Glandŵr Cymru
Canal & River Trust in Wales

Trevor Basin Car Parking
Ecology Assessment

14 August 2025

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Version	Purpose/Change	Author/Reviewed By	Date
1.0	Draft, for review	Jenny Spelling, Ecologist, Canal & River Trust	04/08/2025
1.2	Final, for issue	Jenny Spelling, Ecologist, Canal & River Trust	14/08/2025

Executive Summary

This report has been prepared in connection with proposals to construct 17 new car parking spaces at Trevor Basin. It provides the results of ecological surveys carried out and an assessment of the potential effects of the proposals along with appropriate mitigation measures.

Methodology

A desk study was carried out, which included obtaining information on designated sites, protected and notable species within a 1km radius of the application site. A site survey was carried out on 25 June 2025, which included identification of the habitats present, and an assessment of the likelihood of the presence of protected species. At the time of the survey, the Application Site had already been cleared as part of the nearby redevelopment of the previously approved Boat Hire Base, therefore the assessment of habitats and impacts on protected species has been carried out using photographic evidence prior to clearance, aerial photographs and survey information from adjacent habitats.

Key impacts and mitigation measures

The River Dee Site of Special Scientific Interest and Special Area of Conservation is situated 0.5km from the application site. There are no likely impact pathways that could affect the SAC/SSSI. No other statutory or non-statutory designated sites are likely to be affected by the proposals.

Any new artificial lighting may disturb foraging bats and other nocturnal wildlife that may be passing through or adjacent to the site, such as bats. Measures to avoid disturbance from lighting have been detailed in the report and will be implemented. No other protected species are likely to be impacted by the proposals.

Using photographic evidence and survey information from adjacent habitats, it is estimated that circa 0.02 ha of bare ground, grassland, small bramble scrub and tall ruderal vegetation. No trees were removed.

Several invasive species are present in habitats near to the site, however none were found within or adjacent to the application site.

Areas of new wildflower seeding and planting will mitigate for the loss of the grassland. Other enhancement measures are detailed in the Net Biodiversity Benefit report submitted with the application.

Conclusions

Overall, the proposed development will result in no net loss of habitats and any potential risks of harm to protected/notable species has been mitigated. The scheme will result in an overall long term biodiversity benefit.

Introduction and Project Description

Trevor Basin is located in Wrexham, North Wales at the World Heritage Site within the Scheduled Ancient Monument boundary of the Pontcysyllte Aqueduct and within the Pontcysyllte Aqueduct Conservation Area. As a UNESCO landmark attraction, the site has high visitor numbers for the aqueduct, tourism, leisure, education and recreational purposes.

The proposals are for a change of use of the land and minor works to facilitate relocating 17 designated car parking spaces, for the previously approved redevelopment of the Boat Hire Business (planning application reference P/2021/0560). Further detail on the scope of works can be found within the following documents submitted with the application:

- Location Plan
- Existing Site Plan
- Proposed Site Plan
- Proposed Sections
- Proposed Landscape Plan
- Site Plan: Supplementary Planting Plan
- Swept Path Drawings
- Green Infrastructure and Net Biodiversity Benefit Plan, Canal & River Trust, 14 August 2025.
- Habitats Regulations Assessment Screening, Canal & River Trust, 04 August 2025.

Location

The application site is located in Trevor Basin, Wrexham, LL20 7TT. The Ordnance Survey grid references are SJ 2726 4254 and SJ 2721 4247. The application site is within Wrexham County Borough Council. The application site consists of two parcels of land **(referred to as 'area 1' and 'area 2')** situated within close proximity of one another, which are located towards the north of Trevor Basin on a private vehicular access drive, off Tower Hill, on land adjacent to the existing main Trevor Basin visitor car park. Please refer to Figures 1 and 2 below and overleaf.



Figure 1: Location of the Application Site

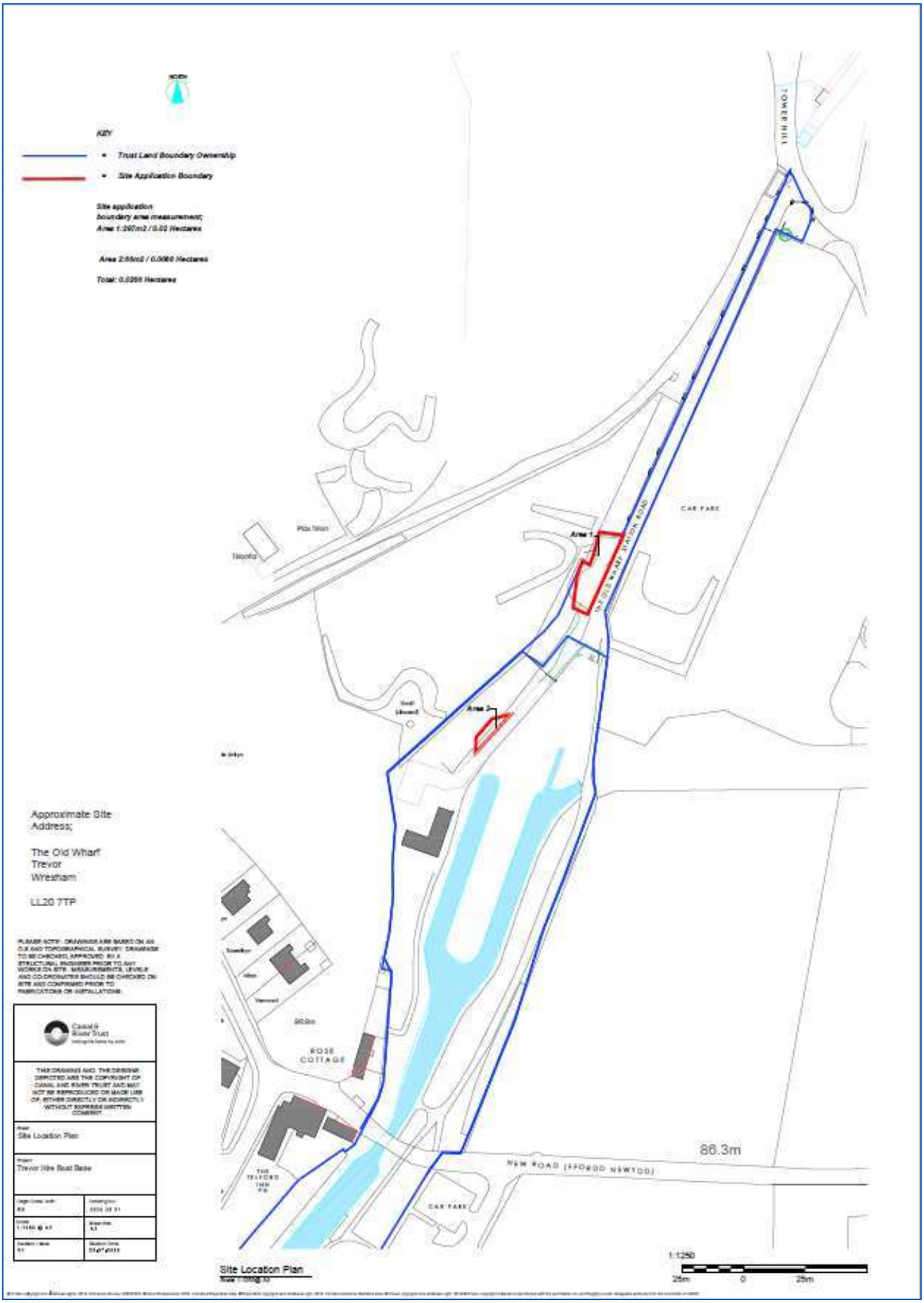


Figure 2: Site Location Plan

Methodology

Desk study

A desk study was carried out, which included obtaining information on designated sites, protected and notable species within a 1km radius of the application site. The desk study radius was set at 1km due to the small size of the application site. The desk study included a search of the following sources of data:

- MAGIC Interactive Map (https://magic.defra.gov.uk/MagicMap.aspx) for information on statutory designated sites.
- Cofnod, the Biological Records Centre for North Wales, for information on non-statutory designated sites and protected and notable species within 1km radius of the application site.
- Canal & River Trust biological records.

Site Survey

The site was visited on the 25 June 2025, in order to assess the habitat and potential for the presence of protected species. The survey was carried out by Canal & River Trust Ecologist Jennifer Spelling.

An extended phase one habitat survey was carried out following the JNCC guidelines. The weather was mild and dry during all surveys.

Constraints

The Application Site is an active construction site, with works associated with construction of the new Boat Hire Base already underway in both areas. There is a limited photographic record of the habitats present prior to construction, therefore an estimate has been made by the ecologist based on photographs, aerial imagery and a review of habitats adjacent to the site that are unaffected by current works.

The survey was carried out in June, which is within the optimum time for carrying out botanical surveys.

Results

Desk Study

Statutory and Non-statutory Designated Sites

Statutory Designated Sites

The Application Site is situated 0.5 km from the River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid (Wales) Special Area of Conservation (SAC). It is also designated as Afon Dyfrdwy (River Dee) Site of Special Scientific Interest. The primary reasons for overall designation are:

- Feature 1. Watercourses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation
- Feature 2. Atlantic salmon *Salmo salar*
- Feature 3. Floating water-plantain *Luronium natans*

Other Reason

- Feature 4. Sea lamprey *Petromyzon marinus*
- Feature 5. Brook lamprey *Lampetra planeri*
- Feature 6. River Lamprey *Lampetra fluviatilis*
- Feature 7. Bullhead *Cottus gobio*
- Feature 8. European otter *Lutra lutra*

Within the SAC unit 7851 Dee-Ceiriog to Alwen that the site falls within, the following Qualifying Features occur:

- Feature 1. Watercourses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation
- Feature 2. Atlantic salmon
- Feature 5. Brook lamprey
- Feature 7. Bullhead
- Feature 8. European otter

There are several Restored Ancient Woodland Sites and Ancient Semi-natural Woodlands within 1km of the application site, principally located to the south, south west and south east along the River Dee corridor. The closest site is situated 420 metres to the south west.

There are no further statutory designated sites within the 1km search radius.

Non-statutory Designated Sites

Within 1km of the project, the following non-statutory sites are present:

- The project lies within the North East Wales Important Invertebrate Area (IIA), which supports a nationally and internationally important population of the Globally Endangered freshwater pearl mussel *Margaritifera margaritifera*. The IIA also supports a nationally important assemblage of invertebrates.
- Spring Wood LWS, which comprises good condition broadleaved woodland is situated 0.83 km south west.
- Froncysyllte Quarries Local Wildlife Site (LWS) is situated 0.9km south and supports several large disused limestone quarries with cliffs and spoil heaps, colonised by broad-leaved woodland and scrub.

Due to the limited footprint of the proposed project and lack of ecological connectivity, no other non-statutory designated sites are likely to be affected and are scoped out from further consideration.

Protected and Notable Species

Several protected and notable species have been recorded within 1km of the application site. This includes:

- [redacted] *Meles meles*
- Bats:
    - Common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctula*.
- Birds: many bird records were reported for the 1km search radius. Protected and notable species are given in Table 1 below:

Table 1: Desk study records for protected and notable bird species within 1km

Common Name	Scientific Name
Black-headed gull	*Chroicocephalus ridibundus*
Brambling	*Fringilla montifringilla*
Bullfinch	*Pyrrhula pyrrhula*
Coal tit	*Periparus ater*
Common gull	*Larus canus*
Common sandpiper	*Actitis hypoleucos*
Cormorant	*Phalacrocorax carbo*
Crossbill	*Loxia curvirostra*
Curlew	*Numenius arquata*
Dipper	*Cinclus cinclus*
Dunnock	*Prunella modularis*
Fieldfare	*Turdus pilaris*
Goldcrest	*Regulus regulus*
Great black-backed Gull	*Larus marinus*
Green woodpecker	*Picus viridis*
Greenfinch	*Chloris chloris*
Grey wagtail	*Motacilla cinerea*
Greylag goose	*Anser anser*
Herring gull	*Larus argentatus*
Hobby	*Falco subbuteo*
House Martin	*Delichon urbicum*

Common Name	Scientific Name
House Sparrow	*Passer domesticus*
Kestrel	*Falco tinnunculus*
Kingfisher	*Alcedo atthis*
Lesser black-backed gull	*Larus fuscus*
Lesser redpoll	*Acanthis cabaret*
Linnet	*Linaria cannabina*
Little egret	*Egretta garzetta*
Long-tailed duck	*Clangula hyemalis*
Long-tailed tit	*Aegithalos caudatus*
Mallard	*Anas platyrhynchos*
Marsh tit	*Poecile palustris*
Mistle thrush	*Turdus viscivorus*
Moorhen	*Gallinula chloropus*
Mute swan	*Cygnus olor*
Osprey	*Pandion haliaetus*
Peregrine	*Falco peregrinus*
Pink-footed goose	*Anser brachyrhynchus*
Red Kite	*Milvus milvus*
Redstart	*Phoenicurus phoenicurus*
Redwing	*Turdus iliacus*
Rook	*Corvus frugilegus*
Sand martin	*Riparia riparia*

Skylark	*Alauda arvensis*
Song thrush	*Turdus philomelos*
Sparrowhawk	*Accipiter nisus*
Starling	*Sturnus vulgaris*
Stock dove	*Columba oenas*
Swallow	*Hirundo rustica*
Swift	*Apus apus*
Tawny owl	*Strix aluco*
Teal	*Anas crecca*

Tree sparrow	*Passer montanus*
Tufted duck	*Aythya fuligula*
Wheatear	*Oenanthe oenanthe*
Whitethroat	*Curruca communis*
Willow tit	*Poecile montanus*
Willow warbler	*Phylloscopus trochilus*
Woodpigeon	*Columba palumbus*
Wren	*Troglodytes troglodytes*
Yellowhammer	*Emberiza citrinella*

- Reptiles:
    - Slow-worm *Anguis fragilis*
    - Grass snake *Natrix helvetica*
- Amphibians
    - Great crested newt *Triturus cristatus*
- Otter *Lutra lutra*
- Water vole *Arvicola amphibius*: no records
- Invertebrates:
    - Black-legged water-snipefly *Ibisia marginata*
    - Wall, *Lasiommata megera*
    - White-letter hairstreak, *Satyrium w-album*
    - Yellow Evening Hawk, *Ephemerella notata*
    - *Rhithrogena germanica*
    - *Tinodes maclachlani*
- Fish:
    - Atlantic salmon *Salmo salar*, bullhead *Cottus gobio*, river lamprey *Lampetra fluviatilis*, brook lamprey *L. planeri*) and sea lamprey *Petromyzon marinus*.
- Dormouse *Muscardinus avellanarius*: no records
- Other mammals, including brown hare *Lepus europaeus*, hedgehog *Erinaceus europaeus* and weasel *Mustela nivalis.*

Invasive Non-native Species

The following invasive plant species have been recorded within 1km: Japanese knotweed *Reynoutria japonica*, Himalayan balsam *Impatiens glandulifera*, rhododendron *Rhododendron ponticum*, Canadian Waterweed *Elodea canadensis*, Montbretia *Crocosmia pottsii x aurea = C. x crocosmiiflora*, variegated yellow archangel *Lamiastrum galeobdolon* subsp. *argentatum* and Nuttall's Waterweed *Elodea nuttallii*.

Canal & River Trust have recorded American mink *Neovison vison* along the Llangollen Canal and River Dee within 1km of the application site.

Phase 1 Habitat Survey

Photographs of the site as existing are provided overleaf. As noted in the constraints section of this report, construction has already commenced on site, therefore the description of habitats relates to photographic

evidence and of land adjacent to the site to make an informed estimate of what the habitats were prior to development:

- Area 1: Tall ruderal vegetation including nettles *Urtica dioica*, cleavers *Gallium aparine,* meadow grass *Poa* sp. with some bramble *Rubus fruticosus* agg and patches of bare ground. Nearby mature trees comprise hazel *Corylus avellana*, ash *Fraxinus excelsior* and hawthorn *Crataegus monogyna*.

- Area 2: It appears that area 2 was a widened part of the existing road leading to Trevor Basin. Large timber sleepers overgrown with vegetation demarcate the boundary of area 2, indicating this has previously been used for storage, parking or as a passing place for the road. To the west of area 2 is deciduous woodland, with hazel and ash trees and a ground cover of ivy *Hedera helix* and bramble.

The above habitats are common within the local area and even in good condition prior to development, would not fall within the description of any priority or notable habitats.

Photo 1: Area 1 view north 2025



Photo 2: Area 1 view south 2025



Photo 3: Area 2 view north 2022



Photo 4: Area 2 view north 2025



Protected Species

Although numerous protected and notable species have been recorded within 1km, due to the very small size of the Application Site and current construction work, it is unlikely any protected species are present within the Site. Assuming that prior to construction work, the Application Site habitats comprised patches of bare ground, grass, tall ruderal vegetation and small bramble scrub, it is unlikely any protected species were present prior to construction, although more mobile species such as birds, bats, insects and small mammals may have passed through or foraged within the Application Site.

Great crested newts are known to be present within the surrounding 1km area, with the nearest known record within a pond at 350 metres to the east[1], within the **"Flexsys Site"** proposed for redevelopment by Wrexham Council to provide access improvements and a new visitor car park. The publicly accessible Ecological Impact Assessment report for that development confirmed great crested newts are present within three ponds and surrounding terrestrial habitat of the Flexsys Site. Although great crested newts (GCN) are known to travel across terrestrial habitat outside of the breeding season, it is considered unlikely they would have been or will be present within the Application Site, for the following reasons:

- The nearest GCN ponds are 350m away, with no aquatic habitat present within or near to the Application Site.
- Between the GCN ponds and the Application Site are areas of high quality woodland habitat, and GCN have a proven affinity for woodland habitats (Malmgren 2000, Mullner 2002, Jehle and Arntzen 2000).
- Also between the Application Site and GCN ponds are several roads and areas of hardstanding, which would represent dispersal barriers for terrestrial GCN.
- During mitigation exercises, a significant proportion of GCN have been found to remain within 50m of a breeding pond[2], particularly where there are suitable habitat features around which to trap.

It is highly unlikely any protected species associated with the nearby River Dee SSSI/SAC (such as otter *Lutra lutra*) would be present within the Application Site due to the lack of aquatic habitats.

Invasive Species

No invasive species were recorded within the Application Site or in adjacent habitats during the survey.

[1] Arcadis (August 2024) Trevor Basin Car Park Ecological Impact Assessment, Document Ref: 10054502-ARC-XX-XX-XX-EcIA, Revision: 0

[2] English Nature (2004) An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt Triturus cristatus. Research report no. 576

Impact Assessment, Mitigation and Compensation

In order to avoid or minimise harm to protected and notable habitats and species, the following measures will be implemented. As part of the Site Induction, all those working on site must receive a protected species toolbox talk or briefing, to ensure they are aware of the legislation and actions to take, in the unlikely event a protected species is found during any further works. The name and contact details for the Canal & River Trust Ecologist or an Ecological Clerk of Works will be available to site staff throughout the construction period.

Measures to enhance the site for biodiversity are included in a separate report submitted with the planning application.

Statutory and Non-statutory Designated Sites

The application site is situated 0.5km from the River Dee SSSI/SAC boundary. There will be no direct impacts on the habitats within the Dee SSSI/SAC boundary or species associated with the river. Further details are provided in the Habitats Regulations Assessment (HRA) Screening document submitted with the planning application.

The distance from the application site to the nearest area of ancient woodland is over 400 metres. Based on the distance from the site to these areas of woodland, no significant impact on any other statutory designated sites is anticipated.

The application site is within the North East Wales IIA. The site and adjacent areas do not contain habitats suitable for a notable range of invertebrates.

Based on the small size of the application site and distance from other non-statutory designated sites, the proposed development will not affect any other non-statutory sites within 1km radius.

Habitats

Standard pollution prevention measures will be implemented as part of general site good practice to minimise the potential for harm to adjacent habitats.

The project has likely resulted in the loss of 0.02 ha of bare ground, grass, tall ruderal vegetation and small bramble scrub within the application site boundary.

The loss of these habitats will be mitigated by the following:

- Native shrub understorey planting.
- Native wildflower grassland seeding.

Further details on these measures are described in the Net Biodiversity Benefit (NBB) Plan, Soft Landscape Plan (drawing ref. 2025 38 103 dated July 2025) and Site Plan: Supplementary Planting Plan (drawing ref. 2025 38 104 V1 dated 23 July 2025).

Protected and Notable Species

Since it is unlikely any habitat for protected or notable species was lost as a result of the current construction works, no mitigation is proposed. However, to prevent future harm or disturbance to species such as bats that may fly through the site, no lighting is proposed to ensure no additional light spill onto the site or surrounding habitats.

Additional measures for enhancing the site for protected species are described in the NBB Plan.

Conclusions

Overall, the proposed development will result in no harm to designated sites and no net loss of habitats. The scheme will result in an overall long term biodiversity benefit. The mitigation strategy is aimed at minimising habitat loss and avoiding harm to protected and notable species, by replacing lost habitat, along with enhancement of habitats, as detailed in the Net Biodiversity Benefit Plan.