

# **J & J DESIGN**

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## **TOWN AND COUNTRY PLANNING ACT 1990**

### **FLOOD RISK ASSESSMENT**

in support of an application for

**Extension to Existing Warehouse**

at

**2 Marples Way Havant PO9 1UH**

for

**Solent Business Supplies**

Our ref: 1307/JRS/l  
March 2013

**EXTENSION TO EXISTING WAREHOUSE  
AT 2 MARPLES WAY HAVANT PO9 1UH  
FOR SOLENT BUSINESS SUPPLIES**

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**1. INTRODUCTION AND SUMMARY**

- 1.1 This FRA is prepared in support of a planning application seeking to renew planning permission for a single storey extension to an existing warehouse following the expiry of the previous consent.
- 1.2 It is acknowledged that part of the curtilage of the site is within Flood Zone 2 – medium probability. The remainder of the site including the location of the proposed extension is within Flood Zone 1 – low probability.
- 1.3 The proposals will not exceed 250m<sup>2</sup> in floor area and do not include living accommodation. The proposals therefore fall within the Environment Agency Advice for Householder and Other Minor Extensions in Flood Zones 2 and 3.

**2. PROPOSED DEVELOPMENT AND BACKGROUND**

- 2.1 Planning permission was previously granted for a single storey rear extension at the premises under reference 05/67207/000 dated 18<sup>th</sup> May 2005. The proposals for the extension of the existing warehouse were not implemented and the previous planning consent has expired.
- 2.2 The current proposals are identical to that which was previously granted planning permission. No changes to ground levels or floor levels are proposed. The floor area of the proposed extension will be 112.5m<sup>2</sup>.

**3. SITE LOCATION**

- 3.1 The site is located on the north west quadrant of the junction between Brockhampton Road and Solent Road Havant in an existing employment area.
- 3.2 The site is accessed from Marples Way to a hardstanding and car park to the west of the existing building. The proposed extension is to the north of the existing building.
- 3.3 Within the curtilage there is an existing pond surrounded by mature vegetation. The pond is fed by a culvert flowing from the north with an existing flap valve. Outfall from the pond is through a further culvert to the south which is assumed to flow beneath the adjacent roundabout.
- 3.4 A copy of the Site Location Plan at 1:1250 scale is attached at Appendix 1.

#### **4. GENERAL SITUATION**

- 4.1 The Borough of Havant is a coastal district with a coastline of 48km. Main rivers designated in the area include Hermitage Stream, to the west of the application site.
- 4.2 Both coastal ('tidal') and river ('fluvial') flooding has occurred in the Borough. Tidal flooding can result in watercourses becoming 'tide locked'. This is likely to be for a limited duration during tidal surge events combined with high tide and/or southerly winds raising tidal flows in Langstone Harbour.

#### **5. STRATEGIC FLOOD RISK ASSESSMENT**

- 5.1 In December 2007 Atkins published a Strategic Flood Risk Assessment for the Partnership for Urban South Hampshire (PUSH) Authorities. This document provides a broad overview of flood risks throughout the South Hampshire area.
- 5.2 The SFRA indicates that the Flood Zone 2 extends to a limited area of the curtilage of the application site.
- 5.3 The SFRA highlights the increasing risks of extreme tidal flooding events. Within Langstone Harbour the baseline 1000 year tidal levels are expected to rise from 3.4m (1990), to 3.5m (2025) and 3.8m (2055) during extreme events.

#### **6. ENVIRONMENT AGENCY FLOOD RISK MAP**

- 6.1 A copy of the Environment Agency Flood Risk Map is attached at Appendix 2. This shows a limited area at the north east of the site within Flood Zone 2, in the general area of the existing pond. The remainder of the site including the existing building, hardstanding and the location of the proposed extension are shown to be in Flood Zone 1.

#### **7. GROUND CONDITIONS**

- 7.1 The British Geological Society Geology of Britain records indicate that the site lies in an area characterised by Bedrock of Lewes Nodular Chalk Formation from the Cretaceous Period overlain by River Terrace deposits comprising sand, silt and clay from the Quaternary Period.

#### **8. EXISTING WATERCOURSES**

- 8.1 The Brockhampton Stream flows from Havant Park in a south westerly direction through The Tanneries Industrial Estate, crossing Solent Road beneath the roundabout junction with Brockhampton Road. Brockhampton Stream and associated ponds are open to the north east of the roundabout, before flowing through a culvert to a further open watercourse south west of the road junction. It appears that the culvert from the pond within the application site connects with Brockhampton Stream beneath the public highway.

- 8.2 The Brockhampton Stream is a tributary of the Hermitage Stream flowing south from Bedhampton, beneath the A27 and discharging into Langstone Harbour at Broad Marsh.

## **9. FLOOD RISK VULNERABILITY CLASSIFICATION**

- 9.1 The existing premises are used for general industrial storage and distribution uses and fall within the 'less vulnerable' classification as shown in Table 2 of the Technical Guidance to the NPPF.

## **10. PROPOSED FLOOR LEVELS**

- 10.1 Floor levels in the proposed extension will be set no lower than the existing levels.

## **11. SURFACE WATER DRAINAGE**

- 11.1 The existing site drains positively to the adjacent pond. It is anticipated that the proposed extension drainage will be connected to the existing pipework which runs beneath the proposed extension.
- 11.2 In order to provide increased resilience to future extreme flood events, it is proposed to fit a flap valve to the existing 225mm diameter surface water drain outfall at the pond.

## **12. CONCLUSIONS**

- 12.1 The proposed extension falls within the Environment Agency Guidelines for Householder and Other Minor Extensions in Flood Zones 2 and 3. This is a non-domestic extension where the additional footprint created by the development will not exceed 250m<sup>2</sup>. The development will not include any living accommodation. A copy of the Environment Agency Checklist for this category of development is attached at Appendix 3.
- 12.2 Floor levels within the proposed development will be set no lower than the existing levels and the flood performance of the existing drainage system will be improved by the fitting of a flap valve on the outfall to the adjacent pond.
- 12.3 The development falls within the less vulnerable category which is acceptable within Flood Zone 2. However, the proposed development will actually be located within Flood Zone 1 and there are therefore no additional flood risks arising from the proposed development.

**Bibliography**

- a. Technical Guidance to the National Planning Policy Framework : DCLG : 2012
- b. PPS25 : Development and Flood Risk – Practice Guide : DCLG : 2008
- c. Improving the Flood Performance of New Buildings – Flood Resilient Construction : DCLG : 2007
- d. Development and Flood Risk – Guidance for the Construction Industry : CIRIA C624 : 2004
- e. Partnership for Urban South Hampshire – Strategic Flood Risk Assessment – Final Report : Atkins : 2007

## **APPENDIX 1**

### SITE LOCATION PLAN

## **APPENDIX 2**

EA FLOOD RISK MAP

**APPENDIX 3**

EA PROFORMA FOR  
HOUSEHOLDER AND OTHER MINOR EXTENSIONS