



Preliminary Ecological Assessment

Richards Music Centre Site, Bishopswood Road, Highgate, London, Greater London N6 4PR

10/05/2016

Status	Version/Issue	Name of Author/Reviewer	Date
Draft	1/0	Craig Williams MSc GradCIEEM MRSB	09/05/2016
Reviewed	2/0	Julie Powell, Technical Lead of Ecology	10/05/2016
Final	3/1	Craig Williams MSc GradCIEEM MRSB	10/05/2016

Guidelines

This assessment has been designed to meet:

- Chartered Institute of Ecology and Environmental Management 'Guidelines for Preliminary Ecological Appraisal' (2013); and
- British Standard 42020 (2013) 'Biodiversity – Code of Practice for Planning and Development'.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

This approach is enshrined in Government planning guidance, for example, paragraph 193 of the National Planning Policy Framework for England.

The desk studies and field surveys undertaken to provide a preliminary ecological appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

In consequence of the scale and intensity of the proposed development, the low impact on ecological receptors identified through both the site survey and any search of local biological records, and the passive interface with the mitigation hierarchy, this plan-led report is considered adequate and proportionate. It communicates all relevant information necessary to determine a planning application, or support the recommendation for further survey.

Limitations

Arbtech Consulting Limited has prepared this report for the sole use of the above named Client or his agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited.

Copyright

© This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

Site Details and Non-Technical Summary		
Site location	Address:	Richards Music Centre site, Bishopswood Road, Highgate, London, Greater London N6 4PR
	Ordnance Survey Grid Reference:	TQ28028760
Site area	Development site of ~ 1,800m ²	
Description of proposed development (Plans in appendix 2)	No planning application exists at the time of writing, for the proposed development on site, with the London Borough of Haringey.	
	The currently proposed development is to demolish the current pavilion building and construct a two storey (with basement) school building. This will also involve the removal of some trees and amenity grass.	
	Appendix 2 (<i>the proposed development</i>) contains a site plan, which has been used to inform the conclusions and recommendations of this report.	
Client	Highgate school	
Ecological surveyor	Craig Williams MSc GradCIEEM MRSB Licence number [Bats] (2015-11169-CLS-CLS) Licence number [Great Crested Newts] (2015-16682-CLS-CLS) Licence number [Barn Owls] (CL29/00097)	
Date of survey	9 th May 2016	
Access and works areas	Along existing road network and footpaths.	
Designated sites	None within site boundary or adjacent.	

	The table below details any within 1km: Designated Site Name	Distance from Site (approx.)	Reasons for Notification and integral value (from Natural England/records search)
	Statutory Sites		
	Hampstead Heath Woods SSSI	Starts ~780m south-west and ~820m west	Site of special scientific interest <i>Hampstead Heath Woods are examples of long-established high forest woodlands with an exceptional structure comprising an abundance of old and over-mature trees providing dead wood habitat for a range of invertebrate species. The site also includes an adjacent small valley containing an acidic flush with developing bog-moss communities.</i>
	Parkland Walk LNR	Starts ~810m north-east	Local nature reserve <i>The predominant habitat at Parkland Walk is secondary woodland. A large area of naturalised wild plum are present in the Islington section of Parkland Walk. English elm is occasionally present and most abundant in the Islington section. The Islington stretch is also very important for a range of wildlife and includes the borough's only area of acidic grassland which is home to several rare plants and insects.</i>
	Closest non-statutory Site		
	M072 Hampstead Heath	Starts ~300m south-west	Site of importance to nature conservation (SINC). <i>One of London's best loved open spaces, the Heath's remarkable range of habitats so close to central London includes one of the capital's few bogs, as well as wide expanses of grassland and ancient woodland.</i>
Weather	Light breeze. 40% cloud. No rain.		

Summary of desk study data

Biological records data have been obtained from Greenspace information for Greater London (GIGL). They are incorporated into this assessment and report.

[Priority habitats/habitats of principle importance](#)

There are no priority habitats on site.

Within 1km are areas of:

Priority habitat	Closest distance from survey site
Deciduous Woodland	~100m south
Good quality semi-improved grassland	~470m south-west
Woodpasture and Parkland BAP Priority Habitat	~490m west
Lowland Heathland	~800m south-west

[Selected protected species recorded within 2km](#)

Common Name	Scientific binomial	Distance of nearest record (m)
Adder	<i>Vipera berus</i>	Confidential
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	300
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	300
West European Hedgehog	<i>Erinaceus europaeus</i>	300
Brown Long-eared Bat	<i>Plecotus auritus</i>	316
Daubenton's Bat	<i>Myotis daubentonii</i>	447
Common Lizard	<i>Zootoca vivipara</i>	499
Noctule bat	<i>Nyctalus noctula</i>	632
Nathusius's Pipistrelle	<i>Pipistrellus nathusii</i>	640
Serotine bat	<i>Eptesicus serotinus</i>	640
Lesser noctule	<i>Nyctalus leisleri</i>	640
Natterer's Bat	<i>Myotis nattereri</i>	640

Description of existing land use and habitat character using phase 1 habitat survey codes (Map in appendix 1)	The site consists of a school building, a small amenity grass area and scattered trees. [A3.1] Broadleaved scattered trees There are scattered trees around the site, on amenity grass and nearby. Although some are quite tall, none are veteran or possess suitable roosting features for bats. Species include common lime (<i>Tilia europaea</i>), London plane (<i>Platanus x hispanica</i>), Sycamore (<i>Acer pseudoplatanus</i>), Yew (<i>Taxus baccata</i>), Hawthorn (<i>Crataegus monogyna</i>), Common Oak (<i>Quercus robur</i>), and Birch (<i>Betula</i> spp.) [J1.2] Amenity grass Much of the survey site is covered with amenity grass lawn. Perennial rye grass (<i>Lolium perenne</i>) is dominant. Daisy (<i>Bellis perenne</i>) and white clover (<i>Trifolium repens</i>) are common. [J2.4] Fences Metal rail and timber close board fences are present around most of the site's boundary. [J3.6] Buildings and hardstanding There is one permanent structure on the survey site, designated as B1. B1 is a brick built, single storey pavilion. It has a main original section, and a newer extension to the west. The original sections have gables roofs of clay tiles, and the extension has a half-hipped slate roof. All the tiles across the building are of a good condition without gaps. A clock cupola on the roof of the original section is intact, and the lead flashing around its base is unpeeling. Flashing around the rest of the building is also intact. Most of the building features parapet walls, and the centre section has an ornamental gable wall. These are all intact without holes or gaps, as is the exterior brickwork in general. Brick cornices are present around most of the building. ON the eastern end,
--	---

	there are some timber soffit boxes, although these are intact without gaps or cracks. Some flat roofed areas attached the eastern end feature intact roofing liners. The loftspaces are constructed from timber beams and rafters, which are all cobwebbed along the ridge beam indicating a lack of aerial activity. There are three in the original section, and two in the extension. All feature some form of intact lining under the external tiles, a bitumen felt in the case of the clay tiled roofs, or a waterproof membrane in the extension, also boarded. No access into these loftspace from the outside is thought to exist. The building is unsuitable for roosting bats; it did not support any external roosting features, or access into any lofts. No bat evidence was found internally or externally. Around the building is hard standing paving and concrete. Suitability for protected species Appendix 1 (<i>the current site conditions</i>) contains a Phase 1 habitat map. A landscape map can be seen in figure 1. Photographs can be seen in figure 2.
Suitability assessment for protected species	More likely ➤ The scattered trees have the potential to support breeding birds. Less Likely ➤ Although reptiles are known to be present in the local environment, there is no suitable habitat on site for reptiles. The grass cover is short and isolated from other areas. ➤ There is no habitat suitable for great crested newts (terrestrial or aquatic) on the survey site. Great crested newts were also not recorded within 2km. Therefore, their presence is extremely unlikely year round.

	➤ The site offers no roosting value to bats. The building did not have any external roosting features, or access into any lofts for bats. No bat evidence was found internally or externally. Any nearby tree line may be used for commuting. ➤ No evidence of badger use was found on site; the habitats on site are very unlikely to be used by badgers. ➤ No habitat suitable for barn owls were present. ➤ No habitat for any notable invertebrate assemblages was recorded. ➤ No evidence of, or habitat suitable for, any other protected species was present.	
Executive Summary of assessment	Designated sites	There are no designated sites close to the survey site. No impacts are foreseen from dust, noise etc.
	Habitats	The site exhibits no botanical habitats of integral value (botanical habitats and features comprise amenity grass and scattered trees). No impacts on any local priority habitats are foreseen from the works, as none are closer than ~100m away. No invasive species were noted.
	Protected species	<u>Potential impacts and recommendations</u> ➤ It is understood that scattered trees will be removed for the development. This may impact nesting birds. ➤ Any bats commuting along the nearby tree line are unlikely to be affected by the demolition of one school building, and the construction of another. Such urban bats are likely used to current/local levels of noise and lighting. The development is also small scale and will not involve the fragmentation of the tree line to the east. ➤ Recommendations for enhancement for biodiversity are provided.

Figure 1: Landscape map of area with site highlighted.



Assessment Methodology: the desk study and the site survey

Existing records relating to the site and a surrounding 2km radius (the study area) have been requested from the local biological records centre. Freely available information *on designated sites, habitats and species of Principal Importance* was also reviewed, including a search on *Magic.gov.uk*, and *OS OpenData* (2010). Information obtained from the desk study included, where available:

- Landscape structure;
- Habitats and species of Principal Importance (as listed on S41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Habitats and Species of Principal Importance);
- Information on designated sites;
- Information on the surrounding area, including water bodies; and
- Reports of previous ecological assessments.

An extended Phase 1 habitat survey of the site (the survey area) was undertaken. The survey area comprised all land that will be impacted by the proposals. The methodology for the Phase 1 habitat survey was based on the best practice publication Phase 1 habitat survey methodology (JNCC, 2010). All land parcels were described and mapped according to JNCC Phase 1 habitat classification (Appendix 1). Where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure and management (Appendix 1).

During the survey, habitats were assessed for their suitability to support protected species and notable species assemblages, and field signs indicating their presence or absence recorded. The subsequent assessment took into consideration the findings of the desk study, the habitat conditions on site and in the context of the surrounding landscape, and the ecology of the species. The likelihood of occupancy (of protected species) is ranked; the habitats on site were evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat.

The ecological value of the survey area has been assessed based on the Guidelines for Ecological Impact Assessment (IEEM, 2006), and the Handbook of Biodiversity Methods: Survey, evaluation and monitoring (David Hill, 2005), using geographic frames of reference. The biodiversity value of any identified designated sites, habitat types and associated species/assemblages has been considered. Finally, the distribution and extent of invasive species listed on Schedule 9 of the Wildlife and Countryside Act (1981) were also noted throughout the survey area.

Refer to Appendix 3 for full evaluation methodology and survey limitations.

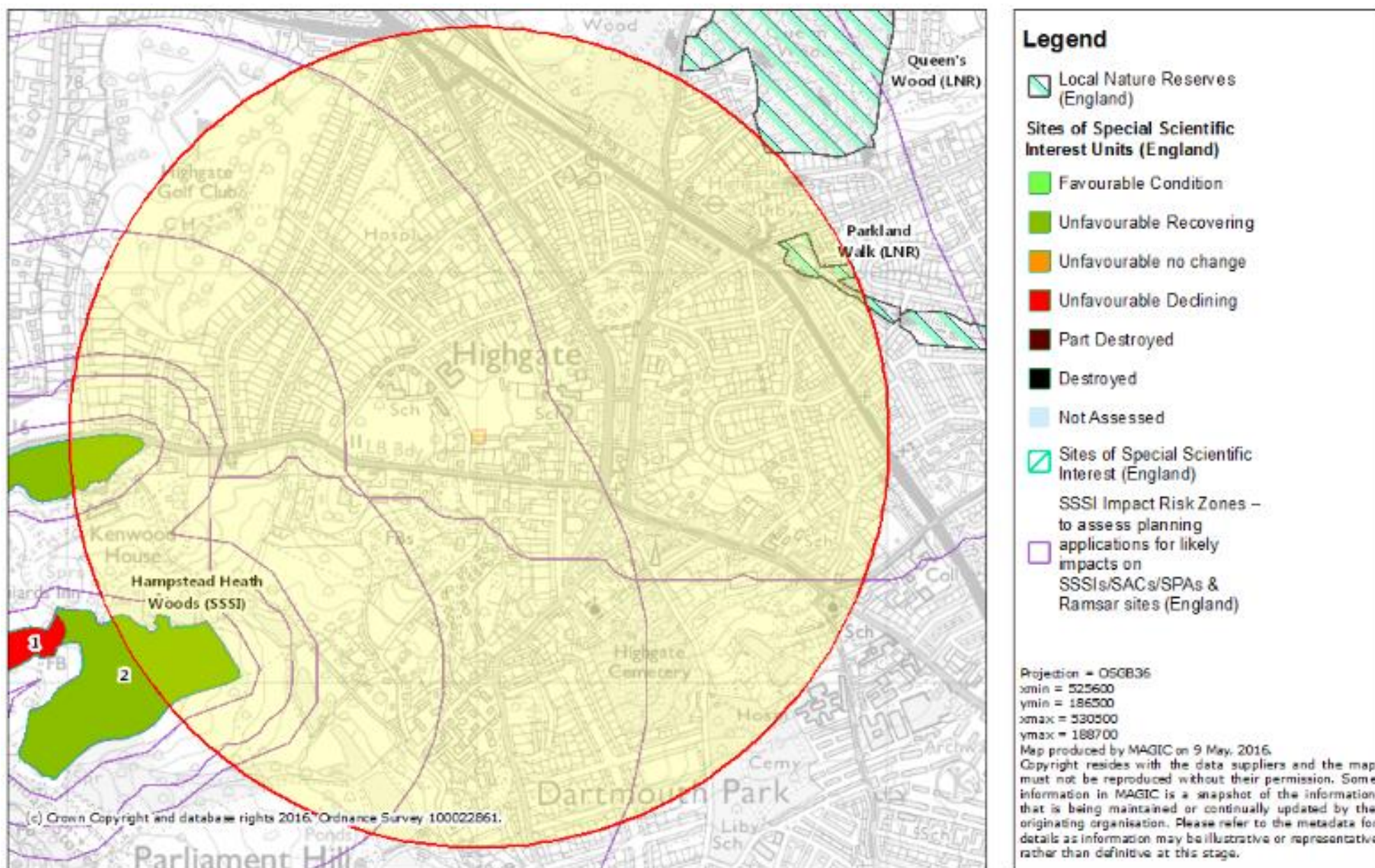
Figure 2: Site photo collage.



◆1: looking south-east at B1 ◆ 2: Looking south-west at B1 ◆3: Looking north-west at the rear of B1 ◆ Inside one of the lofts of B1.

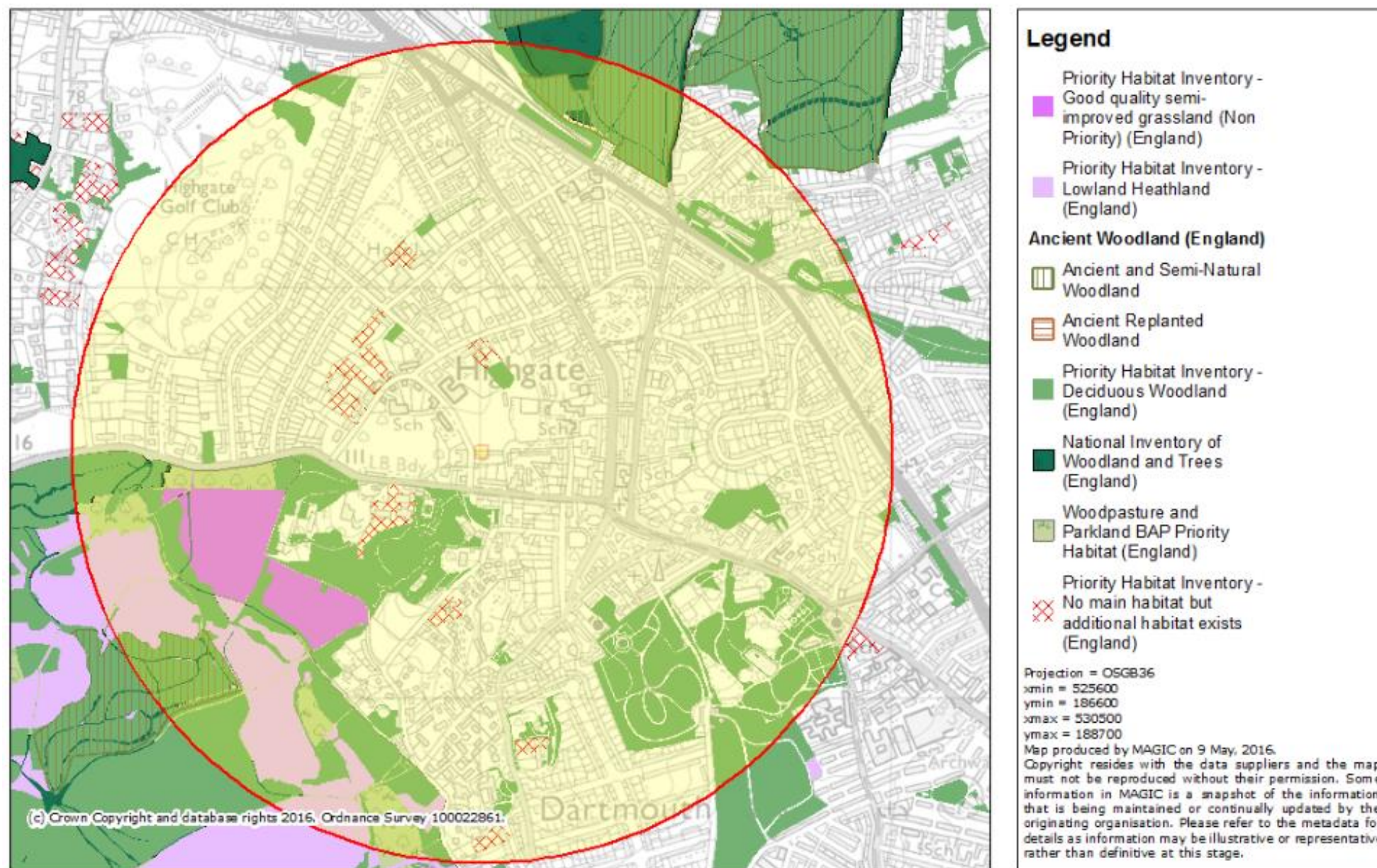
Designated Sites

Figure 3: Magic.gov.uk Map showing designated sites in the wider landscape (buffer showing 1km radius: magic.gov.uk)



Priority Habitats and Habitats of Principal Importance

Figure 4: Magic.gov.uk Map showing designated habitats in the wider landscape (buffer showing 1km radius: magic.gov.uk)



Impacts and the biodiversity mitigation hierarchy ¹	
Assessment of likely significant effects	Further surveys, avoidance, mitigation, and/or compensation
Designated sites	
There are no designated sites close to the survey site. No impacts are foreseen from dust or noises etc.	No further surveys.
Notable habitats and species (e.g. ancient woodland)	
The site exhibits no botanical habitats of integral value (botanical habitats and features comprise amenity grass and scattered trees). No biotic or abiotic impacts on any local priority habitats are foreseen, as none are closer than ~100m away. No invasive species were noted.	No further surveys.
Protected species	
Birds could nest in the scattered scrub on site. Any works which affects this habitat could have an impact on nesting birds; active nests could be damaged or destroyed, and the development could result in permanent loss of a small amount of breeding and foraging habitat. No impacts are foreseen on any other ecological receptor.	➤ Since all in-use bird's nests and their contents are protected from damage or destruction, any tree and shrub removal should be undertaken outside the period 1st March to 31st August. If this time frame cannot be avoided, a close inspection of trees and shrubs to be removed or affected should be undertaken prior to clearance. Work should not be carried out within 5.0m of any in-use nest. Any nest will be retained in situ until the young have fledged.
Invasive and non-native species (e.g. Japanese knotweed)	
None found on site.	No further surveys.

¹ "The overarching aims of ecological work used to inform the planning process are to minimize harm and to maximize benefits for biodiversity resulting from development. The generally accepted way of doing this, now embedded within the planning system, is to follow the 'mitigation hierarchy'. This seeks as a preference to avoid impacts then to mitigate unavoidable impacts, and, as a last resort, to compensate for unavoidable residual impacts that remain after avoidance and mitigation measures." (BS 42020, 2013).

Recommended Enhancements	
Proposed biodiversity enhancement	The following are recommended as enhancements: • The installation of habitat boxes for birds/bats • The planting of native species trees

Bibliography

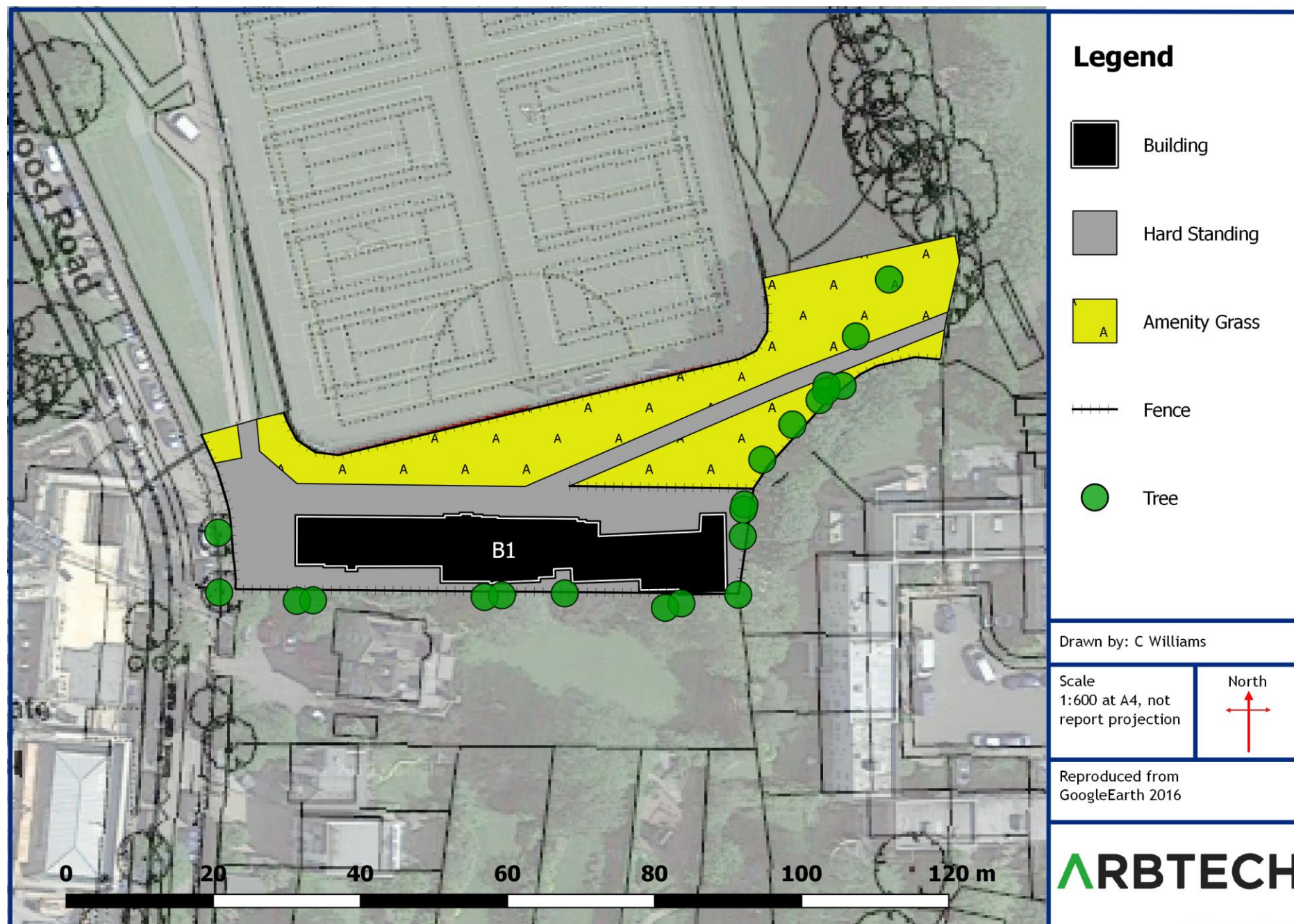
- Magic (2016) <http://www.magic.gov.uk/MagicMap.aspx>
- Google earth images accessed through QGIS openlayers plugin, April 2016.

References

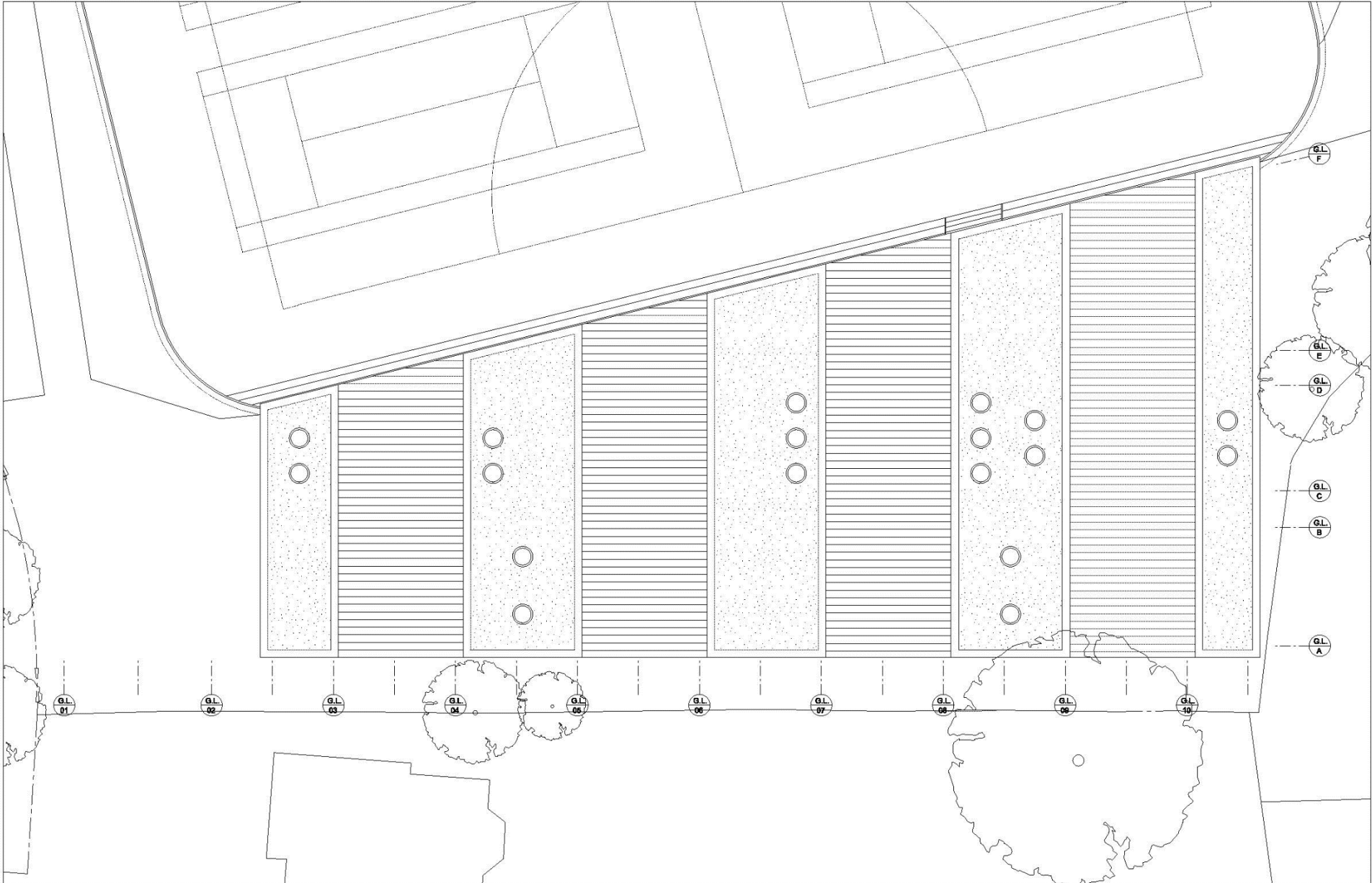
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey a technique for environmental audit.
- Natural England (2007). Badgers and Development a Guide to Best Practice and Licensing. Natural England. Bristol.
- National Planning Policy Framework, 2012 <http://www.communities.gov.uk/publications/planningandbuilding/nppf>
- Paul Edgar, Jim Foster and John Baker (2010). Reptile Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth
- Tom Langton, Catherine Beckett and Jim Foster (2001). Great Crested Newt Conservation Handbook. Froglife. Suffolk.
- Collins (2016), *Bat Surveys for Professional Ecologists: Good Practice Guidelines. 3rd ed.* Bat Conservation Trust, Print.
- Cheffings, C. and Farrell, L. (eds.) (2005) *The Vascular Plant Red Data List for Great Britain*. Joint Nature Conservation Committee, Peterborough.
- Eaton MA, Brown AF, Noble DG, Musgrove AJ, Hearn R, Aebischer NJ, Gibbons DW, Evans A and Gregory RD (2009) Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man. *British Birds* 102, pp296-341
- Gregory R.D., et al (2009). Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and Isle of Man.
- HMSO: Wildlife and Countryside Act 1981 (as amended)
- HMSO: The Protection of Badgers Act 1992 (as amended)
- HMSO: Countryside & Rights of Way Act (2000)

- HMSO: Natural Environmental and Rural Communities Act (2006)
- HMSO: The Conservation of Habitats and Species Regulations (2010)
- IEEM (2006) *Guidelines for Ecological Impact Assessment in the United Kingdom*. Available at www.ieem.org.uk
- IEEM (2012) *Guidelines for Preliminary Ecological Appraisal* Institute of Ecology and Environmental Management.
- JNCC (2004) Bat Workers Manual, 3rd Edition.
- JNCC (2010). *Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit*, First published 1990; reprinted in 1993; reprinted in 2003 with limited revisions & additions; reprinted in 2004; reprinted in 2007 with minor additions; reprinted in 2010.
- Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000) Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal* 10(4), 143-155.
- Spon E & F.N (1995) *Guidelines for Baseline Ecological Assessment*. Institute of Environmental Assessment
- BS 42020, Biodiversity – Code of practice for planning and development (2013)

Appendix 1: Phase 1 Habitat Map (current site conditions)



Appendix 2: Proposed Site Plan



Work Package	Client Check	Modeling	Tender	Contract	Construction	Date	Rev.	Description	Approved By	Date	Rev.	Description	Approved By	Project	Subject	Sort Code	Drawing Number	Rev.
														Highgate School: Bishopwood Road	Road Plan	ANIS-BWR	0112	-
Architect: Highgate Architects Partnership LLP 27 Broadway Terrace, London, NW1 6LP T: 020 7726 1761 E: info@highgate.ac.uk															Date: 10.02.2016 Scale: 1:200 at A3			