

Appendix 2.2

BIODIVERSITY ASSESSMENT

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Statement Addendum (2019)



NOTE

The following technical reports were prepared and appended to the Environmental Statement registered in January, 2017, for an earlier iteration of the Proposed Scheme:

- i **Appendix 2.1** Phase 1 Preliminary Geo-environmental Risk Assessment;
- i **Appendix 2.2** Biodiversity Assessment;
- i **Appendix 2.3** Preliminary Geotechnical and Environmental Assessment;
- i **Appendix 5.1** EIA Scoping Report;
- i **Appendix 6.1-6.4** Noise appendices;
- i **Appendix 7.1** Socio-economic glossary;
- i **Appendix 10.1-10.4** Wind;
- i **Appendix 12.1** Archaeological DBA; and
- i **Appendix 12.2** WSI.

The subsequent design changes made, giving rise to the current iteration of the Proposed Scheme which is set out in **Chapter 3 Scheme Description** of this ES, are such that the information and assumptions on which these technical reports are based remain valid and appropriate. For this reason, it has been concluded that the technical reports can be provided in their current form, without update.

It should be noted that where reference is made in the following technical report to the Proposed Scheme, this should be disregarded and reference made only to **Chapter 3 Scheme Description** in this ES.

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REPORT N° 001

ST MICHAEL'S, JACKSON'S ROW

BIODIVERSITY ASSESSMENT

PUBLIC

NOVEMBER 2016

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ST MICHAEL'S, JACKSON'S ROW

BIODIVERSITY ASSESSMENT

Jackson's Row Developments Ltd

Public

Project no: 70020278
Date: November 2016

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Statement Addendum (2019).

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QUALITY MANAGEMENT

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1 INTRODUCTION

1.1.1 WSP | Parsons Brinkerhoff (WSP | PB) was instructed to conduct an Ecological Constraints Appraisal (referred to as a Biodiversity Assessment) on a parcel of land located on Jackson's Row. The Site is located in central Manchester, north of the A57 (M) (National Grid Reference SJ83663 98054) (herein referred to as the 'Site') prior to the proposed construction of a mixed use development (hereafter referred to as the 'Proposed Scheme'). The Site boundary is shown in **Figure 1** - Site Location Plan.

1.1.2 During the initial survey potential features for roosting bats were noted on the outside of one of the buildings. Therefore an internal inspection plus roost surveys have been undertaken in 2016.

1.2 SITE DESCRIPTION AND PROPOSED DEVELOPMENT

1.2.1 The Site comprises of a number of buildings between Jackson's Row and Bootle Street, Greater Manchester. It is within an area of predominantly commercial properties. Rochdale Canal and the River Irwell are located approximately 0.5km from the Site boundary.

1.2.2 Within the Site boundary habitats include hardstanding, buildings, ornamental scrub and scattered trees.

1.2.3 The Proposed Scheme is for two buildings comprising residential dwellings, a hotel, a synagogue, a number of restaurants and bars and office spaces. In addition, it also includes public realm areas, revised access, car parking, landscaping and pedestrian routes through the Site. The Site area comprises 0.56 ha.

1.3 SCOPE OF WORKS

1.3.1 The objectives of the initial biodiversity assessment are to set out the following:

- Obtain detailed baseline information on the current habitats and ecological features in and around the Site;
- Identify the potential of the Site to support protected or notable habitats or species;
- Identify the presence or potential presence of any protected or notable species whose disturbance may require consent under the Wildlife and Countryside Act, 1981 (as amended) (hereafter 'the WCA') or the Conservation of Habitats and Species Regulations, 2010 (as amended); and
- Identify any requirements for further survey or control measures to be put in place during the construction phase.

1.3.2 The updated assessment follows the further bat surveys.

2 METHODOLOGY

2.1 DESKTOP ASSESSMENT

- 2.1.1 A desktop assessment was carried out in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) 'Guidelines for Preliminary Ecological Appraisal' (2013). Records of any protected or notable species, habitats and designated nature conservation sites within a 2 km radius of the Site were obtained and reviewed. This radius was extended to 5 km for bats, as recommended by best practice guidelines (Hundt, 2012) and 10 km for International and European level conservation sites including Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Wetlands of International Importance (Ramsar).
- 2.1.2 The following organisations were contacted regarding records held for protected and/or notable species:
- Greater Manchester Ecology Unit (GMEU).
- 2.1.3 Additional information on sites of nature conservation interest was obtained from:
- Natural England – Nature on the map website / Multi Agency Geographical Information for the Countryside (MAGIC) (<http://www.natureonthemap.naturalengland.org.uk/>); and
 - The National Biodiversity Network (NBN) (<http://www.nbn.org.uk/>).

2.2 WALKOVER SURVEY

- 2.2.1 An Ecological Constraints Appraisal is a broad inspection which identifies habitat types present at the Site and evaluates their potential to support protected or notable species. A Site walkover was undertaken on 15th October 2015 by Principal Ecologist Dawn Phythian MCIEEM CEnv, from the publically accessible areas of Site. The habitats within the Site boundary were identified in accordance with the Joint Nature Conservation Committee (JNCC) Phase 1 survey methodology (JNCC, 2010) and notes were taken on any features of interest. The habitats recorded at the Site were also assessed for their potential to support protected or notable species following Chartered Institute of Ecology and Environmental Management guidance (CIEEM, 2013).
- 2.2.2 Any field signs of legally protected or priority species were noted and where no field signs were present an assessment was made of whether any protected or priority species were likely to be present. Features of ecological interest or evidence of protected species were recorded as Target Notes (see **Appendix A**).
- 2.2.3 The buildings and trees on Site were examined to determine if they offered suitable roosting potential for bats. These were then categorised and further surveys were recommended on the bat potential rating of the feature as described within **Appendix B** (as modified from Hundt, 2012).
- 2.2.4 The surveys also looked for the presence of common invasive species such as Japanese knotweed *Fallopia japonica*, giant hogweed *Heracleum mantegazzianum* and Himalayan balsam *Impatiens glandulifera*.

2.3 BAT SURVEYS

- 2.3.1 Following the initial assessment, bat surveys were undertaken of the buildings on Site to investigate the potential of the buildings to support roosting bats. This included internal and external inspections of the buildings and emergence survey on the public house.

ROOST SURVEYS

- 2.3.2 The features present on the outside of the public house were identified as having moderate potential to support roosting bats and as such two bat roost surveys were undertaken, in accordance with current professional guidelines (Collins, 2016). These emergence surveys were undertaken from 15 minutes before until 2 hours after dusk.

Table 2-1 - Dates and weather conditions for the bat emergence surveys

Date	Sunset	Weather Conditions
15/09/16	19:24	Clear sky, temperature from 22.6 ⁰ C to 18.7 ⁰ C at the end of surveys. No breeze at the start of survey picking up to beaufort wind speed of 1 by the end.
22/09/16	19:06	Cloud covers 6 Oktas, wind 1 on beaufort wind speed scale. Temperature 15.6 ⁰ C at start to 13.7 ⁰ C at finish.

BUILDING SURVEYS

- 2.3.3 The buildings were accessed where safe to do so and externally surveyed from the ground. Surveys focused on roof space (from visual assessment only) and features on the inside and outside of windows. An endoscope was used to investigate any cavities. Signs of bat use searched for include:

- scratches;
- droppings;
- staining at potential entrances; and
- live and dead bats

2.4 LIMITATIONS TO THE ASSESSMENT

- 2.4.1 An Ecological Constraints Appraisal does not comprise a full botanical assessment of all species present within a Site; therefore species lists are indicative only. Similarly, plant species are not as easily identifiable within areas of short/low mown grassland habitats. The list of species identified at the Site is therefore unlikely to be comprehensive; however it provides a broad overview of the habitat types and their ecological value.
- 2.4.2 The Site was assessed from accessible areas only and the internal courtyard, and sample areas of the roof were viewed on the police training centre (including views of the roofs of the other buildings). However, due to the fact that no information on asbestos was available, the small roof space in the public house was viewed from the loft hatch only and the cellar was not entered.
- 2.4.3 Only emergence surveys were undertaken, not dawn surveys on the public house, due to safety reasons. Surveys were not commissioned until late in the bat activity season 2016 and as such surveys were spaced out as far as possible for that section of the season only. Given the features identified are likely only to support small roosts with no access available to large cavities, this is not deemed to be a significant constraint.
- 2.4.4 The baseline conditions described in this report are accurate at the time at which the survey was undertaken. Should considerable time pass (e.g. 2+ years) and/or conditions/land-use on the Site change prior to the commencement of works, it is recommended that an update survey is undertaken.

3 RESULTS

3.1 DESKTOP ASSESSMENT

- 3.1.1 Data older than 10 years has been excluded from the protected species summary as this data is unlikely to provide accurate representation of the species within the study area.

NATURE CONSERVATION SITES

STATUTORY SITES

- 3.1.2 Rochdale Canal Special Area of Conservation (SAC) and Site of Special Scientific Interest is located approximately 6.06 km north east from the Site boundary. The JNCC qualifies this site for protection due to the presence of a significant population of the European Protected Species (EPS) floating water-plantain *Luronium natans* in a botanically diverse waterplant community which also supports a wide range of pondweeds *Potamogeton* spp. This population of *Luronium* is representative of the formerly more widespread canal populations of north-west England.

- 3.1.3 There are no other statutory designated sites located within 2 km of the Site.

NON STATUTORY SITES

- 3.1.4 There are three Sites of Biological Interest (SBIs) located within 2 km of the Site boundary. SBIs are areas designated for protection due to their significant wildlife value and are of county-wide importance.

- 3.1.5 The Rochdale Canal (Stott's Lane Ducie Street Basin) and the Ashton Canal are both designated as SBI's and are located approximately 1.44 km north-east and 1.20 km east from the Site boundary, respectively. The Rochdale Canal is designated for protection for its floating water plantain population. It is also of note that certain stretches support white-clawed crayfish *Austropotamobius paludosus*, which has full legal protection and American pondweed *Potamogeton epihydrus*, a Red Data Book species. In addition, certain stretches of the Ashton Canal also support floating water plantain and the nationally scarce grasswrack pondweed *Potamogeton compressus*, both are UK Biodiversity Priority Species and are designated as Species of Principal Importance under Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006. The River Irwell SBI is located 1.28 km north-west from the Site boundary is recognised for its distinctive aquatic species composition.

- 3.1.6 There are no connecting features between the described non statutory sites and the Site.

SPECIES

- 3.1.7 GMEU provided the following records of protected and notable species.

Table 3-1 - Species records located within 2 km of the Site boundary

Species	Closest Record to Site	Date	Distance from Site Boundary	Suitable Habitat Present on Site
Birds				
Lapwing <i>Vanellus vanellus</i>	SJ827981	01/06/2012	0.85 km west	✗
Lesser redpoll <i>Carduelis cabaret</i>	SJ823989	27/01/2011	1.57 km north west	✗
Skylark <i>Alauda arvensis</i>	SJ82809803	25/05/2012	0.82 km west	✗
House sparrow <i>Passer domesticus</i>	SJ82499901	16/03/2014	1.48 km north west	✓
Dunnock <i>Prunella modularis</i>	SJ83309839	20/02/2014	0.46 km north west	✓
Peregrine falcon <i>Falco peregrinus</i>	SJ823989	11/09/2010	1.57 km north west	✗
Song thrush <i>Turdus philomelos</i>	SJ82899803	04/04/2014	0.72 km west	✓
Little ringed plover <i>Charadrius dubius</i>	SJ82779811	17/05/2011	0.85 km west	✗
Kingfisher <i>Alcedo atthis</i>	SJ838978	01/02/2013	0.39 km south east	✗
Bullfinch <i>Pyrrhula pyrrhula</i>	SJ82859800	22/04/2014	0.76 km west	✓
Starling <i>Sturnus vulgaris</i>	SJ8337961	04/12/2012	0.74 km west	✓
Black redstart <i>Phoenicurus ochruros</i>	SJ83889744	20/06/2011	0.56 km south east	✓
Mammals				
West European Hedgehog <i>Erinaceus europaeus</i>	SJ845972	16/01/2013	1.1 km south east	✗
Badger <i>Meles meles</i>	Confidential	20/09/2011	0.52 km south east	✗
Amphibians/Reptiles				
Common toad <i>Bufo bufo</i>	SJ823987	19/04/2014	1.47 km north west	✗

3.1.8

GMEU provided recent records of the following bat species within 5km of the Site boundary:

Table 3-2 - Bat roost records returned within 5 km of the Site boundary

Species	Closest Record To Site	Date	Distance From Site Boundary
Common pipistrelle <i>Pipistrellus pipistrellus</i>	SJ83239773	15/08/2012	0.47 km south west
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	SJ82849793	26/06/2013	0.78 km south west
<i>Pipistrellus</i> sp.	SJ83729744	05/06/2008	0.54 km south
Daubenton's bat <i>Myotis daubentonii</i>	SD798008	13/07/2006	4.70 km north west
Brown long-eared bat <i>Plecotus auritus</i>	SJ87059697	04/07/2011	3.47 km south east
<i>Vespertilionidae</i> sp.	SJ82849793	20/06/2013	0.79 km west

3.1.9 One record of unknown Noctule *Nyctalus noctula* species was also recorded, but location data provided was not full.

3.1.10 Habitats and species listed under the Greater Manchester Biodiversity Action Plan (BAP) which may be relevant to the Site include:

- Black redstart *Phoenicurus phoenicurus*;
- Bats; and
- Urban-managed greenspace

3.2 ECOLOGICAL CONSTRAINTS APPRAISAL

3.2.1 The habitats present on Site consist of buildings, hardstanding, ornamental shrubs and immature trees. Overall the habitats on Site are considered to be of minimal ecological value.

PROTECTED SPECIES

BREEDING BIRDS

3.2.2 The Site contained a small number of ornamental hawthorn *Crataegus orientalis* trees; however these were identified to have limited potential to support breeding birds and are therefore not considered to pose a constraint to the Proposed Development.

3.2.3 It should be noted that the nationally protected black redstart has been known to breed in central Manchester over recent years, and species records returned from the data search show that this species has been recorded less than 1 km from the Site boundary. The walk over survey was undertaken in autumn, these birds are summer migrants, and as such would not be expected to be present on Site at this time. The Site contained a number of flat roofs but with little vegetation and foraging habitat and therefore the Site is of low potential for these birds. The Greater Manchester Biodiversity Action Plan (BAP) has a Species Action Plan for this species and it is recommended that design plans include for green roofs and buildings to take this species into account.

BATS

3.2.4 Three buildings on Site were assessed for their potential to support roosting bats, and a summary

of features identified during building inspections can be found within **Table 3-3** below and exact locations detailed in **Figure 2**. Full descriptions of features identified during the building inspections are included below.

Table 3-3 - Bat roost potential categories for the buildings found within the Site boundary

Building Name	Building Description	Features With Bat Roost Potential	Bat Roost Potential Category
Building A	This building is a synagogue. It has three levels with a flat roof and an overlapping felt edge. The building also has metal windows and metal roof single storey small rear extension.	Small gaps were noted on the felt roof overlap at both the front and back of the building. These gaps are small and are against a flat concrete slab with no access to a cavity. The roof was viewed. Anecdotal evidence provided by the Site caretaker indicated that bats have been seen in vicinity of this area in previous years.	Negligible
Building B	The Sir Ralph Abercromby public house is of a Victorian build, predominately constructed of brick with a multi-levelled pitched and tiled roof, wooden sash windows and a single storey flat roof extension to rear. One area within the roof was flat.	Features are: • Gaps in and adjacent to wooden sash windows balcony on three windows. (moderate potential) • wooden soffit boxes with small gaps noted on upper balcony (low potential); • brickwork on the chimney had some damage and missing mortar (low potential); • lifted flashing on roof (low potential); and • Loose tiles and ridge tile gaps on roof (low- moderate potential).	Moderate
Building C	This building was once used as a police station and is constructed of brick with stone frontage. It is multiple stories with a flat roof and visible concrete lip. The brick and mortar were generally considered to be in good condition and no gaps were identified around the PVC windows.	No features on the building could be seen from the external inspection. Possible features could have been present on the roof and within the courtyard however due to visual restrictions; this structure could not be thoroughly assessed.	Negligible

Building A

- 3.2.5 This building was found to have no roof space and a flat roof. The potential gaps on the outside of the building did not have access to potential cavities and as such was deemed to have negligible features.

Building B

- 3.2.6 Building B has features of moderate potential on the outside of the building, two surveys in line with current guidance were undertaken, dusk surveys were undertaken due to the location of the Site in the city centre and the worry of security. No emergence was observed. However, activity

from a small number of bats was observed, generally feeding over the vegetation on Site.

- 3.2.7 The building is a brick two and three storey structure. The third storey rooms are built into the room space leaving approximate 1 foot of space above the ceilings. A single roof light was seen at this level. The second storey had a small loft space, views into this were achieved and it was noted that the roof had modern breathable membrane under the tiles and had been relined relatively recently. There was no light visible in the roof and therefore it was considered that no gaps are present in the membrane which could allow access into the cavity by roosting bats. As such with no loft space on the third floor and no access to any internal loft space in second floor section, the potential for roosting bats within the buildings roofs is limited to under the external roofing tiles. The breathable roof membrane reduces the value of the roof for bats as its fibrous nature traps bats within it. This makes the internal space in the roof unsuitable for roosting bats.
- 3.2.8 The windows are, on the whole, original sash windows, some had internal secondary glazing, and there were a few newer wooden frames. All the frames were in good order on the inside and had been painted with no visible entrances on any of the windows on the inside or visible on the outside apart from one. One window at the back of the property had a hole where the sill was damaged. This gave internal access to the room, however on inspection using an endoscope no access to the outside of the building could be found.
- 3.2.9 The small window facing out to the roof terrace has a hole at the top of the window within the mortar between the frame and the wall. This gives access to the wall cavity and during an endoscope inspection it was concluded that the feature extended approximately 30cm up and 50cm to the left of the opening. However, fill was present in terms of mortar and material and no signs of bat use were noted. The window is covered in a metal grate of vertical bars approximately 10cm apart and as such would impede bats finding the feature and reduce the likelihood of use.

Building C

- 3.2.10 The building is stone fronted with metal windows and the facade was, on the whole, very neat with no visible gaps around the windows or profile. The brickwork within the courtyard contains holes as a result of the recent removal of a lean-to structure, these did not appear to open to the wall cavity and as the holes were under 5 months old, they are considered unlikely to be used by roosting bats. The building internally has been salvaged for internal fixtures and there are no usable features. The roof is flat with an external pillar, it is in a good order and no features for bats were noted. As such this building is of negligible value for roosting bats.

INVASIVE SPECIES

- 3.2.11 An established stand of small leaved cotoneaster *Cotoneaster microphyllus* was identified in the centre of the Site (see **Appendix A – TN2**).

OTHER SPECIES

- 3.2.12 No other habitats with potential for protected species were identified on Site and therefore it was considered unlikely that other protected species pose a constraint to the Proposed Scheme.

4 DISCUSSION AND RECOMMENDATIONS

4.1 NATURE CONSERVATION SITES

- 4.1.1 The Site does not share any contiguous or complimentary habitat with the SAC which has been identified within 10km of it. The SAC's primary classification is for its aquatic vegetation community. Given there are no waterbodies on Site, the distance from the Site boundary and the lack of direct connectivity, it is not expected that the proposed work on Site will impact on the SAC. Therefore it is possible to exclude the risk of likely significant effects upon it and no further assessment is required. No other statutory or non-statutory sites are likely to be directly or indirectly impacted upon from the Proposed Scheme due to the spatial separation and lack of connectivity between them and the Site.

4.2 HABITATS

- 4.2.1 The Site is dominated by man-made habitats such as buildings and hardstanding. There are limited areas of semi-natural habitat present including ornamental shrubs and scattered trees. Such habitats are considered to be common within the local context and unlikely to be of significant value for any protected or notable species.

4.3 PROTECTED SPECIES

- 4.3.1 No evidence of protected or notable species was recorded during the survey. However the trees and hedgerow on Site have potential to support nesting birds during the breeding bird season, albeit limited and the Proposed Scheme is therefore unlikely to have a significant effect on breeding birds.
- 4.3.2 Buildings and trees on Site were assessed for their potential to support roosting bats. Some features were identified on building B as having moderate potential for bats. Following a building inspection there are still some features suitable for roosting bats but no signs of potential bat presence were identified during the internal inspection, nor was a large potential cavity found in which maternity or other important roost could be supported.
- 4.3.3 As a result of the assessment of moderate potential for building B, two emergence surveys were undertaken in accordance with guidelines (Collins, 2016), during which no bat emergences was seen. Therefore a conclusion of likely absence of roosting bats within building B was concluded.
- 4.3.4 Buildings A and C were not found to have any features of suitability to support roosting bats.

4.4 RECOMMENDATIONS

BATS

- 4.4.1 The initial assessment undertaken in 2015 highlighted the need for further bat surveys, these have now been completed. No further surveys for bats are recommended at this time. Should building B be demolished or subject to significant refurbishment, then a pre-start demolition check would be recommended as a precaution to ensure that the features identified on the building had not begun to be used by bats in the intervening time period.

BIRDS

- 4.4.2 Given the Site has limited food sources for black redstart; it is not recommended that surveys for this species are undertaken at this time. No other ecological surveys for birds are required given the current ecological records received for the Site.
- 4.4.3 All wild birds are afforded partial protection under Section 1 of the WCA 1981 (as amended),

making it an offence, amongst other things, to intentionally or recklessly kill, injure or take a wild bird; take or destroy its eggs; and/or to take, damage, destroy, interfere with or obstruct access to its nest whilst it is in use or being built.

- 4.4.4 The clearance of the buildings together with any trees and scrub should ideally be carried out outside the bird breeding season i.e. between October and February. If these are to be removed during the bird breeding season (generally considered to be from March-September) then they should be checked to confirm the absence of nesting birds by a suitably qualified ecologist prior to removal. Where nesting birds are encountered, the ecologist should advise on an appropriate buffer to be established within which no works would be conducted until the young have fledged the nest.

INVASIVE SPECIES

- 4.4.5 An established stand of small-leaved cotoneaster was identified in the centre of the Site (See **Appendix A – TN1**). Works should be timed so as to minimise the spread of these species, by working outside of the flowering / seeding periods. Should any of the works directly impact the invasive species, these plants will need to be managed appropriately. Cotoneaster should be removed out of flower when displaying no berries, before being chipped and removed from the Site. Cotoneaster plants spread via the berries, which are on the plant during the autumn and winter months. Therefore if this plant is removed or disturbed during the time when the berries are present this could cause the plant to spread. If necessary, removal of this plant should occur during the spring (April – May).

ECOLOGICAL ENHANCEMENT

- 4.4.6 The National Planning Policy Framework (NPPF) and Natural Environment and Rural Communities (NERC) Act 2006 place a duty upon public bodies, including planning authorities in England and Wales to promote and enhance biodiversity in all of their functions. Habitats and species of value will therefore need to be considered within the development and landscaping design process.

- 4.4.7 The results of this initial biodiversity assessment suggest that the following should be considered during the early scheme design to minimise potentially adverse ecological effects and realise opportunities to enhance biodiversity:

- Any soft landscaping should take into account local wildlife listed in the Greater Manchester Biodiversity Action Plan and efforts should be made to promote these species;
- Should any artificial lighting be installed or utilised at night during the Proposed Works then it is recommended that low pressure sodium lamps or high pressure sodium instead of mercury or metal halide lamps is used due to its UV filtration characteristics. This will avoid disturbance to commuting, foraging or roosting bats. Lighting should also be directional to avoid light spill (Bat Conservation Trust & Institute of Lighting Engineers 2008); and
- Given the design includes roof gardens and tall buildings there is opportunity within the design to support the Manchester BAP for black redstart. Therefore it is recommended the design of these features should incorporate favourable habitat such as achievable ledges and foraging opportunity in the planting. This would also have benefits for other birds and provide foraging opportunities for insects and bats.

5 CONCLUSION

- 5.1.1 The Ecological Assessment updated in October 2015 noted that the buildings on Site have some potential for roosting bats and breeding birds. In addition an invasive plant species was identified on the Site.
- 5.1.2 Further surveys were undertaken to investigate the potential use of the buildings for bats. Buildings A and C were not found to contain any visible features for bats. Building B has visible features, however likely absence is concluded for these features following emergence surveys and an internal inspection.
- 5.1.3 The buildings roofs and the vegetation on Site have some potential to support nesting birds and therefore should be removed outside the nesting season (commonly taken to be March to September inclusive). It is considered unlikely that the Proposed Scheme will impact on protected/notable species or local conservation sites as identified in the study.
- 5.1.4 There is opportunity within the building design plans to provide valuable wildlife habitats within the proposed green spaces as included within the proposed design, including suitable provisions for the locally highlighted black redstart.

This Appendix has been replaced in full!
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BIBLIOGRAPHY

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- Multi Agency Geographical Information for the Countryside (MAGIC) website (<http://magic.defra.gov.uk/website/magic>)
- Nature on the map website (<http://www.natureonthemap.naturalengland.org.uk/>)
- ODPM Circular 06/2005: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within The Planning System
- The Natural Environment and Rural Communities (NERC) Act (2006).

This Appendix has been replaced in full.
Please refer to the Environmental
Statement Addendum (2019)

FIGURE 1 - SITE LOCATION PLAN

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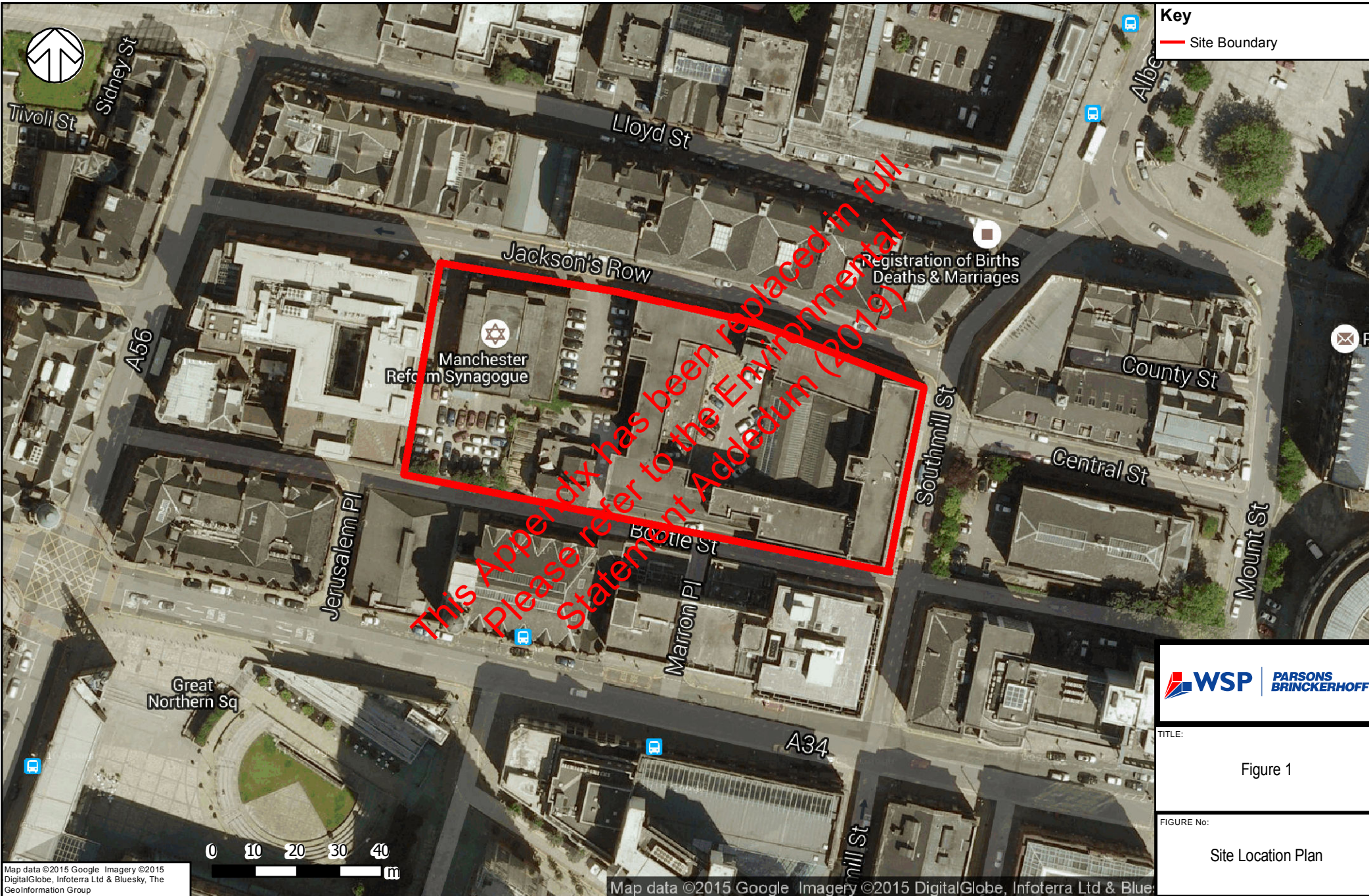
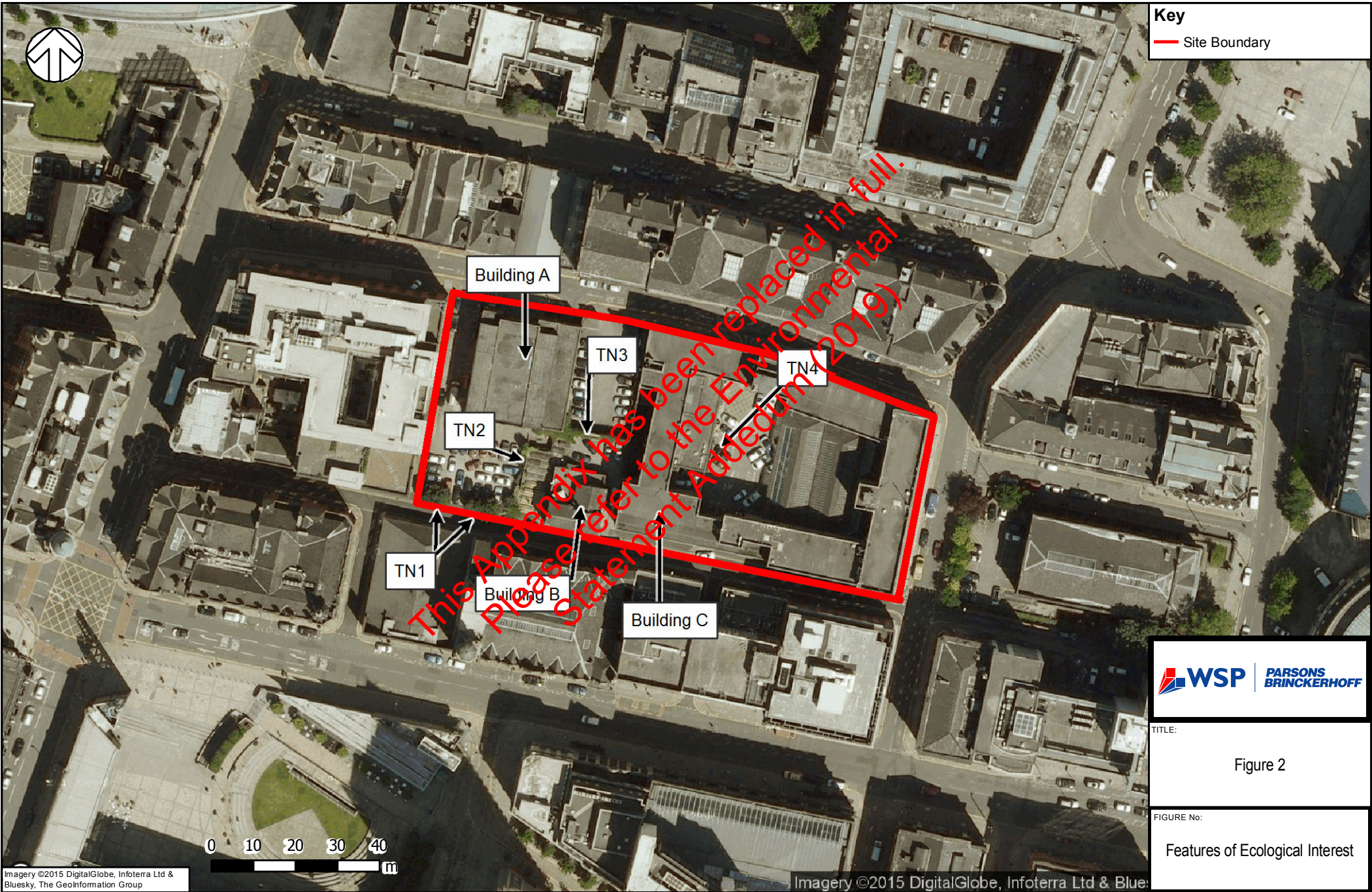


FIGURE 2 - FEATURES OF ECOLOGICAL INTEREST

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Appendix A

TARGET NOTES

Target Note	Grid Reference	Description
1	SJ83619 98007 & SJ83631 98004	Vegetation identified in this area: ■ 5 immature oriental rowan (one densely covered in ivy) ■ The understorey vegetation in is patch bare ground with some perennial rye grass <i>Lolium perenne</i>, chickweed <i>Stellaria media</i> and white clover <i>Trifolium repens</i>. Dumped material was also present in this area.
2	SJ83640 98017	Small leaved cotoneaster was present within this planter. A vegetation planter was also present in this area and contained laurel <i>Laurus</i>, sycamore <i>Acer pseudoplatanus</i>, ornamental rowan <i>Sorbus sp.</i> and ornamental rose <i>Rosa sp.</i>
3	SJ83657 98021	Russian vine <i>Fallopia baldschuanica</i> was seen on the wall located at the back of Building B (the Sir Ralph Abercromby).
4	SJ83688 98020	Buddleia <i>Buddleja sp.</i> was present in cracks present in the courtyard of the Site.

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Appendix B

BAT ROOST POTENTIAL ASSESSMENT GUIDANCE

Criteria for bat roost potential assessment of a structure (modified from Collins 2016)

Bat Roost Potential	Description
Confirmed	Building with features confirmed to be used by roosting bats either by historic records (verified appropriately), or evidence recorded during survey.
High	Building exhibits a number of features suitable for use by roosting bats e.g. numerous roosting opportunities such as dark, enclosed roof voids; has a high degree of connectivity with likely navigation routes; and is located within suitable foraging habitat.
Moderate	Building exhibits features suitable for use by roosting bats, such as internal and external cavities well insulated from external weather conditions, but is less than ideal in some way. It may be situated in less than ideal habitat, lacking suitable commuting corridors.
Low	Building may have some interest to roosting bats, e.g. external roosting features such as fascia or soffit boards, but is considered to be sub-optimal to the extent that bats would be considered unlikely to use it; or has more suitable features but is in an unsuitable location e.g. isolated from foraging or commuting habitats.
Negligible	Building with little-to-no potential to support bats in an unsuitable location e.g. isolated from foraging or commuting habitats.

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Appendix C

LEGISLATION AND POLICY GUIDANCE

THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010 (AS AMENDED)

The Conservation of Habitats and Species Regulations 2010 (as amended) consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law.

THE WILDLIFE AND COUNTRYSIDE ACT (WCA) 1981 (AS AMENDED)

The WCA, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive.

It complements the Conservation of Habitats and Species (Amendment) Regulations 2011 offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs). Schedules of the act provide lists of protected species, both flora and fauna, and detail the possible offences that apply to these species. All relevant species specific legislation is detailed later in this Appendix.

THE COUNTRYSIDE AND RIGHTS OF WAY (CROW) ACT 2000

The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife legislation detailed in the WCA. It places a duty on government departments and the National Assembly for Wales to have regard for biodiversity, and provides increased powers for the protection and maintenance of SSSIs.

The Act also contains lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

THE NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006

Section 40 of the NERC Act 2006 places a duty upon all local authorities and public bodies in England and Wales to have regard to the conservation of biodiversity in their function. Section 41 (England) lists the habitats and species of principal importance to the conservation of biodiversity in England. These species and habitats are a material consideration in the planning process.

NATIONAL PLANNING POLICY FRAMEWORK (NPPF) MARCH 2012

The planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying a number of principles, including (but not limited to) the following:

- if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;
- opportunities to incorporate biodiversity in and around developments should be encouraged;
- Proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the

features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest;

- planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss; and
- By encouraging good design, planning policies and decisions should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

NATIONAL PLANNING PRACTICE GUIDANCE 2014

The National Planning Practice Guidance (NPPG) was published on 6th March 2014 and introduced revised and updated planning practice guidance.

Advice is provided within the 'Natural Environment' section, which refers the reader to specific guidance; in particular paragraph 016, which states:

"Information on biodiversity impacts and opportunities should inform all stages of development (including, for instance, site selection and design including any pre-application consultation as well as the application itself.

"An ecological survey will be necessary in advance of a planning application if the type and location of development are such that the impact on biodiversity may be significant and existing information is lacking or inadequate. Pre-application discussion can help scope whether this is the case and, if so, the survey work required.

"Where an Environmental Impact Assessment is not needed it might still be appropriate to undertake an ecological survey, for example, where protected species may be present. Separate guidance is to be published by Defra on statutory obligations in regard to protected species which will replace the advice set out in Circular 06/05: Biodiversity and Geological Conservation.

"Local planning authorities should only require ecological surveys where clearly justified, for example if they consider there is a reasonable likelihood of a protected species being present and affected by development. Assessments should be proportionate to the nature and scale of development proposed and the likely impact on biodiversity. Further guidance on information requirements is set out in making an application.

"Planning conditions, legal agreements or undertakings may be appropriate in order to provide for monitoring and/or biodiversity management plans where these are needed."

ODPM CIRCULAR 06/2006: BIODIVERSITY AND GEOLOGICAL CONSERVATION - STATUTORY OBLIGATIONS AND THEIR IMPACT WITHIN THE PLANNING SYSTEM (CIRCULAR 06/05).

This Circular was prepared to support the now obsolete guidance within Planning Policy Statement 9 (PPS9) and provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. This document will shortly be replaced by guidance set out within NPPG. Of particular note, this document states:

"The potential effects of a development, on habitats or species listed as priorities in the UK Biodiversity Action Plan (BAP), and by Local Biodiversity Partnerships, together with policies in the England Biodiversity Strategy, are capable of being a material consideration in the preparation of regional spatial strategies and local development documents and the making of planning decisions.'
'The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat'.

BATS

All native UK bats are afforded full protection under Section 9 of the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5 of the Act. Under the Act it is an offense to:

- intentionally or recklessly kill, injure or take a wild animal included in Schedule 5 (Section 9.1); and to
- possess or control any live or dead wild animal included in Schedule 5 or any part of, or anything derived from, such an animal (Section 9.2)

It is an offence intentionally or recklessly to:

- damage or destroy any structure or place which any wild animal specified in Schedule 5 uses for shelter or protection (Section 9.4a);
- disturb any such animal while it is occupying a structure or place which it uses for shelter or protection (Section 9.4b); or
- obstruct access to any structure or place which any such animal uses for shelter or protection (Section 9.4c)

It is also an offence to:

- sell, offer or expose for sale, or possess or transport for the purpose of sale, any live or dead wild animal included in Schedule 5, or any part of, or anything derived from, such an animal (Section 9.5a); or
- publish or cause to be published any advertisement likely to be understood as conveying that one buys or sells, or intends to buy or sell, any of those things (Section 9.5b)

Knowingly causing or permitting any of the above acts to be carried out is also an offence.

Bats also receive full protection as European Protected Species under Section 41 of The Conservation of Habitats and Species Regulations 2010 through their inclusion on Schedule 2. Under the Regulations it is an offence to deliberately:

- capture, injure or kill a wild animal of these species;
- disturb such animals; and to
- damage or destroy a breeding site or resting place of such an animal

It is also an offence to:

- possess or control, transport, sell or exchange or offer for sale or exchange any of these species or any part or derivative of one (if obtained after May 1994)

INVASIVE WEEDS

Schedule 9 of the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) makes it an offence to plant or otherwise cause species such as Japanese knotweed *Fallopia japonica* to grow in the wild.