

Bradford Road Gasholder

Preliminary Ecological Appraisal Report

National Grid

June 2022



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This document does not purport to provide legal advice.

This document has 31 pages including the cover.

Due to the potential presence of protected species on site, this is a redacted version of the Preliminary Ecological Appraisal report. A full, unredacted and confidential version of the report will be submitted directly to Manchester City Council.

Document history

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Summary

Report purpose	The aims of this report are to: - Identify key ecological constraints to the development; - Identify if additional ecological surveys are required to inform an ecological impact assessment; and, - Identify avoidance, mitigation, compensation and enhancement measures.
Proposed Scheme	The Proposed Scheme involves demolition and removal of a gasholder tank, boiler room, chimney, and redundant pipework on Site. Access will be via an existing road. The starting date for the Proposed Scheme is approximately spring/summer 2023 and will last for approximately 18 months.
Desk studies and field surveys	This report presents ecological information obtained during: - An extended Phase 1 habitat survey of accessible land within and adjacent to the Site on 14/04/2022; and, - A desk study undertaken on 06/05/2022.
Ecological features	Clayton Vale Local Nature Reserve is located approximately 833 m east of the Site. Ashton Canal (west) Site of Biological Interest (SBI), Rochdale Canal Stotts Lane – Ducie Street Basin SBI and Bank Bridge Meadow SBI (non-statutory designated sites for nature conservation) are located within 1 km of the Site. Habitats within the Site comprise broadleaved woodland, hardstanding, dense scrub, semi-improved neutral grassland, and gravel with ephemeral vegetation. Habitats within the Site are suitable for bats, badgers, and nesting birds. Several invasive non-native plant species (INNPS) such as Himalayan balsam, cotoneaster species, Japanese rose, and Japanese knotweed have been identified within and adjacent to the Site.
Avoidance, mitigation, and compensation measures	General best practice guidance should be followed during the construction stage. No night-time working (taken to be 30 minutes prior to sunset until 30 minutes after sunrise) should be undertaken. If night-time working is required, this should be discussed with an ecologist prior to commencement to establish what mitigation measures are required. It is recommended that the removal of the gasholder structure is undertaken outside of the core nesting bird season (the core nesting bird season is 1 March and 31 August). If this cannot be achieved, then works should be undertaken following a Precautionary Method of Works document with respect to nesting birds. Wild strawberry plants should be translocated if they are going to be impacted by the Proposed Scheme. A specialist contractor should be contacted for advice regarding the management or removal of INNPS within the Site.
Recommendations for further survey	No further surveys are required.

Report Validity

In the event of scope or programme changes or if works do not commence within 12 months of the date of this report, then updates to the surveys may be required to ensure the validity of the data, as per CIEEM guidance¹.

¹ CIEEM (2019) Advice Note on the Lifespan of Ecological Reports and Surveys

1. Introduction

Terms of Reference

- 1.1. Atkins Limited, member of the SNC-Lavalin Group, was commissioned by National Grid to undertake a preliminary ecological appraisal (PEA) in connection with the proposed demolition of Bradford Road Gasholder (hereafter referred to as 'the Proposed Scheme'). The Proposed Scheme is near the A6010 in Manchester as shown on Figure No. 1 in Appendix A (hereafter referred to as 'the Site').
- 1.2. This report has been undertaken with reference to current good practice guidance² and provides an initial appraisal of any likely ecological constraints upon designated sites for nature conservation, protected and priority species, and any other features of ecological interest.
- 1.3. Following the principles of the mitigation hierarchy and British Standard (BS) 42020:2013³, this report also identifies the need for measures to avoid, mitigate, or compensate for damage and disturbance to habitats and species. Opportunities to provide biodiversity enhancements in accordance with local, regional, and national biodiversity planning strategies are also identified where relevant. Furthermore, it identifies recommendations for further ecological surveys that may be required to establish the presence or likely absence of ecological features within and adjoining the Proposed Scheme.
- 1.4. This report is intended to inform design development, site layout and/or site investigations. In addition, it provides the indicative scope for further ecological surveys and/or ecological impact assessment required in connection with a planning application.

The Site

- 1.5. The Site is located off the A6010 Alan Turing Way in Manchester at Ordnance Survey National Grid reference SJ 86696 99197. The Site is surrounded by the A6010 to the north and east, industrial, and residential buildings to the west and hardstanding car parks to the south associated with the Etihad Stadium. The wider area comprises of residential areas, sport facilities, and parkland areas of Philips Park and Philips Park Cemetery.
- 1.6. The Site is approximately 2.88 ha and comprises hardstanding, built structures, broadleaf woodland and smaller areas of scrub.

The Proposed Scheme

- 1.7. The details of the Proposed Scheme, as they are currently understood, are shown on in Appendix A.
- 1.8. The Proposed Scheme involves demolition and removal of the gasholder tank, boiler room, chimney and redundant overhead pipework and gantries on Site. Access will be via existing roads to the west of the Site. Some vegetation clearance may be required in order to access the pipework.
- 1.9. The anticipated starting date for the Proposed Scheme is spring/summer 2023 and the works will last for approximately 18 months.

Scope of the Assessment

- 1.10. This report presents ecological information obtained during the following:
 - A walkover survey of accessible land within and adjacent to the Site on 14/04/2022; and
 - A desk-study undertaken on 06/05/2022.
- 1.11. The walkover survey and identification of potential ecological constraints was based on the condition of the Site and its immediate surroundings encountered at the time of the walkover survey, and information about the Proposed Scheme available at the time. If information on the Proposed Scheme should change, the Site may need to be re-visited to establish if there are any further ecological constraints arising from changes to the design.

² CIEEM (2017) Guidelines for preliminary ecological appraisal. 2nd Edition.

³ British Standard (2013) BS 42020:2013 Biodiversity - code of practice for planning and development

2. Methods

Desk Study

- 2.1. The geographical area for obtaining ecological data through desk studies has been determined using best practice guidance and professional judgement. Baseline data has been gathered from a range of sources through data requests, consultation, and using online resources as outlined below. This included data gathering in relation to statutory and non-statutory designated sites for nature conservation and protected and priority species⁴. The study areas used for the data gathering are detailed in Table 2-1. The desk study was undertaken on 06/05/2022. For species records collected, only those within 10 years of the data collection date have been considered within the assessment.
- 2.2. The following online resources were accessed:
- Multi-Agency Geographic Information for the Countryside (MAGIC) website; and
 - The Woodland Trust's Ancient Tree Inventory.
- 2.3. Ordnance Survey maps and the Grid Reference Finder website⁵ were used to identify the presence of waterbodies within 500 m of the Site boundary, to establish if the land within and immediately surrounding the Site could be used as terrestrial habitat for great crested newts. This species typically uses suitable terrestrial habitat up to 500 m from a breeding pond⁶. However, there is a notable decrease in great crested newt abundance beyond 250 m from a breeding pond⁷.
- 2.4. The Greater Manchester Local Records Centre (GMLRC) were contacted to request records of protected and priority species and habitats and details of non-statutory designated sites for nature conservation.

Table 2-1 - Data search areas

Data Type	Search area – distance from Proposed Scheme boundary
Statutory designated sites for nature conservation	2 km
Non-statutory designated sites for nature conservation	1 km
Irreplaceable habitats ⁸	1 km
Protected and priority species and habitats	1 km (extended to 2 km for bats)

- 2.5. A review of national and local planning policy relevant to the Proposed Scheme was undertaken as part of the data gathering. The following policy documents were subject to review:
- Ministry of Housing, Communities and Local Government (2021) National Planning Policy Framework⁹; and
 - The Manchester Local Plan¹⁰.

Field Surveys

- 2.6. The geographical area for undertaking ecological field surveys has been determined using the current survey guidance, professional judgement, and the zones of influence, which have been determined based on likely effects arising from the Proposed Scheme.

⁴ These are defined in CIEEM (2017) Guidelines for Preliminary Ecological Appraisal 2nd Edition

⁵ <https://gridreferencefinder.com/>

⁶ English Nature (2004). Great Crested Newt Mitigation Licences

⁷ English Nature (2004). An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt (ENRR576) <http://publications.naturalengland.org.uk/publication/134002>

⁸ As defined within the NPPF (2021) "Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen."

⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

¹⁰ https://secure.manchester.gov.uk/info/200074/planning/6572/local_plan

Surveyor Competencies

- 2.7. All the surveys were led by surveyors who have been assessed to be at least of capable knowledge and experience following the Chartered Institute of Ecology and Environmental Management (CIEEM) competency framework¹¹.

Extended Phase 1 Habitat Survey

- 2.8. An ecological walkover survey of areas within and adjacent to the Site, including land up to 50 m from the Site boundary where access was allowed (the Survey Area), was undertaken on 14/04/2022 using the extended Phase 1 habitat survey methodology¹² as guidance. The walkover survey recorded information on the habitats within the Survey Area and included a search for evidence of the presence of, and the potential of each habitat to support, protected and priority species as recommended by CIEEM¹³. Vascular plant names recorded during this survey follows Stace¹⁴.
- 2.9. This survey method comprised mapping habitats present according to the JNCC Phase 1 habitat survey methodology¹², with target notes (TNs) used to record specific details on the plant species composition of the habitats, current management and quality. TNs were also used to record features of ecological importance (e.g. ponds, complex habitat mosaics). In addition, the survey comprised assessing the suitability of the habitats present for, and recording any activity of the following species (in line with current guidance):
- amphibians (terrestrial and aquatic habitats), including an assessment of aquatic habitat for its suitability to support great crested newts using the Habitat Suitability Index (HSI) assessment¹⁵
 - bats¹⁶;
 - badger;
 - breeding and wintering birds;
 - hazel dormouse¹⁷;
 - reptiles¹⁸;
 - priority invertebrates¹⁹;
 - water vole²⁰, otter and white-clawed crayfish²¹; and
 - Other protected and priority species.
- 2.10. Evidence of the presence of the following invasive species was recorded where seen:
- Evidence of animal species as listed on the Invasive Alien Species (Enforcement and Permitting) Order 2019, such as; Chinese mitten crab, red swamp crayfish, signal crayfish, spiny cheek crayfish, muntjac deer, ruddy duck, Egyptian goose and grey squirrel.
 - Evidence of the presence of the following invasive species, such as Japanese knotweed, giant knotweed, hybrid knotweed, giant hogweed, Himalayan balsam, rhododendron, New Zealand pigmy weed, Virginia creeper, variegated yellow archangel, and cotoneaster. These are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) and subject to strict legal control.
- 2.11. In addition to those listed above, evidence of plant species as listed on the Invasive Alien Species (Enforcement and Permitting) Order 2019: Nuttall's waterweed, Chilean rhubarb, floating

¹¹ <https://www.cieem.net/competency-framework>

¹² Joint Nature Conservation Committee (2010) Handbook for Phase 1 habitat survey - a technique for environmental audit.

¹³ CIEEM (2017) Guidelines for preliminary ecological appraisal. 2nd Edition.

¹⁴ Stace (2019) New Flora of the British Isles 4th edition

¹⁵ Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000) Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*) Herpetological Journal 10 (4), 143-155 (2000).

¹⁶ Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). The Bat Conservation Trust, London

¹⁷ English Nature (2006). The Dormouse Conservation Handbook (2nd edition).

¹⁸ Froglife (1999) Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife advice sheet 10

¹⁹ As relevant to the location, identified through the desk study

²⁰ Dean, M. et al The Water Vole Mitigation Handbook (2016). Mammal Society.

²¹ Peay S. (2003) Monitoring the White-clawed Crayfish *Austropotamobius pallipes* Conserving Nature 2000 Rivers Monitoring Series No.

1. English Nature, Peterborough.

pennywort, curly waterweed and parrot's feather, fanwort, water hyacinth and floating water primrose.

Limitations

- 2.12. This section identifies any limitations to the surveys or assessment and provides an explanation as to the effect of these on the appraisal.
- 2.13. Access was restricted beyond the site boundary due to a fence present along the site boundary. However, the Proposed Scheme will have localised impacts within the site boundary and the habitats surrounding the Site include car parks and railways.
- 2.14. The search for waterbodies within 500 m of the Site was undertaken by using Ordnance Survey plans and aerial photographs only. These sources may not show all waterbodies within 500 m of the Site boundary and, therefore, some waterbodies may not have been identified.
- 2.15. The list of invasive plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) is extensive and these plants are found in a range of different habitats, including aquatic habitats. The extended Phase 1 habitat survey checked for the presence of Japanese knotweed, giant knotweed, hybrid knotweed, giant hogweed, Himalayan balsam, rhododendron, New Zealand pigmyweed, Virginia creeper, variegated yellow archangel, and cotoneaster species. Other invasive species, in particular those associated with aquatic habitats, may not have been recorded.
- 2.16. The desk study reviewed the Woodland Trust's Ancient Trees Inventory. This provides records of ancient and veteran trees but is not an exhaustive list and other ancient or veteran trees may be present in the area. The walkover survey aimed to identify such features and as such this is not considered a significant constraint.
- 2.17. GMLRC records are not exhaustive, and the absence of records does not demonstrate the absence of species.
- 2.18. Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The ecological surveys undertaken to support this PEA have not therefore produced a complete list of plants and animals and the absence of evidence of any species should not be taken as conclusive proof that the species is not present or that it will not be present in the future. The above limitations have been addressed through taking the precautionary approach within the appraisal.

3. Results

Statutory and non-Statutory Designated Sites

- 3.1. Table 3-1 details the statutory and non-statutory designated sites for nature conservation identified through the desk study.

Table 3-1 - Statutory and non-statutory designated sites within 2 km (Statutory) and 1 km (non-statutory)²² of the Site

Site name	Designation	Location of designated site ²³	Features of interest ²⁴
Clayton Vale	Local Nature Reserve (LNR)	833 m east of the Site.	Reclaimed landfill, now forming a valley with the River Medlock running at its base.
Ashton Canal (west)	Site of Biological Interest (SBI)	200 m south of the Site	SBI is formed of the Ashton Canal. Ashton Canal is an important wildlife corridor linking Ashton with Manchester which provides an important accessible greenspace in an otherwise urban landscape. The European Protected species and UK Priority Biodiversity Species floating water-plantain is recorded here. The UK Priority Biodiversity Species grasswack pondweed is also recorded here.
Rochdale Canal Stotts Lane – Ducie Street Basin	SBI	400 m northwest of the Site	SBI is formed of the Rochdale Canal. The Rochdale and Ashton Canals meet at the Ducie Street Basin. European Protected Species and UK Priority Biodiversity Species floating water-plantain is also recorded here.
Bank Bridge Meadow	SBI	631 m east of the Site	An area of woodland and grassland associated with the River Medlock.

Impacts on Clayton Vale LNR as a result of the Proposed Scheme are considered unlikely, given the distance from the Site and the lack of habitat connectivity due to the presence of the A6010 acting as a barrier.

No impacts on Bank Bridge Meadow SBI, Rochdale Canal Stotts Lane – Ducie Street Basin SBI or Ashton Canal (west) SBI are anticipated given the distance of these SBI sites from the Proposed Scheme and absence of hydrological connectivity to the Site.

Irreplaceable Habitats

- 3.2. There are no irreplaceable habitats or any veteran or ancient trees known to be located within 1 km of the Site.

Priority Habitats

- 3.3. An area of wood pasture and parkland is present approximately 273 m southeast of the Site. Fifteen areas of open mosaic habitats on previously developed land, and 47 areas of deciduous woodland are present within 1 km of the Site. The closest area of open mosaic habitat is 60 m southeast, and the closest area of deciduous woodland is 68 m east of the Site. Given the localised nature of the Proposed Scheme and distance of these habitats from the Site, it is considered unlikely that priority habitats will be impacted by the Proposed Scheme. Therefore, priority habitats are not considered further in this assessment.

²² This is the zone of influence for designated sites.

²³ Where designated sites are situated outside of the Site boundary, the distance and direction is given to the closest point that the designated site is from the Site.

²⁴ Including qualifying features of internationally designated sites and reasons for designation for SSSIs

Habitats

- 3.4. The habitats within the Site are predominately broadleaved woodland and built structures, with smaller areas of hardstanding, semi-improved grassland, and scrub. The River Medlock is present southwest and east of the Site and the Ashton Canal is present to the south.
- 3.5. Table 3-2 lists all of the habitats present within the zone of influence, identifies those habitats which are listed on Annex 1²⁵, and/or listed as priority habitats²⁶. The table also provides details of the area²⁷ of each habitat within the Survey Area and the proportion of the Site this makes up. Habitats are mapped on the extended Phase 1 habitat survey plan provided in Appendix B.

Table 3-2 - Habitat types within the Survey Area

Habitat Type	Location of habitat	Area of habitat/ distance of linear feature		Priority habitat y/n
		Ha/M	% of Site	
Broadleaved woodland	Within the Site and Survey Area	1.1 Ha	34%	Y
Dense scrub	Within the Site	0.1 Ha	3%	N
Built structures	Within the Site	0.61 Ha	19%	N
Semi-improved grassland	Within the Site	0.1 Ha	3%	N
Ephemeral vegetation	Within the Site.	0.4 Ha	13%	N
Hardstanding	Within the Site	0.7 Ha	22%	N

Protected and Priority Species

- 3.6. Evidence of protected and priority species, or habitats with the potential to support protected and priority species are indicated on the habitat survey map (in Appendix B), with specific features highlighted by TNs on the map. TN descriptions are provided in Appendix B. Details of legislation relating to protected species is provided in Appendix C.

Amphibians

- 3.7. GMLRC provided no records of amphibians within 1 km of the Site.
- 3.8. The desk study identified one standing waterbody approximately 350 m east of the Site which, according to publicly accessible aerial imagery, may be suitable for great crested newt breeding. However, this waterbody does not have suitable habitat connectivity to the Site for great crested newts with the A6010 Alan Turing Way providing a major barrier to dispersal.
- 3.9. The Site itself has suitable terrestrial habitat for great crested newts and other amphibians, including deciduous woodland, scrub, semi-improved grassland, and gravel with ephemeral vegetation.
- 3.10. Due to poor connectivity to the suitable waterbody and other suitable surrounding habitats, and a lack of amphibian records, amphibians are not discussed further within this report as they are not considered to pose a constraint to the Proposed Scheme.

Bats

- 3.11. GMLRC provided 104 records of bats within 2 km of the Site, comprising common pipistrelle, myotis species, pipistrelle species, Daubenton's bat, and soprano pipistrelle. The closest bat sighting record was of a common pipistrelle approximately 185 m south of the Site, and the closest bat roost record was of a common pipistrelle roost approximately 250 m south of the Site.

²⁵ <http://jncc.defra.gov.uk/page-1523>

²⁶ <http://jncc.defra.gov.uk/page-5706>

²⁷ Habitat areas measured using QGIS

- 3.12. Three bridges and a wall were identified in the Survey Area which contained suitable roosting features for bats. However, all features are outside of the impact zone of the Proposed Scheme and will not be removed or altered as part of the proposed works. The existing bridge already receives usage from vehicles pass under and the operational railway above, and hence will be subject to existing disturbance levels. There is also a vegetative buffer between the wall with roosting potential and the pipeline work area.
- 3.13. The woodland within the Site was dense and young with none of the trees having any bat roosting suitability. The habitats within the Site have limited suitability for commuting and foraging bats due to the site's small size and urbanised surroundings. However, the River Medlock, canals, and parkland in the surrounding area are suitable for commuting and foraging bats.
- 3.14. As suitable roosting habitat for bats has been recorded within the study area this species may pose a constraint to the Proposed Scheme and recommendations are provided in Section 4 below.

Badger

- 3.15. GMLRC provided 25 records of badgers within 1 km of the Site. The closest badger record was located approximately 310 m east of the Site. Details pertaining to badger setts locations have been removed for reports within the public realm. For information relating to presence of badger setts, refer to the full confidential report.
- 3.16. There was also suitable badger habitat within the Site comprising of broadleaved woodland and scrub. However, the woodland and scrub will not be impacted by the Proposed Scheme.
- 3.17. As suitable habitat for badgers has been recorded within the study area, this species may pose a constraint to the Proposed Scheme and recommendations are provided in Section 4 below.

Birds

- 3.18. GMLRC provided 89 records of Priority bird species within 1 km of the Site, comprising peregrine falcon, barn owl, black redstart, kingfisher, little ringed plover, bullfinch, dunnoek, herring gull, house sparrow, lapwing, lesser redpoll, linnet, song thrush, spotted flycatcher, and starling. Breeding peregrine falcons have been identified on a gasholder located 150 m west from the Site in previous surveys. The closest record outside of the Site Boundary was a peregrine falcon record 123 m west of the Site. However, peregrines nesting in urban areas are usually habituated to disturbance.
- 3.19. The Site offers bird nesting opportunities including the gasholder structure itself, the broadleaved woodland, and scrub area, as well as the grassland, gravel, and ephemeral habitats for ground nesting species. A pair of ravens were observed likely breeding on the gasholder structure within the Site. Ravens are scarce breeders in Manchester according to the Greater Manchester SBI guidelines.
- 3.20. As suitable nesting habitat for birds has been recorded within the study area, as well as likely breeding ravens within the existing gasholder, nesting birds may pose a constraint to the Proposed Scheme and recommendations are provided in Section 4 below.

Reptiles

- 3.21. GMLRC provided no records of reptiles within 1 km of the Site.
- 3.22. The areas of scrub, broadleaved woodland, gravel, ephemeral vegetation and grassland within the Site provides suitable foraging and commuting habitat for reptiles and there were potential hibernacula identified within the Site (from piles of broken foundations). However, the woodland and scrub will not be impacted by the Proposed Scheme.
- 3.23. The Site is isolated from other suitable habitats in the wider area by buildings and roads including the A6010.
- 3.24. As there is a lack of connectivity to surrounding suitable habitat, and the suitable habitats within the Site will not be impacted, reptiles are not discussed further within this report as they are not considered to pose a constraint to the Proposed Scheme.

Priority Invertebrates and White-clawed Crayfish

- 3.25. GMLRC provided seven records of white letter-hairstreak within 1 km of the Site. The closest record was located 119 m east of the Site. There are no elms within the Site (elms are the white letter-hairstreak foodplant), therefore it is considered unlikely that white letter-hairstreak will be present within the Site.

- 3.26. GMLRC provided no records of white-clawed crayfish within 1 km of the Site. There are no watercourses within the Site. The Ashton Canal and the Rochdale Canal may be suitable for white-clawed crayfish. However, neither are hydrologically connected to the Site and thus will not be impacted.

All habitats within the Site provide suitable invertebrate habitat. Although some vegetation removal may be required, this is unlikely to have significant impacts on invertebrates as there is widespread suitable habitat in the surrounding area. Additionally, any vegetation removed will likely grow back the following year. Therefore, Priority invertebrates and white-clawed crayfish are not discussed further within this report as they are not considered to pose a constraint to the Proposed Scheme.

Otters and Water Voles

- 3.27. GMLRC provided no records of otters or water voles within 1 km of the Site.
- 3.28. There are no waterbodies or watercourses within or immediately adjacent to the Site. The River Medlock is located 150 m east of the Site and has some suitability for sheltering, foraging and commuting otters and water voles, however, the River Medlock will not be impacted by the Proposed Scheme. The A6010 also provides a barrier between the Site and River Medlock. Both the Ashton Canal and the Rochdale Canal may also have commuting and foraging opportunities for otters and water voles, however, have no connectivity to the Site and will not be impacted by the Proposed Scheme.
- 3.29. As no suitable aquatic habitat for otters or water voles has been recorded within or immediately adjacent to the Site, and as the A6010 forms a barrier between the Site and surrounding suitable aquatic habitat, otters and water voles are not discussed further within this report as they are not considered to pose a constraint to the Proposed Scheme.

Priority Plants

- 3.30. GMLRC returned one record of yellow bird's nest, a priority plant and red-listed endangered species in England²⁸. This record was approximately 650 m east of the Site. Due to the distance between the Site and this record, it is unlikely to be affected by the Proposed Scheme.
- 3.31. Wild strawberry were identified on Site. Wild strawberries are a locally important species and is red-listed near-threatened in England²⁹. The species was identified in close proximity to the work area (TN21) and could be impacted by the Proposed Scheme.
- 3.32. Due to its proximity to the work area, the wild strawberry may pose a constraint to the Proposed Scheme and recommendations are provided in Section 4 below.

Other Priority Species

- 3.33. GMLRC returned one record of hedgehog approximately 277 m northwest of the Site.
- 3.34. The scrub, woodland and grassland habitats within the Site are suitable for foraging and commuting hedgehogs and as such hedgehogs may pose a constraint to the Proposed Scheme. Recommendations are provided in Section 4 below.

Invasive Non-native Species

- 3.35. GMLRC returned no records of invasive non-native species (INNS) within 1 km of the Site.
- 3.36. Japanese rose, Himalayan balsam, and cotoneaster species were identified on Site (TN9, TN12, TN13, TN15, TN18, TN23-26). Japanese knotweed was also identified directly adjacent to the Site on the eastern boundary and is at risk of being spread into the Site.
- 3.37. As INNS have been identified within the Site, they may pose a constraint to the Proposed Scheme and recommendations are provided in Section 4 below.

²⁸ https://bsbi.org/wp-content/uploads/dlm_uploads/England_Red_List_1.pdf
²⁹ https://bsbi.org/wp-content/uploads/dlm_uploads/England_Red_List_1.pdf

4. Constraints and Recommendations

Key Constraints

- 4.1. If works are undertaken during night-time hours, taken to be 30 minutes prior to sunset and 30 minutes after sunrise, bats and badgers (and other nocturnal/crepuscular wildlife) may be impacted by the works.
- 4.2. If the works are scheduled to be undertaken to be between 1 March and 31 August (although it should be noted that some birds do nest earlier and later than this), nesting birds on the gasholder structure and in the surrounding habitats may be impacted.
- 4.3. If the works will impact the area immediately around the gasholder, the population of near threatened wild strawberries may be impacted.
- 4.4. Hedgehogs may forage, commute and shelter through the Site and surrounding habitats, there is potential for hedgehogs in the area to be impacted by the works.
- 4.5. Japanese rose, Himalayan balsam, and cotoneaster species have been recorded within the Site, and Japanese knotweed has been recorded directly adjacent to the Site. The Proposed Scheme has the potential to spread these INNS.

Mitigation

- 4.6. Works should proceed following standard good practice working methods for environmental protection which should adhere to the General Pollution Prevention (GPPs)³⁰ and the Construction Industry Construction Industry Research and Information Association (CIRIA)³¹ C715 Environmental good practice. Access and storage of equipment/materials should not be located within vegetated areas. Areas of hardstanding/bare ground should be used for this purpose or, if this is not possible, access and storage areas should be specifically agreed with an ecologist.
- 4.7. No night-time working (taken to be 30 minutes prior to sunset until 30 minutes after sunrise) should be undertaken to avoid impacts on nocturnal/crepuscular animals, including badgers and bats. If night-time working is required, this should be discussed with an ecologist prior to commencement to establish what mitigation measures are required.
- 4.8. It is recommended that any excavations are filled or covered overnight to prevent animals becoming entrapped. Where excavations cannot be filled or covered overnight, a plank of wood (or similar) should be placed into the excavation at an angle that provides a means of escape.
- 4.9. Vehicles should not park under or near the bridges to minimise disturbance to potential bat roosts. Vegetation should be retained between the pipeline for removal and the wall to act as a buffer between the work and potential roost feature. Provided these mitigation measures are implemented, impacts to bats are considered unlikely.
- 4.10. It is recommended that the removal of the gasholder structure, and any vegetation clearance is undertaken outside of the core nesting bird season (the core nesting bird season is 1 March and 31 August). If this cannot be achieved, then works should be undertaken following a Precautionary Method of Works (PMW) document with respect to nesting birds. This PMW will include pre-works checks for nesting birds, no sooner than 24 hours prior to the removal of the gasholder. If a nesting bird is found to be using the gasholder structure, demolition of the structure should not take place until the young have fledged and left the nest.
- 4.11. It is recommended that the wild strawberries identified within the Site boundary is translocated to a suitable retained habitat, such as the woodland within the Site, if it is likely to be impacted by the Proposed Scheme, so it is not significantly impacted.
- 4.12. It is recommended that the INNS located within and adjacent to the Site are fully avoided (with at least 10 m buffer zones) or eradicated prior to works commencing. Any management or eradication of INNS should be undertaken by an INNS specialist.
- 4.13. If any protected species or evidence of legally protected species, or any INNS, are unexpectedly encountered at any point during the works, all works should cease, and an ecologist should be contacted for further advice on how to proceed.

³⁰ <https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/guidance-for-pollution-prevention-gpps-full-list/>

³¹ CIRIA (2006), CIRIA C648 Control of water pollution from linear construction projects Technical guidance. London.

5. Conclusion

- 5.1. Habitats with suitability for foraging and commuting bats, badgers, nesting birds, and hedgehogs are present within the Site. The near threatened plant species, wild strawberry, has been identified within the Site, close to the work area. Cotoneaster species, Japanese rose, and Himalayan Balsam which are all INNS have been identified within the Site, as well as Japanese knotweed directly adjacent.
- 5.2. Mitigation measures have been provided to ensure that there will not be any adverse impacts to these protected and priority species, and to ensure INNS are not spread during the proposed work.

Report Validity

- 5.3. In the event of scope or programme changes or if works do not commence within 12 months of the date of this report, then updates to the surveys may be required to ensure the validity of the data, as per CIEEM guidance³².

³² CIEEM (2019) Advice Note on the Lifespan of Ecological Reports and Surveys

Appendices



Appendix A. Site Location



 APPLICATION NGPH
BOUNDARY (4ha)

Drawing Status	FOR INFORMATION	Suitability	S2
----------------	------------------------	-------------	-----------

Suitability
S2



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NATIONAL GRID PROPERTY HOLDINGS

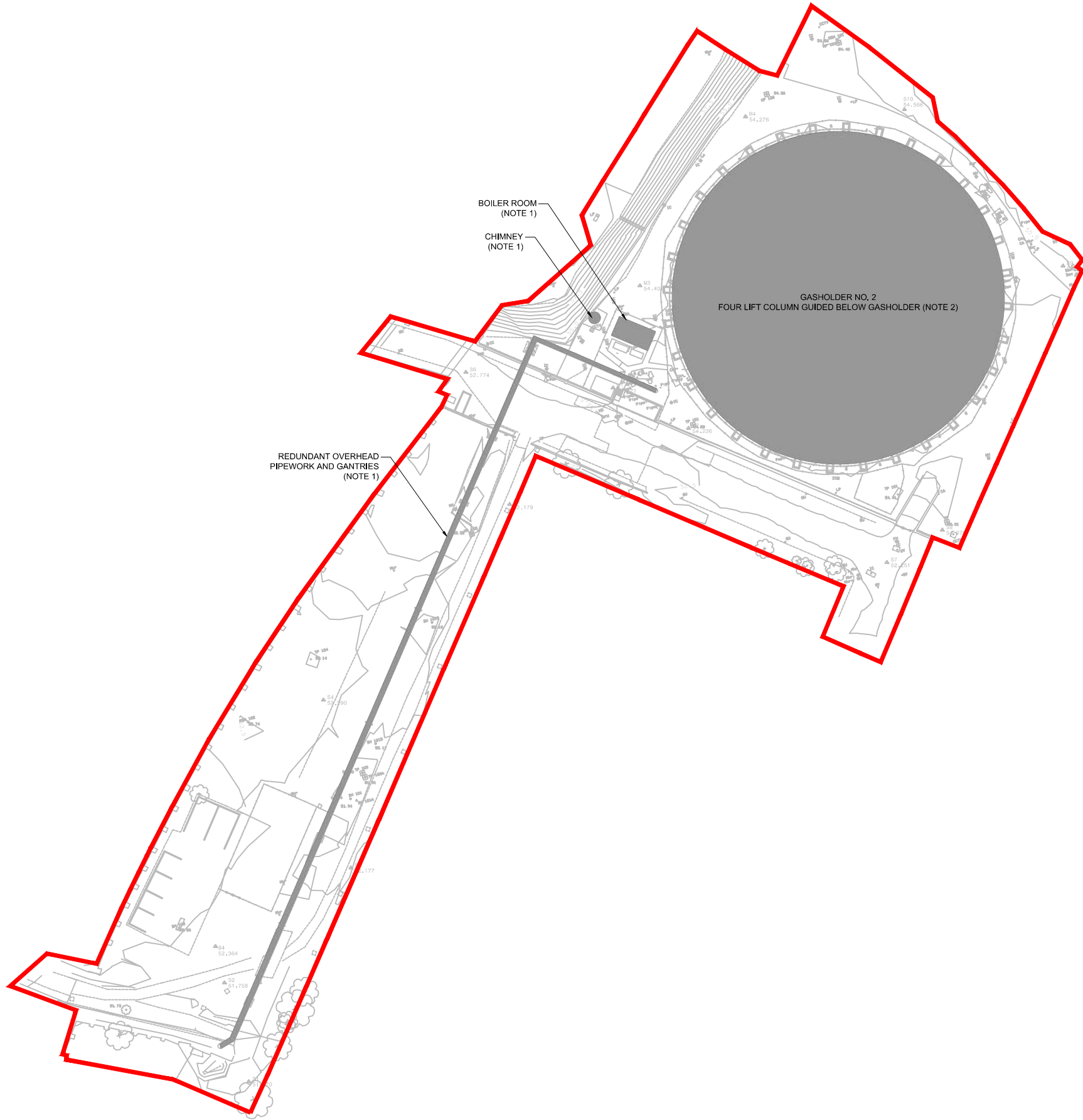
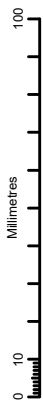
Drawing Title

SITE LOCATION PLAN

Drawing Number	FIGURE 1	Revision	P01
----------------	----------	----------	-----

P01

Scheme Drawing



DO NOT SCALE



- NOTES:
- DO NOT SCALE FROM THIS FIGURE.
 - THIS DRAWING IS TO BE READ IN FULL COLOUR.

KEY:

APPLICATION NGPH BOUNDARY (4ha)

STRUCTURES TO BE DEMOLISHED

- NOTE 1 - STRUCTURES TO BE DEMOLISHED TO SLAB LEVEL.
- NOTE 2 - STRUCTURE TO BE DEMOLISHED TO BASE OF BELOW GROUND TANK AND INFILLED TO GROUND LEVEL.

P01	11/05/22	FOR INFORMATION	CW	NS	RG
Rev.	Date	Description	By	Chk'd	App'd

Drawing Status	Suitability
FOR INFORMATION	S2

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Client

NATIONAL GRID PROPERTY HOLDINGS

Project Title

NGPH BRADFORD ROAD
DEMOLITION AND INFILLING

Drawing Title

PROPOSED WORKS PLAN

Scale	Designed	Drawn	Checked	Authorised
1:1,250	-	CW	NS	RG
Original Size	Date	Date	Date	Date
A3	-	06/05/2022	11/05/2022	11/05/2022
Drawing Number	FIGURE 3			Revision
				P01

Appendix B. Habitat Survey Plan and Target Notes

Refer to the full confidential report for Target Notes 1-8 containing information relating to badger.



1:70,000

Legend

Phase 1

- A1.1.1 - Broadleaved woodland - semi-natural
- A2.1 - Scrub - dense/continuous
- B2.2 - Neutral grassland - semi-improved
- J1.3 - Cultivated/disturbed land - ephemeral/s
- J3.6 - Buildings
- J5 - Other habitat
- J2.4 - Fence
- J2.5 - Wall
- Site boundary
- Target Notes (redacted)

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Chadwick House
Birchwood Park
Warrington
England
WA3 6AE

Project: Bradford Gasholder

Client: National Grid

Title: Extended Phase 1 Habitat Plan

Drawing number: Figure 01

Original scale: 1:1,750

Page: 1/1

Drawn: JC	Checked: NC	Reviewed: AW	Approved:
Date: 14/06/2022	Date: 15/06/2022	Date: 23/06/2022	Date:

0 50 100 150 200 m

Target Notes

Table B-1 – Summary of Target Notes

Target note	Description	Photograph
TN9	Hollyberry Cotoneaster	
TN10	Peregrine falcon observed flying and calling.	
TN11	Potential hibernacula for hibernating species.	

TN12	Himalayan balsam.	
TN13	Potential hibernacula for hibernating species.	
TN14	Wall cotoneaster.	

TN15

Small depressed area with standing water. 1m x 2m. Looks to be ephemeral and considered unlikely to support amphibians.



TN16

Small depressed area with standing water. 1m x 1m. Looks to be ephemeral and considered unlikely to support amphibians.



TN17

Wall cotoneaster.



TN18	Evidence of nesting pigeons on bridge ledges.	
TN19	Pile of cut wood, hibernacula.	
TN20	Wild strawberries.	

TN21	Ravens nesting on gasholder. Gasholder potential for other nesting birds including peregrine falcons.	
TN22	Japanese rose.	
TN23	Himalayan balsam.	

TN24

Japanese knotweed.



Appendix C. Legislation table

Species	Legislation	Offences	Licensing procedures and guidance
Bats <i>European protected species</i>	Conservation of Habitats and Species Regulations 2017 (as amended) Reg 43	Deliberately ³³ capture, injure or kill a bat; deliberate disturbance ³⁴ of bats; or damage or destroy a breeding site or resting place used by a bat. [The protection of bat roosts is considered to apply regardless of whether bats are present.]	A Natural England (NE) licence in respect of development is required. Guidance documents: <i>NE Standing Advice for protected species 2013</i> <i>European Protected Species: Mitigation Licensing- How to get a licence</i> (NE 2013) <i>Bat Mitigation Guidelines</i> (English Nature 2004) <i>Bat Workers Manual</i> (JNCC 2004)
	Wildlife and Countryside Act 1981 (as amended) S.9	Intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb ³⁵ a bat in such a place.	Licence from NE is required for surveys (scientific purposes) that would involve disturbance of bats or entering a known or suspected roost site.
Otters	Conservation of Habitats and Species Regulations 2017 (as amended) Reg 43	Deliberately ³³ capture, injure or kill an otter; deliberate disturbance ³⁴ of otters; or damage or	Licences issued for development by Natural England. Guidance documents: <i>NE Standing Advice for protected species 2013</i>

³³ Deliberate capture or killing is taken to include “accepting the possibility” of such capture or killing

³⁴ Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.

³⁵ Lower levels of disturbance not covered by the Conservation of Habitats and Species Regulations 2017 (as amended) remain an offence under the Wildlife and Countryside Act 1981 (as amended) although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided.

<i>European protected species</i>		destroy a breeding site or resting place used by an otter.	<i>European Protected Species: Mitigation Licensing- How to get a licence</i> (NE 2013)
	Wildlife and Countryside Act 1981 (as amended) S.9	Intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb ³⁵ an otter in such a place.	No licence is required for survey in England. However, a licence would be required if the survey methodology involved disturbance.
Birds	Wildlife and Countryside Act 1981 (as amended) S.1	Intentionally kill, injure or take any wild bird; intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built; intentionally take or destroy the nest or eggs of any wild bird. Intentionally or recklessly disturb a Schedule 1 species while it is building a nest or is in, on or near a nest containing eggs or young; intentionally or recklessly disturb dependent young of such a species [e.g. most birds of prey, kingfisher, barn owl, black redstart, little ringed plover].	No licences are available to disturb any birds in regard to development. Licences are available in certain circumstances to damage or destroy nests, but these only apply to the list of licensable activities in the Act and do not cover development. General licences are available in respect of 'pest species' but only for certain very specific purposes, e.g. public health, public safety, air safety. Guidance documents: <i>NE Standing Advice for protected species 2013</i>
Plants <i>Invasive species, e.g. Japanese knotweed,</i>	Wildlife and Countryside Act 1981 (as amended) S.14	It is illegal to plant or otherwise cause these species to grow in the wild.	Any contaminated soil or plant material is classified as controlled waste and should be disposed of in a suitably licensed landfill site, accompanied by appropriate Waste Transfer documentation, and must comply with section 34 of the Environmental Protection Act 1990. Guidance documents: <i>The Knotweed Code of Practice</i> (Environment Agency, 2013 version 3)

hybrid knotweed, giant knotweed, giant hogweed, rhododendron, Himalayan balsam			<i>Managing Invasive Non-native Plants</i> (Environment Agency 2010) <i>Guidance on Section 14 of the Wildlife and Countryside Act, 1981</i> (Defra 2010)
Local Sites (e.g. County Wildlife Sites, Sites of Importance for Nature Conservation)	There is no statutory designation for local sites.	Local sites are given protection through policies in the Local Development Plan.	Development proposals that would potentially affect a local site would need to provide a detailed justification for the work, an assessment of likely impacts, together with proposals for mitigation and restoration of habitats lost or damaged. Guidance documents: The National Planning Policy Framework (Department for Communities and Local Government, June 2019), with particular reference to Policy 15, and the joint Circular.

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