners regarding development on sites within draft policy SS5: Fort Blockhouse will be necessary as part of the planning application process.

POLICY SS6: ROYAL HASLAR HOSPITAL Background

- 4.274 The Royal Haslar Hospital closed as a military hospital in 2007 and the NHS ceased operating from the site in July 2009. A planning application for a comprehensive mixed-use development was approved in 2014. This outline consent (Ref: 12/00591/OUT) comprises the demolition and part demolition of a Listed Building and buildings within a Conservation Area and conversion of existing buildings and erection of new buildings to comprise:
 - 286 residential units (Class C3 use);
 - Continuing Care Retirement Community of 60-bed Care Home, communal facilities and 244 self-contained retirement units (Class C2 use);
 - Offices and Business Units (Class B1 use);
 - Health Centre (Class D1 use);
 - Hotel (Class C1 use);
 - Tearooms/Restaurant/Bar (Class A3/A4 use);
 - Convenience Store (Class A1 use); and
 - Church, Public Hall and Heritage Centre (Class D1 use).
- 4.275 This site is part of a strategic re-development within the Harbour Urban Regeneration Area. The site is located immediately north of Portsmouth Harbour SPA, SSSI and Ramsar site. To the north of the proposed development site lies Stoke Lake, and also parts of Portsmouth Harbour SPA, SSSI and Ramsar site. To the east lies Haslar Marina.
- 4.276 The site is located close to the international environmental designations of Portsmouth Harbour SSSI, SPA and Ramsar site. The site is located immediately north of the G64 Low Use site and adjacent to the G62 Candidate Site and G63 Core Area, under the Solent Waders & Brent Goose Strategy (2020). The site is also located within close proximity to the G01 and G31 Core Areas and the G52 SPA Site.

4.277 Draft policy SS6 permits the following uses:

POLICY SS6: ROYAL HASLAR HOSPITAL

- 1. Land at Haslar Hospital, as shown on the Policies Map, is allocated for the following mixed-use development:
 - a) Either:
 - i. Up to 300 residential dwellings (Class C3 use) and a hotel (Class C1); <u>or</u>
 - ii. Up to 360 residential dwellings (Class C3 use).
 - b) Up to 305 residential care units (Class C2 use);
 - c) Medical, health and care facilities including residential care will be the prime uses on this site including the re-use of existing facilities and buildings;
 - d) Other employment uses will be encouraged including the re-use of buildings for small offices and workshops;
 - e) Appropriate leisure and tourism uses;
 - f) Small-scale retail facilities and services to serve the site and the local community.
- 2. Development proposals should address the following design and habitat objectives:
 - a) The Listed Buildings and the Historic Park and Garden are conserved and where appropriate enhanced;
 - b) That public access to the Historic Park and Garden and the Solent frontage is secured; and
 - c) The on-site Haslar Hospital Site of Importance to Nature Conservation (SINC) is appropriately protected and opportunities taken to enhance it.
- 3. Development proposals should be served by a sufficient level of infrastructure including a connection to the sewerage system at an appropriate point of adequate capacity.
- 4. Flood risk from all sources of flooding must be fully taken into account for development proposals at Royal Haslar Hospital through site-specific FRA(s). New development will be safely managed through the application of appropriate flood risk mitigation measures.
- 4.278 Development proposals should be informed by a site-specific Flood Risk Assessment (FRA) and demonstrate, through suitable designs, that the proposed dwellings would be resilient to both current and forecasted flood risk. These designs may result in the ground floor of buildings being free from residential living accommodation and incorporate flood resistance and resilience measures. Proposals should also, in line with national planning guidance, provide a safe access and egress, taking account of all sources of flood risk both present day

and taking into account the latest climate change projections. This should be agreed with the Environment Agency and the Council's Emergency Planning Officer. The site-specific FRA should take into account the mitigation measures identified in more detail in this iSFRA and draft policies D3: Urban Regeneration Areas and D7: Flood Risk and Coastal Erosion.

4.279 The draft Local Plan proposes to include a new publically accessible open space through the conservation and enhancement of the Historic Park and Garden and new accessibility to the Solent facing frontage.

Strategic Flood Risk Assessment for Royal Haslar Hospital

4.280 The findings of the iSFRA in respect to policy SS6: Royal Haslar Hospital is set out below.

4.281 **Q:** Is the potential allocation site in an area at low risk of flooding?

- A significant portion of the site is located within the Environment Agency's present day (2021) Flood Zone 1. The southern and western perimeters of the site, including access and egress routes along Dolphin Road, Clayhall Road and part of Haslar Road, are shown to lie within Flood Zones 2 and 3, therefore may be at risk from a 1 in 200 year to 1 in 1000 year (0.5% to 0.1% annual probability) extreme tidal flood event Whilst it is proposed to locate the public open space within this area which is a water-compatible land-use it is considered that a site-specific FRA to address flooding issues from all sources of flooding would be required as there are areas of Flood Zones 2 and 3 (present day) surrounding the site. Therefore any development within this area would need to be accompanied by a FRA, appropriate to the scale and nature of the proposed development, demonstrating that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall.
- 4.282 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
- 4.283 Future safe access and egress for the site may not be possible during an extreme tidal flood event therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms should be set above this level.

4.284 Is there an alternative potential allocation site in an area at low risk of flooding?

There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:

- (i) Rowner and HMS Sultan are located in Flood Zone 1.
- (ii) Daedalus is located in Flood Zone 1.
- (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
- (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3.

- (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane
 - Land at Wheeler Close; and
 - Land at Whitworth Close.
- 4.285 **Q:** Are these alternative sites less suitable, taking into account other planning issues?

A: The alternative sites considered are unsuitable for a number of reasons, these are set out below:

Land at Rowner and HMS Sultan (policy SS10)

4.286 Significant areas of land at Rowner have already been brought forward for regeneration. Outline planning permission was granted in April 2009 for a mixed-use proposal. The site has delivered 700 residential units in total and policy SS10: Rowner and HMS Sultan allows for further residential development (unspecified quantum) to come forward to complete the regeneration of Rowner this is a long-term project that would likely extend into the next plan period. As such, the change in the number of residential dwellings is not currently known. There are no residential units proposed on HMS Sultan. The Council's preferred option for that site is to support employment and training and the anticipated disposal for the site is now unlikely to come forward before 2029

Daedalus (policy SS11)

- 4.287 The Daedalus site is already a successful regeneration area in the adopted Gosport Borough Local Plan 2011-2029. Outline planning permission (planning application: 11/00282/OUT) with all matters reserved except access was granted in January 2016 for the following development:
 - Up to 69,992 sq.m. of commercial floor space in new buildings and reuse of existing buildings (Class B1, B2 and B8 use);
 - Up to 1,075 sq.m. of retail use (Class A1, A2, A3 and/or A4 use);
 - Up to 200 residential units (Class C3 use);
 - Up to 32 units of care accommodation (Class C2 use);
 - Up to 1,839 sq.m. of community use (Class D1 use);
 - Up to 8,320 sq.m. of hotel use (Class C1 use);
 - Up to 2,321 sq.m. of leisure (Class D2 use);
 - Access, parking and landscaping.
- 4.288 To-date (2021) subsequent applications have been submitted and approved for the discharge of conditions for this outline consent including additional consents outside the outline application site. As of 31st March 2021 the completion position for 11/00282/OUT is:

- Dwellings C3: 180 complete with 20 outstanding permissions and 49 outstanding from the Policy LP5 allocation (this will reduce to 20 if the Wykham Hall, Frobisher House application is permitted);
- Care Units C2: 32 C2 units outstanding and not yet started;
- Employment floorspace: 69,992 m2 floorspace outstanding from 11/00282/OUT (5,173 m2 has been completed within the extent of 11/00282/OUT however these are separate schemes and do not pertain to the outline permission);
- Retail floorspace: 1,075 m2 of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m2.
- Policy SS11 proposes a further 300 Class C3 and/or C2 residential dwellings on Site B of the strategic site and an additional 35,000m² (gross) employment floorspace as part of a wider heritage-led regeneration scheme.
- 4.289 Gosport Town Centre (Policy SS3) makes provision for a significant number of new homes in the draft plan period both within the High Street and surrounding areas and at Gosport Bus Station. As the Town's principal retail, commercial and service centre, Gosport Town Centre has a number of strengths and weaknesses. The High Street is pedestrianised, level and accessible and there is a range of parking options. However, the range of shops is somewhat limited and does not attract many visitors from outside the Borough. The range of food and drink offers is lacking variety and there are, in common with many High Streets nationally, a number of vacant retail units which has been exacerbated by the economic impact of the political response to the COVID-19 pandemic which has accelerated trends for online shopping. In addition the proximity to the larger centres of Fareham and Portsmouth provides significant competition and associated leakages of retail spend.
- 4.290 The smaller allocations make an important contribution towards meeting the overall planning strategy but are insufficient on their own to meet the regeneration benefits afforded by the Gosport Town Centre allocation.

4.291 **Q:** Consider Royal Haslar Hospital as a strategic site. Will the proposed development type(s) be acceptable in this Flood Zone?

- A: The Royal Haslar Hospital site is currently an allocation in the adopted Gosport Borough Local Plan 2011-2029 under policy LP6. The site as part of the wider Haslar Peninsula Regeneration Area was the subject of a PFSH SFRA. Planning permission was granted in September 2014 (12/00591/OUT) and a site-specific FRA formed part of that outline consent.
- 4.292 It is considered that development proposals in those areas within Flood Zones 2 and 3 will require site-specific FRA in accordance with draft policies D3: Urban Regeneration Areas and D7: Flood Risk and Coastal Erosion. Where residential elements are located within Flood Zone 2, residential development is considered appropriate but would require a FRA. Should other uses classified as 'more vulnerable' that may form part of a submitted planning application would also need to be considered against the Exceptions Test if they were located within

Flood Zone 3. The table below sets out the types of uses that could be accommodated on the site and the NPPF vulnerability classification:

Proposed Land – uses	NPPG vulnerability classification
Residential (including residential care)	More vulnerable
Medical, health and care facilities	More vulnerable
Employment, retail, leisure and tourism	Less vulnerable
Public open space	Water-compatible development

4.293 The water-compatible open space envisaged on the site would not require the Exception Test to be passed. The residential element would need to pass the Exception Test. A site-specific FRA would be required because the majority of the site and surrounding area is within Flood Zone 3 at 2115. National Planning Policy Guidance for flooding provides detailed advice on what a site-specific FRA should contain. It is also recommended that applicants undertake pre-application discussions with the Council, Environment Agency and Coastal Partners.

4.294 Is the Exception Test satisfied?

Yes see the section on Meeting the Exception Test on page 35.

4.295 Are there other potential allocation sites in the same FZ?

Harbour Regeneration Area - Haslar Peninsula.

This area was largely in Ministry of Defence ownership. There are a number of strategic sites proposed within this location. Significant areas are within Flood Zones 3 against this backdrop there are significant opportunities to deliver substantial regeneration benefits.

- 4.296 The Haslar Peninsula ('Haslar') is separated from the Waterfront and Town Centre by the saline Haslar Lake and Stoke Lake. Haslar comprises of mostly previously developed land and includes internationally important heritage assets including: the Haslar Gunboat Sheds, Royal Haslar Hospital, Haslar Barracks and Fort Blockhouse which taken together with the large range of military sites around Portsmouth Harbour are potentially of international significance.
 - 4.297 The Haslar part of the Harbour Regeneration Area includes six Strategic Development Site policies (including policy SS6). The other five locations are:
 - SS4: Blockhouse and Haslar Gunboat Sheds
 - SS5: Fort Blockhouse
 - SS7: Haslar Barracks
 - SS8: The Piggeries
 - SS9: Haslar Marine Technology Park
 - 4.298 Of these sites, with the exception of Royal Haslar Hospital which is mainly located in Flood Zone 1 (present day 2021) significant area of the remaining allocations within the Haslar area are located in Flood Zones 2 and 3.

4.299 The Gosport Waterfront part of the Harbour Regeneration Area (policies SS1 and SS2) and parts of the Gosport Town Centre (policy SS3) draft allocations are also within Flood Zones 2 and 3.

Other Key Considerations

4.300 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 SFRA. A new SFRA is expected to be completed in winter/spring 2022 and will be used to update the information shown for this iSFRA.

Undefended flood hazard (1B)

- 4.301 The majority of the site is shown as being outside of the undefended flood hazard in Flood Zones 2 and 3. Where the flood hazard is shown, falls within an area of 'low' risk (shown in green for both Flood Zones 2 and 3 events) and is located at the southern and western edges of the site. However when looking at the Flood Zone undefended hazard the majority of the site would fall within the 'low' risk area; in this context the hazard within Flood Zone 2 the index is based on the potential flood depths that could occur during a 1 in 1,000 year event. There are areas identified as a 'low' hazard across the whole site for Flood Zones 2 and 3 and an area of 'very high' risk immediately adjacent to the Haslar Sea Wall. 'Low risk' is defined in the PfSH SFRA as areas where there may still be shallow flowing water or deep standing water. Areas of 'very high risk' are defined as areas where there could be dangers to most people potential for deep flowing fast water.
- 4.302 This information can be used to guide development towards that part of the site at the lowest risk and to establish a buffer area between the sea wall and the proposed development. It is therefore recommended that site-specific FRAs for proposals within these areas should undertake a quantitative assessment of defence standards, defence failure scenarios and overland flood flow in this location.

Indicative areas benefiting from flood defences (1C)

- 4.303 Under the PfSH SFRA the site area does not show any areas benefiting from indicative Areas Benefiting from Defences (iABDs). The site does however benefit from having a protected frontage and this is shown on map (1C). However, it is only in those areas where sea defences are **consistently** benefiting from the present day 1:200 year SOP along the frontage of the flood cell being assessed will show the hatching of the iABD. The PfSH SFRA acknowledges that the high level strategic modelling and assessment does not take into account the benefit provided by all defences. It is important to note that these are only shown if the entire frontage of a flood cell is connected to a 1:200 year standard, where this may not be the case the areas are not shown even if the majority of it is protected to that standard or above. This does not imply that any land not shown does not benefit from any defences, just not necessarily to the 1:200 Standard in a continuous block.
- 4.304 In the case of Royal Hospital Haslar, the iABDs are not shown. This is because shown in this location on the eastern part of the site adjoining the Haslar Royal Naval Cemetery. Further checking with the Environment Agency's Planning for Rivers and Seas also does not show ABDs in this location. However, there may be the potential to identify parts of this area as ABDs if more detailed

assessments (beyond the scope of the PfSH SFRA (or this assessment) of the defences are undertaken.

4.305 Site-specific FRAs for new proposals at Royal Haslar Hospital as proposed by policy SS6 would need to undertake detailed topographic survey and undertake a quantitative assessment of flood hazard based on more detailed assessments of defence standards, defence failure scenarios and overland conveyance of flood flows.

Other sources of flooding (1F1 series of mapsets)

- 4.306 Wave overtopping (1F1): This layer addresses the issue of flood risk from potential wave overtopping. The Haslar peninsula experiences both types of wave energy action 'medium' and 'low'. The proposed allocation is located adjacent to the boundary of the Haslar Sea Wall which experiences 'medium wave energy'.
- 4.307 The PfSH SFRA recommends that development sites adjacent to 'medium wave energy' coastal frontages take into account the potential risk of wave overtopping and carry out site-specific assessments for this issue. Therefore any site-specific FRAs will need to address this matter. The PfSH SFRA did not show any historical incidences of wave overtopping, however in the PfSH SFRA, the work on extreme water levels assumed a 'still water' level on which the effects of wave action were added. This is an important caveat because a significant part of the site is on the open coast therefore it is possible that additional wave action through storm surge could cause potential for flooding previous anecdotal evidence suggests this may be the case. There is on-going work through the Southern Coastal Group and SCOPAC to understand overtopping and the impact of bimodal waves and the recent SCOPAC Storm Analysis Study has been published (January 2021⁴⁹), and therefore site-specific FRAs should also examine this issue as part of a detailed assessment.
- 4.308 **Groundwater flooding (1F2):** The local geology is shown as being of being of 'moderate permeability' with no historical incidences of groundwater flooding. The PfSH SFRA guidance notes specific to Gosport indicate that site-specific FRAs do not need to take into account this form of flooding. It is worth noting however that the EA's MAGIC mapping system⁵⁰ show this area as falling within a Medium/Medium-High classification (due to its location close to Portsmouth Harbour). The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:
- 4.309 'The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid.
- 4.310 The potential impact of groundwater pollution is considered using the aquifer designation status which provides an indication of the scale and importance of

⁴⁹ Details of the SCOPAC Storm Analysis Study can be found here: <u>https://southerncoastalgroup-scopac.org.uk/scopac-research/</u>

⁵⁰ https://magic.defra.gov.uk/MagicMap.aspx

groundwater for potable water supply and/or in supporting baseflow to rivers, lakes and wetlands.

4.311 Groundwater vulnerability to pollution risk classification is defined as:

• High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.

• Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.

• Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits.⁵¹

- 4.312 This provides a high level analysis only and may need to be considered in further detail as part of a site-specific FRA for individual planning applications. Pre-application discussions with the Environment Agency and the Local Planning Authority are advised.
- 4.313 **Impact of land use change on surface water run-off (1F3):** This layer shows the impact of existing land use change on surface water run-off is shown as being moderate for the whole of the site. There have been some historical incidences of flooding identified by Southern Water at the corner of Clayhall Road and Gilkicker Road and near Waterloo Road. Draft policy SS6, identifies opportunities to retain and improve open space there may be opportunities within the site to include open space as part of a flood risk mitigation package to assist with the management of surface water on site, reducing the risk of flooding from surface water and flood storage.
- 4.314 In addition to the above information, the Council has used the EA's Flood Map for Planning which shows the latest published information for surface water flooding.⁵² In this location this mapping shows there are areas susceptible to surface water flooding along Clayhall Road/Haslar Road at the southern end of the site and within the site, at James Lind Avenue, Admirals Walk, Sir John Richardson Avenue and at the southern end of the site adjoining Dolphin Way.
- 4.315 This mapping incorporates susceptibility to potential surface water flooding from mainly a 'low' risk scenario with some of the 'medium' risk scenario incorporated within this flood outline as explained in the footnote below.⁵³ In terms of the

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwater_variability_ summary.pdf ⁵² It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall

There are four levels of flood risk. These are:

Further information can be found at: <u>https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?easting=461850&northing=99848&map=SurfaceWater</u>

⁵¹ Groundwater vulnerability maps technical summary

Project summary SC040016 , Environment Agency,

⁵² It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's PFSH SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.
⁵³ The EA surface water maps are high level maps designed to provide an indication of whether an area may be affected by surface

⁵³ The EA surface water maps are high level maps designed to provide an indication of whether an area may be affected by surface water flooding and to what extent.

[•] High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)

[•] Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30 (3.3%)

[•] Low - each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%)

[•] Very low - each year, the area has a chance of flooding of less than 1 in 1000 (0.1%)
potential depths of water from surface water flooding, for the 'low' and 'medium' scenarios the depths range between less than 300mm and 300-900mm. In terms of the velocity this for each risk scenario, this is shown as less than 0.25m/s for the 'low' risk scenario but there are some small pockets around the southern part of the site where the open space is envisaged were the velocity is greater than 0.25m/s and for those small areas of land which could fall within a 'high' risk scenario at the southern end of the site (cemetery) and is shown as less than 0.25m/s.

- 4.316 This map layer does not show surface water as a particular issue within the area of land identified for built development. However, it is still considered that a sitespecific FRA(s) should investigate this issue further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council) and will need to address the impacts of surface water flooding taking into account the latest Climate Change Allowances including peak rainfall intensity allowances recently published by the Environment Agency (July 2021). Further information can be obtained from: https://www.gov.uk/guidance/flood-risk-assessmentsclimate-change-allowances and the Environment Agency's Standing Advice on site-specific Flood Risk Assessments for applicants in: https://www.gov.uk/guidance/flood-risk-assessment-standing-advice
- 4.317 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. In terms of Royal Haslar Hospital, the site is shown as being within two categories of risk: 'high' (shown in brown) and 'very high' (shown in red).
- 4.318 The map can be used to identify areas which have a high to very high potential for generating overland flow. However, it is important to note that this information does not show the locations where overland flow may pass through, or pond, and it is not implied that those areas with a 'low potential' for generating overland flow also have a low risk of experiencing flooding due to overland flow. The assessment of flow routes outside of river systems is a complex and detailed process, and such an assessment across the entire PfSH sub-region was beyond the scope of the PfSH SFRA. This provided a high-level sub-regional assessment of the relative potential of areas to generate overland flow, and as such can be used to ensure that sensitive or vulnerable development is not located 'downstream' of areas which may result in high overland flow during intense rainstorms. It may also be of use to those wishing to refine study areas for more detailed assessments of overland flow for other and therefore is considered helpful in this context.
- 4.319 The PfSH SFRA advice considers that for site-specific FRAs for those sites that are found to be within or in the vicinity of these areas, especially if the local topography places the site at a lower elevation than the surrounding land and hence downstream of the source, should consider the impacts and management of flooding due to overland flow.
- 4.320 It is therefore considered to be an issue that should be addressed through a site-specific FRA and should consider the impacts and management of flooding due to overland flow in this case.

- 4.321 **Surface water sewer flooding (1F5):** The PfSH SFRA does not show any recorded incidents of sewer flooding in this location, however, it is considered that site-specific FRAs should consult Southern Water to investigate the impact of new development on the existing drainage network and because there have been historical occurrences of flooding in the locality as described above (see SS8: The Piggeries).
- 4.322 **Present Day Defence Crest Levels (2016):** The equivalent tidal return period of the existing defence crest levels was calculated by comparing the crest level of the defence/natural ground to the range of extreme sea level return periods for both 2010 and 2115, provided by the Environment Agency at that time. Each length of defence or natural ground defence was then allocated an equivalent surge tide return period.
- 4.323 The assessment was based solely on a comparison of the crest/natural ground level with extreme sea levels and does not take account of the following:
 - Defence type.
 - Defence age, condition and residual life.
 - Freeboard allowance built into the design of the defences.
 - The potential for wave overtopping of the defences.
- 4.324 The assessment therefore, does not provided information on the standard of service provided by existing defences.
- 4.325 For the draft allocation site, a SOP is shown as 1:1000 along the seawall for both present day and at 2115. However when applying the 2115 climate change layers, virtually the whole site is covered by Flood Zone 3, therefore the longer term enhancement and maintenance of defences in this location as part of a package of flood risk management measures will be a key consideration. Detailed investigations will be required to understand the condition and longevity of the existing defence assets along the Haslar Sea Wall and discussions with the Council (including the Coastal Partners) will be required as part of the planning application process.
- 4.326 The PfSH SFRA has identified a number of important issues which are likely to need further investigation.
- 4.327 The provision of new flood mitigation measures will be required and the PfSH SFRA recommends that these should be funded by the developer and developers proposing new mitigation measures which solely benefit new development should not call on the public purse as a means to secure funding. In addition defences funded through public resources may only defend to an existing standard that could be unsafe for development. This needs to be considered when looking at the effects of standards of protection in the light of increasing sea level rise. It may be necessary to secure some funding through alternative funding sources.

- 4.328 **Climate change implications (for 2115):** the risk of flooding in a higher flood risk zone increases for both Flood Zones 2 and 3 at 2115.
- 4.329 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
- 4.330 The site are shown to lie within present day (2021) Flood Zones 1, 2 and 3, any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, it will need to undertake an assessment of the residual risk and demonstrate that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall. The Council would expect new development to remain safe during the design event, which is the 1:200 year event, taking into account climate change. This is because climate change information for 2115 shows almost the entire site falling within Flood Zone 3.
- 4.331 Given the scale and form of the proposed development, applicants are encouraged to engage with the Council from an early stage to determine whether the proposals constitute EIA development as part of the recommended pre-application process.
- 4.332 This information will need to be reviewed once the PfSH SFRA is complete in winter/spring 2022.

Conclusions

- 4.333 **Q:** Consider site details and flood risk management requirements. Is the proposed development site likely to be safe and appropriate?
 - A: This strategic area satisfies all of the criteria set out in the Exception Test. Through the work on the PFSH SFRA a number of important issues have been identified on this aspect. Site-specific FRAs will need to demonstrate how the following matters can be addressed. These are set out below:
 - The Flood Zone(s) within which the proposed development is located;
 - The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
 - How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
 - Safe access and egress routes for the site, including during a potential extreme tidal flood event ⁵⁴;
 - The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels

⁴⁴ Future safe access and egress for some areas of the site may not be possible during an extreme tidal flood event, therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms are set above this level.

have been set with these in mind (all levels to be given in metres above ordnance datum - mAOD);

- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures⁵⁵, where appropriate, and the preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and GBC Emergency Planners. (A small part of the site in the south western corner of the site by Clayhall Road and Dolphin Way is in an EA Flood Warning Area).
- 4.334 In conclusion, it is considered the development is considered capable of being made safe in the event of a severe flood event. The whole site was identified through the SHLAA process and will make an important contribution towards meeting the wider regeneration benefits of the Local Plan including meeting much needed housing in the community. This Report sets out the Council's preferred approach for managing flood risk on the site. This will need to be reviewed once the findings of the new PfSH SFRA are complete. Further discussions between the Council, the Environment Agency and the Coastal Partners to take account of the new PfSH SFRA will inform a further iteration of this work prior to the publication of the Regulation 19 stage of the draft Local Plan.

The Council's interim preferred approach for managing flood risk at Royal Haslar Hospital

- 4.335 **1.Off-site strategic measures:** The North Solent Shoreline Management Plan's (NSSMP) long-term (100 year) policy for this frontage is 'Hold the Line'. The adopted Coastal Strategy supports the SMP's Hold the Line policy. However, based on early evidence, any proposed coastal defence schemes are not currently eligible for full government funding therefore developer contributions will be sought to deliver flood risk management measures for this location to an agreed standard of protection.
- 4.336 The proposed development site is located within the overarching North Solent Shoreline Management Plan's (NSSMP) Policy Unit 5b01 (Portsmouth Harbour Entrance to Gilkicker Point).
- 4.337 The NSSMP recommends a policy of 'Hold the Line' (HTL maintain or upgrade the standard of protection offered by the existing coastal defences) for this policy unit throughout Epochs 1-3, for at least the next 100 years.

⁵⁵ Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:

⁻ Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

⁻ Keeping valuable items at higher levels

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

⁻ Flood doors and windows;

⁻ Flood barriers;

⁻ Concrete floors with damp-proof membranes;

⁻ Airbricks, airbrick covers & vents;

⁻ Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising.

- 4.338 The site is also located within Strategy Management Zone 2 Upper Quay (Fareham) to Fort Monckton (Gosport) of the River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (RHPS, 2015). The Strategy was developed to provide strategic recommendations for how to implement the policies recommended within the NSSMP.
- 4.339 Within SMZ2, this proposed development site is located with Option Development Unit 20 Haslar Royal Naval Cemetery to Fort Monckton. For ODU 20, the RHPS recommends that the landowners conduct maintenance and repairs to their existing defences, to manage coastal flood and erosion risk to nationally important assets and the wider community. Other capital works are recommended to take place locally, with upgrades to all defences recommended to take place from 2060. It is considered that notwithstanding the information set out in the RHPS, detailed investigations will be required to understand the current condition and longevity of the existing defence assets along the Haslar Sea Wall.
- 4.340 **2. On-site strategic measures:** The developer could improve defences within the boundary of their site and raise the Standard of Protection (SOP). This would reduce the likelihood of a breach. The Borough Council would expect contributions to the long-term maintenance and enhancements to existing defences to be met by the developer. The River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy identifies the preferred options for management over the longer term.
- 4.341 The site should be designed so that flooding would not impact on the buildings. A sequential approach across the site could locate the more vulnerable parts of the development in the areas of lowest flood hazard. If necessary finished floor levels of the site could be raised so that the internals of the building would remain dry during the design and extreme tidal flood events. Therefore all residential buildings would have a safe place of refuge. A Flood Response Plan would also need to be prepared & accepted by the Local Planning Authority taking advice from the Emergency Planner and Emergency Services looking at conditions experienced in a design extreme flood event.
- 4.342 The developer will need to prepare a comprehensive flood risk management strategy which will manage risk for the allocation site across the plan period whilst all phases of development are being delivered. It would generally be expected to deliver a standard of safety of to keep people and property safer from the 0.5% probability tidal flood event in 2115 (to take account of climate change over the development lifetime) during which the tide level is predicted to reach 4.3m AOD. There is an aspiration that people will be safe from a 0.1% event and if this cannot be achieved, a minimum standard of safety of resisting the 0.5% event. The 0.1% probability tidal flood event in 2115 is 4.5m AOD which does not account for wave action. The proposed open space within the draft allocation will contribute towards the overall package of flood risk management measures to be delivered on-site.
- 4.343 **4. Adjacent off-site measures:** A number of options for adjacent off site measures could include land raising of access routes. These may be considered less likely to be deliverable. The viability of this has not been assessed at present and will need to be determined. There will need to be a robust Flood

Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Emergency Planner and Emergency Services.

4.344 Preferred Option(s)

The flood risk issues at Royal Haslar Hospital will be a determining factor on the location, type and scale of uses within the site. Although the proposed allocation is within present day (2021) Flood Zone 1 at 2115 significant parts of the surrounding areas are in Flood Zones 2 and 3 creating an 'island' effect. A FRA was prepared as part of the outline consent.⁵⁶ Notwithstanding this information it is considered a FRA for new proposals will need to address a number of issues including the following:

- The Flood Zone(s) within which the proposed development is located;
- The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
- How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
- Safe access and egress routes for the site, including during a potential extreme tidal flood event:
- The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum - mAOD);
- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures, where appropriate⁵⁷;
- The preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and the Borough Council's **Emergency Planner; and**
- The capacity of the site to deal with surface water and whether sustainable drainage systems can assist.

⁵⁶ Further information on the FRA accompanying planning application 12/00591/OUT can be found at: https://publicaccess.gosport.gov.uk/online-

applications/applicationDetails.do?keyVal=MFE27OHO02B00&activeTab=summary ⁵⁷ Future safe access and egress for some areas of the site may not be possible during an extreme tidal flood event, therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms are set above this level.

Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following: - Raised electrics and sockets:

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

⁻ Keeping valuable items at higher levels

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

⁻ Flood doors and windows; - Flood barriers

⁻ Concrete floors with damp-proof membranes;

⁻ Airbricks, airbrick covers & vents;

⁻ Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising

- 4.345 Any site-specific FRA will also need to assess the residual flood risk behind the defences delivered (i.e. if the defences are breached or overtopped) or risks until a full continuous flood defence is delivered and the development employs appropriate mitigation techniques. The FRA must show if this site is within a Rapid Inundation Zone should the defence breach or be overtopped. Any site-specific FRA will need to assess the residual flood risk behind the defences. In particular a FRA should address the following issues in relation to wave overtopping.
- 4.346 The FRA analysis will clearly demonstrate the potential severity of risk and location of risk to the site including flood depths, velocities and extents; and
- 4.347 Demonstrate how any buildings located within identified areas potentially at risk from wave overtopping of defences, over the full lifetime of the development can remain safe from the risk identified.
- 4.348 In terms of preferred options, a combination of options 2 & 3 are preferred solutions to ensure that the development is safe in this location. The Council would expect the developer to provide these flood risk management measures as part of the development proposals on the site. Although the potential costs associated in delivering option 2 may be high, it is considered that with the engineering options available, and with sufficient funding measures in place, be feasible to protect the site. Discussions with the Council (including the Coastal Partners) will be required.
- 4.349 Prior to the provision of a continuous sea defence for the allocation site and safe access and exit, there will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Council's Emergency Planning Officer and the Emergency Services.

Implications for the draft Gosport Borough Local Plan 2038

- 4.350 The regeneration of the Harbour Regeneration Area is a major component of delivering the Council's spatial strategy for the Borough. The rationalisation of MoD operations has led to a contraction of local jobs and increased out-commuting to other parts of South Hampshire. If these trends are allowed to continue the situation in Gosport will be exacerbated with significant social, economic and environmental consequences not only for the residents of Gosport but also for others within the sub region. Consequently in order to achieve the PfSH vision of employment-led regeneration in South Hampshire, the 'city centres first' and the 'regeneration of urban areas' policy initiatives need to be fully delivered.
- 4.351 For Gosport, the regeneration opportunities presented by the Harbour Regeneration Area and other key Regeneration areas for example at Daedalus which includes major employment opportunities, will make a significant contribution towards delivering the strategic vision for the south Hampshire sub region as a whole as well as meeting major planning objectives set out in the draft GBLP 2038. This is set out in further detail in the Meeting the Sequential and Exceptions Tests section of this Report.

- 4.352 The site has been the subject to an iSFRA. It is considered that this site will contribute towards delivering significant regeneration benefits as part of the wider Harbour Regeneration Area. Consequently using the sequential approach set out in the NPPF it is considered that there are no alternative sites in the Borough to deliver the quantum and mix of uses. It is necessary to ensure that the site fully accords with the requirements of the Exception Test. There are no reasonably available sites on previously developed land capable of providing the regeneration benefits associated with this site. The site provides wider sustainability benefits these matters are addressed more fully addressed in the relevant supporting documents to accompany the draft Local Plan.
- 4.353 Requirements for a site-specific FRA(s) are set out in the preceding paragraphs. Early discussions with the Council, the Environment Agency and the Coastal Partners regarding development on sites within draft policy SS6: Royal Haslar Hospital will be necessary as part of the planning application process.

POLICY SS7: HASLAR BARRACKS

Background

- 4.354 The former Haslar Barracks is located within the Harbour Regeneration Area. It is a former MoD military prison and Ministry of Justice Immigration Removal Centre and is currently vacant. It has a number of historic buildings on-site. Haslar Barracks is designated as a Conservation Area. Haslar Barracks is a site of national historic significance due to its rarity by type, and its strategic role in the defence of the wider military establishments in the Gosport and Portsmouth area. It has been identified through the Council's Strategic Housing Land Availability Assessment process and it is considered potentially suitable for residential use. It is proposed to allocate the site for residential units under draft policy SS7: Haslar Barracks.
- 4.355 The following environmental constraints have been identified:

- The site is located close to the international environmental designations of Portsmouth Harbour SSSI, SPA and Ramsar site.

- The site encompasses the G63 Core Area, is located immediately north of the G62 Candidate Site and adjacent to the G64 Low Use site, under the Solent Waders & Brent Goose Strategy (2020). The site is also located within close proximity to the G01 and G31 Core Areas and the G52 SPA Site.

4.356 Draft policy SS7 permits the following uses:

POLICY SS7: HASLAR BARRACKS

- 1. Haslar Barracks is allocated for heritage-led, mixed-use regeneration. The Council will positively consider the re-use of Haslar Barracks heritage assets for residential dwellings and viable commercial use or sui generis uses where it is clearly demonstrated that the significance of heritage assets is sustained and enhanced and is consistent with their long-term conservation. Planning permission will be granted providing this and the following criteria are met:
 - a) Approximately 225 residential dwellings (either Class C2 and/or C3) in a suitable mix of tenures and sizes;
 - b) Residential typologies which address, through their design, current and forecasted flood risk from all sources;
 - c) Provision of safe vehicular and pedestrian access and egress from the site taking flood risk into account
 - d) Publicly accessible pedestrian and cycle routes between Fort Road and the Solent shoreline;
 - e) Removal of all security infrastructure associated with the former use of the site to improve local visual amenity; and
 - f) Suitable mitigation to address the protected Brent geese.
- 2. Ancillary small-scale commercial uses will also be considered appropriate at the Haslar Barracks site.
- 3. Development proposals could in lieu of on-site open space provision provide a commuted sum towards the improvement of the adjacent Fort Road site into a new public park.

- 4.357 Haslar Barracks is an opportunity to provide up to 225 residential dwellings utilising various tenures and typologies. The historic barrack buildings have capacity to be re-used for residential dwellings and some limited commercial uses. The Council's preference is that the barracks are used for sheltered or care accommodation for vulnerable or elderly people or service personnel/veteran accommodation together with associated facilities. However, proposals involving standard market and affordable housing would also be acceptable in principle.
- 4.358 The re-use of heritage assets at Haslar Barracks for residential use will be supported in principle subject to them being sustained and enhanced consistent with their long-term conservation and retention of their historic significance. To improve local visual amenity the redevelopment of Haslar Barracks should include the removal of all permanent modern boundary treatments associated with its most recent use.
- 4.359 The playing fields in the western portion of the site are also considered appropriate for new housing. The Council's preference here is for standard market and affordable housing. However, forms of sheltered or care accommodation for vulnerable or elderly people would also be appropriate as part of a wider mix of Class C2 and C3 housing.
- 4.360 The site offers the potential to provide a new pedestrian and cycle route between Fort Road and the Solent shoreline path. This facility should be incorporated into site layouts to improve permeability and public access.
- 4.361 Development proposals should address flood risk through suitable housing designs. Site promoters should engage early with the Environment Agency (EA) to understand what residential typologies need to include in their design in order to satisfactorily address flood risk. These designs may, for example, result in the ground floor of buildings being free from residential living accommodation on parts of the site.
- 4.362 Gosport is an important location for feeding and roosting Brent geese and wading birds. Under national, and local policy, these special and sensitive internationally important habitats will have continued protection.
- 4.363 As such, it will be necessary to undertake appropriate ecological studies of the Haslar Barracks site and ensure that development does not have a detrimental impact on these protected species and any other features of ecological importance. This includes other habitats in the vicinity such as those areas outside of designated sites known to be of importance for protected species (such as Brent geese and other wading birds).
- 4.364 The existing sports field within the site has been identified as a 'Primary Site' in the latest Solent Waders and Brent Goose Strategy and therefore suitable mitigation will be required. Initial discussions between the landowner, the Council and Natural England have identified potential mitigation for the sports field including the need for the landowners / developers to secure appropriate management of other suitable sites for Brent geese in the vicinity in perpetuity. Potential sites have been identified and are the subject of ongoing discussions.

- 4.365 Small-scale commercial uses including Class E (a), (b), (c) and E(g) (Business) will be acceptable in principle within this part of the site subject to proposals enhancing the setting of heritage assets. There may be scope for associated care facilities with the residential use or indeed training and small workshop provision associated with any veteran provision.
- 4.366 The allocation site is located adjacent to the Council owned Fort Road open space. The Council would be willing to enter into negotiations with site promoters to provide a significant contribution towards improving this open space and its car park in lieu of providing open space within the allocation site in line with Policy LE1 criterion 3(a). The detail of what could be provided on the Fort Road site would be done in conjunction with further consultation with the local community but should include a dedicated cycle and pedestrian route as part of the Solent Way long distance footpath.

Strategic Flood Risk Assessment for Haslar Barracks

4.367 The findings of the iSFRA in respect to policy SS7: Haslar Barracks are set out below.

4.368 Is the potential allocation site in an area at low risk of flooding?

A significant portion of the site, including the entirety of the south of the site, is located within the Environment Agency's present day Flood Zones 2 and 3 and may therefore be at risk from a 1 in 200 year to 1 in 1000 year (0.5% to 0.1% annual probability) extreme tidal flood event. The remainder of the site, including access and egress along Fort Road is located within Flood Zone 1 and considered to be at low risk (less than 1 in 1000 year / 0.1% annual probability) from an extreme tidal flood event. Therefore any development within these areas would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, demonstrating that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall.

- 4.369 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
- 4.370 Future safe access and egress for the site may not be possible during an extreme tidal flood event; therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms are also set above this level.

4.371 Is there an alternative potential allocation site in an area at low risk of flooding?

There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:

- (i) Rowner and HMS Sultan are located in Flood Zone 1.
- (ii) Daedalus is located in Flood Zone 1.
- (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
- (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
- (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane
 - Land at Wheeler Close; and
 - Land at Whitworth Close.

4.372 Are these alternative sites less suitable, taking into account other planning issues?

The alternative sites considered are unsuitable for a number of reasons, these are set out below:

Land at Rowner and HMS Sultan (policy SS10)

4.373 Significant areas of land at Rowner have already been brought forward for regeneration. Outline planning permission was granted in April 2009 for a mixed-use proposal. The site has delivered 700 residential units in total and policy SS10: Rowner and HMS Sultan allows for further residential development (unspecified quantum) to come forward to complete the regeneration of Rowner this is a long-term project that would likely extend into the next plan period. As such, the change in the number of residential dwellings is not currently known. There are no residential units proposed on HMS Sultan. The Council's preferred option for that site is to support employment and training and the anticipated disposal for the site is now unlikely to come forward before 2029

4.374 Daedalus (policy SS11)

The Daedalus site is already a successful regeneration area in the adopted Gosport Borough Local Plan 2011-2029. Outline planning permission (planning application: 11/00282/OUT) with all matters reserved except access was granted in January 2016 for the following development:

• Up to 69,992 sq.m. of commercial floor space in new buildings and reuse of existing buildings (Class B1, B2 and B8 use);

- Up to 1,075 sq.m. of retail use (Class A1, A2, A3 and/or A4 use);
- Up to 200 residential units (Class C3 use);
- Up to 32 units of care accommodation (Class C2 use);
- Up to 1,839 sq.m. of community use (Class D1 use);
- Up to 8,320 sq.m. of hotel use (Class C1 use);
- Up to 2,321 sq.m. of leisure (Class D2 use);
- Access, parking and landscaping.
- 4.375 To date (2021) subsequent applications have been submitted and approved for the discharge of conditions for this outline consent including additional consents outside the outline application site. As of 31st March 2021 the completion position for 11/00282/OUT is:
 - Dwellings C3: 180 complete with 20 outstanding permissions and 49 outstanding from the Policy LP5 allocation (this will reduce to 20 if the Wykham Hall, Frobisher House application is permitted);
 - Care Units C2: 32 C2 units outstanding and not yet started;
 - Employment floorspace: 69,992 m2 floorspace outstanding from 11/00282/OUT (5,173 m2 has been completed within the extent of 11/00282/OUT however these are separate schemes and do not pertain to the outline permission);
 - Retail floorspace: 1,075 m2 of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m2.
- 4.376 Policy SS11 proposes a further 300 Class C3 and/or C2 residential dwellings on Site B of the strategic site and an additional 35,000m² (gross) employment floorspace as part of a wider heritage-led regeneration scheme.
- 4.377 Gosport Town Centre (Policy SS3) makes provision for a significant number of new homes in the draft plan period both within the High Street and surrounding areas and at Gosport Bus Station. As the Town's principal retail, commercial and service centre, Gosport Town Centre has a number of strengths and weaknesses. The High Street is pedestrianised, level and accessible and there is a range of parking options. However, the range of shops is somewhat limited and does not attract many visitors from outside the Borough.

4.378 The range of food and drink offers is lacking variety and there are, in common with many High Streets nationally, a number of vacant retail units which has been exacerbated by the economic impact of the political response to the COVID-19 pandemic which has accelerated trends for online shopping. In addition the proximity to the larger centres of Fareham and Portsmouth provides significant competition and associated leakages of retail spend.

4.379 Royal Haslar Hospital (Policy SS6) is located in Flood Zone 1 however this already has consent granted in September 2014 for the comprehensive redevelopment and re-use of the site (planning application 12/00591/OUT). The proposed scheme includes a wide range of uses and incorporates medical and care facilities, a hotel (with up to 78 beds), a church, convenience store, health centre, tearoom, restaurant, office and business units, 286 residential units and 244 self-contained retirement units.

- 4.380 The smaller allocations make an important contribution towards meeting the overall planning strategy but are insufficient on their own to meet the regeneration benefits afforded by the Haslar Barracks allocation as part of the wider Harbour Regeneration Area.
- 4.381 **Consider Haslar Barracks as a strategic site.** Will the proposed development type(s) be acceptable in this Flood Zone? It is considered that development proposals in those areas within Flood Zones 2 and 3 will require site-specific FRA in accordance with draft policies D3: Urban Regeneration Areas and D7: Flood Risk and Coastal Erosion. Where residential elements are located within Flood Zone 2, residential development is considered appropriate but would require a FRA. Should other uses classified as 'more vulnerable' that may form part of a submitted planning application would also need to be considered against the Exceptions Test if they were located within Flood Zone 3. The table below sets out the types of uses that could be accommodated on the site and the NPPF vulnerability classification:

NPPG vulnerability classification
More vulnerable
Water-compatible development

- 4.382 The less vulnerable uses envisaged on the site would not require the Exception Test to be passed nor would the water-compatible development. The residential elements which fall outside of flood zones 1 and 2 would. A site-specific FRA would be required for those developments within Flood Zones 2 and 3. National Planning Policy Guidance for flooding provides detailed advice on what a site-specific FRA should contain. It is also recommended that applicants undertake pre-application discussions with the Council, Environment Agency and Coastal Partners.
- 4.383 Is the Exception Test satisfied?

Yes see the section on Meeting the Exception Test on page 35.

4.384 Are there other potential allocation sites in the same FZ?

Harbour Regeneration Area - Haslar Peninsula. This area was largely in Ministry of Defence ownership. There are a number of strategic sites proposed within this location. Significant areas are within Flood Zones 3 against this backdrop there are significant opportunities to deliver substantial regeneration benefits.

- 4.385 The Haslar Peninsula ('Haslar') is separated from the Waterfront and Town Centre by the saline Haslar Lake and Stoke Lake. Haslar comprises of mostly previously developed land and includes internationally important heritage assets including Haslar Gunboat Sheds, Royal Haslar Hospital, Haslar Barracks and Fort Blockhouse which taken together with the large range of military sites around Portsmouth Harbour are potentially of international significance.
- 4.386 The Haslar part of the Harbour Regeneration Area includes six Strategic Development Site policies (including policy SS7). The other five locations are:

- SS4: Blockhouse and Haslar Gunboat Sheds
- SS5: Fort Blockhouse
- SS6: Royal Haslar Hospital
- SS8: The Piggeries
- SS9: Haslar Marine Technology Park
- 4.387 Of these sites, with the exception of Royal Haslar Hospital which is located in Flood Zone 1 (present day) significant area of the remaining allocations within the Haslar area are located in Flood Zones 2 and 3.
- 4.388 The Gosport Waterfront (policies SS1 and SS2) and parts of the Gosport Town Centre (policy SS3) draft allocations are also within Flood Zones 2 and 3.

Other Key Considerations

4.389 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 SFRA. A new SFRA is expected to be completed in winter/spring 2022 and will be used to update the information shown for this iSFRA.

Undefended flood hazard (1B)

- 4.390 The majority of the site is shown as being outside of the undefended flood hazard. Where the flood hazard is shown there are areas identified as a 'low' hazard at the north eastern corner of the Barracks and areas of 'low' hazard along the eastern seaward boundary of the site. Land immediately adjacent to the sea wall is shown as having a 'very high risk' shown in red development would therefore need to be sited away from sea wall. 'Low risk' is defined as areas where there may still be shallow flowing water or deep standing water. Areas of 'very high risk' are defined as where there could be extreme danger with deep flowing fast water.
- 4.391 This information can be used to guide development towards that part of the site at the lowest risk. It is therefore recommended that site-specific FRAs for proposals within these areas should undertake a quantitative assessment of defence standards, defence failure scenarios and overland flood flow.
- 4.392 Coastal defences in the Borough are not within a single ownership. In the case of the Haslar Peninsula coastal defences are in the ownership of the Ministry of Defence and others. It has not been possible to date to ascertain a comprehensive picture of the condition of coastal defences along this peninsula. Where information about defence data exists, the PfSH SFRA shows that for the Haslar Sea Wall the present day defences appear as being greater than 1:200 year standard. However it is considered more detailed information about the conditions of the sea wall are likely to be needed as part of detailed site-specific FRAs. The River Hamble to Portchester Coastal Strategy includes information on the defence assets in 2013 at this location and sets out a preferred long-term strategic option for managing this coastline which is existing defences would need to be maintained over the longer term.

Indicative areas benefiting from flood defences (1C)

- 4.393 Under the PfSH SFRA model, the site area does not show any areas benefiting from indicative Areas Benefiting from Defences (iABDs). The site does however benefit from having a protected frontage and this is shown within the PfSH SFRA layer. However, it is only in those areas where sea defences are **consistently** benefiting from the present day 1:200 year SOP along the frontage of the flood cell being assessed will show the hatching of the iABD. The PfSH SFRA acknowledges that the high level strategic modelling and assessment does not take into account the benefit provided by all defences. It is important to note that these are only shown if the entire frontage of a flood cell is connected to a 1:200 year standard, where this may not be the case the areas are not shown even if the majority of it is protected to that standard or above. This does not imply that any land not shown does not benefit from any defences, just not necessarily to the 1:200 Standard in a continuous block.
- 4.394 In the case of Haslar Barracks, iABDs are not shown in this location. Further checking with the Environment Agency's Planning for Rivers and Seas also does not show any ABDs in this location. There may be the potential to identify parts of this area as ABDs if more detailed assessments (beyond the scope of the PfSH SFRA or this assessment) of the defences are undertaken.

Danger to people from breaching (1D)

- 4.395 This map layer only provides a guide as to where further detailed breaching may occur and where detailed analysis may be required in site-specific FRAs as part of assessing the residual risk posed by development. This is a broad high-level assessment and only the potential hazard due to breaching is estimated. The assessment does not consider the probability of occurrence, nor does it identify the most likely locations for a breach. The findings of this assessment should be used as an initial guide only and provides useful information to identify where more detailed breach assessments may be required.
- 4.396 In general terms, along the Haslar Barracks frontage, the PfSH SFRA shows if the sea wall were breached there is potential for danger to people from breaching shown as areas for 'danger for some' and 'danger for most'. The greatest potential risk from deeper, fast flowing water and debris is, as would be expected, come from the closest proximity to any potential breach along the sea wall. The PfSH SFRA map also shows lowest risk (shown in green) where there is potential for shallow flowing water but still with potential for deep standing water in certain locations, dependent on the topography of the site. The map layer also shows there is a potential hazard from moderate (shown in yellow) and low (shown in green) risk at the north eastern corner of the site indicating the potential residual risk should an extreme flood event occur on the eastern side of the peninsula from Stoke Lake. Proposed development would need to be set back to avoid these areas and would need to be considered further as part of a site-specific FRA and flood risk management mitigation measures.
- 4.397 It should be noted that in the current work underway for the new SFRA new breach modelling will be undertaken for the Haslar Sea Wall at a number of location points and this section of the iSFRA will be revised to take account of the latest available information when that work is completed in winter/spring 2022.

4.398 In the meantime it is recommended that FRAs for proposals at Haslar Barracks should still undertake detailed topographic survey and undertake a quantitative assessment of flood hazard based on more detailed assessments of defence standards, defence failure scenarios and overland conveyance of flood flows.

Other sources of flooding (1F1 series of mapsets)

- 4.399 **Wave overtopping (1F1):** This layer addresses the issue of flood risk from potential wave overtopping. The Haslar peninsula experiences both types of wave energy action. The eastern seaward boundary of the site along Haslar Sea Wall experiences 'medium wave energy' frontage.
- 4.400 The PfSH SFRA recommends that development sites adjacent to 'medium wave energy' coastal frontages take into account the potential risk of wave overtopping and carry out site-specific assessments for this issue. Therefore any site-specific FRAs will need to address this matter. The PfSH SFRA did not show any historical incidences of wave overtopping, however in the PfSH SFRA, the work on extreme water levels assumed a 'still water' level on which the effects of wave action were added. This is an important caveat because this part of the Borough is on the open coast and although the topography here is high it is possible that additional wave action could cause potential for flooding previous anecdotal evidence suggests this may be the case. There is on-going work through the Southern Coastal Group and SCOPAC to understand overtopping and the impact of bimodal waves and the recent SCOPAC Storm Analysis Study has been published (January 2021⁵⁸), and therefore site-specific FRAs should also examine this issue as part of a detailed assessment.
- 4.401 **Groundwater flooding (1F2):** The local geology as being of being of 'moderate permeability' with no historical incidences of groundwater flooding. The PfSH SFRA guidance notes specific to Gosport indicate that site-specific FRAs do not need to take into account this form of flooding. It is worth noting however that the EA's MAGIC mapping system⁵⁹ show this area as falling within a Medium/Medium-High classification (due to its location close to Portsmouth Harbour). The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:
- 4.402 The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometer square grid.
- 4.403 The potential impact of groundwater pollution is considered using the aquifer designation status which provides an indication of the scale and importance of groundwater for potable water supply and/or in supporting baseflow to rivers, lakes and wetlands.
- 4.404 Groundwater vulnerability to pollution risk classification is defined as:

⁵⁸ Details of the SCOPAC Storm Analysis Study can be found here: <u>https://southerncoastalgroup-scopac.org.uk/scopac-research/</u>

⁵⁹ https://magic.defra.gov.uk/MagicMap.aspx

• High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.

• Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.

• Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits.⁶⁰

- 4.405 This provides a high level analysis only and may need to be considered in further detail as part of a site-specific FRA for individual planning applications. Preapplication discussions with the Environment Agency and the Local Planning Authority are advised.
- 4.406 Impact of land use change on surface water run-off (1F3): The map layer shows the impact of existing land use change on surface water run-off is shown as being moderate for the whole of the Haslar Barracks site. Draft policy SS7. identifies opportunities to retain and improve open space at the adjacent Fort Road car park part of the site, there may be opportunities within the Haslar Barracks site to include open space as part of a flood risk mitigation package to assist with the management of surface water on site, reducing the risk of flooding from surface water.
- 4.407 In addition to the above information, the Council has used the EA's Flood Map for Planning which shows the latest published information for surface water flooding.⁶¹ In this location this mapping shows there are areas susceptible to surface water flooding along Dolphin Way and in a small part to the north of the built up Barracks part of the site and to the north of the Officers' Quarters (in the southern part of the site) and in the open space to the south. This incorporates susceptibility to potential surface water flooding from all three 'high', 'medium' and 'low' scenarios explained in the footnote below.⁶². In terms of the potential depths of water from surface water flooding, for the 'medium' and 'high' scenarios the depths are low at less than 300mm whilst in the 'low' risk scenario the depths are deeper including 300-900mm. In terms of the velocity this for each risk scenario, this is shown as 0.25m/s for 'medium' and 'high' risk but for the 'low' risk scenario there are small pockets of water in areas to the left of the Stores building and on the former Parade Ground and lawns where this also includes a faster flow of water at more than 0.25m/s.

⁶⁰ Groundwater vulnerability maps technical summary

Project summary SC040016, Environment Agency, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwater_variability_

summary.pdf ⁶¹ It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's PFSH SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

⁶² The EA surface water maps are high level maps designed to provide an indication of whether an area may be affected by surface water flooding and to what extent.

There are four levels of flood risk. These are:

[•] High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)

[•] Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30

^(3.3%)

[•] Low - each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%)

Very low - each year, the area has a chance of flooding of less than 1 in 1000 (0.1%)

Further information can be found at: https://flood-warning-information.service.gov.uk/long-term-floodrisk/map?easting=461850&northing=99848&map=SurfaceWater

- 4.408 Therefore it is considered that a site-specific FRA(s) should investigate this issue further in a site-specific FRA in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council). In addition to this, a site-specific FRA(s) will need to address the impacts of surface water flooding taking into account the latest Climate Change Allowances including peak rainfall recently published by the Environment Agency (July 2021). Further information can be obtained from: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances
- 4.409 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. The map layer identifies substantial areas of 'high' to 'very high' potential susceptible to overland flow. However whilst this is not unusual in urban areas such as Gosport, it is considered to be an issue that would need to be addressed in detail through a site-specific FRA and should consider the impacts and management of flooding due to overland flow.
- 4.410 **Surface water sewer flooding (1F5):** The PfSH SFRA does not show any recorded incidents of sewer flooding in this location, however, because of the scale of development potential under consideration, site-specific FRAs would need to consult Southern Water to investigate the impact of new development on the existing drainage network.
- 4.411 **Present Day Defence Crest Levels (2016):** The equivalent tidal return period of the existing defence crest levels was calculated by comparing the crest level of the defence/natural ground to the range of extreme sea level return periods for both 2010 and 2115, provided by the Environment Agency at that time. Each length of defence or natural ground defence was then allocated an equivalent surge tide return period. This is the best available information at the present time.
- 4.412 The assessment was based solely on a comparison of the crest/natural ground level with extreme sea levels and does not take account of the following:
 - Defence type.
 - Defence age, condition and residual life.
 - Freeboard allowance built into the design of the defences.
 - The potential for wave overtopping of the defences.
- 4.413 The assessment therefore, does not provided information on the standard of service provided by existing defences.
- 4.414 For the draft allocation area, a 1:1000 (Haslar Sea Wall) SOP however the longer term maintenance of the Haslar Sea Wall will be a key consideration and detailed investigations will be required to understand the condition and longevity of the seawall and detailed discussions with the Council and the Coastal Partners will be required as part of the planning applications process.
- 4.415 A number of important issues which are likely to need further investigation as future development opportunities on the peninsula emerge.

- 4.416 The provision of new flood mitigation measures will be required and the PfSH SFRA recommends that these should be funded by the developer and developers proposing new mitigation measures which solely benefit new development should not call on the public purse as a means to secure funding. In addition defences funded through public resources may only defend to an existing standard that could be unsafe for development. This needs to be considered when looking at the effects of standards of protection in the light of increasing sea level rise. It may be necessary to secure some funding through alternative funding sources.
- 4.417 **Climate change implications (for 2115):** The risk of flooding in a higher flood risk zone increases for both Flood Zones 2 and 3 at 2115.
- 4.418 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
- 4.419 As the site is shown to lie within present day (2021) Flood Zones 2 and 3, any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, it will need to undertake an assessment of the residual risk and demonstrate that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall. The Council would expect new development to remain safe during the design event, which is the 1:200 year event, taking into account climate change.
- 4.420 Given the scale of the proposed development, applicants are encouraged to engage with the Council from an early stage to determine whether the proposals constitute EIA development as part of the recommended pre-application process. This information will need to be reviewed once the PfSH SFRA is complete in winter/spring 2022.

Conclusions

4.421 **Consider site details and flood risk management requirements. Is the proposed development site likely to be safe and appropriate?** This strategic area satisfies all of the criteria set out in the Exception Test. Through the work on the iSFRA a number of important issues have been identified on this aspect. Site-specific FRAs will need to demonstrate how the following matters can be addressed. These are set out below:

- The Flood Zone(s) within which the proposed development is located;
- The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
- How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
- Safe access and egress routes for the site, including during a potential extreme tidal flood event ⁶³;
- The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum mAOD);
- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures⁶⁴, where appropriate, and the preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and GBC Emergency Planners. (The north eastern part of the site is in an EA Flood Warning Area).
- 4.422 In conclusion, it is considered the development is considered capable of being made safe in the event of a severe flood event. The whole site was identified through the SHLAA process and will make an important contribution towards meeting the wider regeneration benefits of the Local Plan including meeting much needed housing in the community. This Report sets out the Council's preferred approach for managing flood risk on the site. Further discussions between the Council, the Environment Agency and the Coastal Partners to take account of the new PfSH SFRA and this will inform a further iteration of this work prior to the publication of the Regulation 19 stage of the draft Local Plan.

The Council's interim preferred approach for managing flood risk at Haslar Barracks

4.423 **1. Off-site strategic measures:** The North Solent Shoreline Management Plan's (NSSMP) long-term (100 year) policy for this frontage is 'Hold the Line'. The adopted Coastal Strategy supports the SMP's Hold the Line policy. However, based on early evidence, any proposed coastal defence schemes are not currently eligible for full government funding therefore developer contributions will

- Keeping valuable items at higher levels

- Airbricks, airbrick covers & vents;

⁶³ Future safe access and egress for some areas of the site may not be possible during an extreme tidal flood event; therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms are set above this level.

it is recommended that all habitable rooms are set above this level. ⁶⁴ Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:

⁻ Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

⁻ Flood doors and windows;

⁻ Flood barriers;

⁻ Concrete floors with damp-proof membranes;

⁻ Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising.

be sought to deliver flood risk management measures for this location to an agreed standard of protection.

- 4.424 The proposed development site is located within the overarching North Solent Shoreline Management Plan's (NSSMP) Policy Unit 5b01 (Portsmouth Harbour Entrance to Gilkicker Point).
- 4.425 The NSSMP recommends a policy of 'Hold the Line' (HTL maintain or upgrade the standard of protection offered by the existing coastal defences) for this policy unit throughout Epochs 1-3, for at least the next 100 years.
- 4.426 The site is also located within Strategy Management Zone 2 Upper Quay (Fareham) to Fort Monckton (Gosport) of the River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (RHPS, 2015). The Strategy was developed to provide strategic recommendations for how to implement the policies recommended within the NSSMP.
- 4.427 Within SMZ2, this proposed development site is located with Option Development Unit 20 Haslar Royal Naval Cemetery to Fort Monckton. For ODU 20, the RHPS recommends that the MOD conduct maintenance and repairs to their existing defences, to manage coastal flood and erosion risk to nationally important assets and the wider community. Other capital works are recommended to take place locally, with upgrades to all defences recommended to take place from 2060.
- 4.428 **2. On-site strategic measures:** The developer could improve defences within the boundary of their site and raise the Standard of Protection (SOP). This would reduce the likelihood of breach and wave overtopping. The sea wall is in private ownership and the Borough Council would expect contributions to the maintenance and enhancements to the sea wall to be met by the developer. The River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy identifies the preferred options for management over the longer term.
- 4.429 **3. On-site measures:** The site should be designed so that flooding would not impact on the buildings. A sequential approach across the site could locate the more vulnerable parts of the development in the areas of lowest flood hazard. If necessary finished floor levels of the site could be raised so that the internals of the building would remain dry during the design and extreme tidal flood events. (The preferred approach to managing risk is to raise land where appropriate the presence of listed buildings may restrict this opportunity to do this here.) Therefore all residential buildings would have a safe place of refuge.
- 4.430 A Flood Response Plan would also need to be prepared & accepted by the Local Planning Authority taking advice from the Emergency Planner and Emergency Services looking at conditions experienced in a design extreme flood event.
- 4.431 The developer will need to prepare a comprehensive flood risk management strategy which will manage risk for the allocation site across the plan period whilst all phases of development are being delivered. It would generally be expected to deliver a standard of safety of to keep people and property safer from the 0.5% probability tidal flood event in 2115 (to take account of climate

change over the development lifetime) during which the tide level is predicted to reach 4.3m AOD. There is an aspiration that people will be safe from a 0.1% event and if this cannot be achieved, a minimum standard of safety of resisting the 0.5% event. The 0.1% probability tidal flood event in 2115 is 4.5m AOD which does not account for wave action which will be an important consideration at this site.

4.432 **4. Adjacent off-site measures:** A number of options for adjacent off site measures could include land raising of access routes. These may be considered less likely to be deliverable. The viability of this has not been assessed at present and will need to be determined. There will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Emergency Planner and Emergency Services.

4.433 **Preferred Option(s)**

The flood risk issues at Haslar Barracks will be a determining factor on the location, type and scale of uses within the site. Parts of the proposed allocation within present day (2021) Flood Zones 2 and 3. Consequently the FRA will need to consider whether it is appropriate to locate particular uses (as defined by the NPPF) on certain parts of the site. A FRA will need to address a number of issues including the following:

- The condition of the existing Solent seawall defences and the risks of defence failure;
- Whether the sea defences are adequate to deal with future climatic condition and what improvements would be required;
- The potential of overtopping of sea defences; and
- The capacity of the site to deal with surface water and whether sustainable drainage systems can assist.
- 4.434 Any site-specific FRA will need to assess the residual flood risk behind the defences delivered (i.e. if the defences are breached or overtopped) or risks until a full continuous flood defence is delivered and the development employs appropriate mitigation techniques. The FRA must show if this site is within a Rapid Inundation Zone should the defence breach or be overtopped. Any site-specific FRA will need to assess the residual flood risk behind the defences.
- 4.435 The FRA analysis will clearly demonstrate the potential severity of risk and location of risk to the site including flood depths, velocities and extents; and demonstrates how any buildings located within identified areas potentially at risk from wave overtopping of defences, over the full lifetime of the development can remain safe from the risk identified.
- 4.436 In terms of preferred options, a combination of options 2 & 3 are preferred solutions to ensure that the development is safe in this location. The Council would expect the developer to provide these flood risk management measures as part of the development proposals on the site. Although the potential costs associated in delivering option 2 may be high, it is considered that with the engineering options available, and with sufficient funding measures in place, be feasible to protect the site.

4.437 Prior to the provision of a continuous sea defence for the allocation site and safe access and exit, there will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Council's Emergency Planning Officer and the Emergency Services.

Implications for the draft Gosport Borough Local Plan 2038

- 4.438 The regeneration of the Harbour Regeneration Area is a major component of delivering the Council's spatial strategy for the Borough. The rationalisation of MoD operations has led to a contraction of local jobs and increased out-commuting to other parts of South Hampshire. If these trends are allowed to continue the situation in Gosport will be exacerbated with significant social, economic and environmental consequences not only for the residents of Gosport but also for others within the sub region. Consequently in order to achieve the PfSH vision of employment-led regeneration in South Hampshire, the 'city centres first' and the 'regeneration of urban areas' policy initiatives need to be fully delivered.
- 4.439 For Gosport, the regeneration opportunities presented by the Harbour Regeneration Area and other key Regeneration areas for example at Daedalus which includes major employment opportunities, will make a significant contribution towards delivering the strategic vision for the south Hampshire sub region as a whole as well as meeting major planning objectives set out in the draft GBLP 2038. This is set out in further detail in the Meeting the Sequential and Exceptions Tests section of this Report.
- 4.440 Parts of Haslar Barracks are situated in Flood Zones 2 and 3. The site has been the subject to an iSFRA. It is considered that this site will contribute towards delivering significant regeneration benefits to re-use a key historic site and capitalise on its military heritage and provide much needed homes and appropriate commercial offer consistent with the long-term conservation and unique heritage setting.
- 4.441 Using the sequential approach set out in the NPPF it is considered that there are no alternative sites in the Borough to deliver the quantum and mix of uses. It is necessary to ensure that the site fully accords with the requirements of the Exception Test. It is located on previously developed land and that there are no reasonably available sites on previously developed land capable of providing the regeneration benefits associated with this site. The site provides wider sustainability benefits these matters are addressed more fully addressed in the relevant supporting documents to accompany the draft Local Plan.
- 4.442 Requirements for a site-specific FRA(s) are set out in the preceding paragraphs. Early discussions with the Council, the Environment Agency and the Coastal Partners regarding development on sites within draft policy SS7: Haslar Barracks will be necessary as part of the planning application process.

POLICY SS8: THE PIGGERIES

Background

- 4.443 The Piggeries is a currently undeveloped area at the western end of the Haslar Peninsula. It has capacity for up to 60 dwellings and proposed public open space which should primarily provide public access to the Stoke Lake shoreline.
- 4.444 The following environmental constraints have been identified:

- The site is located immediately south of the international environmental designations of Portsmouth Harbour SSSI, SPA and Ramsar site.

- The site is not shown to lie within the immediate proximity of any additional sites identified under the Solent Waders and Brent Goose Strategy (2020), however is located further north of the G63, G01 and G31 Core Areas, identified by the Strategy.

4.445 Draft policy SS8 permits the following uses:

POLICY SS8: THE PIGGERIES

- 1. Land at the Piggeries is allocated for residential development to provide the following:
 - a) Up to 60 residential dwellings (Class C3 use) in a suitable mix of tenures and sizes;
 - b) Residential typologies which address through their design, current and forecasted flood risk from all relevant sources;
 - c) Provision of safe vehicular and pedestrian access and egress from the site taking flood risk into account; and
 - d) Publicly accessible open space providing suitably landscaped access to the Stoke Lake shoreline from Clayhall Road.
- 4.446 Development proposals should be informed by a site-specific Flood Risk Assessment (FRA) and demonstrate, through suitable designs, that the proposed dwellings would be resilient to both current and forecasted flood risk. These designs may result in the ground floor of buildings being free from residential living accommodation and incorporate flood resistance and resilience measures. Proposals should also, in line with national planning guidance, provide a safe access and egress, taking account of all sources of flood risk both present day and taking into account the latest climate change projections. This should be agreed with the Environment Agency and the Council's Emergency Planning service. The site-specific FRA should take into account the mitigation measures identified in more detail in this iSFRA and draft policies D3: Urban Regeneration Strategy and D7: Flood Risk and Coastal Erosion.
- 4.447 The draft Local Plan proposes to include a new publically accessible open space which would be informal in character and incorporate biodiversity enhancements. The seating/viewing area adjacent to Stoke Lake should be designed to prevent access onto the shoreline in order to protect over-wintering birds it will also contribute towards the flood risk management measures for this site. It is proposed to locate the open space within Flood Zones 2 and 3.

Strategic Flood Risk Assessment for The Piggeries

4.448 The findings of the iSFRA in respect of policy SS8: The Piggeries are set out below.

4.449 Is the potential allocation site in an area at low risk of flooding?

- A significant portion of the north eastern part of the site, is located within the Environment Agency's present day (2021) Flood Zones 2 and 3 and may therefore be at risk from a 1 in 200 year to 1 in 1000 year (0.5% to 0.1% annual probability) extreme tidal flood event. The remainder of the site, including access and egress along Fort Road is located within Flood Zone 1 and considered to be at low risk (less than 1 in 1000 year / 0.1% annual probability) from an extreme tidal flood event. Whilst it is proposed to locate the public open space within this area which is a water-compatible land-use it is considered that a site-specific FRA would be required to address the residential component of the allocation as there are areas of Flood Zones 2 and 3 (present day) surrounding the site. Therefore any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, demonstrating that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall.
- 4.450 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
- 4.451 Future safe access and egress for the site may not be possible during an extreme tidal flood event therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms are set above this level.

4.452 Is there an alternative potential allocation site in an area at low risk of flooding?

There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:

- (i) Rowner and HMS Sultan are located in Flood Zone 1.
- (ii) Daedalus is located in Flood Zone 1.
- (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
- (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
- (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane

- Land at Bridgemary Road
- Land at Rowner Road Service Station
- Land at Montgomery Road
- Land at Heritage Way and Frater Lane
- Land at Wheeler Close; and
- Land at Whitworth Close.

4.453 Are these alternative sites less suitable, taking into account other planning issues?

The alternative sites considered are unsuitable for a number of reasons, these are set out below:

4.454 Land at Rowner and HMS Sultan (policy SS10)

Significant areas of land at Rowner have already been brought forward for regeneration. Outline planning permission was granted in April 2009 for a mixed-use proposal. The site has delivered 700 residential units in total and policy SS10: Rowner and HMS Sultan allows for further residential development (unspecified quantum) to come forward to complete the regeneration of Rowner this is a long-term project that would likely extend into the next plan period. As such, the change in the number of residential dwellings is not currently known. There are no residential units proposed on HMS Sultan. The Council's preferred option for that site is to support employment and training and the anticipated disposal for the site is now unlikely to come forward before 2029

4.455 <u>Daedalus (policy SS11)</u>

The Daedalus site is already a successful regeneration area in the adopted Gosport Borough Local Plan 2011-2029. Outline planning permission (planning application: 11/00282/OUT) with all matters reserved except access was granted in January 2016 for the following development:

- Up to 69,992 sq.m. of commercial floor space in new buildings and reuse of existing buildings (Class B1, B2 and B8 use);
- Up to 1,075 sq.m. of retail use (Class A1, A2, A3 and/or A4 use);
- Up to 200 residential units (Class C3 use);
- Up to 32 units of care accommodation (Class C2 use);
- Up to 1,839 sq.m. of community use (Class D1 use);
- Up to 8,320 sq.m. of hotel use (Class C1 use);
- Up to 2,321 sq.m. of leisure (Class D2 use);
- Access, parking and landscaping.
- 4.456 To date (2021) subsequent applications have been submitted and approved for the discharge of conditions for this outline consent including additional consents outside the outline application site. As of 31st March 2021 the completion position for 11/00282/OUT is:
 - Dwellings C3: 180 complete with 20 outstanding permissions and 49 outstanding from the Policy LP5 allocation (this will reduce to 20 if the Wykham Hall, Frobisher House application is permitted);
 - Care Units C2: 32 C2 units outstanding and not yet started;
 - Employment floorspace: 69,992 m2 floorspace outstanding from 11/00282/OUT (5,173 m2 has been completed within the extent of

11/00282/OUT however these are separate schemes and do not pertain to the outline permission);

- Retail floorspace: 1,075 m2 of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m2.
- 4.457 Policy SS11 proposes a further 300 Class C3 and/or C2 residential dwellings on Site B of the strategic site and an additional 35,000m² (gross) employment floorspace as part of a wider heritage-led regeneration scheme.
- 4.458 Gosport Town Centre (Policy SS3) makes provision for a significant number of new homes in the draft plan period both within the High Street and surrounding areas and at Gosport Bus Station. As the Town's principal retail, commercial and service centre, Gosport Town Centre has a number of strengths and weaknesses. The High Street is pedestrianised, level and accessible and there is a range of parking options. However, the range of shops is somewhat limited and does not attract many visitors from outside the Borough
- 4.459 The range of food and drink offers is lacking variety and there are, in common with many High Streets nationally, a number of vacant retail units which has been exacerbated by the economic impact of the political response to the COVID-19 pandemic which has accelerated trends for online shopping. In addition the proximity to the larger centres of Fareham and Portsmouth provides significant competition and associated leakages of retail spend.
- 4.460 Royal Haslar Hospital (Policy SS6) is located in Flood Zone 1 however this already has consent granted in September 2014 for the comprehensive redevelopment and re-use of the site (planning application 12/00591/OUT). The proposed scheme includes a wide range of uses and incorporates medical and care facilities, a hotel (with up to 78 beds), a church, convenience store, health centre, tearoom, restaurant, office and business units, 286 residential units and 244 self-contained retirement units.
- 4.461 The smaller allocations make an important contribution towards meeting the overall planning strategy but are insufficient on their own to meet the regeneration benefits afforded by the Gosport Town Centre allocation.

4.462 **Consider The Piggeries as a strategic site.** Will the proposed development type(s) be acceptable in this Flood Zone? It is considered that development proposals in those areas within Flood Zones 2 and 3 will require site-specific FRA in accordance with draft policies D3: Urban Regeneration Areas and D7: Flood Risk and Coastal Erosion. Where residential elements are located within Flood Zone 2, residential development is considered appropriate but would require a FRA. Should other uses classified as 'more vulnerable' that may form part of a submitted planning application would also need to be considered against the Exceptions Test if they were located within Flood Zone 3. The table below sets out the types of uses that could be accommodated on the site and the NPPF vulnerability classification:

Proposed Land – uses	NPPG vulnerability classification
Residential	More vulnerable
Public open space	Water-compatible development

4.463 The water-compatible open space envisaged on the site would not require the Exception Test to be passed. The residential element would need to pass the Exception Test. A site-specific FRA would be required because the majority of the site and surrounding area is within Flood Zone 3 at 2115. National Planning Policy Guidance for flooding provides detailed advice on what a site-specific FRA should contain. It is also recommended that applicants undertake pre-application discussions with the Council, Environment Agency and Coastal Partners.

4.464 Is the Exception Test satisfied?

Yes see the section on Meeting the Exception Test on page 35.

4.465 Are there other potential allocation sites in the same FZ?

Harbour Regeneration Area - Haslar Peninsula. This area was largely in Ministry of Defence ownership. There are a number of strategic sites proposed within this location. Significant areas are within Flood Zones 3 against this backdrop there are significant opportunities to deliver substantial regeneration benefits.

- 4.466 The Haslar Peninsula ('Haslar') is separated from the Waterfront and Town Centre by the saline Haslar Lake and Stoke Lake. Haslar comprises of mostly previously developed land and includes internationally important heritage assets including: the Haslar Gunboat Sheds, Royal Haslar Hospital, Haslar Barracks and Fort Blockhouse which taken together with the large range of military sites around Portsmouth Harbour are potentially of international significance.
- 4.467 The Haslar part of the Harbour Regeneration Area includes six Strategic Development Site policies (including policy SS8). The other five locations are:
 - SS4: Blockhouse and Haslar Gunboat Sheds
 - SS5: Fort Blockhouse
 - SS6: Royal Haslar Hospital
 - SS7: Haslar Barracks
 - SS9: Haslar Marine Technology Park
- 4.468 Of these sites, with the exception of Royal Haslar Hospital which is located in Flood Zone 1 (present day 2021) significant area of the remaining allocations within the Haslar area are located in Flood Zones 2 and 3.
- 4.469 The Gosport Waterfront part of the Harbour Regeneration Area (policies SS1 and SS2) and parts of the Gosport Town Centre (policy SS3) draft allocations are also within Flood Zones 2 and 3.

Other Key Considerations

4.470 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 PFSH SFRA. A new SFRA for the PfSH area is due for completion in winter/spring 2022 and will be used to update the information shown for this iSFRA where this applies.

4.471 <u>Undefended flood hazard (1B)</u>

The majority of the site is shown as being outside of the undefended flood hazard at Flood Zone 3 and within the undefended flood hazard within Flood Zone 2. Where the flood hazard is shown, the area identified in draft policy SS8 as suitable for open space falls within an area of 'low' risk (shown in green for both Flood Zones 2 and 3 events). However when looking at the Flood Zone undefended hazard the majority of the site would fall within the 'low' risk area; in this context the hazard within Flood Zone 2 the index is based on the potential flood depths that could occur during a 1 in 1,000 year event.

- 4.472 There are areas identified as a 'low' hazard across the whole site for Flood Zones 2 and 3 and an area of 'high' risk cutting across the site north to south where it is envisaged that the proposed open pace element will be located. The open space area could be used as part of a suitable package of flood risk management measures for the site.
- 4.473 'Low risk' is defined in the as areas where there may still be shallow flowing water or deep standing water. Areas of 'very high risk' are defined as areas where there could be dangers to most people potential for deep flowing fast water. This information can be used to guide development towards that part of the site at the lowest risk. It is therefore recommended that site-specific FRAs for proposals within these areas should undertake a quantitative assessment of defence standards, defence failure scenarios and overland flood flow in this location.
- 4.474 Indicative areas benefiting from flood defences (1C) Under the PfSH SFRA model, the site area does show areas benefiting from indicative Areas Benefiting from Defences (iABDs). The site benefits from having a protected frontage and this is shown within the PfSH SFRA layer. iABDs are shown in this location on the eastern part of the site adjoining the Haslar Royal Naval Cemetery.
- 4.475 It is recommended that FRAs for proposals at The Piggeries should still undertake detailed topographic survey and undertake a quantitative assessment of flood hazard based on more detailed assessments of defence standards, defence failure scenarios and overland conveyance of flood flows.

Other sources of flooding (1F1 series of mapsets)

4.476 **Wave overtopping (1F1):** This layer addresses the issue of flood risk from potential wave overtopping. The Haslar peninsula experiences both types of wave energy action. The eastern seaward boundary of the site along Haslar Sea Wall experiences 'medium wave energy' frontage. The proposed allocation is located adjacent to the more sheltered Stoke Lake which is shown as experiences 'low' wave energy.

- 4.477 **Groundwater flooding (1F2):** The local geology as being of being of 'moderate permeability' with no historical incidences of groundwater flooding. The PfSH SFRA guidance notes specific to Gosport indicate that site-specific FRAs do not need to take into account this form of flooding. It is worth noting however that the EA's MAGIC mapping system⁶⁵ show this area as falling within a Medium/Medium-High classification (due to its location close to Portsmouth Harbour). The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:
- 4.478 'The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid.
- 4.479 The potential impact of groundwater pollution is considered using the aquifer designation status which provides an indication of the scale and importance of groundwater for potable water supply and/or in supporting baseflow to rivers, lakes and wetlands.
- 4.480 Groundwater vulnerability to pollution risk classification is defined as:
 - High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.

• Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.

• Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits.⁶⁶

- 4.481 This provides a high level analysis only and may need to be considered in further detail as part of a site-specific FRA for individual planning applications. Preapplication discussions with the Environment Agency and the Local Planning Authority are advised.
- 4.482 **Impact of land use change on surface water run-off (1F3):** The impact of existing land use change on surface water run-off is shown as being moderate for the whole of the site. There have been some historical incidences of flooding identified by Southern Water at the corner of Clayhall Road and Gilkicker Road and near Waterloo Road. Draft policy SS8, identifies opportunities to retain and improve open space there may be opportunities within the site to include open space as part of a flood risk mitigation package to assist with the management of surface water on site, reducing the risk of flooding from surface water and flood storage.

⁶⁵ <u>https://magic.defra.gov.uk/MagicMap.aspx</u>

⁶⁶ Groundwater vulnerability maps technical summary

Project summary SC040016, Environment Agency,

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwa ter_variability_summary.pdf

- 4.483 In addition to the above information, the Council has used the EA's Flood Map for Planning which shows the latest published information for surface water flooding.⁶⁷ In this location this mapping shows there are areas susceptible to surface water flooding along Clayhall Road/Haslar Road at the southern end of the site and within the site, north of Mabey Close. This mapping incorporates susceptibility to potential surface water flooding from mainly a 'low' risk scenario with some of the 'medium' risk scenario incorporated within this flood outline as explained in the footnote below.⁶⁸ In terms of the potential depths of water from surface water flooding, for the 'low' and 'medium' scenarios the depths range between less than 300mm and 300-900mm. In terms of the velocity this for each risk scenario, this is shown as less than 0.25m/s for the 'low' risk scenario but there are some small pockets around the southern part of the site where the open space is envisaged were the velocity is greater than 0.25m/s and for those small areas of land which could fall within a 'medium' risk at the southern end of the site these are shown as less than 0.25m/s.
- 4.484 This map layer does not show surface water as a particular issue within the area of land identified for built development. However, it is still considered 'that a sitespecific FRA(s) should investigate this issue further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council) and will need to address the impacts of surface water flooding taking into account the latest Climate Change Allowances including peak rainfall intensity allowances recently published by the Environment Agency (July 2021). Further information can be obtained from: https://www.gov.uk/guidance/flood-risk-assessmentsclimate-change-allowances and the Environment Agency's Standing Advice on site-specific Flood Risk Assessments for applicants in: https://www.gov.uk/guidance/flood-risk-assessment-standing-advice
- 4.485 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. In terms of The Piggeries, the PfSH SFRA identifies the site as being within three categories of risk: 'low' (shown in green); 'moderate' (shown in orange) and 'high' (shown in brown).
- 4.486 The map can be used to identify areas which have a high to very high potential for generating overland flow. However, it is important to note that this information does not show the locations where overland flow may pass through, or pond, and it is not implied that those areas with a 'low potential' for generating overland flow also have a low risk of experiencing flooding due to overland flow. The assessment of flow routes outside of river systems is a complex and detailed process, and such an assessment across the entire PfSH sub-region was

• Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30

⁶⁷ It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's PFSH SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

⁶⁸ The EA surface water maps are high level maps designed to provide an indication of whether an area may be affected by surface water flooding and to what extent.

There are four levels of flood risk. These are:

[•] High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)

^(3.3%)

[•] Low - each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%)

[•] Very low - each year, the area has a chance of flooding of less than 1 in 1000 (0.1%) Further information can be found at: <u>https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?easting=461850&northing=99848&map=SurfaceWater</u>

beyond the scope of the PfSH SFRA. This provided a high-level sub-regional assessment of the relative potential of areas to generate overland flow, and as such can be used to ensure that sensitive or vulnerable development is not located 'downstream' of areas which may result in high overland flow during intense rainstorms. It may also be of use to those wishing to refine study areas for more detailed assessments of overland flow for other and therefore is considered helpful in this context.

- 4.487 The PfSH SFRA advice considers that for site-specific FRAs for those sites that are found to be within or in the vicinity of these areas, especially if the local topography places the site at a lower elevation than the surrounding land and hence downstream of the source, should consider the impacts and management of flooding due to overland flow.
- 4.488 It is therefore considered to be an issue that should be addressed through a sitespecific FRA and should consider the impacts and management of flooding due to overland flow in this case.
- 4.489 **Surface water sewer flooding (1F5):** There are no recorded incidents of sewer flooding in this location, however, it is considered that site-specific FRAs should consult Southern Water to investigate the impact of new development on the existing drainage network and because there have been historical occurrences of flooding in the locality as described above.
- 4.490 **Present Day Defence Crest Levels (2016):** The equivalent tidal return period of the existing defence crest levels was calculated by comparing the crest level of the defence/natural ground to the range of extreme sea level return periods for both 2010 and 2115, provided by the Environment Agency at that time. Each length of defence or natural ground defence was then allocated an equivalent surge tide return period. This is the best available information at the present time.
- 4.491 The assessment was based solely on a comparison of the crest/natural ground level with extreme sea levels and does not take account of the following:
 - Defence type.
 - Defence age, condition and residual life.
 - Freeboard allowance built into the design of the defences.
 - The potential for wave overtopping of the defences.
- 4.492 The assessment therefore, does not provided information on the standard of service provided by existing defences. For the draft allocation site, SS8 the a 1:1000 SOP along the seaward frontage along Stoke Lake. In addition to this, the land immediately to the left of the allocation (Haslar RN Cemetery) shows a present day defence crest level of between 1:200 and 1:1,000 SOP⁶⁹. However when applying the 2115 climate change layers, virtually the whole site is covered by Flood Zone 3, therefore the longer term enhancement and maintenance of defences in this location as part of a package of flood risk management measures will be a key consideration. Detailed investigations will be required to understand the condition and longevity of the existing defence assets along

⁶⁹ Further detail can be found in Appendix B: Defence Conditions Assessment (2014) of the River Hamble to Portchester CFERMS

Stoke Lake and discussions with the Council (including the Coastal Partners) will be required as part of the planning application process.

- 4.493 A number of important issues which are likely to need further investigation as future development opportunities on the peninsula emerge.
- 4.494 The provision of new flood mitigation measures will be required and the PfSH SFRA recommends that these should be funded by the developer and developers proposing new mitigation measures which solely benefit new development should not call on the public purse as a means to secure funding. In addition defences funded through public resources may only defend to an existing standard that could be unsafe for development. This needs to be considered when looking at the effects of standards of protection in the light of increasing sea level rise. It may be necessary to secure some funding through alternative funding sources.
- 4.495 **Climate change implications (for 2115):** The risk of flooding in a higher flood risk zone increases for both Flood Zones 2 and 3 at 2115.
- 4.496 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
- 4.497 The site is shown to lie within present day (2021) Flood Zones 1, 2 and 3, any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, it will need to undertake an assessment of the residual risk and demonstrate that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall. The Council would expect new development to remain safe during the design event, which is the 1:200 year event, taking into account climate change. This is because climate change information for 2115 shows almost the entire site falling within Flood Zone 3.
- 4.498 Given the scale and form of the proposed development, applicants are encouraged to engage with the Council from an early stage to determine whether the proposals constitute EIA development as part of the recommended pre-application process.
- 4.499 This information will need to be reviewed once the PfSH SFRA is complete in winter/spring 2022.

Conclusions

4.500 **Consider site details and flood risk management requirements.** Is the proposed development site likely to be safe and appropriate?

This strategic area satisfies all of the criteria set out in the Exception Test. Sitespecific FRAs will need to demonstrate how the following matters can be addressed. These are set out below:

- The Flood Zone(s) within which the proposed development is located;
- The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
- How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
- Safe access and egress routes for the site, including during a potential extreme tidal flood event ⁷⁰;
- The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum mAOD);
- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures⁷¹, where appropriate, and the preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and GBC Emergency Planners. (The north eastern part of the site is in an EA Flood Warning Area).
- 4.501 In conclusion, it is considered the development is considered capable of being made safe in the event of a severe flood event. The whole site was identified through the SHLAA process and will make an important contribution towards meeting the wider regeneration benefits of the draft Local Plan including meeting much needed housing in the community. This Report sets out the Council's preferred approach for managing flood risk on the site. Further discussions between the Council, the Environment Agency and the Coastal Partners to take account of the new PfSH SFRA and this will inform a further iteration of this work prior to the publication of the Regulation 19 stage of the draft Local Plan.

- Airbricks, airbrick covers & vents;

⁷⁰ Future safe access and egress for some areas of the site may not be possible during an extreme tidal flood event; therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms are set above this level.

it is recommended that all habitable rooms are set above this level. ⁷¹ Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:

⁻ Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

⁻ Keeping valuable items at higher levels

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

⁻ Flood doors and windows;

⁻ Flood barriers;

⁻ Concrete floors with damp-proof membranes;

⁻ Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising.

The Council's interim preferred approach for managing flood risk at The Piggeries

- 4.502 **1. Off-site strategic measures:** The North Solent Shoreline Management Plan's (NSSMP) long-term (100 year) policy for this frontage is 'Hold the Line'. The adopted Coastal Strategy supports the SMP's Hold the Line policy. However, based on early evidence, any proposed coastal defence schemes are not currently eligible for full government funding therefore developer contributions will be sought to deliver flood risk management measures for this location to an agreed standard of protection.
- 4.503 The proposed development site is located within the overarching North Solent Shoreline Management Plan's (NSSMP) Policy Unit 5b01 (Portsmouth Harbour Entrance to Gilkicker Point).
- 4.504 The NSSMP recommends a policy of 'Hold the Line' (HTL maintain or upgrade the standard of protection offered by the existing coastal defences) for this policy unit throughout Epochs 1-3, for at least the next 100 years.
- 4.505 The site is also located within Strategy Management Zone 2 Upper Quay (Fareham) to Fort Monckton (Gosport) of the River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (RHPS, 2015). The Strategy was developed to provide strategic recommendations for how to implement the policies recommended within the NSSMP.
- 4.506 Within SMZ2, this proposed development site is located with Option Development Unit 20 Haslar Royal Naval Cemetery to Fort Monckton. For ODU 20, the RHPS recommends that the landowners conduct maintenance and repairs to their existing defences, to manage coastal flood and erosion risk to nationally important assets and the wider community. Other capital works are recommended to take place locally, with upgrades to all defences recommended to take place from 2060.
- 4.507 **2. On-site strategic measures:** The developer could improve defences within the boundary of their site and raise the Standard of Protection (SOP). This would reduce the likelihood of a breach. The Borough Council would expect contributions to the long-term maintenance and enhancements to existing defences to be met by the developer. The River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy identifies the preferred options for management over the longer term.
- 4.508 The site should be designed so that flooding would not impact on the buildings. A sequential approach across the site could locate the more vulnerable parts of the development in the areas of lowest flood hazard. If necessary finished floor levels of the site could be raised so that the internals of the building would remain dry during the design and extreme tidal flood events. Therefore all residential buildings would have a safe place of refuge. A Flood Response Plan would also need to be prepared & accepted by the Local Planning Authority taking advice from the Emergency Planner and Emergency Services looking at conditions experienced in a design extreme flood event.
- 4.509 The developer will need to prepare a comprehensive flood risk management strategy which will manage risk for the allocation site across the plan period whilst all phases of development are being delivered. It would generally be expected to deliver a standard of safety of to keep people and property safer from the 0.5% probability tidal flood event in 2115 (to take account of climate change over the development lifetime) during which the tide level is predicted to reach 4.3m AOD. There is an aspiration that people will be safe from a 0.1% event and if this cannot be achieved, a minimum standard of safety of resisting the 0.5% event. The 0.1% probability tidal flood event in 2115 is 4.5m AOD which does not account for wave action. The proposed open space within the draft allocation will contribute towards the overall package of flood risk management measures to be delivered on-site.
- 4.510 **4. Adjacent off-site measures:** A number of options for adjacent off site measures could include land raising of access routes. These may be considered less likely to be deliverable. The viability of this has not been assessed at present and will need to be determined. There will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Emergency Planner and Emergency Services.

4.511 **Preferred Option(s)**

The flood risk issues at The Piggeries will be a determining factor on the location, type and scale of uses within the site. Parts of the proposed allocation lie within present day (2021) Flood Zones 2 and 3. Consequently the FRA will need to consider whether it is appropriate to locate particular uses (as defined by the NPPF) on certain parts of the site. A FRA will need to address a number of issues including the following:

- The Flood Zone(s) within which the proposed development is located;
- The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
- How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
- Safe access and egress routes for the site, including during a potential extreme tidal flood event;
- The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum mAOD);
- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures, where appropriate⁷²;

- Keeping valuable items at higher levels

 ⁷² <u>Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:</u>
Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

⁻ Flood doors and windows;

⁻ Flood barriers;

⁻ Concrete floors with damp-proof membranes;

- The preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and the Borough Council's Emergency Planner; and
- The capacity of the site to deal with surface water and whether sustainable drainage systems can assist.
- 4.512 Any site-specific FRA will need to assess the residual flood risk behind the defences delivered (i.e. if the defences are breached or overtopped) or risks until a full continuous flood defence is delivered and the development employs appropriate mitigation techniques. The FRA must show if this site is within a Rapid Inundation Zone should the defence breach or be overtopped. Any site-specific FRA will need to assess the residual flood risk behind the defences.
- 4.513 In terms of preferred options, a combination of options 2 & 3 are preferred solutions to ensure that the development is safe in this location. The Council would expect the developer to provide these flood risk management measures as part of the development proposals on the site. Although the potential costs associated in delivering option 2 may be high, it is considered that with the engineering options available, and with sufficient funding measures in place, be feasible to protect the site. Discussions with the Council (including the Coastal Partners) will be required.
- 4.514 Prior to the provision of a continuous sea defence for the allocation site and safe access and exit, there will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Council's Emergency Planning Officer and the Emergency Services.

Implications for the draft Gosport Borough Local Plan 2038

- 4.515 The regeneration of the Harbour Regeneration Area is a major component of delivering the Council's spatial strategy for the Borough. The rationalisation of MoD operations has led to a contraction of local jobs and increased out-commuting to other parts of South Hampshire. If these trends are allowed to continue the situation in Gosport will be exacerbated with significant social, economic and environmental consequences not only for the residents of Gosport but also for others within the sub region. Consequently in order to achieve the PfSH vision of employment-led regeneration in South Hampshire, the 'city centres first' and the 'regeneration of urban areas' policy initiatives need to be fully delivered.
- 4.516 For Gosport, the regeneration opportunities presented by the Harbour Regeneration Area and other key Regeneration areas for example at Daedalus which includes major employment opportunities, will make a significant contribution towards delivering the strategic vision for the south Hampshire sub region as a whole as well as meeting major planning objectives set out in the

⁻ Airbricks, airbrick covers & vents;

⁻ Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising

draft GBLP 2038. This is set out in further detail in the Meeting the Sequential and Exceptions Tests section of this Report.

- 4.517 Significant parts of The Piggeries are in Flood Zones 2 and 3 particularly over the longer term. The site has been the subject to an iSFRA. It is considered that this site will contribute towards delivering significant regeneration benefits as part of the wider Haslar Peninsula and provide much needed homes and accessing additional public open space. Consequently using the sequential approach set out in the NPPF it is considered that there are no alternative sites in the Borough to deliver the quantum and mix of uses. It is necessary to ensure that the site fully accords with the requirements of the Exception Test. There are no reasonably available sites on previously developed land capable of providing the regeneration benefits these matters are addressed more fully addressed in the relevant supporting documents to accompany the draft Local Plan.
- 4.518 Requirements for a site-specific FRA(s) are set out in the preceding paragraphs. Early discussions with the Council, the Environment Agency and the Coastal Partners regarding development on sites within draft policy SS8: The Piggeries will be necessary as part of the planning application process.

POLICY SS10: ROWNER AND HMS SULTAN



Gosport Borough Local Plan 2038, (Regulation 18 consultation draft)

Background

- 4.519 The regeneration of the residual part of the Rowner estate is a long-term project that would likely extend into the next plan period. As such, the change in the number of residential dwellings is not currently known. HMS Sultan is located opposite the Rowner estate and is currently scheduled for release from MoD use in 2029.
- 4.520 These two distinct sites are considered together in the Local Plan given both their geographical proximity, the long-term nature of their potential regeneration and the opportunities for taking a more integrated approach to create new healthier communities on both sites.
- 4.521 Draft policy SS10 permits the following uses:

POLICY SS10: ROWNER AND HMS SULTAN

- 1. Land at Rowner, as shown on the Policies Map, will continue to be regenerated throughout the plan period to create a range of high quality replacement new homes, open spaces, pedestrian and cycle routes and accessible community facilities. The further redevelopment of Rowner should be in accordance with a Strategic Masterplan to be agreed between the Local Planning Authority, site promoters and the local community. The Strategic Masterplan should be co-designed with the residents of Rowner and subject to comprehensive local consultation.
- 2. A Strategic Masterplan for Rowner should positively address the following:
 - a) Significant enhancement of the quality of the local environment through high quality urban design and landscaping;
 - b) Provision of sustainable housing with a suitable mix of sizes, typologies and tenures;
 - c) Mitigation of any impacts on the Strategic Road Network or other parts of the highway network;
 - d) Creation of legible pedestrian and cycle linkages to and from neighbouring places including the Alver Valley;
 - e) Improvements to public transport and other suitable measures to reduce car use;
 - f) Appropriate mitigation to address flood risk;
 - g) Enhancement of biodiversity through new green infrastructure and improvements to the built environment; and
 - h) Development to be served by necessary infrastructure improvements.
- 3. Land at HMS Sultan, as shown on the Policies Map, is scheduled to be released by the Ministry of Defence for redevelopment in 2029 at the earliest. The following proposals will be considered at the site:
 - a) Proposals to encourage the intensification of employment uses will be permitted provided it accords with other Local Plan

policies;

- b) Proposals to re-use Fort Rowner for residential and commercial uses will be permitted provided:
 - i. Heritage assets are protected and enhanced;
 - ii. Safe access and egress can be demonstrated; and
 - iii. Sufficient vehicular parking to meet the Council's Adopted Parking Standards.
- c) If HMS Sultan is released, either wholly or partially, priority will be sought for employment and complementary commercial or community uses (as shown on the Policies Map as an Employment Priority Site) which help to deliver the Local Plan's objectives in accordance with a planned and coordinated programme of land release to be set out in a Supplementary Planning Document.

Strategic Flood Risk Assessment for Rowner and HMS Sultan

4.522 The findings of the iSFRA in respect to policy SS10: Rowner and HMS Sultan are set out below

4.523 Is the potential allocation site in an area at low risk of flooding?

The allocation at Rowner and HMS Sultan are within Flood Zone 1 as shown by the Environment Agency's present day (2021) Flood Zone maps. Both sites are also shown as being within Flood Zone 1 at 2115. However this will need to be reviewed once the PfSH SFRA is compete in winter/spring 2022. The new sub regional PfSH SFRA will take account of the latest climate change allowances for tidal and fluvial flooding. This new information will inform the Council's iSFRA for the draft allocations prior to the Regulation 19 consultation stage. This iSFRA Report identifies surface water as the key flood risk issue at both Rowner and HMS Sultan and therefore it is considered that any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, demonstrating that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall.

4.524 **Consider Rowner and HMS Sultan as a strategic site.** Will the proposed development type(s) be acceptable in this Flood Zone?

It is considered that development proposals will be acceptable as both sites are in Flood Zone 1. It is considered that a FRA will be required particularly in respect of surface water and a drainage strategy and SuDS should form part of that assessment

Proposed Land – uses	NPPG vulnerability classification
Residential	More vulnerable
Community uses	More vulnerable
Employment uses	Less vulnerable
Public open space	Water-compatible development

4.525 Is the Exception Test satisfied?

The Exception Test is not required for the allocations in draft policy SS10.

4.526 Are there other potential allocation sites in the same FZ?

There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:

- (i) Rowner and HMS Sultan are located in Flood Zone 1.
- (ii) Daedalus is located in Flood Zone 1.
- (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
- (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
- (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane
 - Land at Wheeler Close; and
 - Land at Whitworth Close.

Other Key Considerations

- 4.527 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 PfSH SFRA. Completion of a new SFRA is expected in winter/spring 2022 and will be used to update the information shown for this iSFRA.
- 4.528 Undefended flood hazard (1B)

The secondary source of flood risk to the Borough is from the River Alver. The River Alver discharges into the sea via a tidal outfall which is flapped to prevent tidal inundation of the river valley. If this defence were to fail, the Alver valley would be regularly inundated by tidal flows. As such, 'undefended' Flood Zones show the Alver valley as predominantly at risk of tidal flooding. The River Alver originates from a very small catchment and flows largely through an unconstrained and undeveloped floodplain such that the risk of fluvial flooding is therefore considered minimal.

4.529 The whole of the Rowner/HMS Sultan area is shown outside of the undefended flood. However, flood hazards are identified within close proximity to the site boundary. The extent of the hazard is identified as 'low' risk at the southern tip of HMS Sultan adjacent to the Polo Field. There are also areas identified as 'high' and 'very high' risk in close proximity to Grange Road and Howe Road and within the adjacent Wildgrounds Local Nature Reserve. 'Low risk' is defined in the PfSH SFRA as areas where there may still be shallow flowing water or deep standing water. Areas of 'high' risk are defined as potentially dangerous for most

people with potential for deep fast flowing water and 'very high risk' as where there could be dangers for all and where there is potential for deep flowing fast water. The area of land within the hazard mapping outlines is within the Alver Valley Country Park and would serve to act as a significant area of flood storage should flooding occur within the Alver Valley from the River Alver.

Other sources of flooding (1F1 series of mapsets)

- 4.530 **Groundwater flooding (1F2):** The local geology is shown as being of being of 'moderate permeability' with no historical incidences of groundwater flooding across the whole site. The PfSH SFRA guidance notes specific to Gosport indicate that site-specific FRAs do not need to take into account this form of flooding. It is worth noting however that the EA's MAGIC mapping system⁷³ show this area as falling within a Medium/Medium-High classification (due to its location close to Portsmouth Harbour). The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:
- 4.531 The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid.
- 4.532 The potential impact of groundwater pollution is considered using the aquifer designation status which provides an indication of the scale and importance of groundwater for potable water supply and/or in supporting baseflow to rivers, lakes and wetlands.
- 4.533 Groundwater vulnerability to pollution risk classification is defined as:
 - High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.

• Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.

• Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits.⁷⁴

4.534 This provides a high level analysis only and may need to be considered in further detail as part of a site-specific FRA for individual planning applications. Preapplication discussions with the Environment Agency and the Local Planning Authority are advised.

⁷³ https://magic.defra.gov.uk/MagicMap.aspx

⁷⁴ Groundwater vulnerability maps technical summary

Project summary SC040016 , Environment Agency,

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwater_variability_summary.pdf

- 4.535 **Impact of land use change on surface water run-off (1F3):** The impact of existing land use change on surface water run-off is shown as being moderate for the whole of the site it is considered that new development may have a moderate impact on surface water run-off. This will need to be considered in detail as part of a site-specific FRA. Investigations should include SuDs options to manage surface water (Infiltration and combined systems).
- 4.536 In addition to the above information, the Council has used the EA's Flood Map for Planning which shows the latest published information for surface water flooding.⁷⁵ This mapping information shows there are areas susceptible to surface water flooding within the Rowner and HMS Sultan sites primarily from a 'low' risk scenario across both sites with some of the 'medium' risk scenario incorporated within this flood outline as explained in the footnote below.⁷⁶ In terms of the potential depths of water from surface water flooding, for the 'low' and 'medium' scenarios the depths range between less than 300mm and 300-900mm. There are also some parts of both of the Forts within HMS Sultan where the depths are greater than 900mm. In terms of the velocity this for each risk scenario, this is shown as less than 0.25m/s for the 'low' risk scenario but there are some small pockets around the southern part of the site where the open space is envisaged were the velocity is less than 0.25m/s and for those small areas of land which fall within a 'medium' risk scenario across both sites, the velocity is less than 0.25m/s.
- 4.537 Therefore it is considered that a site-specific FRA(s) should investigate this issue further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council) and will need to address the impacts of surface water flooding taking into account the latest Climate Change Allowances including peak rainfall intensity allowances recently published by the Environment Agency (July 2021).
- 4.538 Further information can be obtained from: <u>https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances</u> and the Environment Agency's Standing Advice on site-specific Flood Risk Assessments for applicants in: <u>https://www.gov.uk/guidance/flood-risk-assessment-standing-advice.</u> Options for SuDS should be fully considered as part of this assessment and appropriate arrangements must be put in place for their ownership and whole life maintenance and management for the long-term maintenance in accordance with the policy requirements of draft policy D7: Flood Risk and Coastal Erosion
- 4.539 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. In terms of Rowner and HMS

⁷⁵ It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's PFSH SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

⁷⁶ The EA surface water maps are high level maps designed to provide an indication of whether an area may be affected by surface water flooding and to what extent.

There are four levels of flood risk. These are:

[•] High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)

[•] Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30 (3.3%)

[•] Low - each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%)

[•] Very low - each year, the area has a chance of flooding of less than 1 in 1000 (0.1%)

Further information can be found at: <u>https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?easting=461850&northing=99848&map=SurfaceWater</u>

Sultan, the PfSH SFRA identifies the site as being within three categories of risk: 'low' (shown in green); 'moderate' (shown in orange), 'high' (shown in brown) and 'very high' (shown in red). The areas shown in 'green' and 'orange' relate only to the Polo Fields whilst the majority of both sites are covered as 'high' with a number of small pockets of land across both sites shown as 'very high'.

- 4.540 The map can be used to identify areas which have a high to very high potential for generating overland flow. However, it is important to note that this information does not show the locations where overland flow may pass through, or pond, and it is not implied that those areas with a 'low potential' for generating overland flow also have a low risk of experiencing flooding due to overland flow. The assessment of flow routes outside of river systems is a complex and detailed process, and such an assessment across the entire PUSH sub-region was beyond the scope of the PfSH SFRA. This map provides a high-level sub-regional assessment of the relative potential of areas to generate overland flow, and as such can be used to ensure that sensitive or vulnerable development is not located 'downstream' of areas which may result in high overland flow during intense rainstorms. It may also be used to refine study areas for more detailed assessments of overland flow.
- 4.541 The PfSH SFRA advice considers that for site-specific FRAs for those sites that are found to be within or in the vicinity of these areas, especially if the local topography places the site at a lower elevation than the surrounding land and hence downstream of the source, should consider the impacts and management of flooding due to overland flow.
- 4.542 It is therefore considered to be an issue that should be addressed through a sitespecific FRA and should consider the impacts and management of flooding due to overland flow in this case.
- 4.543 **Surface water sewer flooding (1F5):** There are no recorded incidents of sewer flooding in this location, the nearest recorded flooding incident to the site being to the east of Military Road at Redhouse Park Gardens. However, it is considered that site-specific FRAs should consult Southern Water to investigate the impact of new development on the existing drainage network and because there have been historical occurrences of flooding in the locality as described above. There may be opportunities to incorporate SuDs as part of a drainage mitigation strategy.
- 4.544 **Climate change implications (for 2115):** The map layers show Rowner and HMS Sultan in Flood Zone 1 at 2115. Flooding from surface water is likely to be the key issue on site and site-specific FRA(s) will be required to address this form of flood risk taking fully into account the latest available information relating to climate change allowances including for peak intensity rainfall. This information will need to be reviewed once the PfSH SFRA is complete in winter/spring 2022.

Conclusions

4.545 **Consider site details and flood risk management requirements.** Is the **proposed development site likely to be safe and appropriate?** This strategic site is located within Flood Zone 1 and high quality development opportunities within it will make a significant contribution towards achieving that end. Although none of the draft allocation is currently within Flood Zones 2 or 3 prospective developers are advised to contact the Environment Agency to determine if there are any issues that may affect the site. Surface water management is likely to be the key issue and an appropriate SuDS scheme may be required. Proposed development is likely to be acceptable in flood risk assessment terms.

Implications for the draft Gosport Borough Local Plan 2038

- 4.546 The continued regeneration of the Rowner area and HMS Sultan should this be released, is a major component of delivering the Council's spatial strategy for the Borough. The rationalisation of MoD operations has led to a contraction of local jobs and increased out-commuting to other parts of South Hampshire. If these trends are allowed to continue the situation in Gosport will be exacerbated with significant social, economic and environmental consequences not only for the residents of Gosport but also for others within the sub region. Consequently in order to achieve the PfSH vision of employment-led regeneration in South Hampshire, the 'city centres first' and the 'regeneration of urban areas' policy initiatives need to be fully delivered.
- 4.547 For Gosport, the regeneration opportunities presented by the Harbour Regeneration Area and other key Regeneration areas for example at HMS Sultan and Daedalus includes major employment opportunities and will make a significant contribution towards delivering the strategic vision for the south Hampshire sub region as a whole as well as meeting major planning objectives set out in the draft GBLP 2038.
- 4.548 Requirements for a site-specific FRA(s) are set out in the preceding paragraphs. Early discussions with the Council, the Environment Agency and the Lead Local Flood Authority regarding development on sites within draft policy SS10: Rowner and HMS Sultan will be necessary as part of the planning application process.

POLICY SS11: DAEDALUS



Gosport Borough Local Plan 2038, (Regulation 18 consultation draft)

Background

- 4.549 The Daedalus site is a former military base and lies to the north and north-west of Lee-on-the-Solent. The site covers a total area of approximately 196 hectares. The majority of the site, some 115.6 hectares, comprises of the runways and associated buildings, lies within the Fareham Borough Council (FBC) administrative area. The remainder of the site, some 38 hectares, lies within the Borough of Gosport.
- 4.550 Daedalus has broadly four parts to it: the airfield, Hangars West, Hangars East and the Daedalus Waterfront. The first three areas are predominantly within Fareham Borough whilst the Daedalus Waterfront and a small area at the southern end of Hangars East and the airfield are within Gosport Borough.
- 4.551 The Daedalus Waterfront area has a strong character and contains most of the built development on the site including a number of historic buildings, many of which are listed including the prominent Wardroom and Westcliffe House located close to the seafront.
- 4.552 Part of Daedalus Waterfront area has been designated as a conservation area and its proximity to Lee-on-the-Solent seafront adds to the site's character with splendid views across the Solent. Between the historic area and the airfield are a number of large hangars and related buildings which are currently used by a range of employers on a short lease basis.
- 4.553 The Maritime and Coastguard Agency (MCA) acquired Daedalus in 2006. It was subsequently transferred to the Homes and Communities Agency (HCA). The

South East England Development Agency (SEEDA) acquired 80 hectares of land surrounding the airfield for the purposes of employment-led regeneration which also has subsequently been transferred to the HCA (now Homes England). In addition, part of the site was retained by the Ministry of Defence (MoD) to develop staff quarters, of which a first phase was completed. The remaining part of this site was disposed of by the MoD in 2012 to the HCA.

- 4.554 The Solent Local Enterprise Partnership (LEP) successfully bid for the Daedalus site to become an Enterprise Zone in August 2011. The focus at Daedalus was, and remains as such, is advanced manufacturing including aviation, aerospace and marine industries which are expected to create up to 3,700 additional jobs by 2026.
- 4.556 Outline planning permission (planning application: 11/00282/OUT) with all matters reserved except access was granted in January 2016 for the following development:
 - Up to 69,992 sq.m. of commercial floor space in new buildings and reuse of existing buildings (Class B1, B2 and B8 use);
 - Up to 1,075 sq.m. of retail use (Class A1, A2, A3 and/or A4 use);
 - Up to 200 residential units (Class C3 use);
 - Up to 32 units of care accommodation (Class C2 use);
 - Up to 1,839 sq.m. of community use (Class D1 use);
 - Up to 8,320 sq.m. of hotel use (Class C1 use);
 - Up to 2,321 sq.m. of leisure (Class D2 use);
 - Access, parking and landscaping.
- 4.557 Subsequent applications have been submitted and approved for the discharge of conditions for this outline consent including additional consents outside the outline application site. As of 31st March 2021 the completion position for 11/00282/OUT is:
 - Dwellings C3: 180 complete with 20 outstanding permissions and 49 outstanding from the Policy LP5 allocation (this will reduce to 20 if the Wykham Hall, Frobisher House application is permitted);
 - Care Units C2: 32 C2 units outstanding and not yet started;
 - Employment floorspace: 69,992 m² floorspace outstanding from 11/00282/OUT (5,173 m² has been completed within the extent of 11/00282/OUT however these are separate schemes and do not pertain to the outline permission);
 - Retail floorspace: 1,075 m² of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m².

Daedalus Supplementary Planning Document

- 4.558 The Daedalus Supplementary Planning Document (SPD) (September 2011) provides detailed guidance for development within the regeneration area. The SPD sets out a vision for Daedalus:
 - Daedalus will be transformed into a sustainable strategic business location;
 - The site will provide significant new job opportunities, particularly within key business clusters including aviation, high-tech manufacturing and marine industries;
 - It will provide a significant number of highly skilled jobs contributing to Gosport's and the Solent area economic growth and diversification;
 - The design and use of existing and new buildings and spaces will be of a high quality to ensure the preservation and enhancement of the environment, the Daedalus Conservation Area and its listed buildings;
 - The prestigious development will be an identifiable place in its own right, well related to, and benefitting the wider community.
- 4.559 The Daedalus SPD also provides guidance on the location of development of different types within the regeneration area. In addition, it considers a number of character areas within the site. The vision in the SPD was reflected in Policy LP5 (Daedalus) in the Gosport Borough Local Plan (2011-2029) which set out strategic scale mixed-use development. The new draft Local Plan offers an opportunity to reconsider what the residual parts of the Daedalus site could provide taking into account the planning consents granted since the adoption of the current Local Plan.
- 4.560 Draft policy SS11 permits the following uses:

POLICY SS11: DAEDALUS

- 1. The Daedalus Regeneration Area (DRA) is the main focus for urban renewal, employment growth and housing in Lee-on-the-Solent during the plan period to 2038. All regeneration proposals should protect and enhance Daedalus heritage assets and waterfront townscape. The following development is allocated at the DRA within the three sites identified below:
 - a) A heritage-led mixed-use scheme at Seaplane Square including a renewed Hovercraft Museum with new commercial and community uses (Site A);
 - b) A heritage-led mixed-use scheme comprising commercial, community uses and approximately 300 Class C3 and/or C2 residential dwellings (Site B);
 - c) Employment and/or residential-led mixed-use at the triangular shaped site bounded by Hermes Road, Unicorn Road and Implacable Road (Site C); and
 - d) Approximately 35,000 sq.m. (gross) employment floorspace (Site D).

2.	All foll	development proposals within the DRA should address the owing overarching policy criteria:
	a)	Heritage assets and their settings are conserved and enhanced through appropriate and viable uses, and all possible
		opportunities to interpret their historic significance are taken;
	D)	of heritage assets with the aim of enhancing or better revealing their significance:
	c)	Use of an appropriate materials palette which reflects and enhances the local context;
	d)	The provision of multifunctional and connected public open spaces which form strategically important links to the surrounding areas, provide accessible routes for people and wildlife, suitable open spaces for recreation for all, and provide part of a wider flood risk and surface water drainage mitigation
		strategy;
	e)	Delivery of safe pedestrian and cycle links in all development sites and where feasible integration with local, regional and nationally important routes:
	f)	Consideration of capacity of the road network and potential need for mitigation measures to improve road capacity:
	g)	Provision of new public transport infrastructure and routes to assist modal shift away from private vehicles; and
	h)	Measures to avoid and mitigate any adverse impacts on internationally important habitats. Proposals should preserve and where possible enhance biodiversity.
3.	Plat that for	nning permission will not be given for incremental development would unacceptably hamper or reduce the development options any of the sites.
4.	Pro	posals should be accompanied with the necessary infrastructure,

Strategic Flood Risk Assessment for Daedalus

acceptable in planning terms.

4.561 The findings of the iSFRA in respect to policy SS11: Daedalus is set out below.

4.562 Is the potential allocation site in an area at low risk of flooding?

Site is located in Flood Zone 1 using the Environment Agency's Flood Zone maps for present day (2021). The whole of the site is also shown as being within Flood Zone 1 at 2115. However this will need to be reviewed once the PfSH SFRA is compete in winter/spring 2022. The new sub regional SFRA takes account of the latest climate change allowances for tidal and fluvial flooding. This new information will inform a further iteration of the Council's SFRA for the draft allocations in the GBLP2038 prior to the Regulation 19 consultation stage. This iSFRA Report identifies surface water as the key flood risk issue at Daedalus and therefore it is considered that any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, demonstrating that the

development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall.

4.563 Is there an alternative potential allocation site in an area at low risk of flooding?

There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:

- (i) Rowner and HMS Sultan are located in Flood Zone 1.
- (ii) Daedalus is located in Flood Zone 1.
- (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
- (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
- (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane
 - Land at Wheeler Close; and
 - Land at Whitworth Close.

4.564 Are these alternative sites less suitable, taking into account other planning issues?

These alternative sites are considered suitable are unsuitable for a number of reasons, these are set out below:

Land at Rowner and HMS Sultan (policy SS10)

- 4.565 Significant areas of land at Rowner have already been brought forward for regeneration. Outline planning permission was granted in April 2009 for a mixed-use proposal. The site has delivered 700 residential units in total and policy SS10: Rowner and HMS Sultan allows for further residential development (unspecified quantum) to come forward to complete the regeneration of Rowner this is a long-term project that would likely extend into the next plan period. As such, the change in the number of residential dwellings is not currently known. There are no residential units proposed on HMS Sultan. The Council's preferred option for that site is to support employment and training and the anticipated disposal for the site is now unlikely to come forward before 2029:
 - Employment floorspace: 69,992 m2 floorspace outstanding from 11/00282/OUT (5,173 m2 has been completed within the extent of 11/00282/OUT however these are separate schemes and do not pertain to the outline permission) and ;

- Retail floorspace: 1,075 m2 of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m2.
- 4.566 Gosport Town Centre (Policy SS3) makes provision for a significant number of new homes in the draft plan period both within the High Street and surrounding areas and at Gosport Bus Station. As the Town's principal retail, commercial and service centre, Gosport Town Centre has a number of strengths and weaknesses. The High Street is pedestrianised, level and accessible and there is a range of parking options. However, the range of shops is somewhat limited and does not attract many visitors from outside the Borough. The range of food and drink offers is lacking variety and there are, in common with many High Streets nationally, a number of vacant retail units which has been exacerbated by the economic impact of the political response to the COVID-19 pandemic which has accelerated trends for online shopping. In addition the proximity to the larger centres of Fareham and Portsmouth provides significant competition and associated leakages of retail spend.
- 4.567 Royal Haslar Hospital (Policy SS6) is located in Flood Zone 1 however this already has consent granted in September 2014 for the comprehensive redevelopment and re-use of the site (planning application 12/00591/OUT).
- 4.568 The proposed scheme includes a wide range of uses and incorporates medical and care facilities, a hotel (with up to 78 beds), a church, convenience store, health centre, tearoom, restaurant, office and business units, 286 residential units and 244 self-contained retirement units.

4.569 **Consider Daedalus as a strategic site. Will the proposed development** type(s) be acceptable in this Flood Zone?

It is considered that development proposals will be acceptable as both sites are in Flood Zone 1. It is considered that a FRA will be required particularly in respect of surface water and a drainage strategy and SuDS should form part of that assessment

Proposed Land – uses	NPPG vulnerability classification
Residential	More vulnerable
Community uses	More vulnerable
Employment uses	Less vulnerable
Public open space	Water-compatible development

4.570 Is the Exception Test satisfied?

The Exception Test is not required for the allocations in draft policy SS11.

4.571 **Consider Daedalus as a strategic site.** Will the proposed development type(s) be acceptable in this Flood Zone?

All uses of land are appropriate in this zone. As the site is over 1ha it is necessary to assess the vulnerability to flooding from other sources as well as from tidal flooding, and the potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water run-off. This will need to be considered as part of a FRA with any planning application. It will be necessary to reduce overall level of flood risk in the area through the layout and form of the development and the appropriate application of sustainable drainage techniques where appropriate.

4.572 Is the Exception Test satisfied?

Yes see the section on Meeting the Exception Test on page 35.

4.573 Are there other potential allocation sites in the same FZ?

Rowner and HMS Sultan are within the same Flood Zone (policy SS10) and parts of the Gosport Town Centre (policy SS3) are also in Flood Zone 1. There are also a number of smaller allocations which are also within Flood Zone 1 (see Table 5b: Future housing supply by Flood Zones pages 34-36).

Other Key Considerations

- 4.574 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 A new SFRA has been commissioned for the south Hampshire which is expected to be completed for the winter/spring 2022 and will be used to update the information shown for this iSFRA.
- 4.575 <u>Undefended flood hazard (1B)</u> The site is located outside of the areas identified as having a hazard risk.
- 4.576 <u>Indicative areas benefiting from flood defences (1C)</u> Under the PfSH SFRA model, the site area does not show any areas benefiting from indicative Areas Benefiting from Defences (iABDs).

Other sources of flooding (1F1 series of mapsets)

- 4.577 **Wave overtopping (1F1):** The site is adjacent a moderate wave energy frontage the slipway would be the most susceptible to these forces. The slipway is located outside of the Regeneration Area boundary for Daedalus.
- 4.578 It should be noted, the findings of the PFSH SFRA recommend that all applications for development within the vicinity of the open coast frontage of Gosport Borough include an assessment of extreme wave overtopping, regardless of which Flood Zone the site is in. This will ensure that this risk is always considered for new development in the relevant locations. The assessment of extreme wave overtopping should be appropriate to the scale of risk and may, in some cases, be ruled out as a significant risk quite easily, but should nevertheless be addressed.
- 4.579 **Groundwater flooding (1F2):** The local geology as being of being of 'moderate permeability' with no historical incidences of groundwater flooding. The PfSH SFRA guidance notes specific to Gosport indicates that site-specific FRAs do not need to take into account this form of flooding. It is worth noting however that the EA's MAGIC mapping system⁷⁷ show this area as falling within a Medium/Medium-High classification (due to its location close to Portsmouth Harbour). The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:

⁷⁷ https://magic.defra.gov.uk/MagicMap.aspx

- 4.580 'The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid.
- 4.581 The potential impact of groundwater pollution is considered using the aquifer designation status which provides an indication of the scale and importance of groundwater for potable water supply and/or in supporting baseflow to rivers, lakes and wetlands.
- 4.582 Groundwater vulnerability to pollution risk classification is defined as:
 - High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.
 - Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.

• Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits.⁷⁸

- 4.583 This provides a high level analysis only and may need to be considered in further detail as part of a site-specific FRA for individual planning applications. Preapplication discussions with the Environment Agency and the Local Planning Authority are advised.
- 4.584 **Impact of land use change on surface water run-off (1F3):** The PfSH SFRA shows the impact of existing land use change on surface water run-off is shown as being moderate for the whole of the site. There have been no historical incidences of flooding identified by Southern Water.
- 4.585 Most of the Daedalus site in Gosport is classified as existing developed area and therefore changes of use or further development are unlikely to significant affect the existing surface water rates and volumes. However this assumption needs to be tested through the preparation of a site-specific FRA(s) with consultation as appropriate with Southern Water and Hampshire County Council as the Lead Local Flood Authority.
- 4.586 The northern part of the site is largely undeveloped and therefore it is considered that new development may have a moderate impact on surface water run-off. This will need to be considered in detail as part of a site-specific FRA. Investigations should include SuDs options to manage surface water (Infiltration and combined systems). In addition to the above information, the Council has used the EA's Flood Map for Planning which shows the latest published information for surface water flooding.⁷⁹ In this location this mapping shows there are areas susceptible to surface water flooding within the Regeneration

⁷⁸ Groundwater vulnerability maps technical summary

Project summary SC040016, Environment Agency,

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwater_variability_ summary.pdf

⁷⁹ It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's PFSH SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

Area boundary across the site. This mapping incorporates susceptibility to potential surface water flooding from mainly a 'low' and 'medium' risk scenarios with some small pockets of 'high' risk in the northern part of the boundary of the Regeneration Area in the vicinity of Bayntun Drive and Daedalus Drive as explained in the footnote below.⁸⁰

- 4.587 In terms of the potential depths of water arising from surface water flooding; for all three scenarios the depths range between less than 300mm. In terms of the velocity for each risk scenario, this is shown as less than 0.25m/s for the 'high' and 'medium' risk scenarios and for the 'low' risk scenario the velocity is shown as less than 0.25m/s across the site with small pockets of land around Bayntun Drive and along Daedalus Drive where the water would flow faster at over 0.25m/s.
- 4.588 Therefore a site-specific FRA(s) should investigate this issue further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council) and will need to address the impacts of surface water flooding taking into account the latest Climate Change Allowances including peak rainfall intensity allowances recently published by the Environment Agency (July 2021). Further information can be obtained from: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances and the Environment Agency's Standing Advice on site-specific Flood Risk Assessments for applicants in: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances and the Environment Agency's Standing Advice on site-specific Flood Risk Assessments for applicants in: https://www.gov.uk/guidance/flood-risk-assessment-standing-advice
- 4.589 **Potential Sources of Overland Flow (1F4):** Within Gosport Borough there are a number of areas which the PfSH SFRA has identified as having a 'high' to 'very high' potential for generating overland flow due to the highly urbanised nature of the Borough. FRAs for sites that are found to be within or in the vicinity of these areas, especially if the local topography places the site at a lower elevation than the surrounding land and hence downstream of the source, should consider the impacts and management of flooding due to overland flow. Within Daedalus there are significant ranges of potential sources of overland flow, from 'low' in the northern part of the Regeneration Area boundary to 'high' (shown in brown) and 'very high' (shown in red). Consequently this will need to be investigated further as part of a site-specific FRA.
- 4.590 The map can be used to identify areas which have a high to very high potential for generating overland flow. However, it is important to note that this information does not show the locations where overland flow may pass through, or pond, and it is not implied that those areas with a 'low potential' for generating overland flow also have a low risk of experiencing flooding due to overland flow. The assessment of flow routes outside of river systems is a complex and detailed process, and such an assessment across the entire PfSH sub-region was

⁸⁰ The EA surface water maps are high level maps designed to provide an indication of whether an area may be affected by surface water flooding and to what extent. There are four levels of flood risk. These are:

[•] High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)

[•] Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30 (3.3%)

[•] Low - each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%)

[•] Very low - each year, the area has a chance of flooding of less than 1 in 1000 (0.1%)

Further information can be found at: <u>https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?easting=461850&northing=99848&map=SurfaceWater</u>

beyond the scope of the PfSH SFRA. This map layer instead provided a highlevel sub-regional assessment of the relative potential of areas to generate overland flow, and as such can be used to ensure that sensitive or vulnerable development is not located 'downstream' of areas which may result in high overland flow during intense rainstorms. It may also be of use to those wishing to refine study areas for more detailed assessments of overland flow for other and therefore is considered helpful in this context.

- 4.591 The PfSH SFRA advice considers that for site-specific FRAs for those sites that are found to be either within, or in the vicinity of these areas, especially if the local topography places the site at a lower elevation than the surrounding land and hence downstream of the source; should consider the impacts and management of flooding due to overland flow. It is therefore considered to be an issue that should be addressed through a site-specific FRA and should consider the impacts and management of flooding in the context for the potential for overland flow in this case.
- 4.592 **Surface water sewer flooding (1F5):** The map layer does not show any recorded incidents of sewer flooding in this location, however, it is considered that site-specific FRAs should consult Southern Water to investigate the impact of new development on the existing drainage network and opportunities to incorporate SuDS within the development proposals.
- 4.593 **Climate change implications (for 2115):** The whole site is shown to lie within Flood Zone 1 at 2115. Flood Zones 2 and 3 outlines for 2115 are shown to cover approximately one third of the slipway at Daedalus which is outside of the boundary of the proposed Regeneration Area.
- 4.594 Flooding from surface water is likely to be the key issue on site and site-specific FRA(s) will be required to address this form of flood risk taking fully into account the latest available information relating to climate change allowances including for peak intensity rainfall.
- 4.595 Given the scale and form of the proposed development, applicants are encouraged to engage with the Council from an early stage to determine whether the proposals constitute EIA development as part of the recommended preapplication process. This information will need to be reviewed once the PfSH SFRA is complete in winter/spring 2022.

Conclusions

- 4.596 **Q:** Consider site details and flood risk management requirements. Is the proposed development site likely to be safe and appropriate?
 - A: Site is suitable and should be considered as a priority for development no exception test required. Although further investigation on issues such as overland water flow, surface water and sewer flooding will be required as part of a site-specific FRA. There do not appear to be overwhelming flooding constraints and therefore it is considered that development is likely to be broadly acceptable in terms of flood risk assessment.

Implications for the draft Gosport Borough Local Plan 2038

4.597 Daedalus offers significant regeneration opportunities for the Borough. As part of a mixed use scheme there would be opportunities to accommodate some housing but also opportunities to secure leisure, tourism, community and employment uses as part of the wider offer of the Regeneration Area. The site is located in Flood Zone 1 and meets the tests set out in the sequential approach. The PfSH SFRA has shown other flooding issues that would need to be investigated further and addressed in a site-specific FRA.

5.0 SITES OUTSIDE OF THE PROPOSED REGENERATION AREAS

- 5.1 In addition to the allocated strategic sites, the draft Local Plan makes a number of additional housing allocations located mainly in Flood Zone 1. Where a small number of housing allocations fall outside of Flood Zone 1 these have been assessed in further detail in this iSFRA report and identified as follows:
 - Fort Gilkicker (policy A1);
 - Land at Fort Road (QinetiQ);
 - Land at Forton Road (policy A2);
 - Land at Grove Road (policy A2); and
 - Land at Gasworks Site, Mariners Way (policy A2).
- 5.2 Policies A1 and A2 are the relevant policies in this case and are set out for context below.

POLICY A1: ENABLING ALLOCATIONS

- 1. The Council will positively consider the re-use of the following heritage assets outside the urban area boundary for residential dwellings, or suitably alternative mixed-use schemes, where it is clearly demonstrated that the significance of heritage assets is sustained and enhanced and is consistent with their long-term conservation and the emerging Stokes Bay Conservation Area:
 - a) Fort Gilkicker, Stokes Bay
 - b) Qinetiq, Fort Road
- 2. Development at each site should also deliver significant on-site biodiversity enhancements and provide suitable nitrate mitigation in line with Policy D5.
- 3. Residential development, or suitable mixed use development, at Fort Gilkicker should also achieve the following further policy objectives:
 - a) Provision of up to 26 market dwellings with a suitable contribution towards off-site affordable housing provision;
 - b) Vehicular access with suitable passing spaces along Military Road;
 - c) Parking provision to be provided wholly within the site in line with the Council's Adopted Parking Standards;
 - d) Landscaping and boundary treatments sympathetic to the heritage asset and wider coastal landscape;
 - e) A site-specific Flood Risk Assessment (FRA) should be undertaken to determine the extent of any necessary mitigation; and
 - f) Retention of a public accessible route between the south of golf course and the north of the residential curtilage
 - g) Appropriate public interpretation and agreed access to the Parade Ground
- 4. Residential development, or suitable mixed-use development, at Qinetiq Fort Road should also achieve the following further policy

objectives:

- a) Provision of up to 15 market dwellings with a suitable contribution towards off-site affordable housing provision;
- b) Safe vehicular access from Fort Road;
- c) Parking provision to provided wholly within the site in line with the Council's Adopted Parking Standards;
- d) The development and associated landscaping and boundary treatments are sympathetic to the heritage asset and wider landscape;
- e) Protection of mature trees;
- f) A site-specific Flood Risk Assessment (FRA) should be undertaken to determine the extent of any necessary mitigation; and
- g) A suitably designed off-road access improvement that provides a cycle/pedestrian route from Fort Road through towards Lifeboat Lane.

POLICY A2: HOUSING

- 1. In order to assist the delivery of new housing the following strategic sites outside the Regeneration Areas, as shown on the Policies Map, are allocated for residential development:
 - a) Land at Heritage Way and Frater Lane, Elson
 - b) Land at Gasworks Site, Mariners Way
 - c) Land at Addenbrooke House, Willis Road
 - d) Anglesey Lodge, Alverstoke
- 2. Development at Land at Heritage Way and Frater Lane should achieve the following design objectives:
 - a) A total of 55 dwellings with the provision of up to 50 affordable dwellings in a range of typologies and unit sizes;
 - b) Provision of at least 5 serviced self-build plots for market family housing with parking and front and rear gardens;
 - c) suitably designed vehicular access from Frater Lane;
 - d) parking provision to be provided wholly within the site in line with the Council's adopted parking standards;
 - e) provision of a suitable pedestrian and cycle network within the site to improve the permeability of the local neighbourhood; and
 - f) contribution towards off-site open space improvements at Monks Walk.
- 3. Development at Land at Gasworks Site, Mariners Way should address the following design objectives:
 - a) Provision of up to 60 dwellings in a range of unit sizes;
 - b) higher density residential development which does not result in significant harm to the amenity of existing residents in Mariners

Way and Dolman Road through loss of light, overbearing impact or loss of privacy; c) suitably designed vehicular access from Mariners Way and pedestrian and cycle access from Cranbourne Road; and d) parking provision to be provided wholly within the site in line with the Council's adopted parking standards. 4. Development at Land at Addenbrooke House, Willis Road should address the following design objectives: a) Provision of up to 60 affordable extra care units to meet the needs of an ageing population; b) suitably designed vehicular access from the Anchorage; c) parking provision to be provided wholly within the site in line with the Council's adopted parking standards. 5. Development at Anglesey Lodge, Alverstoke should address the following design objectives: a) Provision of up to 11 units designed having special regard to the desirability of preserving the building and any features of special architectural or historic interest that it possesses; b) suitably designed vehicular access from Anglesey Road; c) parking provision to be provided wholly within the site in line with the Council's adopted parking standards. 6. In order to assist the delivery of new housing the following nonstrategic sites outside the Regeneration Areas, as shown on the Policies Map, are allocated for residential development (approximate number of dwellings): a) Land at Stoners Close, Bridgemary (8 dwellings) b) Land at Lapthorn Close, Bridgemary (10 dwellings) c) Land at Prideaux-Brune Avenue, Bridgemary (5 dwellings) d) Land at Rowner Road Service Station, Bridgemary (20 dwellings) e) Land at Forton Road, Forton (23 dwellings) f) Land at Wheeler Close, Forton (6 dwellings) g) Land at Whitworth Close, Leesland (18 dwellings) h) 116-118 Priory Road (5 dwellings) i) 1 – 1a TML House, The Anchorage, Gosport (6 dwellings) i) 39-45a Stoke Road and 79-81 Jamaica Place, Gosport (11 dwellings) 7. Planning permission will also be granted on the following sites provided proposals include a contribution to improve the quality of an existing open space in the vicinity: a) Land between Woodside and Wych Lane, Bridgemary (5 dwellings) b) Land at Bridgemary Road, Bridgemary (5 dwellings) c) Land at Montgomery Road, Bridgemary (8 dwellings) d) Land at Grove Road, Hardway (28 dwellings)

Land at Fort Road (former QinetiQ)

Background

- 5.3 The former QinetiQ site at Fort Road is a heritage asset located outside the Gosport urban area boundary which has the capacity to provide either residential dwellings or commercial uses to assist in its future conservation. The Council has included this site in the Local Plan in line with NPPF paragraphs 80 and 208 as it is considers that the benefits of conserving this asset clearly outweighs the impact of some limited new housing outside the urban area.
- 5.4 The Council's preference is for residential development. However, sympathetic commercial development would also be considered if it can be demonstrated that residential is not a viable option.
- 5.5 The site offers the potential to provide a new pedestrian and cycle route between Fort Road and the Solent shoreline path. This facility should be incorporated into site layouts to improve permeability and public access.
- 5.6 Development proposals should address flood risk through suitable housing designs. Site promoters should engage early with the Environment Agency (EA) to understand what residential typologies need to include in their design in order to satisfactorily address flood risk. These designs may, for example, result in the ground floor of buildings being free from residential living accommodation on parts of the site.

Strategic Flood Risk Assessment for Land at Fort Road QinetiQ

5.7 The findings of the interim SFRA in respect to policy A1: Land at Fort Road QinetiQ is set out below.

Is the potential allocation site in an area at low risk of flooding?

- 5.8 A significant portion of the site, including the entirety of the south western part of the site, is located within the Environment Agency's present day Flood Zones 2 and may therefore be at risk from a 1 in 200 year to 1 in 1000 year (0.5% to 0.1% annual probability) extreme tidal flood event. There are also significant parts of the site within Flood Zone 3 which is assessed as having the highest risk of flooding as having a 1 in 200 or greater annual probability of flooding from the sea in any year (>0.5%). The remainder of the site, including access and egress along Fort Road is located within Flood Zone 1 and considered to be at low risk (less than 1 in 1000 year / 0.1% annual probability) from an extreme tidal flood event.
- 5.9 Therefore any development within these areas would need to be located to the lowest area of flood risk and accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, demonstrating that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall.
- 5.10 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000

year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.

5.11 Future safe access and egress for the site may not be possible during an extreme tidal flood event; therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms are set above this level.

Is there an alternative potential allocation site in an area at low risk of flooding?

- 5.12 There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:
 - (i) Rowner and HMS Sultan are located in Flood Zone 1.
 - (ii) Daedalus is located in Flood Zone 1.
 - (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
 - (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
 - (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane
 - Land at Wheeler Close; and
 - Land at Whitworth Close.

Are these alternative sites less suitable, taking into account other planning issues?

5.13 The paragraphs below set out the current position regarding the consideration of alternative sites. A combination of these sites is required to assist the delivery of the level of housing required to deliver the Local Plan strategy.

Land at Rowner and HMS Sultan (policy SS10)

5.14 Significant areas of land at Rowner have already been brought forward for regeneration. Outline planning permission was granted in April 2009 for a mixed-use proposal. The site has delivered 700 residential units in total and policy SS10: Rowner and HMS Sultan allows for further residential development (unspecified quantum) to come forward to complete the regeneration of Rowner this is a long-term project that would likely extend into the next plan period. As such, the change in the number of residential dwellings is not currently known. There are no residential units proposed on HMS Sultan. The Council's preferred option for that site is to support employment and training and the anticipated disposal for the site is now unlikely to come forward before 2029.

Daedalus (policy SS11)

- 5.15 The Daedalus site is already a successful regeneration area in the adopted Gosport Borough Local Plan 2011-2029. Outline planning permission (planning application: 11/00282/OUT) with all matters reserved except access was granted in January 2016 for the following development:
 - Up to 69,992 sq.m. of commercial floor space in new buildings and reuse of existing buildings (Class B1, B2 and B8 use);
 - Up to 1,075 sq.m. of retail use (Class A1, A2, A3 and/or A4 use);
 - Up to 200 residential units (Class C3 use);
 - Up to 32 units of care accommodation (Class C2 use);
 - Up to 1,839 sq.m. of community use (Class D1 use);
 - Up to 8,320 sq.m. of hotel use (Class C1 use);
 - Up to 2,321 sq.m. of leisure (Class D2 use); and
 - Access, parking and landscaping.
- 5.16 To date (2021) subsequent applications have been submitted and approved for the discharge of conditions for this outline consent including additional consents outside the outline application site. As of 31st March 2021 the completion position for 11/00282/OUT is:
 - Dwellings C3: 180 complete with 20 outstanding permissions and 49 outstanding from the Policy LP5 allocation (this will reduce to 20 if the Wykham Hall, Frobisher House application is permitted);
 - Care Units C2: 32 C2 units outstanding and not yet started;
 - Employment floorspace: 69,992 m2 floorspace outstanding from 11/00282/OUT (5,173 m2 has been completed within the extent of 11/00282/OUT however these are separate schemes and do not pertain to the outline permission);
 - Retail floorspace: 1,075 m2 of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m2.
- 5.17 Gosport Town Centre (Policy SS3) makes provision for a significant number of new homes in the draft plan period both within the High Street and surrounding areas and at Gosport Bus Station. As the Town's principal retail, commercial and service centre, Gosport Town Centre has a number of strengths and weaknesses. The High Street is pedestrianised, level and accessible and there is a range of parking options. However, the range of shops is somewhat limited and does not attract many visitors from outside the Borough.
- 5.18 The range of food and drink offers is lacking variety and there are, in common with many High Streets nationally, a number of vacant retail units which has been exacerbated by the economic impact of the political response to the COVID-19 pandemic which has accelerated trends for online shopping. In addition the proximity to the larger centres of Fareham and Portsmouth provides significant competition and associated leakages of retail spend.
- 5.19 Royal Haslar Hospital (Policy SS6) is located in Flood Zone 1 however this already has consent granted in September 2014 for the comprehensive redevelopment and re-use of the site (planning application 12/00591/OUT). The

proposed scheme includes a wide range of uses and incorporates medical and care facilities, a hotel (with up to 78 beds), a church, convenience store, health centre, tearoom, restaurant, office and business units, 286 residential units and 244 self-contained retirement units.

5.20 Each of the smaller residential allocations in policy A2 will be required in order to assist the delivery of new housing in the Borough in addition to the strategic development sites.

Consider Land at Fort Road QinetiQ as an allocation site. Will the proposed development type(s) be acceptable in this Flood Zone?

5.21 It is considered that development proposals in those areas within Flood Zones 2 and 3 will require site-specific FRA in accordance with draft policies D3: Urban Regeneration Areas and D7: Flood Risk and Coastal Erosion. Where residential elements are located within Flood Zone 2, residential development is considered appropriate but would require a FRA. Should other uses classified as 'more vulnerable' form part of a submitted planning application, these would also need to be considered against the Exceptions Test if they were located within Flood Zone 3. The table below sets out the types of uses that could be accommodated on the site and the NPPF vulnerability classification:

Proposed Land – uses	NPPG vulnerability classification
Commercial	Less vulnerable
Residential	More vulnerable
Public open space	Water-compatible development

- 5.22 The less vulnerable uses envisaged on the site would not require the Exception Test to be passed nor would the water-compatible development. The residential elements which fall outside of Flood Zones 1 and 2 would. A site-specific FRA would be required for those developments within Flood Zones 2 and 3. Planning Practice Guidance for flooding provides detailed advice on what a site-specific FRA should contain.
- 5.23 It is also recommended that applicants undertake pre-application discussions with the Council, Environment Agency and Coastal Partners.

Is the Exception Test satisfied?

5.24 Yes see the section on Meeting the Exception Test on page 35.

Are there other potential allocation sites in the same FZ?

5.25 Harbour Regeneration Area - Haslar Peninsula. This area was largely in Ministry of Defence ownership. There are a number of strategic sites proposed within this location. Significant areas are within Flood Zones 3 against this backdrop there are significant opportunities to deliver substantial regeneration benefits.

5.26 The Haslar Peninsula ('Haslar') is separated from the Waterfront and Town Centre by the saline Haslar Lake and Stoke Lake. Haslar comprises of mostly previously developed land and includes internationally important heritage assets including Haslar Gunboat Sheds, Royal Haslar Hospital, Haslar Barracks and Fort Blockhouse which taken together with the large range of military sites around Portsmouth Harbour are potentially of international significance.

- 5.27 The Haslar part of the Harbour Regeneration Area includes six Strategic Development Site policies. The other five locations are:
 - SS4: Blockhouse and Haslar Gunboat Sheds
 - SS5: Fort Blockhouse
 - SS6: Royal Haslar Hospital
 - SS7: Haslar Barracks and Fort Road
 - SS8: The Piggeries
 - SS9: Haslar Marine Technology Park
- 5.28 Of these sites, with the exception of Royal Haslar Hospital which is located in Flood Zone 1 (present day) significant area of the remaining allocations within the Haslar area are located in Flood Zones 2 and 3.
- 5.29 The Gosport Waterfront (policies SS1 and SS2) and parts of the Gosport Town Centre (policy SS3) draft allocations are also within Flood Zones 2 and 3.

Other Key Considerations

5.30 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 SFRA. The completion of a new sub regional SFRA is due for completion in winter/spring 2022 and will be used to update the information shown for this iSFRA.

Undefended flood hazard (1B)

5.31 Approximately one third of the site which is nearest to Fort Road is outside of the flood hazard outline. Where the flood hazard is shown for Flood Zone 2, there are areas identified as a 'low' to 'moderate' hazard at the south eastern corner of the site. The remaining land within the site boundary is shown as 'high' hazard. 'Low risk' is defined in the SFRA as areas where there may still be shallow flowing water or deep standing water. The SFRA defines areas of 'high risk' as where there could be danger for most people with deep fast flowing water. When this mapping layer is shown for Flood Zone 3 undefended flood hazard, the extent of the hazard outline is reduced but the hazard itself is shown as a 'high' hazard risk. This information can be used to guide development towards that part of the site at the lowest risk. It is therefore recommended that site- specific FRAs for proposals within these areas should undertake a quantitative assessment of defence standards, defence failure scenarios and overland flood flow.

Indicative areas benefiting from flood defences (1C)

- 5.32 Under the SFRA model, the site area does not show any areas benefiting from indicative Areas Benefiting from Defences (iABDs). The site does however benefit from having a protected frontage and this is shown within the crest level layer. However, it is only in those areas where sea defences are **consistently** benefiting from the present day 1:200 year SOP along the frontage of the flood cell being assessed will show the hatching of the iABD. The SFRA acknowledges that the high level strategic modelling and assessment does not take into account the benefit provided by all defences.
- 5.33 It is important to note that these are only shown if the entire frontage of a flood cell is connected to a 1:200 year standard, where this may not be the case the

areas are not shown even if the majority of it is protected to that standard or above. This does not imply that any land not shown does not benefit from any defences, just not necessarily to the 1:200 Standard in a continuous block. Further checking with the Environment Agency's Planning for Rivers and Seas also does not show any ABDs in this location. There may be the potential to identify parts of this area as ABDs if more detailed assessments (beyond the scope of the PfSH SFRA or this assessment) of the defences are undertaken.

Other sources of flooding (1F1 series of mapsets)

Groundwater flooding (1F2): The SFRA shows the local geology as being of 5.34 being of 'moderate permeability' with no historical incidences of groundwater flooding. The SFRA guidance notes specific to Gosport indicate that sitespecific FRAs do not need to take into account this form of flooding. It is worth noting however that the EA's MAGIC mapping system⁸¹ confirms this area as falling within a Medium. The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:

> 'The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant discharged ground level based on the hydrological, at geological. hydrogeological and soil properties within a one kilometer square grid.

> The potential impact of groundwater pollution is considered using the aquifer designation status which provides an indication of the scale and importance of groundwater for potable water supply and/or in supporting baseflow to rivers, lakes and wetlands.'

- 5.35 Groundwater vulnerability to pollution risk classification is defined as:
 - High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.

• Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.

• Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits.⁸²

- 5.36 This provides a high level analysis only and may need to be considered in further detail as part of a site-specific FRA for individual planning applications. Preapplication discussions with the Environment Agency and the Local Planning Authority are advised.
- 5.37 Impact of land use change on surface water run-off (1F3): The SFRA shows the impact of existing land use change on surface water run-off is shown as

⁸¹ <u>https://magic.defra.gov.uk/MagicMap.aspx</u>

⁸² Groundwater vulnerability maps technical summary

Project summary SC040016, Environment Agency, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwater_variability_ summary.pdf

being 'moderate' for the largely built-up area of the site (approximately two-thirds of the site) and 'low' for the remaining part.

- 5.38 In addition to the above information, the Council has used the EA's Flood Map for Planning which shows the latest published information for surface water flooding.⁸³ In this location the mapping does not show any areas within the site which may be susceptible to surface water flooding. There is however a small area to the east of the site and along Fort Road where surface water flooding may arise from a 'high', 'medium' and 'low' risk scenarios.⁸⁴ In terms of the potential depths of water from surface water flooding, for the 'medium' and 'high' scenarios the depths are low at less than 300mm whilst in the 'low' risk scenario the depths are deeper including 300-900mm. In terms of the velocity this for each risk scenario, this is shown as less than 0.25m/s for 'medium' and 'high' risk but for the 'low' risk scenario this is shown as more than 0.25m/s along small area of Fort Road close to the site.
- 5.39 Therefore it is considered that a site-specific FRA(s) should investigate this issue further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council). In addition to this, a site-specific FRA(s) will need to address the impacts of surface water flooding taking into account the latest Climate Change Allowances including peak rainfall recently published by the Environment Agency (July 2021). Further information can be obtained from: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances
- 5.40 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. The SFRA identifies substantial areas of 'high' to 'very high' potential susceptible to overland flow. However whilst this is not unusual in urban areas such as Gosport, it is considered to be an issue that would need to be addressed in detail through a site-specific FRA and should consider the impacts and management of flooding due to overland flow. The site at Fort Road is shown as being in a 'very high' (shown as red) and two smaller pockets outside of the existing buildings which are 'high' (shown as brown).
- 5.41 **Surface water sewer flooding (1F5):** The SFRA does not show any recorded incidents of sewer flooding in this location. However, it is considered a site-specific FRAs should consult Southern Water to investigate the impact of new development on the existing drainage network.

⁸³ It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

⁸⁴ The EA surface water maps are high level maps designed to provide an indication of whether an area may be affected by surface water flooding and to what extent.

There are four levels of flood risk. These are:

[•] High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)

[•] Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30

^(3.3%)

[•] Low - each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%)

[•] Very low - each year, the area has a chance of flooding of less than 1 in 1000 (0.1%)

Further information can be found at: <u>https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?easting=461850&northing=99848&map=SurfaceWater</u>

- 5.42 **Present Day Defence Crest Levels (2016):** Whilst the site is not located in close proximity to the sea in the case of an extreme tidal flood event this could potentially impact onto the site. Therefore for this part of the assessment the Council has applied this layer of information to the Stokes Bay coastline. The equivalent tidal return period of the existing defence crest levels was calculated for the PfSH SFRA by comparing the crest level of the defence/natural ground to the range of extreme sea level return periods for both 2010 and 2115, provided by the Environment Agency at that time. Each length of defence or natural ground defence was then allocated an equivalent surge tide return period. This is the best available information at the present time.
- 5.43 The assessment was based solely on a comparison of the crest/natural ground level with extreme sea levels and does not take account of the following:
 - Defence type.
 - Defence age, condition and residual life.
 - Freeboard allowance built into the design of the defences.
 - The potential for wave overtopping of the defences.
- 5.44 The assessment therefore, does not provided information on the standard of service provided by existing defences.
- 5.45 With regards to this part of the Stokes Bay coastline, a crest level defence of 1:1000 shown as a solid black line in relation to Fort Gilkicker.
- 5.46 The iSFRA has identified a number of important issues which are likely to need further investigation.
- 5.47 The provision of new flood mitigation measures will be required and the SFRA recommends that these should be funded by the developer and developers proposing new mitigation measures which solely benefit new development should not call on the public purse as a means to secure funding. In addition flood risk management measures funded through public resources may only defend to an existing standard that could be unsafe for development. This needs to be considered when looking at the effects of standards of protection in the light of increasing sea level rise. It may be necessary to secure some funding through alternative funding sources. Further advice should be sought from the Coastal Partners.
- 5.48 **Climate change implications (for 2115):** The map layers in the SFRA show that as would be expected, the risk of flooding in a higher flood risk zone increases for both Flood Zones 2 and 3 at 2115.
- 5.49 The present day 1:200 year extreme tidal flood level for Gosport /Lee-on-the-Solent is 3.1 mAOD, increasing to a predicted 4.2 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Gosport/Lee-on-the-Solent is 3.3 mAOD, increasing to a predicted 4.4 mAOD by the year 2115.⁸⁵

⁸⁵ PUSH SFRA Appendix E: Environment Agency Extreme Water Levels (2007, Atkins)

- 5.50 As the site is shown to lie within present day (2021) Flood Zones 2 and 3, any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, it will need to undertake an assessment of the residual risk and demonstrate that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall. The Council would expect new development to remain safe during the design event, which is the 1:200 year event, taking into account climate change.
- 5.51 Given the scale of the proposed development, applicants are encouraged to engage with the Council from an early stage to determine whether the proposals constitute EIA development as part of the recommended pre-application process.
- 5.52 This information will need to be reviewed once the new PfSH SFRA is complete in winter/spring 2022.

Conclusions

Consider site details and flood risk management requirements. Is the proposed development site likely to be safe and appropriate?

- 5.53 The site is capable of satisfying the criteria set out in the Exception Test. Through the work on the iSFRA a number of important issues have been identified on this aspect. Site-specific FRAs will need to demonstrate how the following matters can be addressed. These are set out below:
 - The Flood Zone(s) within which the proposed development is located;
 - The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
 - How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
 - Safe access and egress routes for the site, including during a potential extreme tidal flood event ⁸⁶;
 - The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum mAOD);
 - How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures⁸⁷, where appropriate, and the preparation of a

⁸⁶ Future safe access and egress for some areas of the site may not be possible during an extreme tidal flood event, therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable roomsalso be set above this level.

⁸⁷ Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:

⁻ Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

⁻ Keeping valuable items at higher levels

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

⁻ Flood doors and windows;

⁻ Flood barriers;

⁻ Concrete floors with damp-proof membranes;

Flood Warning and Evacuation Plan, in accordance with advice from the EA and GBC Emergency Planners. (The site is in an EA Flood Warning Area).

5.54 In conclusion, it is considered the development is considered capable of being made safe in the event of a severe flood event. The whole site was identified through the SHLAA process and will make an important contribution towards meeting the wider regeneration benefits of the Local Plan including meeting much needed housing in the community. This Report sets out the Council's preferred approach for managing flood risk on the site. This will need to be reviewed once the findings of the new PfSH SFRA are complete. Further discussions between the Council, the Environment Agency and the Coastal Partners to take account of the new PfSH SFRA will inform a further iteration of this work prior to the publication of the Regulation 19 stage of the draft Local Plan.

The Council's interim preferred approach for managing flood risk at Land at Fort Road

- 5.55 **1. Off-site strategic measures: The North Solent Shoreline Management Plan's (NSSMP)** long-term (100 year) policy for this frontage is 'Hold the Line'. The adopted Coastal Strategy supports the SMP's Hold the Line policy. However, based on early evidence, any proposed coastal defence schemes are not currently eligible for full government funding therefore developer contributions will be sought to deliver flood risk management measures for this location to an agreed standard of protection.
- 5.56 The proposed development site is located within the overarching North Solent Shoreline Management Plan's (NSSMP) Policy Unit 5b01 (Portsmouth Harbour Entrance to Gilkicker Point). The NSSMP recommends a policy of 'Hold the Line' (HTL - maintain or upgrade the standard of protection offered by the existing coastal defences) for this policy unit throughout Epochs 1-3, for at least the next 100 years.
- 5.57 The site is also located within Strategy Management Zone 3 Fort Monckton to Hill Head Sailing Club of the River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (RHPS, 2015). The Strategy was developed to provide strategic recommendations for how to implement the policies recommended within the NSSMP.
- 5.58 Within SMZ3, this proposed development site is located with Option Development Unit 21 Fort Monckton to Elmore Angling Club. For ODU 21, the RHPS recommends development and implementation of a beach management plan, including beach recycling and future monitoring. Maintenance of existing defences will also be required. Consider upgrades from 2060 if required.

⁻ Airbricks, airbrick covers & vents;

Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising.

- 5.59 The Coastal Partners have prepared a Hill Head to Portsmouth Harbour Beach Management Plan Study Background Studies Report (April 2020). This Report sets out the technical background to prepare this study.
- 5.60 **2. On-site measures:** The site should be designed so that flooding would not impact on the buildings. A sequential approach across the site could locate the more vulnerable parts of the development in the areas of lowest flood hazard. If necessary finished floor levels of the site could be raised so that the internals of the building would remain dry during the design and extreme tidal flood events. Therefore all residential buildings would have a safe place of refuge. A Flood Response Plan would also need to be prepared & accepted by the Local Planning Authority taking advice from the Emergency Planner and Emergency Services looking at conditions experienced in a design extreme flood event.
- 5.61 The developer will need to prepare a comprehensive flood risk management strategy which will manage risk for the allocation site across the plan period whilst all phases of development are being delivered. It would generally be expected to deliver a standard of safety of to keep people and property safer from the 0.5% probability tidal flood event in 2115 (to take account of climate change over the development lifetime) during which the tide level is predicted to reach 4.2m AOD. There is an aspiration that people will be safe from a 0.1% event and if this cannot be achieved, a minimum standard of safety of resisting the 0.5% event. The 0.1% probability tidal flood event in 2115 is 4.4m AOD which does not account for wave action which will be an important consideration at this site. This information will need to be revised to take account
- **3. Adjacent off-site measures:** A number of options for adjacent off site measures could include land raising of access routes. These may be considered less likely to be deliverable. The viability of this has not been assessed at present and will need to be determined. There will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Emergency Planner and Emergency Services.

Preferred Option(s)

- 5.64 The flood risk issues at Land at Fort Road will be a determining factor on the location, type and scale of uses within the site. Parts of the proposed allocation within present day (2021) Flood Zones 1, 2 and 3. Consequently the FRA will need to consider whether it is appropriate to locate particular uses (as defined by the NPPF) on certain parts of the site. A FRA will need to address a number of issues including the following:
 - An assessment of the residual risk taking into account future sea level rise and what future measures would be required
 - The potential of overtopping of crest defence levels; and
 - The capacity of the site to deal with surface water and whether sustainable drainage systems can assist.
- 5.65 Any site-specific FRA will need to assess the residual flood risk behind the flood risk management measures and mitigation proposed. The FRA must show if this site is within a Rapid Inundation Zone should the defence breach or be overtopped.
Safe access and exit to and from the site will be required. There will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Council's Emergency Planning Officer and the Emergency Services.

5.66 In terms of preferred options, a combination of options 2 & 3 are preferred solutions to ensure that the development is safe in this location. The Council would expect the developer to provide these flood risk management measures as part of the development proposals on the site.

Implications for the draft Gosport Borough Local Plan 2038

- 5.67 The site has been identified through the SHLAA process. It is considered that the number of residential units propose can be accommodated in Flood Zone 1. Over the longer-term parts of the site are in the higher risk flood zones. The site has been the subject to an iSFRA. It is considered that this site will contribute towards providing wider sustainability benefits as part of the broader planning strategy including delivery of necessary housing.
- 5.68 Requirements for a site-specific FRA(s) are set out in the preceding paragraphs. Early discussions with the Council, the Environment Agency and the Coastal Partners will be necessary as part of the planning application process.

Fort Gilkicker

Background

- 5.69 Fort Gilkicker, a Palmerston Fort, is a Grade II* listed Scheduled Ancient Monument located at the apex of Stokes Bay overlooking the Solent. Fort Gilkicker is an especially important being probably the finest example of a Palmerston Fort. The majority built in the Portsmouth area were never armed and were subsequently altered with the loss of original features.
- 5.70 Fort Gilkicker has had two prior residential planning applications. Consent was granted (application reference 9316/5) in 2001 permitting restoration and conversion to 17 dwellings with car parking, Museum with public access, new road junction and access road and improvement including new revetment and earth mounding. This consent was not implemented. A second consent was granted in 2010 (application reference 08/00423/Full) for the restoration of the fort and conversion to 26 dwellings, residents stores and interpretation room. This consent has subsequently been extended twice and implementation has commenced.
- 5.71 Notwithstanding this, given this planning history, the Local Plan allocates Fort Gilkicker in the event that extent applications are not implemented hence it's inclusion in the iSFRA.

Strategic Flood Risk Assessment for Fort Gilkicker

5.72 The findings of the iSFRA in respect to policy A1: Fort Gilkicker is set out below.

Is the potential allocation site in an area at low risk of flooding?

- 5.73 A significant portion of the site, including the entirety of the south of the site, is located within the Environment Agency's present day Flood Zones 2 and 3 and may therefore be at risk from a 1 in 200 year to 1 in 1000 year (0.5% to 0.1% annual probability) extreme tidal flood event and a 1 in 200 or greater annual probability of flooding from the sea in any year (>0.5%). The remainder of the site is located within Flood Zone 1 and considered to be at low risk (less than 1 in 1000 year / 0.1% annual probability) from an extreme tidal flood event however this is only a small area of the total site and the immediate vicinity of the sites is within Flood Zones 2 and 3.
- 5.74 Therefore any development would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, demonstrating that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall.
- 5.75 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
- 5.76 Future safe access and egress for the site may not be possible during an extreme tidal flood event; therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms are set above this level.

Is there an alternative potential allocation site in an area at low risk of flooding?

- 5.77 There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:
 - (i) Rowner and HMS Sultan are located in Flood Zone 1.
 - (ii) Daedalus is located in Flood Zone 1.
 - (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
 - (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
 - (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane

- Land at Wheeler Close; and
- Land at Whitworth Close.

Are these alternative sites less suitable, taking into account other planning issues?

5.78 The paragraphs below set out the current position regarding the consideration of alternative sites. A combination of these sites is required to assist the delivery of the level of housing required to deliver the Local Plan strategy.

Land at Rowner and HMS Sultan (policy SS10)

5.79 Significant areas of land at Rowner have already been brought forward for regeneration. Outline planning permission was granted in April 2009 for a mixed-use proposal. The site has delivered 700 residential units in total and policy SS10: Rowner and HMS Sultan allows for further residential development (unspecified quantum) to come forward to complete the regeneration of Rowner this is a long-term project that would likely extend into the next plan period. As such, the change in the number of residential dwellings is not currently known. There are no residential units proposed on HMS Sultan. The Council's preferred option for that site is to support employment and training and the anticipated disposal for the site is now unlikely to come forward before 2029.

Daedalus (policy SS11)

- 5.80 The Daedalus site is already a successful regeneration area in the adopted Gosport Borough Local Plan 2011-2029. Outline planning permission (planning application: 11/00282/OUT) with all matters reserved except access was granted in January 2016 for the following development:
 - Up to 69,992 sq.m. of commercial floor space in new buildings and reuse of existing buildings (Class B1, B2 and B8 use);
 - Up to 1,075 sq.m. of retail use (Class A1, A2, A3 and/or A4 use);
 - Up to 200 residential units (Class C3 use);
 - Up to 32 units of care accommodation (Class C2 use);
 - Up to 1,839 sq.m. of community use (Class D1 use);
 - Up to 8,320 sq.m. of hotel use (Class C1 use);
 - Up to 2,321 sq.m. of leisure (Class D2 use); and
 - Access, parking and landscaping.
- 5.81 To date (2021) subsequent applications have been submitted and approved for the discharge of conditions for this outline consent including additional consents outside the outline application site. As of 31st March 2021 the completion position for 11/00282/OUT is:
 - Dwellings C3: 180 complete with 20 outstanding permissions and 49 outstanding from the Policy LP5 allocation (this will reduce to 20 if the Wykham Hall, Frobisher House application is permitted);
 - Care Units C2: 32 C2 units outstanding and not yet started;
 - Employment floorspace: 69,992 m2 floorspace outstanding from 11/00282/OUT (5,173 m2 has been completed within the extent of 11/00282/OUT however these are separate schemes and do not pertain to the outline permission);

- Retail floorspace: 1,075 m2 of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m2.
- 5.82 Policy SS11 proposes a further 300 Class C3 and/or C2 residential dwellings on Site B of the strategic site and an additional 35,000m² (gross) employment floorspace as part of a wider heritage-led regeneration scheme.

Gosport Town Centre (Policy SS3) makes provision for a significant number of new homes in the draft plan period both within the High Street and surrounding areas and at Gosport Bus Station. As the Town's principal retail, commercial and service centre, Gosport Town Centre has a number of strengths and weaknesses. The High Street is pedestrianised, level and accessible and there is a range of parking options. However, the range of shops is somewhat limited and does not attract many visitors from outside the Borough.

- 5.83 The range of food and drink offers is lacking variety and there are, in common with many High Streets nationally, a number of vacant retail units which has been exacerbated by the economic impact of the political response to the COVID-19 pandemic which has accelerated trends for online shopping. In addition the proximity to the larger centres of Fareham and Portsmouth provides significant competition and associated leakages of retail spend.
- 5.84 Royal Haslar Hospital (Policy SS6) is located in Flood Zone 1 however this already has consent granted in September 2014 for the comprehensive redevelopment and re-use of the site (planning application 12/00591/OUT). The proposed scheme includes a wide range of uses and incorporates medical and care facilities, a hotel (with up to 78 beds), a church, convenience store, health centre, tearoom, restaurant, office and business units, 286 residential units and 244 self-contained retirement units.
- 5.85 Each of the smaller residential allocations in policy A2 will be required in order to assist the delivery of new housing in the Borough in addition to the strategic development sites.

Consider Fort Gilkicker as an allocation site. Will the proposed development type(s) be acceptable in this Flood Zone?

5.86 It is considered that development proposals in those areas within Flood Zones 2 and 3 will require site-specific FRA in accordance with draft policies D3: Regeneration Areas and D7: Flood Risk and Coastal Erosion. Where residential elements are located within Flood Zone 2, residential development is considered appropriate but would require a FRA. Should other uses classified as 'more vulnerable' form part of a submitted planning application, these would also need to be considered against the Exceptions Test if they were located within Flood Zone 3. The table below sets out the types of uses that could be accommodated on the site and the NPPF vulnerability classification:

Proposed Land – uses	NPPG vulnerability classification
Commercial	Less vulnerable
Residential	More vulnerable
Public open space	Water-compatible development

- 5.87 The less vulnerable uses envisaged on the site would not require the Exception Test to be passed nor would the water-compatible development. The residential elements which fall outside of flood zones 1 and 2 would. A site-specific FRA would be required for those developments within Flood Zones 2 and 3. Planning Practice Guidance for flooding provides detailed advice on what a site-specific FRA should contain.
- 5.88 It is also recommended that applicants undertake pre-application discussions with the Council, Environment Agency and Coastal Partners.

Is the Exception Test satisfied?

5.89 Yes see the section on Meeting the Exception Test on page 36.

Are there other potential allocation sites in the same FZ?

- 5.90 Harbour Regeneration Area Haslar Peninsula. This area was largely in Ministry of Defence ownership. There are a number of strategic sites proposed within this location. Significant areas are within Flood Zones 2 and 3 against this backdrop there are significant opportunities to deliver substantial regeneration benefits.
- 5.91 The Haslar Peninsula ('Haslar') is separated from the Waterfront and Town Centre by the saline Haslar Lake and Stoke Lake. Haslar comprises of mostly previously developed land and includes internationally important heritage assets including Haslar Gunboat Sheds, Royal Haslar Hospital, Haslar Barracks and Fort Blockhouse which taken together with the large range of military sites around Portsmouth Harbour are potentially of international significance.
- 5.92 The Haslar part of the Harbour Regeneration Area includes six Strategic Development Site policies:
 - SS4: Blockhouse and Haslar Gunboat Sheds
 - SS5: Fort Blockhouse
 - SS6: Royal Haslar Hospital
 - SS7: Haslar Barracks and Fort Road
 - SS8: The Piggeries
 - SS9: Haslar Marine Technology Park
- 5.93 Of these sites, with the exception of Royal Haslar Hospital and parts of Haslar Barracks and Fort Road which are located in Flood Zone 1 (present day); significant area of the remaining allocations within the Haslar area are located in Flood Zones 2 and 3.
- 5.94 The Gosport Waterfront (policies SS1 and SS2) and parts of the Gosport Town Centre (policy SS3) draft allocations are also within Flood Zones 2 and 3

Other Key Considerations

5.95 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 SFRA. A new SFRA for the PfSH area has been commissioned and is due for completion winter/spring 2022 and will be used to update the information shown for this interim SFRA.

Undefended flood hazard (1B)

5.96 The site is shown as being within a 'high' and 'very high' category of undefended flood hazard. Where the flood hazard is shown there are areas identified as a 'low' hazard at the outer boundary of the site area when applying the Flood Zone 2 undefended flood hazard map however, within the site and the access to Fort Road this is also shown as being within a 'high' classification. 'Low risk' is defined in the SFRA as areas where there may still be shallow flowing water or deep standing water. The SFRA defines areas of 'high' and 'very high risk' as where there could be extreme danger with deep flowing fast water. This information can be used to guide development towards that part of the site at the lowest risk. It is therefore recommended that site-specific FRAs for proposals within this area should undertake a quantitative assessment of defence standards, defence failure scenarios and overland flood flow.

Indicative areas benefiting from flood defences (1C)

- 5.97 Under the SFRA model, the site area does not show any areas benefiting from indicative Areas Benefiting from Defences (iABDs). The site does however benefit from having a protected frontage and this is shown within the crest level layer. However, it is only in those areas where sea defences are **consistently** benefiting from the present day 1:200 year SOP along the frontage of the flood cell being assessed will show the hatching of the iABD. The SFRA acknowledges that the high level strategic modelling and assessment does not take into account the benefit provided by all defences.
- 5.98 It is important to note that these are only shown if the entire frontage of a flood cell is connected to a 1:200 year standard, where this may not be the case the areas are not shown even if the majority of it is protected to that standard or above. This does not imply that any land not shown does not benefit from any defences, just not necessarily to the 1:200 Standard in a continuous block. Further checking with the Environment Agency's Planning for Rivers and Seas also does not show any ABDs in this location. There may be the potential to identify parts of this area as ABDs if more detailed assessments (beyond the scope of the PfSH SFRA or this assessment) of the defences are undertaken.

Other sources of flooding (1F1 series of mapsets)

- 5.99 **Wave overtopping (1F1):** This layer addresses the issue of flood risk from potential wave overtopping. Fort Gilkicker is located on The Solent and experiences 'medium wave energy' along The Solent frontage.
- 5.100 The SFRA recommends that development sites adjacent to 'medium wave energy' coastal frontages take into account the potential risk of wave overtopping and carry out site-specific assessments for this issue. Therefore any site-specific FRAs will need to address this matter. The SFRA did not show any historical incidences of wave overtopping, however in the SFRA, the work on extreme water levels assumed a 'still water' on which the effects of wave action were added. This is an important caveat because this part of the Borough is on the open coast and although the topography here is high it is possible that additional wave action could cause potential for flooding previous anecdotal evidence suggests this may be the case. There is on-going work through the Southern Coastal Group and SCOPAC to understand overtopping and the impact of bimodal waves and the recent SCOPAC Storm Analysis Study has been

published (January 2021⁸⁸), and therefore site-specific FRAs should also examine this issue as part of a detailed assessment.

5.101 **Groundwater flooding (1F2):** The SFRA shows the local geology as being of being of 'low' permeability' with no historical incidences of groundwater flooding. The SFRA guidance notes specific to Gosport indicate that site- specific FRAs do not need to take into account this form of flooding. It is worth noting however that the EA's MAGIC mapping system⁸⁹ confirms the site is within the 'low' permeability classification. The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:

'The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometer square grid.

The potential impact of groundwater pollution is considered using the aquifer designation status which provides an indication of the scale and importance of groundwater for potable water supply and/or in supporting baseflow to rivers, lakes and wetlands.

Groundwater vulnerability to pollution risk classification is defined as:

• High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.

• Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.

• Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits⁹⁰.

- 5.102 This provides a high level analysis only and may need to be considered in further detail as part of a site-specific FRA for individual planning applications. Preapplication discussions with the Environment Agency and the Local Planning Authority are advised.
- 5.103 **Impact of land use change on surface water run-off (1F3):** The SFRA shows the impact of existing land use change on surface water run-off is shown as being 'high' across the whole of the Fort Gilkicker site.
- 5.104 In addition to the above information, the Council has used the EA's Flood Map for Planning which shows the latest published information for surface water flooding.⁹¹ In this location this mapping shows there is a small area within the top eastern corner of the site that may be susceptible to surface water flooding. This

⁸⁸ Details of the SCOPAC Storm Analysis Study can be found here: <u>https://southerncoastalgroup-scopac.org.uk/scopac-research/</u> <u>https://magic.defra.gov.uk/MagicMap.aspx</u>

⁹⁰ Groundwater vulnerability maps technical summary

Project summary SC040016 , Environment Agency,

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwater_variability_ summary.pdf

⁹¹ It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

incorporates susceptibility to potential surface water flooding from a 'low' risk scenario. The different types of risk scenarios are explained in the footnote below.⁹² In terms of the potential depths of water from surface water flooding, for the 'low risk' scenario this is shown as less than 300mm at less than 0.25 m/s. However, it is considered that a site-specific FRA should investigate this issue further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council).

- 5.105 In addition to this, a site-specific FRA(s) will need to address the impacts of surface water flooding taking into account the latest Climate Change Allowances including peak rainfall recently published by the Environment Agency (July 2021). Further information can be obtained from: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances
- 5.106 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. The SFRA identifies substantial areas of 'high' to 'very high' potential susceptible to overland flow. However whilst this is not unusual in urban areas such as Gosport, it is considered to be an issue that would need to be addressed in detail through a site-specific FRA and should consider the impacts and management of flooding due to overland flow. Fort Gilkicker is shown as being within the 'very high' (shown as red).
- 5.107 **Surface water sewer flooding (1F5):** The SFRA does not show any recorded incidents of sewer flooding in this location. However, it is considered a site-specific FRAs should consult Southern Water to investigate the impact of new development on the existing drainage network.
- 5.108 **Present Day Defence Crest Levels (2016):** The equivalent tidal return period of the existing defence crest levels was calculated for the PfSH SFRA by comparing the crest level of the defence/natural ground to the range of extreme sea level return periods for both 2010 and 2115, provided by the Environment Agency at that time. Each length of defence or natural ground defence was then allocated an equivalent surge tide return period. This is the best available information at the present time.
- 5.109 The assessment was based solely on a comparison of the crest/natural ground level with extreme sea levels and does not take account of the following:
 - Defence type.
 - Defence age, condition and residual life.
 - Freeboard allowance built into the design of the defences.

(3.3%)

⁹² The EA surface water maps are high level maps designed to provide an indication of whether an area may be affected by surface water flooding and to what extent.

There are four levels of flood risk. These are:

[•] High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)

[•] Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30

[•] Low - each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%)

[•] Very low - each year, the area has a chance of flooding of less than 1 in 1000 (0.1%) Further information can be found at: <u>https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?easting=461850&northing=99848&map=SurfaceWater</u>

- The potential for wave overtopping of the defences.
- 5.110 The assessment therefore, does not provided information on the standard of service provided by existing defences.
- 5.111 For the draft allocation area, the SFRA shows a defence crest level of 1:1000 along this part of the Stokes Bay coastline. Detailed investigations will be required to understand the nature of coastal processes and flood risk in this location in order to identify both current and future flood risks and a package of appropriate flood risk management measures. Detailed discussions with the Borough Council, the Environment Agency and Coastal Partners will be required as part of the planning applications process.
- 5.112 The iSFRA has identified a number of important issues which are likely to need further investigation.
- 5.113 The provision of new flood mitigation measures will be required and the iSFRA recommends that these should be funded by the developer and developers proposing new mitigation measures which solely benefit new development should not call on the public purse as a means to secure funding. In addition flood risk management measures funded through public resources may only defend to an existing standard that could be unsafe for development. This needs to be considered when looking at the effects of standards of protection in the light of increasing sea level rise. It may be necessary to secure some funding through alternative funding sources. Further advice should be sought from the Coastal Partners.
- 5.114 **Climate change implications (for 2115):** The map layers in the SFRA show that as would be expected, the risk of flooding in a higher flood risk zone increases for both Flood Zones 2 and 3 at 2115.
- 5.115 The present day 1:200 year extreme tidal flood level for Gosport /Lee-on-the-Solent is 3.1 mAOD, increasing to a predicted 4.2 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Gosport/Lee-on-the-Solent is 3.3 mAOD, increasing to a predicted 4.4 mAOD by the year 2115.⁹³
- 5.116 As the site is shown to lie within present day (2021) Flood Zones 2 and 3, any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, it will need to undertake an assessment of the residual risk and demonstrate that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall. The Council would expect new development to remain safe during the design event, which is the 1:200 year event, taking into account climate change.
- 5.117 Given the location of the proposed development, applicants are encouraged to engage with the Council from an early stage to determine whether the proposals

⁹³ PUSH SFRA Appendix E: Environment Agency Extreme Water Levels (2007, Atkins)

constitute EIA development as part of the recommended pre-application process.

5.118 This information will need to be reviewed once the PfSH SFRA is complete in winter/spring 2022.

Conclusions

5.119 **Consider site details and flood risk management requirements. Is the** *proposed development site likely to be safe and appropriate?*

This strategic area satisfies all of the criteria set out in the Exception Test. Through the work on the SFRA a number of important issues have been identified on this aspect. Site-specific FRAs will need to demonstrate how the following matters can be addressed. These are set out below:

- The Flood Zone(s) within which the proposed development is located;
- The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
- How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
- Safe access and egress routes for the site, including during a potential extreme tidal flood event ⁹⁴;
- The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum mAOD);
- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures⁹⁵, where appropriate, and the preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and GBC Emergency Planners. (The site is in an EA Flood Warning Area).
- 5.120 In conclusion, it is considered the development is considered capable of being made safe in the event of a severe flood event. The whole site was identified through the SHLAA process and will make an important contribution towards meeting the wider regeneration benefits of the Local Plan including meeting much needed housing in the community. This Report sets out the Council's

⁹⁴ Future safe access and egress for some areas of the site may not be possible during an extreme tidal flood event, therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable roomsalso be set above this level.

it is recommended that all habitable roomsalso be set above this level. ⁹⁵ Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:

⁻ Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

⁻ Keeping valuable items at higher levels

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

⁻ Flood doors and windows;

Flood barriers;

⁻ Concrete floors with damp-proof membranes;

⁻ Airbricks, airbrick covers & vents;

⁻ Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising.

preferred approach for managing flood risk on the site. This will need to be reviewed once the findings of the new PfSH SFRA are complete. Further discussions between the Council, the Environment Agency and the Coastal Partners to take account of the new PfSH SFRA will inform a further iteration of this work prior to the publication of the Regulation 19 stage of the draft Local Plan.

The Council's interim preferred approach for managing flood risk at Fort Gilkicker

- 5.121 **1. Off-site strategic measures:** The North Solent Shoreline Management Plan's (NSSMP) long-term (100 year) policy for this frontage is 'Hold the Line'. The adopted Coastal Strategy supports the SMP's Hold the Line policy. However, based on early evidence, any proposed coastal defence schemes are not currently eligible for full government funding therefore developer contributions will be sought to deliver flood risk management measures for this location to an agreed standard of protection.
- 5.122 The proposed development site is located within the overarching North Solent Shoreline Management Plan's (NSSMP) Policy Unit 5b01 (Portsmouth Harbour Entrance to Gilkicker Point).
- 5.123 The NSSMP recommends a policy of 'Hold the Line' (HTL maintain or upgrade the standard of protection offered by the existing coastal defences) for this policy unit throughout Epochs 1-3, for at least the next 100 years. The site is also located within Strategy Management Zone 3 - Fort Monckton to Hill Head Sailing Club of the River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (RHPS, 2015). The Strategy was developed to provide strategic recommendations for how to implement the policies recommended within the NSSMP.
- 5.124 Within SMZ3, this proposed development site is located with Option Development Unit 21 Fort Monckton to Elmore Angling Club. For ODU 21, the RHPS recommends development and implementation of a beach management plan, including beach recycling and future monitoring. Maintenance of existing defences will also be required. Consider upgrades from 2060 if required.
- 5.125 The Coastal Partners have prepared a Hill Head to Portsmouth Harbour Beach Management Plan Study Background Studies Report (April 2020). This Report sets out the technical background to prepare this study.
- 5.126 **2. On-site strategic measures:** The developer could improve flood risk management measures within the boundary of their site and raise the Standard of Protection (SOP) offered. This would reduce the likelihood of breach and wave overtopping. The Borough Council would expect contributions to the maintenance and enhancements to local flood risk management measures to be met by the developer. The River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy identifies the preferred options for management over the longer term.
- 5.127 **3. On-site measures:** The site should be designed so that flooding would not impact on the buildings. A sequential approach across the site could locate the

more vulnerable parts of the development in the areas of lowest flood hazard. If necessary finished floor levels of the site could be raised so that the internals of the building would remain dry during the design and extreme tidal flood events. Therefore all residential buildings would have a safe place of refuge. A Flood Response Plan would also need to be prepared & accepted by the Local Planning Authority taking advice from the Emergency Planner and Emergency Services looking at conditions experienced in a design extreme flood event.

- 5.128 The developer will need to prepare a comprehensive flood risk management strategy which will manage risk for the allocation site across the plan period whilst all phases of development are being delivered. It would generally be expected to deliver a standard of safety of to keep people and property safer from the 0.5% probability tidal flood event in 2115 (to take account of climate change over the development lifetime) during which the tide level is predicted to reach 4.2m AOD. There is an aspiration that people will be safe from a 0.1% event and if this cannot be achieved, a minimum standard of safety of resisting the 0.5% event. The 0.1% probability tidal flood event in 2115 is 4.4m AOD which does not account for wave action which will be an important consideration at this site. This information will need to be revised to take account
- **4. Adjacent off-site measures:** A number of options for adjacent off site measures could include land raising of access routes. These may be considered less likely to be deliverable and full consideration would need to be given to the potential impacts on the nearby Gilkicker Lagoon SSSI. The viability of this has not been assessed at present and will need to be determined. There will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Emergency Planner and Emergency Services.

5.130 **Preferred Option(s)**

Parts of the proposed allocation within present day (2021) Flood Zones 2 and 3. Consequently the FRA will need to consider whether it is appropriate to locate particular uses (as defined by the NPPF) on certain parts of the site taking into consideration the unique historic role and assets the site possess. A FRA will need to address a number of issues including the following:

- An assessment of the residual risk taking into account future sea level rise and what future measures would be required;
- The potential of overtopping of crest defence levels; and
- The capacity of the site to deal with surface water and whether sustainable drainage systems can assist.
- 5.131 Any site-specific FRA will need to assess the residual flood risk behind the flood risk management measures and mitigation proposed. The FRA must show if this site is within a Rapid Inundation Zone should the defence breach or be overtopped.
- 5.132 Safe access and exit to and from the site will be required. There will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local

Planning Authority in consultation with the Council's Emergency Planning Officer and the Emergency Services.

5.133 In terms of preferred options at this stage, a combination of options 2, 3 & 4 are preferred solutions to ensure that the development is safe in this location. The Council would expect the developer to provide these flood risk management measures as part of the development proposals on the site. The preferred options will need to be revised to take account of the findings of the new PfSH SFRA once that work has been completed.

Implications for the draft Gosport Borough Local Plan 2038

- 5.134 Fort Gilkicker is an important and unique heritage asset and it is considered that a small level of residential accommodation could secure the future of the Fort. Over the longer-term significant areas of the site are in the higher risk flood zones. The site has been the subject to an iSFRA. It is considered that this site will contribute towards providing wider sustainability benefits as part of the broader planning strategy including delivery of necessary housing and secure an important heritage asset.
- 5.135 Requirements for a site-specific FRA(s) are set out in the preceding paragraphs. Early discussions with the Council, the Environment Agency and the Coastal Partners will be necessary as part of the planning application process.

Land at Forton Road

Background

5.136 This is a former builders' yard adjacent to the Royal Mail Delivery Office. The site is now vacant after Solent Building Supplies moved their premises to Cranbourne Road. The site sites in an area where higher densities could be achieved. Vehicular access is gained directly from Brockhurst Road. The site is 0.40 ha. The site has been identified through the Council's SHLAA.

5.137 Strategic Flood Risk Assessment for Land at Forton Road The findings of the interim SFRA in respect to Land at Forton Road are set out below.

5.138 Is the potential allocation site in an area at low risk of flooding?

- The site is in Flood Zone 1 at 2021 however, at 2115 three-quarters if the site is within both Flood Zone 2 and 3 flood outlines and may therefore be at risk from a 1 in 200 year to 1 in 1000 year (0.5% to 0.1% annual probability) extreme tidal flood event. That part of the site located in Flood Zone 1 is considered to be at low risk (less than 1 in 1000 year / 0.1% annual probability) from an extreme tidal flood event. Therefore any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, demonstrating that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall.
- 5.139 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
- 5.140 It is considered that future safe access and egress for the site may not be possible during an extreme tidal flood event therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms are set above this level. The FRA will need to demonstrate, through suitable designs, that the proposed dwellings would be resilient to both current and forecasted flood risk. These designs may result in the ground floor of buildings being free from residential living accommodation and incorporate flood resistance and resilience measures.
- 5.141 The site-specific FRA should take into account the mitigation measures identified in more detail in this interim SFRA and policies D3: Urban Regeneration Areas and D7: Flood Risk and Coastal Erosion and proposals should also, in line with national planning guidance, provide a safe access and egress, taking account of all sources of flood risk both present day and taking into account the latest climate change projections. This should be agreed with the Environment Agency and the Council's Emergency Planning service.

5.142 Is there an alternative potential allocation site in an area at low risk of flooding?

There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:

- (i) Rowner and HMS Sultan are located in Flood Zone 1.
- (ii) Daedalus is located in Flood Zone 1.
- (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
- (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
- (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane
 - Land at Wheeler Close; and
 - Land at Whitworth Close.

5.143 Are these alternative sites less suitable, taking into account other planning issues?

The paragraphs below set out the current position regarding the consideration of alternative sites. A combination of these sites is required to assist the delivery of the level of housing required to deliver the Local Plan strategy.

5.144 Land at Rowner and HMS Sultan (policy SS10)

Significant areas of land at Rowner have already been brought forward for regeneration. Outline planning permission was granted in April 2009 for a mixed-use proposal. The site has delivered 700 residential units in total and policy SS10: Rowner and HMS Sultan allows for further residential development (unspecified quantum) to come forward to complete the regeneration of Rowner this is a long-term project that would likely extend into the next plan period. As such, the change in the number of residential dwellings is not currently known. There are no residential units proposed on HMS Sultan. The Council's preferred option for that site is to support employment and training and the anticipated disposal for the site is now unlikely to come forward before 2029.

5.145 <u>Daedalus (policy SS11)</u>

The Daedalus site is already a successful regeneration area in the adopted Gosport Borough Local Plan 2011-2029. Outline planning permission (planning application: 11/00282/OUT) with all matters reserved except access was granted in January 2016 for the following development:

- Up to 69,992 sq.m. of commercial floor space in new buildings and reuse of existing buildings (Class B1, B2 and B8 use);
- Up to 1,075 sq.m. of retail use (Class A1, A2, A3 and/or A4 use);

- Up to 200 residential units (Class C3 use);
- Up to 32 units of care accommodation (Class C2 use);
- Up to 1,839 sq.m. of community use (Class D1 use);
- Up to 8,320 sq.m. of hotel use (Class C1 use);
- Up to 2,321 sq.m. of leisure (Class D2 use); and
- Access, parking and landscaping.
- 5.146 To date (2021) subsequent applications have been submitted and approved for the discharge of conditions for this outline consent including additional consents outside the outline application site. As of 31st March 2021 the completion position for 11/00282/OUT is:
 - Dwellings C3: 180 complete with 20 outstanding permissions and 49 outstanding from the Policy LP5 allocation (this will reduce to 20 if the Wykham Hall, Frobisher House application is permitted);
 - Care Units C2: 32 C2 units outstanding and not yet started;
 - Employment floorspace: 69,992 m2 floorspace outstanding from 11/00282/OUT (5,173 m2 has been completed within the extent of 11/00282/OUT however these are separate schemes and do not pertain to the outline permission);
 - Retail floorspace: 1,075 m2 of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m2.
- 5.147 Policy SS11 proposes a further 300 Class C3 and/or C2 residential dwellings on Site B of the strategic site and an additional 35,000m² (gross) employment floorspace as part of a wider heritage-led regeneration scheme.
- 5.148 Gosport Town Centre (Policy SS3) makes provision for a significant number of new homes in the draft plan period both within the High Street and surrounding areas and at Gosport Bus Station. As the Town's principal retail, commercial and service centre, Gosport Town Centre has a number of strengths and weaknesses. The High Street is pedestrianised, level and accessible and there is a range of parking options. However, the range of shops is somewhat limited and does not attract many visitors from outside the Borough.
- 5.149 The range of food and drink offers is lacking variety and there are, in common with many High Streets nationally, a number of vacant retail units which has been exacerbated by the economic impact of the political response to the COVID-19 pandemic which has accelerated trends for online shopping. In addition the proximity to the larger centres of Fareham and Portsmouth provides significant competition and associated leakages of retail spend.
- 5.150 Royal Haslar Hospital (Policy SS6) is located in Flood Zone 1 however this already has consent granted in September 2014 for the comprehensive redevelopment and re-use of the site (planning application 12/00591/OUT). The proposed scheme includes a wide range of uses and incorporates medical and care facilities, a hotel (with up to 78 beds), a church, convenience store, health centre, tearoom, restaurant, office and business units, 286 residential units and 244 self-contained retirement units.

- 5.151 Each of the smaller residential allocations in policy A2 will be required in order to assist the delivery of new housing in the Borough in addition to the strategic development sites.
- 5.152 **Consider Land at Forton Road as an allocation site. Will the proposed development type(s) be acceptable in this Flood Zone?** The site is in Flood Zone 1 (2021) and therefore development in this location is acceptable. However, it is considered that because in the future, the SFRA shows that the majority of the site and the immediate surroundings are within Flood Zone 2 and a smaller southern portion of the site is in Flood Zone 3 at 2115; a site-specific FRA in accordance with draft policies D3: Urban Regeneration Areas and D7: Flood Risk and Coastal Erosion will be required.
- 5.153 Where residential elements are located within Flood Zone 2, residential development is considered appropriate but would require a FRA. Should other uses classified as 'more vulnerable' that may form part of a submitted planning application. Where development is located within the portion of the site in Flood Zone 3 this element would also need to pass the Exceptions Test. The table below sets out the NPPF vulnerability classification:

Proposed Land – uses	NPPG vulnerability classification
Residential	More vulnerable

5.154 Planning Practice Guidance for flooding provides detailed advice on what a sitespecific FRA should contain. It is also recommended that applicants undertake pre-application discussions with the Council, Environment Agency and Coastal Partners.

5.155 Is the Exception Test satisfied?

Yes see the section on Meeting the Exception Test on page 35.

5.156 Are there other potential allocation sites in the same FZ?

All the potential allocation sites in the same Flood Zone that are considered to be deliverable in the plan period have been identified through the Council's SHLAA and allocated in the draft Local Plan.

Other Key Considerations

5.157 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 SFRA. new SFRA is due for completion in winter/spring 2022 and will be used to update the information shown for this iSFRA.

Undefended flood hazard (1B)

5.158 The site is shown as being within the undefended flood hazard at Flood Zone 2. Where the flood hazard is shown, the area identified in draft policy A2 as suitable for residential development falls within an area of 'low' risk (shown in green for Flood Zone 2) 'Low' risk in this context the hazard within Flood Zone 2 the index is based on the potential flood depths that could occur during a 1 in 1,000 year event. 'Low risk' is defined in the SFRA as areas where there may still be shallow flowing water or deep standing water. This information can be used to guide development towards that part of the site at the lowest risk. It is therefore recommended that site- specific FRAs for proposals within these areas should

undertake a quantitative assessment of defence standards, defence failure scenarios and overland flood flow in this location.

Indicative areas benefiting from flood defences (1C)

- 5.159 Under the SFRA model, the site area does not show any areas benefiting from indicative Areas Benefiting from Defences (iABDs). The SFRA shows the site to be partially benefitting from a protective frontage to a 1:200 year standard along Forton Lake but this is not a continuous frontage to this standard and when applying historical crest level information the standard of protection along this frontage is mixed. It is only in those areas where sea defences are **consistently** benefiting from the present day 1:200 year SOP along the frontage of the flood cell being assessed will show the hatching of the iABD.
- 5.160 The SFRA acknowledges that the high level strategic modelling and assessment does not take into account the benefit provided by all defences. It is important to note that these are only shown if the entire frontage of a flood cell is connected to a 1:200 year standard, where this may not be the case the areas are not shown even if the majority of it is protected to that standard or above. This does not imply that any land not shown does not benefit from any defences, just not necessarily to the 1:200 Standard in a continuous block. Further checking with the Environment Agency's Planning for Rivers and Seas also does not show ABDs in this location. However, there may be the potential to identify parts of this area as ABDs if more detailed assessments (beyond the scope of the PfSH SFRA or this assessment) of the defences are undertaken.
- 5.161 It is important to recognise that planning permission was granted in 2020 for a new flood defence scheme at Forton Lake and the delivery of that scheme will enhance flood protection to the local area including at this site. Details of the scheme are explained in subsequent paragraphs further in the assessment. In the meantime it is recommended that FRAs for proposals at Land at Forton Road should still undertake detailed topographic survey and undertake a quantitative assessment of flood hazard based on more detailed assessments of defence standards, defence failure scenarios and overland conveyance of flood flows taking into account the latest climate change allowances.

Other sources of flooding (1F1 series of mapsets)

- 5.162 **Wave overtopping (1F1):** not applicable to this site. For further information Forton Lake experiences 'low' wave energy and there are no historical incidences of wave overtopping in the vicinity of Forton Lake.
- 5.163 **Groundwater flooding (1F2):** The SFRA shows the local geology as being of being of 'moderate permeability' with no historical incidences of groundwater flooding. The SFRA guidance notes specific to Gosport indicate that site-specific FRAs do not need to take into account this form of flooding. It is worth noting that the EA's MAGIC mapping system⁹⁶ also shows this area as falling within a Medium classification. The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:

⁹⁶ <u>https://magic.defra.gov.uk/MagicMap.aspx</u>

'The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant ground level based on the hydrological, discharged at geological, hydrogeological and soil properties within a one kilometer square grid.

The potential impact of groundwater pollution is considered using the aguifer designation status which provides an indication of the scale and importance of groundwater for potable water supply and/or in supporting baseflow to rivers, lakes and wetlands.

Groundwater vulnerability to pollution risk classification is defined as:

- High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.
- Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits.⁹⁷
- 5.164 This provides a high level analysis only and may need to be considered in further detail as part of a site-specific FRA for individual planning applications. Preapplication discussions with the Environment Agency and the Local Planning Authority are advised.
- Impact of land use change on surface water run-off (1F3): The SFRA shows 5.165 the impact of existing land use change on surface water run-off is shown as being of a 'moderate' impact for the whole of the site. In addition to the above information, the Council has used the EA's Flood Map for Planning which shows the latest published information for surface water flooding.⁹⁸ In this location this mapping shows there are areas of the site susceptible to surface water flooding within approximately the southern third of the site area. This mapping incorporates susceptibility to potential surface water flooding from two scenarios: 'medium' and 'low' risk these terms are explained in the footnote below. In terms of the potential depths of water from surface water flooding for each scenario these are explained as follows. The small 'medium' risk scenario is identified in the southern third of the site with depths of less than 300mm.
- 5.166 In terms of the velocity, this is shown as less than 0.25m/s. The main risk from surface water flooding on the site and in the immediate area along Brockhurst Road is shown as occurring from the 'low' risk scenario with potential depths of 300-900mm with some smaller areas shown as less than 300mm in depth. In terms of velocity this is shown as being less than 25m/s within the site with small

⁹⁷ Groundwater vulnerability maps technical summary

Project summary SC040016, Environment Agency, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwater_variability_ summary.pdf

⁹⁸ It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

areas towards the southern boundary of the site and on Brockhurst Road as over 25m/s.

- 5.167 A site-specific FRA(s) should investigate this issue further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council) and will need to address the impacts of surface water flooding taking into account the latest Climate Change Allowances including peak rainfall intensity allowances recently published by the Environment Agency (July 2021). Further information can be obtained from: <u>https://www.gov.uk/guidance/flood-riskassessments-climate-change-allowances</u> and the Environment Agency's Standing Advice on site-specific Flood Risk Assessments for applicants in: <u>https://www.gov.uk/guidance/flood-risk-assessment-standing-advice</u>
- 5.168 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. In terms of this site, the SFRA identifies the site as being split between the 'high'(shown in brown) (the western part of the site) and 'very high' (shown in red) (the eastern part of the site) classifications.
- 5.169 The map can be used to identify areas which have a high to very high potential for generating overland flow. However, it is important to note that this information does not show the locations where overland flow may pass through, or pond, and it is not implied that those areas with a 'low potential' for generating overland flow also have a low risk of experiencing flooding due to overland flow. The assessment of flow routes outside of river systems is a complex and detailed process, and such an assessment across the entire PUSH sub-region was beyond the scope of the SFRA. This provided a high-level sub-regional assessment of the relative potential of areas to generate overland flow, and as such can be used to ensure that sensitive or vulnerable development is not located 'downstream' of areas which may result in high overland flow during intense rainstorms. It may also be of use to those wishing to refine study areas for more detailed assessments of overland flow for other and therefore is considered helpful in this context.
- 5.170 The SFRA advice considers that for site-specific FRAs for those sites that are found to be within or in the vicinity of these areas, especially if the local topography places the site at a lower elevation than the surrounding land and hence downstream of the source, should consider the impacts and management of flooding due to overland flow. It is therefore considered to be an issue that should be addressed through a site-specific FRA and should consider the impacts and management of flooding due to overland flow.
- 5.171 **Surface water sewer flooding (1F5):** The SFRA does not show any recorded incidents of sewer flooding on the site, however, it does show localised incidences of flooding in nearby locations for example in Lukes Road and Gladstone Road. Therefore it is considered that site-specific FRAs should consult Southern Water to investigate the impact of new development on the existing drainage network.
- 5.172 **Present Day Defence Crest Levels (2016):** Whilst the site is not located in close proximity to Forton Lake in the case of an extreme tidal flood event this

could potentially impact onto the site. Therefore for this part of the assessment the Council has applied this layer of information to Forton Lake.

- 5.173 The equivalent tidal return period of the existing defence crest levels was calculated for the PfSH SFRA by comparing the crest level of the defence/natural ground to the range of extreme sea level return periods for both 2010 and 2115, provided by the Environment Agency at that time. Each length of defence or natural ground defence was then allocated an equivalent surge tide return period.
- 5.174 The assessment was based solely on a comparison of the crest/natural ground level with extreme sea levels and does not take account of the following:
 - Defence type.
 - Defence age, condition and residual life.
 - Freeboard allowance built into the design of the defences.
 - The potential for wave overtopping of the defences.
- 5.175 The assessment therefore, does not provided information on the standard of service provided by existing defences.
- 5.176 For the draft allocation site, the SFRA shows a mixed SOP along the Forton Lake frontage with a range of defence asset types and conditions.⁹⁹ When applying the 2115 climate change layers, virtually the whole site is covered by Flood Zone 3, therefore the longer term enhancement and maintenance of future defences in this location as part of a package of flood risk management measures will be a key consideration.
- 5.177 Planning permission was granted in January 2021 for a Flood and Coastal Erosion Risk Management scheme comprising of a new setback I-shaped flood wall, maintenance repairs to the existing sea wall, road raising, installation of a removable flood gate (stop logs), associated drainage and landscaping. The scheme also includes a number of ecological enhancements in the form of bee bricks, vertipools and native species planting. This scheme will provide protection to around 232 properties on completion.¹⁰⁰
- 5.178 Any future provision of new flood risk management and mitigation measures may be required and the SFRA recommends that these should be funded by the developer and developers proposing new mitigation measures which solely benefit new development should not call on the public purse as a means to secure funding. In addition defences funded through public resources may only defend to an existing standard that could be unsafe for development. This needs to be considered when looking at the effects of standards of protection in the light of increasing sea level rise. It may be necessary to secure some funding through alternative funding sources. Further advice should be sought from the Coastal Partners on behalf of the Borough Council.

⁹⁹ Further detail can be found in Appendix B: Defence Conditions Assessment (2014) of the River Hamble to Portchester CFERMS ¹⁰⁰ Further information can be found on the Coastal Partners website on: https://coastalpartners.org.uk/project/forton-scheme

- 5.179 **Climate change implications (for 2115):** The map layers in the SFRA show that as would be expected, the risk of flooding in a higher flood risk zone increases for both Flood Zones 2 and 3 at 2115.
- 5.180 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115. This information will need to be reviewed once the PfSH SFRA is complete in winter/spring 2022.
- 5.181 The site is shown to lie within present day (2021) Flood Zone 1 however, any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), because of potential future flood risk in this location as shown by the current SFRA map layers at 2115. The FRA will be expected to be appropriate to the scale and nature of the proposed development, it will need to undertake an assessment of the residual risk and demonstrate that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall. The Council would expect new development to remain safe during the design event, which is the 1:200 year event, taking into account climate change. This is because climate change information for 2115 shows substantial areas of the site and the immediate surrounding area falling within Flood Zone 3.
- 5.182 Applicants are encouraged to engage with the Council from an early stage to determine the level of flood risk management measures that will be required as part of the recommended pre-application process.

Conclusions

5.183 **Consider site details and flood risk management requirements.** Is the proposed development site likely to be safe and appropriate?

This allocated site can satisfy the criteria set out in the Exception Test. Through the work on the iSFRA a number of important issues have been identified. Sitespecific FRAs will need to demonstrate how the following matters can be addressed. These are set out below:

- The Flood Zone(s) within which the proposed development is located;
- The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
- How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
- Safe access and egress routes for the site, including during a potential extreme tidal flood event ¹⁰¹;
- The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels

¹⁰¹ Future safe access and egress for some areas of the site may not be possible during an extreme tidal flood event, therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms are set above this level.

have been set with these in mind (all levels to be given in metres above ordnance datum - mAOD);

- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures¹⁰², where appropriate, and the preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and GBC Emergency Planners. (The southern part of the site is in an EA Flood Warning Area).
- 5.184 In conclusion, it is considered the development is considered capable of being made safe in the event of a severe flood event. The whole site was identified through the SHLAA process and will make an important contribution towards meeting the wider regeneration benefits of the draft Local Plan including meeting much needed housing in the community. This Report sets out the Council's preferred approach for managing flood risk on the site. This approach will need to be reviewed once the findings of the new PfSH SFRA are complete. Further discussions between the Council, the Environment Agency and the Coastal Partners to take account of the new PfSH SFRA will inform a further iteration of this work prior to the publication of the Regulation 19 stage of the draft Local Plan.

The Council's interim preferred approach for managing flood risk for Land at Forton Road

- 5.185 **1. Off-site strategic measures:** The North Solent Shoreline Management Plan's (NSSMP) long-term (100 year) policy for this frontage is 'Hold the Line'. The adopted Coastal Strategy supports the SMP's Hold the Line policy. However, based on early evidence, any proposed coastal defence schemes are not currently eligible for full government funding therefore developer contributions will be sought to deliver flood risk management measures for this location to an agreed standard of protection.
- 5.186 The proposed development site is located within the overarching North Solent Shoreline Management Plan's (NSSMP) Policy Unit 5b01 (Portsmouth Harbour Entrance to Gilkicker Point).
- 5.187 The NSSMP recommends a policy of 'Hold the Line' (HTL maintain or upgrade the standard of protection offered by the existing coastal defences) for this policy unit throughout Epochs 1-3, for at least the next 100 years.

- Keeping valuable items at higher levels

¹⁰² Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:

⁻ Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

⁻ Flood doors and windows;

⁻ Flood barriers;

⁻ Concrete floors with damp-proof membranes;

⁻ Airbricks, airbrick covers & vents;

⁻ Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising.

- 5.188 The site is also located within Strategy Management Zone 2 Upper Quay (Fareham) to Fort Monckton (Gosport) of the River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (RHPS, 2015). The Strategy was developed to provide strategic recommendations for how to implement the policies recommended within the NSSMP.
- 5.189 Within SMZ2, this proposed development site is located with Option Development Unit 11: Lichfield Drive to Parham Road (ODU11). For ODU 11, the RHPS recommend priority capital works, such as a flood wall, are required near St Vincent's College to address flood risk. Ongoing defence maintenance with further defence upgrades will also be required from 2060. Since the adoption of the Strategy, a new flood defence scheme was granted planning permission at Forton Lake in January 2021. This scheme will provide flood protection for around 232 properties in the wider locality. Details of the scheme are set out in the Infrastructure in section 5 below.

5.190 **2. On-site strategic measures:**

The site should be designed so that flooding would not impact on the buildings. A sequential approach across the site to locate the more vulnerable parts of the development in the areas of lowest flood hazard should be applied where possible. If necessary finished floor levels of the site could be raised so that the internals of the building would remain dry during the design and extreme tidal flood events. Therefore all residential buildings would have a safe place of refuge.

- 5.191 A Flood Response Plan would also need to be prepared & accepted by the Local Planning Authority taking advice from the Emergency Planner and Emergency Services looking at conditions experienced in a design extreme flood event.
- 5.192 The developer will need to prepare a comprehensive flood risk management strategy which will manage risk for the allocation site across the plan period whilst all phases of development are being delivered. It would generally be expected to deliver a standard of safety of to keep people and property safer from the 0.5% probability tidal flood event in 2115 (to take account of climate change over the development lifetime) during which the tide level is predicted to reach 4.3m AOD. There is an aspiration that people will be safe from a 0.1% event and if this cannot be achieved, a minimum standard of safety of resisting the 0.5% event. The 0.1% probability tidal flood event in 2115 is 4.5m AOD which does not account for wave action.
- 5.193 **3. Adjacent off-site measures:** There will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Emergency Planner and Emergency Services.

5.194 **Preferred Option(s)**

The flood risk issues at Land at Forton Road will be a determining factor on the location, type and scale of uses within the site taking into account future flood risk using the latest climate change allowances and the new PfSH SFRA. A FRA will need to address a number of issues including the following:

- The Flood Zone(s) within which the proposed development is located;
- The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
- How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
- Safe access and egress routes for the site, including during a potential extreme tidal flood event;
- The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum mAOD);
- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures, where appropriate¹⁰³;
- The preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and the Borough Council's Emergency Planner; and
- The capacity of the site to deal with surface water and whether sustainable drainage systems can assist.
- 5.195 A combination of options 2 and 3 are likely to be preferred. In addition to this, any site-specific FRA will need to assess the residual flood risk behind the defences delivered (i.e. if the defences are breached or overtopped) or risks until a full continuous flood defence is delivered and the development employs appropriate mitigation techniques. The FRA must show if this site is within a Rapid Inundation Zone should the defence at Forton Lake is breach or be overtopped. Any site-specific FRA will need to assess the residual flood risk behind the defences.
- 5.196 A combination of options will be preferred to ensure that the development is safe in this location. The Council would expect the developer to provide these flood risk management measures as part of the development proposals on the site. Discussions with the Council (including the Coastal Partners) will be required.
- 5.197 There will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Council's Emergency Planning Officer and the Emergency Services.

 ¹⁰³ Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:
 Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

⁻ Keeping valuable items at higher levels

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

Flood doors and windows;
 Flood barriers;

⁻ Concrete floors with damp-proof membranes;

⁻ Airbricks, airbrick covers & vents;

⁻ Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising

Implications for the draft Gosport Borough Local Plan 2038

- 5.198 Significant parts of the site are in the higher risk flood zones over the longer term. The site has been the subject to an iSFRA. It is considered that this site will contribute towards delivering the housing requirement. The site contributes towards providing wider sustainability benefits as part of the broader planning strategy including delivery of necessary housing.
- 5.199 Requirements for a site-specific FRA(s) are set out in the preceding paragraphs. Early discussions with the Council, the Environment Agency and the Coastal Partners regarding development on the site are advised as part of the planning application process.

Land at Grove Road

Background

- 5.200 Land at Grove Road is currently identified as open space, however the recent Open Space Monitoring Report has shown that this site is privately owned and appears to be no longer publicly accessible. The site has been allocated for housing.
- 5.201 The following environmental constraints have been identified:
 The site is located immediately south of the international environmental designations of Portsmouth Harbour SSSI, SPA and Ramsar site.
 The site is not shown to lie within the immediate proximity of any additional sites identified under the Solent Waders and Brent Goose Strategy (2020), however is located further north of the G63, G01 and G31 Core Areas, identified by the Strategy.

- Site within 200 m of Priddy's Hard SINC. Proposals should protect the habitat.

5.202 Development proposals should be informed by a site-specific Flood Risk Assessment (FRA) and demonstrate, through suitable designs, that the proposed dwellings would be resilient to both current and forecasted flood risk. These designs may result in the ground floor of buildings being free from residential living accommodation and incorporate flood resistance and resilience measures. Proposals should also, in line with national planning guidance, provide a safe access and egress, taking account of all sources of flood risk both present day and taking into account the latest climate change projections. This should be agreed with the Environment Agency and the Council's Emergency Planning service. The site-specific FRA should take into account the mitigation measures identified in more detail in this interim SFRA and policies D3: Urban Regeneration Areas and D7: Flood Risk and Coastal Erosion.

Strategic Flood Risk Assessment for Land at Grove Road

5.203 The findings of the interim SFRA in respect to policy A2: Land at Grove Road are set out below.

5.204 Is the potential allocation site in an area at low risk of flooding?

The allocation at Land at Grove Road is within Flood Zone 1 as shown by the Environment Agency's present day (2021) Flood Zone maps. The main part of the site remains in Flood Zone 1 at 2115 with the exception being the bottom edge of the site along Sealark Road and along parts of Grove Road is shown as being within Flood Zones 2 and 3 at 2115. This will need to be reviewed once the PfSH SFRA is complete in winter/spring 2022. The new sub regional SFRA takes account of the latest climate change allowances for tidal and fluvial flooding. This new information will inform the Council's SFRA prior to the Regulation 19 consultation stage. This iSFRA identifies surface water as an issue not on the site itself but along Grove Road and Sealark Road and this is explained in further detail later in the assessment. Therefore it is considered that any development within this area would need to be accompanied by a sitespecific Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, demonstrating that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall.

5.205 **Consider Land at Grove Road as an allocation site. Will the proposed** development type(s) be acceptable in this Flood Zone?

It is considered that development proposals will be acceptable as the site is in Flood Zone 1. It is considered that a site-specific FRA will be required particularly in respect of surface water and a drainage strategy and SuDS should form part of that assessment.

Proposed Land – uses	NPPG vulnerability classification
Residential	More vulnerable

5.206 Are there other potential allocation sites in the same FZ?

There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:

- (i) Rowner and HMS Sultan are located in Flood Zone 1.
- (ii) Daedalus is located in Flood Zone 1.
- (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
- (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
- (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane
 - Land at Wheeler Close; and
 - Land at Whitworth Close.

5.207 Is the Exception Test satisfied?

Yes see the section on Meeting the Exception Test on page 36.

Other Key Considerations

5.208 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 SFRA. A new SFRA is due for completion in winter/spring 2022 and will be used to update the information shown for this iSFRA.

Undefended flood hazard (1B)

5.209 The site is shown as being outside of the undefended flood hazard at Flood Zones 2 and 3.

Indicative areas benefiting from flood defences (1C)

5.210 Under the SFRA model, the site area does not show any areas benefiting from indicative Areas Benefiting from Defences (iABDs).

Other sources of flooding (1F1 series of mapsets)

- 5.211 **Groundwater flooding (1F2):** The SFRA shows the local geology as being of being of 'medium-high bedrock permeability' for the majority of the site and of 'moderate permeability' in approximately the bottom third of the site. There are with no historical incidences of groundwater flooding. The SFRA guidance notes specific to Gosport indicate that there is a narrow band of highly permeable bedrock running from Brookers Lane to Priddy's Hard splits the Borough site-specific FRAs do not need to take into account this form of flooding. It is worth noting however that the EA's MAGIC mapping system¹⁰⁴ show this area as falling within a Medium-High. The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:
- 5.212 'The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometer square grid.

The potential impact of groundwater pollution is considered using the aquifer designation status which provides an indication of the scale and importance of groundwater for potable water supply and/or in supporting baseflow to rivers, lakes and wetlands.

Groundwater vulnerability to pollution risk classification is defined as:

• High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.

• Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.

• Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits.¹⁰⁵

- 5.213 This provides a high level analysis only and may need to be considered in further detail as part of a site-specific FRA for individual planning applications. Preapplication discussions with the Environment Agency and the Local Planning Authority are advised.
- 5.214 **Impact of land use change on surface water run-off (1F3):** The SFRA shows the impact of existing land use change on surface water run-off is shown as being moderate for the whole of the site. There have been some historical

Project summary SC040016, Environment Agency,

¹⁰⁴ https://magic.defra.gov.uk/MagicMap.aspx

¹⁰⁵ Groundwater vulnerability maps technical summary

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwater_variability_summary.pdf

incidences of flooding identified by Southern Water at the corner of Grove Road and Sealark Road.

- 5.215 In addition to the above information, the Council has used the EA's Flood Map for Planning which shows the latest published information for surface water flooding.¹⁰⁶ In this location this mapping shows there are areas susceptible to surface water flooding along Grove Road and Sealark Road at the southern and western end of the site boundary. This mapping incorporates susceptibility to potential surface water flooding from mainly a 'low' risk scenario along the western boundary with some of the 'high' and 'medium' risk scenarios incorporated along the southern boundary in Sealark Road as explained in the footnote below.¹⁰⁷ In terms of the potential depths of water from surface water flooding, for the 'low' and 'medium' scenarios the depths range between less than 300mm and 300-900mm.
- 5.216 In terms of the velocity for the 'low' risk scenario this is shown as over 0.25m/s along Grove Road but there are some small pockets around the southern part of the site where the open space is envisaged were the velocity is less than 0.25m/s and for those small areas of land which could fall within a 'medium' risk at the southern end of the site these are shown as mainly less than 0.25m/s but with some small areas at the south western corner where the velocity is more than 0.25m/s.
- 5.217 This map layer does not show surface water as a particular issue within the site area of land identified for built development. However, it is still considered 'that a site-specific FRA(s) should investigate this issue further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council) and will need to address the impacts of surface water flooding taking into account the latest Climate Change Allowances including peak rainfall intensity allowances recently published by the Environment Agency (July 2021). Further information can be obtained from: https://www.gov.uk/guidance/flood-risk-assessments for applicants in: https://www.gov.uk/guidance/flood-risk-assessments for applicants in: https://www.gov.uk/guidance/flood-risk-assessments-standing-advice
- 5.218 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. In terms of the site allocation, the SFRA identifies the site as being within the 'very high' (shown in red). The map can be used to identify areas which have a high to very high potential for generating overland flow. However, it is important to note that this information

¹⁰⁶ It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

¹⁰⁷ The EA surface water maps are high level maps designed to provide an indication of whether an area may be affected by surface water flooding and to what extent.

There are four levels of flood risk. These are:

[•] High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)

[•] Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30

^(3.3%)

[•] Low - each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%)

[•] Very low - each year, the area has a chance of flooding of less than 1 in 1000 (0.1%)

Further information can be found at: <u>https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?easting=461850&northing=99848&map=SurfaceWater</u>

does not show the locations where overland flow may pass through, or pond, and it is not implied that those areas with a 'low potential' for generating overland flow also have a low risk of experiencing flooding due to overland flow.

- 5.219 The assessment of flow routes outside of river systems is a complex and detailed process, and such an assessment across the entire PUSH sub-region was beyond the scope of the SFRA. This provided a high-level sub-regional assessment of the relative potential of areas to generate overland flow, and as such can be used to ensure that sensitive or vulnerable development is not located 'downstream' of areas which may result in high overland flow during intense rainstorms. It may also be of use to those wishing to refine study areas for more detailed assessments of overland flow for other and therefore is considered helpful in this context.
- 5.220 The SFRA advice considers that for site-specific FRAs for those sites that are found to be within or in the vicinity of these areas, especially if the local topography places the site at a lower elevation than the surrounding land and hence downstream of the source, should consider the impacts and management of flooding due to overland flow.
- 5.221 It is therefore considered to be an issue that should be addressed through a sitespecific FRA and should consider the impacts and management of flooding due to overland flow in this case.
- 5.222 **Surface water sewer flooding (1F5):** The SFRA does not show any recorded incidents of sewer flooding in this location, however, it is considered that site-specific FRAs should consult Southern Water to investigate the impact of new development on the existing drainage network and because there have been historical occurrences of flooding in the locality as described above.
- 5.223 **Climate change implications (for 2115):** The map layers in the SFRA show that as would be expected, the risk of flooding in a higher flood risk zone increases for both Flood Zones 2 and 3 at 2115. Whilst the boundary of the site itself remains in Flood Zone 1 large areas around it at Grove Road and Sealark Road are within Flood Zones 2 and 3 at 2115.
- 5.224 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
- 5.225 The site are shown to lie within present day (2021) Flood Zone 1 however development proposals would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development taking into account future flood residual risk and demonstrate that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall. The Council would expect new development to remain safe during the design event, which is the 1:200 year event, taking into account climate change. This is because climate change information for 2115 shows almost the whole of the surrounding area within Flood Zone 3. This

information will need to be reviewed once the PfSH SFRA is complete in winter/spring 2022.

Conclusions

Consider site details and flood risk management requirements. Is the 5.226 proposed development site likely to be safe and appropriate?

It is considered this allocation satisfies all of the criteria set out in the Exception Test. Through the work on the iSFRA a number of important issues have been identified on this aspect. A site-specific FRA will need to demonstrate how the following matters can be addressed. These are set out below:

- The Flood Zone within which the proposed development is located;
- The sources of flooding which could affect the site; to include tidal, • fluvial, groundwater and surface water flooding, and the probability of each occurring;
- How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
- Safe access and egress routes for the site, including during a potential extreme tidal flood event ¹⁰⁸:
- The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum - mAOD);
- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures¹⁰⁹, where appropriate, and the preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and GBC Emergency Planners. (The site is in an EA Flood Warning Area).
- 5.227 In conclusion, it is considered the development is considered capable of being made safe in the event of a severe flood event. The whole site was identified through the SHLAA process and will make an important contribution towards meeting the wider regeneration benefits of the draft Local Plan including meeting much needed housing in the community. This Report sets out the Council's preferred approach for managing flood risk on the site. This will need to be reviewed once the findings of the new PfSH SFRA are complete. Further

Future safe access and egress for some areas of the site may not be possible during an extreme tidal flood event, therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore,

it is recommended that all habitable roomsalso be set above this level. ¹⁰⁹ Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:

⁻ Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

⁻ Keeping valuable items at higher levels

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

⁻ Flood doors and windows;

⁻ Flood barriers

⁻ Concrete floors with damp-proof membranes;

⁻ Airbricks, airbrick covers & vents;

⁻ Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising.

discussions between the Council, the Environment Agency and the Coastal Partners to take account of the new PfSH SFRA will inform a further iteration of this work prior to the publication of the Regulation 19 stage of the draft Local Plan.

The Council's interim preferred approach for managing flood risk at Land at Grove Road

- 5.228 **1. Off-site strategic measures:** The North Solent Shoreline Management Plan's (NSSMP) long-term (100 year) policy for this frontage is 'Hold the Line'. The adopted Coastal Strategy supports the SMP's Hold the Line policy. However, based on early evidence, any proposed coastal defence schemes are not currently eligible for full government funding therefore developer contributions will be sought to deliver flood risk management measures for this location to an agreed standard of protection.
- 5.229 The proposed development site is located within the overarching North Solent Shoreline Management Plan's (NSSMP) Policy Unit 5b01 (Portsmouth Harbour Entrance to Gilkicker Point).
- 5.230 The NSSMP recommends a policy of 'Hold the Line' (HTL maintain or upgrade the standard of protection offered by the existing coastal defences) for this policy unit throughout Epochs 1-3, for at least the next 100 years.
- 5.231 The site is also located within Strategy Management Zone 2 Upper Quay (Fareham) to Fort Monckton (Gosport) of the River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (RHPS, 2015). The Strategy was developed to provide strategic recommendations for how to implement the policies recommended within the NSSMP.
- 5.232 Within SMZ2, this proposed development site is located with Option Development Unit 10 Monks Walk to Lichfield Drive. For ODU 10, the RHPS recommends that scheduled maintenance should be carried out to maintain the current defences which offer a good SoP. Capital works (e.g. seawall) will be required from 2060. This will offer improved defences to the locality including the allocation site.
- **2. On-site strategic measures:** The site should be designed so that flooding would not impact on the buildings. Finished floor levels of the site could be raised so that the internals of the building would remain dry during the design and extreme tidal flood events. Therefore all residential buildings would have a safe place of refuge. A Flood Response Plan would also need to be prepared & accepted by the Local Planning Authority taking advice from the Emergency Planner and Emergency Services looking at conditions experienced in a design extreme flood event.

Preferred Option(s)

- 5.234 A FRA will need to address a number of issues including the following:
 - The Flood Zone(s) within which the proposed development is located particularly with regards to climate change;
 - The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
 - How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
 - Safe access and egress routes for the site, including during a potential extreme tidal flood event;
 - The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum mAOD);
 - How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures, where appropriate¹¹⁰;
 - The preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and the Borough Council's Emergency Planner; and
 - The capacity of the site to deal with surface water and whether sustainable drainage systems can assist.
- 5.235 Any site-specific FRA will need to assess the residual flood risk behind the defences delivered (i.e. if the defences are breached or overtopped) or risks until a full continuous flood defence is delivered and the development employs appropriate mitigation techniques. The FRA must show if this site is within a Rapid Inundation Zone should the defence breach or be overtopped. Any site-specific FRA will need to assess the residual flood risk behind the defences.

The Council would expect the developer to provide these flood risk management measures as part of the development proposals on the site.

There will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Council's Emergency Planning Officer and the Emergency Services.

 ¹¹⁰ Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:
 Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

⁻ Keeping valuable items at higher levels

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

Flood doors and windows;
 Flood barriers;

Concrete floors with damp-proof membranes;

⁻ Airbricks, airbrick covers & vents;

⁻ Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising

Implications for the draft Gosport Borough Local Plan 2038

- 5.236 The residential allocations set out in draft policy A2 will make an important contribution towards meeting the housing requirement set out in the draft Local Plan. Development proposals at the site will need to comply with Policy D7: Flood Risk and Coastal Erosion and manage current and future flood risks. Whilst the site is within Flood Zone 1 the SFRA shows that it is bounded by large areas that are within Flood Zones 2 and 3 at 2115 creating an 'island' effect and therefore it is considered that future development proposals must address these issues.
- 5.237 The site has been the subject to an interim SFRA. It is considered that this site will contribute towards meeting housing needs within the Borough. It is necessary to ensure that the site fully accords with the requirements of the Exception Test. The site contributes towards wider sustainability benefits these matters are addressed more fully addressed in the relevant supporting documents to accompany the draft Local Plan.

Land at Gasworks Site, Mariners Way

Background

- 5.238 Land at the Gasworks in Mariners Way is a former gas storage site with access from Cranbourne Rd and Mariners Way. Infrastructure associated with the sites prior use remains. The landowner Southern Gas Networks are looking to dispose of the site as part of their nationwide programme to dispose of older gas storage sites which are no longer used. The site has been identified through the Council's SHLAA.
- 5.239 The following environmental constraints have been identified:
 The site is located approximately within 50m of the international environmental designations of Portsmouth Harbour SSSI, SPA and Ramsar site.
- 5.240 Development proposals should be informed by a site-specific Flood Risk Assessment (FRA) and demonstrate, through suitable designs, that the proposed dwellings would be resilient to both current and forecasted flood risk. These designs may result in the ground floor of buildings being free from residential living accommodation and incorporate flood resistance and resilience measures. Proposals should also, in line with national planning guidance, provide a safe access and egress, taking account of all sources of flood risk both present day and taking into account the latest climate change projections. This should be agreed with the Environment Agency and the Council's Emergency Planning service. The site-specific FRA should take into account the mitigation measures identified in more detail in this interim SFRA and policies D3: Urban Regeneration Areas and D7: Flood Risk and Coastal Erosion.

Strategic Flood Risk Assessment for Land at the Gasworks, Mariners Way

5.241 The findings of the interim SFRA in respect to Land at the Gasworks, Mariners Way are set out below.

5.242 Is the potential allocation site in an area at low risk of flooding?

The majority of the site is located in Flood Zone 1 with the exception of the edge adjoining properties in Dolphin Road which is shown in Flood Zones 2 and 3 as shown on the Environment Agency Flood Zones present day maps (2021) and may therefore be at risk from a 1 in 200 year to 1 in 1000 year (0.5% to 0.1% annual probability) extreme tidal flood event. That part of the site located in Flood Zone 1 is considered to be at low risk (less than 1 in 1000 year / 0.1% annual probability) from an extreme tidal flood event. Therefore any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, demonstrating that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall.

5.243 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115.
5.244 Future safe access and egress for the site may not be possible during an extreme tidal flood event therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable rooms are set above this level.

5.245 Is there an alternative potential allocation site in an area at low risk of flooding?

There are a number of alternative potential allocation sites in an area at low risk of flooding these are set out below:

- (i) Rowner and HMS Sultan are located in Flood Zone 1.
- (ii) Daedalus is located in Flood Zone 1.
- (iii) Parts of Gosport Town Centre are located in Flood Zone 1.
- (iv) Haslar Peninsular is mainly located in Flood Zones 2 and 3. The site of the hospital (policy SS6) is situated on higher ground levels and is in Flood Zone 1.
- (v) Draft allocations in Flood Zone 1 (policy A2) set out below:
 - Land south of Fort Road (parts of)
 - Land at Forton Road
 - Land at Stoners Close
 - Land at Lapthorn Close
 - Land at Prideaux Brune Avenue
 - Land between Woodside and Wych Lane
 - Land at Bridgemary Road
 - Land at Rowner Road Service Station
 - Land at Montgomery Road
 - Land at Heritage Way and Frater Lane
 - Land at Wheeler Close; and
 - Land at Whitworth Close.

5.246 Are these alternative sites less suitable, taking into account other planning issues?

The paragraphs below set out the current position regarding the consideration of alternative sites. A combination of these sites is required to assist the delivery of the level of housing required to deliver the Local Plan strategy.

Land at Rowner and HMS Sultan (policy SS10)

5.247 Significant areas of land at Rowner have already been brought forward for regeneration. Outline planning permission was granted in April 2009 for a mixed-use proposal. The site has delivered 700 residential units in total and policy SS10: Rowner and HMS Sultan allows for further residential development (unspecified quantum) to come forward to complete the regeneration of Rowner this is a long-term project that would likely extend into the next plan period. As such, the change in the number of residential dwellings is not currently known. There are no residential units proposed on HMS Sultan. The Council's preferred option for that site is to support employment and training and the anticipated disposal for the site is now unlikely to come forward before 2029.

Daedalus (policy SS11)

- 5.248 The Daedalus site is already a successful regeneration area in the adopted Gosport Borough Local Plan 2011-2029. Outline planning permission (planning application: 11/00282/OUT) with all matters reserved except access was granted in January 2016 for the following development:
 - Up to 69,992 sq.m. of commercial floor space in new buildings and reuse of existing buildings (Class B1, B2 and B8 use);
 - Up to 1,075 sq.m. of retail use (Class A1, A2, A3 and/or A4 use);
 - Up to 200 residential units (Class C3 use);
 - Up to 32 units of care accommodation (Class C2 use);
 - Up to 1,839 sq.m. of community use (Class D1 use);
 - Up to 8,320 sq.m. of hotel use (Class C1 use);
 - Up to 2,321 sq.m. of leisure (Class D2 use); and
 - Access, parking and landscaping.
- 5.249 To date (2021) subsequent applications have been submitted and approved for the discharge of conditions for this outline consent including additional consents outside the outline application site. As of 31st March 2021 the completion position for 11/00282/OUT is:
 - Dwellings C3: 180 complete with 20 outstanding permissions and 49 outstanding from the Policy LP5 allocation (this will reduce to 20 if the Wykham Hall, Frobisher House application is permitted);
 - Care Units C2: 32 C2 units outstanding and not yet started;
 - Employment floorspace: 69,992 m2 floorspace outstanding from 11/00282/OUT (5,173 m2 has been completed within the extent of 11/00282/OUT however these are separate schemes and do not pertain to the outline permission);
 - Retail floorspace: 1,075 m2 of retail floorspace outstanding and not started (permitted as Classes A1, A2, A3 and/or A4) with A1 retail uses (shops) restricted to no more than 200 m2.
- 5.250 Policy SS11 proposes a further 300 Class C3 and/or C2 residential dwellings on Site B of the strategic site and an additional 35,000m² (gross) employment floorspace as part of a wider heritage-led regeneration scheme.
- 5.251 Gosport Town Centre (Policy SS3) makes provision for a significant number of new homes in the draft plan period both within the High Street and surrounding areas and at Gosport Bus Station. As the Town's principal retail, commercial and service centre, Gosport Town Centre has a number of strengths and weaknesses. The High Street is pedestrianised, level and accessible and there is a range of parking options. However, the range of shops is somewhat limited and does not attract many visitors from outside the Borough.
- 5.252 The range of food and drink offers is lacking variety and there are, in common with many High Streets nationally, a number of vacant retail units which has been exacerbated by the economic impact of the political response to the COVID-19 pandemic which has accelerated trends for online shopping. In addition the proximity to the larger centres of Fareham and Portsmouth provides significant competition and associated leakages of retail spend.

- 5.253 Royal Haslar Hospital (Policy SS6) is located in Flood Zone 1 however this already has consent granted in September 2014 for the comprehensive redevelopment and re-use of the site (planning application 12/00591/OUT). The proposed scheme includes a wide range of uses and incorporates medical and care facilities, a hotel (with up to 78 beds), a church, convenience store, health centre, tearoom, restaurant, office and business units, 286 residential units and 244 self-contained retirement units.
- 5.254 Each of the smaller residential allocations in policy A2 will be required in order to assist the delivery of new housing in the Borough in addition to the strategic development sites.

5.255 **Consider Land at the Gasworks, Mariners Way as an allocation site.** *Will the proposed development type(s) be acceptable in this Flood Zone?* Whilst the majority of the site is in Flood Zone 1 and therefore development in this location is acceptable, it is considered that because in the future the SFRA shows that the majority of the site and the immediate surroundings are within Flood Zones 2 and 3 at 2115 and therefore a site-specific FRA in accordance with draft policies D3: Urban Regeneration Areas and D7: Flood Risk and Coastal Erosion will be required. Where residential elements are located within Flood Zone 2, residential development is considered appropriate but would require a FRA. Should other uses classified as 'more vulnerable' that may form part of a submitted planning application would also need to pass the Exceptions Test if they were located within Flood Zone 3. The table below sets out the types of uses that could be accommodated on the site and the NPPF vulnerability classification:

Proposed Land – uses	NPPG vulnerability classification
Residential	More vulnerable
Public open space	Water-compatible development

5.256 National Planning Policy Guidance for flooding provides detailed advice on what a site-specific FRA should contain. It is also recommended that applicants undertake pre-application discussions with the Council, Environment Agency and Coastal Partners.

5.257 Is the Exception Test satisfied? Yes see the section on Meeting the Exception Test on page 35.

Other Key Considerations

5.258 These considerations are taken from existing information from the PfSH SFRA 2016 and are based on the original 2007 SFRA. A new SFRA is expected to be completed in winter/spring 2022 and will be used to update the information shown for this iSFRA.

Undefended flood hazard (1B)

5.259 The site is shown as being within the undefended flood hazard at Flood Zone 2 and outside of the undefended flood hazard within Flood Zone 3. Where the flood hazard is shown, the area identified in draft policy A2 as suitable for residential development falls within an area of 'low' risk (shown in green for Flood Zone 2) and two very small isolated pockets of 'moderate' risk (shown in yellow). 'Low' risk in this context the hazard within Flood Zone 2 the index is based on the potential flood depths that could occur during a 1 in 1,000 year event. 'Low risk' is defined in the SFRA as areas where there may still be shallow flowing water or deep standing water. The SFRA defines areas of 'very high risk' as where there could be dangers to most people potential for deep flowing fast water.

5.260 This information can be used to guide development towards that part of the site at the lowest risk. It is therefore recommended that site- specific FRAs for proposals within these areas should undertake a quantitative assessment of defence standards, defence failure scenarios and overland flood flow in this location.

Indicative areas benefiting from flood defences (1C)

- 5.261 Under the SFRA model, the site area does not show any areas benefiting from indicative Areas Benefiting from Defences (iABDs). The SFRA shows the site to be partially benefitting from a protective frontage to a 1:200 year standard but this is not a continuous frontage to this standard and when applying historical crest level information the standard of protection along this frontage is mixed. It is only in those areas where sea defences are **consistently** benefiting from the present day 1:200 year SOP along the frontage of the flood cell being assessed will show the hatching of the iABD.
- 5.262 The SFRA acknowledges that the high level strategic modelling and assessment does not take into account the benefit provided by all defences. It is important to note that these are only shown if the entire frontage of a flood cell is connected to a 1:200 year standard, where this may not be the case the areas are not shown even if the majority of it is protected to that standard or above. This does not imply that any land not shown does not benefit from any defences, just not necessarily to the 1:200 Standard in a continuous block. Further checking with the Environment Agency's Planning for Rivers and Seas also does not show ABDs in this location. However, there may be the potential to identify parts of this area as ABDs if more detailed assessments (beyond the scope of the PfSH SFRA or this assessment) of the defences are undertaken.
- 5.263 In the meantime it is recommended that FRAs for proposals at Land at The Gasworks, Mariners Way should still undertake detailed topographic survey and undertake a quantitative assessment of flood hazard based on more detailed assessments of defence standards, defence failure scenarios and overland conveyance of flood flows taking into account the latest climate change allowances.

Other sources of flooding (1F1 series of mapsets)

- 5.264 **Wave overtopping (1F1):** This layer addresses the issue of flood risk from potential wave overtopping. The proposed allocation is located adjacent to the more sheltered Haslar Lake which is shown as experiences 'low' wave energy.
- 5.265 **Groundwater flooding (1F2):** The SFRA shows the local geology as being of being of 'moderate permeability' with no historical incidences of groundwater flooding. The SFRA guidance notes specific to Gosport indicate that site-specific FRAs do not need to take into account this form of flooding. It is worth noting

that the EA's MAGIC mapping system¹¹¹ also shows this area as falling within a Medium classification. The explanatory document accompanying the Groundwater Vulnerability Zone mapping states:

5.266 'The Environment Agency has updated its groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometer square grid.

> The potential impact of groundwater pollution is considered using the aquifer designation status which provides an indication of the scale and importance of groundwater for potable water supply and/or in supporting baseflow to rivers, lakes and wetlands.

Groundwater vulnerability to pollution risk classification is defined as:

• High: Areas able to easily transmit pollution to groundwater. They are characterised by high leaching soils and the absence of low permeability superficial deposits.

• Medium: Areas that offer some groundwater protection. Intermediate between high and low vulnerability.

• Low: Areas that provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of low permeability superficial deposits.¹¹²

- This provides a high level analysis only and may need to be considered in further 5.267 detail as part of a site-specific FRA for individual planning applications. Preapplication discussions with the Environment Agency and the Local Planning Authority are advised.
- Impact of land use change on surface water run-off (1F3): The SFRA shows 5.268 the impact of existing land use change on surface water run-off is shown as being moderate for the whole of the site. There have been some historical incidences of flooding identified by Southern Water in nearby Old Road but not shown for the site itself.
- In addition to the above information, the Council has used the EA's Flood Map 5.269 for Planning which shows the latest published information for surface water flooding.¹¹³ In this location this mapping shows there are some small areas susceptible to surface water flooding within the site. This mapping incorporates susceptibility to potential surface water flooding from a 'low' risk scenario this term is explained in the footnote below.¹¹⁴ In terms of the potential depths of

¹¹¹ https://magic.defra.gov.uk/MagicMap.aspx

¹¹² Groundwater vulnerability maps technical summary

Project summary SC040016, Environment Agency, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650371/Groundwater_variability_ summary.pdf

It should be noted that the Environment Agency are due to publish its latest climate change modelling allowances for peak rainfall and this will need to be taken into account in the next iteration of the Council's SFRA to be prepared to for the Regulation 19 consultation on the draft GBLP2038.

¹¹⁴ The EA surface water maps are high level maps designed to provide an indication of whether an area may be affected by surface water flooding and to what extent.

There are four levels of flood risk. These are:

[•] High - each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)

[•] Medium - each year, the area has a chance of flooding of between 1 in 100 (1%) and 1 in 30

water from surface water flooding for the 'low' risk scenario, the depths range between less than 300mm and 300-900mm.

- 5.270 In terms of the velocity, this is shown as less than 0.25m/s into the northern part of the site where it joins Cranbourne Road and around the larger of the two gas holders on site. This map layer does not show surface water as a particular issue within the area of land identified for built development.
- 5.271 However, it is still considered 'that a site-specific FRA(s) should investigate this issue further in consultation with Southern Water and the Lead Local Flood Authority (Hampshire County Council) and will need to address the impacts of surface water flooding taking into account the latest Climate Change Allowances including peak rainfall intensity allowances recently published by the Environment Agency (July 2021). Further information can be obtained from: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances and the Environment Agency's Standing Advice on site-specific Flood Risk Assessments for applicants in: https://www.gov.uk/guidance/flood-risk-assessment-standing-advice
- 5.272 **Potential Sources of Overland Flow (1F4):** Within Gosport there are a number of areas which have a high to very high potential for generating overland flow due to the high runoff potential of urban areas. In terms of this site, the SFRA identifies the site as being within 'very high' (shown in red).
- 5.273 The map can be used to identify areas which have a high to very high potential for generating overland flow. However, it is important to note that this information does not show the locations where overland flow may pass through, or pond, and it is not implied that those areas with a 'low potential' for generating overland flow also have a low risk of experiencing flooding due to overland flow. The assessment of flow routes outside of river systems is a complex and detailed process, and such an assessment across the entire PUSH sub-region was beyond the scope of the SFRA. This provided a high-level sub-regional assessment of the relative potential of areas to generate overland flow, and as such can be used to ensure that sensitive or vulnerable development is not located 'downstream' of areas which may result in high overland flow during intense rainstorms. It may also be of use to those wishing to refine study areas for more detailed assessments of overland flow for other and therefore is considered helpful in this context.
- 5.274 The SFRA advice considers that for site-specific FRAs for those sites that are found to be within or in the vicinity of these areas, especially if the local topography places the site at a lower elevation than the surrounding land and hence downstream of the source, should consider the impacts and management of flooding due to overland flow.
 - (3.3%)
 - Low each year, the area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%)
 - Very low each year, the area has a chance of flooding of less than 1 in 1000 (0.1%) Further information can be found at: <u>https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?easting=461850&northing=99848&map=SurfaceWater</u>

- 5.275 It is therefore considered to be an issue that should be addressed through a sitespecific FRA and should consider the impacts and management of flooding due to overland flow in this case.
- 5.276 **Surface water sewer flooding (1F5):** The SFRA does not show any recorded incidents of sewer flooding on the site, however, it does show localised incidences of flooding in nearby Old Road therefore it is considered that site-specific FRAs should consult Southern Water to investigate the impact of new development on the existing drainage network.
- 5.277 **Present Day Defence Crest Levels (2016):** The equivalent tidal return period of the existing defence crest levels was calculated for the PfSH SFRA by comparing the crest level of the defence/natural ground to the range of extreme sea level return periods for both 2010 and 2115, provided by the Environment Agency at that time. Each length of defence or natural ground defence was then allocated an equivalent surge tide return period. This is the best available information at the present time.
- 5.278 The assessment was based solely on a comparison of the crest/natural ground level with extreme sea levels and does not take account of the following:
 - Defence type.
 - Defence age, condition and residual life.
 - Freeboard allowance built into the design of the defences.
 - The potential for wave overtopping of the defences.
- 5.279 The assessment therefore, does not provided information on the standard of service provided by existing defences.
- 5.280 For the draft allocation site, the SFRA shows a mixed SOP along the Haslar Lake frontage around this location with a range of defence asset types and conditions.¹¹⁵ When applying the 2115 climate change layers, virtually the whole site is covered by Flood Zone 3, therefore the longer term enhancement and maintenance of future defences in this location as part of a package of flood risk management measures will be a key consideration. Detailed investigations will be required to understand the condition and longevity of the existing defence assets along Stoke Lake and discussions with the Council (including the Coastal Partners) will be required as part of the planning application process.
- 5.281 The provision of new flood risk management and mitigation measures will be required and the SFRA recommends that these should be funded by the developer and developers proposing new mitigation measures which solely benefit new development should not call on the public purse as a means to secure funding. In addition defences funded through public resources may only defend to an existing standard that could be unsafe for development. This needs to be considered when looking at the effects of standards of protection in the light of increasing sea level rise. It may be necessary to secure some funding through alternative funding sources. Further advice should be sought from the Coastal Partners on behalf of the Borough Council.

¹¹⁵ Further detail can be found in Appendix B: Defence Conditions Assessment (2014) of the River Hamble to Portchester CFERMS

- 5.282 **Climate change implications (for 2115):** The map layers in the SFRA show that as would be expected, the risk of flooding in a higher flood risk zone increases for both Flood Zones 2 and 3 at 2115.
- 5.283 The present day 1:200 year extreme tidal flood level for Portsmouth Harbour is 3.2 mAOD, increasing to a predicted 4.3 mAOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Portsmouth Harbour is 3.4 mAOD, increasing to a predicted 4.5 mAOD by the year 2115. This information will need to be reviewed once the PfSH SFRA is complete in winter/spring 2022.
- 5.284 The site is shown to lie within present day (2021) Flood Zone 1 however, any development within this area would need to be accompanied by a Flood Risk Assessment (FRA), appropriate to the scale and nature of the proposed development, it will need to undertake an assessment of the residual risk and demonstrate that the development is safe and does not increase flood risk elsewhere, and where possible reduces flood risk overall. The Council would expect new development to remain safe during the design event, which is the 1:200 year event, taking into account climate change. This is because climate change information for 2115 shows substantial areas of the site and the immediate surrounding area falling within Flood Zone 3.
- 5.285 Applicants are encouraged to engage with the Council from an early stage to determine the level of flood risk management measures that will be required as part of the recommended pre-application process.

Conclusions

- 5.286 **Consider site details and flood risk management requirements. Is the proposed development site likely to be safe and appropriate?** This strategic area satisfies all of the criteria set out in the Exception Test. Through the work on the SFRA a number of important issues have been identified on this aspect. A site-specific FRA will need to demonstrate how the following matters can be addressed. These are set out below:
 - The Flood Zone(s) within which the proposed development is located;
 - The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
 - How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
 - Safe access and egress routes for the site, including during a potential extreme tidal flood event ¹¹⁶;
 - The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum mAOD);

¹¹⁶ Future safe access and egress for some areas of the site may not be possible during an extreme tidal flood event, therefore occupants will be reliant on the provision of safe internal refuge. Any residential development will need to demonstrate that safe internal refuge, above the 1:200 year design tide level of 4.3 mAOD for Portsmouth Harbour in 2115, can be provided. Furthermore, it is recommended that all habitable are set above this level.

- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures¹¹⁷, where appropriate, the preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and GBC Emergency Planners. (The north eastern part of the site is in an EA Flood Warning Area).
- 5.287 In conclusion, it is considered the development is considered capable of being made safe in the event of a severe flood event. The whole site was identified through the SHLAA process and will make an important contribution towards meeting the wider regeneration benefits of the draft Local Plan including meeting much needed housing in the community. This Report sets out the Council's preferred approach for managing flood risk on the site. This will need to be reviewed once the findings of the new PfSH SFRA are complete. Further discussions between the Council, the Environment Agency and the Coastal Partners to take account of the new PfSH SFRA will inform a further iteration of this work prior to the publication of the Regulation 19 stage of the draft Local Plan.

The Council's interim preferred approach for managing flood risk for Land at The Gasworks, Mariners Way

- 5.287 **1.Off-site strategic measures:** The North Solent Shoreline Management Plan's (NSSMP) long-term (100 year) policy for this frontage is 'Hold the Line'. The adopted Coastal Strategy supports the SMP's Hold the Line policy. However, based on early evidence, any proposed coastal defence schemes are not currently eligible for full government funding therefore developer contributions will be sought to deliver flood risk management measures for this location to an agreed standard of protection.
- 5.288 The proposed development site is located within the overarching North Solent Shoreline Management Plan's (NSSMP) Policy Unit 5b01 (Portsmouth Harbour Entrance to Gilkicker Point).
- 5.893 The NSSMP recommends a policy of 'Hold the Line' (HTL maintain or upgrade the standard of protection offered by the existing coastal defences) for this policy unit throughout Epochs 1-3, for at least the next 100 years.
- 5.290 The site is also located within Strategy Management Zone 2 Upper Quay (Fareham) to Fort Monckton (Gosport) of the River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy (RHPS, 2015). The

¹¹⁷ Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:

⁻ Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

⁻ Keeping valuable items at higher levels

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

⁻ Flood doors and windows;

⁻ Flood barriers;

⁻ Concrete floors with damp-proof membranes;

⁻ Airbricks, airbrick covers & vents;

⁻ Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising.

Strategy was developed to provide strategic recommendations for how to implement the policies recommended within the NSSMP.

- 5.291 Within SMZ2, this proposed development site is located with Option Development Unit 17 Willis Road to Dolphin Crescent. For ODU 17, the RHPS recommend that priority capital works, such as a new sea wall, are required at Seafield to address flood risk. Property level protection also required. Ongoing maintenance with defence upgrades from 2060.
- 5.292 **2. On-site strategic measures:** The developer could improve defences within the boundary of their site and raise the Standard of Protection (SOP). This would reduce the likelihood of flooding. The Borough Council would expect contributions to the long-term maintenance and enhancements to existing defences to be met by the developer. The River Hamble to Portchester Coastal Flood and Erosion Risk Management Strategy identifies the preferred options for management over the longer term as described above.
- 5.293 The site should be designed so that flooding would not impact on the buildings. A sequential approach across the site to locate the more vulnerable parts of the development in the areas of lowest flood hazard should be applied. If necessary finished floor levels of the site could be raised so that the internals of the building would remain dry during the design and extreme tidal flood events. Therefore all residential buildings would have a safe place of refuge. A Flood Response Plan would also need to be prepared & accepted by the Local Planning Authority taking advice from the Emergency Planner and Emergency Services looking at conditions experienced in a design extreme flood event.
- 5.294 The developer will need to prepare a comprehensive flood risk management strategy which will manage risk for the allocation site across the plan period whilst all phases of development are being delivered. It would generally be expected to deliver a standard of safety of to keep people and property safer from the 0.5% probability tidal flood event in 2115 (to take account of climate change over the development lifetime) during which the tide level is predicted to reach 4.3m AOD. There is an aspiration that people will be safe from a 0.1% event and if this cannot be achieved, a minimum standard of safety of resisting the 0.5% event. The 0.1% probability tidal flood event in 2115 is 4.5m AOD which does not account for wave action.
- 5.295 **3. Adjacent off-site measures:** There will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Emergency Planner and Emergency Services.

5.296 Preferred Option(s)

The flood risk issues at Land at The Gasworks, Mariners Way will be a determining factor on the location, type and scale of uses within the site taking into account future flood risk using the latest climate change allowances and the new PfSH SFRA. A FRA will need to address a number of issues including the following:

• The Flood Zone(s) within which the proposed development is located;

- The sources of flooding which could affect the site; to include tidal, fluvial, groundwater and surface water flooding, and the probability of each occurring;
- How flood risk at the site is predicted to increase with climate change and how this will be mitigated;
- Safe access and egress routes for the site, including during a potential extreme tidal flood event;
- The existing ground levels of the development site, the predicted tidal flood levels for the site area, and evidence that the finished floor levels have been set with these in mind (all levels to be given in metres above ordnance datum mAOD);
- How the residual flood risk at the site will be mitigated over the lifetime of its development, including the incorporation of flood resistance and resilience measures, where appropriate¹¹⁸;
- The preparation of a Flood Warning and Evacuation Plan, in accordance with advice from the EA and the Borough Council's Emergency Planner; and
- The capacity of the site to deal with surface water and whether sustainable drainage systems can assist.
- 5.297 Any site-specific FRA will need to assess the residual flood risk behind the defences delivered (i.e. if the defences are breached or overtopped) or risks until a full continuous flood defence is delivered and the development employs appropriate mitigation techniques. The FRA must show if this site is within a Rapid Inundation Zone should the defence breach or be overtopped. Any site-specific FRA will need to assess the residual flood risk behind the defences.
- 5.298 A combination of options will be preferred to ensure that the development is safe in this location. The Council would expect the developer to provide these flood risk management measures as part of the development proposals on the site. Discussions with the Council (including the Coastal Partners) will be required.
- 5.299 Prior to the provision of a continuous sea defence for the allocation site and safe access and exit, there will need to be a robust Flood Response Plan which will show how flood risk will be managed i.e. through evacuation or safe refuge. This must be acceptable to the Local Planning Authority in consultation with the Council's Emergency Planning Officer and the Emergency Services.

 ¹¹⁸ Appropriate flood resilience measures to reduce damage caused by flood water may include any of the following:
Raised electrics and sockets;

⁻ Sump & pump systems;

⁻ The use of water resistant materials in kitchens, bathrooms and for flooring;

⁻ Keeping valuable items at higher levels

Appropriate flood resistance measures to prevent water entry to specific points and to prevent damage caused by flooding may include any of the following:

Flood doors and windows;
Flood barriers;

Concrete floors with damp-proof membranes;

⁻ Airbricks, airbrick covers & vents;

⁻ Water-resistant walls;

⁻ Fitting non-return valves to pipes;

⁻ Land and floor level raising

Implications for the draft Gosport Borough Local Plan 2038

- 5.300 Significant parts of the site are in the higher risk flood zones over the longer term. The site has been the subject to an interim SFRA. It is considered that this site will contribute towards delivering the housing requirement. The site contributes towards providing wider sustainability benefits as part of the broader planning strategy these matters are addressed more fully addressed in the relevant supporting documents to accompany the draft Local Plan.
- 5.301 Requirements for a site-specific FRA(s) are set out in the preceding paragraphs. Early discussions with the Council, the Environment Agency and the Coastal Partners regarding development on the site are advised as part of the planning application process.

Smaller allocations in draft Local Plan located in Flood Zone 1.

5.302 It was considered appropriate to also assess those smaller allocations (i.e. less than 1 hectare) in Flood Zone 1 for flooding. It is considered that in these instances the likely form of potential flood risk is from surface water. The Council used the Environment Agency's Long Term Flood Map service for surface water. The sites are set out in Tables 5(a) and 5(b) of this Report and the information relating to these sites can be found in Appendix 1 to this Report on-line.

6.0 INFRASTRUCTURE

- 6.1 The PfSH SFRA (2016) prepared a Local Authority Guidance note for Gosport¹¹⁹. The key from this document for both existing defence assets and anticipated future investment needs is set out below:
 - The low lying nature of the Borough indicates predicted increases of sea level will be an increasing key issue in considering future patterns of development.
 - Many of the coastal frontages in Gosport are relatively low-lying and are subject to some form of existing coastal defence structure. Elsewhere, ground levels are higher than predicted extreme sea levels and lie outside of an area considered at risk of flooding. The town centre frontage from Haslar Creek round to Priddy's Hard has a mixed standard of protection, with certain areas, such as Ministry of Defence site adjacent to the Royal Clarence Yard and around Gosport Park which not protected from a present day 1 in 20 year tidal flood.
 - The coastal defences in Gosport are also likely to be susceptible to climate change, as 100 years of predicted sea level rise would mean that most defences would fail, at their current level, to offer protection from a 1 in 20 year tidal flood. Notable exceptions to this are parts of the frontages from Gilkicker Point to Portsmouth Harbour and Priddy's Hard to Frater Lake. To sustain future development in Gosport, particularly in high risk or highly vulnerable parts of the Borough, significant investment in flood defences and flood defence infrastructure will be required.¹²⁰
- 6.2 To sustain future development patterns in Gosport, investment which supports a Partnership Funding approach to delivering flood risk management measures including coastal defence infrastructure will be required. The draft GBLP2038 recognises that new development may need a number of different infrastructure requirements to support it this also may include the provision of flood risk Where this is required, the approach to securing management infrastructure. this form of infrastructure is developed through draft policies D11: Securing Infrastructure and D7: Flood Risk and Coastal Erosion. This is supported by the Borough Council's Infrastructure Assessment Report (September 2021) and Infrastructure Assessment and Delivery Plan (2020). Work is still on-going to identify the levels of flood risk management infrastructure necessary and the potential delivery mechanisms available to implement such measures. Traditionally, flood defences measures have been provided in Gosport through Defra/EA approved schemes. However, the Borough Council also considers that developer contributions can play a key role towards the provision of flood risk management measures.
- 6.3 The River Hamble to Portchester Flood and Coastal Erosion Risk Management Strategy covers the entire length of the Gosport coastline. This strategy will take forward the high level management policies identified in the North Solent SMP and will assist in informing future levels of flood management infrastructure required in the Borough. A number of schemes have already achieved planning

¹¹⁹ PUSH Strategic Flood Risk Assessment – 2016 Update Guidance Document: Gosport Borough Council

¹²⁰ PUSH Strategic Flood Risk Assessment – 2016 Update Guidance Document: Gosport Borough Council

consent in 2020 to deliver flood protection at Forton Lake and Stoke Lake. A further proposed scheme for Seafield (Workhouse Lake) is at the design and consultation stage. Further information about these flood defence schemes can be found in the Council's Infrastructure Delivery Plan (2020) at: www.gosport.gov.uk/infrastructure

- 6.4 The Gosport Infrastructure Investment Plan (GIIP) was prepared for the Solent Local Enterprise Partnership (Solent LEP) provides an economic vision for the Borough t to 2050. The GIIP highlights key areas where there is scope for targeted public sector action and investment and flood risk management infrastructure is identified as a high priority for delivering development opportunities in the Borough over this timeframe
- 6.5 Table 6 below provides a broad summary of flood protection/mitigation issues which have been identified for the allocated sites where this is known.

Gosport Waterfront and Gosp	oort Town Centre (policies SS1-SS3)	
Elood protection/mitigation	Flood defences built to appropriate standards (1:200) will be required to safeguard sites within the Regeneration Area along with other forms of flood risk management measures set out within this iSFRA report including appropriate safe access and egress and evacuation measures.	
issues	Within the Priddy's Hard Heritage Area (SS2) flood defence upgrades were approved under planning application 17/00/599/FULL. However a site-specific FRA will be required for new proposals to determine the residual risk and potential future upgrades to existing defences and other flood risk management measures as appropriate.	
Haslar Peninsula (policies SS4-SS9)		
Flood protection/mitigation issues	This is a significant issue. Further research is required to understand the flood risk issues relating to the strategic sites (SS4-SS8) within the Haslar Peninsula and what improvements and long term maintenance will be required for the Haslar Sea Wall.	
Rowner/HMS Sultan (policy SS10)		
Flood protection/mitigation issues	The Alver Village Regeneration project included a Sustainable Drainage System (SuDS) scheme. Further SuDS schemes will need to be considered as part of a surface water management strategy for other areas within Rowner and HMS	

Table 6: Flood Protection

	Sultan Regeneration Area (SS10) in
	order to mitigate against surface water
	flooding and contribute to the Borough's
	local green infrastructure. This will need
	to be accompanied by a management
	and maintananaa plan for SuDS for the
	lifetime of the development.
Daedalus (policy SS11)	
	A site-specific FRA will be required for
	new proposals at Daedalus (SS11). A
	SuDS scheme was implemented under
	planning application: 11/00282/OUT.
	Further assessment regarding surface
Flood protection/mitigation	water drainage will be required and it
issues	may be appropriate to include a SuDs
	scheme as part of a surface water
	mitigation strategy. This will need to be
	accompanied by a management and
	maintenance plan for the lifetime of the
	development
Fort Cillricker (policy A4)	
Fort Glikicker (policy A1)	Fast Oillichen has had two mise
	Fort Gilkicker has had two prior
	residential planning applications.
	Consent was granted (application
	reference 9316/5) in 2001 permitting
	restoration and conversion to 17
	dwellings with car parking, Museum with
	public access, new road junction and
	access road and improvement including
	new revetment and earth mounding. This
	consent was not implemented. A second
Flood protection/mitigation	consent was granted in 2010 (application
issues	reference 08/00/23/FULL) for the
	restoration of the fort and conversion to
	26 dwallings, residents stores and
	26 dwellings, residents stores and
	interpretation room. This consent has
	subsequently been extended twice and
	implementation has commenced.
	The Local Plan allocates Fort Gilkicker in
	the event that extent applications are not
	implemented.
Land at Forton Road (policy	A2)
	Planning permission was granted in
	January 2021 for a Flood and Coastal
Flood protection/mitigation issues	Erosion Risk Management scheme
	comprising of a new setback I-shaped
	flood wall maintenance renairs to the
	evisting sea wall road raising installation
	of a romovable fleed gate (step lage)
	or a removable nood gate (stop logs),
	associated drainage and landscaping.

	The scheme also includes a number of	
	ecological enhancements in the form of	
	bee bricks, vertipools and native planting.	
Land at Grove Road (policy A2)		
	The site borders Flood Zone 3 at 2115	
	and will require a site-specific FRA to	
Flood protection/mitigation	address current and future flood risk from	
issues	all sources of flooding. The preferred	
	option for managing flood risk is set out	
	in the iSFRA for this site.	
Land at The Gasworks Mariners Way (policy A2)		
Flood protection/mitigation issues	Outline design proposals are complete	
	for the proposed Seafield Flood and	
	Coastal Erosion Risk Management	
	scheme and have been the subject of	
	public consultation. The next stage is to	
	work up detailed designs taking on board	
	the findings of the consultation.	