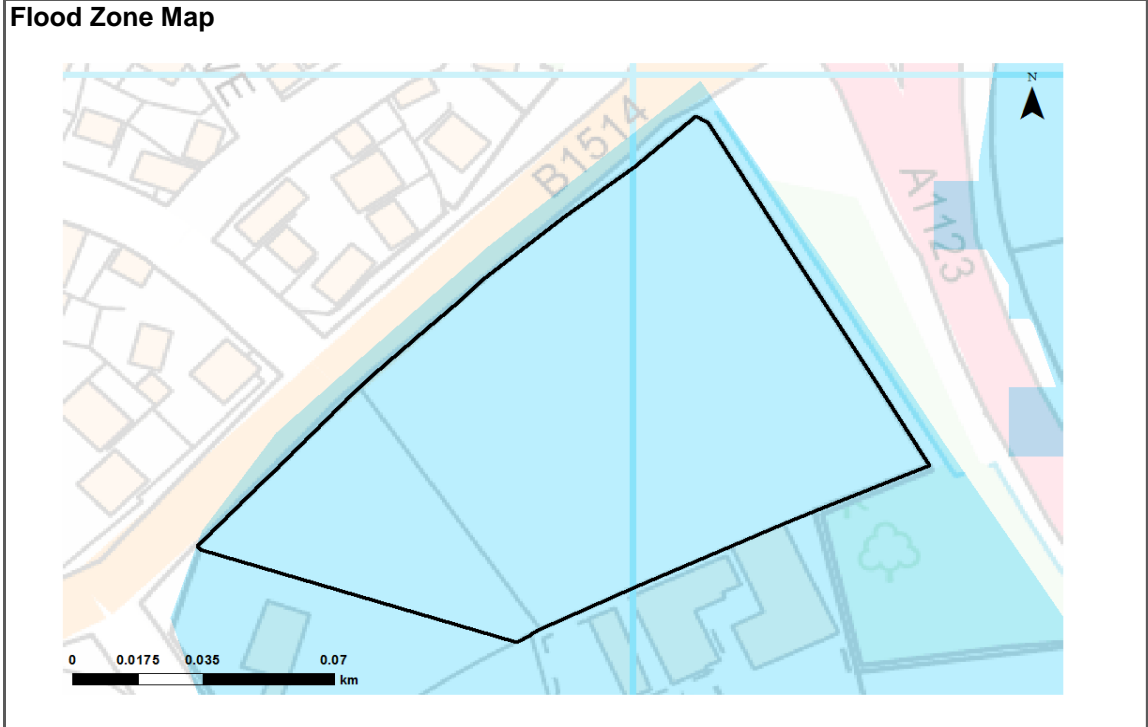


Main Street, Huntingdon

OSNGR: 525987,272901	Area: 1.49ha		Greenfield	
Flood Zone Coverage:	FZ3b 0%	FZ3a 0%	FZ2 100%	FZ1 0%

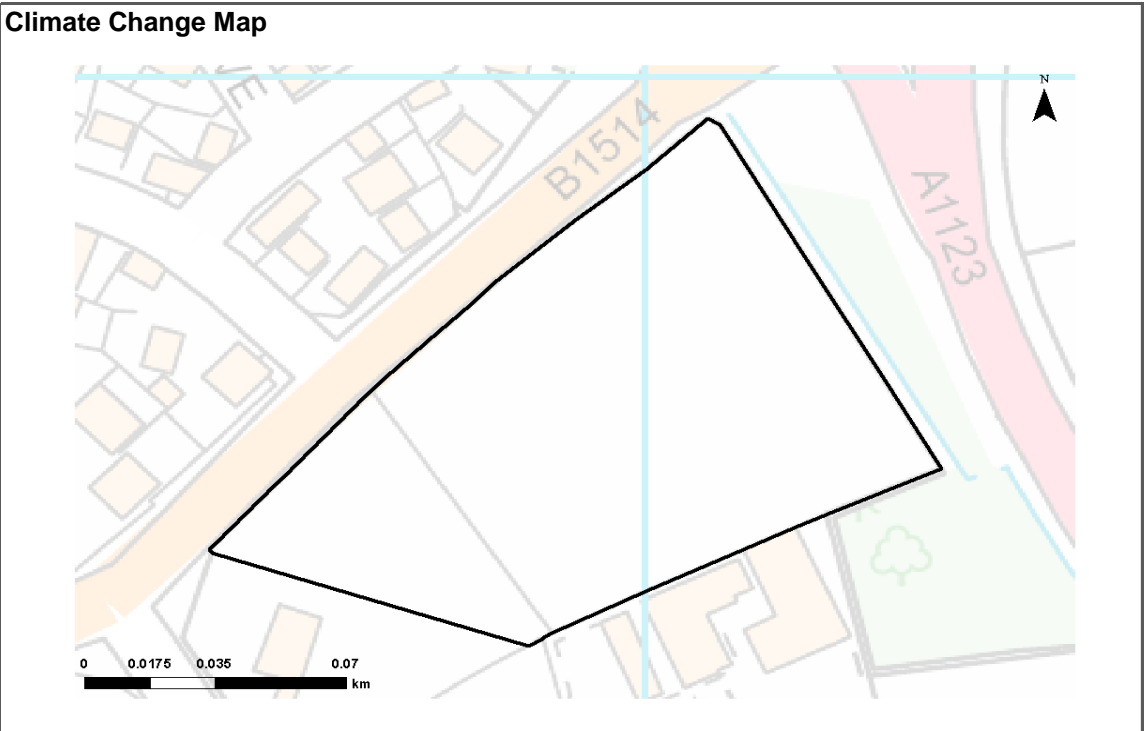
Sources of flood risk:
Flood risk is from an unnamed tributary of the River Great Ouse. The whole of the site is located within Flood Zone 2. The site is also shown to be significantly affected by surface water flooding.

Exception Test Required?
Yes, for Highly Vulnerable development located in FZ2.

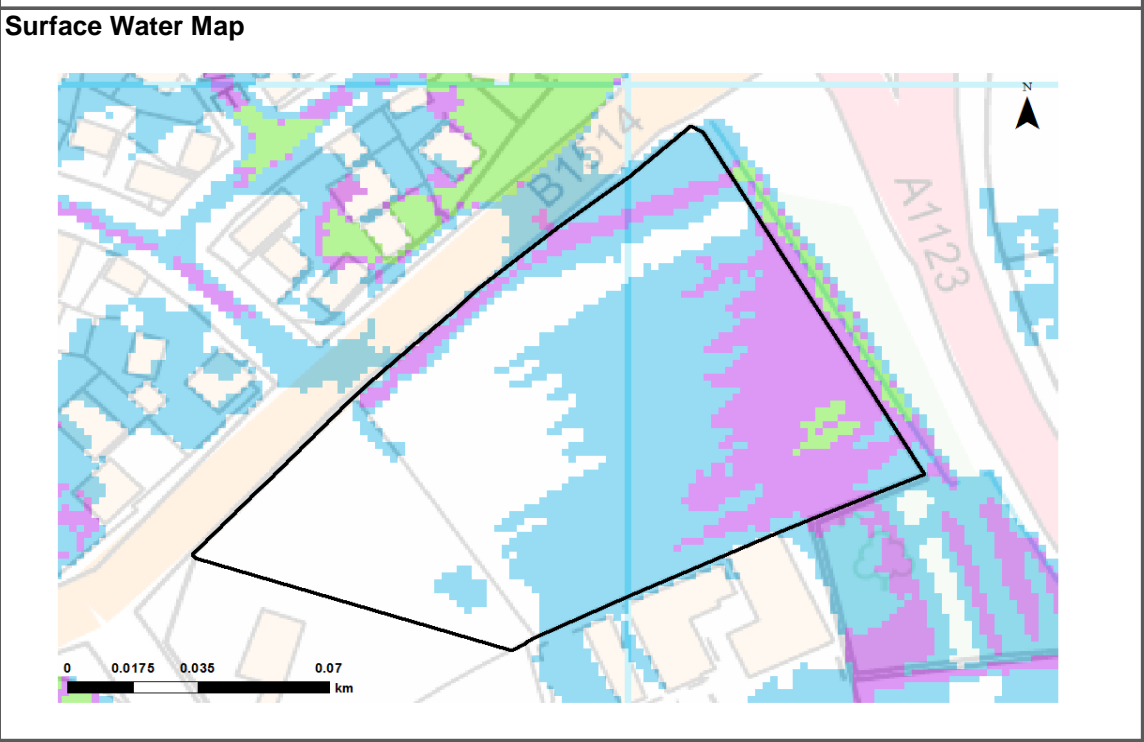
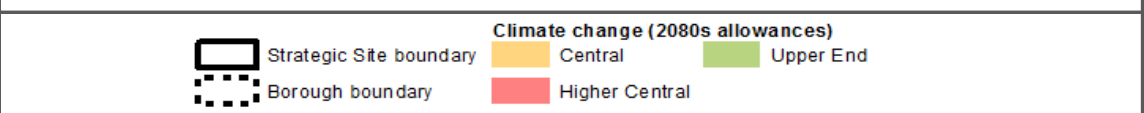


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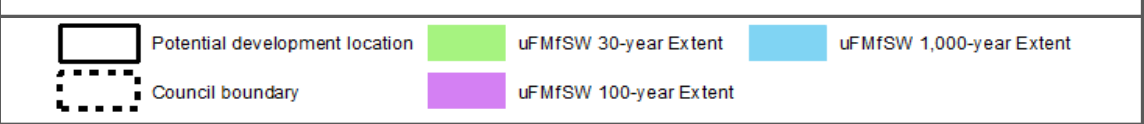
 Potential development location	 Flood Zone 3b	 Flood Zone 3a
 Council boundary	 Indicative Extent of Flood Zone 3b	 Flood Zone 2



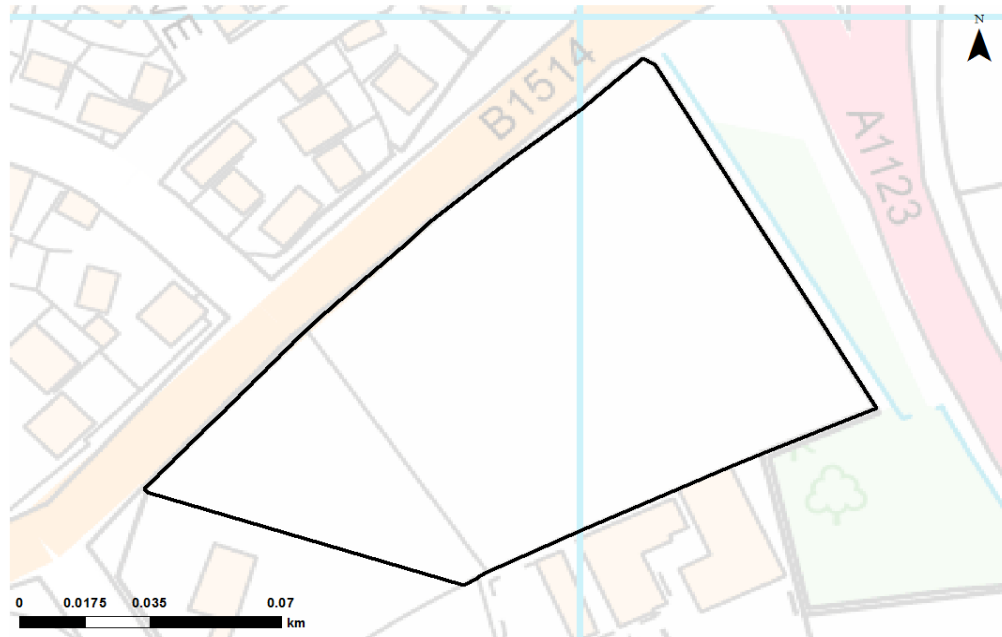
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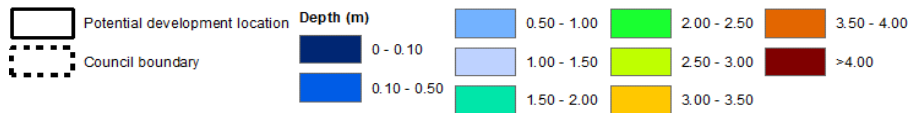
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Depth Map - fluvial flooding (1% Annual exceedance probability)



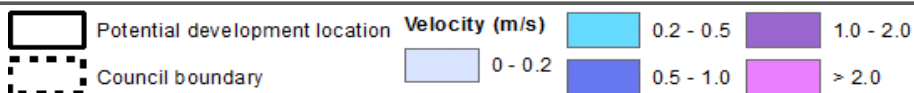
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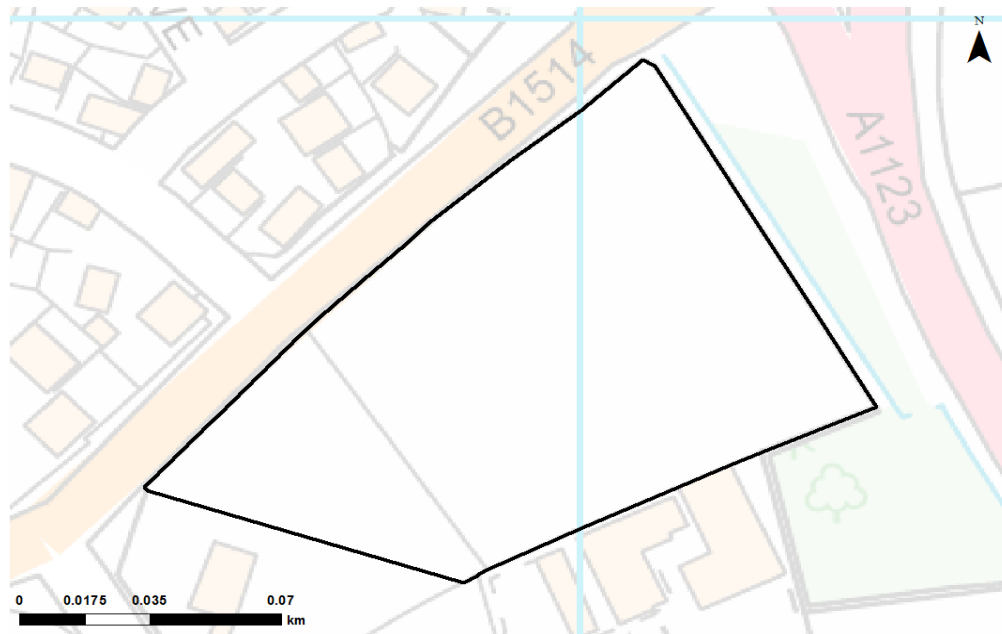
Velocity Map - fluvial flooding (1% Annual exceedance probability)



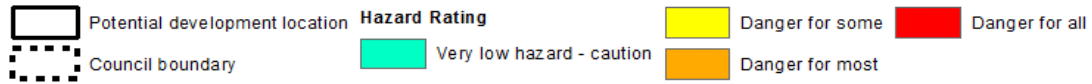
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Hazard Map - fluvial flooding (1% Annual exceedance probability)



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SuDS & the development site:

SuDS Type	Suitability	Comments
Source Control		Most source control techniques are likely to be suitable. Mapping suggests that permeable paving may have to use non-infiltrating systems given the possible risk both to and from groundwater.
Infiltration		Mapping suggests that there is a high risk of groundwater flooding at this location, therefore it is possible infiltration techniques will not be suitable. This should be confirmed via site investigations to assess the potential for infiltration. If possible, proposed SuDS should be discussed with relevant stakeholders (LPA, LLFA and EA) at an early stage to understand possible constraints given that the site is located with a Source Protection Zone.
Detention		This option may be feasible provided site slopes are < 5% at the location of the detention feature. A liner may be required to prevent the egress of groundwater and if there are any contamination issues.
Filtration		This feature is probably suitable provided site slopes are <5% and the depth to the water table is >1m. A liner may be required to prevent the egress of groundwater and if there are any contamination issues.
Conveyance		All forms of conveyance are likely to be suitable. Where the slopes are >5% features should follow contours or utilise check dams to slow flows. A liner may be required to prevent the egress of groundwater and if there are any contamination issues.

Drainage strategies should demonstrate that an appropriate number of treatment stages have been delivered. This depends on the factors such as the type of development, primary source of runoff and likelihood of contamination. Guidance should be sought from the LLFA and other guidance documents such as the CIRIA SuDS Manual (C753).

The site is located within a Source Protection Zone. As such, infiltration techniques should only be used where there are suitable levels of treatment, although it is possible that infiltration may not be permitted. Proposed SuDS should be discussed with relevant stakeholders (LPA, LLFA and EA) at an early stage to understand possible constraints

Flood Defences:

There are no flood defences at this site.

Emergency Planning:

This site is partially covered by the Huntingdon and Hartford Flood Warning Area

Access & Egress:

The site may be accessed via the B1514 or the A1123, neither of which are shown to be at risk from fluvial flooding. Pockets of the B1514 are shown to be at risk from surface water flooding but this is unlikely to affect access and egress for the site.

Climate Change:

Modelling shows that the site remains unaffected by a 1% AEP event when the 2080s climate change allowances are applied.

Implications for Development:

Use of the Sequential Approach is limited due to the site being located entirely within Flood Zone 2; therefore any Highly Vulnerable development placed within Flood Zone 2 will be required to pass the Exception Test. Safe access and egress is not considered an issue, although climate change may increase the extent of surface water and fluvial flooding in the future and have the potential to affect routes. Broadscale assessment of suitable SuDS has indicated a number of different types may be possible; however, given the size of the site and the proportion of the site at risk from flooding, the type of SuDS system used may be influenced by amount of land available; depending on the system used there may be an impact on the amount of land available for development and the cost of development. The site is partially covered by the Environment Agency's Flood Warning Service. The site is not known to benefit from any flood defences. Given the size and location of the site, it is unlikely the site could be used to implement strategic solutions to alleviate flood risk elsewhere in the catchment.

Guidance for Developers:

[Mapping in this table is based on results from the Environment Agency's Downstream Ouse 1D-2D model.](#) At the planning application stage, a site-specific flood risk assessment will be required if any development is located within Flood Zones 2. Other sources of flooding should also be considered. Where a site specific FRA has produced modelling outlines which differ from the Flood Map for Planning then a full evidence based review would be required; where this is acceptable to the EA then amendments to the Flood Map for Planning may take place. Resilience measures will be required if buildings are situated in the flood risk area. The peak flows on the River Great Ouse should be considered when considering drainage. Assessment for runoff should include allowance for climate change effects. New or re-development should adopt exemplar source control SuDS techniques to reduce the risk of frequent low impact flooding due to post-development runoff. Onsite attenuation schemes would need to be tested against the hydrographs of the Barrack Brook to ensure flows are not exacerbated downstream within the catchment. New development must seek opportunities to reduce overall level of flood risk at the site, for example by:

- o Reducing volume and rate of runoff
- o Relocating development to zones with lower flood risk
- o Creating space for flooding.
- o Green infrastructure should be considered within the mitigation measures for surface water runoff from potential development and consider using Flood Zones 2 and 3 as public open space.

Consultation with the Local Authority and the Environment Agency should be undertaken at an early stage.