

A428 Black Cat to Caxton Gibbet improvements

TR010044

Volume 6

6.13 Biodiversity pre-commencement plan

Planning Act 2008

Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



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Development Consent Order 202[]

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Table of contents

Chapter		Pages
1	Biodiversity pre-commencement plan	1
1.1	Introduction	
1.2	Definitions	
1.3	Roles	
	General control measures	
1.5	Protected species and sites	4
	Invasive non-native species	
1.7	References	11



1 Biodiversity pre-commencement plan

1.1 Introduction

- 1.1.1 This document is the Biodiversity pre-commencement plan (Rev 2) [TR010044/APP/6.13] (referred herein as 'the Plan') for the A428 Black Cat to Caxton Gibbet Road Improvement scheme (the Scheme).
- 1.1.1 This Plan describes the proposed pre-commencement works (as defined in Article 2 of the draft Development Consent Order (DCO) [REF6-003]) to be undertaken as part of the Scheme.
- 1.1.2 The purpose of this Plan is to identify the preliminary works surveys, checks, controls and actions that are required to be undertaken to ensure that any precommencement works (for example vegetation clearance, demolition and construction compound formation) undertaken in advance of the main construction works do not contravene legislation. The Plan also identifies licensing requirements for protected species that may be affected by the precommencement works.
- 1.1.3 The Plan specifically covers matters relating to biodiversity. It should be read in conjunction with the Pre-commencement plan (Rev 3) [TR010044/EXAM/9.48] submitted at Deadline 8 of the Examination which details wider measures to be undertaken by the PC to control works and activities during the Scheme's pre-commencement phase.

1.2 Definitions

- 1.2.1 For the purposes of this document, the following definitions apply:
 - a. "The Authority" is National Highways, who is seeking to obtain powers to construct, operate and maintain the Scheme through an application for a development consent order.
 - b. The "Principal Contractor" (PC) is any contractor appointed by The Authority to deliver the construction works (and shall also include any sub-contractors appointed by the PC).
 - c. The "Ecological Clerk of Works" (ECoW) is an individual that supports compliance with legislation and planning conditions or requirements, and also provides advice and guidance throughout the works.

1.3 Roles

- 1.3.1 The PC shall establish the role of the ECoW and appoint a suitably qualified person to ensure pre-commencement operations comply with the requirements detailed within the Plan in relation to: surveys; supervision and monitoring; communication; the delivery of mitigation measures; and the preparation of Method Statements.
- 1.3.2 The ECoW will also be responsible for ensuring pre-commencement operations comply with all applicable ecological legislation and any requirements defined within consents and licences.



1.4 General control measures

1.4.1 The following general control measures will be applied by the PC within all construction working areas of the Scheme during pre-commencement works.

Biodiversity Net Gain

1.4.2 Surveys of habitat condition will be undertaken by the ECoW or other appropriate specialist in advance of site clearance operations. These will inform an updated biodiversity net gain calculation of the Scheme. The ECoW will be responsible for recording the losses, retention and gains of habitat areas and their condition.

Site clearance and demolition works

- 1.4.3 Site clearance or demolition will not be carried out within any area of the Scheme's Order Limits until the ECoW has confirmed that there are no biodiversity constraints to the works in that area.
- 1.4.4 Vegetation clearance will be undertaken and recorded in accordance with a Permit to Clear issued by the ECoW, which will ensure these operations only commence following inspection by the ECoW. Where required, this will be extended to incorporate and cover areas of land that will be left undisturbed during the bird breeding season.
- 1.4.5 Where possible, clearance operations will be overseen by the ECoW and:
 - a. Be minimised as far as practicable.
 - b. Be phased to minimise the areas of exposed ground and reduce the potential for runoff.
 - c. Be undertaken outside of the bird nesting season (March to August inclusive).
 - d. Be undertaken outside the hibernation period for reptiles, in order to render habitat unfavourable for reptiles to shelter and encourage their dispersal into adjacent areas of suitable habitat.
- 1.4.6 The ECoW shall oversee site clearance operations undertaken in sensitive habitats, including those with potential to be used as shelter by protected or notable species.
- 1.4.7 Where individuals of any species protected by legislation are noted during the pre-commencement works, operations will stop in those areas and the ECoW shall be contacted for further advice on how to proceed.
- 1.4.8 Where necessary, the EcoW will produce a Method Statement to ensure full compliance with relevant legislation.

Protection of trees and other vegetation

1.4.9 Bankside vegetation within 8m of any watercourse or waterbody will be retained where appropriate.



- 1.4.10 The PC shall protect trees from the works in accordance with the best practice measures contained in the following British Standards:
 - a. BS 5837:2012 Trees in relation to design, demolition and construction [REF 1-1].
 - b. BS 3998:2010 Tree Work: Recommendations [REF 1-2].
- 1.4.11 A Root Protection Area shall be identified and established around trees to be retained prior to works commencing and demarcated using a suitable physical barrier or fencing. In the event that a Root Protection Area cannot be maintained at 12 times the diameter at breast height, other measures (for example, bog matting, flotation tyres or hand digging) will be used by the PC.
- 1.4.12 Protection shall be provided around those afforded protection by way of Tree Preservation Order in proximity to the pre-commencement works.
- 1.4.13 Any installed protective barriers or fencing shall be maintained for the duration of the pre-commencement works and inspected on a regular basis by the PC.
- 1.4.14 Where required, the PC shall seek the views and advice of the relevant local authority regarding the protection of trees.

Temporary fencing

- 1.4.15 Temporary fencing will be erected prior to construction to protect ecological species and habitats from construction working areas prior to undertaking precommencement works, in locations where there is considered to be a risk from operations and activities.
- 1.4.16 The PC, in conjunction with the ECoW, shall develop a fencing plan and will consult the relevant local authorities on the form and location of temporary fencing to be installed within the Scheme's Order Limits.

Compound establishment

1.4.17 Construction compounds and storage areas will, where reasonably practicable, be established away from areas with potential for use for breeding by amphibians.

Site communications and inspections

- 1.4.18 Prior to starting any work with potential to affect protected species, site operatives will be informed by toolbox talks given by the PC and/or the ECoW on any requirements, constraints, what to look out for and what to do in the event that a protected species is found.
- 1.4.19 The ECoW will be responsible for ensuring necessary environmental mitigation measures are correctly implemented, monitored and maintained during the works.

Habitat creation

1.4.20 Habitat creation will be carried out by the PC in advance of pre-commencement operations, where required, to provide mitigation for certain species (see Section 1.5).



1.5 Protected species and sites

Licence requirements

- 1.5.2 Protected species licences from Natural England will be required for the following species:
 - a. Badger.
 - b. Great Crested Newt.
- 1.5.3 A Letter of No Impediment for the Scheme, based on a draft Badger licence application, was issued to The Authority by Natural England on 15 July 2021. This confirms that Natural England sees no barrier to granting a licence in the future, subject to a number of matters being addressed prior to the full licence application being formally submitted.
- 1.5.4 The Authority submitted a draft application for a Scheme-wide European Protected Species Licence to Natural England in November 2021 to mitigate the impact on Great Crested Newt habitat loss as a result of the Scheme. Based on the content of this draft application and the proposed mitigation measures, Natural England confirmed to The Authority in writing on 13 January 2022 that it sees no impediment to a licence being issued, should the DCO be granted.
- 1.5.5 In parallel to the Scheme-wide European Protected Species Licence, The Authority is pursuing a District Level Licence (DLL) through NatureSpace to mitigate impacts on Great Crested Newt within Bedfordshire's administrative area.
- 1.5.6 This dual approach has been adopted to ensure that suitable mitigation and licensing can be delivered in relation to:
 - a. Avoiding mortality during clearance of terrestrial habitat in the vicinity of breeding ponds.
 - b. Excluding Great Crested Newts from construction areas using amphibian fencing.
 - c. Capturing Great Crested Newts and translocating them to existing or preprepared receptor sites within the Scheme's Order Limits.
- 1.5.7 Updates to the baseline surveys will be carried out, as required, to inform the licence applications for Badger and Great Crested Newt and to determine the need for any licences for Bats, Otter and Water Vole. The PC will not commence any pre-commencement works until the required licences for Badger and Great Crested Newt (and if required, Bats and other protected species) have been obtained from Natural England.
- 1.5.8 Although no necessity has been identified at this stage for bat licences, in the event any bat roosts are confirmed roosting during pre-commencement surveys, a mitigation licence will be sought and obtained from Natural England by the PC prior to undertaking any demolition or tree felling works.
- 1.5.9 All operations and activities associated with the pre-commencement works will be carried out under the requirements and conditions of the granted licences.



Bats

- 1.5.10 Although no roosts have been identified that will be directly impacted by the precommencement works the PC shall update the bat survey information reported in:
 - a. Appendix 8.5, Bats [APP-192] of the Environmental Statement.
 - b. Habitats Regulations Assessment: Report to Inform Appropriate Assessment [TR010044/EXAM/9.99].
 - c. Barbastelle Bat Survey and Mitigation Technical Note (Rev 4) [TR010044/EXAM/9.54].
- 1.5.11 Bat surveys to be undertaken ahead of tree felling and demolition works within the pre-commencement period will involve:
 - a. An internal and external survey of building, structures and suitably creviced trees to record any potential change in roost suitability (i.e. upgrade or downgrade).
 - b. Single emergence surveys (including any additions from possible upgrades) informed by the inspection survey and up to a total of three dusk/dawn surveys to characterise the roost, where required.
- 1.5.12 A constraints plan will be prepared prior to undertaking pre-commencement operations to identify areas and features which are sensitive for bats.
- 1.5.13 A Method Statement will be prepared setting out measures to ensure the protection of bats during site clearance activities. This will include information on:
 - a. Pre-works checks required.
 - b. The timing for demolition and tree felling.
 - c. The role of the ECoW during demolition and tree felling activities.
- 1.5.14 Bat boxes of various designs will be installed in retained woodlands within the Order Limits (as shown in principle on Figure 2.4 (v3) Environmental Masterplan [REP6-006] submitted at Deadline 6 of the Examination). These will be provided as far ahead of vegetation clearance works as is practicable.
- 1.5.15 Up-to-date pre-construction bat activity data will be collected to provide a basis for post-construction monitoring, and will use a combination of transects and statics detector surveys.

Badger

1.5.16 During site clearance tree and shrub felling will be carried out avoiding damage to badger setts and blocking of any badger pathways. Fencing will be used to mark minimum stand-offs around active setts, or to exclude badgers from construction working areas where there is considered to be a risk of accidental collision with construction traffic.



- 1.5.17 A pre-construction badger survey will be completed prior to the works in order to verify the status of setts located within the Scheme's Order Limits. The survey results will inform the content and submission of a full Badger licence application to Natural England to permit the closure of badger setts which will be affected by the proposed works.
- 1.5.18 Measures for Badger will be included in a Method Statement to inform the preliminary works.

Otter and Water Vole

- 1.5.19 As Otter has been found to be using some of the brooks within the Scheme's Order Limits, a pre-construction Otter survey will be completed prior to the pre-commencement works.
- 1.5.20 Measures to be implemented by the PC to minimise potential disturbance to this species as applicable are:
 - a. Undertaking ECoW supervision of any works in, or adjacent to, watercourses identified as having potential presence.
 - b. Implementation of a 10m stand-off distance from watercourses during the works (except where works need to be carried out in the channel).
 - c. Demarcation of any restricted areas required to prevent unnecessary entry to sensitive habitats along the watercourses.
 - d. Maintenance of free access for otter along watercourses and/or banks during works.
 - e. Erection of temporary fencing to exclude Otter from working areas (where there is considered to be a risk of accidental collision with construction traffic).
- 1.5.21 Although Water Vole has been recorded as absent during surveys, a preconstruction Water Vole survey will be carried out to check for on-going absence. In the event that Water Vole is found to have colonised any of the brooks, mitigation requirements and the need for a Protected Species Licence will be assessed. If the risk from works is such that they would not require a licence the above precautionary measures for Otter shall be implemented for this species in the event it is present.

Breeding birds

- 1.5.22 To avoid disturbance to nesting birds, site clearance works including the demolition of buildings and the removal of any woody vegetation and ground flora will be conducted, where possible, outside the bird nesting season (i.e. clearance undertaken between September and February).
- 1.5.23 Where this is not achievable, any clearance works will be preceded by a preworks survey for nesting birds conducted by a suitably qualified ecologist, acting as the ECoW, in advance of the clearance works. Pre-works breeding bird surveys will be undertaken a maximum of 48 hours prior to vegetation clearance during the bird breeding season, including grassland, crops and fallow, as these have the potential to be used by ground-nesting birds.



- 1.5.24 If an active nest site is present within or adjacent to a work area a suitable exclusion zone will be designated by the ECoW appropriate to species, nest location and works activities. This exclusion zone will be protected from works and monitored until the ECoW (or other appropriate specialist) has confirmed that the nest site is no longer in use.
- 1.5.25 Any use of legal measures to deter birds from nesting in areas identified for clearance shall be implemented under the advice and supervision of the ECoW. Such measures will not be used where there is considered to be a risk of disturbance to any active nests of bird species listed under Schedule 1 of the Wildlife and Countryside Act 1981 [REF 1-3].
- 1.5.26 A Schedule 1 [REF 1-3] species that could pose a constraint during the precommencement period is Little Ringed Plover (*Charadrius dubius*). This is an opportunistic ground nesting species that uses areas of open gravel with little or no plant growth, typically near freshwater, and is relatively tolerant of disturbance. Measures to limit the risk of nesting plovers will be implemented by the PC, for example minimising the time areas of open gravel are left exposed.
- 1.5.27 Any exclusion zones set up for the protection of breeding birds will be monitored for bird activity during the works.
- 1.5.28 Bird nest boxes will be installed on selected retained trees, designed to be suitable for a range of species.
- 1.5.29 Measures relating to breeding birds will be included in a Method Statement to inform the preliminary works, the content of which shall be approved by the ECoW.

Hobby and Red Kite

- 1.5.30 An ECoW or other appropriate specialist will conduct a survey for nesting Hobby and Red Kite in known nesting locations as part of the pre-commencement works. In the event that a breeding Hobby or Red Kite is located within or adjacent to the Scheme, the ECoW will determine a protective exclusion zone of up to 500m.
- 1.5.31 The radius of any protective exclusion zone and its duration will be dependent on the stage of breeding (i.e. with eggs, chicks, etc.). Indicative guidance distances to avoid disturbance are similar to distances used for Peregrine and Merlin [REF1-7]. For the different stages of breeding these are:
 - a. Nest building: 400m.
 - b. Eggs: 400-500m.
 - c. Chicks: 200-400m.
- 1.5.32 The surrounding habitat, topography and screening from disturbance will all be considered when defining any protective exclusion zone. This may allow the exclusion zone around a nest be reduced, although it is likely to require a minimum of 300m around any active nest site to ensure that there is no disturbance to breeding Hobby or Red Kite.



1.5.33 The appropriate measures would be included in a Method Statement to inform the preliminary works.

Barn Owl

- 1.5.34 An ECoW or other appropriate specialist will conduct a survey for nesting Barn Owl in known nesting and foraging locations, to inform the location of construction fencing.
- 1.5.35 If any Barn Owl nest is found within or adjacent to areas of works, the ECoW will determine the extent and duration of the protective exclusion zone required. This will be dependent on factors such as the stage of breeding. Indicative guidance distances for an exclusion zone during the following stages of breeding are as follows:
 - a. Nest building: 50-100m.
 - b. Eggs: 50-100m.
 - c. Chicks: 50-100m.
- 1.5.36 Subject to agreement with landowners, Barn Owl boxes will be installed as a species enhancement measures on land outside of the Order Limits. The exact location of additional boxes will depend on land ownership, but will be mounted either on a pole adjacent to existing trees or on retained trees, and located sufficiently far from pre-commencement operations to provide alternative roosting and/or nesting sites.
- 1.5.37 The appropriate measures will be included in a Method Statement to inform the pre-commencement work, to be signed off by the ECoW.

Great Crested Newt

- 1.5.38 An updating survey will be carried out to inform a licence application in advance of pre-commencement works. For the purpose of informing mitigation in the event that any pond within 500m of the Scheme which is outside Order Limits cannot be accessed or survey results are inconclusive it will be assumed to have Great Crested Newt present.
- 1.5.39 Figure 2.4 (v3) Environmental Masterplan [REP6-006] submitted at Deadline 6 of the Examination illustrates the form and location of mitigation measures to be implemented by the PC that will function as receptor sites for Great Crested Newt to be translocated during the site clearance works, in the event that a European Protected Species Licence is obtained by the PC from Natural England for this species.
- 1.5.40 These receptor sites comprise the creation of rough grassland with refugia and new ponds with refugia and hibernacula. These receptor sites will be established by the PC as part of the pre-commencement works in advance of site clearance of terrestrial habitat potentially used by Great Crested Newts.
- 1.5.41 Fencing consisting of perimeter and drift fencing will be erected in areas of suitable newt habitat to exclude newts from entering development areas.



1.5.42 The fencing will incorporate traps to actively trap out the newts. Trapping effort will be as required by a granted European Protected Species Licence informed by Natural England guidelines [REF 1-4]. In areas where there is a small population present within 250m of the Scheme's Order Limits, a minimum of 30 days trapping will be undertaken. Where there is a medium population, a minimum of 60 days will be undertaken¹.

Protected Road Verges

- 1.5.43 To minimise the potential for indirect impacts on nationally scarce species within Protected Road Verge S8 (Brockley Road), fencing will be installed by the PC to protect this site from pre-commencement works. Management by mowing and removal of arisings will be carried out during the pre-commencement and construction periods in accordance with the management requirements for species-rich grassland.
- 1.5.44 Positioning of the fencing will not impede the required management of the Protected Road Verge.

1.6 Invasive non-native species

- 1.6.1 A Preliminary Works Invasive Species Management Plan will be produced by the PC, specifying in detail the biosecurity measures which will be taken to ensure that none of the Schedule 9 species [REF 1-3] are spread off, or within, the Order Limits and that measures are specified to ensure that no such scheduled species are inadvertently brought into the Order Limits.
- 1.6.2 All works affecting invasive non-native plant species will be completed in accordance with the following:
 - a. Treatment and disposal of invasive non-native plants: RPS 178 [REF 1-5].
 - b. The Waste (England and Wales) Regulations 2011 [REF 1-6].
- 1.6.3 The Preliminary Works Invasive Species Management Plan will include the best timing of works, biosecurity procedures and treatments and how to carry out the works minimising the risk of dispersion of invasive non-native plant species from, into and within the Scheme and to ensure that they do not cause any delays to the programme. However alongside appropriate management plans, the following general biosecurity measures will be adopted:
 - a. Cleaning stations will be set up at designated entry/exit points to invasive species demarcated areas. A jet wash will be available for vehicles and brushes and buckets of water will be available for clothing and equipment.
 - b. All staff members will be made aware of the locations of invasive species relevant to their work and will be informed of the necessary precautions required to prevent spread.

Planning Inspectorate Scheme Ref: TR010044 Application Document Ref: TR010044/APP/6.13

¹ For medium populations where the habitat to be trapped is arable, it is anticipated that clearance of the area could be achieved with a shorter trapping period proportionate to this suboptimal habitat.



- c. A toolbox talk will be provided by a suitably qualified ECoW at the onset of works, providing details on identification and the required biosecurity precautions.
- d. No plant, equipment or personnel will leave an infested area without ensuring that as far as reasonably practicable all mud and/or plant material has been removed from vehicles, equipment and clothing.
- e. Within demarcated areas, ground disruptive works will be carried out as far away from visible above ground invasive species as is possible.
- f. Where ground disruptive works take place near visible above-ground invasive species (particularly larger stands), programming and method of works in these locations will preferentially work in unaffected areas prior to working in or near invaded areas, to reduce the risk of spreading invasive species within a working area.
- g. Any soil in demarcated areas will be considered to potentially contain invasive species material (for example, rhizome or seeds etc.).
- h. If soils potentially containing Japanese Knotweed rhizome or Himalayan Balsam seeds are taken off site, such soils are classified as controlled waste and there is a duty of care for their proper disposal i.e. the soil must be transported by an appropriately licensed carrier and disposed of at an appropriately licensed waste disposal facility.
- i. Personnel will be reminded of biosecurity requirements at the start of each working day and will be updated on any changes to management plans i.e. information on the locations of any newly identified stands.
- Soil brought on site will only be sourced from a reputable source with a good track record relating to not providing soil contaminated with invasive species propagules.
- k. All invasive works in proximity to watercourses and waterbodies will be undertaken in accordance with the Preliminary Works Invasive Species Management Plan.
- I. Prior to undertaking any herbicide spraying near watercourses, consent will be obtained from the Environment Agency.
- m. When travelling or working between watercourses, measures will be employed to reduce the risk of transferring problem species or diseases between watercourses. Such measures will include, but not be limited to, the checking for and cleaning mud and vegetation from boots, construction equipment and machinery, and allowing such items to dry in sunlight. Where works are carried out within watercourses with invasive species measures will be taken to avoid or minimise the risk of dispersal of fragments of invasive plants downstream.



1.7 References

- REF 1-1 BS 5837:2012 Trees in relation to design, demolition and construction. British Standards Institution (2012).
- REF 1-2 BS 3998:2010 Tree Work: Recommendations. British Standards Institution.
- REF 1-3 Wildlife and Countryside Act 1981. HMSO (1981).
- REF 1-4 Great Crested Newt Mitigation Guidelines. English Nature (2001).
- REF 1-5 Treatment and disposal of invasive non-native plants: RPS 178. Environment Agency (2016).
- REF 1-6 The Waste (England and Wales) Regulations 2011. HMSO (2011).
- REF 1-7 A Review of Disturbance Distances in Selected Bird Species. Ruddock, M., & Whitfield, D.P. (2007).