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Cinderford Northern Quarter Lesser Horseshoe Bat Monitoring Strategy

(Pursuant to condition 23 of planning permission
P0663/14/OUT)

December 2015

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1. Introduction

- 1.1. In February 2015 planning permission was given for the 'Cinderford Northern Quarter' (NQ) (P0663/14/OUT) a mixed use development combining employment, hotel and residential uses focussed around a new road (Spine road) and new college campus. The application was described as a 'Hybrid' application with the college and spine road in 'detail' and the remainder of the proposals in outline.
- 1.2. The hybrid application was considered to be Environmental Impact Assessment (EIA) development and was therefore accompanied by an Environmental Statement. The Wye Valley and Forest of Dean Bat SAC, principally designated for Lesser and Greater Horseshoe bats, covers a number of sites in the wider area and the NQ contains a number of roosts for Lesser Horseshoe bats (LHB). The application was subject to Habitats Regulations Assessment (HRA) including Appropriate Assessment. The subsequent planning permission was subject to 73 conditions; a significant number of which are related to the HRA or wider ecological issues.
- 1.3. Condition 23 of planning permission (P0663/14/OUT) requires a bat monitoring strategy to be agreed in writing with the local planning authority (LPA) prior to the commencement of development. Full details of the condition are set out in box 1 below.
- 1.4. The following report encompasses the monitoring strategy and is submitted to the LPA to discharge the condition. Full details on the hybrid application and its HRA can be found via the planning authorities website (www.fdean.gov.uk) using the planning reference number P0663/14/OUT in the planning applications search facility. There are over 500 documents available in relation to the application. The following information is provided for ease of reference:

<u>Document</u>	<u>Publish Date</u>
Appropriate Assessment	31 st October 2014
Planning Committee Report	7 th November 2014 (3 Documents)
Late Material for Planning Committee	17 th November 2014
Section 106	5 th March 2015 (5 Documents)
Decision	26th Feb 2015

Box 1 - Condition 23 of Planning Permission P0663/14/OUT

Prior to the commencement of the development hereby permitted a bat monitoring strategy shall be submitted and approved in writing by the Local Planning Authority. The Strategy shall:

- Cover the full length of the spine road and development areas as shown on drawing 066_DI_19.11 revision 2 received 4 August 2014 including its bat culverts, bridges as shown on drawing number 1700 Revision 2 received 19 June 2014 and dark corridors including that shown on drawing number 1303 Revision 3 received 4 August 2014.
- Cover major and minor lesser horseshoe flyways as shown in Fig 7.4 (Lesser Horseshoe Bat flightlines) of the Addendum to the Environmental Statement Volume 3: Figures and Appendices, June 2014).
- Cover the Main Office, Bath House, Canteen as shown on figure 6, page 17 of Appendix 7.4 (Bat Survey Report) of the Addendum to the Environmental Statement Volume 3: Figures and Appendices, June 2014) and existing artificial roost and replacement roosts RR1, RR2 as shown in Fig 7.5 (Development phases and mitigation proposals) of the ES Addendum Volume 3: Figures and Appendices June 2014 and two night roosts as required pursuant to condition 13;
- Purpose, aims and objectives of monitoring;
- Identification/provision of adequate baseline data;
- Appropriate success criteria, thresholds, triggers, targets against which effectiveness of mitigation can be monitored and judged;
- Methods of data gathering and analysis;
- Location of points/areas where monitoring will be undertaken;
- Timing and duration of monitoring;
- Responsible persons and lines of communication;
- Review and publication of results/outcomes;
- Identified adaptive management options that may include: Removal of landscaping to dissuade bats from crossing at unsafe points, additional dissuasive lighting and walls/fences at hop overs that could be implemented if monitoring shows that measures are ineffective or not reaching stated aims and objectives.

The bat monitoring strategy shall be implemented in accordance with approved details.

Reason: To conserve biodiversity in accordance with Policy CSP.1 of the Core Strategy, Policy 26 of the Cinderford Northern Quarter Area Action Plan and the advice in the National Planning Policy Framework, National Planning Policy Guidance (Natural Environment).

2. Development of the monitoring strategy

2.1. The strategy has been developed with the involvement of a number of organisations together with specific specialist advice. To date the following organisations have been involved in the development of the monitoring strategy:

Gloucestershire County Council

Homes and Communities Agency

Forest of Dean District Council

Dr Anna Berthinussen & Professor John Altringham

Animal Ecology & Wildlife Consultants (AWEC Ltd)

2.2. Scope

2.2.1. The scope of the strategy is effectively set by the requirements of condition 23. The Forest of Dean District Council's Appropriate Assessment (AA) provided the basis for condition 23 so the strategy has also ensured it has addressed the relevant requirements of the AA.

2.2.2. The monitoring strategy is principally focused on the Lesser Horseshoe Bat (LHB) a 'feature' of the Wye Valley and Forest of Dean Bat SAC and the focus of the AA. Monitoring therefore is designed not only to assess mitigation features but also as 'early warning' to avoid the likelihood of adverse significant effects with the potential to effect the integrity of the Wye Valley and Forest of Dean Bat Sites SAC. Whilst the focus is on LHB's the strategy also identifies where data can be captured relatively easily on other species of bats at the same time as undertaking the monitoring for LHB's.

2.2.3. Development is proposed to be phased with the first phase being the spine road west from Newtown Road to Cinderford Brook and the College Campus. Construction of phase 1 is currently expected to commence in 2016. The phase 1 area has not been identified as having any significant LHB flightlines, however baseline monitoring surveys, proportionate to the areas low use by LHB's, has been undertaken in 2015 (AWEC) and is contained in appendix E.

2.3. Strategy structure

2.3.1. The strategy is made up of a series of distinct elements or 'technical appendices'. These cover four principle areas of the strategy:

Bat monitoring
 Disturbance
 Flightline connectivity monitoring
 Adaptive measures

2.3.2. With reference to section 3 of Technical Appendix A, it is intended that the monitoring will be carried out in accordance with this section. Therefore where 'should' is used in the appendix this should be substituted with 'will'.

2.3.3. This overview is provided to show how the requirements of the condition 23 and P0633's AA are met by the operation of the constituent parts (Compliance check) of the technical appendices. This overview also sets out the processes for co-ordinating, reporting and, where necessary, responding to any issues raised as a result of the monitoring.

2.3.4. Although not required *per se* by condition 23 the baseline monitoring survey for phase 1 is also provided (Appendix E).

3. Compliance Check

3.1. HRA

3.1.1. The Appropriate Assessment (dated 30th October 2014) undertaken by the LPA identified the need for early warning monitoring of certain aspects of the project in order to address uncertainties regarding the effectiveness of particular mitigation measures for lesser horseshoe bats.

Table A

Type of monitoring and HRA Appropriate Assessment reference	Potential impacts	Spatial scope of monitoring	Where details can be found in this document
Detailed early warning lesser horseshoe road monitoring scheme. Table 2c, Box D, section vi.	Collision, flyway severance	At locations where the spine road crosses flyways 1a-c, 2 & 4 ¹ At locations where measures designed to address impacts are located including hop overs ⁴ , culverts and bridges ² (including associated lighting ⁵ and landscaping ⁶)	Technical Appendix A.
Detailed early warning	Short-term	Mitigation areas - MP1A-F, MP2(F)A-B,	Technical

lesser horseshoe bat forage area monitoring scheme. Table 2f, Box D, section iii.	forage habitat loss	MP2(R)A-I ⁷	Appendix A
Detailed early warning lesser horseshoe flyway monitoring scheme. Table 2d, Box D, section ix.	Vegetation loss/damage and lighting	Flyways 1a-c, 2, 4 & 5 ¹ and other ecological corridors ³ within the redline boundary and mitigation areas	Technical Appendix C
Detailed early warning disturbance monitoring scheme. Table 2e, Box D, section iv.	Recreational disturbance (including vandalism)	Hawkwell Inclosure Artificial Roost and Nelson Artificial Roost (RR1) ²	Technical Appendix B

¹As as shown in Fig 7.4 (Lesser Horseshoe Bat flight lines) of the Addendum to the Environmental Statement Volume 3: Figures and Appendices, June 2014

²As shown on the Structures Location Plan, Drawing 1700 (rev 2)

³Defined as linear vegetation along the Cinderford Brook (which forms the Lake's inlet and outlet stream) and the Old Engine Brook.

⁴As shown on the Spine Road Street Lighting Drawing 1301 (rev 3) Sheet 1

⁵As shown in the Spine Road Street Lighting Drawing 1301-1304 (rev 3)

⁶As shown on the Spine Road Landscape Proposals Drawings 3000/06-/08 (rev 1), 3000/09 (rev 2), 3000/11

⁷As shown in Figure 01 (Section 106 Mitigation Plan), Section 106 agreement

3.2. Condition 23

Condition 23 of planning permission P0663/14/FUL transposes the early warning monitoring requirements of the Appropriate Assessment

Whilst reference to the 'Canteen Building' is included in the condition specific monitoring of the Canteen building will not be undertaken. Monthly counts of this building between May 2013 and October 2015 have demonstrated that this structure is only used by individual (or on one occasion two) lesser horseshoe bats during occasional periods in the spring and late summer/early autumn months indicating its use is as a minor day or night roost for the species. Of the 6574 lesser horse recordings made during the May 2013 to October 2015 period only 0.09% related to bats recorded within the Canteen building.

Table B

Element of condition	Where details can be found in this document
Cover the full length of the spine road and development areas as shown on drawing O66_DI_19.11 revision 2 received 4 August 2014 including its bat culverts, bridges as shown on drawing number 1700 Revision 2 received 19 June 2014 and dark corridors including that shown on drawing number 1303 Revision 3 received 4 August 2014	Section 2, Table A above.
Cover major and minor lesser horseshoe flyways as shown in Fig 7.4 (Lesser Horseshoe Bat flight lines) of the Addendum to the Environmental Statement Volume 3: Figures and Appendices, June 2014).	Section 2, Table A above.
Cover the Main Office, Bath House, Canteen as shown on figure 6, page 17 of Appendix 7.4 (Bat Survey Report) of the Addendum to the Environmental Statement Volume 3: Figures and Appendices, June 2014) and existing artificial roost and replacement roosts RR1, RR2 as shown in Fig 7.5 (Development phases and mitigation proposals) of the ES Addendum Volume 3: Figures and Appendices June 2014 and two night roosts as required pursuant to condition 13;	Technical Appendix A
Purpose, aims and objectives of monitoring;	Technical Appendices A, B and C
Identification/provision of adequate baseline data	
Appropriate success criteria, thresholds, triggers, targets against which effectiveness of mitigation can be monitored and judged;	
Methods of data gathering and analysis;	
Location of points/areas where monitoring will be undertaken	
Timing and duration of monitoring;	
Responsible persons and lines of communication	Section 4 (below)
Review and publication of results/outcomes	Section 4 (below)
Identified adaptive management options that may include: Removal of landscaping to dissuade bats from crossing at unsafe points, additional dissuasive lighting and walls/fences at hop overs that could be implemented if monitoring shows that measures are ineffective or not reaching stated aims and objectives.	Technical Appendix D

4. Monitoring Reporting Structures

4.1. Section 106 Agreement

4.1.1. A section 106 agreement (S106) was agreed between the Homes and Communities Agency, Forestry Commission, Gloucestershire County Council and the Forest of Dean District Council in February 2015 prior to the issuing of planning permission P0663/14/OUT.

4.1.2. The S106 provides for a range of ecological management, monitoring and rectification activities.

A series of 'schedules in the S106 describe activities in greater detail:

Schedule 1 – Phase 1a Mitigation Creation

Schedule 2 – Phase 1b Mitigation Creation

Schedule 3 – Phase 2 Mitigation

Schedule 4 – Mitigation Management

Schedule 5 – Mitigation Monitoring

Schedule 11- Rectification Measures

4.1.3. Within an overall monitoring framework schedule 5 sets out monitoring requirements for bats which is consistent with condition 23. Within the schedule it is identified (Sch5, 3.1) that the Homes and Communities Agency (HCA) will undertake or procure the implementation of the Phase 1a&1b monitoring (phase 1a spine road to and college campus, phase 1b remainder of spine road). The HCA is to provide a monitoring report in accordance with the S106 by the 1st June to the Forest of Dean District Council, each year, for the previous calendar year.

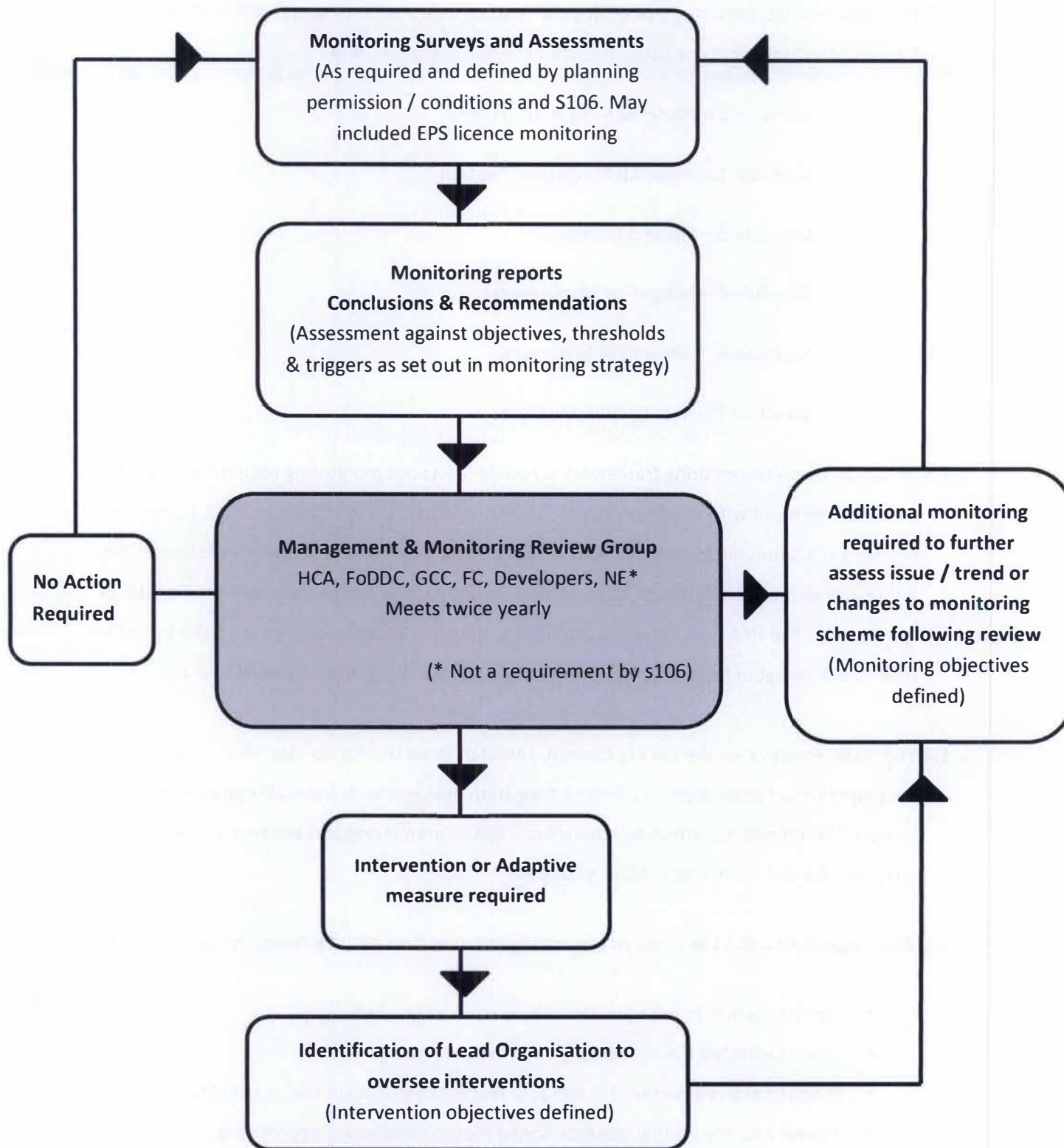
4.1.4. The S106 sets out that the County Council, Forest of Dean District Council, HCA, FC and any other developers meet twice a year to discuss mitigation management. Natural England would also be invited. This monitoring group will therefore oversee monitoring and any requirements for any adaptive management/rectification measures.

4.1.5. With regards to LHB's the scope of the management and monitoring review group will be to:

- work together to maintain the colony size and productivity
- assess whether the monitoring objectives are being met
- monitor and review the LHB status in respect of that identified in the HRA
- review and ensure that the monitoring methodologies are appropriate
- identify and co-ordinate adaptive measures where necessary

4.1.6. The monitoring and reporting structure is illustrated in figure A below.

Figure A – Monitoring & Reporting Structure



4.2 Summary

In terms of reporting on the bat monitoring strategy this will be part of the overall monitoring requirements as set out in the S106. The S106 makes it a requirement that for phases 1a & 1b the HCA will undertake or procure monitoring and for phase 2 a future developer. The S106 also sets up an overseeing management group of the HCA, GCC, FODDC, FC, future Developers and Natural England (if they wish) which will meet twice a year to review mitigation implementation, management and monitoring. Monitoring will be reported to the Cinderford Regeneration Board and Cinderford Regeneration Environmental Forum.