

Growing Baldock

Environmental Statement Volume 2: Figures & Appendices

Chapter 10: Hydrology and Flooding

Appendix 10.1 Flood Risk Assessment



Growing Baldock

Flood Risk Assessment

September 2025

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1 Introduction

This Flood Risk Assessment has been prepared by AKT II support of the proposed development of the land to the east of Baldock on behalf of their Client, Urban & Civic.

This report identifies potential sources of flooding and risk to the Proposed Development. This study has been prepared in accordance with the guidance contained in the National Planning Policy Framework (NPPF) and the North Hertfordshire Strategic Flood Risk Assessment (SFRA).

This report is prepared for the exclusive use of AKT II and our client. All comments and conclusions in this report are based on the assumption that the sourced data is reliable.

AKT II accept no liability for any inaccurate conclusion or assumptions resulting from inaccurate information.

2 The Site

2.1 Site Location

The site is located to the north and east of the historic market town of Baldock, within the administrative area of North Hertfordshire. The development site is located to the immediate north-east of Baldock town centre and Baldock railway station.

The site comprises a series of parcels of predominantly agricultural land immediately adjoining the urban area:

- The northernmost, and largest component of the site (BA1) lies to the east of North Road and Baldock town centre to the south. The southern boundary is defined by the railway line and the eastern and northern edge by existing field boundaries and public rights of way. Bygrave / Ashwell Road runs broadly east-west through this part of the site, from North Road to the village of Bygrave to the north east.
- A narrow strip of land between the railway to the north and Royston Road to the south, forms the central portion of the Growing Baldock development area (BA10). This area incorporates a number of both small businesses and private homes.

- The remaining portion of the Growing Baldock site (incorporating BA3, the Urban Open Land and BA2) wraps around the eastern side of the settlement, bound to the west by existing development area and to the east by the A505. Clothall Road dissects this part of the site, as it runs north-west towards the town centre. The OPA site also incorporates part of the Walls Field Scheduled Monument, to the south east of Hartsfield School and a small parcel of land west of North Road, adjacent to the Ivel Springs Nature Reserve.

Figures 2.1 and 2.2 below show the location of the proposed development.

2.2 Site Description

The majority of the site is given over to agricultural tenancies and is therefore rural in character, with field boundaries defined by hedgerows / trees of varying age and quality. There are no watercourses or water bodies present on site. A network of public rights of way and bridleways traverse the site.

The Outline Planning boundary occupies an area of approximately 220 ha.



Figure 2.1 Local Plan Allocation Sites



Figure 2.2 Site location

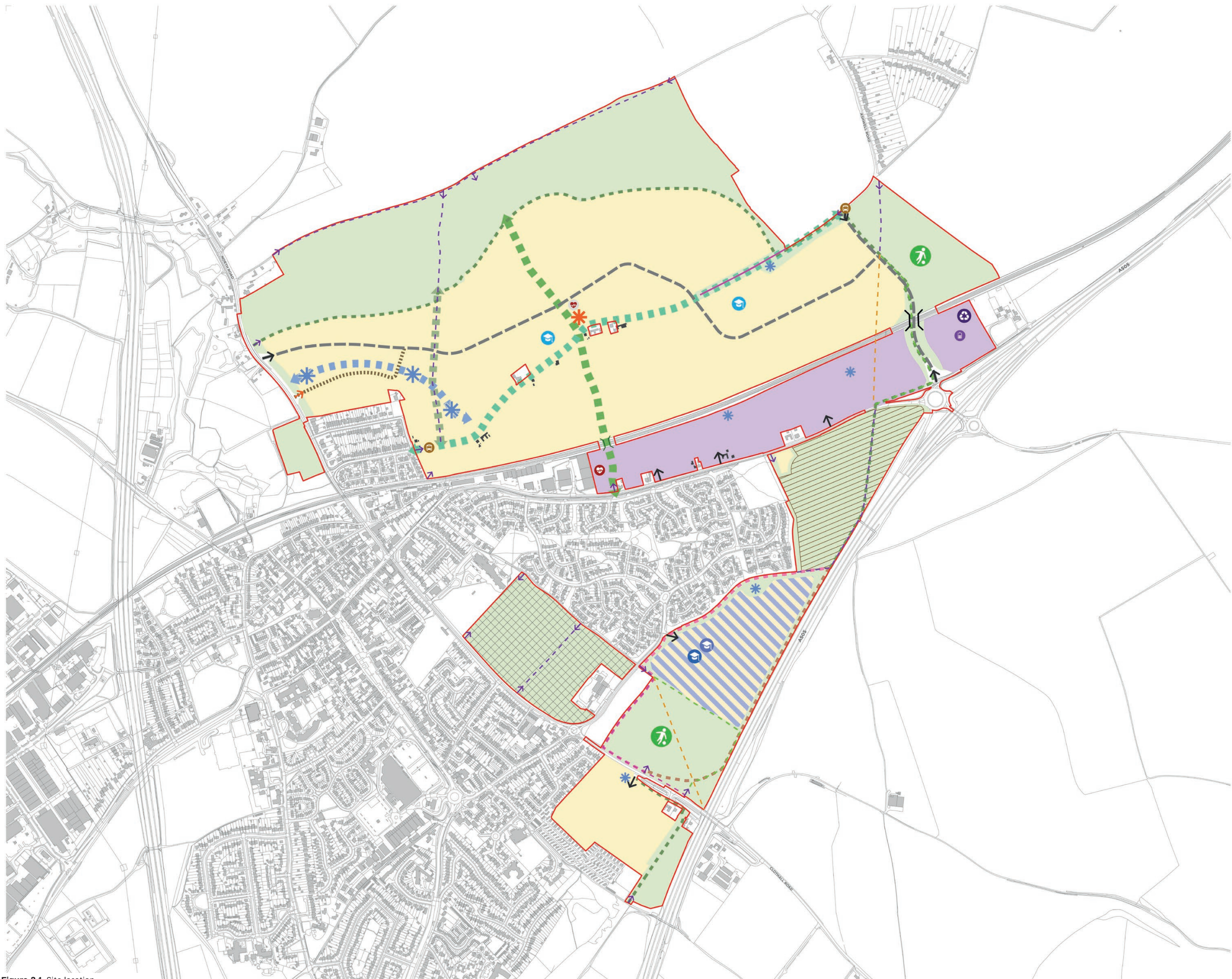
3 Proposed Development

The full description of development is as follows (relevant use classes shown in parentheses, floorspaces indicated represent GIA):

- Up to 3,200 dwellings (C3) in BA1, BA2, BA3 and BA10 including market, affordable, self / custom build plots, older persons housing, accessible / adaptable housing
- Local Centre in BA1 to consist of a mix of:
 - Up to 3,500 m2 hotel/residential institution (C1, C2);
 - Up to 750 m2 pub/takeaway (sui generis);
 - Up to 700 m2 convenience retail (E);
 - Up to 800 m2 retail/café/restaurant (E);
 - Up to 550 m2 office (E);
 - Up to 1,150 m2 gym (E);
 - Up to 2,250 m2 of Health Hub (E, e), if not provided on BA10;
 - Up to 500 m2 community centre (F2).
 - Up to 550 m2 of nursery (E) in BA1 and/or BA10
- Employment and infrastructure uses in BA10 consisting of a mix of:
 - Up to 84,000 m2 of employment uses including a mix of:
 - up to 20,000 m2 office (E, g) i));
 - up to 5,000 m2 indoor sport and recreation (E, d);
 - up to 26,500 m2 research and development (E, g) ii)) and/or light industrial (Class E, g), iii));
 - up to 26,500 m2 industrial (B2); and
 - up to 6,000 m2 Health Hub (E, e).
 - Waste infrastructure consisting of a mix of:
 - up to 1,500 m2 vehicle depot (sui generis);
 - up to 3,500 m2 waste transfer station (B2); and
 - up to 1.1 hectares household waste recycling centre (sui generis).
 - renewable energy infrastructure (sui generis).

- Up to 2 x 2 form entry (FE) primary schools (D1) in BA1, with potential to expand to 3FE subject to need and as agreed via School Review within S106 agreement;
- Up to 5FE secondary school on BA3 (or up to a maximum of 12FE if accommodating the relocation of Knights Templar school on BA3, to be agreed via School Review Process within S106 agreement);
- SEND school on BA3 (1.78ha);
- Green infrastructure, open spaces and other landscaped areas including;
 - parks,
 - play areas,
 - formal outdoor sports provision (including ancillary facilities including up to 1,000m2 of sports pavilion uses (D2)),
 - structural planting,
 - retained and proposed wildlife habitat areas,
 - community food growing areas; and
 - formal/informal open space.
- Access and movement infrastructure including:
 - Active travel (pedestrian and cyclist) infrastructure including enhanced existing and new leisure and utility routes and crossings, and the Baldock Greenway;
 - Mobility hubs;
 - Diversion and extension of Public Rights of Way;
 - Vehicular and cycle parking;
 - Internal street network including public transport infrastructure;
 - Access junctions into site from North Road (separate bus and vehicular junctions), A505 (additional arm to existing junction), Royston Road, Wallington Road and Clothall Road;
 - vehicular modes crossing of the railway;
 - active travel crossing of the railway;
 - Land to facilitate northern station active travel access; and
 - Modal filters on Bygrave Road.

- Drainage works including foul and surface water infrastructure, Sustainable Drainage Systems, pumping stations and strategic sewer;
- Provision of and diversion/upgrades to existing utilities and services infrastructure to support the development;
- Demolition of existing buildings and structures;
- Ground works including any necessary ground remodelling; and
- Boundary treatments including construction hoarding



- Outline Application Site Boundary
- Existing Features**
 - Bygrave Road Local Wildlife Site (Onsite)
 - Walls Field Scheduled Monument
 - Existing Agricultural and Residential Buildings
 - Retained Habitat
- Land Use**
 - Development Area (Residential)
 - Development Area (Employment)
 - Development Area (Flexible Land Use - Residential/Education)
- Approximate Location of Key Facilities**
 - Local Centre
 - Health Hub
 - Health Hub - Potential Alternative Location
 - Primary School
 - Secondary School Option
 - SEND School
 - Renewable Energy Infrastructure
 - Waste Facilities (Including Waste Transfer Station with a stack up to 15m)
- Access and Movement**
 - Primary Site Accesses - All Modes
 - Public Transport Only Site Accesses
 - Key Pedestrian and Cycle Accesses
 - Modal Filter
 - Primary Street Indicative Alignment
 - Public Transport Only Route (Connecting to Primary Street)
 - All Modes Bridge
 - Active Travel Crossing
 - Retained Public Rights of Way
 - Existing PROW Proposed to be Diverted
 - Proposed PROW Diversion Alignment
 - Proposed PROW Diversion Alignment (if secondary school is delivered on the flexible land use parcel)
 - Active Travel Spine
 - Bygrave Road
 - Green Link
- Landscape/Green/Blue Infrastructure**
 - Strategic Green Infrastructure
 - Formal Outdoor Sport
 - Baldock Greenway
 - Baldock Greenway - if a secondary school is delivered on the flexible land use parcel
 - Baldock Greenway - if no secondary school delivered on the flexible land use parcel
 - Sustainable Drainage Corridor
 - Primary SUDS Features

Rev	Description	Date
1	Initial design	10/09/2025

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Client:

Urban&Civic

Growing Baldock - Outline Planning Application

Parameter Plan

Scale@A1:	Drawn:	Designed:	Approved:
1:5,000	NMW	SJP/AC	HA
0			250 Meters

Drawing Number: UAC092-002
Revision: Q
Date: 10/09/2025

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DAVID LOCK ASSOCIATES

Figure 3.1 Site location

4 Requirements of National Planning Policy Framework (NPPF)

4.1 Summary

The National Planning Policy Framework (NPPF) has superseded Planning Policy Statement 25 “Development and Flood Risk” (PPS 25) although the requirements and goals remain essentially the same:

- The susceptibility of land to flooding is a material planning consideration;
- The Environment Agency has the lead role in providing advice on flood issues, at a strategic level and in relation to planning applications;
- Planning decisions should apply the precautionary principle to the issue of flood risk, using a risk-based search sequence to avoid inappropriate development on undeveloped and undefended flood plains etc;
- Developers should fund flood defences and warning measures required because of the development;
- Planning policies and decisions should recognise that the consideration of flood risk and its management needs to be applied on a whole-catchment basis and not only be restricted to flood plains.

With regard to the NPPF, those proposing particular developments are responsible for:

- Providing an assessment of whether any proposed development is likely to be affected by flooding and whether it will increase flood risk elsewhere and the measures proposed to deal with these effects and risks and;
- Satisfying the local planning authority that any flood risk to the development or additional risk arising from the proposal will be successfully managed with the minimum environmental effect thus ensuring the safe development and secure future occupancy of the site.

After this has been addressed, it is then the local planning authority’s responsibility (advised as necessary by the Environment Agency) to determine an application for planning permission after taking into account all material considerations, including the issue of flood risk and how it might be managed or mitigated. Local planning authorities are required to adopt a risk-based approach to proposals for development in flood risk areas. The assessment of risk should take into account:

- The area liable to flooding;
- The probability of it occurring, both now and over time;
- The extent and standard of existing flood defences and their effectiveness over time;
- The likely depth of flooding;
- The rates of flow likely to be involved; and
- The nature of the development proposed and the extent to which it is designed to deal with flood risk.

Local planning authorities in conjunction with the Environment Agency are responsible for determining that the threat of flooding should be managed. This is to ensure that the development is and remains safe throughout its lifetime (i.e. it has an appropriate degree of protection) and does not increase flood risk elsewhere.

Following flooding in December 2000 the Environment Agency (EA) provided indicative flood plain maps to all authorities and published them on the EA website. In addition to these indicative maps (following a national programme adopted by the Agency in 1996), detailed data and maps for priority areas at risk are available, to provide precise information for building developments.

The Government looks to local planning authorities under the NPPF to apply the risk-based approach to their decisions on development control through a sequential test. Under the test, sites are to be categorised under the following zones.

- 1 Areas with little or no potential risk of flooding (annual probability less than 0.1% for rivers, tidal & coastal). These areas would have no constraints on development other than the need to ensure that the development does not increase run-off from the site to greater than that from the site in its undeveloped or presently developed state. For development proposals on sites located within Flood Zone 1 comprising one hectare or above the vulnerability to flooding from other sources as well as from river and the sea flooding, and the potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water run-off, should be incorporated in an FRA.
- 2 Areas with low potential risk of flooding (annual probability between 1.0% - 0.1% for rivers and between 0.5% - 0.1% for tidal & coastal). These areas would be suitable for most developments.
- 3a Areas with high potential risk of flooding (annual probability greater than 1.0% for rivers and greater than 0.5% for tidal & coastal). These areas will generally be suitable for “Less Vulnerable” uses such as commercial, retail and industrial uses, provided there are adequate flood defences in place, that ensure buildings are designed to resist flooding, there are suitable warning and evacuation procedures in place and the new development does not add to flood risk downstream. “More Vulnerable” uses such as residential, health and education will require the Exception Test to be passed.
- 3b Areas at highest risk from flooding (including those areas behind defences that offer a standard of defence less than 1% for rivers and less than 0.5% for tidal & coastal or where there is a significant risk that failure could lead to rapid inundation by fast flowing water). These areas may be suitable for recreation, sport and conservation use.

5 Strategic Flood Risk Assessments

Strategic Flood Risk Assessments are produced by Local Authorities in order to form the basis for preparing appropriate policies for flood risk management. The Environment Agency advise that Developers “should consult the Strategic Flood Risk Assessment prepared by your local planning authority” when preparing their design.

The site has been the subject of two Flood Risk Assessments - the North Hertfordshire Strategic Flood Risk Assessment initially issued in July 2008 and subsequently updated in 2016 and the Hertfordshire County Council Level 1 Strategic Flood Risk Assessment dated 2022.

The site is also subject to the recommendations within the Hertfordshire County Council SuDS Design Guidance and Developer Guide.

The key findings and recommendations from these reports relating to the development site are summarised in the following section and have been used to inform the preparation of this site-specific flood risk assessment.

5.1.1 Summary of findings

- Where it is proposed to use infiltration as a disposal method, HCC would expect to see infiltration testing carried out in accordance with BRE Digest 365.
- Where infiltration is not feasible an alternative strategy should be provided based upon attenuation and discharge to a watercourse or surface water sewer.
- Discharge rates should be restricted to greenfield rates and if this cannot be achieved, justification is required as to why it is not possible. Where greenfield rates cannot be achieved, it is expected that a significant betterment on the existing scenario will be provided.
- A climate change allowance of 40% should be applied.
- The SFRAs include information on historic, current and future flood risks designed to inform future planning decisions for development within the region in terms of flood risk.
- The SFRAs include a series of appendices containing mapping of historical flooding along with flooding from surface water, groundwater, rivers and watercourses, sewers, canals and reservoirs.



Figure 5.1 North Hertfordshire District Council SFRA

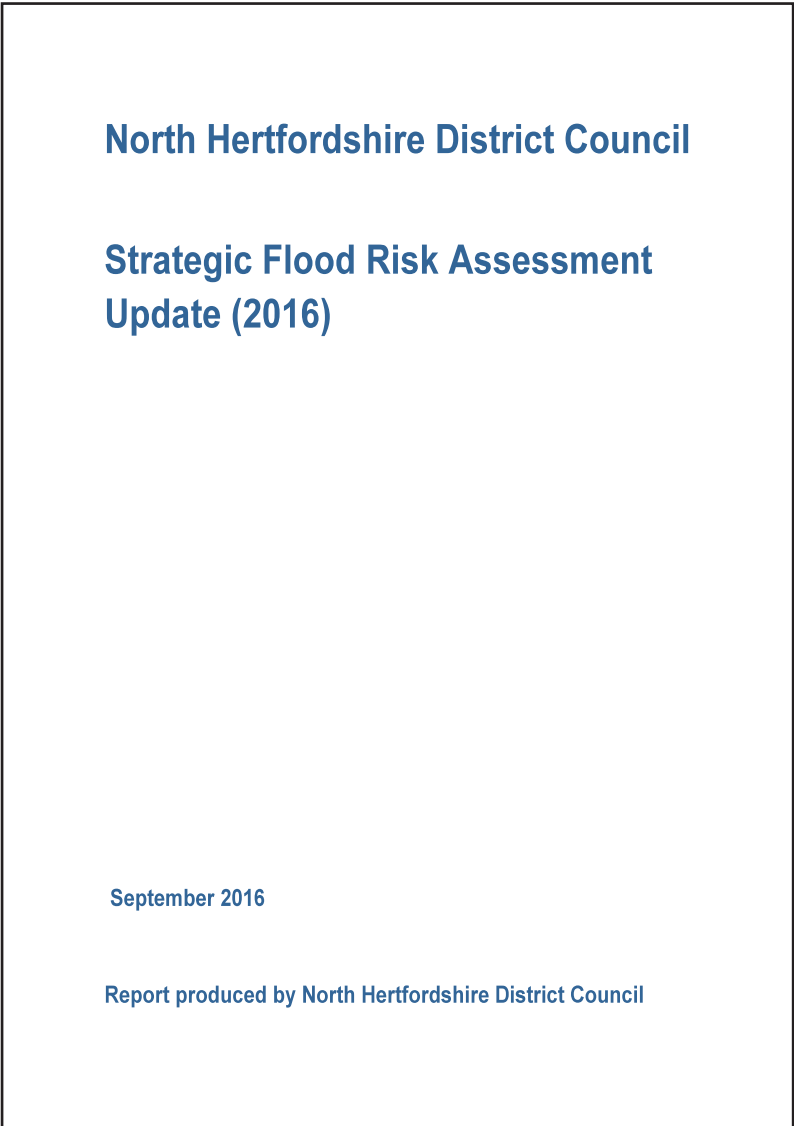


Figure 5.2 North Hertfordshire District Council SFRA Update

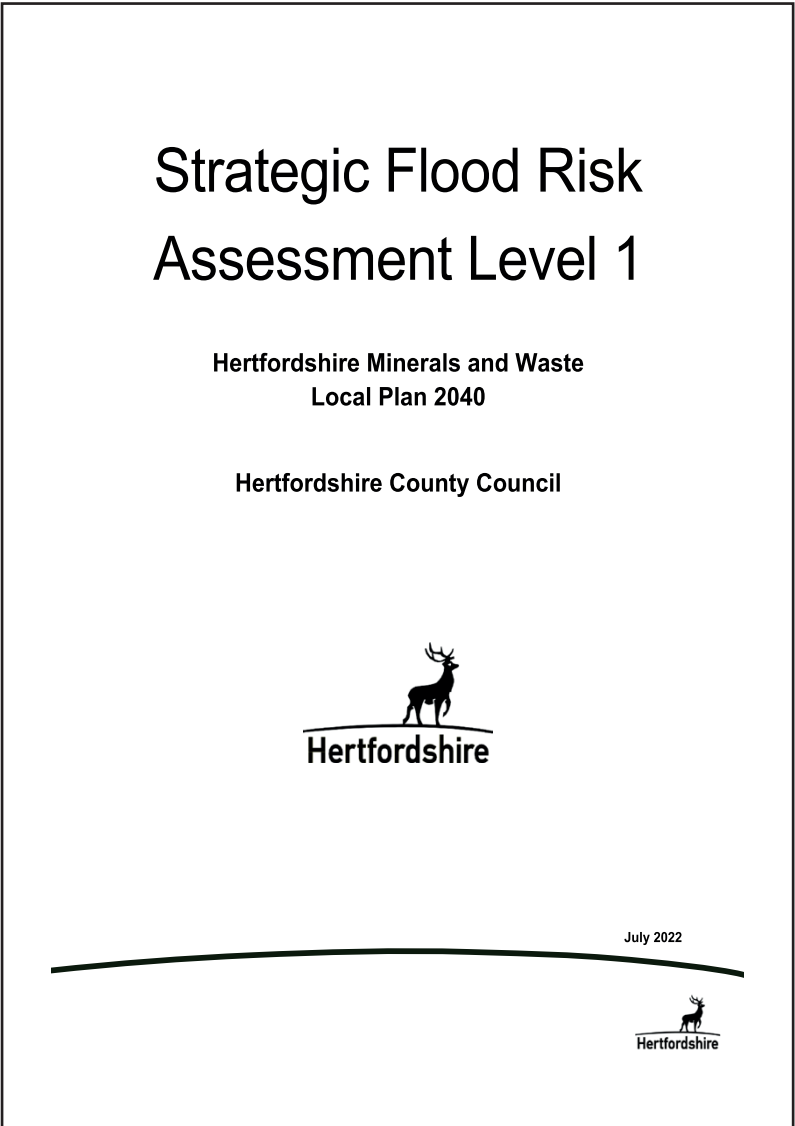


Figure 5.3 Hertfordshire County Council SFRA

6 Sources of Flooding

In accordance with the NPPF, it is a requirement to assess the flood risk to the site from all potential sources. For the purposes of this assessment this has been broken down into five potential sources:

- Flooding from rivers and sea
- Flooding from sewers
- Flooding from groundwater
- Flooding from artificial sources (e.g. reservoirs and canals)
- Flooding from surface water

These sources are discussed and assessed in more detail in Sections 6.2 to 6.6 below.

6.1 Sequential Test

A risk-based Sequential test should be applied at all stages of the planning process. The aim is to steer developments to areas at the lowest probability of flooding (i.e. to Flood Zone 1).

Based on the Environment Agency’s “Flood Map for Planning (Rivers and Sea)” (refer to Figure 6.1), the site is located entirely within Flood Zone 1 - an area assessed as having a less than 1 in 1000 annual probability of river or sea flooding (<0.1%). The North Hertfordshire District Council SFRA also indicates that the site is located within Flood Zone 1 (refer to Figure 6.2).

The proposed land uses would be classified as “More vulnerable” and “Less vulnerable” in accordance with NPPF Table 2 (refer to Figure 6.3), The foul water pumping stations would be classified as “Water-compatible”.

Referring to NPPF Table 3 (shown below in Figure 6.4) all vulnerability classifications are suitable in Flood Zone 1. Therefore, the proposed land uses are acceptable on the site and the Sequential Test has been passed.

Essential infrastructure • Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk. • Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works that need to remain operational in times of flood. • Wind turbines.
Highly vulnerable • Police stations, ambulance stations and fire stations and command centres and telecommunications installations required to be operational during flooding. • Emergency dispersal points. • Basement dwellings. • Caravans, mobile homes and park homes intended for permanent residential use. • Installations requiring hazardous substances consent (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as “essential infrastructure”).
More vulnerable • Hospitals. • Residential institutions such as residential care homes, children's homes, social services homes, prisons and hostels. • Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels. • Non-residential uses for health services, nurseries and educational establishments. • Landfill and sites used for waste management facilities for hazardous waste. • Sites used for holiday or short-let caravans and camping, <i>subject to a specific warning and evacuation plan</i>.
Less vulnerable • Police, ambulance and fire stations which are not required to be operational during flooding. • Buildings used for shops, financial, professional and other services, restaurants and cafes, hot food takeaways, offices, general industry, storage and distribution, non-residential institutions not included in “more vulnerable”, and assembly and leisure. • Land and buildings used for agriculture and forestry. • Waste treatment (except landfill and hazardous waste facilities). • Minerals working and processing (except for sand and gravel working). • Water treatment works which do not need to remain operational during times of flood. • Sewage treatment works (if adequate measures to control pollution and manage sewage during flooding events are in place).
Water-compatible development • Flood control infrastructure. • Water transmission infrastructure and pumping stations. • Sewage transmission infrastructure and pumping stations. • Sand and gravel working. • Docks, marinas and wharves. • Navigation facilities. • Ministry of Defence defence installations. • Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location. • Water-based recreation (excluding sleeping accommodation). • Lifeguard and coastguard stations. • Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms. • Essential ancillary sleeping or residential accommodation for staff required by uses in this category, <i>subject to a specific warning and evacuation plan</i>.

Figure 6.3 National Planning Policy Framework: Table 2 - Flood Risk Vulnerability Classification

Flood Risk vulnerability classification (see Table 2)		Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Flood Zone (see table 1)	Zone 1	✓	✓	✓	✓	✓
	Zone 2	✓	✓	Exception Test required	✓	✓
	Zone 3a	Exception Test required	✓	✗	Exception Test required	✓
	Zone 3b functional floodplain	Exception Test required	✓	✗	✗	✗

Figure 6.4 National Planning Policy Framework: Table 3 - Flood Risk Vulnerability and Flood Zone “Compatibility”

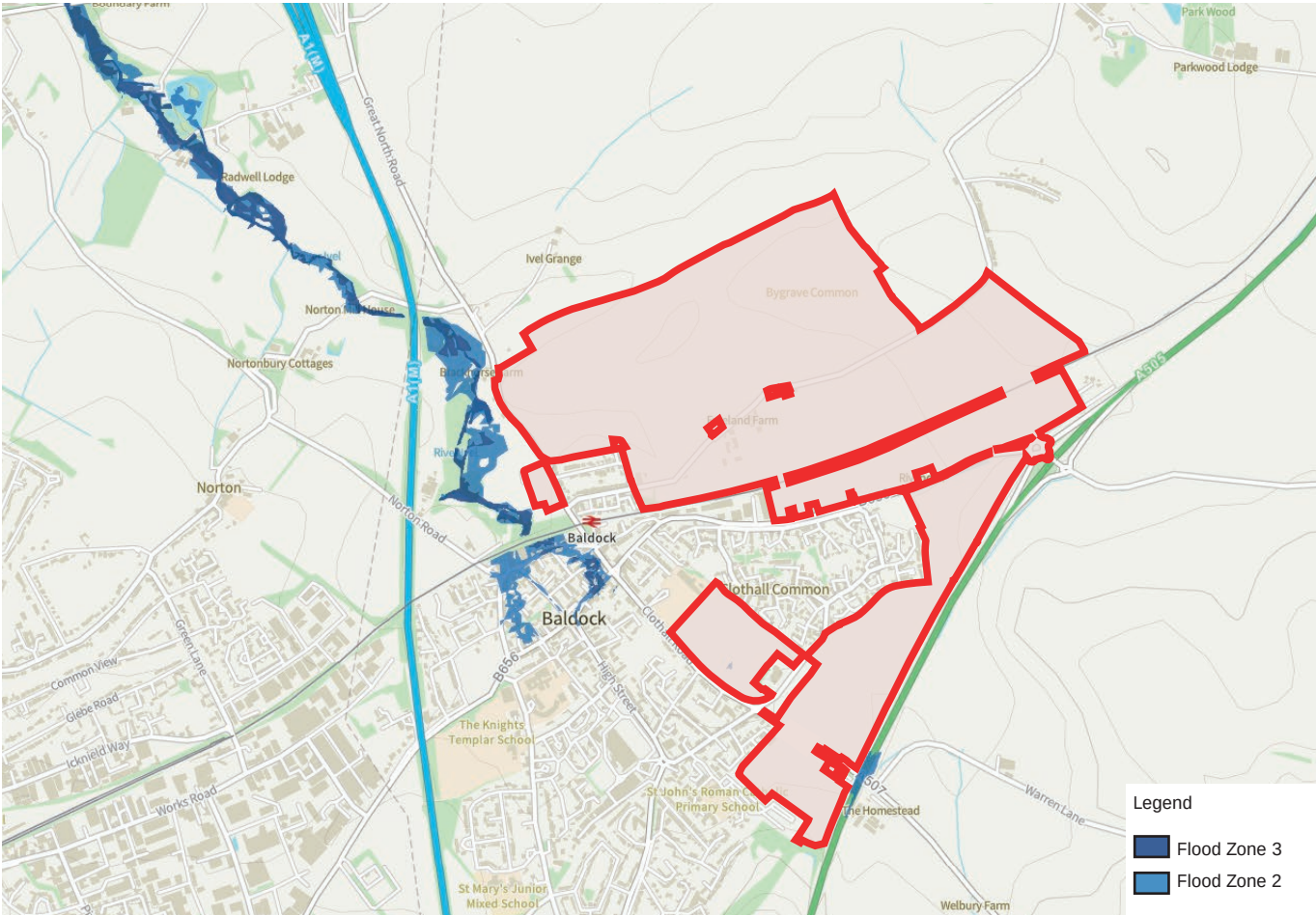


Figure 6.1 Flood Risk Map for Planning (2025)

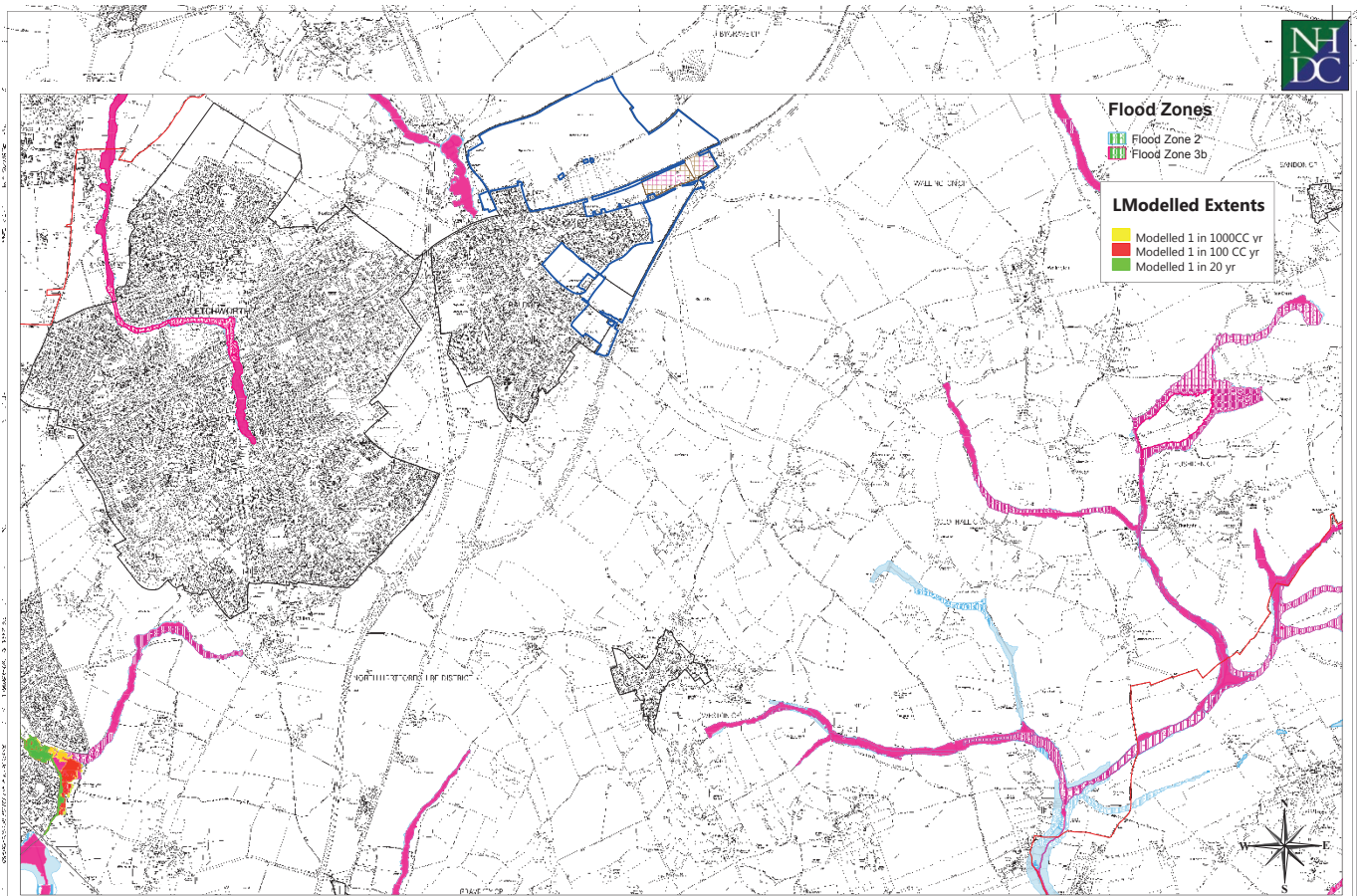


Figure 6.2 NHDC SFRA Update Flood Zones (2016)

6.2 Flooding from Rivers and Sea

Fluvial flooding is caused by rivers, watercourses or ditches overflowing. Tidal flooding is caused by elevated sea levels or overtopping by wave action. In estuarine areas such as London, flooding might arise from either fluvial or tidal flooding, or a combination of the two.

Based on the Environment Agency's "Flood Map for Planning (Rivers and Sea)" (refer to Figures 6.5 and 6.6), the site is located entirely within Flood Zone 1 - an area assessed as having a less than 1 in 1000 annual probability of river or sea flooding (<0.1%). The nearest area of fluvial flooding is to the west of North Road in Ivel Springs Local Nature Reserve which is an area that has been maintained as historic wetland and pasture.

The Flood Zone map contained in Appendix 2 of the most recent North Hertfordshire District Council Strategic Flood Risk Assessment also confirms that the site is located entirely within Zone 1 and shows the same extent of fluvial flooding within the nature reserve.

Therefore, using all the available evidence, it is considered that the site has a **very low** probability of flooding from fluvial and tidal sources.

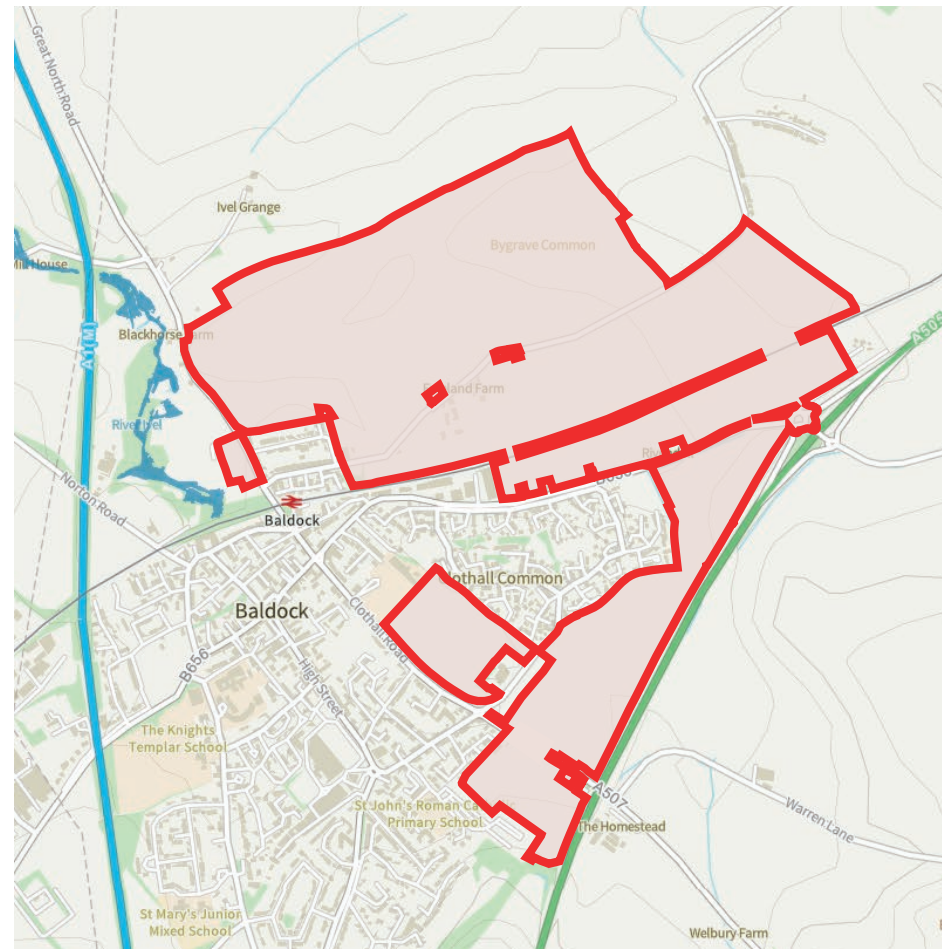


Figure 6.5 Environment Agency Flood Map for Rivers and Sea (Rivers 1 in 100, Sea 1 in 200)

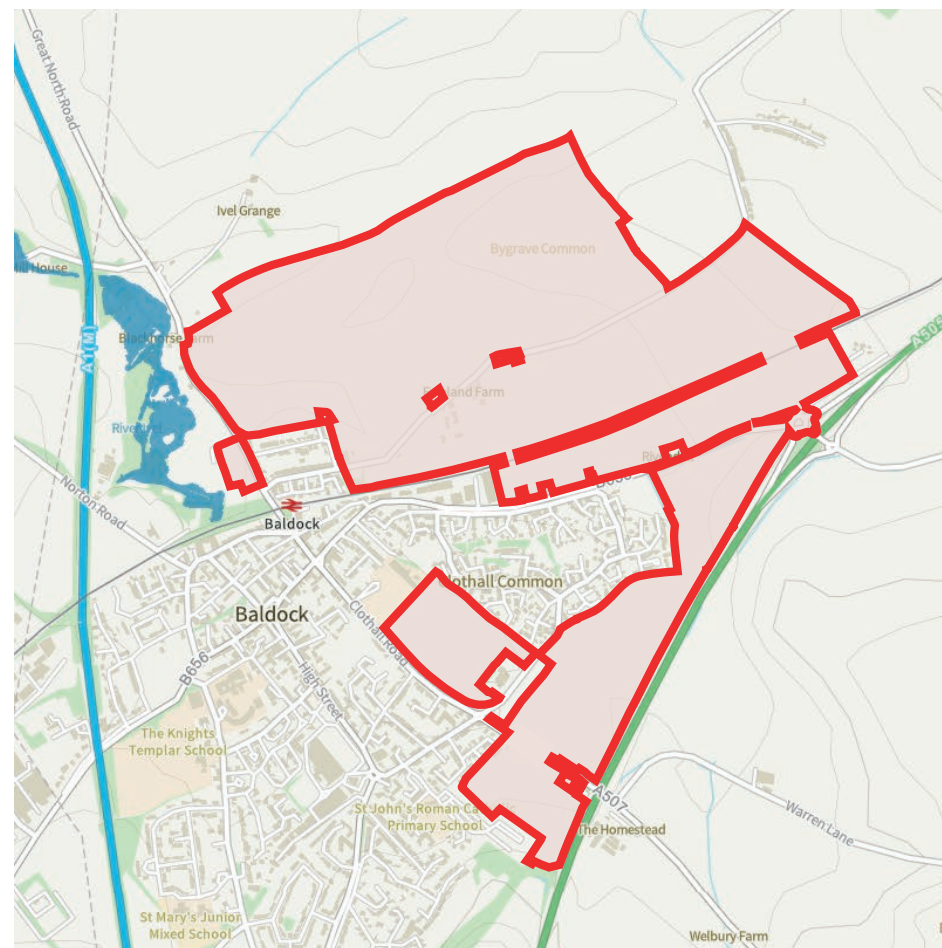


Figure 6.6 Environment Agency Flood Map for Rivers and Sea (Rivers and Sea 1 in 1000)

6.3 Flood risk from Sewers

Sewer and highway drainage flooding occurs when the capacity of systems are exceeded, or the function of the system is impeded (e.g. tide locking), which results in surcharging of the system and water being forced to the surface via gullies, manholes, foul water appliances such as toilets or other dedicated overflows.

The available Anglian Water record plans (Appendix 1 and reproduced below in Figure 6.7) indicate that there are no surface water sewers on or crossing the site.

There is a foul water rising main crossing the northern part of the site from north east to south west. The risk of flooding from this rising main is considered to be negligible provided that the exact location is determined, recorded and avoided during the construction phases of the project.

The North Hertfordshire SFRA indicates that there are no known incidences of sewer flooding within the area (refer to Appendix 2) and there is also no anecdotal evidence of sewer flooding locally.

Using all the available evidence it is therefore considered that the site has a **very low** risk of flooding from sewers and the local drainage network, as long as they continue to be adequately maintained.

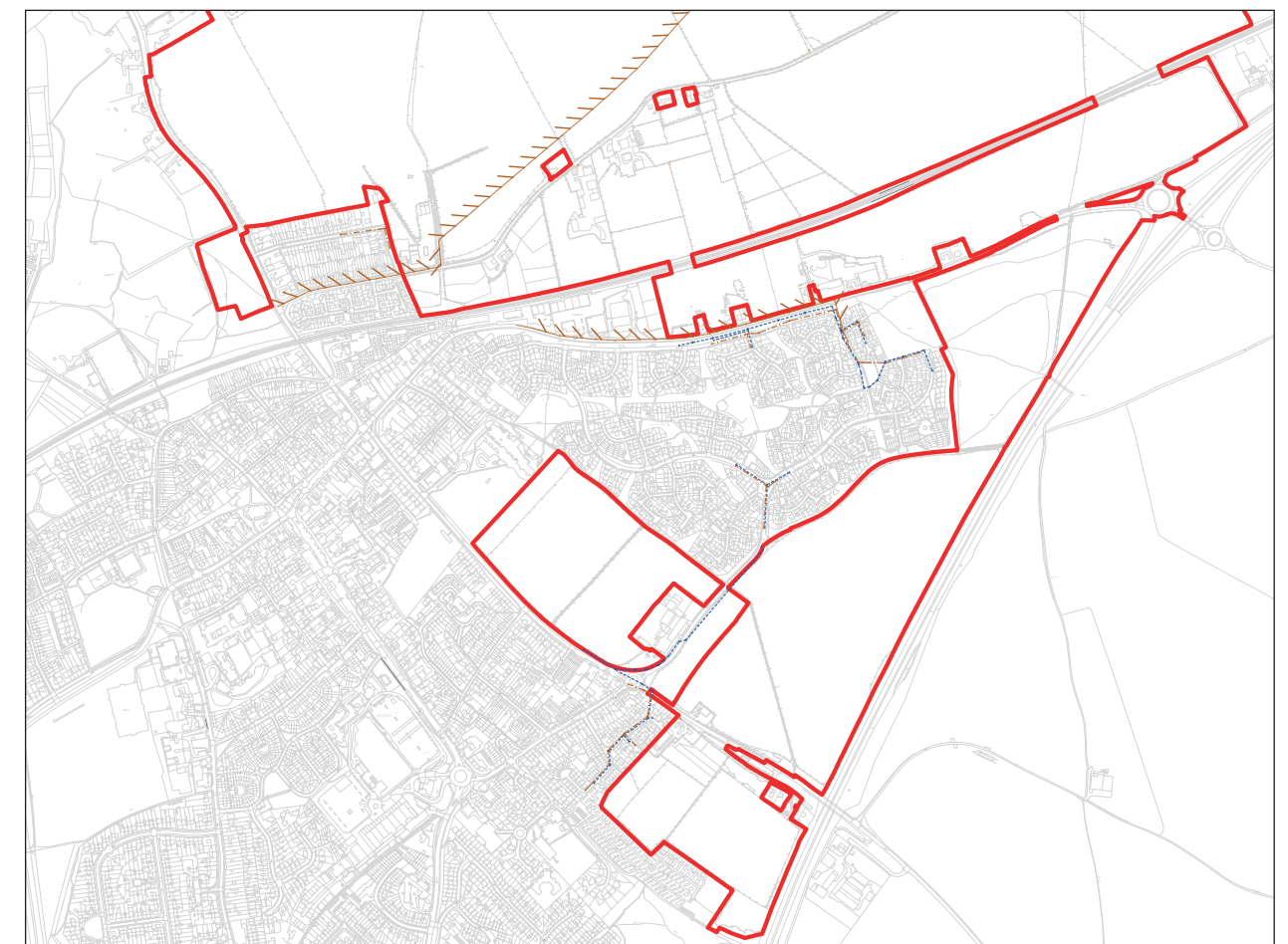


Figure 6.7 Anglian Water Sewer Map Extracts Combined

6.4 Flooding from Groundwater

Groundwater flooding is caused by the emergence of water originating from sub-surface permeable strata and is often highly localised and complex. After a prolonged period of rainfall, a considerable rise in the water table can result in inundation for extended periods of time.

The North Hertfordshire SFRA indicates areas susceptible to groundwater flooding (refer to Appendix 2). This shows that the majority of the site has a flood risk of less than 25% with a small area in the north west of the site having a 50-75% risk. However, the mapping is based on a 1 km by 1 km grid and this square is an isolated higher risk square which includes Ivel Springs and so the "groundwater flooding" is believed to relate to the origin of the River Ivel rather than actual flooding.

The site investigation works undertaken have confirmed that groundwater is generally not present across the site with the exception of three trial pits and a window sample in the south western corner of Parcel BA1 which recorded groundwater at depths of between 2.0 and 3.0 m below ground level.

Groundwater was encountered at depth in six boreholes immediately to the north and six boreholes immediately to the south of the railway line where it was recorded at between 5.0 and 15.3 m below ground level. These groundwater monitoring results are contained in Appendix 4 for reference.

The available British Geological Society onshore borehole records in the area did not encounter groundwater to a depth of at least 10 m below ground level.

Based on this evidence, we consider that the site is at **very low** risk of flooding from groundwater sources even if basements were to be proposed.

6.5 Flooding from Artificial Sources

Where infrastructure exists that retains, transmits or controls the flow of water; flooding may result if there is a structural, hydraulic, geotechnical or mechanical failure of the infrastructure.

Figure 6.9 shows the Environment Agency's Flood Map for Reservoirs which indicates that the site is not at risk from flooding associated with reservoirs or artificial sources. Any flooding from a failure of the Hatch Lane Reservoir remains west of Clothall Road and south of the railway line.

There are no other known artificial sources of flooding in the area.

Based on this information it is therefore considered that the site is at **very low** risk of flooding from artificial sources.

6.6 Flooding from Surface Water

Surface water flooding can occur as a result of either overland flow or ponding. Overland flow occurs following heavy or prolonged rainfall, snow melt, or where intense rainfall is unable to soak into the ground or enter drainage systems due to blockages or capacity issues. Unless it is channelled elsewhere, the run-off travels overland, following the gradient of the land. Ponding occurs as the overland flow reaches low lying areas in the local topography. These flood events tend to have a short duration and depend on a number of factors such as geology, topography, rainfall, saturation, extent of urbanisation and vegetation.

The Environment Agency have recently expanded their Risk of Flooding from Surface Water map to show extents for the 1 in 30, 1 in 100 and 1 in 1000 annual likelihood of occurring (Figures 6.10 to 6.12). These indicate that the site is generally located in an area identified as having a **very low risk** of surface water flooding.

On the southern half of the site there are two areas of flooding indicated - one to the south of the properties on Merchants Walk and one between the property "Watts Roofing Supplies" and the railway line. There is also an overland flow path shown emanating from close to the junction of Clothall Road and Wallington Road and flowing north towards the centre of Baldock.

On the northern half of the site there is flooding indicated to the south of Half Way Farm and Freeland Farm which then crosses Bygrave Road and flows around Laymoor Farm and the rear of the properties on Salisbury Road to a low point adjacent to North Road. This is generally consistent with the route of the historic Winterbourne which crosses the site.

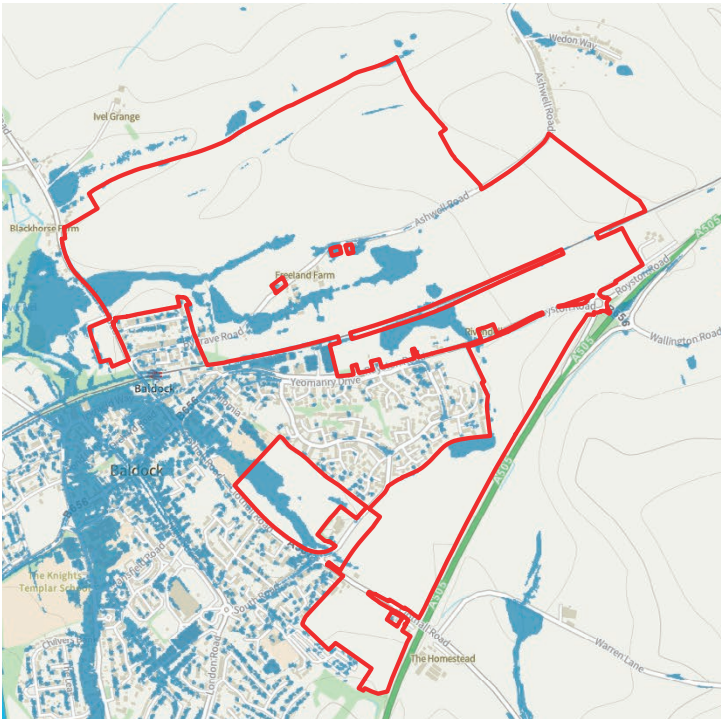


Figure 6.11 Environment Agency's Extent of Flooding from Surface Water (1 in 100)

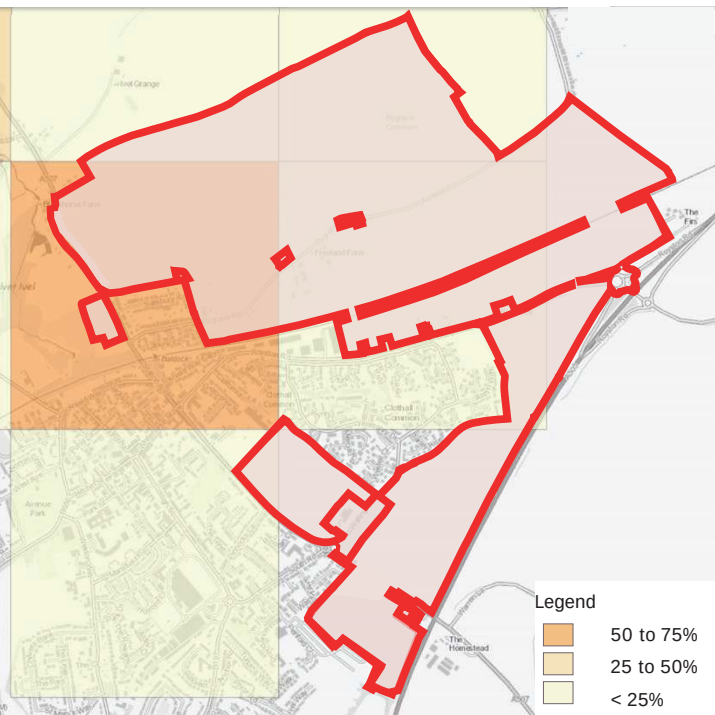


Figure 6.8 Groundwater flooding susceptibility

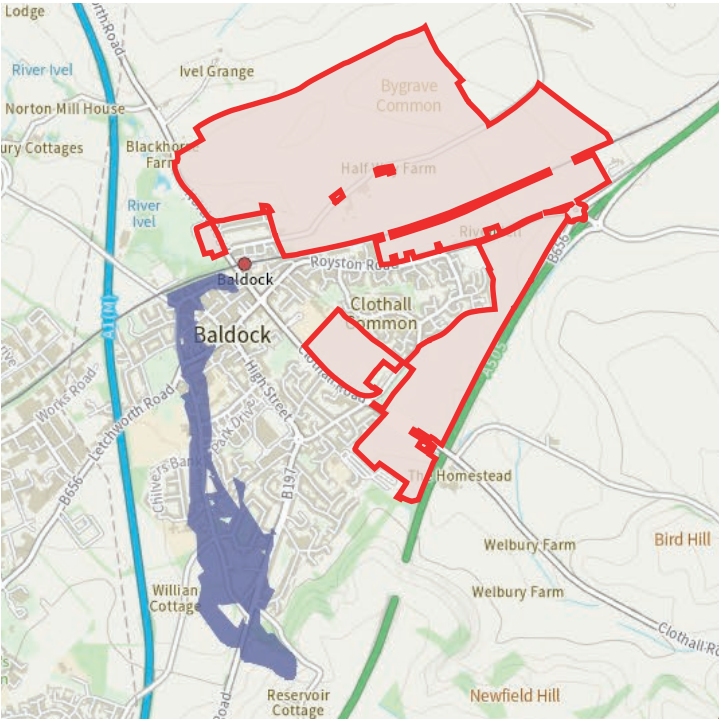


Figure 6.9 Environment Agency Reservoir Flood Map

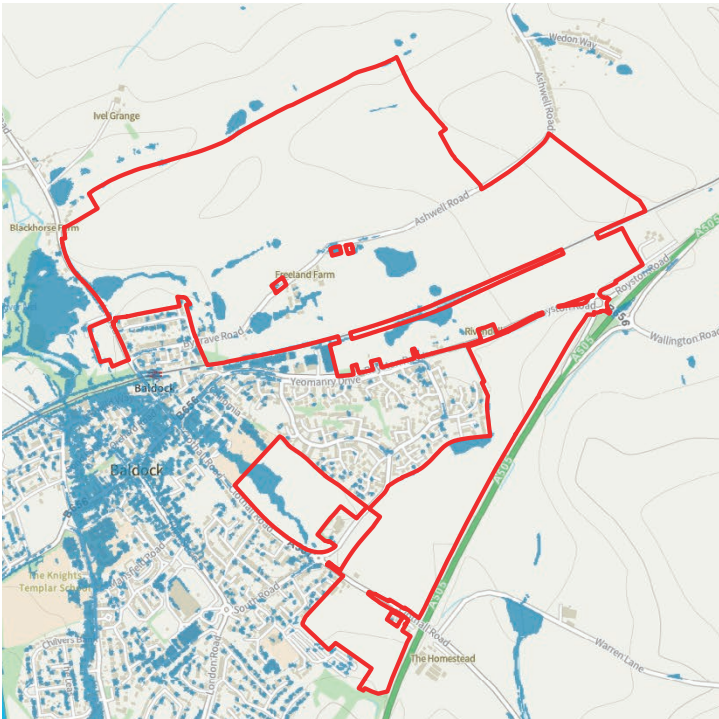


Figure 6.10 Environment Agency's Extent of Flooding from Surface Water (1 in 30)



Figure 6.12 Environment Agency's Extent of Flooding from Surface Water (1 in 1000)

The Environment Agency provide further maps which illustrate the extent of flooding for various flood depths with varying probabilities of occurring, ranging from a “high” probability event with a 1 in 30 (3.3%) or greater chance of occurring each year, a “Medium” probability event has between 1 in 30 (3.3%) and a 1 in 100 (1%) chance of occurring and a “Low” probability event has a 1 in 100 (1%) or less of occurring.

- The 900mm water depth map indicates that the only flooding in the southern half of the site is adjacent to the railway line and has a low probability. In the northern half of the site the area immediately adjacent to North Road is indicated as having a high risk of occurring this extends into the site with the outer edge of the low probability “ring” approximately 150m into the site (Figure 6.13).
- The 600mm water depth map indicates a slightly larger extent of flooding on the southern half of the site with the area nearest the railway at a high probability of occurring. Small areas with a low probability of happening have appeared at the north of Clothall Common and near Merchant Walk. The flooding on the northern half of the site adjacent to North Road is similar in extent to the 900mm map but is now at high and medium probability. Also, there are now localised spots of low risk flooding appearing along the line of the Winterbourne (Figure 6.14).
- The 300mm water depth map indicates a similar overall extent of flooding on the southern half of the site but now with a high and medium probability of happening rather than low. The flooding at North road (is similar in extent but at high risk of occurring. The individual spots of flooding along the line of the Winterbourne are now staring to join together with some spots now at high risk of arising (Figure 6.15).
- The 200mm water depth map is similar to the 300mm map in terms of the extent of flooding but with increased areas now at high risk of being present. The flooding on Clothall Common has now extended to reach Wallington Road (Figure 6.16).

These Environment Agency maps indicate that the majority of the site is not susceptible to surface water flooding and, where it does occur, it is generally 300mm deep or less. The two exceptions are a localised area adjacent to North Road which has a relatively high risk of happening up to a depth of 900mm and a localised area next to the railway which has a low risk of flooding to 900mm deep and a low to medium risk of flooding to a depth of 600m.

The impact of this surface water flooding on the proposed development areas is discussed in more detail below.



Figure 6.13 Environment Agency's Risk of Flooding from Surface Water Map (900mm deep)



Figure 6.14 Environment Agency's Risk of Flooding from Surface Water Map (600mm deep)



Figure 6.15 Environment Agency's Risk of Flooding from Surface Water Map (300mm deep)

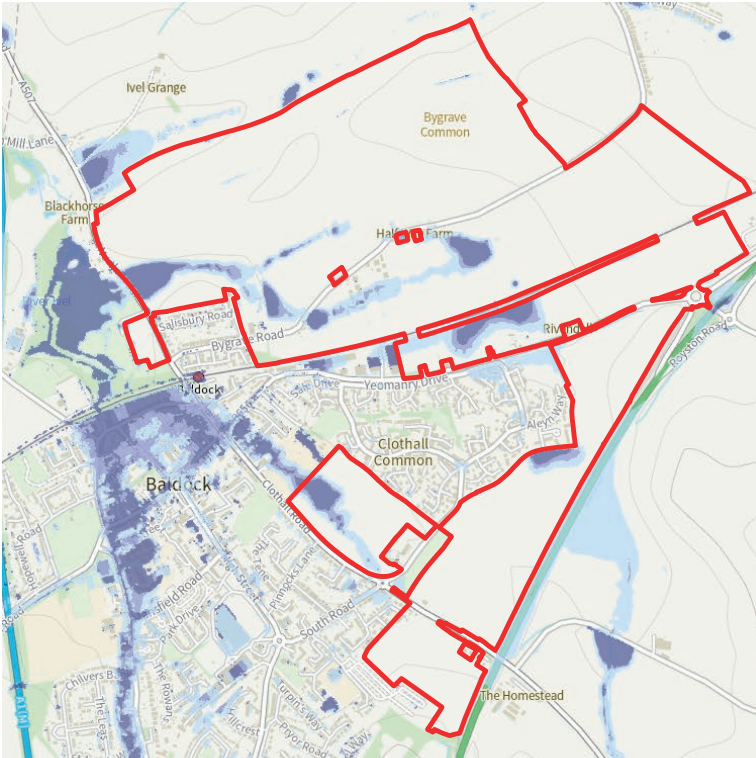


Figure 6.16 Environment Agency's Risk of Flooding from Surface Water Map (200mm deep)