

**Flood Risk Assessment to
Accompany planning application
for
change of use
at
For
40 Haven Road
Hayling Island
Hampshire**

1 Introduction

- 1.1. This flood risk assessment has been prepared to support the following proposal:

“Planning application for change of use from domestic curtilage to static caravan park with one permanent static caravan and three 10 month rental static caravans on land at 40 Haven Road, Hayling Island, Hampshire”.

This Flood Risk Assessment has been prepared by ACE Designs Ltd who act as planning consultants for the applicants.

- 1.2. This FRA has been prepared in accordance with the Technical Guidance to the National Planning Policy Framework (March 2012). Para 9 of the Technical Guidance states;

“9. As set out in the National Planning Policy Framework, local planning authorities should only consider development in flood risk areas appropriate where informed by a site-specific flood risk assessment. This should identify and assess the risks of all forms of flooding to and from the development and demonstrate how these flood risks will be managed so that the development remains safe throughout its lifetime, taking climate change into account. Those proposing developments should take advice from the emergency services when producing an evacuation plan for the development as part of the flood risk assessment.”

1.3. Site Context

- 2.1. The site is located on the southern side of Haven Road and is screened from that road by a 1.8m high fence with a five bar gated entrance.
- 2.2. The property lies within an area predominantly characterised by caravan sites but with a scattering of single-storey houses.
- 2.3. 40 Haven Road is a rectangular site, 0.065 ha in size
- 2.4. To the west of the site is 38 Haven Road, a previously approved “caravan site” and two bungalows, Nos 36, Haven Cottage, and No 34 Haven Road.
- 2.5. To the east and north are caravan sites.
- 2.6. Sandy Point Road to the south and Bosmere Road to the east are characterised by permanent, predominantly single-storey, housing.
- 2.7. The Environment Agency advises that the site is located within Flood Zone 2 with a predicted still water level of 3.4m AOD (1:200) and 3.6m AOD (1:1000) which assumes no defence in place.
- 2.8. The Partnership For Urban South Hampshire (PUSH) guidance for Havant states:

“Hayling Island is entirely below approximately 9m AOD. Further development is likely to increase the pressure for further maintenance and improvement to existing flood defences, particularly following predicted rises in sea levels in the future”

“Geologically, Havant Borough is underlain by a mix of low, moderate and highly permeable bedrock formations. The towns of Havant and Waterlooville and the southern part of Hayling Island are underlain by low and moderately permeable bedrock formations, while a highly permeable chalk layer exists between these two areas, resulting in the many springs used by Portsmouth Water. However, moderately permeable superficial deposits overlie the majority of this permeable layer, reducing its permeability in terms of surface water runoff generation.”

3. Shoreline Management

- 3.1. The North Solent Shoreline Management Plan (2010) sets out the coast defence strategy that is technically, economically and environmentally sustainable.

- 3.2. The SMP identifies the site within policy unit 5aH104 and states:

“This frontage is within Chichester Harbour AONB. Significant numbers of residential properties at Eastoke, Selmore and Mengham and commercial assets and facilities, including marinas and boat yards, are within the extensive tidal floodplain. The majority of the existing defences are maintained by the Environment Agency, with relatively short sections owned and maintained by private individuals and the private sailing club. Inter-tidal and transitional freshwater habitats of International, European and national nature conservation importance provides important high tide roost sites for waders and waterfowl (at Selmore) and support nearby and adjacent SPA/Ramsar sites. Heritage assets include monuments and maritime features. The Selmore to Mengham Strategy (unapproved) may provide useful detail for the management of the frontage and for subsequent studies.”

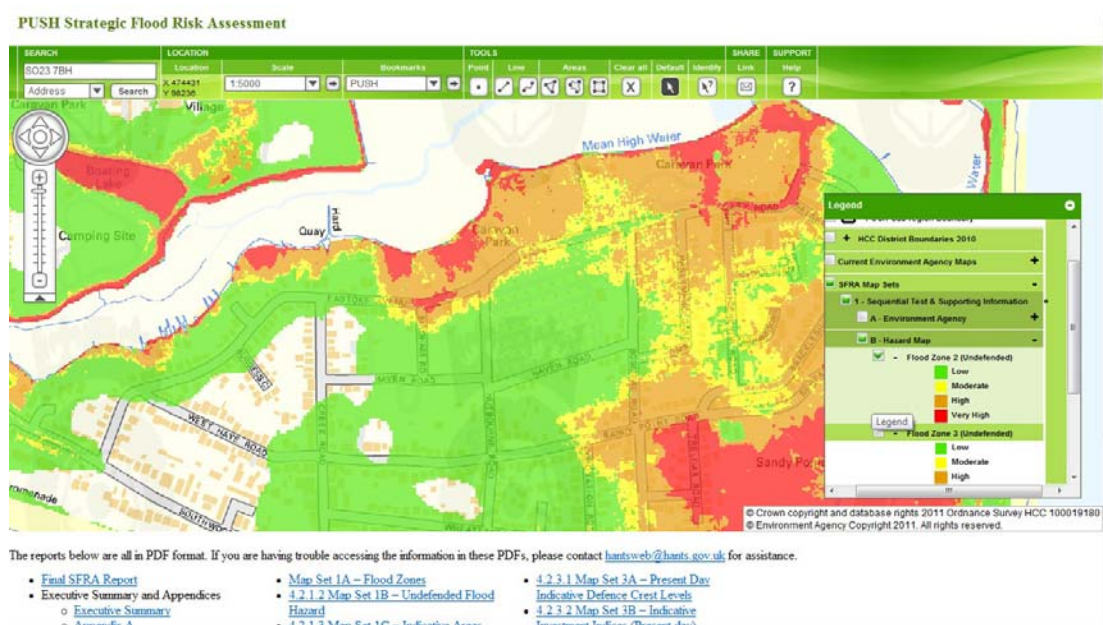
- 3.3. The defensive strategy within the North Solent Shoreline Management Plan is to hold the line. The policy states:

“Maintaining the defence line through upgrades and maintenance would provide economic and societal benefits to significant numbers of residential properties, commercial assets and local transport networks, as well as amenity open space and facilities, which are located within the extensive tidal floodplain covering the southeast region of Hayling Island. Although the Selmore Mengham Strategy was not concluded or approved it may provide useful detail in subsequent studies maintenance of defence structures will result however, in the continued loss of European and national nature conservation designated habitats such as inter-tidal foreshore habitats, through coastal squeeze. These losses will need to be mitigated within the same designated area or compensated for elsewhere and delivered through the Regional Habitat Creation Programme. Opportunities for habitat mitigation and compensation have been detailed within the Appropriate Assessment of the final policies.”

4 Strategic Flood Risk Assessment

- 4.1. Partnership for Urban South Hampshire (PUSH) has carried out a Strategic Flood Risk Assessment (SFRA).
- 4.2. The SFRA identifies that the site is within Flood Risk Zone 2 and at low hazard (undefended)

5. Survey Information



- 5.1. A site visit was carried out in late July 2019.
- 5.2. The existing site comprises a static caravan with the application for a further three static caravans.
- 5.3. The topography of the local area is flat up to the south shoreline of Chichester Harbour.
- 5.4. The site and buildings drain to the existing public sewer.
The owner has no knowledge of any previous flooding on this site.

6 Source - Pathway Receptors

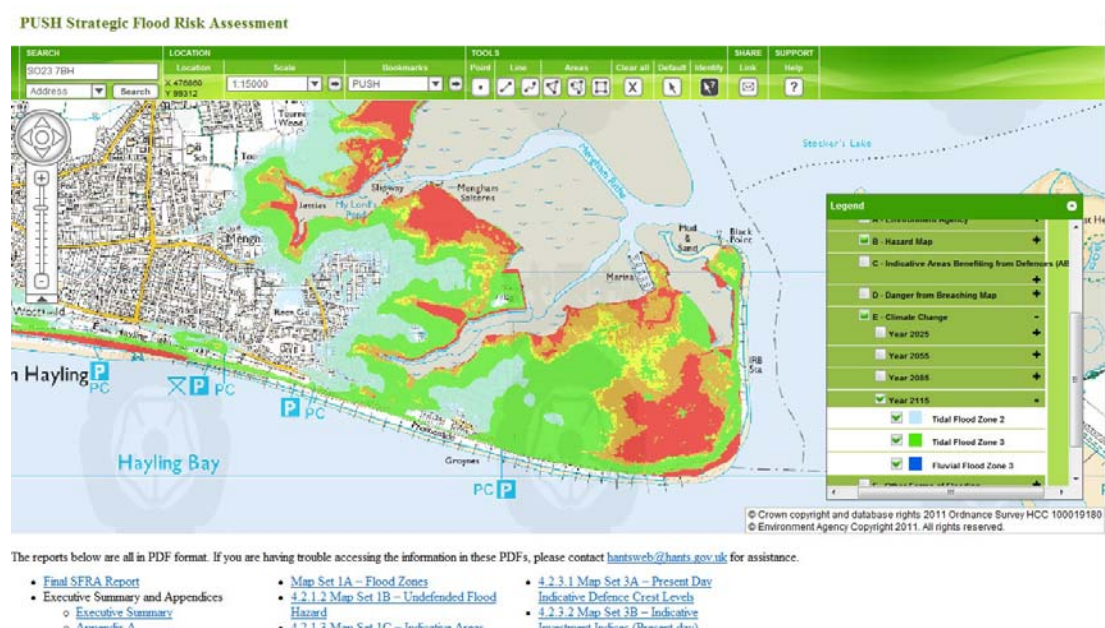
- 6.1 The existing building is a static caravan home. It is proposed to vary a planning condition to allow the occupancy of this building all year round.
- 6.2. The topography is flat across the site.
- 6.3. There are no significant surface water courses on or near to the site. The PUSH Guidance confirms that this site is not associated with fluvial flood risk.
- 6.4. The source of flooding is therefore tidal flooding. The site is within Flood Risk Zone 2 (Low Hazard).
- 6.5. The existing receptor to flooding is a single-storey static caravan.
- 6.6. The proposed receptor to flooding is a single-storey static caravan that will be permanently occupied together with 3 additional static caravans occupied on a ten month basis.
- 6.7. The pathway will be by overland surface flows from over-topping of existing defences at Fishery Creek (north) Chichester Harbour (west) and The Solent (South) then across the urbanised Eastoke peninsular and onto the site.
- 6.8. Table 2 of the technical guidance to the NPPF classifies the existing development as more vulnerable (Sites used for holiday or short let caravans and camping) .

Table 2 confirms that the proposed development is classified as more vulnerable (Buildings used for dwelling houses).
- 6.9. Surface water run-off will be unaffected by the proposed development. Surface water run-off and foul discharge will continue to flow to the local sewer network.

7. Flood probability

- 7.1. Table 1 of the Technical Guidance to the NPPF confirms that the anticipated flood probability for a site within Zone 2 is between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% -0.1% in any year).
- 7.2. Predicted Extreme Tide Level provided by the SFRA for this area (Tide Zone 15) is 4.5m AOD (1:200) and 4.7m AOD (1:1000).

8. Climate change



- 8.1. The PUSH SFRA confirms the extent of the floodplain based on a design life of the development of 100 years. It is anticipated that the classification of the land will be upgraded from Zone 2 (Low Hazard) to Zone 3 (Low Hazard).
- 8.2. Tables 7 and 8 of Appendix A of the Push SFRA show that extreme tide levels are predicted to increase to 4.5m AOD (1:200) and 4.7m AOD (1:1000).

9. The Sequential Test

- 9.1. The site is located within Zone 2 (Low Hazard). The site is located a short distance to the east of the boundary with Zone 1.
- 9.2. The PUSH SFRA confirms that for sites within Zone 2 (Low Hazard) the sequential assessment will be deemed to have been passed.

10. The Exception Test

- 10.1 Table 3 of the Technical Guidance to the NPPF confirms that more vulnerable development within Zone 2 is considered to be acceptable subject to a site specific flood risk assessment.
- 10.2 The exception Test is deemed to have been passed.

11 Site Specific Flood Risk Assessment

- 11.1. This proposal does not seek to 'create' new dwellings or put additional persons at risk.
- 11.2. This proposal simply seeks to remove a planning condition to allow the occupation of the site throughout the year.
- 11.3. This proposal does not alter the flood risk classification of the site nor does it:
 - 1) have an adverse effect on a watercourse, floodplain or its flood defences;
 - 2) would impede access to flood defence and management facilities; or
 - 3) where the cumulative impact of such developments would have a significant effect on local flood storage capacity or flood flows.
- 11.4. The building is a static caravan which is raised above the level of the land by approximately 0.3m AOD. The internal floor level is approximately 3.5m AOD Vehicular Access is directly from Haven Road.
- 11.5. The pavement datum levels in the immediate locality of the development are 3.2m AOD. There is pedestrian access available from the development to Haven Road with means of escape and refuge in a flood event. Road levels remain relatively flat and rise to the east of the site to 3.7m AOD
- 11.6. No other flood protection measures are in place.
- 11.7. The Environment Agency advises that the site is located within Flood Zone 2 with a predicted still water level of 3.4m AOD (1:200) and 3.6m AOD (1:1000) which assumes no defence in place. At present the site would therefore flood to a level of 0.2m AOD (1:200) and 0.4m AOD (1:1000). At this depth evacuation is possible before, during and after a flood event.
- 11.8. Tables 7 and 8 of Appendix A of the Push SFRA show that extreme tide levels are predicted to increase to 4.5m AOD (1:200) and 4.7m AOD (1:1000). In the future the site would be flooded to a level of 1.3m AOD (1:200) and 1.5m AOD (1:1000). At this depth evacuation is only possible before and after a flood event however given the presence of Mobile Holiday Homes on the site there is no increase in the number of buildings or persons at risk at any one time.

12. Management measures

- 12.1. A flood risk warning and evacuation plan has been prepared to accord with the requirements of the NPPF.

13. Off-site impacts

No off-site impacts are anticipated as a result of this proposal.

14 Residual risks

- 14.1 No residual risks are anticipated above and beyond already experienced by the location of this holiday home site within Zone 2.
- 14.2. It is anticipated that the SMP strategy of 'hold the line' will continue to afford protection to Hayling Island and will be upgraded to account for anticipated wave height and tide height levels until 2115.

15. Conclusions

- 15.1 It is submitted that this proposal would accord with the aims and objectives of the NPPF and its associated Technical Guidance.
- 15.2. Whilst the flood risk classification will change over time this proposal will not put additional buildings or persons at risk from a flood event.

