



Wild Service

Site Name	Land at the Wheatridge
Prepared by	Will Feirn
Date	07/09/2017

Site description

The Site is located to the south of Gloucester, it is a field of approximately 0.7ha and the central grid reference is SO 83095 15813. The Site is bordered by a railway line to the east, a new housing development to the north west, a sports ground to the north and a dismantled railway line and large secondary school to the south.

The Site forms part of a large playing field that extends to the west and is primarily composed of amenity grassland with small patches of scrub and a hedgerow.

Methodology

An extended Phase 1 habitat survey of the Site was undertaken on 5 September 2017 following standard methods¹. Phase 1 habitat survey provides a rapid means of classifying broad habitat types in any given terrestrial Site.

The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Study Area's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations.

The Study Area was also inspected for signs of any invasive plant species subject to legal controls e.g. Japanese knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

¹ Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough.

Results

Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 habitat map presented in **Figure 1** and the target notes in **Table 1**. The habitats identified on Site included poor semi-improved neutral grassland with scattered shrubs and a species poor defunct hedge.

Table 1: Target Notes.

Target Note	Description
1	There were six scattered hawthorn shrubs within the grassland.
2	Runs that could have been caused by badger were recorded within the species-poor defunct hedge.

Poor semi-improved grassland with scattered scrub

The largest vegetative community on Site was poor semi-improved grassland (**Photo 1**). The dominant species was perennial rye-grass (*Lolium perenne*) but other grass species such as false oat-grass (*Arrhenatherum elatius*), Yorkshire fog (*Holcus lanatus*) and cocksfoot (*Dactylis glomerata*) were also present.

Grassland forbs were present and included meadow vetchling (*Lathyrus pratensis*), bush vetch (*Vicia sepium*), salad burnet (*Sanguisorba minor*), white clover (*Trifolium repens*), red clover (*T. pratense*), ragwort (*Jacobaea vulgaris*), dandelion (*Taraxacum officinale* agg.), meadow buttercup (*Ranunculus acris*), broadleaf plantain (*Plantago major*), creeping cinquefoil (*Potentilla reptans*), common hogweed (*Heracleum sphondylium*) and meadowsweet (*Filipendula ulmaria*).



Photo 1: Poor semi-improved grassland.

The grassland had an intrusion of six scattered hawthorn shrubs (**Target Note 1**).

Species-poor defunct hedge

A defunct, species-poor hedgerow was present along the western, southern and south-eastern boundaries of the Site.

The hedge was mostly comprised of hawthorn, plum (*Prunus domestica*), bramble (*Rubus fruticosus*), elder (*Sambucus nigra*), holly (*Ilex aquifolium*) and ivy (*Hedera helix*). The part of the hedgerow on the south-eastern end of the Site had been planted and was mostly comprised of Leyland cypress (*Cupressus x leylandii*) but cherry (*Prunus* sp.) and hawthorn were also present.



Evaluation and Discussion

No protected species were recorded during the survey, although the habitats present provided opportunities for protected species.

Bats

While the trees on Site did not provide opportunities for roosting bats, the habitats on Site did provide foraging opportunities due to the invertebrate diversity within the poor semi-improved grassland.

Birds

With a variety of trees, hedgerows and shrubs present, opportunities exist for nesting birds within the Site.

Mammals

The habitats on Site were suitable for badger (*Meles meles*) foraging and signs of badger use of the Site were recorded during the survey (**Target Note 2**). Runs that could have been caused by badger were recorded within the hedgerow.

The habitats on Site also provided opportunities for hedgehog (*Erinaceus europaeus*).

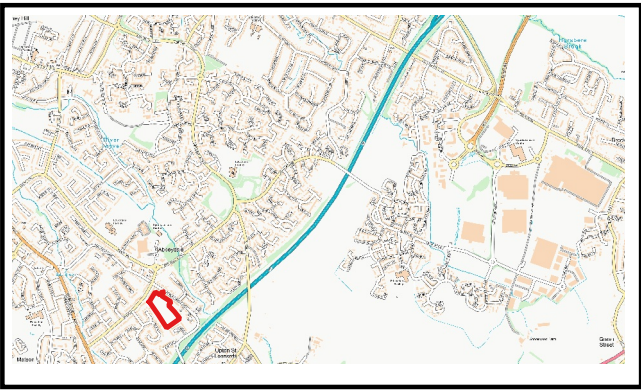
Reptiles

The Site has a mosaic of habitats such as grassland of different heights, hedgerows and shrubs. These provide potential refuges and basking spots for reptiles, and as such, the Site has potential to support populations of common reptile species such as slow worm (*Anguis fragilis*)

Further Surveys

Due to the potential for protected species to be present on site, the following surveys would be advised;

- Bats – bat activity surveys to assess their use of linear features such as hedges;
- Birds – no specific survey is recommended, but vegetation scheduled for removal between March and August must be checked for evidence of breeding birds; and
- Reptiles – presence/absence survey.



PHASE 1 HABITATS 2017

Location:

SA01 Land at the Wheatridge

Scale:

1:1750 @ A4

Drawing No.

1.

Ref:

WS252

Revision:

A.

Drawn by:

WF

Originator:

WF

Date:

28/09/2017

Legend

- Boundary
- Target Notes
- Poor semi-improved grassland
- Intact hedge - species-poor
- Hawthorn intrusion



Wild Service



Wild Service

Site Name	Barnwood Manor
Prepared by	Will Feirn
Date	06/09/2017

Site description

The Site is located to the east of Gloucester and is adjacent to Barnwood Road. It is approximately 2.2ha and the central grid reference is SO 86334 17791. It is surrounded by housing and commercial properties with access from Barnwood Road, Weir Bridge Close and Newstead Road. Barnwood Arboretum Local Nature Reserve is located to the east, 200m downstream of Wotton Brook.

The Site comprised mainly residential buildings and associated infrastructure; along with amenity grassland, a river (Wotton Brook), parkland and rough grassland. The site has also been subjected to ornamental planting.

Methodology

An extended Phase 1 habitat survey of the Site was undertaken on 5 September 2017 following standard methods¹. Phase 1 habitat survey provides a rapid means of classifying broad habitat types in any given terrestrial Site.

The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Study Area's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations.

The Study Area was also inspected for signs of any invasive plant species subject to legal controls e.g. Japanese knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

¹ Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough.

Results

Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 habitat map presented in **Figure 1** and the target notes in **Table 1**. The habitats identified on Site included buildings and hardstanding, amenity grassland, river and parkland.

Table 1: Target Notes.

Target Note	Description
1	The invasive plant species Himalayan balsam was found along the watercourse present on Site.
2	A recently dug mammal burrow was recorded along the watercourse.

Buildings

There were several single storey residential bungalows and associated out-buildings on Site (**Photo 1**). These buildings had voids in the roofs as well as some loose tiles. These features have the potential to provide roosting opportunities for bats.



Photo 1: Buildings and hardstanding within the Site.

Amenity grassland

Amenity grassland was present throughout the Site (**Photo 2**). They were predominantly within the gardens of the bungalows and in the communal areas such as the Manor Gardens. These areas were heavily manicured and as such were dominated by perennial rye-grass (*Lolium perenne*). Grassland forbs were abundant, but low in richness. Species noted included self-heal (*Prunella vulgaris*), autumn hawkbit (*Scorzoneroides autumnalis*), white clover (*Trifolium repens*) and red clover (*Trifolium pratense*).

There was ornamental planting of shrubs and trees amongst the amenity grassland (**Photo 2**); especially amongst the residents' gardens and the Manor Gardens. The majority of the shrubs included box (*Buxus* spp.), *Pyracantha* spp. and *Hypericum* spp., while planted trees comprised cherry (*Prunus* spp.), silver birch (*Betula pendula*), whitebeam (*Sorbus aria*), and ash (*Fraxinus excelsior*).



Photo 2: Amenity grassland with standard trees.

River

Wotton Brook river runs through the southern end of the Site. At the time of survey, the running water appeared clear and was running over a rocky substrate. The river water was classified as oligotrophic.

Himalayan balsam (*Impatiens glandulifera*) was found along the watercourse (**Target Note 1**). This is an alien invasive floristic species and is subject to legal controls.

Parkland

At the southern limit of the Site there is a large area of parkland. The parkland consisted of planted trees and shrubs, with a field layer consisting of rough grassland. Trees and shrubs that were recorded included hazel (*Corylus avellana*), sycamore (*Acer pseudoplatanus*), willow (*Salix* spp.), cherry, elder (*Sambucus nigra*), horse chestnut (*Aesculus hippocastanum*), whitebeam, butterfly bush (*Buddleja*), field maple (*Acer campestre*) and damson (*Prunus domestica*).

The field layer of the parkland consisted of rough grassland that has been subjected to a less intensive mowing regime compared to the areas of amenity grassland and as such can be classified as semi-improved neutral grassland. The dominant species in the rough grassland were: perennial rye-grass, Yorkshire fog (*Holcus lanatus*), red fescue (*Festuca rubra*) and false oat-grass (*Arrhenatherum elatius*). Grassland forbs included white clover, yarrow (*Achillea millefolium*), meadow buttercup (*Ranunculus acris*), creeping buttercup (*Ranunculus repens*), broad-leaved plantain (*Plantago major*), broad-leaved dock (*Rumex obtusifolius*), pendulous sedge (*Carex pendula*), ivy (*Hedera helix*), nettle (*Urtica dioica*), daisy (*Bellis perennis*) and dandelion (*Taraxacum* agg.).

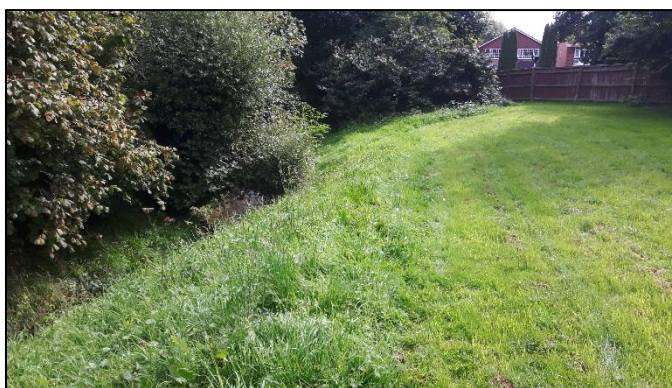


Photo 3: Rough grassland towards to the southern boundary of the site.

Evaluation and Discussion

No protected species were recorded during the survey, although the habitats present provided opportunities for protected species.

Bats

The buildings present on Site had roof voids, along with some loose tiles which can provide roosting opportunities for bats. The trees on Site did not offer any potential roosting features. The area of parkland and river also provide foraging opportunities; and the river provides a linear feature which provides a commuting opportunity.

Birds

With a variety of trees and shrubs on Site, there is opportunity for nesting birds.

Mammals

The river provides habitat for several protected mammal species including water vole (*Arvicola amphibious*) and otter (*Lutra lutra*). Water voles were not recorded during the survey, but with marginal vegetation and step banks the river does provide potential habitat. Otters were also not recorded during the survey but potential field signs were present. Slips were seen along the river just outside of the Site boundary and a freshly dug burrow was found located in the river bank (see **Target Note 2**).

No evidence of setts was observed, although the rough grassland is suitable for foraging and connectivity to Barnwood Arboretum provides opportunity for badger (*Meles meles*) to occupy and utilise the Site. The grassland also provides potential foraging and nesting habitat for hedgehog (*Erinaceus europaeus*).

Whilst surveying the parkland, a total of five foxes (*Vulpes vulpes*) were recorded. While foxes are not protected under UK law, they may indicate that area is rich in prey species such as small mammals and birds.

Reptiles

With a mosaic of habitats, the site has potential to hold populations of reptiles such as grass snake (*Natrix helvetica*) and slow worm (*Anguis fragilis*). The site has a mosaic of grasslands with different sward heights, water courses, and shrubs and trees. These provide refuges and basking spots for reptiles.

Further Surveys

Due to the potential for protected species to be present on site, the following surveys would be advised;

- Bats – building inspections (and any required emergence/re-entry surveys) and activity survey;
- Birds – no specific survey is recommended, but vegetation scheduled for removal between March and August must be checked for evidence of breeding birds;
- Otter and water voles – a survey of the watercourse for recent evidence of presence; and
- Reptile presence/absence survey.

Ecological Opportunities

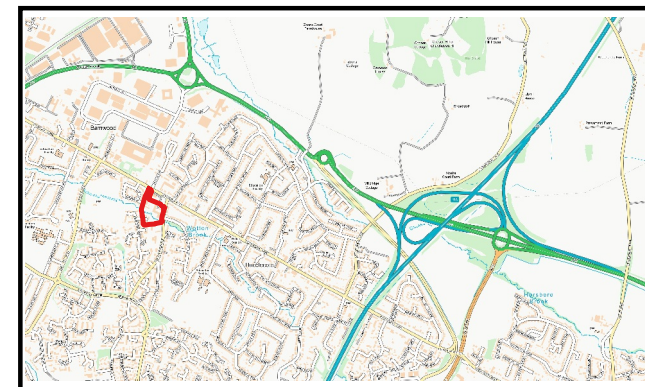
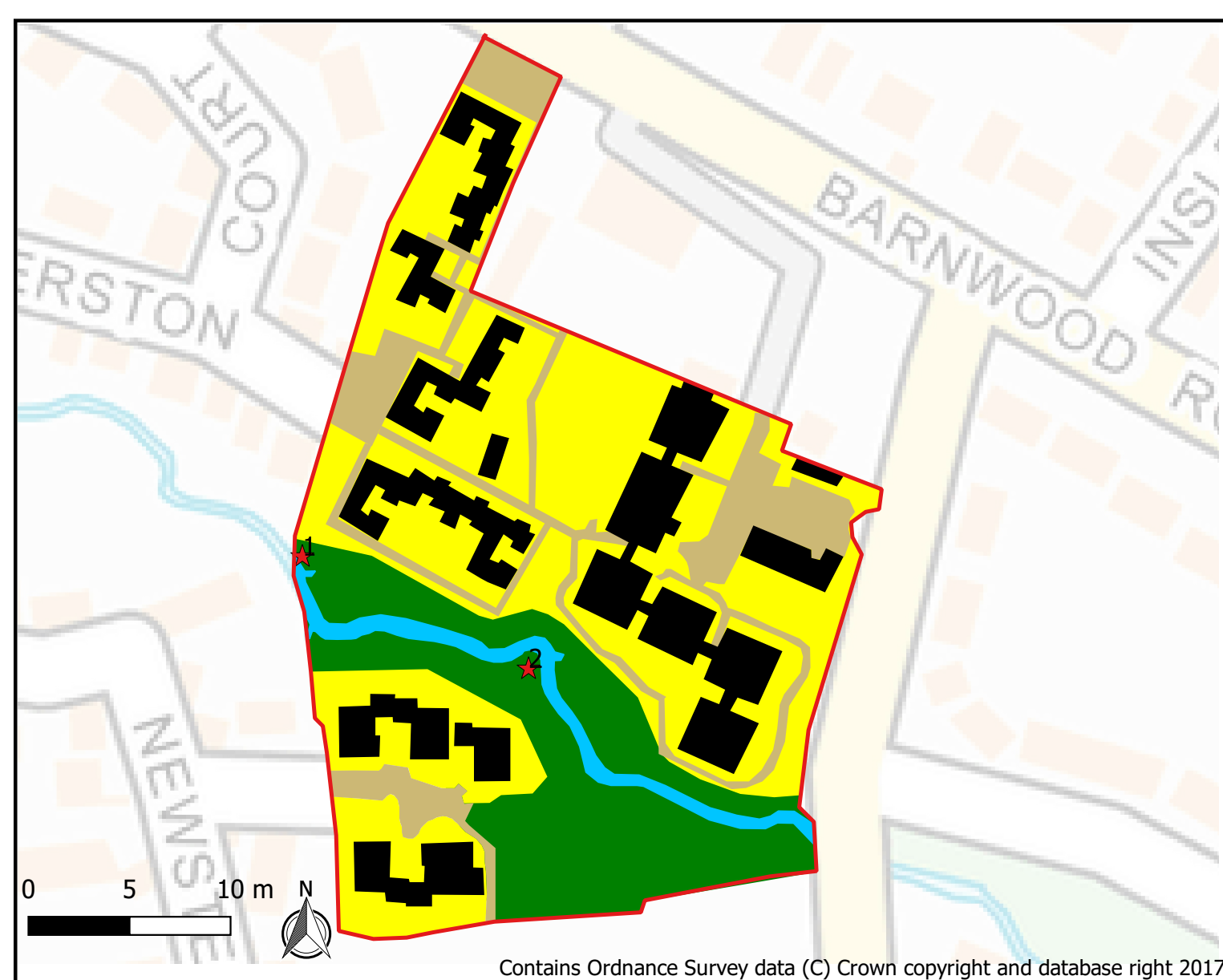
Wildlife corridor

Wotton Brook is part of an ecological network that connects green spaces such as Barnwood Arboretum Nature Reserve and Plock Court across the Severn Vale. As a river system, it is connected to Horsbere Brook and the River Severn. This means that it not only acts as a highway for aquatic species such as otter and water vole, but also for species such as bats, birds and reptiles as the brook is predominantly lined by trees along the length of its course.

Development of the parkland and river on Site could lead to the fragmentation of this wildlife corridor, as well as affecting the ecosystem down-stream due to runoff and possible pollutants entering the watercourse.

On-site enhancement

With appropriate management, there is opportunity to increase biodiversity on Site within the area of parkland and along the river. There is opportunity to increase invertebrate diversity as well as provide opportunities for reptiles, mammals and birds.



PHASE 1 HABITATS 2017

Location:

SA02 Barnwood Manor,
Barnwood Road

Scale:

1:1500 @ A4

Drawing No.

1.

Ref:

WS252

Revision:

A.

Drawn by:

WF

Originator:

WF

Date:

28/09/2017



Wild Service

Legend

- Boundary
- ★ Target Notes
- A3.1 = Broadleaved Parkland/scattered trees
- G2.2 = Running water - mesotrophic
- J1.2 = amenity grassland
- J3.6 = Buildings
- J5 = Hard standing



Wild Service

Site Name	Great Western Road Sidings
Prepared by	Glenn Norris
Date	15/03/2018

Site description

The Site is located in Gloucester City Centre, immediately east of the central station. It is approximately 4.3ha and the central grid reference for is SO 84140 18371. The sidings are post-industrial yards associated with the adjacent railway line. The surrounding land-use is a mix of industrial and commercial buildings.

The Site consists of disused railway sidings, buildings and yards that have gradually been colonised by plants dispersing along the railway lines.

Methodology

An extended Phase 1 habitat survey of the Site was undertaken on 14 March 2018 following standard methods¹. Phase 1 habitat survey provides a rapid means of classifying broad habitat types in any given terrestrial Site.

The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Study Area's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations.

The Study Area was also inspected for signs of any invasive plant species subject to legal controls e.g. Japanese knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

Due to proximity to the railway lines, access to the Site was limited, so a full inspection could not be completed. However, enough of the Site was visible to ascertain a confident assessment of what ecological features would be present.

¹ Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough.

Results

Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 habitat map presented in **Figure 1**. The habitats identified on Site included scrub, bare ground and trees.

Railway lines, buildings and hardstanding

As a space previously used for industry, there was little natural substrate for plants and trees to grow. Where these areas remained in use by vehicles, vegetative growth was restricted leaving bare hardstanding.

The railway lines within the Site did not appear to have been used for some time, so where less impenetrable substrate was present, such as gravel, bryophytes, hardy grasses, plants and scrub had developed.

The buildings were brick-built and some had fallen in to a state of disrepair. **Photo 1** shows the condition of the buildings nearest to Horton Road.



Photo 1: Example of the condition of buildings on Site.

Scattered scrub

Where the sidings were seldom used, buddleia was dominant due to its ability to survive, and thrive, in dry, low nutrient habitats. **Photo 2** shows the extent of buddleia towards the eastern end of the Site.



Photo 2: Example of scrub encroachment throughout the Site.

Evaluation and Discussion

No protected species were recorded during the survey, although the habitats present provided opportunities for protected species.

Bats

The buildings on Site were in poor condition and likely to present opportunities for bats to find access to internal areas for roosting. No mature trees with potential roost features appeared to be present.

Being adjacent to the railway line, the Site provides excellent access to other brownfield areas within Gloucester, including the nearby Southern Railway Triangle, and the mixture of scrub and low-growing ephemeral vegetation provide suitable foraging habitat within the Site.

Birds

There was ample bird nesting and foraging opportunities within the Site due to the available habitat. However, the location and condition of the habitats were not likely to attract rare species.

Hedgehog

The areas of scrub provide habitat for hedgehog nesting and foraging.

Reptiles

With a mosaic of habitats, and the proximity of the Site to railway lines, the site has potential to hold populations of reptiles such as slow worm. The presence of debris on the Site may also provide potential refugia and basking locations.

Further Surveys

Due to the potential for protected species to be present on site, the following surveys would be advised;

- Bats – building inspections (and any required emergence/re-entry surveys) if any buildings are scheduled to be removed or altered and bat activity surveys;
- Birds – no specific survey is recommended, but vegetation scheduled for removal between March and August must be checked for evidence of breeding birds;
- Reptiles – presence/absence survey; and
- Invertebrates – an assessment of important habitats for invertebrates should be considered.



Wild Service



Legend

- Site boundary
- ▨ Scrub
- Buildings
- Hardstanding

Phase 1 Habitats Map

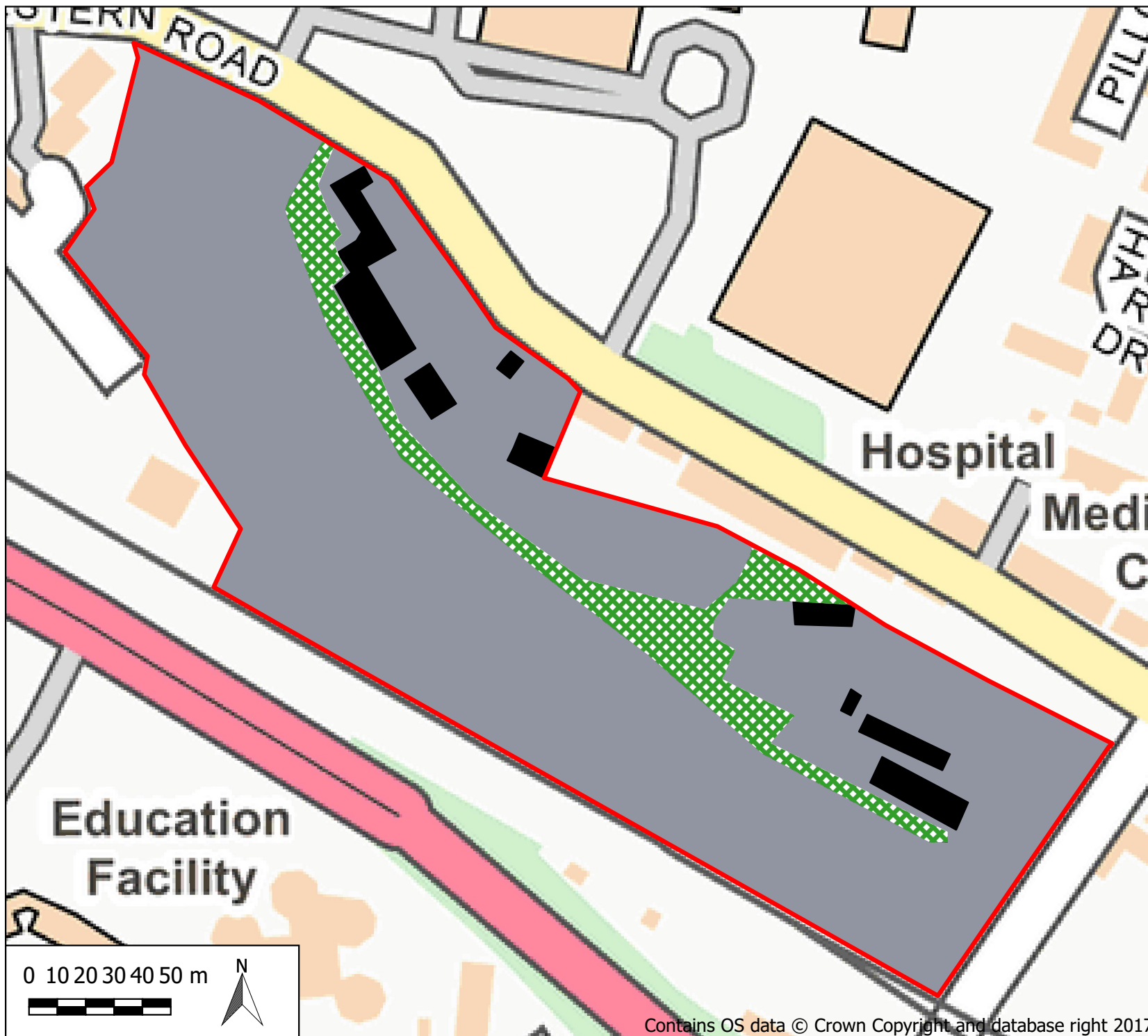
HA20A Gloucester

Date: 16 March 2018

Scale: 1:3,000

Drawn by: OG

Drawing: Figure 1



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Wild Service

Site Name	Lynton Fields
Prepared by	Glenn Norris
Date	22/01/2019

Site description

The Site is located to the south of Gloucester, near Hardwicke. It is approximately 2ha and the central grid reference is SO 81832 12641. It is surrounded by car parks to the north and east, industrial buildings to the west and three large houses to the south. The site itself is used for free-range poultry and fowl farming. The surrounding area of Hardwicke is a mix of residential, commercial and agricultural land-use.

The Site comprised mainly improved grassland with buildings related to the poultry business.

Methodology

An extended Phase 1 habitat survey of the Site was undertaken on 22nd January 2019 following standard methods¹. Phase 1 habitat survey provides a rapid means of classifying broad habitat types in any given terrestrial Site.

The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Study Area's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations.

The Study Area was also inspected for signs of any invasive plant species subject to legal controls e.g. Japanese knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

¹ Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough.

Results

Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 habitat map presented in **Figure 1** and the target notes in **Table 1**.

Table 1: Target Notes.

Target Note	Description
1	There are approximately 8 mature trees in the south-west corner of the site with heavy ivy cover. It is possible the ivy may cover potential roosting features for bats.

Improved grassland

The south of the site is a large field (approximately 1.5ha) which is dominated by improved grassland (**Photo 1**). The dominant species were cock's-foot *Dactylus glomerata* and false oat-grass *Arrhenatherum elatius* forming tussocks of rank grassland. There are small areas where scattered scrub consisting of a few hawthorn *Crataegus monogyna* with bramble *Rubus fruticosus* around the base.



Photo 1: Improved grassland in the southern part of the site.

Hedgerow

The site is surrounded by hedgerows on each boundary, although they vary in structure (**Photos 2 and 3**). The western hedgerow is unmanaged and is more a line of bramble scrub with occasional hawthorn *Crataegus monogyna*. Towards the southern end of the boundary, mature trees begin to dominate, and the bramble scrub reduces in abundance. The eastern boundary also appears unmanaged and is dominated by hawthorn with occasional blackthorn *Prunus spinosa*, dog rose *Rosa* sp. and elder *Sambucus nigra*. The hedgerow fronting the road along the northern boundary is more formal hawthorn hedge with heavy ivy *Hedera helix* cover.



Photos 2 and 3: Hedgerows along the west and east boundaries.

Ditch

There is a ditch running along the southern boundary of the site with banks of scrub and mature trees. To the eastern end of the ditch the flow slows, and some aquatic vegetation has begun to develop (**Photo 4**).



Photo 4: Evidence of aquatic vegetation appearing in the slower flowing parts of the ditch.

Buildings

The majority of buildings on site are of modern metal construction and regularly used by the existing poultry business. The lack of roosting opportunities for bats and the regular disturbance makes these buildings unlikely to be used by bats. There is a single-storey house with a tiled hipped roof (**Photo 5**). The tiles appear to be tightly fitting with none missing. The brickwork is in good condition with no obvious cracks for bat ingress. There does appear to be small gaps visible under the eaves that may allow access for bats. The house is considered to offer low roost potential for bats.



Photo 5: building with low bat roost potential.

Evaluation and Discussion

No protected species were recorded during the survey, although the habitats present provided opportunities for protected species.

Bats

The only building that offers roosting potential is the house. The mature trees around the boundary may provide roosting features hidden by the ivy cover and should be considered in any future development proposal. The site provides moderate quality foraging habitat with a mixture of hedgerows, trees and grassland. It is also relatively well-connected to the wider habitats via hedgerows and tree-lines.

Birds

With a variety of trees and shrubs on Site, there is opportunity for nesting birds.

Badger

There was no evidence of badger, although the site provides excellent foraging habitat and may be used by badgers living the local area.

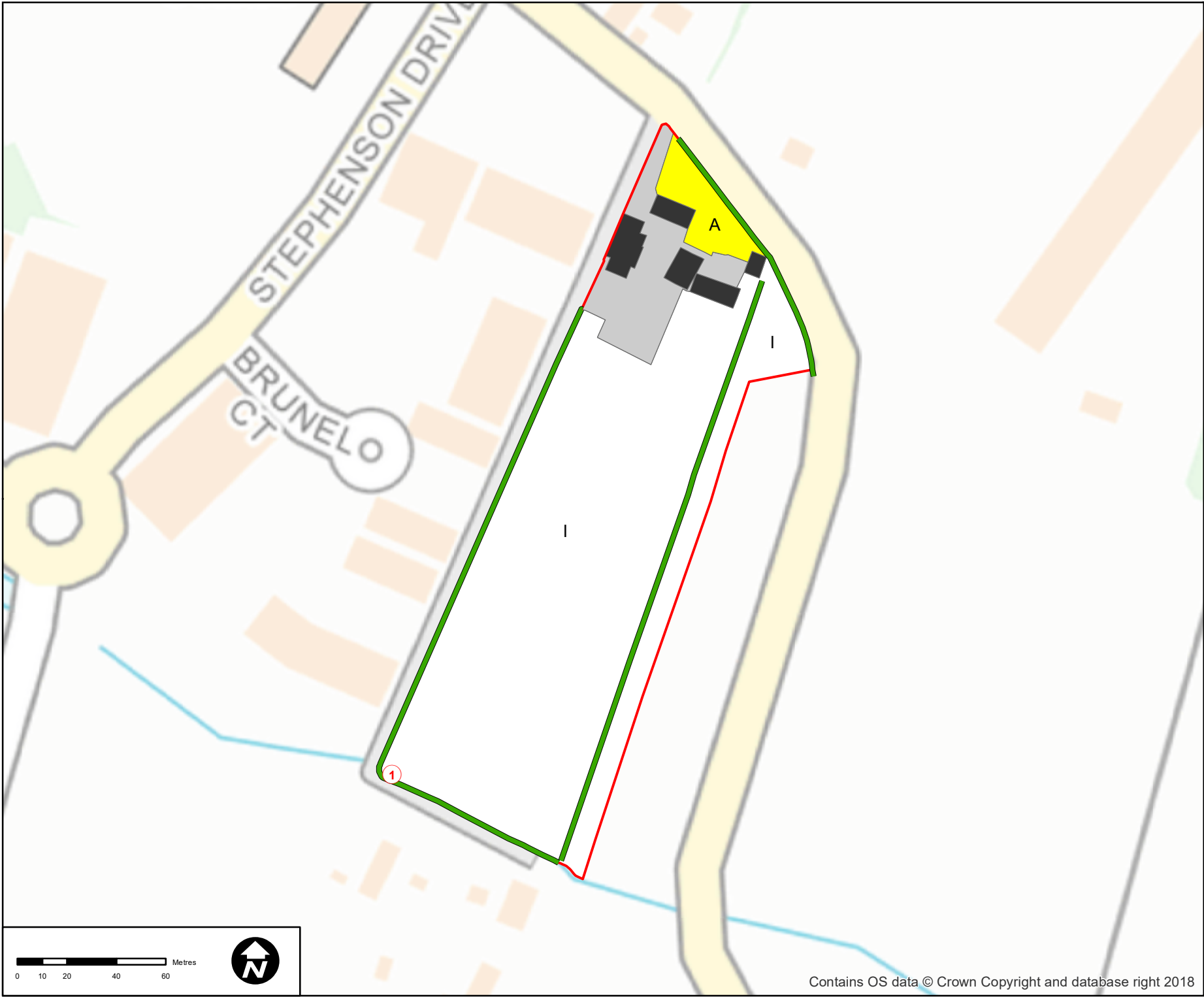
Reptiles

The site is largely a field of improved grassland and mixed scrub, providing excellent habitat for common reptiles such as slow-worms. Furthermore, the site field is littered with debris that would make suitable refugia and potential hibernacula.

Further Surveys

Due to the potential for protected species to be present on site, the following surveys would be advised;

- Bats – building inspections (and any required emergence/re-entry surveys) and activity survey;
- Birds – no specific survey is recommended, but vegetation scheduled for removal between March and August must be checked for evidence of breeding birds; and
- Reptiles – presence/absence survey.



Legend

Site boundary

Habitat

- Improved grassland
- Amenity grassland
- Building
- Hardstanding
- Hedgerow
- 1 Target note



Wild Service

Phase 1 Habitats

Lynton Fields, Gloucester

Scale 1:2,000 @ A4		Drawing No. Figure 1	
Drawn By CC	Originator GN	Date	28/01/2019
Ref. GN2018065A		Revision A	

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Wild Service

Site Name	Land at St. Oswalds
Prepared by	Will Feirn
Date	12/09/2017

Site description

The Site is located on the north-western end of Gloucester, with the River Severn to the west and the Twyver to the north. The Site is approximately 3.6ha and the central grid reference is SO 82658 19415. It is immediately surrounded by a mix of residential and commercial properties to the north and east, a large open green space formed by grassland and flood plain to the west and a railway line to the south.

The Site is a typical 'brownfield' and is comprised of a mix of hardstanding, scrub, tall ruderal vegetation and broadleaved woodland.

Methodology

An extended Phase 1 habitat survey of the Site was undertaken on 5 September 2017 following standard methods¹. Phase 1 habitat survey provides a rapid means of classifying broad habitat types in any given terrestrial Site.

The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Study Area's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations.

The Study Area was also inspected for signs of any invasive plant species subject to legal controls e.g. Japanese knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

¹ Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough.

Results

Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 habitat map presented in **Figure 1** and the target notes in **Table 1**. The habitats identified on Site included hardstanding, continuous scrub, tall ruderal vegetation and broadleaved woodland.

Table 1: Target Notes.

Target Note	Description
1	On the south-western end of the hardstanding there was a large pile of wood chippings.
2	There was a pile of house bricks among the scrub on the northern end of the Site.
3	There was a pile of rubble on the south-eastern end of the Site.

Hardstanding

Most of the Site is composed of hardstanding. Where cracks have formed in the tarmac, plant species have started to grow, including ox-eye daisy (*Leucanthemum vulgare*), white stonecrop (*Sedum album*), ragwort (*Jacobaea vulgaris*), great mullein (*Verbascum thapsus*), buddleia (*Buddleja* sp.) and perforate St. John's-wort (*Hypericum perforatum*). In the southern end of the hardstanding were two features of note; which included a pile of wood chippings (see **Target Note 1; Photo 1**) and a pile of aggregate (see **Target Note 3**).



Photo 1: Pile of wood chippings.

Continuous scrub

There were three areas of dense and continuous scrub within the Site. There was a large area of scrub to the north-east of the Site, and two bands of scrub that run along the south-east boundary and the centre of the Site.

The scrub had abundant bramble (*Rubus fruticosus*), with occasional hawthorn (*Crataegus monogyna*), elder (*Sambucus nigra*), rose (*Rosa* spp.), nettle (*Urtica dioica*) and buddleia. Willow (*Salix* spp.), perforate St. John's-wort and silver birch (*Betula pendula*) were locally common.

There was pile of house bricks among the scrub on the northern end of the Site (see **Target Note 2; Photo 2**).



Photo 2: Pile of house bricks amongst the scrub/tall ruderal mosaic.

Tall ruderal vegetation

There was an area of tall ruderal vegetation that run along the north-western, western and south-western boundaries of the Site. The vegetation on this habitat was composed of oxeye daisy, hazel (*Corylus avellana*), meadow vetchling (*Lathyrus pratensis*), perforate St. Johns-wort, black medick (*Medicago lupulina*), slender sedge (*Carex gracilior*), great mullein and buddleia.

Semi-natural broadleaved woodland

There was a band of broad-leaved woodland along the western boundary of the site and was mostly composed of willow with a field layer of bramble.

Evaluation and Discussion

No protected species were recorded during the survey, although the habitats present provided opportunities for protected species.

Bats

The scrub, woodland and tall ruderal vegetation provide moderate foraging and commuting opportunities for bats.

Birds

With a variety of trees and shrubs on Site, there is opportunity for nesting birds.

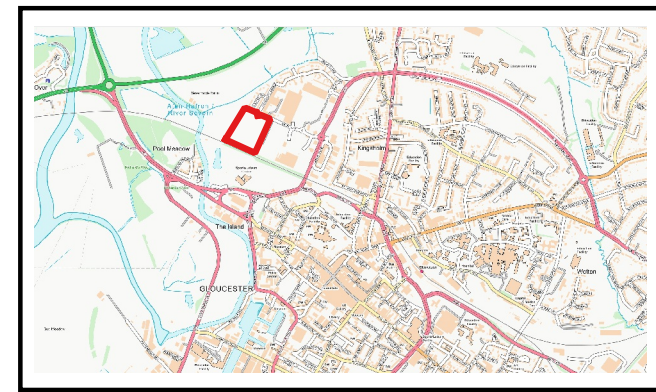
Reptiles

With a mosaic of habitats, the site has potential to hold populations of reptiles such as grass snake (*Natrix helvetica*) and slow worm (*Anguis fragilis*). The site has typical 'brownfield' characteristics, which are known for their reptile habitat. There are also features that can act as hibernacula, which provide refuges and basking spots for reptiles (see **Target Note 1, 2 & 3**).

Further Surveys

Due to the potential for protected species to be present on site, the following surveys would be advised;

- Bats – bat activity surveys to assess their use of the Site;
- Birds – no specific survey is recommended, but vegetation scheduled for removal between March and August must be checked for evidence of breeding birds; and
- Reptiles – presence/absence survey.



PHASE 1 HABITATS 2017

Location:

Land at St. Oswalds
Gloucester

Scale:

1:1750 @ A4

Drawing No.

1.

Ref:

WS252

Revision:

A.

Drawn by:

WF

Originator:

WF

Date:

28/09/2017



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Legend

— Boundary

★ Target Note

■ A1.1.1 - Broadleaved woodland - semi-natural

■ A2.1 - Scrub - dense/continuous

■ C3.1 - Other tall herb and fern - ruderal

■ J5 - Hard Standing



**Wild
Service**



Wild Service

Site Name	Land adjacent to former Blackbridge Allotments
Prepared by	Will Feirn
Date	07/09/2017

Site description

The Site is located to the south of Gloucester, it is a field of approximately 0.7ha and the central grid reference is SO 83095 15813. The Site is bordered by a railway line to the east, a new housing development to the north-west, an sports ground to the north and a dismantled railway line and large secondary school to the south.

The Site forms part of a large playing field that extends to the west and is primarily composed of amenity grassland with small patches of scrub and a hedgerow.

Methodology

An extended Phase 1 habitat survey of the Site was undertaken on 5 September 2017 following standard methods¹. Phase 1 habitat survey provides a rapid means of classifying broad habitat types in any given terrestrial Site.

The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Study Area's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations.

The Study Area was also inspected for signs of any invasive plant species subject to legal controls e.g. Japanese knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

¹ Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough.

Results

Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 habitat map presented in **Figure 1** and the target notes in **Table 1**. The habitats identified on Site included amenity grassland, continuous scrub and a species poor hedgerow.

Table 1: Target Notes.

Target Note	Description
1	The boundary of the Site along the southern and eastern ends are composed of dense continuous scrub.
2	There is a species-poor intact hedgerow along the northern boundary of the Site.

Amenity grassland

The majority of the Site was composed by amenity grassland with an intensive mowing regime (**Photo 1**). The dominant species was perennial rye-grass (*Lolium perenne*). Grassland forbs were present and included red clover (*Trifolium pratense*), white clover (*Trifolium repens*), autumn hawkbit (*Scorzoneroides autumnalis*), broad-leaved plantain (*Plantago major*), yarrow (*Achillea millefolium*), self-heal (*Prunella vulgaris*), daisy (*Bellis perennis*) and dandelion (*Taraxacum officinale* agg.).



Photo 1: Example of the large expanse of amenity grassland.

Continuous scrub

The Site is bordered by dense and continuous scrub along the southern, eastern and north-western ends (**Target Note 1**; **Photo 2**). The areas of scrub appeared once to have been part of the hedgerow, which has since been lost due to a lack of management.

The area of scrub along the southern boundary of the Site is comprised of hawthorn (*Crataegus monogyna*), ash (*Fraxinus excelsior*), rose (*Rosa* spp.), bramble (*Rubus fruticosus* agg.), nettle (*Urtica dioica*) and old man's beard (*Clematis vitalba*). The area of scrub that forms the eastern and north-western boundary of the Site is composed of ash, sycamore (*Acer pseudoplatanus*),

cherry (*Prunus avium*), hawthorn, blackthorn (*Prunus spinosa*), creeping thistle (*Cirsium arvense*), nettle, autumn hawkbit, ragwort (*Jacobaea vulgaris*) and bramble.



Photo 2: Dense scrub surrounding the boundary of the Site.

Species-poor hedge

The northern limit of the Site is composed by an intact hedge which is not rich in native species (**Target Note 2**). The hedge is formed of blackthorn, ivy (*Hedera helix*), bramble, nettle and herb Robert (*Geranium robertianum*).

Evaluation and Discussion

No protected species were recorded during the survey, although the habitats present provided opportunities for protected species.

Birds

With a variety of trees, hedgerows and shrubs present, opportunities exist for nesting birds within the Site.

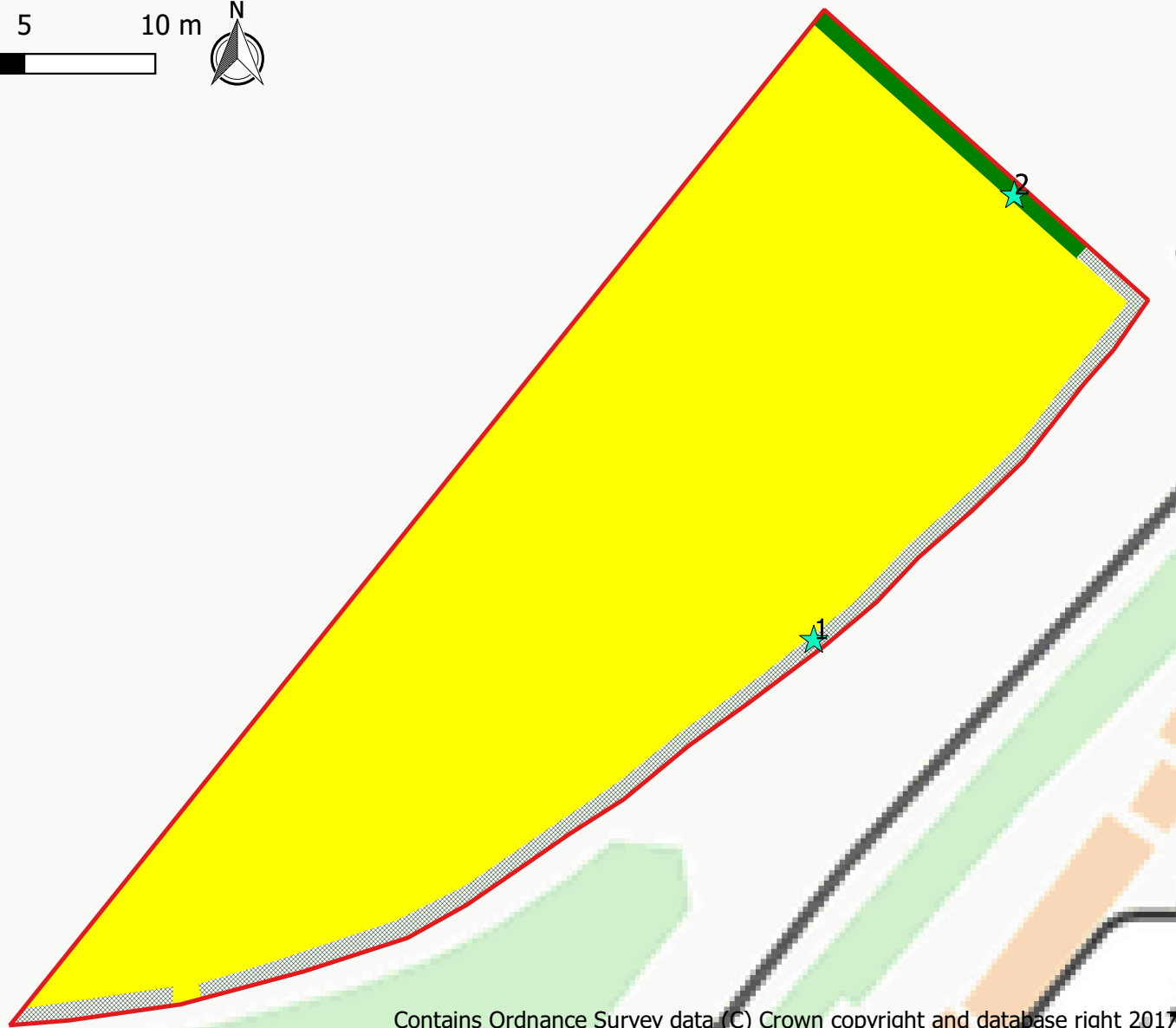
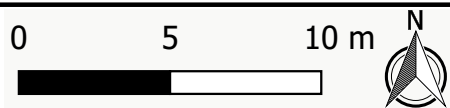
Reptiles

While the dominant habitat is amenity grassland with a short sward height, the site has hedgerows and scrub that could provide refuges and basking spots for common reptiles such as slow worm (*Anguis fragilis*).

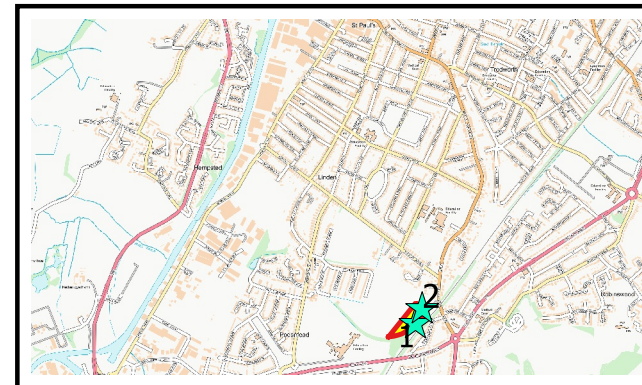
Further Surveys

Due to the potential for protected species to be present on site, the following surveys would be advised;

- Birds – no specific survey is recommended, but vegetation scheduled for removal between March and August must be checked for evidence of breeding birds.



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PHASE 1 HABITATS 2017

Location:

SA24 Land adjacent former
Blackbridge Allotments

Scale:

1:1250 @ A4

Drawing No.

1.

Ref:

WS252

Revision:

A.

Drawn by:

WF

Originator:

WF

Date:

28/09/2017

Legend

-  Target Notes
-  Blackbridge
-  A2.1 = dense scrub
-  J1.2 = amenity grassland
-  J2.1.2 = Intact hedge - species-poor



**Wild
Service**



Wild Service

Site Name	Land at East of Sneedhams Road
Prepared by	Olatz Gartzia
Date	03/11/2017

Site description

The Site is located on the south-eastern edge of Gloucester, off Winnycroft Lane. It is approximately 0.22ha and the central grid reference for is SO 85080 14484. It is surrounded by a mostly agricultural landscape, with large arable fields and pasture lands linked by a well-established network of hedgerows. There is also a housing estate immediately north from the Site. Robinswood Hill Country Park is located approximately 250m west from the Site.

The Site comprised a field of semi-improved grassland, a building with a garden, hedgerows and patches of scrub.

Methodology

An extended Phase 1 habitat survey of the Site was undertaken on 30 October 2017 following standard methods¹. Phase 1 habitat survey provides a rapid means of classifying broad habitat types in any given terrestrial Site.

The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Study Area's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations.

The Study Area was also inspected for signs of any invasive plant species subject to legal controls e.g. Japanese knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

¹ Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough.

Results

Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 habitat map presented in **Figure 1** and the target notes in **Table 1**. The habitats identified on Site included semi-improved grassland, building associated garden, hedgerow and scrub.

Table 1: Target Notes.

Target Note	Description
1	There was a residential building on the south-western end of the Site which had some features for roosting bats.

Poor semi-improved grassland

The majority of the Site was composed of poor semi-improved grassland, partly grazed by a horse (**Photo 1**). This habitat had abundant cocksfoot (*Dactylis glomerata*), with frequent creeping thistle (*Cirsium arvense*), creeping buttercup (*Ranunculus repens*), red clover (*Trifolium pratense*) and bristly oxtongue (*Picris echioides*). Ribwort plantain (*Plantago lanceolata*), curled dock (*Rumex crispus*), creeping thistle (*Cirsium arvense*) and nettle (*Urtica dioica*) were also present occasionally.

There were mature scattered trees present within the grassland, including apple tree (*Malus domestica*) and walnut (*Juglans regia*). None of the trees had potential to support roosting bats.



Photo 1: Poor semi-improved grassland with apple tree.

Building

There was a modern residential building on the south-western end of the Site (**Target Note 1; Photo 2**). The building had a pitched roof clad with slate tiles and soffited overhanging eaves. Some loose tiles were recorded on the roof which could provide access to bats.



Photo 2: Residential dwelling within the Site.

Garden

There was a garden area surrounding the house, which was composed of amenity grassland and an area of planted vegetables and ornamental plants.

The amenity grassland was very manicured and was dominated by perennial rye-grass (*Lolium perenne*) with occasional red clover, white clover (*Trifolium repens*), daisy (*Bellis perennis*) and white dead-nettle (*Labium album*).

Hedgerow

The western boundary of the Site comprised a species poor hedge dominated by hawthorn (*Crataegus monogyna*) with occasional ivy (*Hedera helix*) and bramble. English elm (*Ulmus minor*) and oak (*Quercus robur*) were present in the hedge.

There was a planted ornamental hedgerow composed of beech (*Fagus sylvatica*).

Scrub

There were several areas of dense scrub on the northern and eastern end of the Site (**Photo 3**). The scrub was dominated by bramble with frequent nettle (*Urtica dioica*), and occasional old man's beard (*Clematis vitalba*).



Photo 3: An example of scrub towards the northern boundary of the Site.

Evaluation and Discussion

No protected species were recorded during the survey, although the habitats present provided opportunities for protected species.

Bats

The building on Site had some loose tiles which can provide roosting opportunities for bats. The trees on Site did not offer any potential roosting features. The hedgerow, scrub, improved-grassland provide low to moderate foraging and commuting opportunities.

Birds

With a variety of trees and shrubs on Site, there is opportunity for nesting birds.

Badger

No evidence of setts was observed; however, well-worn badger paths and push-throughs were observed in the scrub on the northern end of the Site, indicating badger utilise the site.

Hedgehog

The areas of continuous scrub, hedgerow and semi-improved grassland provide habitat for hedgehog nesting and foraging.

Reptiles

With a mosaic of habitats, the site has potential to hold populations of reptiles such as slow worm. The site has a mosaic of grasslands with different sward heights, shrubs and trees. These provide refuges and basking spots for reptiles.

Further Surveys

Due to the potential for protected species to be present on site, the following surveys would be advised;

- Bats – building inspections (and any required emergence/re-entry surveys) if any buildings are scheduled to be removed or altered and bat activity surveys;
- Birds – no specific survey is recommended, but vegetation scheduled for removal between March and August must be checked for evidence of breeding birds; and
- Reptiles – presence/absence survey.



Wild Service

Site Name	Southern Railway Triangle
Prepared by	Glenn Norris
Date	15/03/2018

Site description

The Site is located to the east of Gloucester City Centre, immediately south of Metz Way. It is approximately 4.2ha and the central grid reference for is SO 84579 17861. It is immediately surrounded by two railway lines and Metz Way, with industrial and residential buildings in the wider area.

The Site has been left fallow for some time in which scrub has developed in areas out of use by the Network Rail depot.

Methodology

An extended Phase 1 habitat survey of the Site was undertaken on 14 March 2018 following standard methods¹. Phase 1 habitat survey provides a rapid means of classifying broad habitat types in any given terrestrial Site.

The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Study Area's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations.

The Study Area was also inspected for signs of any invasive plant species subject to legal controls e.g. Japanese knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

Due to proximity to the railway lines, access to the Site was limited, so a full inspection could not be completed. However, enough of the Site was visible to ascertain a confident assessment of what ecological features would be present.

¹ Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough.

Results

Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 habitat map presented in **Figure 1**. The habitats identified on Site included scrub, bare ground and trees.

Scattered scrub

The majority of the Site was composed of scattered scrub. Buddleia, bramble and hawthorn were prevalent with occasional blackthorn. Bramble was beginning to encroach small areas of grassland that had appeared after recent earth movements. Much of the Site was made inaccessible by the thickness of this scrub.



Photo 1: Scattered Scrub throughout the Site.

Bare ground

There were metalled tracks running along the north of the Site, and through the centre to the railway line. Other areas of bare ground included recent earth movements yet to be colonised by plants.

Trees

The tree-line that ran along the railway line had been allowed to grow higher than the rest of the Site. Silver birch was the dominant species.

Evaluation and Discussion

No protected species were recorded during the survey, although the habitats present provided opportunities for protected species.

Bats

The buildings on Site are temporary cabins and as such hold little to no potential for roosting bats. Furthermore, the trees did not appear of an age to harbour potential roost features.

However, there was a bat box within the trees along the embankment of Metz Way, presumably installed as part of the enhancement measures for the new road and associated cycle/footpath.

The habitat was suitable for foraging and commuting bats as the mixture of scrub, trees and short pioneering vegetation over bare ground was likely to provide habitats for a range of invertebrate prey. Its location between two railway lines also provide easy access to the Site for commuting bats, potentially from some distance away.

Birds

There was ample bird nesting and foraging opportunities within the Site due to the available habitat. However, the location and condition of the habitats were not likely to attract rare species.

Badger

As the Site could not be inspected fully, the presence of badger cannot be ruled out. Habitat was suitable for sett construction and there is suitable foraging habitat in the local area.

Hedgehog

The areas of scrub provide habitat for hedgehog nesting and foraging.

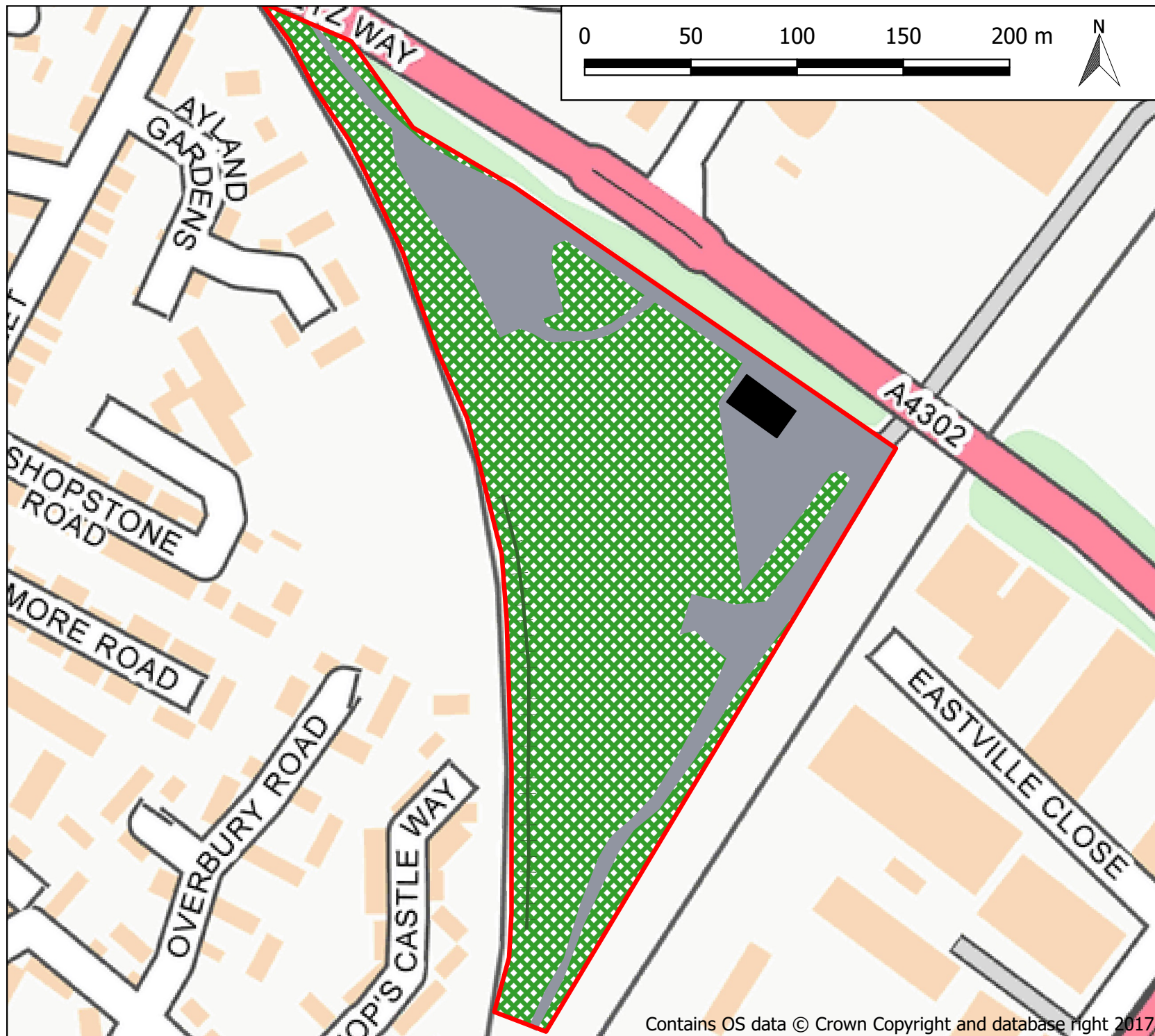
Reptiles

With a mosaic of habitats, and the proximity of the Site to railway lines, the site has potential to hold populations of reptiles such as slow worm. The presence of debris on the Site may also provide potential refugia and basking locations.

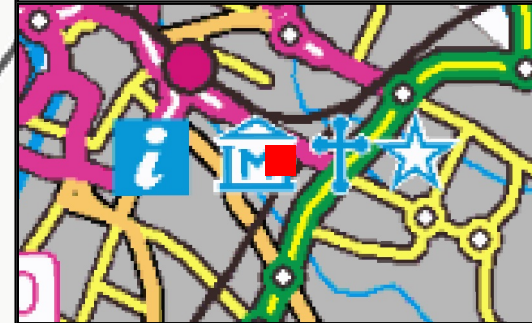
Further Surveys

Due to the potential for protected species to be present on site, the following surveys would be advised;

- Bats – building inspections (and any required emergence/re-entry surveys) if any buildings are scheduled to be removed or altered and bat activity surveys;
- Badger – presence/absence survey.
- Birds – no specific survey is recommended, but vegetation scheduled for removal between March and August must be checked for evidence of breeding birds; and
- Reptiles – presence/absence survey.



Wild Service



Legend

- Site boundary
- Tree line
- Buildings
- Hardstanding
- ▨ Scrub

Phase 1 Habitats Map

SA28

Date: 19 March 2018

Scale: 1:4,000

Drawn by: OG

Drawing: Figure 1

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Wild Service

Site Name	Jordan Brooks House
Prepared by	Glenn Norris
Date	17/01/2019

Site description

The Site is located to the east of Gloucester, approximately 200m from Barnwood Arboretum. It is approximately 0.8ha and the central grid reference is SO 86352 17614. It is surrounded by housing and tree-lined streets with a public right of way running along the southern boundary.

The Site comprised of a large office/residential building and three smaller houses with hardstanding providing access from vehicles. The grounds are maintained as amenity grassland with some landscaping. Tall cypress hedges are present along the eastern boundary.

Methodology

An extended Phase 1 habitat survey of the Site was undertaken on 20th December 2018 following standard methods¹. Phase 1 habitat survey provides a rapid means of classifying broad habitat types in any given terrestrial Site.

The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Study Area's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations.

The Study Area was also inspected for signs of any invasive plant species subject to legal controls e.g. Japanese knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

¹ Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough.

Results

Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 habitat map presented in **Figure 1** and the target notes in **Table 1**.

Table 1: Target Notes.

Target Note	Description
1	A mature apple tree stands along the western boundary.
2	The southern boundary contains several mature horse chestnuts.
3	There is a well-used mammal path through the southern boundary. Possible use by different species but smelt of fox.

Amenity grassland

The majority of the site consists of well-managed amenity grassland (**Photo 1**). It is species poor and offer little ecological value.



Photo 1: Amenity grassland and cypress tree-lines.

Scrub

There is a small patch of scrub behind the disused houses to the north of the site where it is encroaching on the amenity grassland. This is dominated by bramble *Rubus fruticosus* with an individual ash tree *Fraxinus excelsior*.

Ornamental shrub

Along the formal borders of the roads within site are planted beds of non-native ornamental species. These offer some foraging potential to invertebrates and birds during the summer as well as nesting opportunities.

Buildings

There are several built structures on site: the main office building, a small garage block, and three terraced houses. All three are of relatively modern construction and lack obvious features suitable for roosting bats. The small garage block is one storey, flat-roofed with red brick walls. The walls are in good condition and the roof doesn't have any access points. There is a small gap between the wall and the barge board, but these lead to very small recesses that are exposed to the elements. Therefore, this structure has negligible bat roost potential.

The main office building is a two-storey building with a pitched roof (**Photo 2**). There are some small one-storey side extensions with flat-roofs although these have no bat roost potential. The tiles of the roof are tight fitting and no obvious gaps were present. The gable ends have small gaps beneath the barge boards that may allow access to the interior. The soffits beneath the eaves are all in good condition and tightly fitted against the walls. This building was assessed as offering low bat roost potential.



Photo 2: The main office building.

The three terraced houses had been converted to offices but are no longer in use (**Photo 3**). They are two-storey brick buildings with tiled pitched roofs. The brickwork is in good condition, and the soffits fit tightly against the walls. The tiles are also tightly fitted with no obvious access for bats visible from ground level. The gable ends do show some small gaps against the wall that small numbers of bats may use. This building was considered to offer low bat roosting potential.



Photo 3: The terraced houses to the east of the site.

Hardstanding

The site has a large extent of hardstanding for vehicle access and parking and walking around the building.

Evaluation and Discussion

No protected species were recorded during the survey, although the habitats present provided opportunities for protected species.

Bats

The buildings present on Site had few features which can provide roosting opportunities for bats. There was an area of dead cypress trees and mature horse chestnuts that may provide suitable roosting habitat. The site provides low quality commuting and foraging habitat.

Birds

With a variety of trees and shrubs on Site, there is opportunity for nesting birds.

Mammals

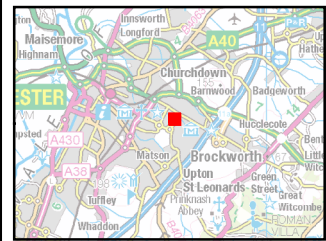
Foxes were found to use the site. No evidence of badger was recorded, but there was a well-used mammal path (**Target note 3**) entering the site that could be used by badger. The site provides excellent foraging habitat for badger.

Further Surveys

Due to the potential for protected species to be present on site, the following surveys would be advised;

- Bats – building and tree inspections (and any required emergence/re-entry surveys) and activity survey; and

- Birds – no specific survey is recommended, but vegetation scheduled for removal between March and August must be checked for evidence of breeding birds.



- Legend**
- Site boundary
 - Habitat**
 - A Amenity grassland
 - Ornamental shrub
 - Building
 - Hardstanding
 - Hedgerow
 - Target note

Wild Service

Phase 1 Habitats

Jordan's Brook House, Gloucester

Scale: 1:800 @ A4		Drawing No. Figure 1	
Drawn By: CC	Originator: GN	Date: 28/01/2019	
Ref: GN2018065A		Revision: A	



Wild Service

Site Name	White City Replacement Community Facility
Prepared by	Glenn Norris
Date	17/01/2019

Site description

The Site is located to the south of central Gloucester and north of Robinswood Hill. It is approximately 0.4ha and the central grid reference is SO 86352 17614. It is bordered to the west by a railway line, and allotments and green space to the north. The south and east of the site is used for residential housing.

Part of the site is a playground with various apparatus and amenity grassland. The other half of the site is amenity grassland with a cultivated patch used by the neighbouring allotments.

Methodology

An extended Phase 1 habitat survey of the Site was undertaken on 20th December 2018 following standard methods¹. Phase 1 habitat survey provides a rapid means of classifying broad habitat types in any given terrestrial Site.

The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Study Area's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations.

The Study Area was also inspected for signs of any invasive plant species subject to legal controls e.g. Japanese knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

¹ Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough.

Results

Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 habitat map presented in **Figure 1**. The habitats identified on Site included improved grassland, scrub and amenity grassland.

Amenity grassland

The majority of the site comprises amenity grassland. Part of the site is used as a formal children's play area for which the grass is kept short between apparatus. The other half is mown for access to the allotments immediately north of the site.



Photo 1: Amenity grassland in front of allotments.

Improved grassland/tall ruderals

There is a small patch of improved grassland and tall ruderals against the northern boundary. It has been left unmanaged and has been colonised by rank grassland dominated by cock's-foot *Dactylus glomerata*. There was occasional false oat-grass *Arrhenatherum elatius*, hogweed *Heracleum sphondylium*, burdock *Arctium lappa* and nettle *Urtica dioica*.



Photo 2: Improved grassland/tall ruderals.

Scrub

Along the western boundary is a line of thick scrub dominated by bramble *Rubus fruticosus* and hawthorn *Crataegus monogyna*. There are occasional mature ash trees along this line.

Hedgerow

Along the southern boundary of the play area was a hedgerow which, similar to the scrub, comprised of bramble. The rest of the hedge was made up of non-native species that may have been planted or escaped from nearby gardens. The fruiting varieties of these trees and brambles will provide foraging opportunities for common birds and invertebrates.

Cultivated land

Against the boundary of the allotments, a new bed has been created within the site outside of the allotments and planted with vegetables. Cultivated land offers little ecological value for wildlife.

Building

There is a small shed on site comprised of breezeblock walls and a corrugated metal roof. The roof has been lifted at some sections allowing light and the elements ingress. The building is considered to offer negligible bat roost potential.

Woodchip

Woodchip has been used around the bases of playing apparatus within the play area. Due to the constant disturbance, this habitat provides low ecological value.

Evaluation and Discussion

No protected species were recorded during the survey, although the habitats present provided opportunities for protected species.

Bats

The building on site offers no roosting potential for bats. The foraging and commuting habitat is considered to be low quality considering the lack of habitats that would provide adequate numbers of invertebrate prey.

Birds

With a variety of trees and shrubs on Site, there is opportunity for nesting birds.

Badger

There was no evidence of sett construction and it is highly unlikely that badgers have setts within the site. However, the site does provide suitable foraging habitat that may be used by badgers living in the wider area.

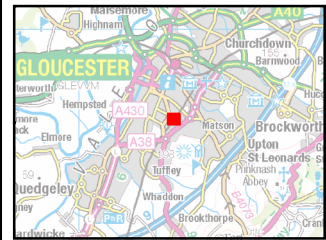
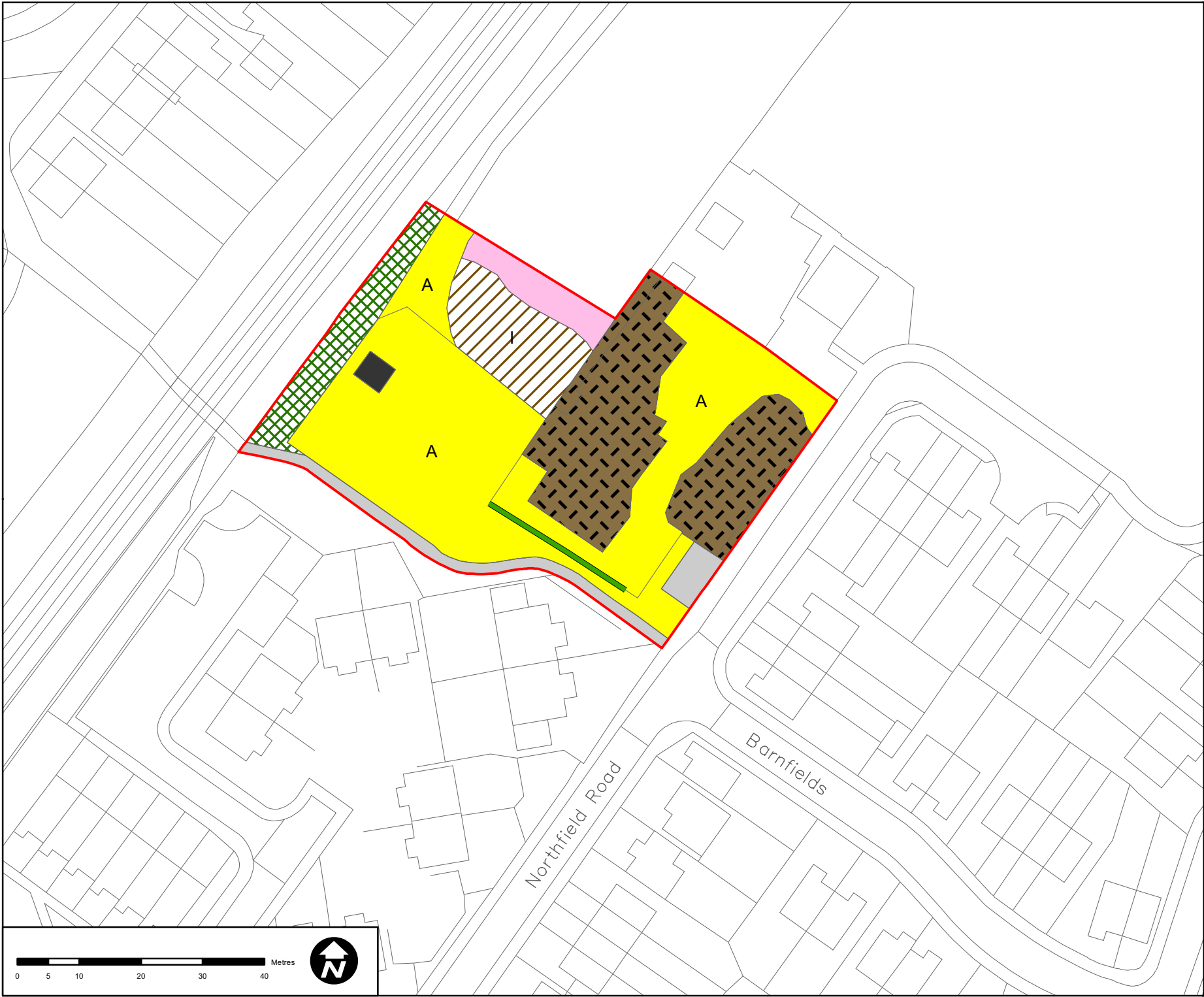
Reptiles

The area of improved grassland/tall ruderals has varied habitat structure and suitable habitat for slow-worm. There are also suitable hibernacula present in the form of tussocks and hardcore forming a small bund bisecting the western half of the site.

Further Surveys

Due to the potential for protected species to be present on site, the following is recommended;

- Birds – no specific survey is recommended, but vegetation scheduled for removal between March and August must be checked for evidence of breeding birds;
- Reptiles – no specific survey is recommended, but vegetation should be removed during the active season in a phased manner.



Legend

Site boundary

Habitat

A Amenity grassland

Building

Cultivated land

Hardstanding

Improved grassland/tall ruderals

Scrub

Woodchip

Hedgerow



**Wild
Service**

Phase 1 Habitats

White City, Gloucester

Scale 1:800 @ A4		Drawing No. Figure 1	
Drawn By CC	Originator GN	Date 28/01/2019	
Ref. GN2018065A		Revision A	

0 5 10 20 30 40 Metres





Wild Service

Site Name	West Quay
Prepared by	Glenn Norris
Date	07/02/2019

Site description

The Site is located to the south of central Gloucester amongst the docks. It is approximately 0.8ha and the central grid reference is SO 82573 18205. To the east is the Gloucester-Sharpness Canal and the city of Gloucester and to the west lies the River Severn and Olney Island. The surrounding land-use is a mix of industrial and commercial.

The Site is comprised of traditional buildings and hardstanding, and is used for various purposes including education, recycling and workshops relating to the nearby dry dock.

Methodology

An extended Phase 1 habitat survey of the Site was undertaken on 7th February 2019 following standard methods¹. Phase 1 habitat survey provides a rapid means of classifying broad habitat types in any given terrestrial Site.

The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Study Area's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations.

The Study Area was also inspected for signs of any invasive plant species subject to legal controls e.g. Japanese knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

¹ Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough.

Results

Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 habitat map presented in **Figure 1** and the target notes in **Table 1**. The habitats identified on Site included buildings and hardstanding.

Table 1: Target Notes.

Target Note	Description
1	House martin cups under the eaves of Building A.
2	Lifted lead flashing along the ridge of Building C.

Buildings

There are seven buildings on site (one building shown on the map no longer exists). Each building is described briefly below.

- A. Building A – The Harbour House is in current use by Gloucester Council (**Photo 1** – foreground). There are two sets of house martin nest cups beneath the eaves on the northern elevation (**TN1**). The building has a pitched roof with tightly fitting tiles with no obvious gaps suitable for bats to enter the interior. The walls are made from brick and the mortar is in good condition. The soffit also appears tightly fitted against the wall.



Photo 1: Buildings A and B.

- B. Building B – Alexandria Warehouse (**Photo 1** – background), now in use by Gloucestershire College, is a large warehouse retrofitted for modern purposes. The walls are comprised of brick and the mortar is in good condition. The roof is pitched, although visibility was limited due to parapets on all elevations of the building. Where visible, the tiles were tight fitting.
- C. Building C – This building now houses the Gloucester Brewery and is another historical building associated with the docks (**Photo 2**). It is built from brick, but this is in good

condition without any obvious holes or gaps in the mortar suitable for bat access. There are two sections of roofing, the eastern section is comprised of a single pitched roof made from corrugated sheets of asbestos. The western section consists of three steeply pitched roofs, all of which are tiled. The tiles are all very tightly fitted although there was a section of lifted flashing along the ridge (TN2). There may also be small gaps beneath the eaves of the pitched roofs.



Photo 2: Building C.

- D. Building D – The old British Waterways building is now used by a local recycling project. The building is single storey with a single pitched roof covered with corrugated asbestos sheeting. Again, the building is constructed from brick that is in good condition.



Photo 3: Building D.

- E. Building E – This building is constructed entirely from corrugated metal and therefore offers no suitable roosting opportunities for bats.
- F. Building F – Building F is of the same construction as Building D (brick walls and corrugated asbestos roof) and is in similar good condition with no obvious features suitable for roosting bats.
- G. Building G – This is a small building at the far west of the site located next to the Severn Road (**Photo 4**). It is a single storey building with a pitched roof and two gables on the northern and southern elevation. There were small gaps above the barge board of the gables allowing access beneath the roof tiles.



Photo 4: Building G.

Hardstanding

The rest of the site comprises hardstanding or gravel in the form of roads, car parks and storage.

Evaluation and Discussion

No protected species were recorded during the survey, although the habitats present provided opportunities for protected species.

Bats

The buildings were assessed externally for potential roosting features and all appear to be traditional brick warehouses and workshops associated with the docks now repurposed for modern requirements. Buildings A, C and G should be subject to further inspection by a licenced bat ecologist as they all exhibit features potentially suitable for roosting bats.

The habitat on site is of low quality for foraging and commuting bats, although the buildings are close to the canal and the river that provide excellent foraging and commuting resources.

Birds

House martins are likely to use Building A for nesting due to the presence of nest cups and the busy colony known from the Gloucester City Council Herbert Warehouse. Gulls appear to regularly use the rooftops for roosting, and nesting may be possible behind the parapets of Building B.

Further Surveys

Due to the potential for protected species to be present on site, the following surveys would be advised;

- Bats – building inspections (and any required emergence/re-entry surveys); and
- Birds – no specific survey is recommended, but vegetation scheduled for removal between March and August must be checked for evidence of breeding birds.

Ecological Opportunities

Wildlife corridor

The site could provide a vital link between the River Severn (and Olney Island) and the canal. If the design was centred around a green corridor this would aid the connection between these two habitats for wildlife.

On-site enhancement

In addition to a green corridor through the site using native planting, rain gardens etc. habitats integrated within the buildings would also enhance the site such as green roofs on bike and bin shelters and bird and bat boxes within buildings.

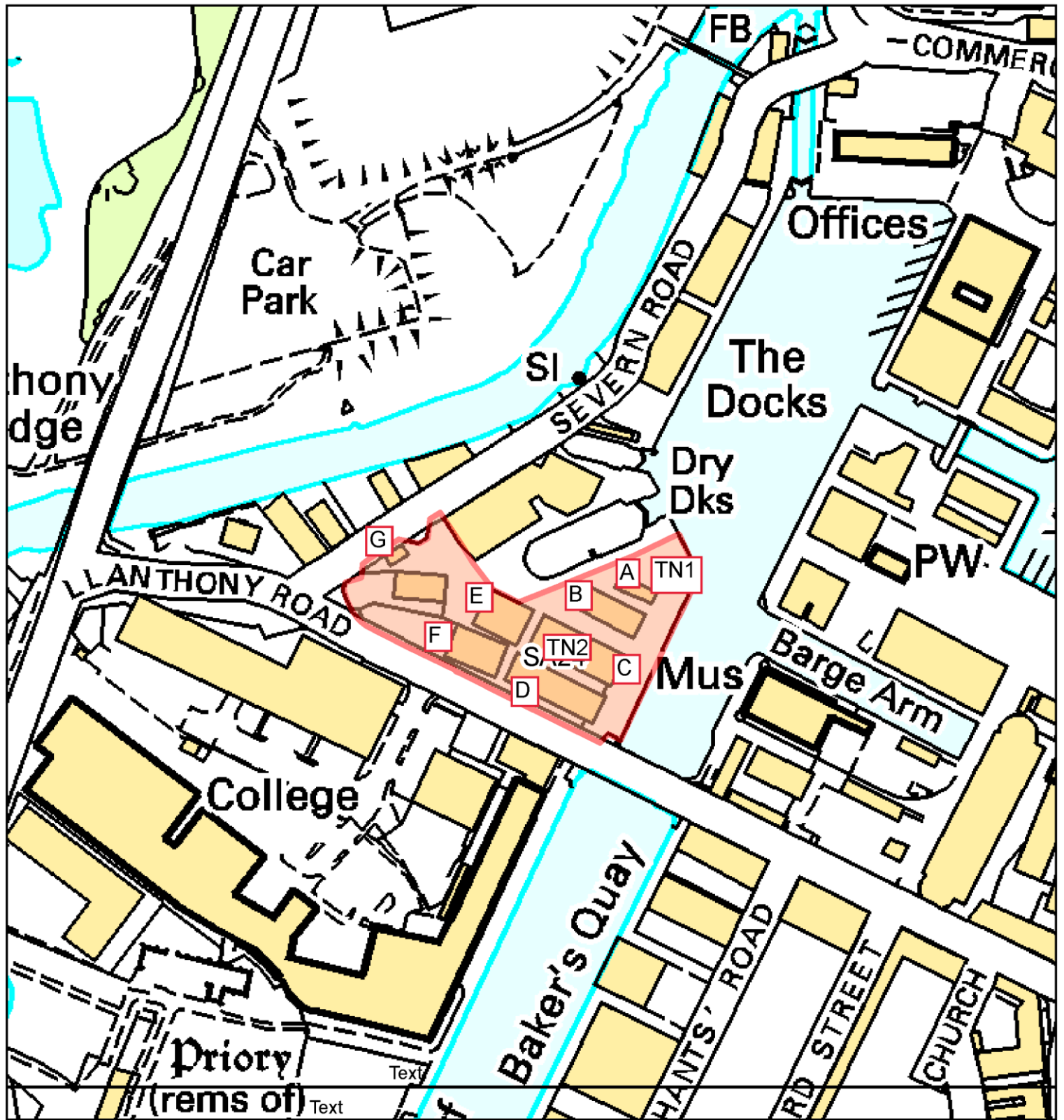


Figure 1

Letters refer to Buildings described in the Results section



Wild Service

Site Name	Secunda Way Industrial Estate
Prepared by	Glenn Norris
Date	21/03/2018

Site description

The Site is located along the Gloucester bypass, south-west of the city centre. It is approximately 0.7ha and the central grid reference for is SO 82068 17302. The industrial estate is predominately hardstanding with two buildings, and an area of recently felled scrub. The land is bounded by sport pitches to the west and south, and residential developments to the north and east.

Methodology

An extended Phase 1 habitat survey of the Site was undertaken on 21 March 2018 following standard methods¹. Phase 1 habitat survey provides a rapid means of classifying broad habitat types in any given terrestrial Site.

The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Study Area's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations.

The Study Area was also inspected for signs of any invasive plant species subject to legal controls e.g. Japanese knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*).

Due to restricted access, a full inspection could not be completed. However, enough of the Site was visible from public land to ascertain a confident assessment of what ecological features would be present.

¹ Joint Nature Conservation Committee (JNCC). 2010. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough.

Results

Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 habitat map presented in **Figure 1**. The habitats identified on Site included scrub, bare ground and trees.

Felled scrub

An area to the south of the industrial estate showed signs of recent felling (**Photo 1**). Several stumps from scrub and small trees were visible with piles of chippings spaced throughout. The majority of the substrate was natural, although some areas of hardstanding that had been colonised by this scrub were present. There were small patches of pendulous sedge, and the majority of trees appeared to be willows, indicating this area was relatively wet.



Photo 1: Area of recently felled scrub.

Scrub

Just beyond the entrance lies a small patch of scrub, consisting of approximately five trees. The dominant species is hawthorn.

Buildings and hardstanding

The majority of the Site was covered by built development including buildings and hardstanding. The hardstanding holds no value to ecological features. The buildings are relatively modern and well-maintained with no obvious features suitable for bats seen from outside the Site (**Photo 2**).



Photo 2: The two buildings within the Site.

Evaluation and Discussion

No protected species were recorded during the survey, although the habitats present provided opportunities for protected species.

Bats

The buildings on Site appeared well-maintained and no obvious features suitable for roosting bats were observed from beyond the site boundaries. No mature trees with potential roost features appeared to be present.

The Site does fall under the shadow of a line of Lombardy poplar trees providing a sheltered transit route between the Site and the green spaces surrounding the sports pitches.

Birds

Since the recently felling, there was limited bird nesting habitats within the Site. Due to the habitats present, rare species are unlikely to occur on Site.

Hedgehog

The areas of felled scrub provide habitat for hedgehog nesting and foraging.

Reptiles

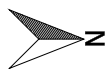
The recent felling of scrub provides a mosaic of habitats important to reptile populations that thrive on variations in vegetation height and structure. If slow-worm happened to be present in the local area, it is possible they may move in to accommodate the newly improved habitat.

Further Surveys

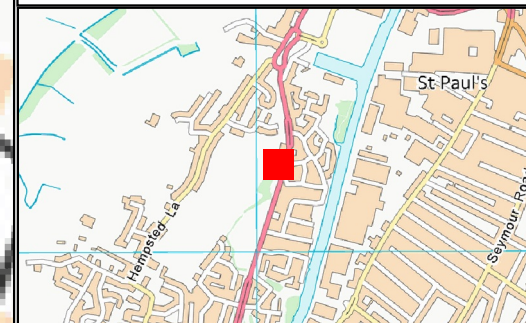
Due to the potential for protected species to be present on site, the following surveys would be advised;

- Bats – building inspections (and any required emergence/re-entry surveys) if any buildings are scheduled to be removed or altered and bat activity surveys;
- Birds – no specific survey is recommended, but vegetation scheduled for removal between March and August must be checked for evidence of breeding birds; and
- Reptiles – method statement during construction (unless the habitat is left to develop naturally, in which case surveys may be required).

0 10 20 30 40 m



Wild Service



Legend

- Site boundary
- Scatered scrub
- Hardstanding
- Buildings
- Tree line

Phase 1 Habitats Map

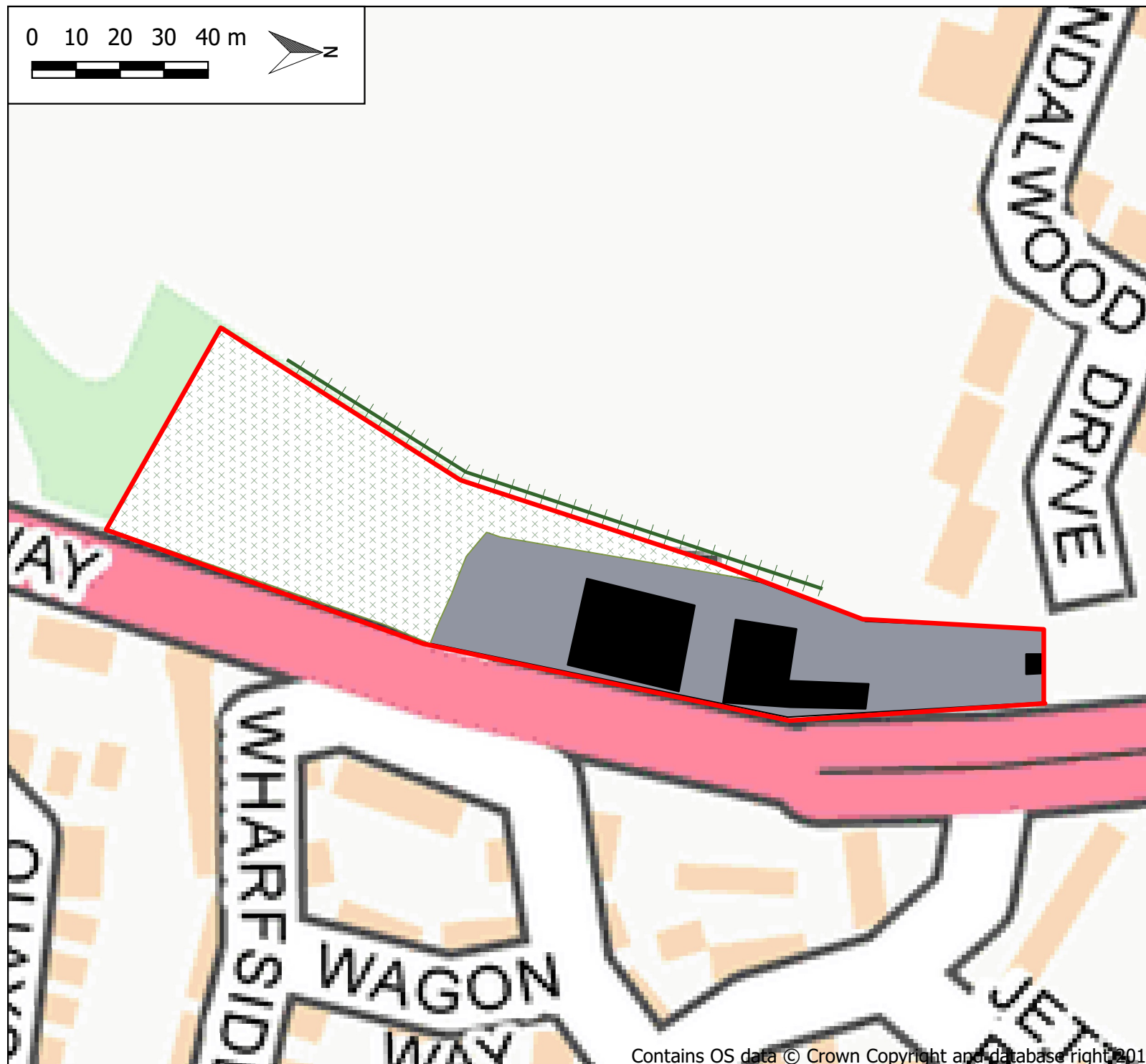
SA22

Date: 22 March 2018

Scale: 1:2000

Drawn by: OG

Drawing: Figure 1



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