PORTLAND MILL, BUXTON ROAD, LEEK

Ecological Management Plan

Client:

McCarthy and Stone

Report Reference:

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RammSanderson

ECOLOGY

FLOOD RISK

ARBORICULTURE

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1 INTRODUCTION AND BACKGROUND

1.1 Purpose and Scope of this Report

i RammSanderson Ecology Ltd was instructed by McCarthy and Stone to produce this Ecological Management Plan (EMP) in relation to the proposed redevelopment at Portland Mill, Buxton Road, Leek to protect sensitive ecological features and to satisfy Conditions 26 and 27 of the recently approved Planning Application (ref: SMD/2017/0165).

ii The EMP has been informed by existing site-specific ecological data and the Clients site proposals plan (Appendix 1).

1.2 Background Information

i A Preliminary Ecological Appraisal (PEA) of buildings (and associated grounds) at Portland Mill, Buxton Road, Leek, was conducted by RammSanderson Ecology Ltd in November 2016, in relation to the proposed redevelopment of the site. The PEA identified two key ecological sensitivities: roosting bats and nesting birds. Although no roosting bats were recorded during dedicated bat roost activity surveys (conducted by RammSanderson Ecology Ltd May-June 2017 and detailed within the Nocturnal Bat Survey Report, July 2017), Buildings at Portland Mill were assessed as having high bat roost potential. Subsequently, permission was granted for the development, subject to two Conditions. These conditions are satisfied through this Ecological Mitigation Plan (EMP), in complement with the Precautionary Method of Works (PMW) and walkover/supervision to be completed during the initial phase of demolition. The conditions are as follows:

Condition 26:

"*The development hereby permitted shall not be commenced (including any demolition or site clearance) until such time that a further bat survey has been carried out and the results of this further survey together with any recommended works and timescales have been submitted to and approved in writing by the Local Planning Authority. The survey shall be based on the recommendations contained within the Nocturnal Bat Survey report (dated 12th July 2017) by Ram Sanderson and according to guidelines in Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists Good Practice Guidelines (3rd edition). The Bat Conservation Trust. The development shall thereafter proceed in full accordance with the approved details and timetable. Reason:- In the interests of nature conservation.*"

Condition 27:

"*The development hereby permitted shall not be commenced (including any site clearance) until such time as an EcMP (Ecological Management Plan) has been submitted to and approved in writing by the Local Planning Authority, giving details of proposed creation, maintenance, management and development, including timescales and delivery mechanisms, for all new landscaping and wildlife enhancements across the site. The plan must include all avoidance, mitigation and compensation measures to address impacts on legally protected species. This shall include full and accurate locations of proposed new features for breeding birds and bats; technical specifications, timescales and phasing for the creation of any new wildlife features; 5 year establishment and aftercare prescriptions for any newly created wildlife features; landscaping with plants that will benefit pollinating insects, and therefore provide a food source for foraging for bats and birds; and a minimum 20 year maintenance and management operations for all planting, or artificial bat or bird breeding sites. The EcMP must specify that the demolition of structures is to be carried out carefully by hand to avoid potential impacts on bats. If bats are found work shall stop and an ecological*

consultant licensed by Natural England should be contracted to draw up a mitigation plan. To avoid impacts on breeding birds a check for breeding birds shall be carried out before works are carried out by a suitably qualified ecological consultant, as detailed in the EcMP. If nesting birds are located work shall cease until nesting is completed and fledged young have departed the site. Multiple nesting opportunities for swift and house martins shall be provided within the development, and the exact location and design shall be specified within the EcMP. Details of how swifts will be attracted to breed in created features shall be specified. Methods, timescales, persons responsible for work shall be detailed with the EcMP. Lighting design must allow bats or breeding birds to exhibit undisturbed behaviour patterns, and must not be directed away from created roosting or breeding sites. The development shall be carried out fully in accordance with the approved EcMP and timescales therein. Reason:- In the interests of biodiversity enhancement"

1.3 Site Context and Location

i The site can be accessed off Buxton Road, Portland Street, Brunswick Street and Queen Street in Leek, Staffordshire, ST13, 6EG (grid reference SJ 98959 56656). The Mill building is located to the south of Buxton Road in a built up urban location with the aforementioned streets surrounding the site. The site is located towards the eastern edge of Leek town centre.

Figure 1: Site Location Plan

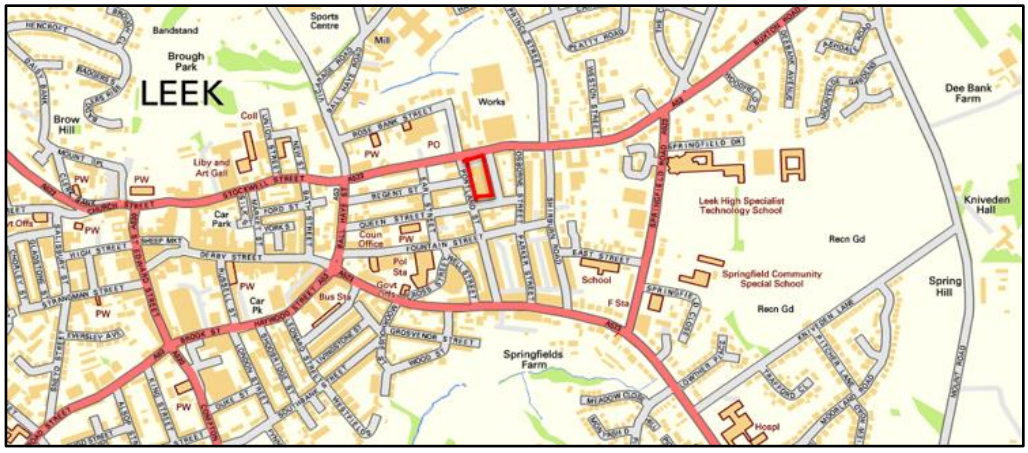

Figure 2: Site Context Plan

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2 AIMS AND OBJECTIVES OF MANAGEMENT

2.1 Management Objectives and Targets

i In compiling the management plan for this site, the following documents are considered with regard to maximise the local and national benefits in accordance with their targets:

- The Natural Environment and Rural Communities (NERC) Act 2006;
- Staffordshire Local Biodiversity Action Plan (SBAP);
- ODPM Circular 06/2005 (retained as Technical Guidance on NPPF 2012);
- Local planning policies (Staffordshire Moorlands District Council) (draft);
- The Conservation of Habitats and Species Regulations 2010 (as amended) ('the Habitat Regulations');
- The Wildlife and Countryside Act 1981 (as amended);
- The Countryside and Rights of Way Act 2000;
- National Planning Policy Framework 2012 (NPPF).

2.2 Local Biodiversity Targets

2.2.1 Local Biodiversity Action Plan

i The site falls within Staffordshire Biodiversity Action Plan (SBAP) area. The SBAP sets out to coordinate conservation efforts in delivering the UK BAP targets at a local level and provide a sustainable living and working environment that benefits both people and nature.

ii Habitat and Species Action Plans, although retained, are superseded by Ecosystem Action Plans (EAP), which work on a landscape level and focus efforts on ecological networks, habitats and species. The site falls within 'Species-rich Farmland' EAP. This EAP has 15 habitat action plans 17 priority species specific to the Ecosystem. Given the urban setting of the site, the most relevant priorities include hedgerow and bats.

2.2.2 Local Planning Policy

i The following excerpts are taken from the Local planning policies (Staffordshire Moorlands District Council) (draft). The plans strategic objectives include:

ii **Policy SO9**: To protect and improve the character and distinctiveness of the countryside and its landscape, biodiversity and geological resources.

iii **Policy SS11**: [Relating to Churnet Valley in which the site is located] Particular support will be given to the following forms of development and measures actions to protect and enhance the biodiversity of the valley, including the maintenance, buffering and connection of designated sites and actions to mitigate climate change.

iv Any development should be of a scale and nature and of a high standard of design which conserves and enhances the heritage, landscape and biodiversity of the area and demonstrate strong sustainable development and environmental management principles. The consideration of landscape character will be paramount in all development proposals in order to protect and conserve locally distinctive qualities and sense of place and to maximise opportunities for restoring, strengthening and enhancing distinctive landscape features.

v **Policy NE** 1: Biodiversity and Geological Resources

vi The biodiversity and geological resources of the District and neighbouring areas will be conserved and enhanced by positive management and strict control of development (and having regard to Council evidence) by:

- Resisting any proposed development that could have an adverse effect on the integrity of a European site (or successor designation) alone or in combination with other plans or projects unless it can be demonstrated that the legislative provisions to protect such sites can be fully met. Any development

with a potential to adversely affect a European site/s through construction activities should ensure that Ciria construction guidelines are followed including environmental good practice on control of dust and water pollution.

- The Council will not normally permit any development proposal which would directly or indirectly (either individually or in combination with other developments) have an adverse effect on a Site of Special Scientific Interest. 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.
- Conserving, and enhancing regional and locally designated sites. The Council will not permit any development proposal which would directly or indirectly result in significant harm to geological and biodiversity conservation interests, unless it can be demonstrated that:
  - a) there is no appropriate alternative site available; and
  - b) all statutory and regulatory requirements relating to any such proposal have been satisfied; and
  - c) appropriate conservation and mitigation measures are provided; or if it is demonstrated that this is not possible
  - d) the need for, and benefit of, the development is demonstrated to clearly outweigh the need to safeguard the intrinsic nature conservation value of the site and compensatory measures are implemented.
- Supporting opportunities to improve site management and increase public access to wildlife sites including supporting the objectives of the Staffordshire County Council Rights of Way Improvement Plan.
- Ensuring development where appropriate produces a net gain in biodiversity, and ensuring that any unavoidable impacts are appropriately mitigated for.
- Ensuring development promotes the appropriate maintenance, enhancement, restoration and/or re-creation of biodiversity through its proposed nature, scale, location and design. The Staffordshire Moorlands Biodiversity Opportunity Map, in conjunction with the Staffordshire Biodiversity Action Plan, will be used to guide biodiversity enhancement measures to be included in development proposals as appropriate to the nature and scale of development proposed and other environmental interest, in particular supporting opportunities to increase grassland and heathland habitats including supporting targets in the UK and Staffordshire Biodiversity Action Plan.
- Protecting and enhancing habitats and species of principal importance for the conservation of biodiversity as identified in legislation, and recognising and implementing appropriate measures, including landscape-scale conservation management, to take account of the fact that the distribution of habitats and species will be affected by climate change.
- Recognising the value of the natural environment for sport and leisure activities and the need to manage such activities to ensure there is no conflict.
- Ensuring the provision and protection of green infrastructure networks in line with Policy C3.

vii **Policy NE 2**: Trees, Woodland and Hedgerows

viii The Council will protect existing trees, woodlands and hedgerows, in particular, ancient woodland, veteran trees and ancient or species-rich hedgerows from loss or deterioration. This will be achieved by:

- Requiring that existing woodlands, healthy, mature trees and hedgerows are retained and integrated within a proposed development unless the need for, and benefits of, the development clearly outweigh their loss;
- Requiring new developments where appropriate to provide tree planting and soft landscaping, including where possible the replacement of any trees that are removed at a ratio of 2:1;
- Resisting development that would directly or indirectly damage existing ancient woodland, veteran trees and ancient or species-rich hedgerows.
- The Council will refer to its adopted Tree Strategy in the consideration of proposals; and will in general seek to retain as many trees and as much hedgerow on site as possible.

2.3 Mitigation and Management Objectives

2.3.1 Nesting Birds and Roosting Bats

i The buildings to be redeveloped provide suitable habitat for roosting bat. During surveys nesting swallow and nesting feral pigeon were recorded in the buildings.

ii This site could be simply and effectively improved for both groups through incorporation of a range of bird and bat boxes on trees within the site.

iii The site is currently heavily dominated by habitats of low species diversity (hardstanding and building) and is a poor food resource for foraging animals. Therefore, planting of species which will encourage pollinating insects is proposed, which will attract foraging bats and birds. The Landscaping Plan and Planting Schedule (Drawing No: WM-2416-01-03-AC-014) which were submitted with the original planning application is considered to overwhelmingly fulfil this criterion.

iv Artificial lighting can affect the way that bats use habitats. As the site is located within an urban area with surrounding street lights, lighting for the proposals are anticipated to have an insignificant effect on the local bat population. As a general recommendation, lighting should be used as infrequently as possible and directed away from any new roosting provision or soft landscaping areas. Lighting will be designed with reference to Bats and Lighting in the UK (BCT, 2009). Light-spill will be minimised through directional fittings and / or use of hoods. Timers and motion sensors will be used where practicable to allow periods during the night with minimal light use.

v Methods to safeguard bats and birds during pre-construction demolition works are set out within a Precautionary Method of Works (PMW) document (Ref: RSE_817_PMW_V1) which will be delivered to site operatives prior to works commencing on site.

2.4 Comparison to Policy

i In reviewing the local policy objectives against the proposed scheme the table below identifies where it is considered that the proposals meet these targets and under what criteria.

Table 1: Targets and Objectives Criteria, Compared to Policy

Targets	Objective Criteria	Rationale
Nesting Birds and Roosting Bats	NERC Act (2006) & Local Plan S11, NE1	The inclusion of bat and bird boxes on site will enhance site biodiversity by allowing species to become resident of the site and not transitory.
Landscaping	NERC Act (2006) & Local Plan SS11, NE1, NE2	Flowering plants will be used in landscaping which will attract pollinating insects, a food resource for foraging birds and foraging bats. Furthermore, landscape planting will include tree and hedge species.
Lighting Plan	Wildlife and Countryside Act (1981), Habitat Regulations, NERC Act (2006) & Local Plan SS11, NE1	Sensitive lighting will help protect bats from being disturbed from roosts or foraging.

2.5 Management Responsibility

i The implementation of this EMP will be the responsibility of McCarthy and Stone and any nominated management company, upon completion of construction. Under current proposals, the site will be converted

to retirement living accommodation which will be under active regular management, which will include, as a minimum the maintenance of shared outdoor spaces, thereby ensuring success of a planting scheme which will enhance the area for foraging bats and birds.

2.6 Risks

i This EMP covers as many eventualities as possible, however it is not exhaustive and so management can be adjusted if ecologically or otherwise necessary to ensure the objectives of the EMP are met.

3 MANAGEMENT PRESCRIPTIONS

3.1 Nesting Birds and Roosting Bats

i To increase the available resources for nesting birds and roosting bats on site, the following tree and building boxes will be installed:

-2 x 2F Schwegler Bat Boxes
-2 x 1FF Schwegler Bat Boxes
-1 x No. 18 Schwegler Swift Nest Box
-2 x No. 10B Schwegler Swallow Nest Boxes
-1 x 9A-1 Schwegler House Martin Single Box

ii Boxes should be placed on a range of aspects from south east to south west and typically a bird box should not be installed within the same tree as a bat box to prevent the bat box being colonised by species such as wren. Specific specifications for each type of box can be found on the plan in Appendix 1. Boxes should be installed at heights of approximately 2.5m or above, wherever possible.

iii Management of the boxes will simply be to replace any lost or damaged boxes over the course of this management plan period. However those boxes chosen are largely of woodcrete composite and designed to be long lasting and require minimal replacement.

3.2 Landscaping

i The Landscaping Plan includes installation of tree, hedge and amenity grassland. Prescriptions in the Landscape Management Plan, Landscaping Plan and Planting Schedule (Drawing No: WM-2416-01-03-AC-014) should be followed. Information below is provided as a guide only.

ii Recommendations for tree and hedge planting are set out below and detailed further within the landscaping plan for the site:

Table 2 Tree and Hedge Specifications

Tree		
Species	Height	Girth
Amelanchler x grandiflora	300-350 cm	10-12cm
Cercis siliquastrum	400-450cm	16-18cm
Malus domestica	350-425cm	12-14cm
Tilia cordata	400-450cm	16-18cm

Hedge	
Crataegus monogyna	40-60 cm
Prunus spiosa	40-60 cm
Ilex aquifolium	40-60 cm

iii Tree and shrub planting should comply with BS4428 and should take place between October and March on topsoil to a depth of 300mm. Shrubs should be separated by approximately 5-7 plants per metre. Trees and shrubs should be allowed to establish for two years before cutting or pruning.

iv Grassland areas should be sown with the Naturescape NL2 fine lawn seed mix or similar at a rate of 50g/m2 on topsoil depth of 150mm with no cuts carried out for the first 6-12months to allow the grass to establish. This grassland area should be then subject to two cuts per year as a minimum, one in February and a second in September, with a cutting height of around 5cm.

4 MANAGEMENT PLAN

i This management plan is designed as year 1 to 20, year 1 being the year of construction. As the site is planned to be converted to retirement homes, routine management of the landscaped areas (and so flowering plants) is anticipated.

Table 3: Year 1 – 20 management plan

Objective	Prescription	Year 1	Year 2	Year 4	Year 8	Year 12	Year 16	Year 20
Bird and Bat Boxes	Install	•	•					
	Monitor and replace damage / lost			•	•	•	•	•
Lighting	Install	•						
	Maintain hoods in correct positions and ensure correct bulbs are in use.		•	•	•	•	•	•
Landscaping	Plant hedge and trees, complying with BS4428	• (October – March)	• (October – March)					
	Replace any failed trees and shrubs on a like for like basis.		• (October – March)	• (October – March)				
	Crown prune trees			• (October – December)	• (October – December)	• (October – December)	• (October – December)	• (October – December)
	Cut hedgerow to 1.5m height as a minimum			• (October - December)	• (October- December)	• (October- December)	• (October- December)	• (October- December)
	Sow grassland seed mix	•	•					
	Cut grass and remove arisings from site			At least twice per year in February and September				
	Remove leaf litter from grassed areas			Yearly in November or December				

5 REFERENCES

i BS 42020:2013 Biodiversity – Code of Practice for Planning and Development 2013: The British Standards Institution.

ii Collins, J (ed.)., 2016. Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd

iii Department of Communities & Local Government, 2012. National Planning Policy Framework, London: DCLG.

iv Staffordshire Moorlands District Council. Staffordshire Moorlands Local Plan – Preferred Options (online version) 2016-2031 (draft). Staffsmoorlands-consult.objective.co.uk [accessed 02/10/2017].

v Staffordshire Biodiversity Action Plan. Staffordshire Biodiversity Action Plan. Sbap.org.uk [accessed 02/10/2017].

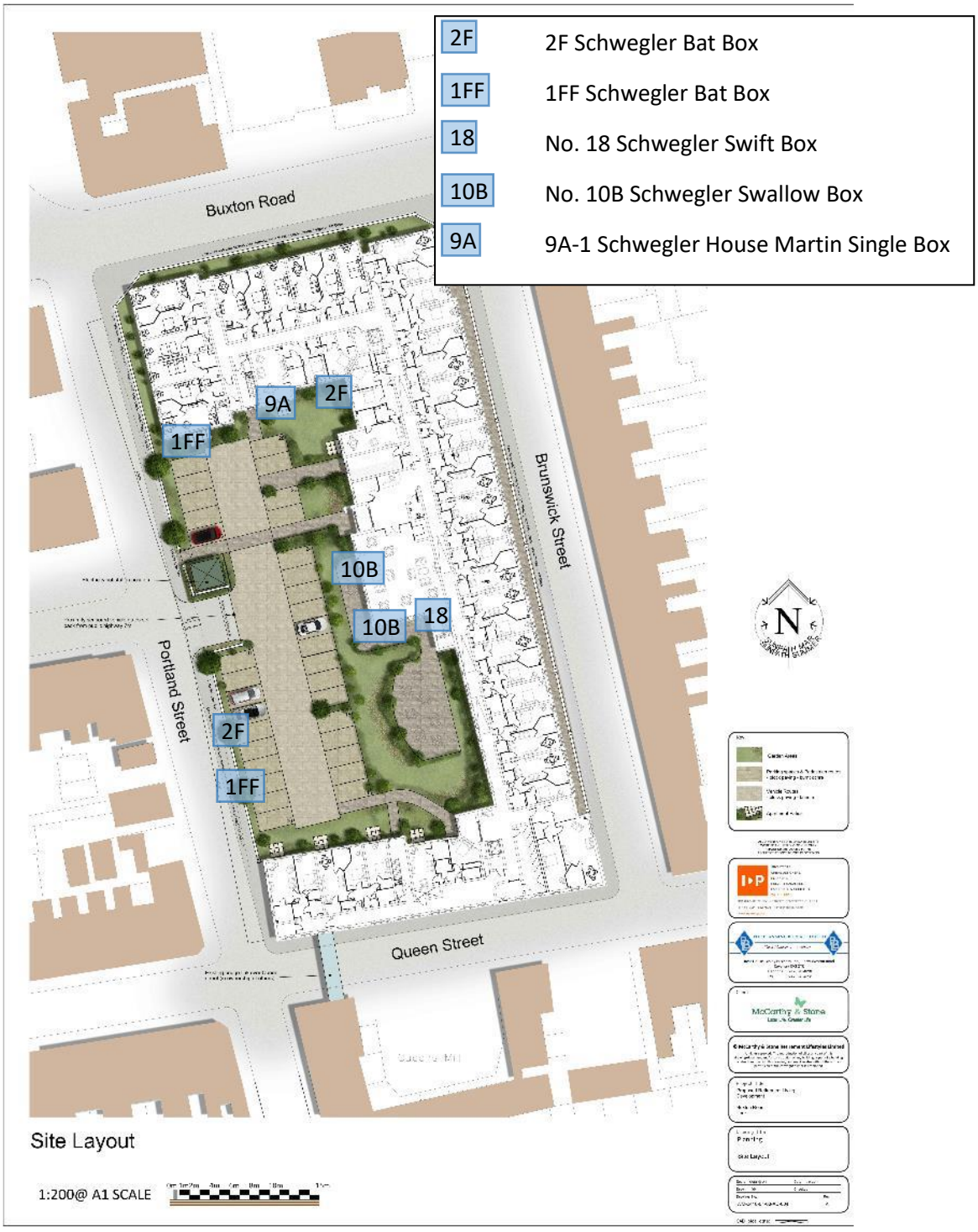
vi Institute of Ecology and Environmental Management, 2006. Guidelines for Ecological Impact Assessment in the UK. 2nd ed. Winchester: IEEM.

vii Lawton, J.H., Brotherton, P.N.M., Brown, V.K., Elphick, C., Fitter, A.H., Forshaw, J., Haddow, R.W., Hilborne, S., Leafe, R.N., Mace, G.M., Southgate, M.P., Sutherland, W.J., Tew, T.E., Varley, J., & Wynne, G.R. (2010) Making Space for Nature: a review of England's wildlife sites and ecological network. Report to Defra.

viii Office of the Deputy Prime Minister, 06/2005. Government Circular: Biodiversity and Geological Conservation - Statutory Obligations and their impact within the planning system. London: ODPM.

6 APPENDICES

Appendix 1: Proposed Site Layout with Bat and Bird Box Plan



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