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Proposed Hotel & Family Restaurant, Land East of Langstone Technology Park, Havant PO9 1SA

Flood Risk Assessment dated April 2012

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1.0 Introduction

1.1 A planning application is to be submitted for a proposed hotel and family restaurant at the site known as Land East of Langstone Technology Park, Havant PO9 1SA. The development comprises a hotel and family restaurant as shown by Head Roberts & Associates drawing no. 3956/105G attached and has a total site area of 1.099 hectares.

1.2 The site slopes from south east to north west. The highest level at the south east corner of the site is 7.33m with the lowest level in the north west corner of 5.28m giving an overall fall from east to west of 2.05m.

1.3 The Technical Guidance to the National Planning Policy Framework was published to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding with the requirement for a flood risk assessment which appraises, manages and reduces the risk of flooding.

1.4 This site specific flood risk assessment is required to meet the minimum requirements set out in the Technical Guidance to the National Planning Policy Framework

2.0 Flood Risk Assessment

Tidal Flood Risk

2.1 The site is located inland 0.9 kilometres from the sea and thus is not susceptible to Tidal Flood Risk.

Fluvial Flood Risk

2.2 The Environment Agency has been consulted to determine whether the site is at risk of flooding. The Floodplain Map attached, centred on Land East of Langstone Technology Park, Havant, Hampshire PO9 1SA shows that apart from a small area to be used for car parking the site is outside the designated Flood Zone 3 (High Probability - flooding from a river with a 1 in 100 or greater chance of happening each year) or Flood Zone 2 (Medium Probability - flooding from rivers with up to a 1 in 1000 chance of occurring each year). The development site can therefore be designated as being within Flood Zone 1 assessed to have a less than 1 in 10000 annual probability of river or sea flooding in any year.

2.3 The closest sources of fluvial flooding is the stream directly to the west of the site as shown by the EA flood map. The site layout has been developed, after discussions with the EA, to ensure that no building is located within 10m of the adjacent river bank to ensure that no proposed building is susceptible to fluvial flooding.

2.4 Land within Flood Zone 1 is appropriate for all uses.

Groundwater Flood Risk

2.5 Recent and historic boreholes taken as part of site investigation works for adjacent developments confirm made up ground over alluvial clays and gravels over chalk. Groundwater was not encountered during drilling confirming that the site is not at risk of flooding from ground water.

Other Sources of Flood Risk

2.6 The site slopes from south east to north west. The highest level at the south east corner of the site is 7.33m with the lowest level in the north west corner of 5.28m giving an overall fall from south east to north west of 2.05m.

2.7 The new buildings will be set with finished ground floor levels a minimum of 150mm above proposed ground level. External levels will be set following the natural contours of the site falling away from the properties. Finished levels will not be raised above existing ground levels within 10m of the adjacent river bank. Proposed ground levels

will be set to follow the natural contours of the site to ensure that flows through the site are redirected away from properties in the unlikely event of flooding taking place from other sources such as foul, surface water or combined sewers as well as surface water sheet run off or infrastructure failure.

3.0 Surface Water Management

3.1 The Code of Practice for Sustainable Drainage Systems provides a flexible approach to drainage systems with a wide range of components and includes a hierarchy of techniques. These are:-

1. Prevention - The use of good site design and housekeeping measures on site to prevent run-off and pollution.

2. Source Control - Control of run off at or very near to its source.

3. Site Control - Management of water from several sub catchment areas.

4. Regional Control - Management of run off from several sites, typically in a detention pond or wetland.

3.2 With the above in mind sustainable drainage systems and rain water harvesting are proposed for the development which respect the hierarchy of techniques outlined above.

3.3 Prevention will be at the forefront of the development of the site with the site set out to minimise the extent of non permeable paved areas and maximise the areas of soft landscaping.

3.4 Source control is to be introduced in the following ways:-

- Water harvesting for the roof surface water runoff by means of rainwater harvesting to allow for reuse of the water for grey water purposes.

- Permeable paving / porous sub base hard standing to car parks and access roads to allow infiltration of rainwater to the ground from the external hardstanding areas. This form of sustainable drainage has the added advantage of removing pollutants from areas of car parking and vehicular access at the same time as restricting post development run off rates to that of greenfield run off rates prior to development.

3.5 Rainfall within soft landscaped areas will be allowed to permeate thought the ground in order to mimic as closely as possible the natural drainage from the site before development.

4.0 Conclusions

4.1 The flood risk assessment indicates that the proposed development is not vulnerable to flooding from tidal, fluvial, ground water or other sources of flooding and is thus appropriate.

4.2 In the unlikely event of flooding taking place an alternative over land flood route will be formed though the site to direct any flooding though the site and away from properties.

4.3 Sustainable surface water management techniques will be adopted to minimise run off and restrict post development run off rates to that of greenfield run off rates prior to development.

EA Floodplain Map

Environment Agency

Enter a postcode or place name: PO9 1SA Go

Other topics for this area... Risk of Flooding from Rivers and Sea

Risk of Flooding from Rivers and Sea

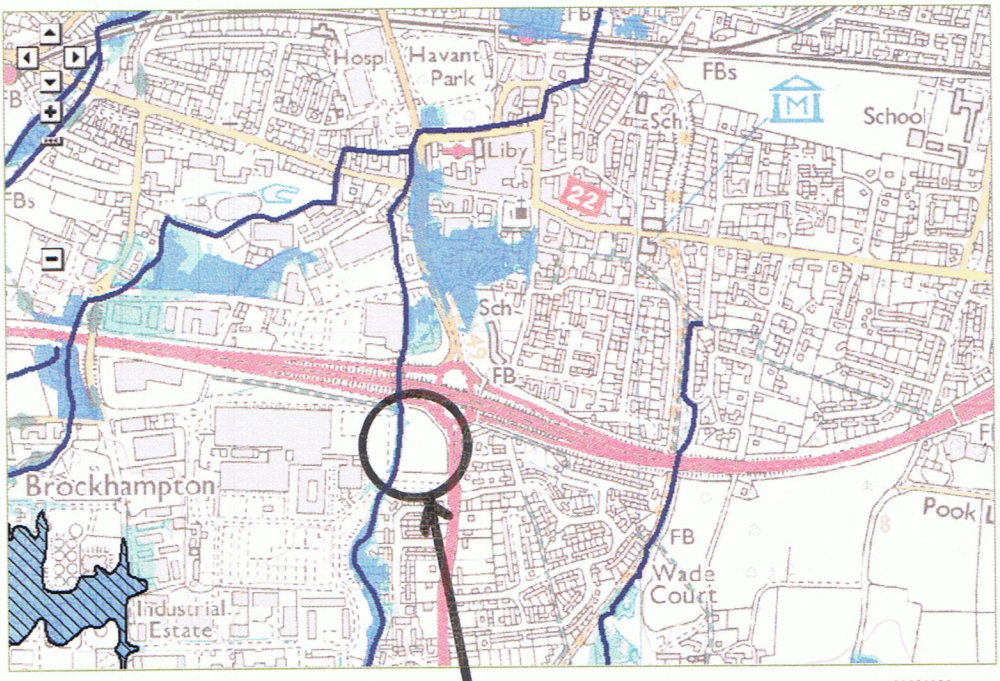
PO9 1SA at scale 1:10,000

Data search Text only version

Map legend

Click on the map to see what is the Risk of Flooding at a particular location.

- Flood Maps
  - Flooding from rivers or sea without defences
  - Extent of extreme flood
  - Flood defences
  - Areas benefiting from flood defences
  - Main rivers



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Flood Map – Information Warnings

Manchester Ship Canal

Flood Mapping of the Manchester Ship Canal in Trafford, Salford and Warrington may be subject to revision as a result of representations. For further information please contact the Environment Agency on 03708 506 506.
Users of the Flood Zone Map should be aware that we have received a Judicial review challenge to the mapping of the Manchester Ship Canal at Trafford, Salford and Warrington on the ground that the preparation of the map is flawed In respect of our consideration of the role of the sluice gates in preventing flooding.
We are defending the challenge and believe and are advised that it is ill-founded. Nevertheless, pending determination of the challenge, users of the map need to consider whether the existence of the Challenge, and the basis of it, affects the weight they judge may be given to the zoning of the Manchester Ship Canal within the Flood Map.

More about flooding:

Understanding the flood map

A more detailed explanation to help you understand the flood map shown above.

Current flood warnings

We provide flood warnings online 24 hours a day. Find out the current flood warning status in your local area.

Flood map - your questions answered

Answers to commonly asked questions about the flood map.

creating a better place

Site Layout Plan



This drawing shall not be scaled, except for planning purposes. All dimensions to be checked on site where applicable, prior to commencement on site. Differences between drawings, and between drawings and specification or bills of quantities to be referred to the Architect for clarification. All works shall conform to he current edition of the Building Regulations and other relevant statutory requirements. All materials and workmanship shall conform with the relevant British Standard Specifications and Codes of Practice.
This drawing is the copyright of Head, Roberts and Associates and shall not be copied or reproduced without permission.