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York Street Bus Depot, Glossop,

Extended Phase One & Bat Survey Report

nlg ecology ltd
Unit B1.1
Clarence Mill
Clarence Road
Bollington
Macclesfield
SK10 5JZ

Tel: 01625 560789
E-mail:nlg@nlgeco.com

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Executive Summary

Jones Homes commissioned an Extended Phase 1 Habitat and Bat Survey to describe the baseline wildlife interests of land within and around York Street Bus Depot, Glossop. The application area is predominantly the bus depot buildings and adjacent hard standing with a band of rank neutral grassland and standard trees to the north and west. There are no designated sites within close proximity to the site, no rare or protected plants or BAP Priority Habitats were identified during the survey.

Neutral grassland habitat should be included within the proposals for landscaping following any redevelopment of the site. The existing stream should be retained and adjacent semi natural habitat enhanced through the planting of wildflowers as plug plants or seed as an integral part of the site landscape proposals.

Where feasible the early mature trees and scrub should be retained on site to meet the requirements of High Peak Borough Local Plan Policy OC10. Retained trees should have root protection areas established for the duration of all construction and related activities in accordance with BS5837:2005 Trees in Relation to Construction.

The existing hedgerows to the east of the site should be protected during construction. The opportunity exists to mitigate for any tree loss through the planting of species rich hedgerows around the site boundaries to provide a net gain for biodiversity at the site.

Two stands of Japanese knotweed are present on site and a site specific Japanese knotweed management plan should be established and the knotweed treated in accordance with the Environment Agency Japanese Knotweed Code of Practice 2007.

The habitats on site were assessed for evidence of and their potential to support protected species notably nesting birds, bats, water vole (*Arvicola terrestris*) and badger (*Meles meles*). No evidence was found of badger or water vole within the site. The buildings and trees were inspected for evidence of and potential for roosting bats, no evidence was found of bats using or having used the bus depot as a roost site. The standard trees are all immature and early mature in age and were assessed as being of negligible value for roosting bats.

Bats are not considered to be a constraint to any proposed demolition and redevelopment of the site. Opportunities exist to provide features as potential bat roost sites within the proposed new development.

Nesting bird habitat is present within the hedgerow, standard trees and scrub present within the site boundary. Any arboreal works should be undertaken between September and February outside the nesting bird season.

1.0 Introduction

Jones Homes commissioned an Extended Phase 1 Habitat Survey and Bat Survey to describe the baseline wildlife interests of land within and around York Street Bus Depot, Glossop, Derbyshire the (OS grid ref: SK 041 943). The application area is indicated on the Location Map, Plan 1, Appendix 1; the site boundary being marked by a red line.

Jones Homes intend to apply for planning permission for the redevelopment of the land as housing. This will involve the construction of housing and associated landscaping. The site is located on the urban fringe of Glossop being a now disused bus depot at the northern end of York St, being bounded by residential properties to the south, south east and west, a cricket club to the north and open countryside to the north east.

The site itself is predominantly hard standing surrounding the now disused bus depot buildings which is a large industrial type structure of brick and corrugated metal walls with a corrugated metal roof. A band of rank semi improved grassland with standard trees partially bounds the hard standing to the north and west.

2.0 Desk Study

The site is located within Glossop in the Borough of the High Peak; the sections of the High Peak Borough Council Adopted Local Plan relevant to biodiversity and this site in particular are within Chapter 4 of the document and include OC9 – Protected Species and OC10 – Trees and Woodlands (High Peak Borough Council 2005).

A search was made for any nationally or internationally designated sites for conservation within 1km of the site on www.magic.gov.uk. In addition a search was made for any locally designated sites (Sites of Biological Importance, SBI's) for conservation within 1km of the site on www.highpeak.gov.uk.

The UK Biodiversity Action Plan (BAP) and Countdown - the Cheshire region BAP were also consulted with regard to priority species and habitats. Reference is made to the revision of BAP priority species and habitats, which was published on 28th August 2007.

Protected species are those with statutory protection according to the following legal Acts and Regulations:

- The European Communities Council Directive on the Conservation of Habitats and Species Regulations 2010.
- The Wildlife and Countryside Act 1981 (as amended) which gives general protection measures for wildlife and special measures for species included on Schedules of the Act.
- The Countryside and Rights of Way Act (CROW Act) 2000 amended the Wildlife and Countryside Act 1981 to also make it an offence to intentionally or recklessly damage, destroy or obstruct a place that a species, listed on Schedules of the Wildlife and Countryside Act, uses for shelter or protection. The repealed Section 74 of the CROW Act listed habitats and species important to biological diversity in England, in accordance with the 1992 UN Convention on Biodiversity (Habitats and Species Action Plans under The UK Biodiversity Action Plan is the means by which the government complied with it's duty under Section 74).
- Section 41 of the Natural Environment and Rural Communities Act (2006) replaces Section 74 of the Countryside and Rights of Way Act, 2000 and refers to the list of organisms and habitats of principal importance published under the repealed Section 74 of the CROW Act 2000. The Secretary of State must take such steps to further the conservation of the living organisms and types of habitat included in the list and promote the taking by others of such steps.
- The Protection of Badgers Act (1992) which principally relates to animal welfare rather than species rarity.

3.0 Survey Methodology

The surveys were undertaken on the 26th May 2011 by Neil Lee-Gallon, CEnv, MIEEM with the assistance of Steven Ward AIEEM. This is within the optimum period for Phase 1 Habitat Survey and the identification of flora and for bat survey work. The day itself was of mixed weather with sunshine early in the day and heavy showers of rain in the afternoon, temperatures averaging 14°c.

3.1 Extended Phase 1 Survey

The Extended Phase 1 Habitat Survey is a description of habitats within the study area based upon the plant species present and includes records of evidence, or potential for the presence of legally protected or notable faunal species / groups. The survey followed the Phase 1 habitat Survey Methodology (JNCC, 1993) and was extended to assess faunal potential. This involves walking the whole site, mapping and describing different habitats (for example: woodland, grassland, scrub); evidence of fauna and faunal habitat is also recorded (for example: droppings, tracks, or specialist habitat such as ponds for breeding amphibians).

This modified approach to the Phase 1 survey is in accordance with the approach recommended by the Guidelines for Baseline Ecological Assessment (IEA, 1995).

3.2 Bat Survey

3.2.1 Building Inspection

The aim of the building inspection was to search for evidence of roosting bats within the warehouse, to assess the buildings potential for roosting bats and to identify the need for any further bat activity and emergence surveys. Externally the walls, roofs and any associated voids were inspected with the aid of close focussing binoculars, ladders and a high powered torch (1 million candlepower) for staining around potential entrance points, bat droppings, scratch marks and feeding remains. The doorways and windows were also inspected for the presence of bat droppings and feeding remains.

Internally the floors, walls, steel stanchions, doors, internal features and furniture within the bus depot were thoroughly inspected for the presence of bat droppings and feeding remains. Rooms at the side and front of the bus depot, as well as the small voids above the hanging ceilings, were similarly inspected for evidence of bats with the aid of ladders and torch.

Evidence of nesting birds on the exterior or interior of the warehouse was also searched for during the inspection.

3.2.2 Tree Assessment

An inspection of the trees on site was undertaken to identify the possible use of the trees as bat roosts. The trees were assessed according to the following table (adapted from the Bat Conservation Trust, Bat Survey Guidelines 2007).

Tree Assessment Criteria

Category	Roosting Habitat Value	Roosting Opportunities
3	Negligible value	Trees that have no features which could be used by bats for roosting.
2c	Low value	One or two minor opportunities offered to individual bats. Features associated with feeding or night time roosts, easily replaced elsewhere. Features such as sparse ivy-cover, minor branch splits, small sections of loose or flaking bark. Features which may have been available for less than 10 years.
2b	Moderate value	Features which provide a more secure form of roost for small groups of bats and individuals, but may still be quite common types of feature such as dense ivy, significant branch splits, small cavities. Features which may have been available for more than 10 years but less than 30 years.
2a	High value	Features of particular significance, suitable for high priority roosts such as maternity roosts, used by large numbers of bats offering conditions that are rare or uncommon in the local area. Features such as large cavities, extensive branch or trunk splits, also including multiple features in the same tree that offer diversity of opportunities. Features which may have been available for more than 30 years and could therefore have been utilised by several generations of bats.
1	Confirmed roost	Evidence found that indicate tree features are used by bats. Droppings found at base of trees or below a cavity. Bats heard chattering inside tree on warm day or at dusk. Bats observed flying from a feature.

4.0 Results

4.1 Desk Study

There are no nationally designated sites (SSSI, SPA, SAC etc) located within 1km of York Street Bus Depot, Glossop. Shire Hill Woods a locally designated Derbyshire Wildlife Register Site is located approximately 800m to the east of the application area and due to the distance this will not be adversely affected by the proposed redevelopment of the York St bus depot.

4.2 Description of Habitats and Flora

The Phase 1 Habitat Map is presented as Plan 2, Appendix 1. The habitat descriptions below are cross referenced to the target notes recorded during the survey; these are presented as Target Notes, Appendix 2.

No rare or protected species of plant were found to be present within the study area. There are no UK or Local Biodiversity Action Plan (BAP) Priority Habitats present within the study area. Running water and neutral grassland are UK BAP broad habitat types.

The dominant habitats within the survey area are:

- Woodland
- Grassland
- Miscellaneous

Woodland

Standard trees and scattered scrub

Mature, early mature and immature standard trees and scattered scrub are present around the boundaries and margins of the site. Species present include beech (*Fagus sylvatica*), poplar (*Populus spp*), apple (*Malus domesticus spp*), field maple (*Acer campestris*), ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplatanus*), goat willow (*Salix caprea*), hawthorn (*Crataegus monogyna*) and elder (*Sambucus nigra*). Several of the trees have been subject to either vandalism or very poor arboreal works.

Grassland

Species poor semi-improved neutral grassland

A band of rank semi improved neutral grassland extends around the northern and western boundary of the site. The grassland is dominated by grasses such as cocksfoot (*Dactylis glomerata*), red fescue (*Festuca rubra*), Yorkshire fog (*Holcus lanatus*) and tufted hair grass (*Deschampsia caespitosa*); dicotyledons are generally absent with occasional common sorrel (*Rumex acetosa*) and creeping buttercup (*Ranunculus repens*). A full species list of flora recorded within the grassland is included as target note 2, appendices.

Miscellaneous

Tall ruderal

Two stands of the highly invasive weed Japanese knotweed (*Reynoutria japonica*) are present to the western edge of the site. Target notes 5 and 6, appendices.

Running water
A shallow stream (UK BAP broad habitat type) flows through the south eastern corner of the site, being culverted beneath York St, the wetted channel was <30cm at time of survey to a depth of 10cm. The banks are earth and steep sided with rank grassland having colonised the bank top with scrub and trees in close proximity. No evidence was found of water vole (*Arvicola terrestris*) along the stream banks. Target note 8, appendices.

Hedgerows
A species poor hawthorn (*Crataegus monogyna*) and Leylandii (*Cupressocyparis leylandii*) hedgerow extends along part of the sites western boundary, this is locally dense and will provide habitat for nesting birds.

Fences
Tall chain link fences define some of the boundaries within the study area.

Building
The derelict bus depot dominates the site and this is described in more detail within Section 4.4 below.

Hard standing
Hard standing as tarmac and concrete slab extend around the exterior of the building.

4.3 Description of Fauna

During the extended Phase 1 survey potential habitats and evidence was identified for the following protected species and other fauna. These included:

- Badger
- Bats
- Nesting birds
- Water vole

Badger *(Meles meles)*
Habitat is present within the wider area for badger however no evidence was found of the species during the extended Phase 1 survey within or adjacent to the application site.

Mammal paths were identified running to and from the residential properties to the west of the site and these are most likely domestic cat paths.

Bats
The grassland, hedgerow and standard trees on site will provide invertebrate rich foraging and commuting habitat for bats. The buildings and trees inspected as potential bat roosts are detailed within section 4.4 below.

Nesting birds
Breeding bird habitat is present within the study area within the hedgerow and standard trees. These habitats along with the grassland will support an assemblage of common bird species. No bird nests were identified within the interior or exterior of the bus depot building during the surveys undertaken.

Water vole *(Arvicola terrestris)*
No evidence was found of water vole along the shallow stream within the site and the stream is considered sub optimal as water vole habitat.

4.4 Bat Survey

4.4.1 Building inspection

Photographs of the interior and exterior of the bus depot are included as appendix 3.

The bus depot is a large industrial warehouse type building comprising brick lower walls to approximately 2.5m with corrugated metal walls and roof above. The brick work is intact with no cracks or crevices identified as having the potential to provide roost opportunities for crevice dwelling bats. The metal walls and roof have occasional gaps of approximately 20 to 40mm at the eaves between the grooves of corrugations and the barge board to which the guttering is attached. No evidence was found beneath these gaps of roosting bats and these are considered sub optimal as roost sites due to the smooth metal surface which would offer very limited friction or point of attachment for bats landing on its face prior to entering potential roost crevices.

No evidence was found of bats having used any features on the exterior of the bus depot as a roost site during the external building inspection

The bus depot has large double metal shutter garage doors to the front and rear elevations, gaps are present around the edges to enable access to the interior of the bus depot. A standard wooden door is also present as access to the old office along with fire doors to the side elevations. No evidence was found of bats around the interior or exterior of the doors.

Internally the bus depot has a large vacuous main room with adjacent large workshop area; to the sides of the building are side rooms, previously used as staff rooms, storage and offices. The corrugated metal roof has large roof windows of clear corrugated plastic making the interior of the main room and workshop relatively brightly lit from natural light. The exterior metal walls and roof are attached to internal steel stanchions and no crevices were identified within the main building or workshop as potential roost sites for bats. The side rooms are all sealed with false hanging ceilings, and no evidence of bats was found within these voids. No evidence was found of bats having used the interior of the bus depot as a roost site during the internal inspection.

The bus depot building is considered to be of negligible value as a roost site for bats.

4.4.2 Tree assessment

All of the trees within the study area are either immature or early mature trees with no features identified as having the potential to provide roost opportunities for tree dwelling bat species.

The trees on site are all considered to be of negligible value to roosting bats.

5. Conclusions and Recommendations

5.1 Desk Study

There are no locally, nationally or internationally designated sites for conservation that will be adversely affected by the proposed redevelopment of York Street Bus Depot.

5.2 Habitats and Flora

There are no rare or protected species of plants within the application area. There are no UK or local BAP Priority Habitats within the application area. Running water and neutral grassland are UK BAP Broad Habitat Types.

Neutral grassland habitat should be included within the proposals for landscaping following any redevelopment of the site. Seeding of any landscaping with a grassland meadow mixture and appropriate future management would benefit biodiversity. The existing stream should be retained and adjacent semi natural habitat enhanced through the planting of wildflowers as plug plants or seed as an integral part of the site landscape proposals.

Where feasible the early mature trees and scrub, which have not been vandalised, should be retained on site to meet the requirements of High Peak Borough Local Plan Policy OC10. Retained trees should have root protection areas established for the duration of all construction and related activities in accordance with BS5837:2005 Trees in Relation to Construction.

The existing hedgerows to the east of the site should be protected during construction as above. The opportunity exists to mitigate for any tree loss through the planting of species rich hedgerows utilising native species ideally of local provenance around the site boundaries, this as the hedgerows mature would provide a net gain for biodiversity at the site. If required the boundary fencing could remain in situ notably to the northern site boundary with the cricket ground.

A site specific Japanese knotweed management plan should be established in accordance with the Environment Agency Japanese Knotweed Code of Practice 2007. This highly invasive plant should then be treated in accord with the management plan and eradicated from the site.

5.3 Protected Species

No evidence was found of protected species, other than nesting bird habitat, within the site boundary or buildings.

No evidence was found of bats using or having used the building as a roost site during the building inspection. The bus depot building is considered to be of negligible value to roosting bats with a general absence of suitable features for roosting bats on the exterior or interior of the building. The trees present within the site are all either immature or early mature and were assessed as being of negligible value to roosting bats. As such no further bat activity or emergence surveys are proposed for the site. Opportunities exist to provide features as potential bat roost sites within the proposed development.

Nesting bird habitat is present within the hedgerow, standard trees and scrub present within the site boundary. Any arboreal works should be undertaken between September and February outside the nesting bird season. If works are required during the nesting season then vegetation should be checked prior to the start of works by an Ecologist. If nests are present no work can be carried out within a minimum 5m radius of the nest until the young birds have fledged the nest and the Ecologist has given the go ahead to proceed.

References

Text

Bat Conservation Trust (2007); *Bat Surveys – Best Practice Guidelines*

Environment Agency (2007); *The Knotweed Code of Practice.* Environment Agency

IEA (1995). *Guidelines for Baseline Ecological Assessment.* Chapman and Hall.

High Peak Borough Council (2005); High Peak Local Plan (Adopted March 2005). High Peak Borough Council.

Joint Nature Conservation Committee (1993). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit.* JNCC.

Internet

www.highpeak.gov.uk

www.magic.gov.uk

www.ukbap.org.uk

Front elevation of bus depot



Rear and side elevation of bus depot



Interior of bus depot.

Appendix 3: Photographs

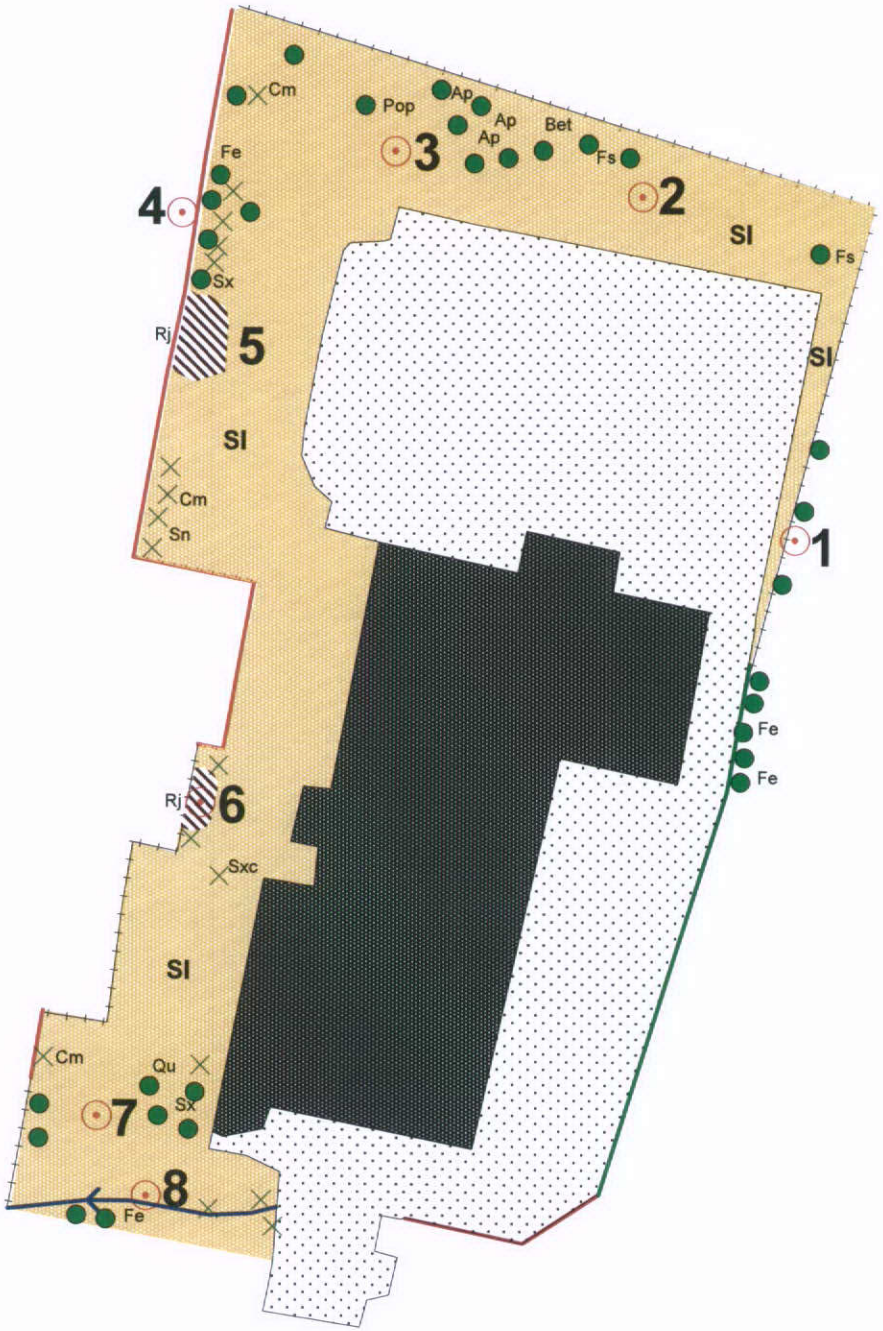


Side elevation of bus depot.



Appendix 2: Target Notes

Target Note	Description	Comments oN Potential faunal and habitat value
1	Immature ash trees on site boundary (*Fraxinus excelsior*)	Negligible value for roosting bats.
2	Rank semi improved neutral grassland with red fescue (*Festuca rubra*), common ragwort (*Senecio jacobaea*), field horsetail (*Equisetum arvense*), rosebay willowherb (*Chamerion angustifolium*), Tufted hair grass (*Deschampsia caespitosa*), cocksfoot (*Dactylis glomerata*), creeping buttercup (*Ranunculus repens*), common sorrel (*Rumex acetosa*), nettle (*Urtica dioica*), Yorkshire Fog (*Holcus lanatus*), ribwort plantain (*Plantago lanceolata*), meadow foxtail (*Alopecurus pratensis*), Curled dock (*Rumex crispus*) and meadow vetchling (*Lathyrus pratensis*).	Neutral grassland is a UK BAP Broad Habitat Type.
3	Stand of early mature beech (*Fagus sylvatica*) sycamore (*Acer pseudoplatanus*), poplar (*Populus sp*) and field maple (*Acer campestre*).	Negligible value for roosting bats.
4	Immature goat willow (*Salix caprea*) and ash ((Fraxinus excelsior).	Negligible value for roosting bats.
5	A stand of Japanese Knotweed (*Fallopia japonica*).	
6	Stand of immature to early mature stand of trees consisting of: pedunculate oak (*Quercus robur*), sycamore (*Acer pseudoplatanus*) and goat willow (*Salix caprea*).	All trees are of negligible value to roosting bats.
7	Shallow, slow flowing water course. <30cm wetted channel and 10 cm deep. The banks are semi-improved neutral grassland. No evidence of water vole.	Running water is a UK BAP Broad Habitat Type.



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York Street

Phase 1 Survey Plan

SI	Semi improved neutral grassland
	Scattered scrub
	Broadleaved standard tree
	Tall ruderal
	Running water
	Species poor hedgerow
	Fence
	Wall
	Building
	Bare ground
3	Target note

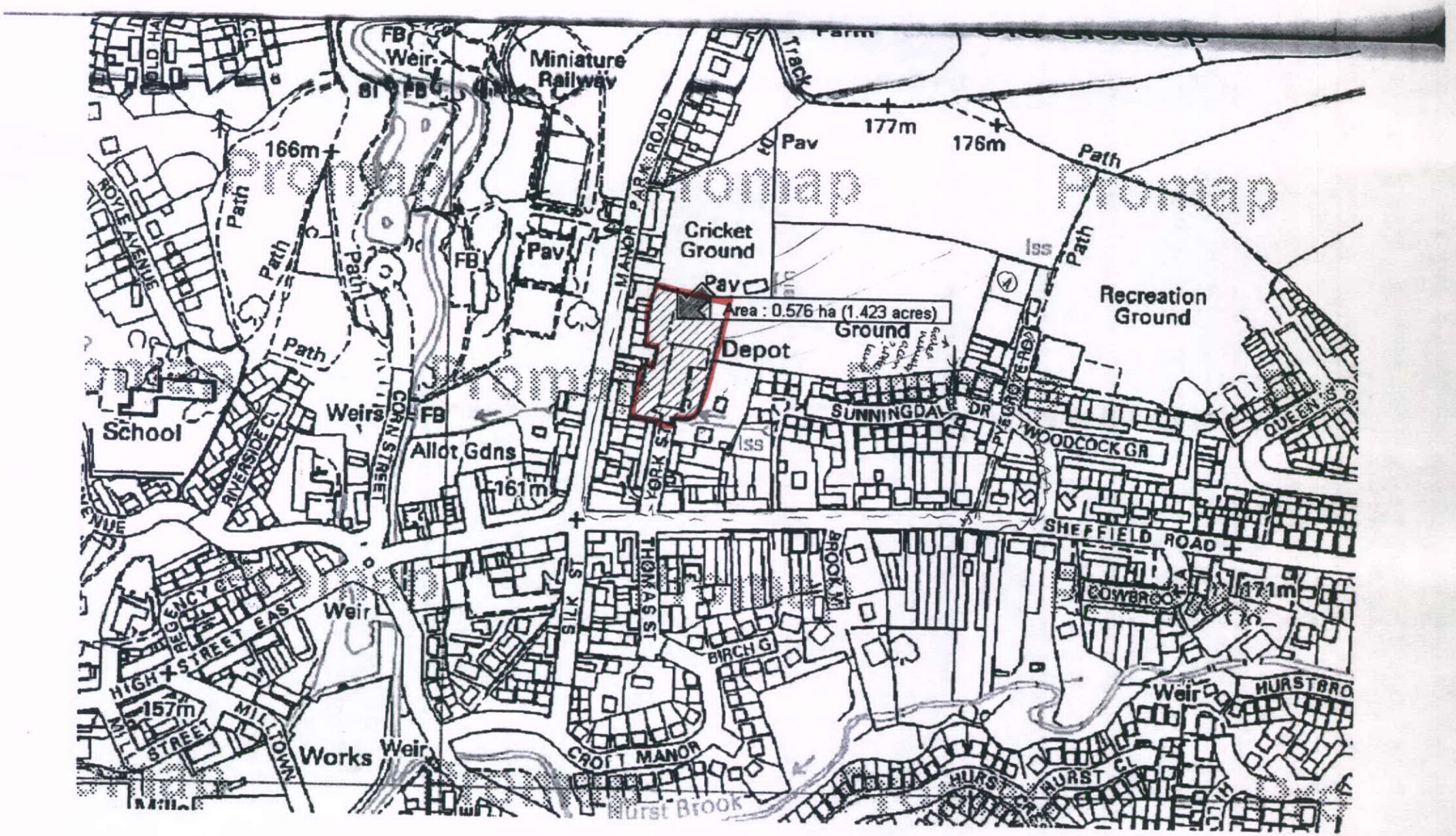
Ap	Acer pseudoplatanus
Bet	Betula sp
Cm	Crataegus monogyna
Fe	Fraxinus excelsior
Fs	Fagus sylvatica
Pop	Populus sp
Qu	Quercus sp
Rj	Reynoutria japonica
Sx	Salix sp
Sxc	Salix caprea

NGR	SCALE	REVISION
404169 394346	NTS	A

DRAWN BY	CHECKED BY	DATE
LB	NLG	10/06/11

Maps provided by The Emerson group 2011.

LAND AT YORK ST GLOSSOP



GL HEARN
Property Consultants

Appendices

Appendix 1: Plans

Plan 1 - Site Location Plan

Plan 2 – Phase 1 Habitat Plan