

FLOOD RISK ASSESSMENT

North Street Arcade, North Street, Havant, Hants, PO9 1PX

Construction of 30 No. One and Two Bedroom Apartments in a Part 2 ½ / Part 4 Storey Extension Fronting onto Prince George Street together with the Provision of Infill Flexible Use (Classes A1/A2/A3) Town Centre Commercial Units to North Street Frontage Following the Demolition of Existing 1 and 2 Storey Retail Development to Rear

1.0 Introduction

1.1 Planning permission is sought for the redevelopment of North Street Arcade in Havant for a mixed use development comprising new town centre use commercial units and 30 1 and 2 bedroom flats.

1.2 The Hamill Davies drawing 18-3139-900-P1 attached as Appendix B to their Drainage Strategy, March 2020 shows that the site is generally flat with an approximate level of 8.9m AOD.

1.3 The Technical Guidance to the National planning Policy Framework seeks to ensure that flood risk is taken into account at all stages of 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 NPPF.

2.0 Flood Risk Assessment

Tidal Flood Risk

2.1 The site is located inland 1.4km from the Langstone/Emsworth Channel of Langstone Harbour and is not, therefore, 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 as Appendix A, centred on North Street Arcade shows that the site is outside the designated Flood Zone 3 (High Probability of flooding from

a river with a 1 in 100 or greater chance of happening each year) or a Flood Zone 2 (Medium Probability of flooding from a river with a 1 in 1000 or greater 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 1000 annual probability of river or sea flooding in any year.

2.3 The closest source of fluvial flooding is a culverted stream which is shown on the EA Flood Map attached at Appendix A. The EA Flood Map shows that the site is not susceptible to fluvial flooding.

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

Groundwater Flood Risk

2.5 The topographical survey shows that the site is generally flat with an approximate level of 8.9m AOD and will not, therefore, be at risk of flooding from groundwater.

Other Sources of Flooding

2.6 The site is generally flat with an approximate level of 8.9m AOD.

2.7 The buildings are proposed to be extended upwards. Finished ground floor levels will be unaltered. Proposed external levels will be set following the natural contours of the site falling away from the properties to ensure that flows through the site are directed away from properties in the unlikely event of flooding taking place from other sources such as foul 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: -

5. Prevention – The use of good site design and housekeeping measures on site to prevent runoff and pollution.
6. Source Control – Control of run-off at or very near to its source.
7. Site control – Management of water from several sub catchment areas.
8. Regional Control – Management of run-off from several sites, typically a detention pond or wetland.

3.2 With the above in mind surface water disposal will 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 maximise the areas of soft landscaping.

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

The Environment Agency/Local Planning Authority require surface water run-off after development to be no greater than the surface water runoff prior to development.

The drawings submitted with the planning application show the existing and proposed development. Development is mainly upwards (excluding the infill commercial units) with a small reduction in the existing areas of hardstanding.

As a consequence, the impermeable areas within the site will be reduced (existing and proposed site layouts copied below).



Surface water will be discharged to the existing surface water drainage system in a similar manner to that which exists.

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

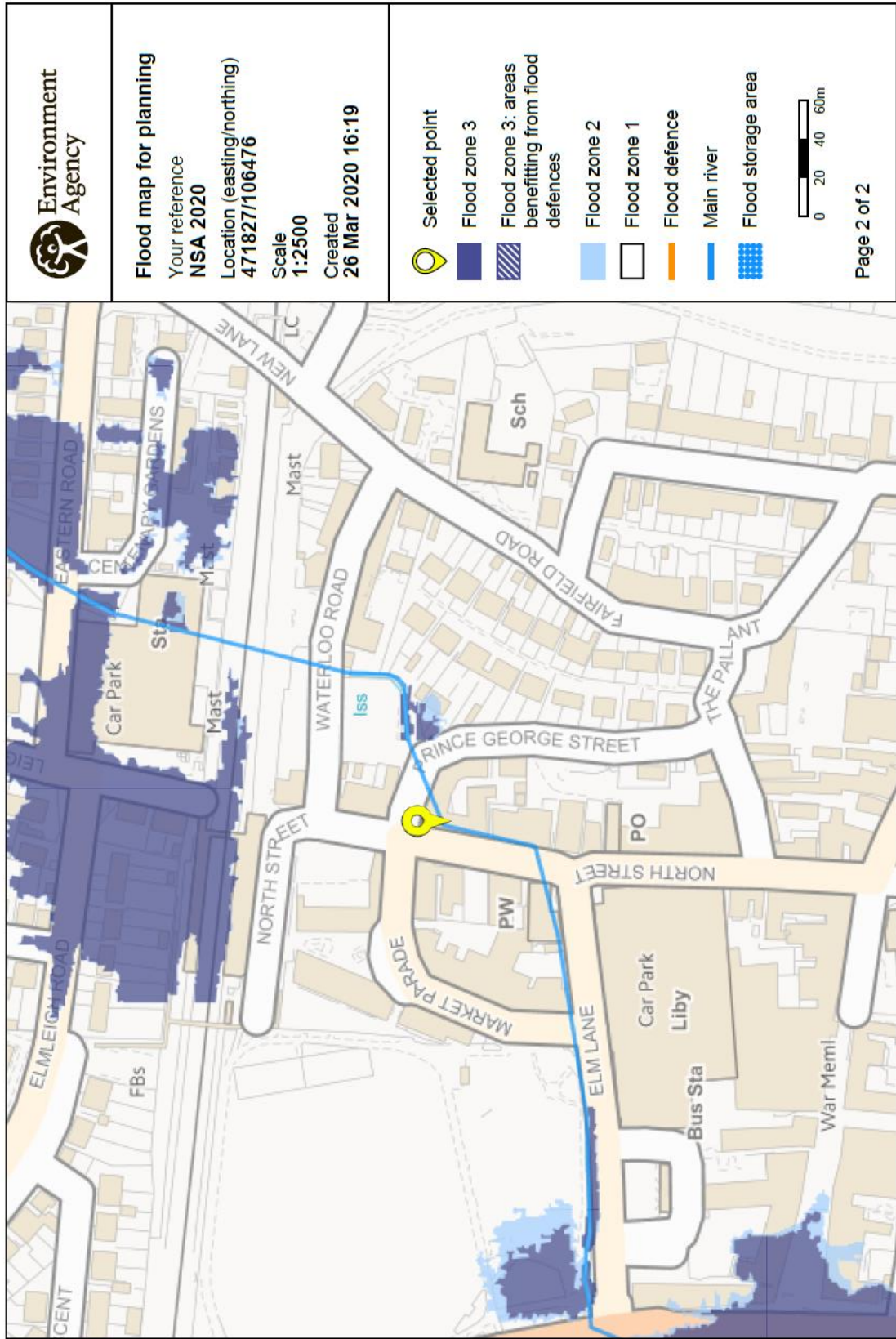
4.0 SUDS Maintenance Schedule

- 4.1 The existing on-site surface water drainage system will be maintained by a private management company.
- 4.2 Regular sweeping of hardstanding areas will be undertaken with cleaning of gullies in the Spring and after leaf fall in Autumn.
- 4.3 Above ground rainwater goods, including gutters and rainwater down pipes, will be cleaned in the Spring and after leaf fall in Autumn.

5.0 Conclusions

- 5.1 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, therefore, appropriate.
- 5.2 In the unlikely event of flooding taking place an alternative overland flood route will be formed through the site to direct any flooding away from properties.
- 5.3 The proposed development allows for a small reduction in the impermeable areas, as outlined above, to ensure that surface water run-off rates do not exceed the existing rainfall run-off rates.

APPENDIX A



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