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## **Gasholder Site – Banks Road, Garston**

### **Preliminary Ecological Appraisal Report**

**(Extended Phase 1 Habitat Survey)**

**10<sup>th</sup> June 2014**



Preliminary Ecological Appraisal

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Preliminary Ecological Appraisal

(Extended Phase 1 Habitat Survey)

at

National Grid,  
Garston Gasholder Site,  
Banks Road,  
Garston Industrial Estate,  
Liverpool,  
L19 8HY

for

Rachael Elliott – Senior Consultant (WorleyParsons)

On behalf of

National Grid Gas Property Holdings Limited

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Preliminary Ecological Appraisal

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**0. EXECUTIVE SUMMARY**

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This report has been prepared at the request of Rachael Elliott (WorleyParsons) on behalf of National Grid Property Holdings Limited, to provide an overview of the landscape and habitat types, any ecological features of interest and the potential to provide habitats for legally protected species at the former gasworks site located off Banks Road, Garston Industrial Estate, Liverpool, L19 8HY (OS Grid Reference: SJ 40498 84173). A site survey was undertaken on the 10<sup>th</sup> June 2014 by Evolution Ecology Ltd.

This section provides conclusions drawn from the desktop study and the site survey to determine the importance of the different habitat types on-site. It is also necessary to conclude what effects the proposed demolition works will have on any locally protected wildlife species, with particular reference to mammals, amphibians, birds and reptiles.

At this time, the only areas which are proposed to be directly impacted are the three buildings (to be demolished), the hard standing (where some demolition will occur [of the wall surrounding B3] and some areas will be used for machinery access/temporary works compound erection) and finally, some of the overgrown areas of scrub/grassland/introduced shrub which surround these areas (which may need to be cut back to allow clear pathways to be defined).

With regards to the buildings, all three can be demolished, with no negative impacts upon local nesting birds and/or roosting bats being predicted. This is said, as the two gasholders (B1 & B3) are metal structures which possess no utilizable features for these species. Similarly, the brick building (B2) is also considered to be of low ecological value, as it was of solid brick construction, with a flat roof and intact windows and doors – all factors which reduce the number of potential access/roosting points within the building.

With regards to access to C1, it has been stated by Rachael Elliott (of WorleyParsons) that it will be necessary to erect a temporary works compound in between the two gasholders (i.e. within C2), as this will function as an office/work station throughout the duration of the dismantling/demolition works. As mentioned previously, C2 has been assigned the non-statutory designation of LWS, and as such, this area is considered to be of local value to wildlife. With this being the case, it will be necessary to ensure that the proposed vegetation clearance and temporary works compound erection take place in conjunction with appropriate mitigation measures, which could include;

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- Designing potential access routes (which will require vegetation clearance) around any 'pockets' or flora species of conservation concern (which will need to be deciphered via an additional flora survey), in order to maintain the ecological integrity of the remainder of the LWS.
- Relocating any flora species or 'pockets' of habitat which are considered to be of local importance (hence their classification within the LWS designation).
- Placing heras fencing around the temporary works compound (once outlined) in order to prevent encroachment of machinery on the remainder of the LWS (i.e. semi-improved neutral grassland habitat).

Approaching the problem [of the locale of the LWS designation] in this way, will ensure that the proposed works can go ahead as planned, whilst maintaining the ecological integrity of the remainder of the habitat in the long-term.

**Please note:** The recommendations outlined above illustrate potential mitigation measures only, as due to the non-statutory LWS designation, it is up to the local planning authority to assess whether or not the proposed safeguard measures are appropriate to maintain the ecological integrity of the site.

In addition to the protection of the semi-improved grassland habitat within C2, the scrub habitats [present within both C2 and C3] should also be safeguarded, due to their value for local breeding birds. This being said, it will be necessary (particularly within C3) for some vegetation clearance to occur, in order to allow machinery access to the structures to be demolished. The approximate areas which will be affected by proposed vegetation clearance works are highlighted in blue on figure 1, but as of yet, the full extent of these measures remains unknown. This being said, up to now, it would appear that the required vegetation clearance measures are relatively minimal, as access to C1 will predominantly take place along the gravel track which currently stands (which only exhibits minor floral colonization). In contrast to this, some of the overgrown tree specimens (which are situated along the south-eastern boundary of the site) may prevent initial access to the site, so minor management of these specimens (i.e. pruning some of the trees back) may be required.

With regards to C3, entry from the central road (which runs between C2 & C3) will be required in order to gain access to the two buildings to be demolished (B2 and B3). More substantial vegetation clearance will need to occur in this area [than within C2], in order for a wide enough pathway to be created. Typically, it would be recommended that dense vegetation clearance occur outside of the bird nesting season (which is between the months of March-August). However, Evolution Ecology Ltd has been informed (by Rachael Elliott – WorleyParsons) that working within this time frame will not be achievable, so instead, supervision works (by a suitably qualified ecologist) will need to be incorporated into the proposed works as to ensure that no nesting birds and/or their eggs/chicks will be

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harmed during the vegetation clearance works. Preferably [if possible], this should be coupled with the erection of heras fencing around the works perimeter, to prevent encroachment onto nearby valuable habitats.

If future works are to spread outside the boundaries surveyed, it will be necessary to conduct an update ecological appraisal in order to incorporate these areas into the plans. In addition to this, if these areas are similar in structure to the habitats within C2, it may be necessary to conduct reptile/amphibian and invertebrate surveys on these areas, in order to establish whether any of these species would be negatively affected by the proposed works. As no plans have been put forward at this time, it is difficult to detail potential future survey works, so this would need to be discussed with the client at a later date.

Overall, as long as the suggested habitat safeguard measures are followed, there should be no negative long-term impact upon the habitats present [both onsite and within the immediately surrounding area], which are considered to be of good ecological value to local fauna.

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## **1. INTRODUCTION**

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### **1.1 Background**

This report has been prepared at the request of Rachael Elliott (WorleyParsons) on behalf of National Grid Property Holdings Limited, to provide an overview of the landscape and habitat types, any ecological features of interest and the potential to provide habitats for legally protected species at the former gasworks site located off Banks Road, Garston Industrial Estate, Liverpool, L19 8HY (OS Grid Reference: SJ 40498 84173). A site survey was undertaken on the 10<sup>th</sup> June 2014 by Evolution Ecology Ltd.

#### **Aim**

The aim of this survey was to identify which, if any, habitats and flora species may be affected by any alterations to the site, and to assess the habitat needs for them to exist on the site alongside any proposed demolition works, in accordance with the Preliminary Ecological Appraisal (Extended Phase 1 Habitat Survey) criteria.

#### **Surveyor Details**

The site was surveyed by Mr Paul Keeling BSc (Hons) MCIEEM – Senior Ecologist, Miss Charlotte Richardson BSc (Hons) – Assistant Ecologist and Mr Richard Millington – Assistant Ecologist.

### **1.2 Site Description**

The former gasworks site located off Banks Road is situated within the heart of the district of Garston, Merseyside and it is predominantly surrounded by residential properties and industrial estates to the north and south. In addition to these urbanized areas, a relatively large woodland area (when taking into account the surrounding urban landscape) is situated immediately adjacent to the eastern boundary of the site, and woodland/grassland areas are also present approximately 400m to the west. It is also worth noting that a number of main roads are located nearby, the closest of these being Garston Way/Speke Road (A561) which is situated roughly 180m to the north of the former gaswork site. This is mentioned, as roads such as this can often function as physical barriers to migration for a number of terrestrial fauna species. Within the wider surrounding landscape, other habitats including amenity grassland, hedgerow/tree belts and running water courses (in the form of the River Mersey) are present - all of which provide excellent foraging, sheltering and [potential] breeding habitats for a variety of protected fauna species.



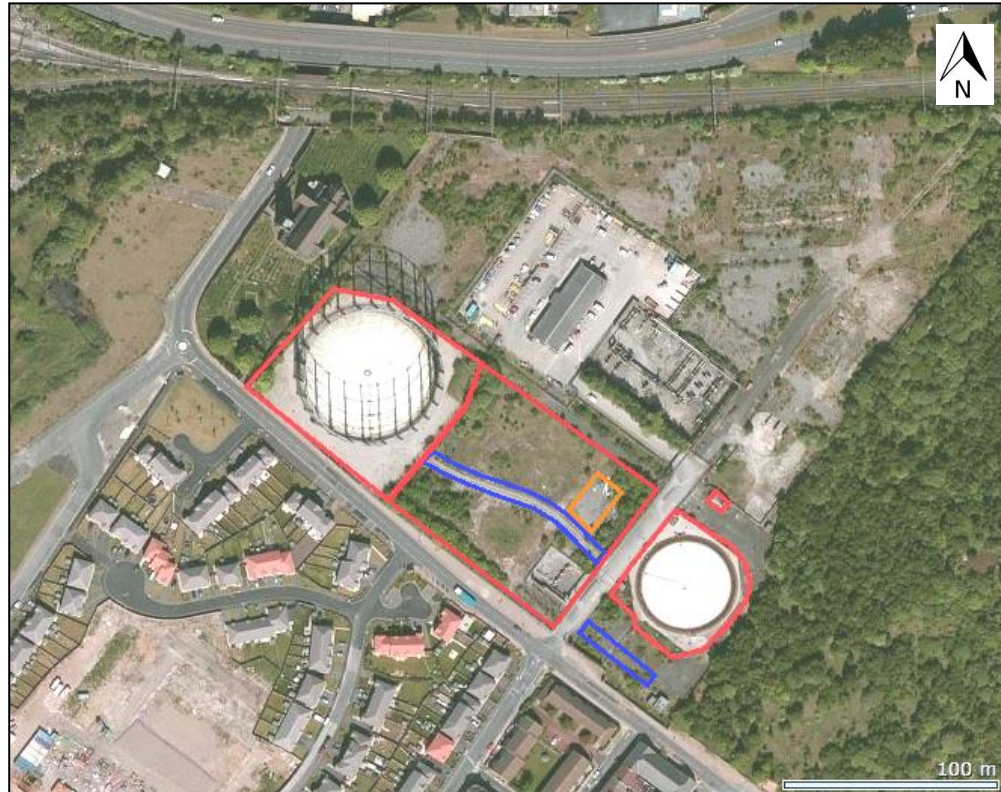
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The site itself was surveyed in two main parts; the first section was the compound to the north-west of the site (Compound 1 – C1), which contained the larger of the two gasholders. The second area inspected was the compound to the south-east of the site (Compound 3 – C3), which contained the second, smaller gasholder. A number of additional areas were also surveyed (including Compound 2 (C2) - which will be illustrated in Figure 1 and 1A), as the proposed works will require some minor vegetation clearance to allow machinery access to the gasholder compounds. The dominant habitat type's onsite are semi-improved grassland, buildings and hard standing, with patchy distributions of introduced shrub, tall ruderal and scrub also being apparent. Each of the habitat types on site have varying ecological value and they will be discussed individually in turn.

**Figure 1:** A map showing the approximate boundaries of the three surveyed compounds and the brick building which is proposed to be demolished within the former gaswork site located off Banks Road, Garston (as outlined in red). The zones outlined in blue indicate the approximate areas which are to undergo vegetation clearance works (to allow machinery access to the compounds) and the orange boundary illustrates the approximate bare ground area, which could form a temporary works compound.



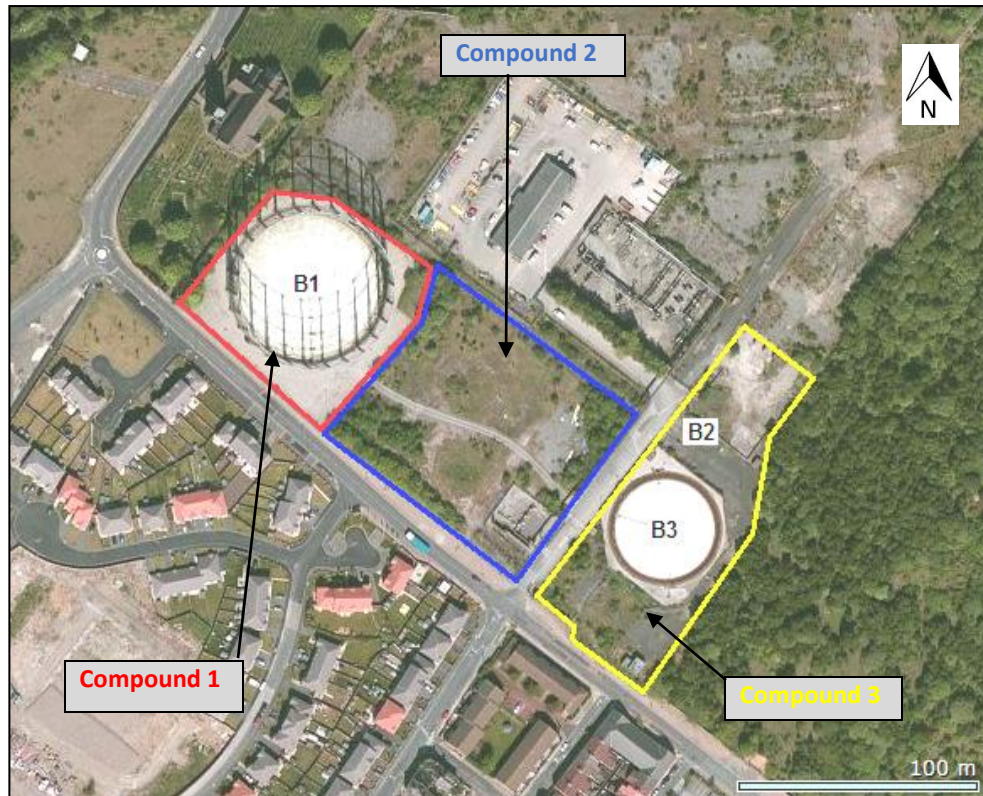


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**Figure 1A:** For ease of reference throughout this section of the report, the area outlined in red will be referred to as compound 1 (C1), the area outlined in blue will be compound 2 (C2) and the area outlined in yellow will be referred to as compound 3 (C3). The buildings proposed for demolition have also been assigned building unit numbers (B1, B2 and B3).



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## **2. METHODOLOGY**

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### **2.1 Desktop Study (Ecological Data Search)**

Merseyside BioBank (MBB) was commissioned to carry out an ecological data search of all protected species and sites recorded within 2km radius of the site.

### **2.2 Preliminary Ecological Appraisal (Extended Phase 1 Habitat Site Survey)**

To fulfil the brief, a Preliminary Ecological Appraisal (Extended Phase 1 Habitat Survey) was conducted according to the methodology of the JNCC (2010). Preliminary Ecological Appraisal is a standard technique for classifying British habitats. The aim is to provide records of habitats that are of significant ecological value.

#### **Additional Target Notes**

Additional target notes were made where applicable to record:

- Key habitat features.
- Urban ecological features not covered in sufficient detail in the Phase 1 Methodology.
- Important habitats too small to be mapped and to identify dominant species.
- Other features of ecological interest.

### **2.3 Protected Flora and Fauna Species**

Potential signs and suitable habitats for the presence of European and domestically protected species (amphibians, reptiles, mammals and birds) were recorded according to the Biodiversity Action Plan (BAP) and Birds of Conservation Concern (RSPB, 2009).

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**3. FIELD SURVEY RESULTS**

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**3.1 Desktop Survey (Ecological Data Search)**

Merseyside BioBank (MBB) was commissioned to carry out an ecological data search of all protected species and sites recorded within 2km radius of the site. The search uncovered numerous records of protected species, but none of which have been recorded on or immediately adjacent to the site.

With regards to reptiles and amphibians (herpetiles), the majority of the records identified were of amphibians, with only one reptile record being evident. The majority of the amphibian records were of common frog (*Rana temporaria*), with only a few instances of common toad (*Bufo Bufo*) and smooth newt (*Lissotriton vulgaris*) being apparent. Additionally, one great crested newt (*Triturus cristatus*) record was identified, but based upon the grid reference at which it was recorded, it can be concluded that it was a considerable distance away from the site of interest. With regards to reptiles, the only species identified was the common lizard (*Zootoca vivipara*) which was recorded on only one occasion. Once again, this record was a considerable distance away from the site, and it was also outdated (1990), meaning that it may not present a fully accurate representation of the reptile species which currently reside within the nearby surrounding area.

A number of declining bird species have also been recorded within the 2km search radius. These include red-listed (globally threatened) species such as; common starling (*Sturnus vulgaris*), grasshopper warbler (*Locustella naevia*) and house sparrow (*Passer domesticus*). Additionally, two barn owl (*Tyto alba*) records have been revealed, neither of which were located upon the site of interest. It is also worth pointing out that the majority of the bird records received are relatively outdated (ranging in age from 1997 to 2002), so once again, they may not give an accurate representation of the bird species which currently reside within the area.

With regards to protected mammal species, a number of records have been revealed within the 2km search radius (the majority of which were of bats). Firstly, the bat species identified were common pipistrelle (*Pipistrellus pipistrellus*) and noctule (*Nyctalus noctula*), with some unidentified bat species also being apparent – all of which are European Protected Species (EPS). Other terrestrial mammal species identified within the search area include; brown hare (*Lepus europaeus*), Eurasian red squirrel (*Sciurus vulgaris*) and west European hedgehog (*Erinaceus europaeus*). With regards to other protected mammal species such as badgers (*Meles meles*), otters (*Lutra lutra*) or water voles (*Arvicola*

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*amphibius*), no records have been identified anywhere within the 2km search radius. Finally, it is worth pointing out that a number of marine mammals have been identified within the search area, including; common porpoise (*Phocoena phocoena*), grey seal (*Halichoerus grypus*) and northern bottlenose whale (*Hyperoodon ampullatus*). However, due to the nature of the site, it is deemed that none of these species would be negatively affected by the proposed works.

The most notable designated site in relation to the site of interest is Banks Road and Garston Gas Works, which have collectively been assigned the non-statutory designation of Local Wildlife Site (LWS). Non-statutory site designation such as LWS's are not afforded the same level of legal protection as statutory sites (such as SSSI's) and as such, their only protection is afforded via the planning system (which will be discussed further in turn). A number of notable habitat types and flora and fauna species have been identified within the woodland area to the east of the site, but as the proposed works will not break into this woodland, the area will remain undisturbed. This being said, upon closer inspection of the maps provided by MBB, it became apparent that it has been proposed that the central compound to the gaswork site (C2 - which is where the proposed vegetation clearance and the temporary work compound erection is proposed to take place) also be incorporated within the LWS designation which has been assigned to the adjacent woodland.

Additionally, after a telephone conversation with Ben Deed of MBB, and subsequent conversation with Rachael Rhodes of Merseyside Environmental Advisory Service, it became apparent that the information received in the ecological data report was outdated, as the records regarding Local Wildlife Site Designations have not been updated within the recent past. With this being the case, the representative from MBB informed Evolution Ecology, that this 'proposed' Local Wildlife Site [within C2], was officially classified as a Local Wildlife Site four years ago, meaning that this area is a non-statutory designated site.

According to the Wildlife Trust:

*"The Local Wildlife Site designation is a non-statutory one so sites are not directly protected by any national legislation. They are, however, afforded protection through planning policies such as Planning Policy Statement 9 (PPS9) which recognises that Local Wildlife Sites have a fundamental role to play in helping to meet overall national biodiversity targets. It also advises Local Authorities on the need to develop local policies to protect sites. In the last five years legislation such as the Natural Environment and Rural Communities Act 2007 and the Environmental Impact Assessment*

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*Regulations for uncultivated and semi-natural land (2006) can sometimes provide additional protection relevant to some Local Wildlife Sites”.*

Further information is available at:

<http://www.derbyshirewildlifetrust.org.uk/what-we-do/local-wildlife-sites>

Additional information regarding this LWS designation onsite has come to light after talks between the landowner (National Grid) and Liverpool City Council. This information has been received by Evolution Ecology via Rachael Elliott (WorleyParsons) who is representing National Grid for the purposes of the site assessment. According to Liverpool City Council, the grassland area within C2 has been assigned the LWS designation as either;

- 1.) Specific pockets within the habitat have been classified as being of ecological importance;

Or

- 2.) Individual flora species of specific conservation concern have been recorded.

Bearing this information in mind (and due to the fact that LWS's are only assigned protection via the planning system), it will be possible to devise appropriate mitigation/avoidance measures during the proposed works in order to ensure that the habitat and its ecological features are not degraded long-term (which will be discussed further in turn).

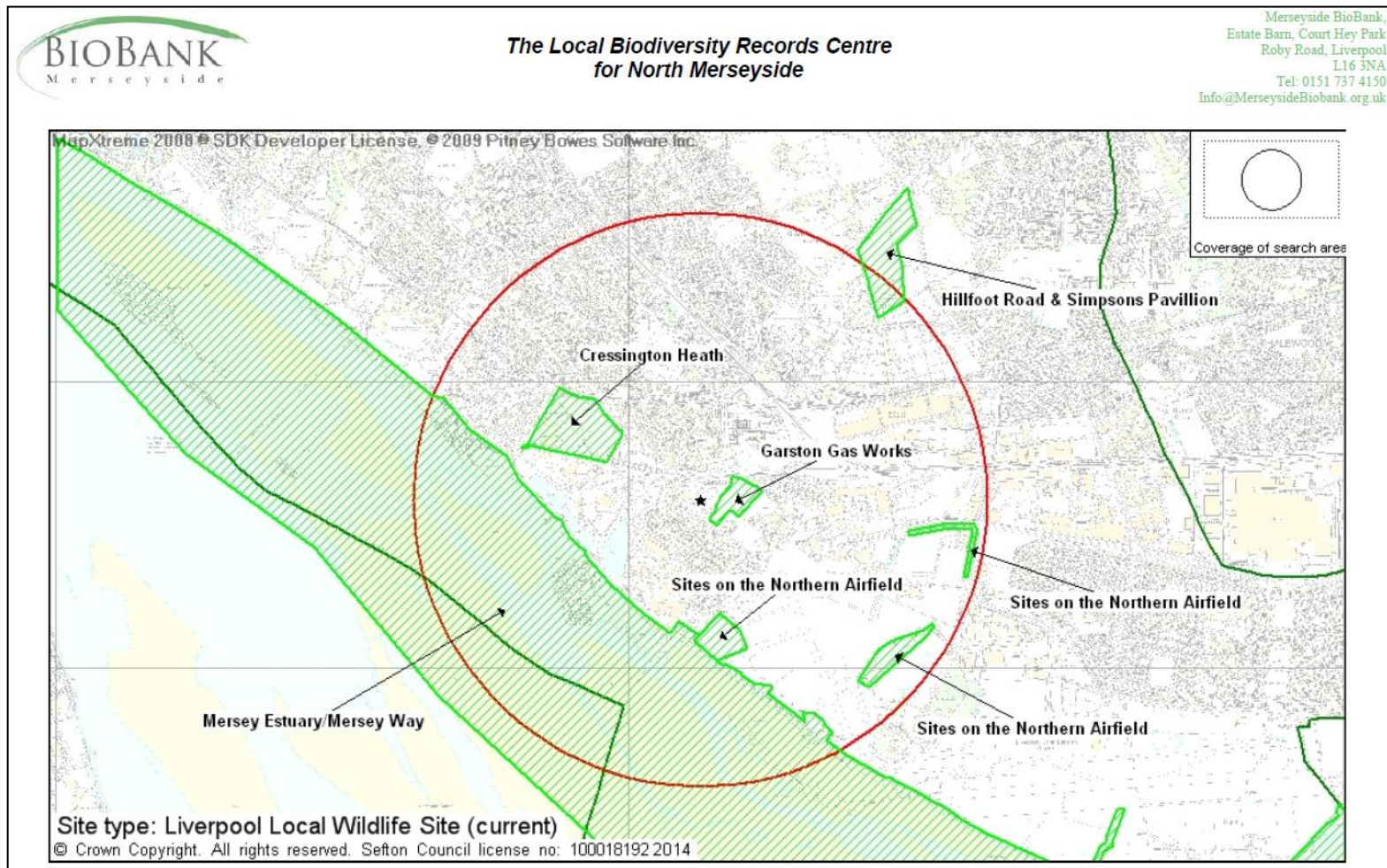
Bearing all of the above information in mind, it is considered that the habitats present within C2 must be of some ecological value (especially when considering the high levels of urbanization within the immediately surrounding area), in order for the LWS designation to be justified.

In addition to this, a further six non-statutory designated sites (all of which are again LWS's) are located nearby, including; Cressington Heath, Hillfoot Road & Simpson's Pavilion, Mersey Estuary/Mersey Way and Sites on the Northern Airfield (in three different locations). This being said, all of these are considered to be located too far away from the site of interest, to be impacted by the proposed works.



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**Figure 2:** A map of the known non-statutory site designations which surround the former gaswork site. The site itself is indicated by the black star.







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### 3.2 Preliminary Ecological Appraisal (Extended Phase 1 Habitat Site Survey) and Limitations

The site in its entirety is dominated by a number of habitat types, but within the compounds of interest, the dominant habitats are buildings and hard standing (with some areas being colonized by tall ruderal and semi-improved rough grassland). Some of the immediately surrounding habitats of these compounds are to undergo minor vegetation clearance during the proposed works in order to gain access to the gasholders [and building] to be demolished. With this being the case, it is anticipated that areas dominated by scrub and introduced shrub will also be disturbed by the proposed works (as some specimens will be removed). Similarly, a temporary works compound will need to be erected nearby to the most north-westerly gasholder (in order for it to function as an office/welfare unit), so some of the habitats within the most central compound (predominantly hard standing) will be temporarily impacted.

All of these habitat types have varying ecological value and each will be addressed individually. The dominant species, if any, will be noted and their ecological value will be assessed to conclude what affects the proposed demolition works will have on local flora and fauna. Each habitat is colour coded and can be found in Appendix A: Preliminary Ecological Appraisal (Extended Phase 1 Habitat Survey) Map. This Phase 1 has been conducted using JNCC (Joint Nature Conservation Committee, 2010) Handbook for Phase 1 habitat survey.

**Limitations/constraints:** Phase 1 habitat surveys can be conducted all year round, however, the optimal time for undertaking these surveys would be between the months of April and September. The ecological survey conducted on this site was done so in June 2014, which is considered to be within the optimal time frame for floral surveys. If surveys are undertaken outside this period, it is often likely that a follow-up botanical survey will be required. This being said, Evolution Ecology feels confident that the survey conducted presents an accurate representation of the flora present onsite. Please see below for further details.

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A2.1 – Scrub

Well-developed scrub habitat occupied all three compounds in varying densities. C1 contained a small patch of scrub along the south-eastern boundary, which was overgrowth from the scrub within the adjacent compound (C2). A number of unidentified beetle species were identified upon the overgrown trees/shrubs within this area (which were predominantly dog rose *Rosa canina* and small-leaved lime *Tilia cordata*). C2 contained the largest and most extensive area of scrub, but under the current proposals, this area is not to be largely affected by the proposed works. This being said, it may be necessary to prune some of the more overgrown tree/shrub specimens back, in order to allow machinery access to C1. The scrub habitat within this compound predominantly occupies the eastern, south-western and north-western boundaries, but as this area is to remain largely unaffected, a full survey of the species present within this area, was not deemed necessary.

The final area which was colonized by scrub was situated to the south-west of the most south-easterly gasholder (B3). This area was considered to be of good ecological value, as some of the species present offer ample foraging and sheltering habitat for a number of fauna species (predominantly invertebrates). In addition to this, the more mature tree/shrub specimens could also present some potential nesting opportunities for breeding birds during the months of March and August.

The main species present within this scrub habitat were immature/semi-mature; hawthorn (*Crataegus monogyna*), silver birch (*Betula pendula*) and willow species (*Salix spp.*). This scrub habitat was intermixed with introduced shrub [in the form of buddleia (*Buddleja davidii*), which will be discussed further in turn], which collectively provide good foraging/sheltering habitat for invertebrates. Similarly to C2, C3 may require localized vegetation clearance to facilitate the dismantling and demolition works within this compound. However, as the scrub clearance within this area will need to be more extensive (as no track way is currently visible), these works will need to be carefully managed and the supervision of a suitably qualified/licenced ecologist will be required during the removal of any potentially utilizable habitat/s.

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**Figure 4:** This image illustrates the overgrown area of scrub which has encroached onto the south-eastern corner of C1.



Please see Appendix A: Preliminary Ecological Appraisal (Extended Phase 1 Habitat Survey) Map, for the precise locations of the scrub (A2.1).

#### B2.2 – Semi-improved neutral grassland

Semi-improved grassland occupies the vast majority of C2 and a small area within C3. As mentioned previously, it is proposed that vegetation clearance works (predominantly along the hard standing track way and to some of the overgrown scrub habitat) and a temporary works compound be erected within the C2 boundary during the demolition of the gasholders. However, it is predicted that if managed effectively (i.e. via the translocation of any flora species of specific conservation concern to an appropriate receptor area or by incorporating reasonable avoidance measures), there will be no long-term degradation of the habitat and its ecological features during the proposed works. Some of the flora species present within the C2 semi-improved grassland, include; bird's-foot-trefoil (*Lotus corniculatus*), cock's-foot (*Dactylis glomerata*), crested dog's-tail (*Cynosurus cristatus*), kidney vetch (*Anthyllis vulneraria*), oxeye daisy (*Leucanthemum vulgare*) and perennial rye grass (*Lolium perenne*). However, once again, as this area was not of concern with regards to the proposed demolition/site clearance works, a full flora appraisal of this habitat was not deemed necessary.

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Within C3, two main areas were found to be colonized by semi-improved neutral grassland. The first was immediately adjacent to B3, and although not very extensive, it was densely overgrown (due to a lack of regular management). With this being the case, it is considered that this area would be a good foraging and sheltering habitat for a number of fauna species, particularly invertebrates and small mammals. This grassland habitat was largely dominated by false oat grass (*Arrhenatherum elatius*), with stands of bramble (*Rubus fruticosus*), cleavers (*Galium aparine*), nettle (*Urtica dioica*) and vetch species (*Vicia spp.*) also being apparent.

The final area dominated by semi-improved neutral grassland was located directly to the south-west of B3. This area was intermediate in size to the two aforementioned semi-improved grassland habitats, but it was deemed as being similar in terms of floral structure to the grassland within C1. This is said, as the dominant species recorded were; bird's-foot-trefoil (*Lotus corniculatus*), cock's-foot (*Dactylis glomerata*), kidney vetch (*Anthyllis vulneraria*) and oxeye daisy (*Leucanthemum vulgare*). Once again, this area is considered to be of moderate ecological value to local fauna (particularly invertebrates) due to the wide floral diversity attached to it.

Please see Appendix A: Preliminary Ecological Appraisal (Extended Phase 1 Habitat Survey) Map, for the precise locations of the semi-improved neutral grassland (B2.2).

#### C3.1 – Tall ruderal

Only one patch of tall ruderal was identified throughout the preliminary ecological appraisal, and this was discovered in the north-eastern corner of C1. It is thought that this area was once amenity grassland, but due to a lack of regular management, it has begun to succeed to the habitat which currently stands. A wide variety of flora was discovered within this area, including; bird's-foot-trefoil (*Lotus corniculatus*), bramble (*Rubus fruticosus*), cleavers (*Galium aparine*), cock's-foot (*Dactylis glomerata*), cowslip (*Primula veris*), kidney vetch (*Anthyllis vulneraria*), nettle (*Urtica dioica*), oxeye daisy (*Leucanthemum vulgare*), ragwort (*Jacobaea vulgaris*), ribwort plantain (*Plantago lanceolata*), rough meadow grass (*Poa trivialis*), salad burnet (*Sanguisorba minor*) and Yorkshire fog (*Holcus lanatus*). Although not overly extensive, this habitat provides a good potential foraging habitat for invertebrates, and subsequently small mammals and birds.

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**Figure 5:** A view of the tall ruderal habitat, as taken from a south-western viewpoint.



Please see Appendix A: Preliminary Ecological Appraisal (Extended Phase 1 Habitat Survey) Map, for the precise locations of the tall ruderal (C3.1).

#### J1.4 – Introduced shrub

This habitat type was scattered throughout C1 and C3 of the site, in the form of a number of buddleia (*Buddleja davidii*) specimens. The patch of buddleia identified within C1 was situated on the boundary of the tall ruderal habitat, and was present in the form of one well-developed specimen. Although non-native, buddleia is often well known to support dense assemblages of native foraging invertebrates, with particular reference to bees, butterflies, hoverflies and moths. In addition to this, well-developed specimens of this species have also been known to support nests of small breeding birds such as goldfinch (*Carduelis carduelis*). However, no active [or abandoned] bird nests were identified within this buddleia specimen during the preliminary ecological appraisal.

The second area to be colonized by buddleia was C3, and it was present in two main areas. The first was an individual specimen which was present to the north of B3 and the second was an extensive patch which was situated in between the scrub and semi-improved grassland habitats. It is

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thought that under the current vegetation clearance proposals, the buddleia to the south-west of C3 will be disturb. It is because of the ecological value attached to the scrub, semi-improved grassland and introduced shrub habitats that all vegetation clearance works should be restricted wherever possible, in order to ensure that suitable foraging habitat will remain onsite [post-works] for a number of fauna species.

Please see Appendix A: Preliminary Ecological Appraisal (Extended Phase 1 Habitat Survey) Map, for the precise locations of the introduced shrub (J1.4).

#### J3.6 – Buildings

Four buildings were identified within the survey area; two gasholders and two brick buildings. However, of these, only the two gasholders and the building (B2) to the north-east of B3 were surveyed to reveal their potential to house protected species, as the remaining building will be left as is during the proposed works. Firstly, the two gasholders (B1 and B3) are considered to be of low ecological value to protected species, as they offer minimal utilizable habitat for bats and/or birds. As such, it is considered that these habitats will be of use to passerine ('perching') birds only, as they are entirely unsuitable for nest building purposes. Similarly, the metal structure of both gasholders means that no cracks or crevices are present, within which local bat species could roost. With this being the case, it is anticipated that the removal of both of these buildings would be of no detriment to local bat/bird species.

The other building of interest (B2) is situated to the north-east of B3 within C3. This building is of solid brick construction with a flat roof and intact windows and doors. The combination of these factors mean that the building once again has low potential for housing nesting birds and/or roosting bats, as there are no potential access points into the building. Similarly, as the structure has a flat roof, there is no roof void in which bats and/or birds could roost and/or nest.



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**Figure 6:** An image illustrating B2, which has low potential for housing protected bat/bird species (as taken from a south-eastern viewpoint).



Please see Appendix A: Preliminary Ecological Appraisal (Extended Phase 1 Habitat Survey) Map, for the precise locations of the buildings (J3.6).



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**Table 1:** Features of buildings and built structure classification, which may indicate the potential for bats. The full guidance can be found in the Bat Conservation Trust Good Practice Survey Guidelines (P53).

| Likelihood of bats being present | Feature of the building or built structure and its location  |
|----------------------------------|--|
| Higher                           | <p>Pre-20th century or early 20th century construction<sup>2</sup>.<br/> Agricultural buildings of traditional brick, stone or timber construction.<br/> Large and complicated roof void with unobstructed flying spaces.<br/> Large (&gt;20 cm) roof timbers with mortice joints, cracks and holes.<br/> Entrances for bats to fly through.<br/> Poorly maintained fabric providing ready access points for bats into roofs, walls, bridges, but at the same time not too draughty and cool.<br/> Roof warmed by the sun, in particular south facing roofs.<br/> Weatherboarding and/or hanging tiles with gaps.<br/> Low level of disturbance by humans.<br/> Bridge structures, follies, aqueducts and viaducts over water and/or wet ground.<br/> For rarer species, buildings or built structures in the core area of their distribution.<br/> Buildings and built structures in proximity to each other providing a variety of roosting opportunities throughout the year.<br/> Buildings or built structures close to good foraging habitat, in particular mature trees, parkland, woodland or wetland, especially in a rural setting</p> |
| Lower                            | <p>Modern, well-maintained buildings<sup>3</sup> or built structures that provide few opportunities for access by bats.<br/> Small, cluttered roof space.<br/> Buildings and built structures comprised primarily of prefabricated steel and sheet materials.<br/> Cool, shaded, light or draughty roof voids.<br/> Roof voids with a dense cover of cobwebs and no sections of clean ridge board.<br/> High level of regular disturbance.<br/> Highly urbanised location with few or no mature trees, parkland, woodland or wetland.<br/> High levels of external lighting.</p>   |

#### J5: Other habitat – Hard standing (with hardy colonizers)

Hard standing was the most extensive of all of the habitat type's onsite. The areas immediately surrounding B1 and B3 were composed of hard standing with a shingle stone overlay, and they were also colonized by some hardy flora species. Additionally, the track which cuts through the centre of C2 was also covered over with gravel-like material.

The majority of the flora species identified were found within C1 and C2, with only a few scattered specimens being apparent around B3. The species identified include; broad-leaved willowherb (*Epilobium montanum*), cleavers (*Galium aparine*), creeping thistle (*Cirsium arvense*), herb Robert (*Geranium robertianum*), horsetail species (*Equisetum spp.*), greater plantain (*Plantago major*), groundsel (*Senecio vulgaris*), yellow rattle (*Rhinanthus minor*) and Yorkshire fog (*Holcus lanatus*). Of these

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Preliminary Ecological Appraisal

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species, only scattered broad-leaved willowherb (*Epilobium montanum*), creeping thistle (*Cirsium arvense*), herb Robert (*Geranium robertianum*) and horsetail (*Equisetum spp.*) specimens were identified around B3. In addition to the areas with a shingle stone overlay, another type of hard standing was identified within the northern portion of C3. This area was similar in composition to the C1 compound (in terms of floral species colonization – with scattered kidney vetch (*Anthyllis vulneraria*), oxeye daisy (*Leucanthemum vulgare*), silver birch (*Betula pendula*) saplings and willow species (*Salix spp.*) saplings also being apparent). However, due to a lack of regular disturbance, it is considered that this area is in a transitional stage to ephemeral/short perennial (a habitat type which is typical of derelict urban sites).

Within the areas discussed so far, it would appear that they are of moderate ecological value (particularly to foraging invertebrates), primarily due to the wide diversity of flora which has colonized within the relatively recent past.

Finally, areas of standard (concrete) hard standing were apparent within compounds 2 (to the north-east and south-east) and 3 (to the north, east and south). These areas are considered to be of commuting use only to local fauna, as they present minimal utilizable foraging and/or sheltering habitats.

Please see Appendix A: Preliminary Ecological Appraisal (Extended Phase 1 Habitat Survey) Map, for the precise locations of the hard standing (with hardy colonizers) (J5).

### Preliminary Ecological Appraisal

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**Table 1:** A full list of the flora species identified at the former gas work site off Banks Road, Garston during the Preliminary Ecological Appraisal.

| <b><u>Common Name</u></b> | <b><u>Scientific Name</u></b> |
|---------------------------|-------------------------------|
| Bird's-foot-trefoil       | <i>Lotus corniculatus</i>     |
| Bramble                   | <i>Rubus fruticosus</i>       |
| Broad-leaved willowherb   | <i>Epilobium montanum</i>     |
| Buddleia                  | <i>Buddleja davidii</i>       |
| Cleavers                  | <i>Galium aparine</i>         |
| Cock's-foot               | <i>Dactylis glomerata</i>     |
| Cowslip                   | <i>Primula veris</i>          |
| Creeping thistle          | <i>Cirsium arvense</i>        |
| Crested dog's-tail        | <i>Cynosurus cristatus</i>    |
| Dog rose                  | <i>Rosa canina</i>            |
| False oat grass           | <i>Arrhenatherum elatius</i>  |
| Greater plantain          | <i>Plantago major</i>         |
| Groundsel                 | <i>Senecio vulgaris</i>       |
| Hawthorn                  | <i>Crataegus monogyna</i>     |
| Herb Robert               | <i>Geranium robertianum</i>   |
| Horsetail species         | <i>Equisetum spp.</i>         |
| Kidney vetch              | <i>Anthyllis vulneraria</i>   |
| Nettle                    | <i>Urtica dioica</i>          |
| Oxeye daisy               | <i>Leucanthemum vulgare</i>   |
| Perennial rye grass       | <i>Lolium perenne</i>         |
| Ragwort                   | <i>Jacobaea vulgaris</i>      |
| Ribwort plantain          | <i>Plantago lanceolata</i>    |
| Rough meadow grass        | <i>Poa trivialis</i>          |
| Salad burnet              | <i>Sanguisorba minor</i>      |
| Silver birch              | <i>Betula pendula</i>         |
| Small-leaved lime         | <i>Tilia cordata</i>          |
| Willow species            | <i>Salix spp.</i>             |
| Yellow rattle             | <i>Rhinanthus minor</i>       |
| Yorkshire fog             | <i>Holcus lanatus</i>         |

**Please note:** Only the areas which are to be affected by the currently proposed works were included within the preliminary ecological appraisal at this time. With this being the case, if in the future, the proposed works are to extend outside of the surveyed area, an update preliminary ecological appraisal will be required to ensure that no protected fauna species will be negatively impacted.

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Preliminary Ecological Appraisal

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### 3.3 Potential Impact on Flora/Habitats

The semi-improved neutral grassland habitats [particularly within C2, but also sparsely within C3], are considered to be of particular conservation concern. This is said, as they possess a number of flora species which provide ample foraging opportunities for invertebrates, which is particularly important when considering the urban nature of the majority of the surrounding area. Due to the LWS designation which has been afforded to the grassland area within C2, it is recommended that the area be surveyed extensively (in order to identify and highlight the 'pockets' or flora species which are considered to be of particular conservation concern) before the proposed works (i.e. vegetation clearance/temporary works compound erection) are to take place. Once this has taken place, it will be possible to work around any areas of specific conservation concern, in order to maintain the overall integrity of the remainder of the habitat.

The remainder of the site is colonized by common species which are typically associated with garden scrub, wasteland and grassland areas. This being said, the areas colonized by scrub in particular are considered to be extensive and dense enough to provide some suitable habitat for protected fauna.

#### Potential Impact on Protected Fauna Species

##### Bird species recorded during the field survey

With regards to **birds**, none were identified onsite during the survey. However, a number of the habitats present (with particular reference to the scrub and introduced shrub habitats) may provide potential nesting and foraging opportunities for local bird populations. With this being the case, nesting birds should be considered before any vegetation removal is to take place, as it is an offence to disturb birds, their nests and eggs during the breeding season (March-August).

##### Mammals

No **mammals** were identified within any of the three compounds surveyed during the preliminary ecological appraisal. This being said, some of the habitats onsite do provide potential utilizable habitat for small mammal species. The areas colonized by scrub in particular, provide ample sheltering habitat for these species and the nearby semi-improved grassland/introduced shrub habitats provide nearby potential foraging opportunities (i.e. foraging invertebrates).

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### Preliminary Ecological Appraisal

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With regards to **badgers** (*Meles meles*), the only area which was thought to be of potential interest to this species, was the woodland area located offsite to the north-west of C1 (which could be indirectly impacted [in terms of disturbance] by the proposed works). However, after a thorough investigation of this area, no evidence of badger activity or presence (in the form of snuffle holes or setts) became apparent. With this being the case, it is anticipated that the proposed demolition works will not negatively impact any local badger populations.

No evidence of **otter** (*Lutra lutra*) or **water vole** (*Arvicola amphibius*) activity was apparent onsite during the survey. This is thought to be due to the fact that the site is deemed unsuitable for these species, which are strongly associated with water. As no water courses/bodies are present within the site boundary (with only one small standing water body being present within the woodland habitat to the east), and as no records of either of these species were revealed within the ecological data search report, it is considered that any local otter and water vole populations will remain unaffected by the proposed works.

**Bats** were considered, as three of the buildings which currently stand upon the site are to be demolished as a part of the proposed works. This being said, the survey deemed that all three of these buildings were unsuitable for bats. The two gasholders (B1 & B3) were of steel-frame construction and as such, provided no potential roosting features. Similarly, the building which is of solid brick construction with a flat roof (B2), was in a good structural condition, and as such it possessed no potential access points to the interior portion of the building. With this being the case, it can be said that the proposed demolition works can continue as planned, with no negative impacts upon local bat colonies being predicted.

#### Invertebrates

The main areas which were found to be of interest to **invertebrates** during the site survey were the scrub, semi-improved neutral grassland and introduced shrub habitats. The most extensive of the grassland habitats occupied the majority of C2, and was deemed as largely suitable for invertebrate utilization (due to the wide floral diversity). As this area is not to be lost by the proposed works, a full survey of the habitat was not conducted.

However, a number of invertebrates were seen in passing, which were predominantly **white-tailed bumblebee** (*Bombus lucorum*) and other **unidentified bumblebee species** (*Bombus spp.*). In addition to this, white-tailed bumblebees (*Bombus lucorum*) and **early bumblebees**

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### Preliminary Ecological Appraisal

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(*Bombus pratorum*) were identified within the scrub habitat within C3, feeding on some of the bramble (*Rubus fruticosus*) specimens. Further invertebrates were identified within this habitat type, including non-native **harlequin ladybirds** (*Harmonia axyridis* – f. *succinea*) and native **hairy shield bugs** (*Dolycoris baccarum*). From the survey, it would appear that the habitats onsite have high potential for supporting local invertebrate species, with particular reference to the scrub, semi-improved neutral grassland and introduced shrub habitats. However, as the proposed works are to negatively impact the building(s) and hard standing areas only in the long-term, it is considered that minor vegetation clearance (to allow machine accessibility) will not be of detriment to local invertebrate populations.

#### Reptiles/Amphibians

No **reptiles or amphibians** (herpetiles) were recorded onsite during the preliminary ecological appraisal, however, some of the habitats present are thought to be suitable for these species (particularly reptiles). C1 is not thought to harbour any habitats which may be of particular interest to herpetiles, so the proposed works should be able to occur as planned with no negative impact upon local herpetiles being predicted. However, C2 and C3 appeared to possess numerous utilizable features, in the form of scrub and hard standing, which collectively provide potential foraging, sheltering and basking opportunities. Although the ecological data search revealed one past record of a reptile within the surrounding area (a **common lizard** *Zootoca vivipara* in 1990), this record was identified as being roughly 1.25km to the south-east of the site. This being said, as the site possesses numerous features which could be of potential interest to this species, and as the only known record of their presence within the area is extremely outdated, there is potential for reptiles to reside within the site (especially when considering the close proximity of the adjacent woodland habitat). With this being the case, site supervision by a suitably qualified ecologist may be necessary during the clearance of the denser stands of vegetation (particularly of the scrub) onsite, as to ensure that no [potentially] locally residing reptiles are harmed.

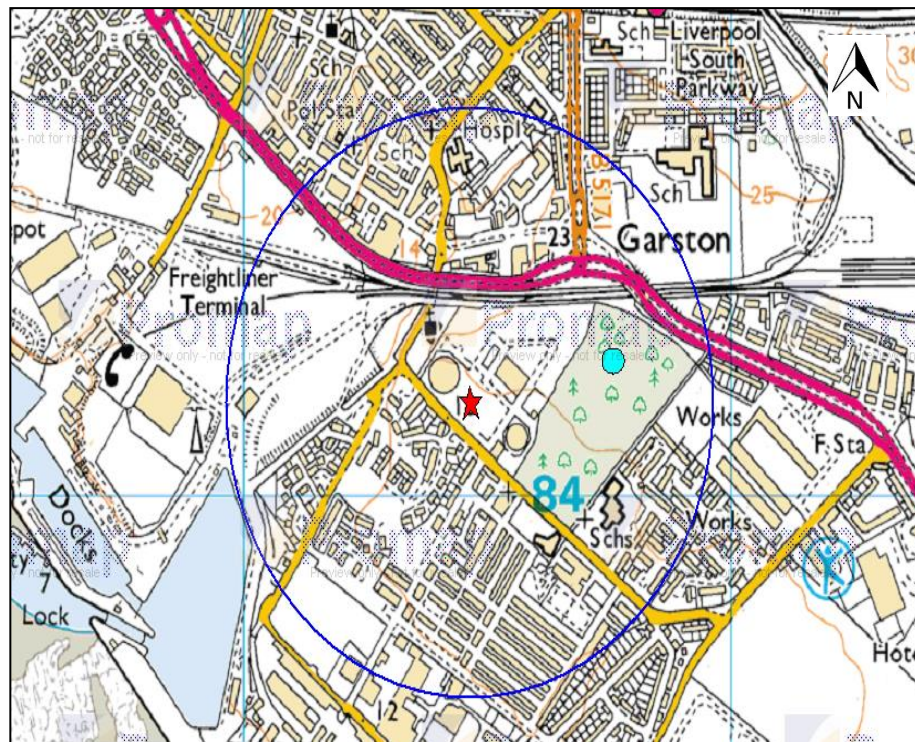
With regards to great crested newts (GCN - *Triturus cristatus*), the only standing water body which is considered to be of interest for GCN, within a 500m radius of the site, is situated within the woodland to the east (as was apparent within the ecological data search report). With this being the case, and due to the urban location, it is considered that the site is unsuitable for breeding GCN. This is further supported by the fact that the nearest (and only) record identified within the ecological data search, was located over 2.5km to the south-east of the site, which is deemed to be a considerable distance away.

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**Figure 8:** A map which illustrates a 500m radius (indicated by the dark blue line) from the site of interest (as shown by the red star). The only standing water body which is visible within this radius is located within the woodland area to the east of the site (as shown by the blue circle), but no past great crested newt (*Triturus cristatus*) records have been revealed anywhere within this area.





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#### **4. CONCLUSIONS AND RECOMMENDATIONS**

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This section provides conclusions drawn from the desktop study and the site survey to determine the importance of the different habitat types on-site. It is also necessary to conclude what effects the proposed demolition works will have on any locally protected wildlife species, with particular reference to mammals, amphibians, birds and reptiles.

*“Planning authorities have a duty to consider biodiversity when assessing planning applications. Where there is a reasonable likelihood that a planning proposal might affect important protected species or habitats, the council will require information on the species and habitat likely to be affected, and an assessment of the impacts of the proposals. This information will need to be provided before a planning decision is made and if this information is not provided, the council may refuse to register the application.*

*“Planning authorities have a duty to consider biodiversity when assessing planning applications. Where there is a reasonable likelihood that a planning proposal might affect important protected species or habitats, the council will require information on the species and habitat likely to be affected, and an assessment of the impacts of the proposals. This information will need to be provided before a planning decision is made and if this information is not provided, the council may refuse to register the application.*

##### Policy Guidance

*Biodiversity 2020: sets out to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people. The government’s policy is aimed at individuals, communities, local authorities, charities, business and government, which all have a role to play in delivering Biodiversity 2020.*

*National Planning Policy Framework, Section 11: The recently published framework in 2012 replaces the previous Planning Policy Statement 9. Section 11: Conserving and enhancing the natural environment, reaffirms the Government’s commitment to maintaining green belt protections and preventing urban sprawl, retains the protection of designated sites and preserves wildlife, aims to improve the quality of the natural environment and halt declines in species and habitats, protects and enhances biodiversity and promotes wildlife corridors.*

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*Article 10 of the EC Habitats Directive: The published Article requires government to develop features such as 'stepping stones' on the landscape, such as clusters of ponds, tracts of rough grassland or scrubland and vegetated railway line embankments.*

*Wildlife and Countryside Act 1981: All species on this list are either fully or partially protected under the Wildlife and Countryside Act 1981, the European Conservation (Natural Habitats etc.) Regulations 1994, and the Countryside and Rights of Way Act 2000. This legislation makes it illegal to possess or control any live or dead specimens, to damage, destroy or obstruct access to any structure or place used for shelter, protection or breeding, and to intentionally disturb a protected species while it is occupying a structure or place which it uses for that purpose.*

*Most resident nesting birds are protected under the Wildlife and Countryside Act 1981, which protects birds, nests, eggs and nestlings. Some rarer species, such as barn owls, are afforded extra protection.*

At this time, the only areas which are proposed to be directly impacted are the three buildings (to be demolished), the hard standing (where some demolition will occur [of the wall surrounding B3] and some areas will be used for machinery access/temporary works compound erection) and finally, some of the overgrown areas of scrub/grassland/introduced shrub which surround these areas (which may need to be cut back to allow clear pathways to be defined).

With regards to the buildings, all three can be demolished, with no negative impacts upon local nesting birds and/or roosting bats being predicted. This is said, as the two gasholders (B1 & B3) are metal structures which possess no utilizable features for these species. Similarly, the brick building (B2) is also considered to be of low ecological value, as it was of solid brick construction, with a flat roof and intact windows and doors – all factors which reduce the number of potential access/roosting points within the building.

With regards to access to C1, it has been stated by Rachael Elliott (of WorleyParsons) that it will be necessary to erect a temporary works compound in between the two gasholders (i.e. within C2), as this will function as an office/work station throughout the duration of the dismantling/demolition works. As mentioned previously, C2 has been assigned the non-statutory designation of LWS, and as such, this area is considered to be of local value to wildlife. With this being the case, it will be necessary to ensure that the proposed vegetation clearance and temporary works compound erection take place in conjunction with appropriate mitigation measures, which could include;

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- Designing potential access routes (which will require vegetation clearance) around any 'pockets' or flora species of conservation concern (which will need to be deciphered via an additional flora survey), in order to maintain the ecological integrity of the remainder of the LWS.
- Relocating any flora species or 'pockets' of habitat which are considered to be of local importance (hence their classification within the LWS designation).
- Placing heras fencing around the temporary works compound (once outlined) in order to prevent encroachment of machinery on the remainder of the LWS (i.e. semi-improved neutral grassland habitat).

Approaching the problem [of the locale of the LWS designation] in this way, will ensure that the proposed works can go ahead as planned, whilst maintaining the ecological integrity of the remainder of the habitat in the long-term.

**Please note:** The recommendations outlined above illustrate potential mitigation measures only, as due to the non-statutory LWS designation, it is up to the local planning authority to assess whether or not the proposed safeguard measures are appropriate to maintain the ecological integrity of the site.

In addition to the protection of the semi-improved grassland habitat within C2, the scrub habitats [present within both C2 and C3] should also be safeguarded, due to their value for local breeding birds. This being said, it will be necessary (particularly within C3) for some vegetation clearance to occur, in order to allow machinery access to the structures to be demolished. The approximate areas which will be affected by proposed vegetation clearance works are highlighted in blue on figure 1/1A, but as of yet, the full extent of these measures remains unknown. This being said, up to now, it would appear that the required vegetation clearance measures are relatively minimal, as access to C1 will predominantly take place along the gravel track which currently stands (which only exhibits minor floral colonization). In contrast to this, some of the overgrown tree specimens (which are situated along the south-eastern boundary of the site) may prevent initial access to the site, so minor management of these specimens (i.e. pruning some of the trees back) may be required.

With regards to C3, entry from the central road (which runs between C2 & C3) will be required in order to gain access to the two buildings to be demolished (B2 and B3). More substantial vegetation clearance will need to occur in this area [than within C2], in order for a wide enough pathway to be created. Typically, it would be recommended that dense vegetation

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clearance occur outside of the bird nesting season (which is between the months of March-August). However, Evolution Ecology Ltd has been informed (by Rachael Elliott – WorleyParsons) that working within this time frame will not be achievable, so instead, supervision works (by a suitably qualified ecologist) will need to be incorporated into the proposed works as to ensure that no nesting birds and/or their eggs/chicks will be harmed during the vegetation clearance works. Preferably [if possible], this should be coupled with the erection of heras fencing around the works perimeter, to prevent encroachment onto nearby valuable habitats.

**Figure 9:** This aerial image details the approximate locations in which the heras fencing could be placed (as indicated by the red line boundaries), in order to safeguard the scrub and semi-improved grassland habitats from damage throughout the duration of the proposed works.



If future works are to spread outside the boundaries surveyed, it will be necessary to conduct an update ecological appraisal in order to incorporate these areas into the plans. In addition to this, if these areas are similar in structure to the habitats within C2, it may be necessary to conduct reptile/amphibian and invertebrate surveys on these areas, in order to establish whether any of these species would be negatively affected by the proposed works. As no plans have been put forward at this time, it is difficult to detail potential future survey works, so this would need to be discussed with the client at a later date.

### Preliminary Ecological Appraisal

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Overall, as long as the suggested habitat safeguard measures are followed, there should be no negative long-term impact upon the habitats present [both onsite and within the immediately surrounding area], which are considered to be of good ecological value to local fauna.

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## Preliminary Ecological Appraisal

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### 5. REFERENCES

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**6. APPENDICES**

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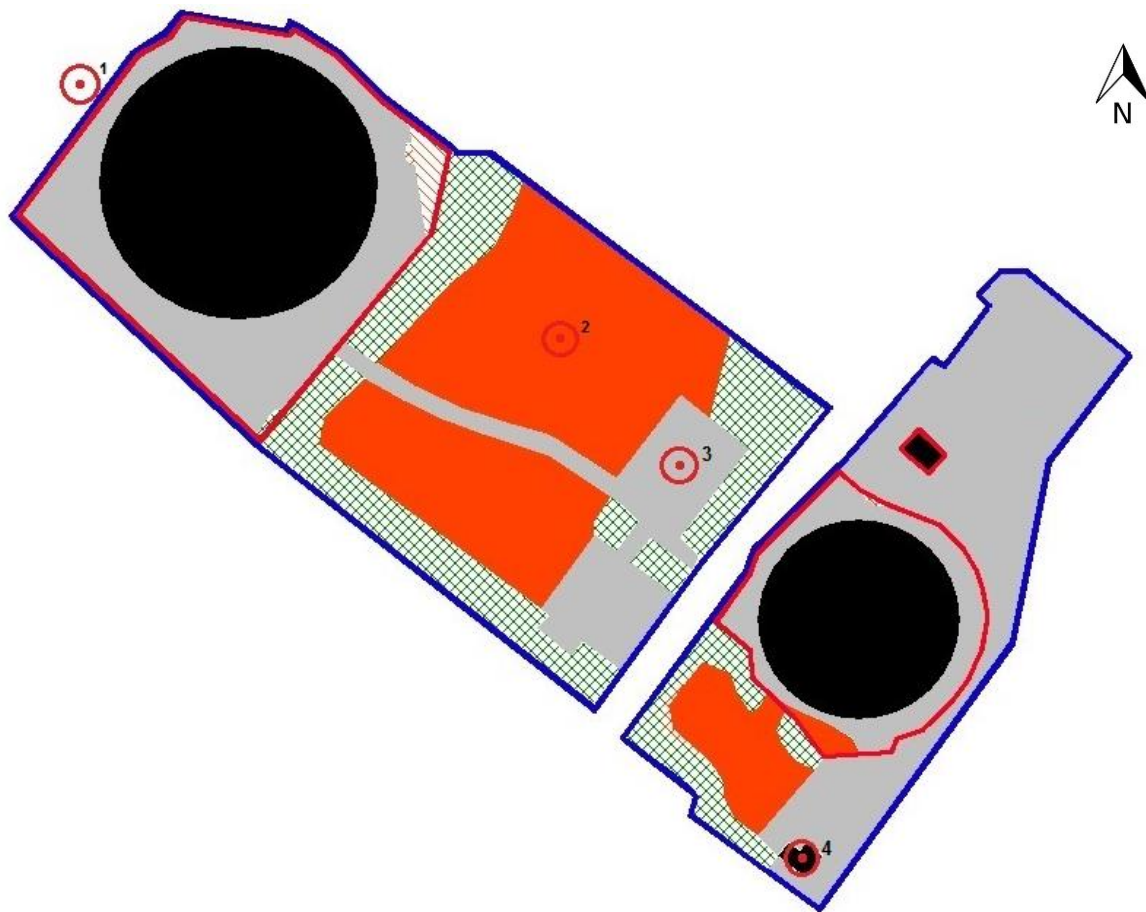
Appendix A: Preliminary Ecological Appraisal (Extended Phase 1 Habitat Map)













Appendix B: Site Plans

Appendix C: Photographic Records

## Preliminary Ecological Appraisal

## Appendix A: Preliminary Ecological Appraisal (Extended Phase 1 Habitat Map).



| Key   |   |
|---|---|
|  | Boundaries of the proposed demolition works   |
|  | Approximate boundaries of the habitats surveyed   |
|  | A2.1 - Scrub  |
|  | B2.2 - Semi-improved neutral grassland  |
|  | C3.1 - Tall ruderal   |
|  | J1.4 - Introduced shrub   |
|  | J3.6 - Buildings  |
|  | J5: Other habitat - Hard standing (with hardy colonizers)   |
|  | A semi-mature (roughly 20-30 year old) woodland tree belt which is located offsite to the west of C1. The species present within this habitat include; mountain ash ( <i>Sorbus aucuparia</i> ), silver birch ( <i>Betula pendula</i> ), sycamore ( <i>Acer pseudoplatanus</i> ) and willow species ( <i>Salix spp.</i> ) |
|  | The main semi-improved neutral grassland habitat which is considered to be of high ecological value   |
|  | The approximate location where the 'temporary works compound' should be erected   |
|  | A building unit which is not to be included within the proposed demolition works  |

Appendix B: A plan which illustrates the approximate boundaries of the gasholder compounds (as illustrated in blue). The areas highlighted in green indicate the buildings which are to be demolished as a part of the proposed works. In addition to this, the wall which separates C3 from the access road is to be demolished, and the area in its entirety is to be levelled off, because as it stands, this area (and its associated gasholder) is raised above the ground by about 2m.



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Appendix C: Photographic Records

A view of the hard standing habitat within C1, in relation to the gasholder to be demolished (B1).



Once again, the hard standing habitat within C1 can be seen in relation to the gasholder, but this image also illustrates the location of the woodland (situated offsite to the west) which was investigated for badger activity.





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A kidney vetch (*Anthyllis vulneraria*) specimen is pictured. This species was particularly abundant within the semi-improved neutral grassland habitat within C2.



A view of the gasholder (B1) within C1. It is clear from this photograph, that the building has limited potential to house protected species (with particular reference to roosting bats and nesting birds).





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This image illustrates the small patch of overgrown false oat grass (*Arrhenatherum elatius*) dominated semi-improved grassland, which was identified directly to the south-east of B3.



B3 (right) in relation to the immediately surrounding hard standing (with a stone overlay) and the most north-westerly gasholder (B1 – left).





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### Preliminary Ecological Appraisal

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This photograph illustrates the scrub, introduced shrub and semi-improved grassland habitats which are located to the south-west of B3. It is proposed that vegetation clearance occur in this area, in order to allow machinery access from the palisade fence (as indicated by the red circle).



Another view of the scrub, introduced shrub and semi-improved grassland habitats within C3, as taken from an eastern viewpoint.



## Preliminary Ecological Appraisal

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Some of the standard (concrete) hard standing habitat within C3 is clear in this image.



Once again, the standard (concrete) hard standing habitat is apparent in this photograph. This area was located directly to the east of B3.





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**7. LIMITING CONDITIONS/DISCLAIMERS (Unless stated otherwise)**

**1. The Service**

- 1.1 Evolution Ecology Ltd agrees to supply Ecological consulting services of a preliminary nature or a more thorough service as advised or as commissioned.

**2. Fees**

- 2.1 The client(s) will settle the agreed fee in full, within 30 days of receiving the invoice. Reports will remain the property of Evolution Ecology Ltd until full payment has been received. No liability is accepted for the contents of a report that is not paid in full. Any queries should be notified to Evolution Ecology Ltd within 7 days of the invoice date.
- 2.2 If the client(s) fails to pay within the time specified in 2.1 then Evolution Ecology Ltd shall charge the client(s) interest on the outstanding fee, both before and after any judgment, at the rate of 4% per annum above the HSBC Bank base rate, until payment is made in full (A part of a month being treated as a full month for the purposes of calculating interest).
- 2.3 In the event that it is necessary to recover any outstanding fees from the client(s), the client(s) will fully reimburse any costs and expenses incurred during the recovery period, including court costs. Evolution Ecology Ltd reserves the right to make a charge for every letter sent and telephone/fax call made, in connection with the recovery.

**3. The Report**

- 3.1 If any part of the report is lost, or altered without the written consent of Evolution Ecology Ltd, then the entire report becomes invalid.
- 3.2 The general format of reports is a certified product and cannot be shown, copied or distributed to third parties without the permission of Evolution Ecology Ltd. No liability is accepted for the contents of the report, other than to that of the client(s).
- 3.3 The report will purport not to express any opinion or comment as to the condition or structural integrity of any building and no reliance should be made on any such comments.

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Preliminary Ecological Appraisal

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**4. Insurance Cover**

- 4.1 All work carried out by Evolution Ecology Ltd is covered by a £1,000,000 professional indemnity insurance.

**5. Quality of Craftsmanship**

- 5.1 When appointing an Ecologist, please use only suitably qualified and experienced companies (The Local Authority and the Institute of Ecology and Environmental Management may be able to provide a select list of such companies).
- 5.2 Evolution Ecology Ltd will not accept liability for any works undertaken by any other companies, or contractors.