


























### 3.3.6 Ecology

The site primarily consists of cultivated arable land that is negligible in terms of ecological value. A number of locally valuable habitats on site include mature trees, hedgerows and woodland bands. A disused badger sett has been recorded on site with a winter barn owl roost at St. Frideswide's Farm, just off-site. Bat roosts have also been confirmed at the site at Pipal Barns and to the east of St. Frideswide's Farm, while there are four trees that have potential to support roosting bats. The Site is used by a range of farmland birds, including ground nesting species such as skylark and, less frequently, lapwing and yellow wagtail.

### 3.3.7 Arboriculture

EDP has surveyed 66 items in total on site which includes 31 individual trees, 16 groups of trees and 19 hedgerows, out of which 3 have been awarded a Category A (trees of high quality), 30 have been categorised as Category B (trees of moderate quality) and 26 are identified as Category C (trees of low quality). In addition to this, 7 items out of the 66 surveyed, are categorised as U and are considered unsuitable for retention irrespective of the development on site.

	Site boundary
	Broadleaved semi-natural woodland
	Broadleaved plantation woodland
	Priority habitat
	Orchard
	Scattered trees/ parkland (Broad-leaved)
	Scattered scrub
	Earth banks covered with tall ruderal
	Poor semi-improved grassland
	Arable grassland
	Amenity grassland
	Buildings
	Hardstanding
	Ponds
	Running water
	Wet ditch
	Dry ditch
	Fence
	Defunct species-poor hedgerow
	Intact species-rich hedgerow
	Intact species-poor hedgerow
	Line of conifers
	Scattered trees (Broad-leaved)
	Badger sett
	Target note

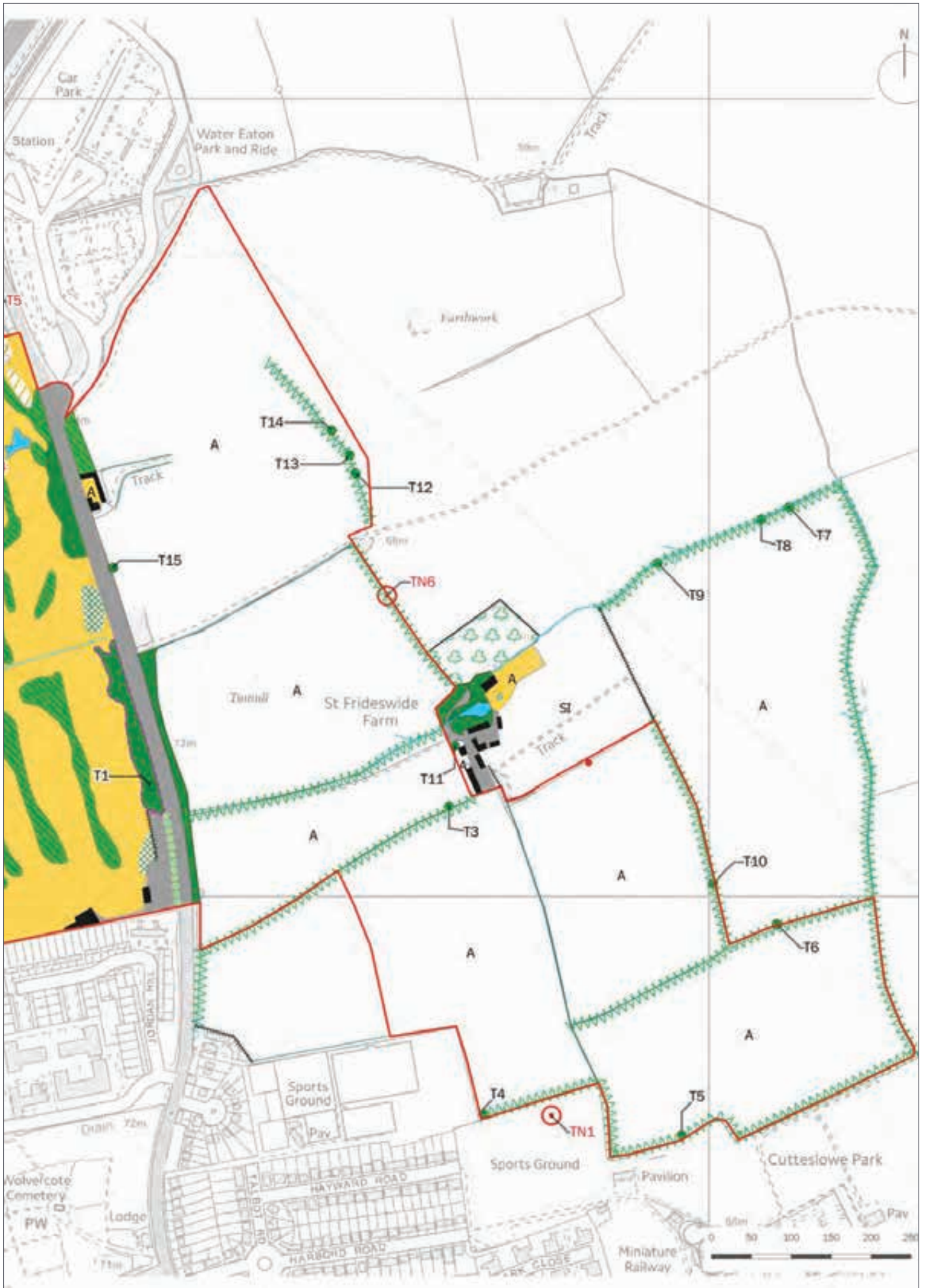


Figure 12 Ecology and Arboriculture plan

### 3.3.8 Flood Risk and Drainage

#### RIVER FLOOD RISK

According to the Environment Agency's Flood Map for Planning and further detailed modelling for climate change including the flood risk scenario associated with it, the site is located wholly in Flood Zone 1, that is, land at the lowest risk of river flooding.

#### SURFACE WATER AND DRAINAGE

The Environment Agency Risk of Flooding from Surface Water map indicates that the majority of the site is at very low risk from surface water flooding, with some area at low, medium and high risk associated with the overland flows which cross the site in times of heavy rainfall.

Rather than provide formal underground sewers to accommodate these rain water flows, there is an opportunity to accommodate them within the development in the form of natural features, providing green / blue corridors within the development area that add biodiversity, and follow the principles of nature-led design in accordance with ['Building for Nature'](#).

Existing flow routes can be maintained and improved where feasible, and a sustainable drainage system can be

implemented on site delivering benefits to new residents and creating new habitats.

The surface water drainage strategy will mimic the existing situation, discharging run-off into the network of watercourses through the site at rates restricted to the greenfield (pre-development) run-off rates for each drainage catchment.

Sustainable Drainage Systems (SuDS) such as ponds, attenuation basins, swales and bio-retention areas will be incorporated throughout the development and will be designed with varying shapes, sizes, depth and permanence, in order to maximise ecological and amenity benefits.

The surface water drainage strategy will be designed to allow for the future effects of climate change.

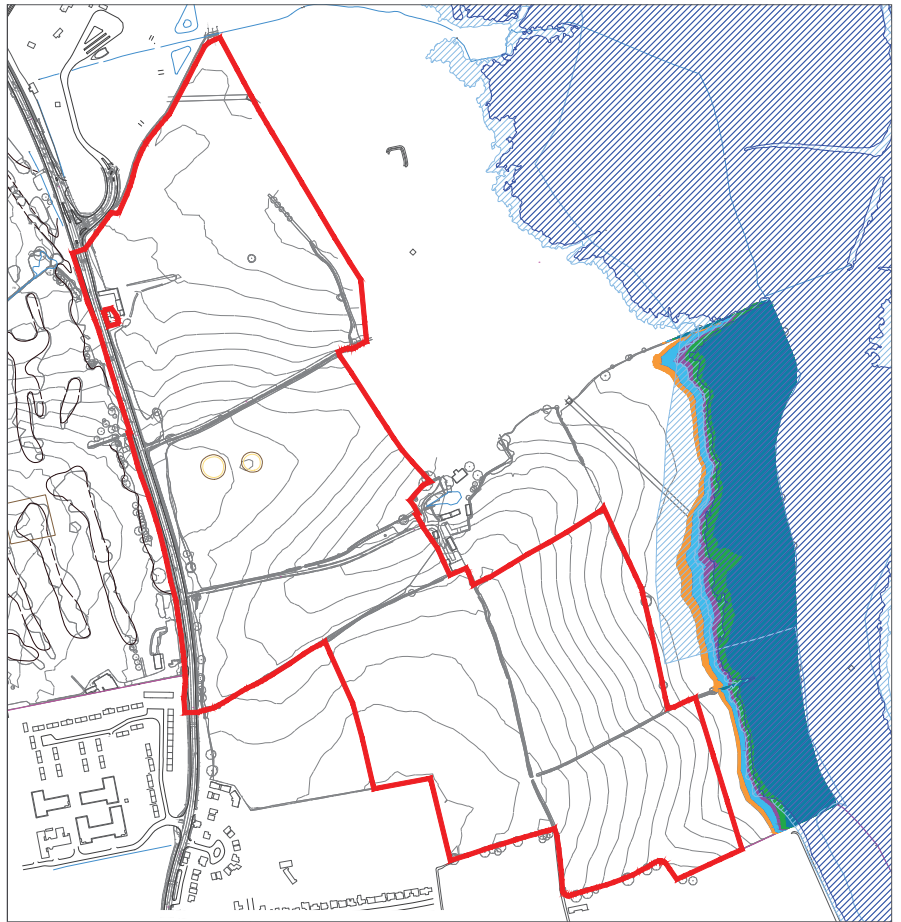
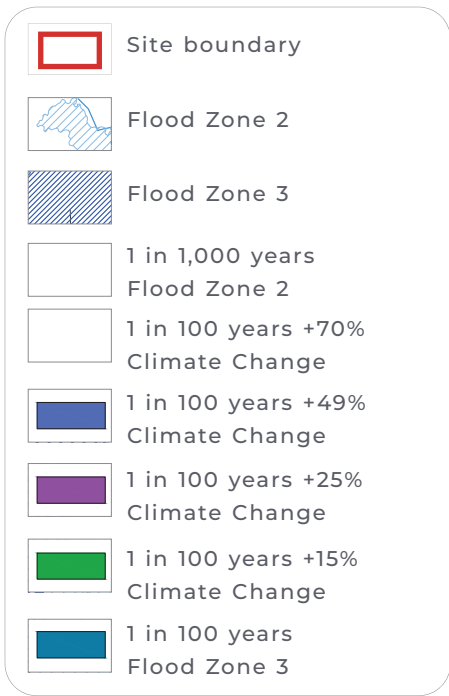


Figure 13 Fluvial flood risk

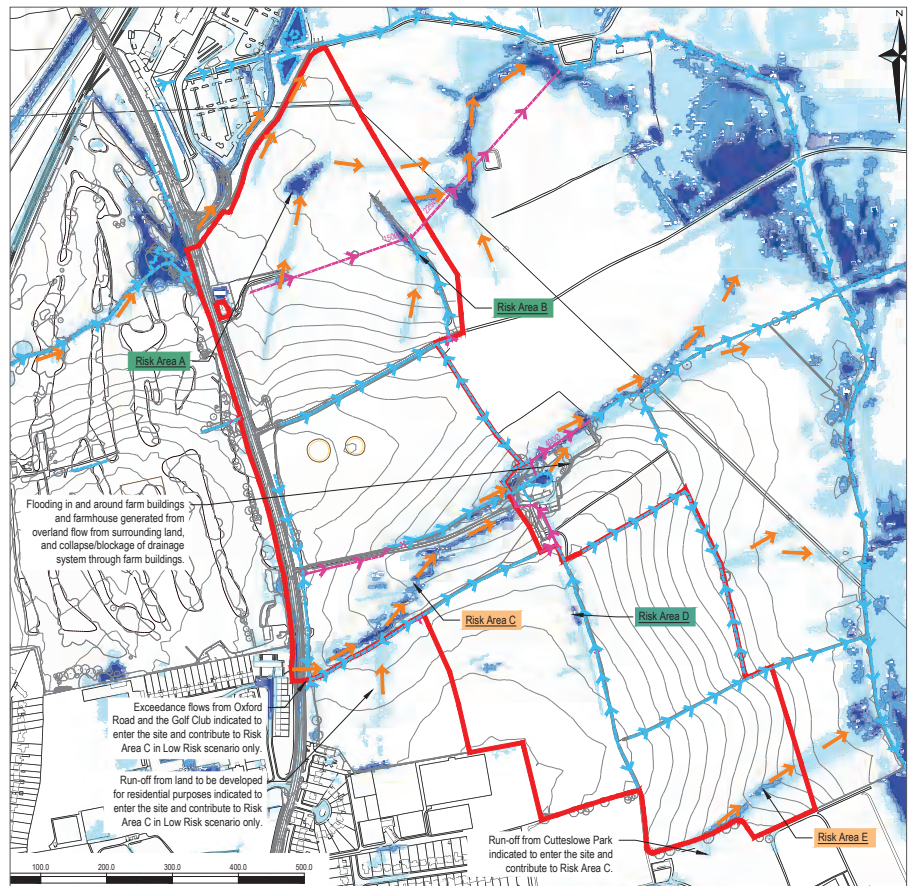
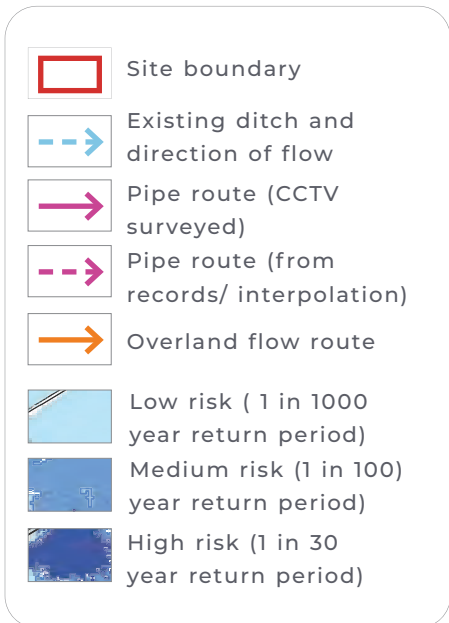


Figure 14 Surface water flood risk

### 3.3.9 Heritage

The site does not contain any designated heritage assets, such as world heritage sites, scheduled monuments, listed buildings, registered parks, and gardens, registered battlefields or conservation areas. St. Frideswide's Farmhouse, a Grade II\* and the associated Grade II listed garden wall are the nearest designated heritage asset which is located c. 50m from the site boundary.

The Oxfordshire HER records four non-designated heritage assets within the boundary of the site and these comprise the ploughed remains of two Anglo Saxon round barrows, and a possible Roman Ridgeway. The remains of the barrows are considered to be of regional significance and considered to warrant preservation in situ. Pipal Cottage and associated farm building complex are considered to be heritage assets of local significance. Where possible, these buildings will be retained in the masterplan. The development options for the Pipal Barns include their conversion and reuse within the scheme or, subsequent to a suitable record being made, their replacement with new buildings.

None of the predicted adverse effects on designated or non-designated archaeology and heritage assets, either during the construction or operational phases of the Proposed Development, are deemed to be of greater than minor significance and, therefore, are not considered to be 'significant' in EIA terms.



① Pipal Cottage



② View north towards the two round barrows in the east of the site.



③ St. Frideswide's Farmhouse, Grade II\* listed building

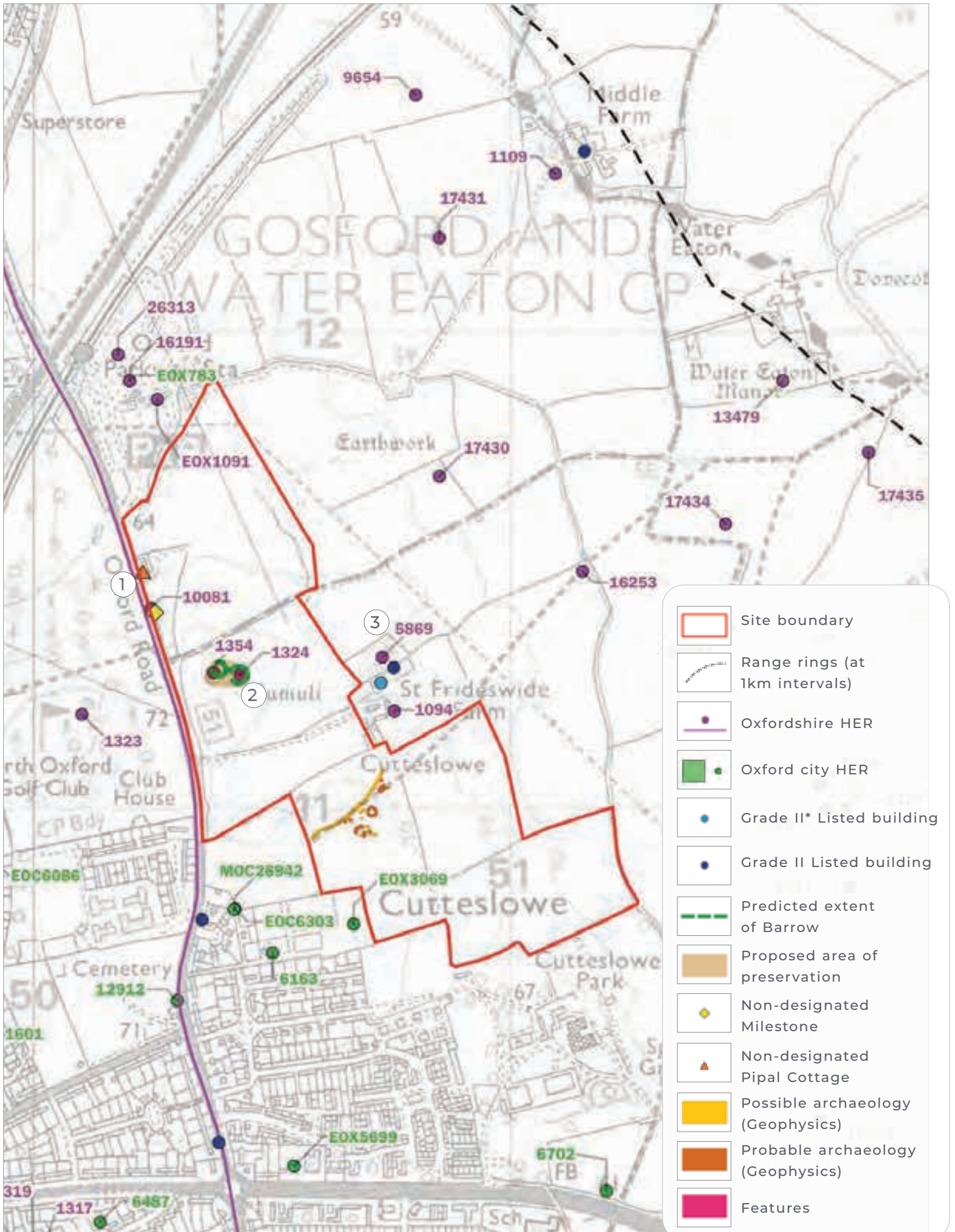


Figure 15 Heritage and archaeology plan (EDP)

### **3.3.10 Noise**

Environmental noise surveys have been completed to quantify the prevailing noise environment, dominated by road traffic from the A4165. The noise survey has been used to develop a 3D computer model of noise propagation across the site including all significant noise sources with full topography, and to

inform a scheme of mitigation measures required to ensure a commensurate level of protection against noise from future occupants of the PR6a development, as well protecting existing occupants of the surrounding areas.

### **3.3.11 Air Quality**

Potential air quality impacts across the proposed development and at sensitive receptors within close proximity to the site have been assessed on a quantitative basis, by calculating NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> levels across the proposed development and at sensitive locations with and without the development using

the ADMS-Roads dispersion modelling software. The overall significance of potential impacts was determined to be not significant in accordance with the EPUK and IAQM guidance.

### **3.3.12 Utilities**

Foul water flows will need to be pumped to the existing Thames Water foul drainage network, and reinforcement works are needed to the existing network to provide the capacity required to serve the site. Liaison is underway with Thames Water to ensure that the development is incorporated into their modelling at the appropriate stage, in order to ensure that the required capacity is provided when it is needed.

Gas, electric, telecommunications and potable water services are all indicated within and in the vicinity of the site.

Given the size of the development, it is likely that off-site reinforcement works may be necessary in order to facilitate the development. A capacity assessment by suppliers will be required at the detailed design stage in order to determine if any reinforcement of the local supply network is required. It is likely that protection and/or diversion works to services along the A4165 may be required to facilitate the construction of new access points into the development, and grounding and / or diversion works required to services serving Water Eaton Manor and St Frideswide's Farm which cross the site.

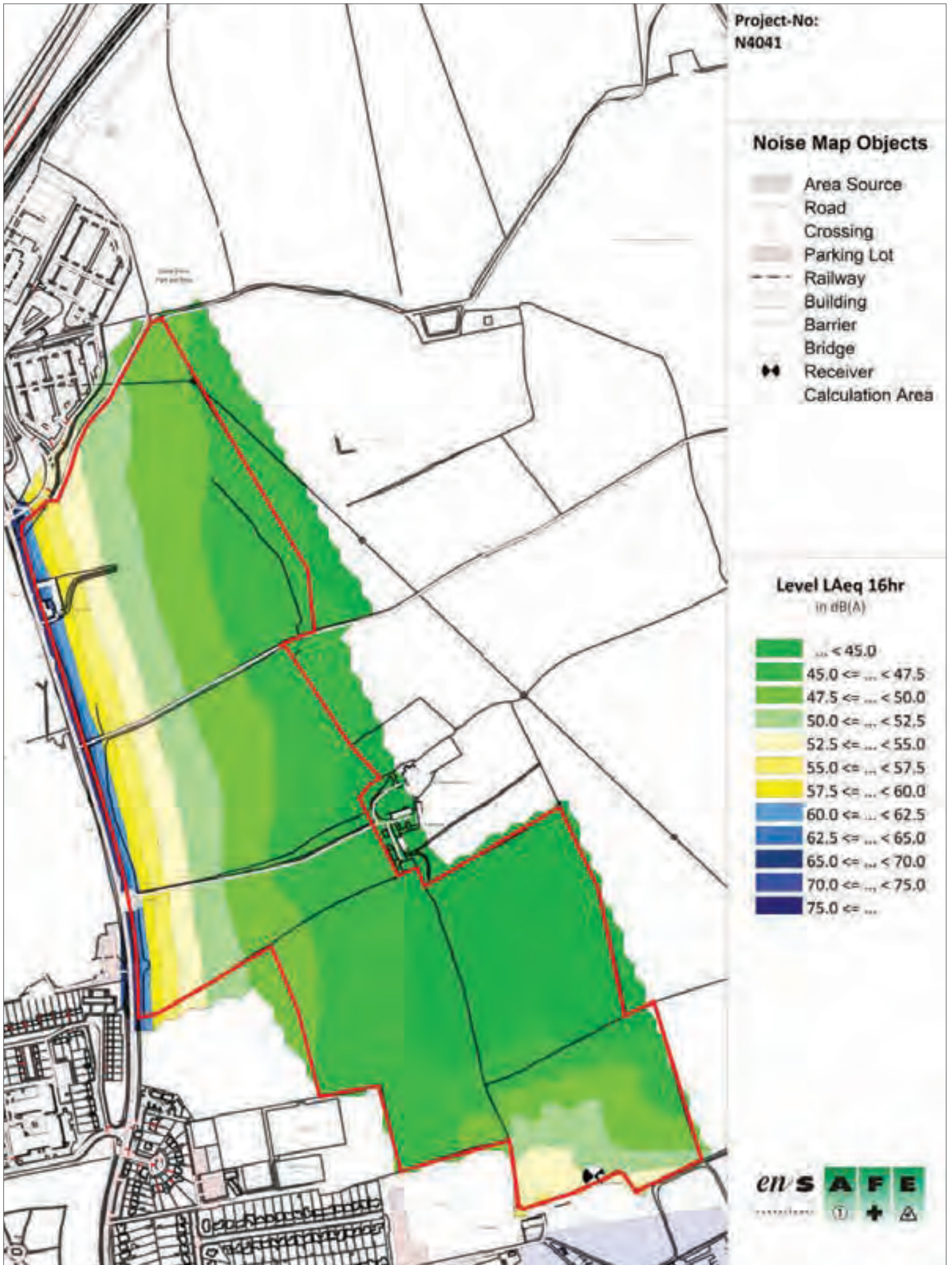


Figure 16 Noise Map