

University of Nottingham, Sutton Bonnington Campus – Attenuation Pond - Ecological Appraisal

Proposed Scheme Design & Ongoing Maintenance

The proposed development includes the extension of the existing attenuation pond through the removal of the vegetation on the northern side of the pond, and the installation of a drainage scheme. The additional pond outside of the red line boundary to the south east is not proposed to be affected by the works.

1. Designated Sites, Habitats of Principal Importance, and other Notable Habitats
2. There are no statutory designated nature conservation sites within the Site, and there are none within the study area. Therefore, no mitigation or further survey work is required with regards to statutory Sites as it is considered these will not be impacted by the proposals
3. There are no non-statutory designated nature conservation sites within the Site boundary, and there are none within 1 km of the Site. The closest is St Anne's Church, Sutton Bonington LWS, which is located 1.04 km to the south. Impacts to this designated site are not anticipated due to the small scale of the proposed works and therefore no mitigation or further survey work is recommended with regard to non-statutory sites.

Habitats

Tall ruderal

The majority, if not all, of this vegetation is proposed to be retained

Semi-improved neutral grassland

A relatively small section of grassland will be removed to facilitate the extension of the pond to the north. This will result in a direct loss of some of this habitat from the Site.

Broadleaved woodland

No areas of broadleaved woodland are proposed for removal.

Scrub

A small amount of scrub habitat may be necessary to clear in order to facilitate the proposed works. Any clearance of scrub vegetation would result in a reduction or loss of this habitat.

Standing water

The attenuation pond will be kept and extended resulting in an increase of this habitat. Remedial works such as reducing the 'typha' density may also take place. The additional pond to the east is not proposed to be affected by the development.

Running water

The ditch on the eastern boundary of the Site is not proposed to be directly affected by the proposals. Although direct impacts are not anticipated, works on site have the potential to cause adverse pollution (e.g., dust and water). Appropriate prevention measures have been put in place during the course of the construction works

Hedgerow

Extending the existing Attenuation pond has not affected the hedgerow on the northern boundary of the Site

Species

Plants, including invasive species

The proposed plans are not considered to affect any protected native plant species or invasive non-native plant species. Despite this, proposed works have the potential to spread typha, a fast-growing species dominating the attenuation pond.

Amphibians and reptiles

The Site is considered to provide some, albeit limited, habitat for amphibians. The attenuation pond does not provide suitable habitat for breeding GCN as it was almost dry in winter and so is likely to be drier in the summer months when GCN would be in their aquatic phase (*the Attenuation pond scored poor on the HSI assessment*)

Bats

Clearance of the scrub and broadleaved woodland habitats will result in the loss of foraging habitats for bats, however, these areas are small and the Site will maintain connectivity with the higher quality habitats within the wider environment through the network of grassland fields, trees and hedgerows. Therefore, the loss of this habitat is not considered to have a significant negative impact to foraging/commuting bats.

Mammals

Construction works and ongoing maintenance have the potential to injure and/or kill mammals including European hedgehog and badger through entrapment within excavations if works are undertaken without due care and attention. Suitable methods will be adopted to avoid the potential to injure and/or kill mammals

Strategy

Construction works and Ongoing Maintenance will follow pollution prevention best practices and official pollution prevention guidance issued by Department for Environment, Food & Rural Affairs, and the Environment Agency (2016) to reduce the potential impacts to retained habitat on Site and off-site habitats, such as water pollution from contaminated run-off entering water courses, or dust coating leaves of surrounding trees. This will include the following recommended measures:

- Preventing water from entering excavations by using cut-off ditches or covering the excavation.
- Collecting contaminated water (*for example, run-off or water pumped out of excavations*) in a system where it can be recycled or treated, such as a settlement tank or lagoon.
- Conducting activities involving potential pollutants, such as concrete or fuel, in dedicated areas which are designed so that spills, leaks, drips and contaminated run off can be captured and properly disposed of.
- Protecting stockpiles (*for example soil, sand, or hardcore*) so that materials are not blown or washed away.

5.2. Habitats

Semi-improved neutral grassland

5.2.1. It is recommended that areas of grassland should be mown once a year in August, to allow all herbs to flower and set seed before cutting. All arisings should be removed after mowing to prevent nutrient enrichment of the soil. Some of the grass cuttings can be added to habitat piles created following scrub and woodland clearance. Yellow rattle (*Rhinanthus minor*), which parasitises grass species, should be sown in autumn to reduce the occurrence of grasses and encourage the growth of a greater variety of herb species, increasing the suitability of the Site for pollinator species and improving its aesthetic value for visitors and staff.

5.2.2. Temporary storage of plant or machinery will be on hardstanding to avoid unnecessary disturbance to grassland areas. Grassland should be retained where possible.

Broadleaved woodland and scattered trees

5.2.3. The works should follow pollution prevention best practices and official pollution prevention guidance issued by Department for Environment, Food & Rural Affairs and the Environment Agency (2016), including the measures detailed in Section 5.1 above, to reduce impacts on the trees from groundwater pollution or from dust smothering the leaves.

5.2.4. No storage of materials, equipment and plant will take place under the 'drip-zone' of mature trees (*i.e. under their canopy*). Best practice will be followed (*i.e. BS5837:2012 Trees in Relation to Construction*) to reduce impacts to individual mature trees.

Scrub and Ruderal

5.2.5. The majority of scrub has been retained as part of the development.

Hedgerows

5.2.6 The northern hedgerow of the Site has not been affected by the development.

Birds

5.2.7 Any ongoing maintenance works, to trees or scrub, will be undertaken outside of the main nesting season (*March to August*) to avoid the potential for the disturbance and/or injuring and/or killing of nesting birds. Ongoing maintenance of the attenuation pond will be undertaken outside of main nesting season (*March to August*) to avoid the potential for the disturbance and/or injuring and/or killing of nesting birds

5.2.8 Any tree or scrub clearance that must be carried out within the bird nesting season will be subject to a pre-clearance nesting bird survey carried out by a suitably experienced ecologist within 24 hours prior to clearance. No works will be carried out within 5 m of an identified nest until the young have fledged and are no longer returning to the nest Site. Works will only be undertaken once a scheme ecologist has declared the nest to be no longer in use.

Attenuation Pond, Proposed Work Area, Sutton Bonnington

