

Highfields, Holmfirth
Ecological Impact Assessment
30th May 2019



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Site Name Hlghfields	Location New North Road, Huddersfield HD1 5LS
Document ref: MBE/EcIA/2019/12/1	
Local Authority Kirklees Council	Grid Reference SE 1389 1717
Surveyor Peter Middleton MCIEEM	Date of Surveys 18/01/2019, 09/05/2019 & 28/05/19
National Character Area (NCA) The Southern Pennine Fringe (37)	Designation of Site None

Phase 1 Habitat Types on Site and adjacent A3.3 Mixed scattered trees, J1.2 Amenity grass, J1.4 Introduced shrub, J3.6 Buildings, J4 Bare ground (including ephemeral).
NVC Communities on Site Roosting bats
Protected/Notable Species, Constraints on Site Roosting bats
HPIs and SPIs under NERC Act 2006 None
Kirklees BAP Bats

1. Summary

- 1.1.1 The Preliminary Ecological Appraisal of the Highfields Centre, New North Road, Huddersfield was commissioned by landscape architect Catriona Furness on behalf of the client on 5th October 2018. Further nocturnal surveys were commissioned on 18th May 2019.
- 1.1.2 The purpose of this report is to present the findings of an extended Phase 1 habitat survey. The report considers the ecological value of the site and presents an assessment of the impacts of the proposed development and provides details of the mitigation and compensation necessary to avoid or reduce these impacts.
- 1.1.3 The site consists of the former Highfields Centre belonging to Kirklees College which is accessed off New North Road. With the exception of two areas of amenity grass, the site consists almost entirely of the built environment and either hard surface or bare ground 0.3ha in extent.
- 1.1.4 On site and adjacent habitats are considered to be of site level importance to nature conservation.
- 1.1.5 Nocturnal bat surveys revealed a single common pipistrelle day roost in association with the surveyed building. No evidence of the structure being used by maternity roosting bats was recorded. The site is considered to be of local level importance to nature conservation for roosting bats. The site is not considered to be of greater than site level importance to any other species group.
- 1.1.6 Ecological enhancements agreed include a soft landscaping scheme to include the planting of native trees and shrubs and the provision of an on-site pond. In light of the agreed mitigation, no significant ecological impacts will result from the scheme as proposed.
- 1.1.7 It is proposed to retain the existing bat roost location within the development. In this case, it is recommended that Heras fencing is used to fence off land within a 2m radius of the roost at the outset of works with all site contractors to be notified of the roost location and advised not to enter the exclusion area without express permission. If proposals change and there is a requirement to re-point the bat roost or otherwise alter this section of the structure then the site will need to be registered on the Bat Mitigation Class Licence (BMCL).

2. Introduction

- 2.1.1 The Preliminary Ecological Appraisal of the Highfields Centre, New North Road, Huddersfield was commissioned by landscape architect Catriona Furness on behalf of the client on 5th October 2018. Further nocturnal surveys were commissioned on 18th April 2019.
- 2.1.2 The ecological survey was commissioned to inform a planning application for the redevelopment of the site and change of use to residential. The site comprises the built environment and man-made habitats only in a central location in the large town of Huddersfield.
- 2.1.3 The purpose of this report is to present the results of an extended Phase 1 habitat survey which includes determining the potential for, or presence of, protected and notable species, plus an appended map of the site showing the Phase 1 habitats present. Where impacts can be confidently determined, recommendations in relation to avoiding, mitigating and compensating for these impacts are included in this report, together with biodiversity enhancement recommendations.
- 2.1.4 Ecological impacts associated with the scheme have been assessed with the focus on identifying significant impacts. Mitigation, compensation and enhancement measures are detailed.
- 2.1.5 Key legislation relating to designated sites and protected species and habitats is presented in Appendix 5. The implications of legislation are detailed in the body of the report where necessary.

3. Site Description

- 3.1.1 The site consists of the former Highfields Centre belonging to Kirklees College which is accessed off New North Road. With the exception of two areas of amenity grass, the site consists entirely of the built environment and either hard surface or bare ground 0.3ha in extent (see Plates 1, 2, & 3). There are two mature deciduous trees (beech and sycamore) near the rear entrance to the site and two immature trees approximately 4m high (cherry and spruce species) on an area of amenity grass also near the rear entrance.
- 3.1.2 Land adjacent to the application site supports the following habitats.
- The built environment
 - Highway
 - Scattered trees
- 3.1.3 The site falls within National Character Area (NCA) 37; The Southern Pennine Fringe which is a transitional landscape from the upland areas of the Southern Pennines NCA in the west through to the low-lying land of the Nottinghamshire, Derbyshire and Yorkshire Coalfield NCA to the east. The most striking aspect of the landscape is the mingling of predominantly 'gritstone' industrial towns and villages with the strong valley forms and pastoral agriculture of the Pennine foothills.

Figure 1. The site location



Figure 2. Ariel view of the site



4. Methodology

4.1 Data Consultation

4.1.1 West Yorkshire Ecological Records (WYER) were contacted to request the following information for locations within a 2km radius of the site:

- Protected and notable species records
- The boundaries of non-statutory designated sites of nature conservation interest

4.1.2 A search of the Multi-Agency Geographical Information for the Countryside (MAGIC)

website was undertaken to determine the following:

- The boundaries of statutory designated sites of nature conservation interest
- The locations of historic European Protected Species (EPS) licences granted by Natural England

4.2 Field Survey

Extended Phase 1 Habitat Survey

4.2.1 The site was surveyed on 9th October 2018 using extended Phase 1 habitat survey methodology (JNCC, 2010) by the following personnel:

- Peter Middleton (MCIEEM)

4.2.2 Notable, rare or scarce plant species were highlighted if present. Evidence of protected species or species of nature conservation importance was recorded where present at the time of survey. Species recorded are included within the report as appropriate. Information is presented on the Phase 1 plan, using Target Notes (TN) to identify particular features of interest, where appropriate. Additionally, and where possible, habitats were classified using the National Vegetation Classification (NVC), as described in the JNCC National Vegetation Classification – Users Handbook (Rodwell, 2006).

4.2.3 Aerial photographs (Google Earth) were studied to place the site in its wider context and to look for ecological features that would not be evident on the ground during the walkover survey. This is particularly useful for identifying wildlife corridors and ponds but because the latter are often not apparent on aerial photographs, OS 1:25 000 scale maps are also used.

4.2.4 Habitats of Principal Importance (HPIs) and Species of Principal Importance (SPIs) are included on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 were noted together with priority species and habitats as included on the Local Biodiversity Action Plan (LBAP).

Nocturnal Bat Surveys

4.2.5 Two nocturnal surveys were undertaken to determine the presence or absence of roosting bats in the building.

4.2.6 The following personnel conducted the nocturnal surveys.

- Robert Bell (RB) (MCIEEM; Class license WML-A34-Level 4, 2016-25236-CLS-CLS), Peter Middleton (PM) (MCIEEM; Class license WML-A34-Level 4, 2016-25236-CLS-CLS), Louisa Malloy (LM; Class license WML-A34-Level 1, 2016-22694-CLS-CLS), Carl Dixon (CD), Stephen Frost (SF) and Dr Amanda Murphy (AM).

4.2.7 The following activities were carried out in compliance with relevant Bat Survey Guidelines (Collins 2016), with surveyor locations shown on Figure 2:

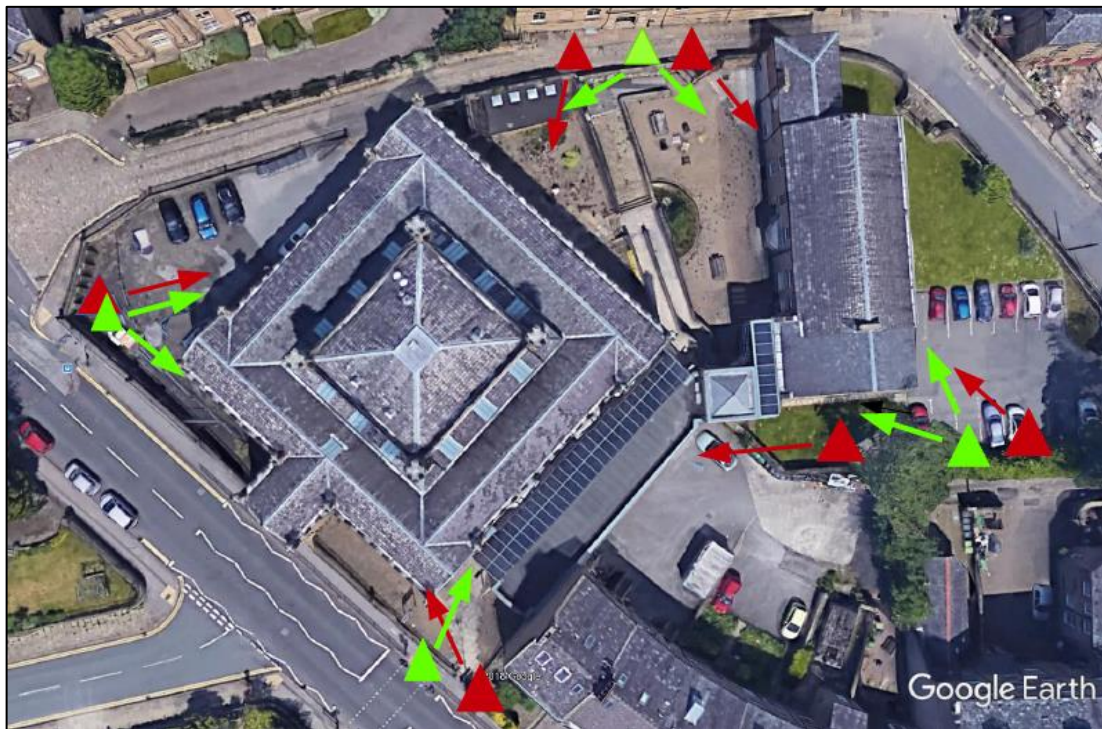
- A dusk emergence survey was undertaken by PM, RB, AM, CD LM and SF on 9th May 2019 continuing from 15 minutes prior to sunrise until 90 minutes after this time. All sections of the building were monitored.

- A dawn return survey was undertaken by PM, CD, AM and SF on 28th May 2019 continuing from 1.5 hours prior to sunrise until 15 minutes after this time. All sections of the building were monitored.

4.2.8 The following equipment was used during the surveys:

- Wildlife Acoustics EM Touch bat detectors and iPad recorders and BatBox Duet coupled with an Anabat.

Figure 2. Surveyor locations Dusk ▲ Dawn ▲



4.3 Method of Assessment

4.3.1 The value and sensitivity of ecological features present on site were determined based on the guidance given in 'Guidelines on Ecological Impact Assessment' (CIEEM, 2016). Individual ecological receptors (habitats and species that could be affected by the development) for the scheme were assigned levels of importance for nature conservation. The highest level is international, then decreasing in order of importance through national, regional, county, local and lastly site.

4.3.2 The assessment of the buildings bat roost potential is in accordance with Bat Survey Good Practice Guidelines (Collins 2016). The system of categorisation is applied using professional judgement with the habitat feature assigned a level of suitability: negligible, low, moderate or high.

4.4 Survey Limitations

4.4.1 Whilst the initial walkover survey was undertaken outside the appropriate period for detailed botanical survey, the habitats present are species poor and could be confidently characterised during the survey.

4.4.2 The dawn bat activity survey was undertaken in less than favourable temperatures (6°C throughout). It is however noted that the temperature at sunset on the night previous to the survey was 11°C, which falls within the parameters recommended by Collins (2016) for undertaking bat surveys. It is considered that the nocturnal bat surveys undertaken have obtained a robust understanding of building use by roosting bats.

5. Ecological Baseline

5.1 Designated Sites

5.1.1 Designated sites present within 2km of the site are detailed in Table 1.

Table 1. Designated sites

Designation	Name	Interest	Distance and direction to site
Local Wildlife Site (LWS)	Sir John Ramsdens Canal	Standing open water and associated habitats	900m east
	Gledholt Wood	Ancient Semi natural woodland	1km southwest
	Huddersfield Canal Narrow	Standing open water and associated habitats	1km south
	Grimscar Wood	Re-planted ancient woodland	1.65km northwest

5.1.3 The closest area of Ancient Semi Natural Woodland is located one kilometre from the site.

5.1.4 Records of protected and notable species obtained are discussed in the species sections of the results.

5.2 Habitats

5.2.1 The arrangement of site habitats is shown on the Phase 1 plan in Appendix 2, whilst full list of plant species recorded is provided in Appendix 3.

5.2.2 On site habitats are largely restricted to several scattered trees and amenity grassland which are considered to be of site level importance to nature conservation.

5.2.3 The site is of local level importance to roosting bats. The site is not considered to be of greater than site level importance to any other species group.

5.2.4 A detailed description of the site and adjacent habitats and the site's potential to support protected and notable species is provided below.

A3.3 Scattered trees

5.2.5 There are two large trees near the rear entrance to the site; a large mature beech *Fagus sylvatica* and a younger sycamore *Acer psuedoplatanus*. In addition, there is a small immature cherry *Prunus* spp and two spruce *Picea* spp. approximately 4m high (see Plates 1 & 2 and Appendix 1).

Plate 1. View of the rear building from beneath a mature beech near the rear entrance to the site



Plate 2. Scattered trees and amenity grassland



J1.2 Amenity grassland

- 5.2.6 There are two relatively small areas of amenity grassland at the rear of the site. Species present include abundant perennial ryegrass *Lolium perenne*, frequent dandelion *Taraxicum officinale* agg, daisy *Bellis perennis*, creeping buttercup *Ranunculus repens*, and great plantain *Plantago major* (see Plate 2 & 3).

Plate 3. Amenity grass and boundary wall



J1.4 Introduced shrub

- 5.2.7 Near the boundary with Highfields lane adjacent to a disused toilet block is a single specimen of rosemary *Rosmarinus officinalis*.

Plate 4. Boundary wall from Highfields Lane



J3.6 Buildings

- 5.2.8 Buildings occupy the majority of the site and include two large stone built buildings that are linked together. The main building (see Plate 5) is Grade 2 Listed. The buildings and their potential to accommodate roosting bats is discussed in the species section of the report.

Plate 5. The main building viewed from New North Road



Plate 6. Elevation facing Highfields Lane



J4 Bare ground with emerging ephemeral

5.2.9 Bare ground constitutes the majority of the site in the form of loose aggregate or paving stones. Pioneer species recorded in these areas include frequent herb robert *Geranium robertianum*, ribwort plantain *Plantago lanceolata*, and willowherb species

Epilobium spp., together with occasional butterfly bush *Buddleia davidii*, smooth sow-thistle *Sonchus oleraceus* and common vetch *Vicia sativa*.

Plate 7. Bare ground (course aggregate) with emerging ephemeral



Species and species groups

Amphibians

5.2.10 No Great Crested Newt (GCN) *Triturus cristatus* records were provided by WYER for locations within a 2km radius of the site. In addition, no GCN EPS mitigation licences have been issued for locations within 2km of the site.

5.2.11 There is a pond within Greenhead Park 330m southwest of the application site. GCN are not considered to be a receptor to the proposed scheme because the site is in an urban location and separated by roads. Common amphibian species are also unlikely to be present on site.

Badger

5.2.12 No badger *Meles meles* record were provided by WYER for locations within 2km radius of the site.

5.2.13 No signs of badger were recorded on site. Considering the central location within Huddersfield and the dearth of potential foraging habitat on site, this area is considered unlikely to be used as a wider foraging area by this species.

Bats

5.2.14 Originally two buildings on site, but now linked together to form a large complex formally used by Kirklees College. No signs of bat presence were recorded from the building complex, a description of the buildings and their potential to accommodate bats is provided below.

5.2.15 One hundred bat records of seven species were provided by WYER. Species included in the records comprised common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle

Pipistrellus pygmaeus, noctule *Nyctalus noctula*, Leisler's bat *Nyctalus leisleri*, brown long-eared bat *Plecotus auritus*, Daubenton's bat *Myotis daubentonii*, whiskered bat *Myotis mystacinus*, unidentified pipistrelle species and unidentified bat species. The nearest record of any kind comprises a record of Daubenton's bat and common pipistrelle using a waterbody 86m northwest from the site for foraging and/or commuting.

- 5.2.16 Two historic EPS mitigation licences have been obtained for locations within 2km of the application site. The closest licence to site was issued in 2014 to allow the destruction of a common pipistrelle resting place; 1.2km southeast of the application site.

Description of building

- 5.2.17 The main building which fronts New North Road is Grade 2 Listed (19th Century). It is largely two storey with a hipped slate roof with crenelated parapets and corner turrets. Symmetrically composed around a central 3 storey hall in a manner of an Inverary Castle. The façade has a protruding central wing. A modern extension links this building with a rectangular stone built building beneath a pitched slate roof at the rear (see Plates 1 to 7).

Internal inspection of building

- 5.2.18 There are no roof-spaces in either of the buildings or the linking extension. All sections of the buildings have vaulted ceilings, with some having had suspended ceilings fitted beneath. No signs of bats were found during the inspection.

Plate 8. Vaulted ceiling in the two-storey section of the main building



- 5.2.19 There are no trees on site that appear to display features with potential to support roosting bats and the site provides suboptimal foraging habitat for bats.

External inspection of building

- 5.2.20 The external walls lack features with potential to accommodate bats and therefore all

features are associated with the roof. The roof displays bat roost potential in the form of gaps under lead flashings and the lead ridge plus uneven slates and gaps between slates.

Nocturnal Surveys

- 5.2.21 **Dusk survey, 9th May 2018** – (Sunset 21:00) – The temperature at the beginning of monitoring was 15°C with a Beaufort Scale Force 1 south-easterly wind and a clear sky. The temperature decreased to 14°C by the end of monitoring and the other conditions remained the same throughout the survey.
- 5.2.22 A common pipistrelle emerged from the south facing gable of the rectangular building near the rear car park (see Plate 8) at 21:22. A Leisler's bat was heard foraging high above at 21:19 and at 21:22 and up to two common pipistrelles foraged intermittently thereafter.
- 5.2.23 **Dawn survey, 28th May 2019** – (Sunrise 04:48) – The temperature at the beginning of monitoring was 6°C with a Beaufort Scale Force 1 westerly wind and a clear sky. The conditions remained the same throughout the survey.
- 5.2.24 No bats were recorded either foraging, commuting or re-entering the surveyed building.

Summary and Evaluation of Findings

- 5.2.25 The buildings displays a moderate number but low diversity of bat roost features and it was assessed as offering a low/moderate level of bat roost potential. One bat roost was identified in association with the surveyed building. The roost (see Plate 9), is a day roost used by a single common pipistrelle within a vertical joint in the masonry on a south facing gable. The roost is considered to be of low conservation value.

Plate 9. Approximate location of emergence, indicated by red circle



Birds

- 5.2.26 No red listed species within the Birds of Conservation Concern (Eaton *et al.*, 2015) were recorded on site. A single pied wagtail *Motacilla alba* was recorded flying over the site.

5.2.27 Perhaps with the exception of two large trees adjacent to the rear entrance, the site is unlikely to support nesting birds

Invasive species

5.2.28 No species listed as invasive species on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended) were found on site.

Invertebrates

5.2.29 The poor quality habitats present on site is likely to support a low assemblage of common invertebrates. Consequently, rarely occurring invertebrate species are unlikely to be present.

Plants

5.2.30 No notable plant species were recorded on site.

Reptiles

5.2.31 No recent reptile records were provided by WYER. Considering that the site is in an urban location, reptiles are not considered to be a receptor to the proposed scheme.

Table 2. Ecological importance of each habitat, species or species group on site and adjacent

Habitat, Species or Species Group	Ecological value
J5 Buildings	Site
Amphibians	Unlikely to be present
Badger	Unlikely to be present
Bats	Local
Birds	Site
Reptiles	Unlikely to be present
Invertebrates	Site
Plants	Site

6. Assessment

6.1 Proposals

6.1.1 The proposed development comprises the conversion of the building into living accommodation. An ecologically sensitive soft landscaping scheme is expected to result in a net ecological gain.

6.1.2 The assessment of impacts is based upon the proposed plan entitled: SPP/H/541/1a, Highfields, CF Landscapes (see Appendix 4).

6.1.3 The client has confirmed that the intention is to retain the identified bat roost location.

6.2 Assessment of Effects, Mitigation Measures and Enhancements

- 6.2.1 The assessment of effects and mitigation measures are considered in relation to habitat, species or species group.

Designated sites

- 6.2.2 No direct impacts on designated sites are anticipated because of the nature of the development and the distances from the site.
- 6.2.3 Given the low value site habitats, it is not considered that scheme impacts will be of importance to nature conservation at greater than the site level. No significant ecological impacts will result from the scheme and there is an opportunity to increase the ecological value of the site by implementing an ecologically sensitive soft landscaping scheme.

Habitats

- 6.2.4 No impacts on site habitats or adjacent habitats, other than those already discussed are envisaged. Enhancements agreed by the developer include a soft landscaping scheme to include the planting of native trees and shrubs and a pond (see Appendix 4).

Species and Species Groups

Bats

- 6.2.5 Roosting bats are subject to strict legal protections as detailed in Appendix 5. The roost is proposed for retention and consequently no impacts on roosting bats are envisaged.
- 6.2.6 If the proposals change and there is a requirement to re-point the bat roost or otherwise alter this section of the structure then the site will need to be registered on the Bat Mitigation Class Licence (BMCL) and a third nocturnal survey will need to be undertaken to inform licensing.
- 6.2.7 It is recommended that Heras fencing is used to fence off land within a 2m radius of the roost at the outset of works. All site contractors should be notified of the roost location and advised not to enter the exclusion area without express permission. Contractors should be advised to site generators and other similar machinery away from this area. Middleton Bell Ecology can undertake a initial Toolbox Talk to the foreman and construction team at the onset of works, if required.
- 6.2.8 No indirect impacts upon foraging bats are anticipated as a result of the scheme. Enhancements for bats will be provided by an improvement in quality of foraging habitat following implementation of a soft landscaping scheme which will include native trees and shrubs and an on-site pond (see Appendix 4).

Birds

- 6.2.9 No direct or indirect impacts upon nesting birds are anticipated as a result of the scheme. Enhancements for birds will be provided by an improvement in quality of nesting habitat for common garden birds such as wren *Troglodytes troglodytes*, dunnock *Prunella modularis*, robin *Erithacus rubecula* and blackbird *Turdus merula* following implementation of a soft landscaping scheme (see Appendix 4).

Other species

6.2.10 No notable impacts on other species groups are envisaged.

6.3 Conclusions and Residual Effects

6.3.1 No significant ecological impacts will result from the scheme as proposed. In order to achieve a net ecological gain, a soft landscaping scheme (see Appendix 4) will be implemented.

7. References

Collins J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines. The Bat Conservation Trust.

Connolly S and Charles P. (2005) Environmental Good Practice Pocket Book. CIRIA, London.

Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015) Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. *British Birds* 108, 708–746.

Environment Agency (2007) Pollution Prevention Guidelines – Works and maintenance in or near water: PPG5. Now retracted, but available from: <https://www.gov.uk/government/collections/pollution-prevention-guidance-ppg>

Froglife (1999). Froglife Advice Sheet 10: reptile survey. Froglife, London.

Gent T and Gibson S (2003). Herpetofauna Workers Manual. JNCC, Peterborough.

Harris S, Cresswell P and Jefferies D (1989). Surveying Badgers. Mammal Society.

CIEEM (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

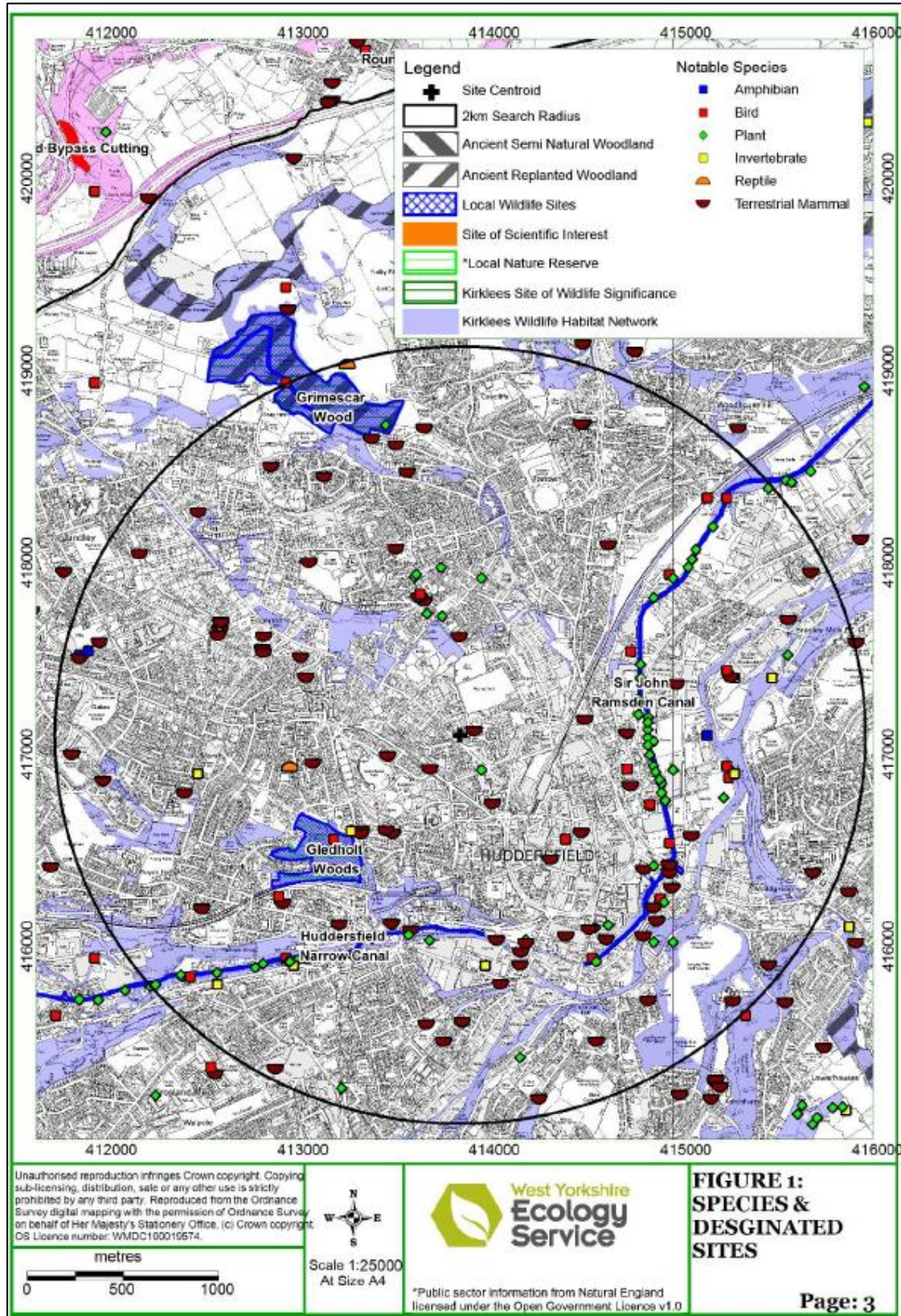
CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

Joint Nature Conservation Committee (2010). Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit. Reprinted by JNCC, Peterborough.

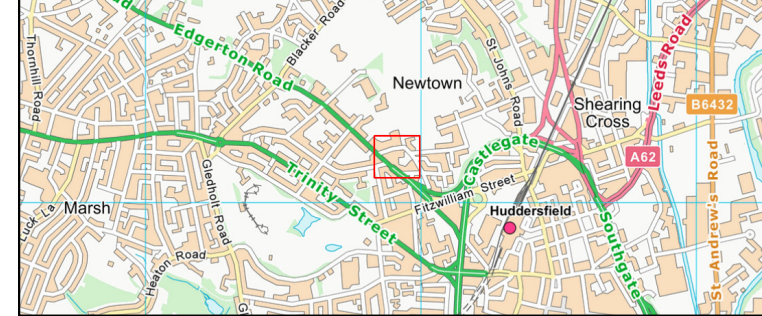
Mitchel- Jones AJ (2004) Bat Mitigation Guidelines, English Nature.

Rodwell JS (2006), NVC Users' Handbook. JNCC.

Appendix 1. Designated Sites Plan



Appendix 2. Phase 1 Plan



Survey Information	
	Site boundary
Phase 1 Habitat Survey	
	Amenity grassland
	Bare ground
	Building
	Hardstanding
	Scattered broadleaved tree
	Scattered coniferous tree
	Introduced shrub
	Target note

Target Notes:
 1 – Small area of grass beneath Spruce.
 2 – Coarse aggregate.
 3 – Bare ground covered in grass cuttings.
 4 – Hard surface.
 5 – Large trees (Beech and Sycamore).

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PROJECT TITLE
HIGHFIELDS, HUDDERSFIELD

DRAWING TITLE
Figure 1. Phase 1 Habitat Plan

VER	DATE	REMARKS	Drawn	Checked
1.2	23/10/18	Phase 1	MP	PM

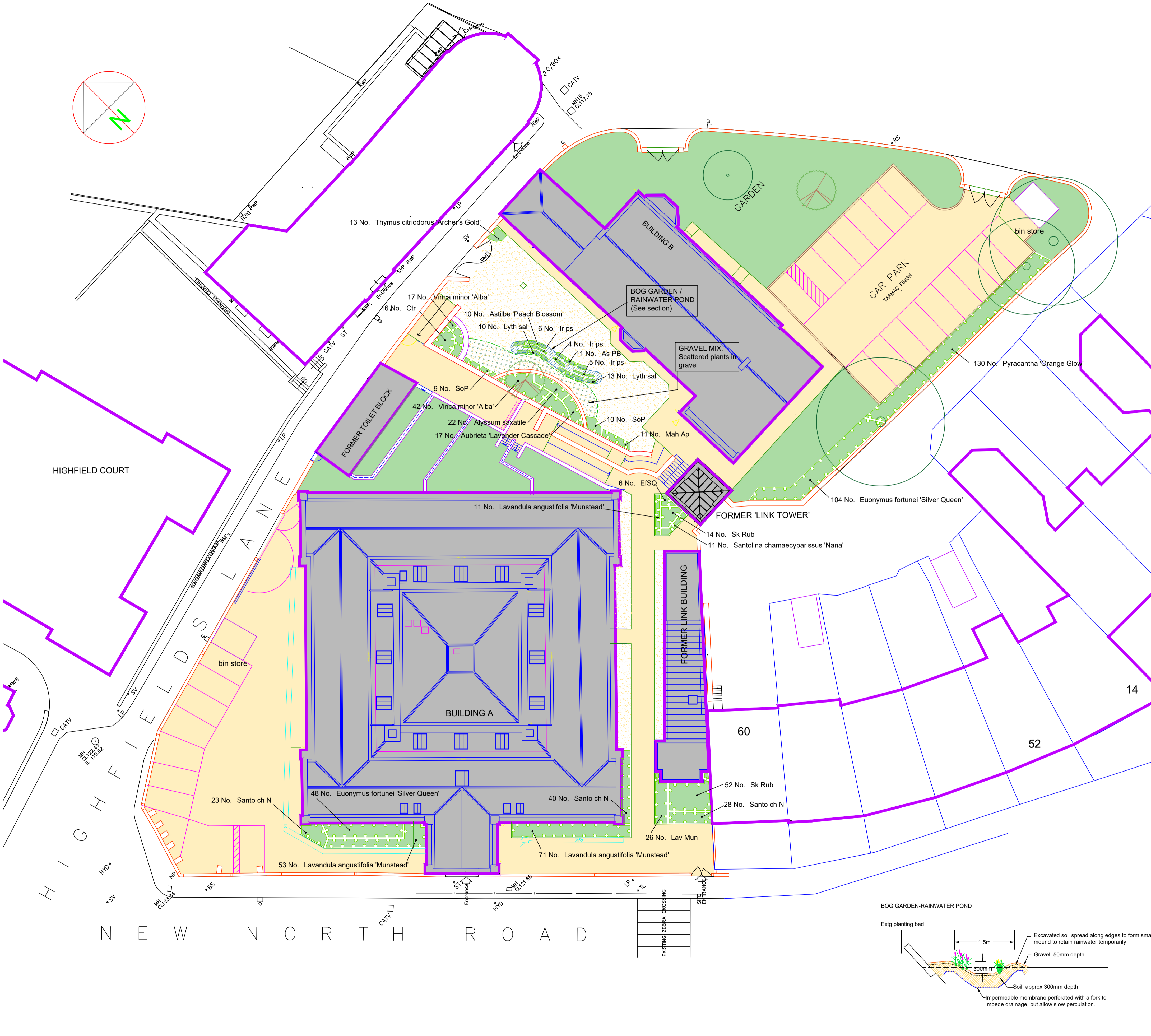
DRAWING NUMBER:
MIDDLETONBELLECOLOGY/Highfieldsy/Phase 1

SCALE	1:550	PLOT SIZE	A3	DATUM	OSGB	PROJECTION	BNG
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Appendix 3. Plant Species Recorded on Site

Full Species List		
English Name	Scientific Name	DAFOR Rating
Mixed scattered trees		
Beech	<i>Fagus sylvatica</i>	R
Sycamore	<i>Acer psuedoplatanus</i>	R
Cherry spp	<i>Prunus</i> spp	R
Spruce	<i>Picea abies</i>	R
Spruce spp	<i>Picea</i>	R
Bare ground including emerging pioneer vegetation		
Herb robert	<i>Geranium robertianum</i>	F
Rosebay	<i>Chamerion angustifolium</i>	R
Ribwort plantain	<i>Plantago lanceolata</i>	F
Groundsel	<i>Senecio vulgare</i>	F
Vetch spp	<i>Vicia</i> spp	O
Willowherb spp	<i>Epilobium</i> spp	F
Butterfly bush	<i>Buddleia davidii</i>	O
Smooth sowthistle	<i>Sonchus oleraceus</i>	O
Coltfoot	<i>Tussilago farfara</i>	R
Sycamore	<i>Acer psuedoplatanus</i>	O
Elder	<i>Sambucus nigra</i>	O
Common orache	<i>Atriplex patula</i>	R
Amenity grassland		
Cocksfoot	<i>Dactylis glomerata</i>	O
Perennial ryegrass	<i>Lolium perenne</i>	A
Yorkshire fog	<i>Holcus lanatus</i>	O
Dandelion	<i>Taraxicum officinale</i> agg	F
Daisy	<i>Bellis perennis</i>	F
Great plantain	<i>Plantago major</i>	F
White clover	<i>Trifolium repens</i>	O
Creeping buttercup	<i>Ranunculus repens</i>	F
Introduced Shrub		
Ivy	<i>Hedera helix</i>	Loc A
Rosemary	<i>Rosmarinus officinalis</i>	R

Appendix 4. Landscaping Plans



Shrubs					
Number	Abbreviation	Species	Height	Specification	Density
16 No.	Ctr	Ceanothus thyrsiflorus repens	30-40cm	3L pot	4/m ²
158 No.	EISQ	Euonymus fortunei 'Silver Queen'	30-40cm	3L pot	4/m ²
161 No.	Lav Mun	Lavandula angustifolia 'Munstead'	30-40cm	3L pot	4/m ²
11 No.	Mah Ap	Mahonia aquifolium 'Apollo'	30-40cm	3L pot	4/m ²
130 No.	POG	Pyracantha 'Orange Glow'	40-60cm	3L pot	3/m ²
19 No.	SoP	Salvia officinalis 'Purpurascens'	30-40cm	3L pot	4/m ²
102 No.	Santo ch N	Santolina chamaecyparissus 'Nana'	20-30cm	3L pot	5/m ²
66 No.	SK Rub	Skimmia japonica 'Rubella'	30-40cm	3L pot	4/m ²
59 No.	V min Al	Vinca minor 'Alba'	20-30cm	2L pot	5/m ²

Herbaceous				
Number	Abbreviation	Species	Specification	Density
22 No.	Alys sax	Alyssum saxatile	9cm pot	5/m ²
21 No.	As PB	Astilbe 'Peach Blossom'	9cm pot	5/m ²
17 No.	Aub LC	Aubrieta 'Lavender Cascade'	9cm pot	5/m ²
13 No.	Th cit AG	Thymus citriodorus 'Archer's Gold'	9cm pot	6/m ²

Marginal / Aquatics				
Number	Abbreviation	Species	Specification	Density
15 No.	Ir ps	Iris pseudacorus	9cm pot	5/m ²
23 No.	Lyth sai	Lythrum salicaria	9cm pot	5/m ²

Gravel plants mix					
Number	Abbreviation	Species	Specification	Density	Weight
6 No.	ArBG	Ajuga reptans 'Burgundy Glow'	9cm pot	2/m ²	
6 No.	Aq RP	Aquilegia vulgaris 'Ruby Port'	9cm pot	2/m ²	
6 No.	Ger sA	Geranium sanguineum 'Album'	9cm pot	2/m ²	
8 No.	Luz niv	Luzula nivea	9cm pot	2/m ²	
8 No.	PaS	Persicaria affinis 'Superba'	9cm pot	2/m ²	
6 No.	SEDACA	Sedum acre aureum	9cm pot	2/m ²	
Total :40 No.					

PREPARATION AND PLANTING

All plant material shall conform to BS3936 Parts 1 and 4 and BS 4428. Topsoil to comply with BS3882, 2015. Organic matter to be proprietary shrub planting compost, or approved compost derived from recycled organic matter. Slow release fertiliser to be 'Enmag' or similar.

Shrub planting.

- Shrubs to be planted into 400mm depth of high quality topsoil complying with BS3882, 1994.
- Organic matter to be spread over planting area and cultivated into soil to a min 400mm depth.
- Shrubs to be planted into prepared soil in pits large enough to accommodate full rootball.
- Finished beds to be lightly forked over and dressed with 50mm depth of coarse forest bark mulch, or 50mm gravel.

Herbaceous planting into gravel

- Existing gravel to be removed and saved for re-use.
- Excavate to 300mm depth, then spread 300mm depth topsoil.
- Lay weed suppressant membrane over cultivated soil.
- Plants to be notch planted into soil through membrane. Plant @ 250mm centres in small groups of 3-6, each group approx 300-750mm apart.
- Finished area to be dressed with 50mm depth gravel.

PHASING

All container grown shrubs, herbaceous and emergent/aquatic plants to be planted in the first March/April after completion of construction.

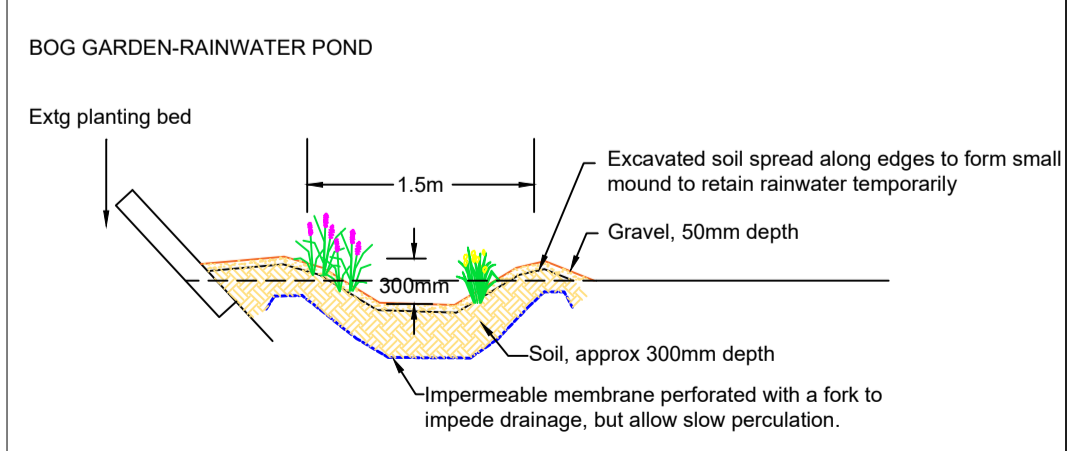
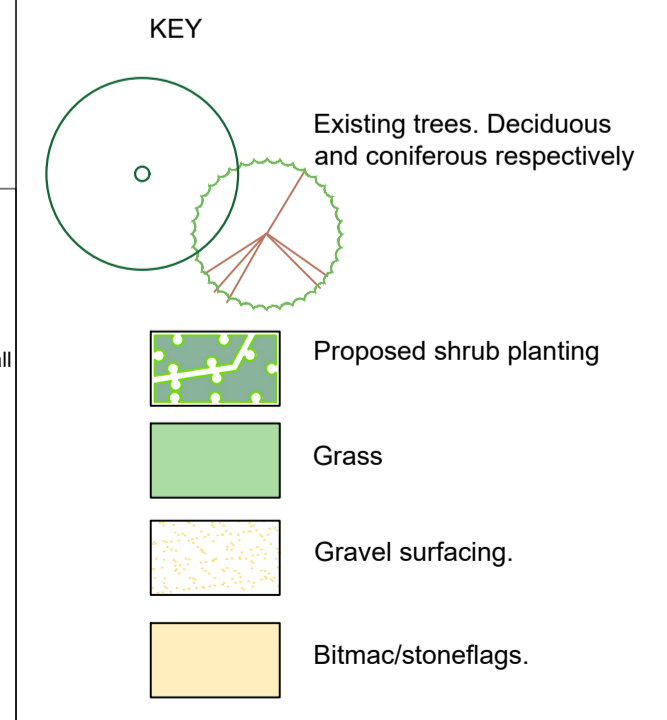
AFTERCARE - 5 YEARS

- Shrubs, herbaceous, emergent/aquatic plants
- Keep all shrub and gravel areas free from weeds by hand pulling or spot treatment with a translocated herbicide.
 - Replace plants that die or fail to thrive, annually.
 - Top up mulch annually.
 - Trim all shrubs along the edges of footpaths after flowering, to encourage bushiness and keep paths clear.
 - Cut back herbaceous species in March.

Watering

In years 1-3, water plants in periods of prolonged dry weather, approx 10 litres per plant. Watering to be undertaken in early morning or evening, avoiding periods of bright sunshine or windy conditions.

Rev A, 2 Jun 19. Amends to garden areas to correspond with architects amended dwg of 13/5/19



client
San Pedro Properties

project
**Development at Highfields
New North Road
Huddersfield**

drawing title
Landscape proposals

scale 1:200 @ A1	date Nov 18	drawn by CTF	drawing no SPP/H/541/1a
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Appendix 5. Relevant Legislation and Planning Policy

Wildlife legislation relating to statutory designated sites and species is summarised in Table A1 and A2 below. This legal information is intended for summary only, and the original legal documents should be consulted if a detailed understanding is required.

Table A1. Legislation relating to designated sites and habitats

Designated Site	Legal Status
Local Wildlife Site (LWS)	While they have no direct legal status, Local Wildlife Sites are considered important enough to receive recognition within the planning system. National planning policy requires local authorities to identify Local Wildlife Sites and provide for their protection through local policy.

Table A2. Legislation relating to species

Species	Legal Status
European protection	
European Protected Species (EPS) (including bats, Great Crested Newt (GCN), otter and hazel dormouse)	<p>These animal species and their breeding sites or resting places are protected under Regulation 41 of the Conservation of Habitats and Species Regulations 2017, which makes it illegal to:</p> <ul style="list-style-type: none"> • Intentionally or deliberately capture, injure or kill any such animal or to deliberately take or destroy their eggs; • Deliberately disturb such an animal; • Damage or destroy a breeding site or resting place of such an animal. <p>European Protected Species (EPS) licences can be granted by Natural England in respect of development to permit activities that would otherwise be unlawful under the Conservation Regulations, providing that the following 3 tests (set out in the EC Habitats Directive) are passed:</p> <ul style="list-style-type: none"> • The development is for reasons of overriding public interest; • There is no satisfactory alternative; and • The favourable conservation status of the species concerned will be maintained and/or enhanced. <p>Under Regulation 9(5) of the Conservation Regulations, Planning Authorities have a legal duty to 'have regard to the requirements of the EC Habitats Directive in the exercise of their functions'. This means that they must consider the above 3 tests when determining whether Planning Permission should be granted for developments likely to cause an offence under the Conservation Regulations. As a consequence, Planning Applications for such developments must demonstrate that the 3 tests will be passed.</p> <p>Natural England also allow sites to be registered on the Bat Low Impact Class Licence to permit activities that would otherwise be unlawful under the Conservation Regulations where the 3 tests can be passed and the bat roosts to be impacted are of low conservation status.</p>

Species	Legal Status
National protection	
European Protected Species and other species including: water vole and white clawed crayfish	These animals receive full protection under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which makes it illegal (subject to exceptions) to: <ul style="list-style-type: none"> • Intentionally kill, injure or take any such animal; • Intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any such animal; and • Intentionally or recklessly disturb such animals while they occupy a place used for shelter or protection.
Common amphibians and reptile species	These animals receive limited protection under The Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which makes it illegal to intentionally kill or injure any such animal.
Badger	The Protection of Badgers Act 1992 makes it illegal to wilfully kill or injure a Badger, or attempt to do so and also make it illegal to intentionally or recklessly interfere with a Badger sett. This includes damaging or destroying a sett, obstructing access to a sett and disturbing a Badger while it is occupying a sett. Licences can be granted by Natural England to permit sett closure and/or disturbance between July and November inclusive.
Schedule 1 birds	Special penalties relate to offences concerning birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). In addition to the offences detailed above relating to all wild birds, it is illegal to intentionally or recklessly disturb any Schedule 1 bird or their dependent young while nesting.
All bird species	All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which makes it illegal (subject to exceptions) to: <ul style="list-style-type: none"> • Intentionally kill, injure or take any wild bird; • Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.
Invasive species	The Wildlife and Countryside Act 1981 (as amended) contains measures for preventing the establishment of non-native species which may be detrimental to native wildlife, prohibiting the release of animals and planting of plants listed in Schedule 9 of the Act. In relation to Schedule 9 plants it is an offence to plant or otherwise cause these plant species to grow in the wild.

Species and Habitats of Principal Importance

Planning authorities have a duty under Section 40 of the NERC Act 2006 to have regard to priority species and habitats in exercising their functions including development control and planning. In compliance with Section 41 of the NERC Act, the Secretary of State has published a list of species and habitats considered to be of principal importance for conserving biodiversity in England under the UK Post-2010 Biodiversity Framework. This is known as the list of Habitats and Species of Principal Importance (HPI/SPI). The HPI/SPI list is used to guide planning authorities in implementing their duty under the NERC Act.

National Planning Policy Framework

The National Planning Policy Framework for England was revised in 2019. This document states that plans should 'promote the conservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity'. It also puts an

emphasis on refusing development which would result in the 'loss or deterioration of irreplaceable habitats (such as ancient woodland)' unless there are 'wholly exceptional reasons and a suitable mitigation strategy exists'.

Local Biodiversity Action Plans

The HPI/SPI list included on Section 41 of the NERC Act 2006 is supported by a series of Local Biodiversity Action Plans (LBAPs), usually set up on a local authority local authority administrative boundary basis. Each LBAP identifies those habitats and species considered to be most important in that area (usually referred to as priority habitats and species). Commonly, an LBAP will identify a number of habitats and species for which "action plans" have been prepared.