

ENVIRONMENT

Honda of the U.K. Manufacturing Limited
Honda Heritage Park
Swindon
Flood Risk Statement

September 2021

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P01	17/09/21	S2	Craig Crowe BSc (Hons) MSc	Rachel Meredith BSc (Hons) MCIWEM	Matthew Day BA (Hons) MSc FRGS MCIWEM C.WEM C.Sci C.Env

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1. INTRODUCTION

- 1.1 This document has been produced by BWB Consulting Ltd on behalf of Honda of the U.K. Manufacturing Limited in respect of a proposed development known as Honda Heritage Park, Swindon.
- 1.2 This report is intended to highlight any associated flood risk that could pose constraint over development and the appropriate mitigation required with respect to addressing any adverse impacts. The level of detail included is commensurate and subject to the nature of the proposals. Summary information is included as **Table 1.1**.

Table 1.1: Site Summary

Site Name	Honda Heritage Park
Location	Swindon
NGR (approx.)	SU190885
Application Site Area (ha)	Approximately 0.63
Development Type	Memorial Garden
Flood Zone Classification	Flood Zone 1
NPPF Vulnerability	Less Vulnerable
Environment Agency Office	Wessex
Lead Local Flood Authority	Swindon Borough Council

- 1.3 The site is located approximately 5,4km from Swindon Town centre and is bound to the east via Highworth Road. The site's location is illustrated within **Figure 1.1**.
- 1.4 Generally, the site topography varies from 96 metres Above Ordnance Datum (mAOD) in the north of the site to 98mAOD along the western boundary.



Figure 1.1: Site Location

2. ASSESSMENT

Honda Heritage Park Background

Fluvial Flood Risk

- 2.1 The Honda Heritage Park is located entirely within Environment Agency (EA) Flood Zone 1 (Low Probability), defined as land having less than a 1 in 1000 annual probability of river or sea flooding (<0.1% Annual Exceedance Probability).
- 2.2 The closest fluvial source is an unnamed ordinary watercourse within the northern boundary of the site. This is understood to be a tributary of the South Marston Brook, the nearest EA designated Main River located approximately 300m south of the site.
- 2.3 Historical flooding has been noted approximately 25m north of the site in July of 2007. However, the nature of this flooding is unclear based on the information available.
- 2.4 Overall, the site is expected to be at low risk of fluvial flooding.

Pluvial Flood Risk

- 2.5 Risk of flooding from surface water mapping has been prepared, this shows the potential flooding which could occur when rainwater does not drain away through the normal drainage systems or soak into the ground, but lies on or flows over the ground instead. An extract from the EA surface water flood risk mapping is included as **Figure 2.1**.

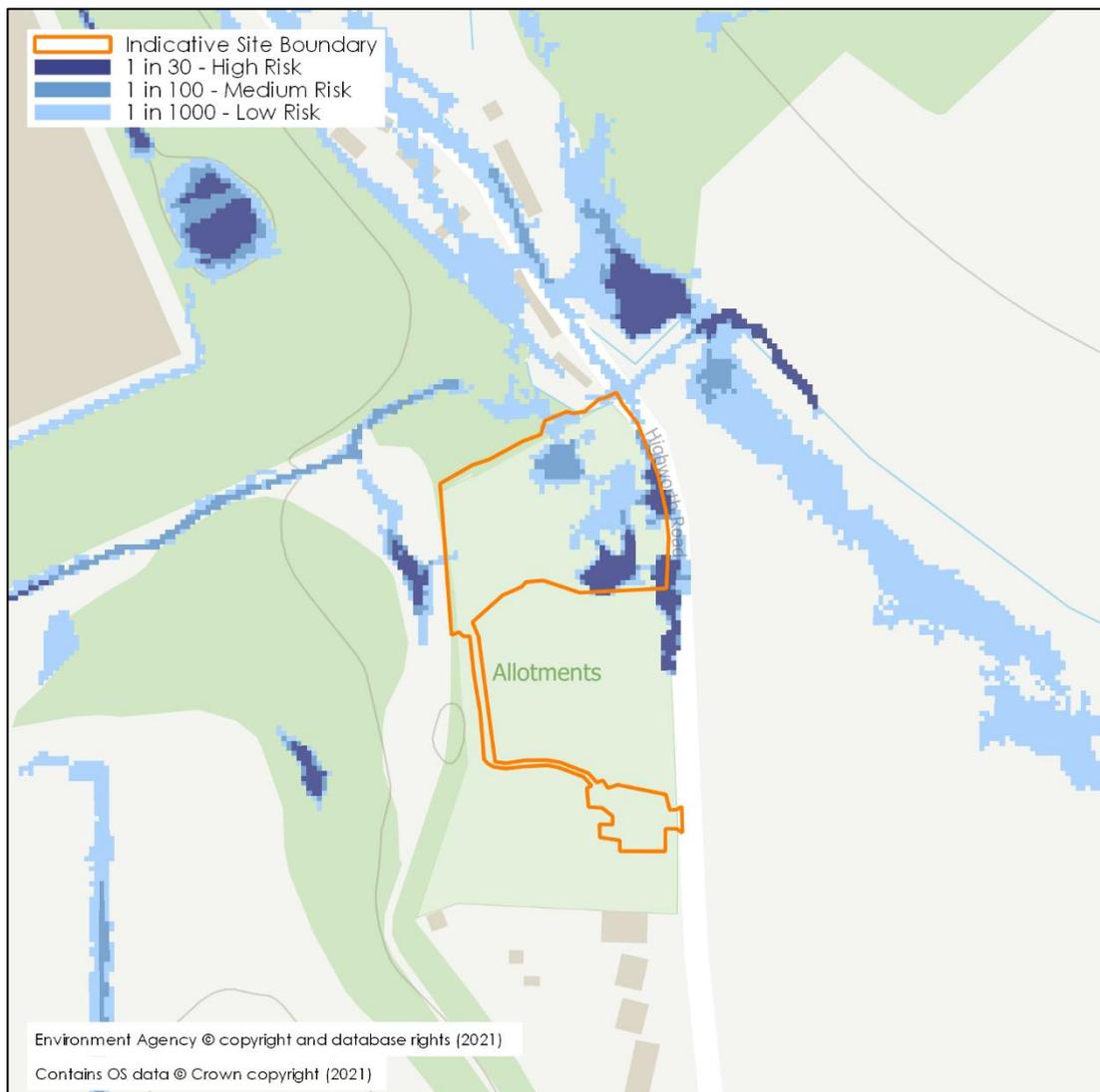


Figure 2.1: EA Surface Water Flood Risk Map

- 2.6 The site is shown to generally be at a low (1 in 1000 year) risk of surface water flooding. There are areas in the north-east of the site presenting medium (1 in 100 year) risk to high (1 in 30 year) risk of surface water flooding. These areas appear to be associated with a topographical depression and the pre-existing pond within the site.
- 2.7 The surface water flood risk map may provide an indication of the overland flow routes across the site in relation to fluvial flooding from the unnamed ordinary watercourse. It is however noted that the surface water flood map does not consider the culvert associated with the watercourse therefore, flood extents may not be as expansive as those shown.
- 2.8 Overall, the risk of surface water flooding at this site is considered to be low.

Groundwater Flooding

- 2.9 British Geological Survey (BGS) mapping outlines that the site is underlain by Red Down Sand Member Sandstone, Ferruginous. This is designated as a Secondary A Aquifer by

the EA which is defined as permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.

- 2.10 There are no superficial deposits expected across the majority of the site. A small area within the north-east of the site does demonstrate Alluvium – Clay, Silt, Sand and Gravel deposits. These are designated as Secondary A aquifers by the EA which are defined as permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.
- 2.11 There are no BGS Boreholes located within the site. The nearest BGS Borehole (reference SU18NE12) is located approximately 100m south of the site. The borehole has no evidence of groundwater recorded at the location. This borehole provides a good representation of ground conditions at the site as it is underlain by the same superficial deposits and bedrock as the site.
- 2.12 The Swindon Borough Council Level 1 Strategic Flood Risk Assessment¹ (SFRA) mapping demonstrates that groundwater flood risk at the site is either low or negligible.
- 2.13 Overall, the risk of groundwater flooding at this site is considered to be low.

Flood Risk from Canals

- 2.14 The site is located a significant distance from the Kennet and Avon Canal located approximately 18.9km south of the site.
- 2.15 Overall, given the significant distance from the site and the general maintenance requirements of canals, the risk of flooding from this source is considered to be low.

Flood Risk from Reservoirs and Large Waterbodies

- 2.16 The site is located a significant distance away from the nearest area predicted to be at risk in the event of a reservoir failure scenario. The nearest extent is approximately 2.1km east of the site and is associated with the Coate Water Reservoir.
- 2.17 Overall, the risk of flooding from this source is expected to be low.

Flood Risk from Sewers

- 2.18 The local sewerage undertaker is Thames Water. From sewer records received for the wider area, the nearest public sewer network is located approximately 250m south of the site in South Marston. Due to the local topography, it is anticipated that in an exceedance event flow would be directed along Highworth Road towards South Marston and away from the site.
- 2.19 Overall, the risk of flooding from sewer exceedance at the site is considered to be low.

¹ Strategic Flood Risk Assessment (Swindon Borough Council, May 2019)

3. SUMMARY

- 3.1 This technical note has summarised the potential sources of flood risk present at the proposed development site of The Honda Heritage Park.
- 3.2 Of the sources investigated none have been found to pose a significant risk of flooding at the site.