Construction Ecological Management Plan

Goldthorpe ES10 Access Roundabout

Author: Julie Riley

info@wildscapes.co.uk

P1570

Quality Assurance

PROJECT NUMBER	P1570.22 (Previously 0932.19)
PROJECT NAME	Construction Ecological Management Plan Goldthorpe ES10 Access Roundabout
SITE LOCATION	Land surrounding A635, Billingley Green, Goldthorpe, Barnsley S72 0JE OS Grid Reference SE 44223 04072
FILE NAME	P1570 Goldthorpe Construction Ecological Management Plan
VERSION	V02.1 – Amended to add Himalayan Balsam Exclusion Zone mapping

PRINCIPAL AUTHOR	CHECKED BY	APPROVED BY
Paul Liptrot BSc(Hons) MCIEEM Updated by Julie Riley BA(Hons) MA ACIEEM	Paul Liptrot BSc(Hons) MCIEEM	Paul Liptrot BSc(Hons) MCIEEM

Field Investigations and Data

Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work. Where any data supplied by the client or from other sources have been used it has been assumed that the information is correct. No responsibility can be accepted by Wildscapes CIC and Sheffield and Rotherham Wildlife Trust for inaccuracies in the data supplied by any other party.

Declaration of Compliance

The information which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed within this document are our true and professional bona fide opinions.

Copyright

The contents and layout of this report are subject to copyright owned by Wildscapes CIC and Sheffield and Rotherham Wildlife Trust

Third Party Disclaimer

Any disclosure of this report to a third party is subject to this disclaimer. The report was prepared by Wildscapes CIC and Sheffield and Rotherham Wildlife Trust at the instruction of, and for use by, our client named on the front of the report. It does not in any way constitute advice to any third party who is able to access it by any means. No other warranty, expressed or implied is made as to the professional advice included in this report.

Contents

CONTENTS 3

TABLES 3

1 INTRODUCTION 4

1.1 VERSION DESCRIPTION 4

1.2 NATURE OF THE PROPOSALS 4

1.3 BACKGROUND 6

2 KEY PROJECT PERSONNEL 7

2.1 SITE MANAGER / BIODIVERSITY CHAMPION 7

2.2 SUITABLY QUALIFIED ECOLOGIST (SQE) 7

3 ES10 ACCESS ROUNDABOUT 8

3.1 PRE-CONSTRUCTION MEASURES 8

3.2 CONSTRUCTION PHASE METHODS 9

3.3 POST-CONSTRUCTION HABITAT CREATION AND MAINTENANCE 11

4 CONSTRUCTION PROGRAMME 12

4.1 KEY ECOLOGICAL CONSTRAINTS 13

5 RELEVANT POLICY AND LEGISLATION 14

5.1 THE CONSERVATION OF HABITATS AND SPECIES (AMENDMENT) (EU EXIT) REGULATIONS 2020 14

5.2 WILDLIFE & COUNTRYSIDE ACT 1981 14

5.3 NATIONAL PLANNING POLICY FRAMEWORK 14

5.4 SECTION 41 HABITATS AND SPECIES (NERC ACT 2006) 16

6 HIMALAYAN BALSAM IDENTIFICATION 17

7 HIMALAYAN BALSAM EXCLUSION ZONE 19

8 ES10 ROUNDABOUT INITIAL WORKS 20

8 REFERENCES 21

Tables

TABLE 1-1 AREA HABITATS IMPACTED BY THE PROPOSALS 5

TABLE 1-2 LINEAR HABITATS IMPACTED BY THE PROPOSALS 5

TABLE 1-3 SUPPORTING INFORMATION 5

1 Introduction

1. The following report was compiled by Paul Liptrot GradCIEEM under the supervision of Jon Goodrick MCIEEM in 2019. It was updated in 2022 by Julie Riley ACIEEM and checked by Paul Liptrot MCIEEM.

2. The report was commissioned by Suzanne Brough on behalf of Barnsley Metropolitan Borough Council (BMBC).

3. The site is referred to as the land surrounding the A635 at Billingley Green, Goldthorpe, Barnsley. The site includes existing roads and paths, roadside grassland, hedgerows and arable fields to the north and south. Carr Dike borders the site to the east.

4. The planned development includes the widening of the road present and creation of a roundabout to allow access to a planned development site.

5. The approximate central grid reference for the site is SE443040.

1.1 Version description

6. This is an updated version of the original document to reflect that in 2021 the position of the proposed roundabout was moved eastwards. The document is designed to accompany the Ecological Impact Assessment for the proposed works. This document will be updated to include the finalised timetable and any other necessary information prior to its inclusion in the site management paperwork for the construction scheme.

1.2 Nature of the proposals

7. The proposals are to construct an access roundabout to facilitate a new industrial site to the north of the A635. The access route involves modifying the existing carriageway and the construction of a new roundabout. This will result in the permanent loss of 3113m^2 of plantation broadleaved woodland, 1473m^2 of improved grassland (farmland edge), 1623m^2 arable farmland, 1691m^2 of roadside amenity grassland, 749m^2 poor semi-improved grassland road verges, 2m^2 of tall ruderals and 75m^2 dense continuous scrub. Planning permission was approved in February 2022.

8. Construction works will also result in some temporary area habitat losses which will be reinstated with topsoil (therefore where a more ecologically valuable habitat such as woodland or poor semi-improved grassland is being replaced by topsoil, this has been added to the permanent loss figures). This will affect 915m^2 of improved grassland (farmland edge), 80m^2 of tall ruderals, 1482m^2 of arable farmland and 51m^2 of roadside amenity grassland.

9. The proposals will also result in the total loss of species-poor native hedgerow H06 (334m), the total loss of species-poor defunct native hedgerow H01.1 (87m) and partial losses from hedgerows H09.1, H09.2 and H10 (17.5m), with hedgerow loss totalling 439m. The proposal also has the potential to impact the running water habitat of Carr Dike.

Table 1-1 Area habitats impacted by the proposals

PHASE 1 CODE	PHASE 1 HABITAT	HABITATS - TOTAL AREA IMPACTED (M^2)	HABITATS - TEMPORARY DAMAGE (M^2)	HABITATS - PERMANENT LOSS (M^2)
A2.1	Dense continuous scrub	75	0	75
C3.1	Tall ruderal	82	80	2
J1.2	Amenity grassland	1742	51	1691
B4	Improved grassland	2388	915	1473
J1.1	Arable	3105	1482	1623
A1.1.2	Plantation broadleaved woodland	3113	[881 – but assume not replanted so added to permanent loss]	3113 (2232 + 881)
B6	Poor semi-improved grassland	749	[65 – but assume not reinstated so added to permanent loss]	749 (684 + 65)

Table 1-2 Linear habitats impacted by the proposals

PHASE 1 CODE	PHASE 1 HABITAT	LENGTH (M)
J2.1.2	Species-poor intact hedge	345
J2.2.2	Species-poor defunct hedge	93.5

10. Wildscapes has been provided with the documents and plans referenced in Table 1-3:

Table 1-3 Supporting information

DATE	TYPE	ORGANISATION	TITLE AND REFERENCE NUMBER
No Date	Plan	Barnsley Metropolitan Borough Council	ES10 Acces Title & License Plan
April 2013	Report	Wildscapes CIC	D1A Report Wildscapes
April 2013	Plan	Wildscapes CIC	D1A Report Wildscapes
Oct 2018	Plan	Barnsley Metropolitan Borough Council	A635 Barnsley Road D1 Access (A635) HD/A635.69.1/D1/01RevA
1st December 2019 – Updated Nov 2021	Report	Wildscapes CIC	Preliminary Ecological Appraisal Goldthorpe Unit D [ES10] V02
July 2021	Plan	Fore Consulting	Proposed Roundabout A635 Goldthorpe: General Arrangement : 3465.100-SK-001 RevE
September 2021	Document	BMBC & Edward Architecture	Goldthorpe Masterplan Framework Version 2.0
June 2020	Report	Middleton Bell Ecology	Goldthorpe ES10 Preliminary Ecological Appraisal
September 2021	Report	Wessex Archaeology	Barnsley LDP Additional South Yorkshire: Hedgerows Assessment
2021	Briefing Note	Middleton Bell Ecology	Goldthorpe ES10 – Bird Survey and Defra Metric Briefing Note v3
December 2021	Plan	Barnsley Metropolitan Borough Council	Site Clearance
January 2022	Report	Tree Care Consultancy	Arboricultural Method Statement: New Roundabout Project

1.3 Background

11. In summary, the ecological studies found the following ecological constraints to be present within the development zones:

12. Habitats – the proposed roundabout will involve the loss of poor semi-improved grassland road verges, amenity grassland, improved grassland, dense scrub, arable, plantation woodland and species poor hedgerow. Scattered trees (particularly Tree T02 and Tree T03) could be impacted as they are close to the construction zone. The roundabout also has the potential to damage Carr Dike through increased risk of pollution events.

13. Invasive species – scattered Himalayan balsam is present within Carr Dike and up the banks of the Dike along the extent of the proposed works.

14. Reptiles – Grass snake have been confirmed to use the road verges to the north of this area and the habitat surrounding the construction zone offers good suitability for foraging and commuting grass snakes. Likewise, common lizard and slow worm records were also returned within the data searches. The proposed works would result in the damage/loss of suitable habitat for these species and present a risk of killing or injuring individuals present.

15. Bats – a number of the trees surrounding the site has been classified as offering moderate or high suitability for roosting bats. Tree T02 has moderate suitability for roosting bats and should be protected during construction following an appropriate tree protection methodology. Tree T03 also has moderate suitability and as it is only 7m away from the construction zone; a precautionary approach to protecting the tree should be taken. Should Trees T02 or T03 need to be felled or managed for any reason, further surveys will be required to confirm their status for roosting bats. Likewise, if any Artifical Lighting at Night (ALAN) is to be installed within 20m of these trees, further survey would be required to determine if they are used by roosting bats.

16. Amphibians – terrestrial habitats suitable for supporting common species of amphibian (common frog, common toad and smooth newt) will be damaged/lost.

17. Nesting birds – The habitats to be damaged/lost have significant potential to support nesting birds.

18. Hedgehog – Habitats suitable for this species will be damaged/lost. The proposed works pose a risk to individual animals during the construction phase.

2 Key project personnel

19. A finalised list of key project personnel has not yet been compiled. However, the following key project roles will need to be filled for the safe implementation of the Construction Ecology Management Plan (CEMP).

2.1 Site Manager / Biodiversity Champion

20. The Site Manager would be responsible for:-

- Ensuring that the CEMP is developed & held on site and that it is implemented throughout all phases of the project. Ensuring the CEMP details are updated as and when relevant information is provided by the stakeholders associated with each section of the CEMP; e.g. further consent conditions, pre-construction surveys, etc.
- Liaising with the Suitably Qualified Ecologist (SQE) to ensure key working methodologies and timings are met in line with CEMP.
- Maintaining the CEMP and ensuring that all contractors and visitors comply with it.
- Communicating the CEMP and other related documents to employees, contractors and client representatives through site inductions.

2.2 Suitably Qualified Ecologist (SQE)

21. The Suitably Qualified Ecologist would be responsible for:-

- Liaising with the Site Manager/Biodiversity Champion to ensure that the CEMP is complied with during works.
- Delivery of pre-works inspections and/or surveys where required.
- Delivery of Ecological Clerk of Works where required.
- Advise on safe working boundaries to protect retained habitat.
- Advising on safe working boundary and SUDS plans to ensure protection of the habitats.
- Advising on suitable locations for mitigation measures.
- Delivery of task specific toolbox talks for contractors where required.

3 ES10 Access Roundabout

3.1 Pre-construction measures

3.1.1 Biosecurity Protocol / Himalayan balsam

22. Himalayan balsam is located within the course of Carr Dike and grows both along the edge of the water and up the banks. A suitable bio-security and removal protocol is required to manage this invasive species which is listed in Schedule 9 of the Wildlife and Countryside Act.

23. Prior to the commencement of works a biosecurity protocol will be developed and agreed upon to manage the risk on site of the spread of invasive species and disease. This protocol will cover both the proposed works on site and disposal of waste products but also the supply chain (to ensure that issues are not brought into site). The protocol must be a key item within the site induction and all site personnel, contractors, supplier and visitors will be expected to prove compliance.

24. The protocol will remain in place for all stages of work (pre-construction, construction and post-construction maintenance).

25. Site operatives shall be made aware of the locations and full extent of Himalayan balsam around Carr Dike and awareness training will be provided to site operatives as required e.g. toolbox talks.

26. Himalayan balsam can scatter its seeds up to 7m away from the parent plant. Seeds can be transported by water and have a long viability period, therefore any control should be carried out before seed pods have formed. If seeds have already formed the best option is to remove the plant from site following controlled waste procedures, or burn on site.

27. Access to Himalayan balsam should be restricted by installing a fence 7m from the nearest plant to create an exclusion zone. Practically this will involve fencing 7m from the banktop of Carr Dike. Appropriate signage should be installed on the fence to advise of the presence of Himalayan balsam. If the Site Manager or Biodiversity Champion are not certain of plant identification they should consult a Suitably Qualified Ecologist. A plan showing the 7m exclusion zone is available in Section 7.

28. If works will need to take place within the exclusion zone, treatment should be carried out to remove Himalayan balsam. The plant is shallow rooted so hand pulling or cutting at ground level is preferred. Ideally this should take place in May/June, when the plant has flowered but before it has set seed. Alternatively herbicide spot spraying treatment of Himalayan balsam can be carried out, but must conform with Environment Agency permit requirements.

29. Construction works carried out between November and March will not contribute to the spread of seeds as this will already have occurred.

3.1.2 Amphibians, Reptiles and Hedgehogs

30. Under the supervision of the Suitably Qualified Ecologist the grass verges, scrub and other suitable habitats within the work area should be made to be less suitable for amphibians and reptiles.

31. The following reasonable avoidance measures for the protection of amphibians, reptiles and hedgehogs must be employed:

- A toolbox talk by a Suitably Qualified Ecologist will be undertaken ahead of all clearance works.
- A method statement will be provided to staff and will be displayed within any shelters on site.
- All sensitive areas on site will be checked by an ecologist before works can begin.

- The dismantling of rubble piles, log piles and suitable features within defunct walls and buildings will be undertaken by hand and will be undertaken in the presence of a Suitably Qualified Ecologist.
- Before any vegetation is cleared, the vegetation height will be reduced to 150mm ahead of a fingertip search by a Suitably Qualified Ecologist. This should be carried out by directional strimming away from the A635 so that animals are not flushed out into the road. Once the fingertip search has taken place, the vegetation height can then be reduced to ground level should no great crested newts be found. Vegetation should be maintained at this level for the remainder of the construction phase.
- **Should great crested newts be identified on site at any point, all works must cease immediately and the advice of a suitably licensed and experienced ecologist sought.**
- Any common amphibians, reptiles or hedgehogs captured during the clearance works will be moved to a safe location outside of the proposed working area.

3.1.3 Nesting birds

32. Under the Wildlife and Countryside Act 1981, as amended (section 1), it is an offence to remove, damage or destroy the nest of any wild bird while that nest is in use or being built. Planning consent for development does not provide a defence against prosecution under this act.

33. It is recommended that the removal of the scrub, plantation woodland, hedgerow and any scattered trees that may need to be removed from the work zone takes place outside the main nesting bird period which runs from March to August inclusive.

34. Should works need to be carried out within the period, a suitable method statement for the protection of nesting birds will be put in place which will include pre-works inspection of suitable nesting features and nests within the work area by a Suitably Qualified Ecologist (SQE). If active nests are found, an exclusion zone dependant on the species of bird will be implemented and works will not be able to commence within the exclusion zone until all chicks have fledged.

35. It should be noted that some species of bird can nest outside the main nesting bird period. If at any point during the works nesting birds are found, works will be suspended and advice sought from a Suitably Qualified Ecologist.

3.2 Construction Phase Methods

3.2.1 Reasonable avoidance measures – amphibians, nesting birds, terrestrial mammals

36. Through the site induction, the Site Manager/Biodiversity Champion will make clear the following reasonable avoidance methods. The Suitably Qualified Ecologist should make available suitable information (images of bats, badger setts and amphibians for instructive purposes).

Amphibians/Reptiles – Reasonable Avoidance Measures

- All workers should be made aware that this landholding has been identified as potentially containing amphibians/reptiles.
- Any building materials and tools should be stored off the ground (e.g. on pallets).

- If at any point during the construction phase great crested newts are found within the work area, all works must be suspended until the advice of the Suitably Qualified Ecologist can be sought.
- If at any point other amphibians/reptiles are identified within the working the area, the Biodiversity Champion should be immediately informed. If safe to do so, the animal can be moved to a suitable area outside of the work zone by the Biodiversity Champion following methods briefed to them in the pre-works toolbox talk. All findings and translocations should be reported to the SQE.

Amphibians and reptiles – Wildlife friendly gully pots

37. The new road scheme must incorporate a wildlife friendly gully pot or drain scheme. This can be achieved by the modification of existing designs to incorporate means of escape for wildlife or inclusion of kerb design solutions such as the ACO wildlife kerb (https://www.aco.co.uk/products/wildlife-kerb) which allow wildlife to avoid drain entrances. The SQE must be consulted to advise on suitable design solutions.

Nesting birds

- If nesting birds are found at any time within the work area, works should be suspended and the Suitably Qualified Ecologist must be contacted immediately for further advice.

Terrestrial mammals

- Any water troughs should be sealed or not open at the top to prevent bird and mammal drowning events.
- Any open trenches/excavations should be left covered overnight or with a suitable means of escape (i.e. earth ramps) to prevent entrapment of mammals.
- Open excavations should be inspected each morning prior to works to check that no animals have become trapped overnight. Should a badger become trapped in a trench it will likely try to dig itself into the side of the trench, forming a temporary sett. Should a trapped badger be encountered or if there are signs that a badger has started to dig a sett, contact the project ecologist before proceeding.
- Any open pipework 200mm or greater in diameter should be 'capped' at the end of each working day to prevent badgers or other animals gaining access overnight.
- Spoil mounds should be inspected daily or fenced off to prevent badgers or other animals from digging setts or dens.

3.2.2 Temporary fencing

38. Prior to the commencement of construction phase works, a temporary Tree Protection Fence (TPF) should be erected to demark any tree/hedgerow root protection areas as shown in the Arboricultural Method Statement produced by Tree Care Consultancy.

39. The fence should be designed to prevent construction machinery and vehicles inadvertently driving through the root protection areas. The fence should be clearly marked with high visibility tape or signage at driver height to serve this purpose.

40. In addition to this, pedestrian signage should be included at suitable intervals to remind construction workers of the purpose of the tree protection area fence and include contact details for the Site Manager/Biodiversity Champion should damage to the fence be observed.

41. All other guidance contained within the Arboricultural Method Statement should be followed throughout the construction phase.

3.2.3 Pollution prevention

42. A suitable pollution prevention protocol, in line with the Environment Agency's Pollution Prevention Guidelines (PPGs), should be put in place for the duration of the construction works. The protocol must include methods to deal with fuel and/or oil spillages from vehicles and machinery. The protocol must explicitly cover risks, preventative and remedial actions around potential contamination of the Carr Dike watercourse, for example temporary fencing or barriers.

3.2.4 Habitat restoration/creation – Road verge

43. Where possible the existing topsoil should be retained to allow the retention of the existing seed bank. This topsoil should then be used on areas of newly created verge. If for any reason the top soil cannot be retained, new road verges should be seeded with a suitably diverse native seed mix. The SQE can advise on a suitable mix to include.

3.2.5 Control of Himalayan balsam

44. If work needs to take place within the exclusion zone during periods of seeding, a one-off pull or cut of plants should take place in areas which will be affected by construction, including access points.

45. All shoes, cutting equipment and machinery should be washed clear of soil before leaving the exclusion zone to prevent the accidental spread of Himalayan balsam seeds in soil. The wash off should not be allowed to enter a watercourse or drainage system.

46. Soil excavated during the works should be reinstated in situ as far as practicable after works are complete. Soil shall be placed on plastic sheeting and covered with plastic sheeting until reinstated. It is an offence to spread Himalayan balsam and any waste containing Himalayan balsam is classed as controlled waste. No excavated soil or Himalayan balsam material should be removed from site unless carried out in line with the relevant controlled waste regulations/legislation.

3.3 Post-construction Habitat Creation and Maintenance

3.3.1 Road verges

47. The key aim for the newly created road verges should be to encourage a biodiverse flowering sward.

Year 1 – 2

48. If a seed mix has been used, the manufacturer's instructions for management should be followed.

49. If the top soil has been retained and used, it will be necessary to regularly cut the verges from Spring – Autumn during the first two years (to prevent dominance by ruderal plant species). The verge should be cut every two months with an aim to maintain the sward height of between 40-150mm for this period. Cutting should be suspended between mid-June and late August to allow wildflower species to seed. All cuttings arising from this maintenance should be removed from site for composting (to ensure low soil fertility).

50. In addition to regular cutting it may be necessary to spot treat pernicious weeds (such as docks or ragwort) with herbicide.

Year 2 – onwards

51. Once the grass verge is established, it should be moved onto a less intensive cutting regime similar to meadow management.

52. The verge should not be cut from spring through to late July/August to give meadow species an opportunity to flower.

53. After flowering in July or August a 'hay cut' is then taken. The sward is cut back with a scythe, petrol strimmer or tractor mower to around 50mm. The 'hay' is then left to dry and shed seed for 1-7 days before being removed from site.

54. The re-growth is then mown through to late autumn/winter to a height of c. 50mm and again in spring if needed.

3.3.2 Plantation Woodland

55. 3113m^2 of plantation woodland should be created to replace the area lost by the proposed scheme. Trees should be planted 2 to 2.5m spacings; this would equate to approximately between 580 and 900 trees. The SQE can advise on a suitable mix to include.

56. The ground should be adequately prepared prior to planting the trees to improve the success rate and reduce the need for maintenance and tree replacement. Trees require a suitable soil substrate, water, light and nutrients to grow. If vegetation is present in the planting area, this should be cut or removed prior to planting. The root plates of the trees will need to be lined with biodegradable material to reduce competition. We would discourage the use of herbicides for this purpose. The newly planted woodland area would also need to be fenced to discourage browsing from rabbits and other terrestrial mammals. Likewise, biodegradable tree guards would be required as well as the fencing to protect individual trees.

57. Once established (approximately 10-15 years) , the woodland will require thining. At this stage (after thinning), it is also recommended that the ground flora of the woodland is enhanced by using a shaded planting mix and native woodland plug plants.

3.3.3 Roundabout Planting

58. Discussions have taken place regarding low-maintenance planting in the centre of the proposed roundabout, either using a brown/green roof style planting, or a low-maintenance urban meadow planting in the style of Sheffield's 'grey to green' project (greytogreen.org.uk).

59. When a planting plan is agreed, the Landscape Architect's specifications will need to be followed to ensure the success of the planting, including initial establishment and follow up maintenance or monitoring as required.

4 Construction programme

60. Pre-construction clearance starts in February 2022 with the arboriculturalist marking up trees to be removed and providing information on tree removal and retention.

61. The main construction works are anticipated to commence June 2022 and be completed by March 2023. Construction will be delivered by the Barnsley Metropolitan Borough Council Highways Department, except for ground stabilisation works which will be delivered by an external contractor.

62. A finalised programme for construction will need to be included when all contractors have been appointed.

4.1 Key ecological constraints

63. Amphibian breeding period: March-June (inclusive)

64. Core nesting bird period: March-August (inclusive)

5 Relevant policy and legislation

65. This legal information is a summary and intended for general guidance only. It is recommended that the original documentation is referred to for detailed and definitive information. Web addresses are located in the References and Bibliography section of this report.

5.1 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2020

66. The Conservation of Habitats and Species Regulations 2017 (as amended) transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (Habitats Directive) into English law, making it an offence to deliberately capture, kill or disturb wild animals listed under Schedule 2 of the Regulations. It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is absent at the time). This has recently been amended by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2020 which continue the same provision for European protected species, licensing requirements, and protected areas after the United 'Kingdom's exit from the European Union.

5.2 Wildlife & Countryside Act 1981

67. The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CRoW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006 (which also places a duty on authorities to have due regard for biodiversity and nature conservation) consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive), making it an offence to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young while it is nesting;
- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act; intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act; intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection;
- Pick or uproot any wild plant listed under Schedule 8 of the Act.

5.3 National Planning Policy Framework

68. The National Planning Policy Framework (NPPF) outlines government planning policies and how they should be applied to local authorities (Ministry of Housing, Communities & Local Government, 2021). The framework places an emphasis on sustainable development, encouraging the re-use of land that has previously been developed

overusing land that has a higher environmental value and by minimising impacts on biodiversity. The NPPF has three overarching objectives :

- **an economic objective** – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
- **a social objective** – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
- **an environmental objective** – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

69. It also states that to conserve and enhance the natural environment planning policies and decisions should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and remediating

and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

5.4 Section 41 Habitats and Species (NERC Act 2006)

70. Section 41 (S41) of the NERC Act 2006 requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40.

6 Himalayan Balsam Identification

NNSS
GB non-native species secretariat

For more information visit **www.nonnativespecies.org**

Produced by Olaf Booy, Max Wade and Vicky White of RPS

Himalayan Balsam

Species Description

Scientific name: *Impatiens glandulifera*
AKA: Policeman's Helmet, Indian Balsam, Jac y Neidiwr (Welsh)
Native to: West and central Himalayas
Habitat: Found mostly on river banks and in damp woodland, can grow in other damp habitat

A tall, attractive, annual herb with explosive seed heads. Although easy to identify as a mature plant with its pink-purple flowers, fleshy stem and characteristic leaves, the seedlings and last year's dead stems of this annual are more difficult to spot.

Introduced as a garden plant in the early 19th century and first recorded in the wild in 1855. Often favoured by the general public for its aesthetic appeal and is still deliberately planted on occasion. Now widespread in the UK, especially along urban rivers. Spreads solely by seeds, which are small and easily carried by wind or water.

Out-competes native species in ecologically sensitive areas, particularly river banks. Where it grows in dense stands along river banks it can impede flow at times of high rainfall, increasing the likelihood of flooding. Die back of extensive stands over winter can leave river banks bare and exposed to erosion.

Himalayan balsam is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England and Wales. As such, it is an offence to plant or otherwise allow this species to grow in the wild.

For details of legislation go to www.nonnativespecies.org/legislation.



Key ID Features



















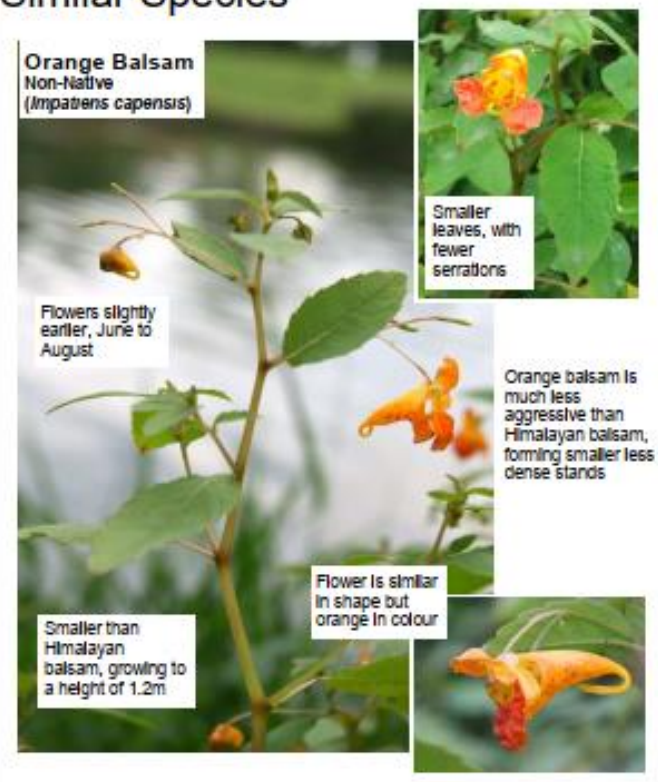
Identification throughout the year

Can be identified at most times of the year: March-June by its seedlings, stem and leaf shape, from July to September by its stem, leaf shape and flowers. More difficult to identify over winter (October to February), look for hay like remains and distinctive root structure.





Similar Species



Distribution

Widespread and common across the whole of the UK. Primarily on riverbanks and in other damp areas.



Source: NBN Gateway. Check website for current distribution

References and further reading:

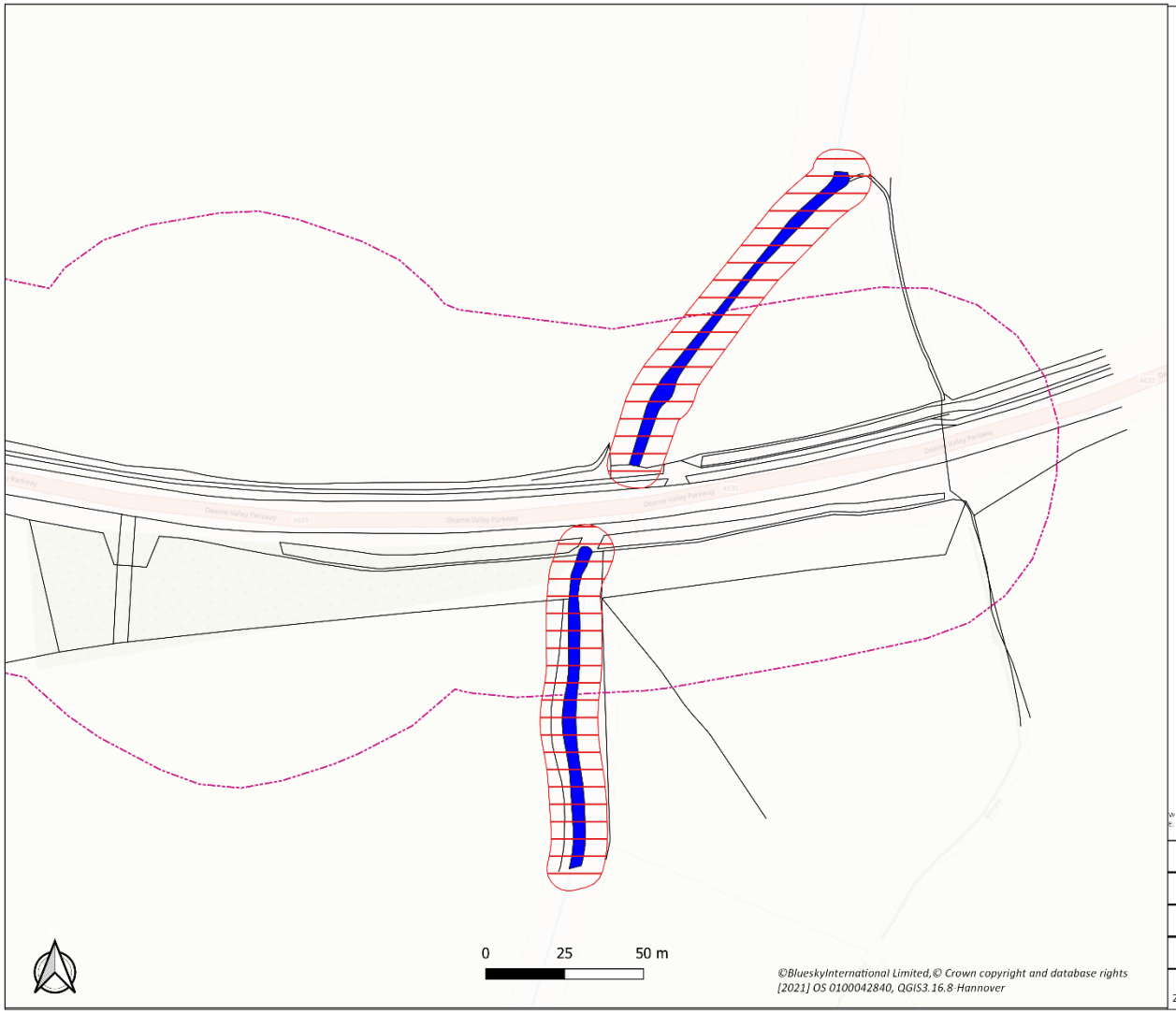
Blamey, M, Fitter, R and Fitter, A (2003) *"The Wild Flowers of Britain and Ireland. The Complete Guide to the British and Irish Flora"*. A & C Black

Preston, C D, Pearman, D A and Dines, T A (editors) (2002) *"New Atlas of the British and Irish Flora"*. Oxford University Press

Stace, C (1999) *"Field Flora of the British Isles"*. Cambridge University Press

Photos from: Olaf Booy, Mike Harris, Max Wade

7 Himalayan Balsam Exclusion Zone



Legend

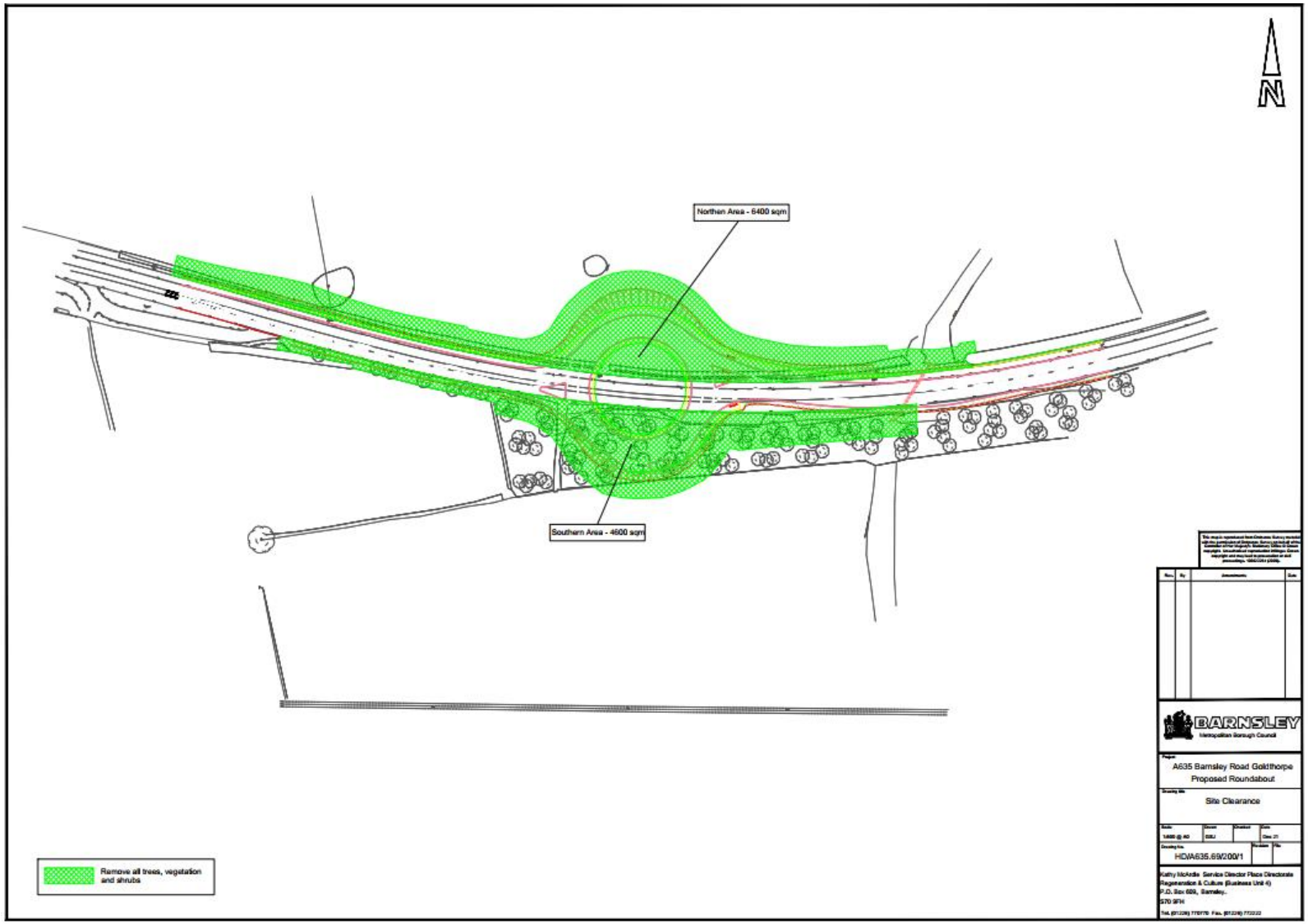
- 50m_Buffer_2021
- 7m Buffer Zone around Carr Dike
- Carr Dike

wild scapes

Project	P0928 Goldthorpe Road Improvements Barnsley MBC ES10
Title	Himalayan Balsam Exclusion Zone
OS Grid Reference	SE445040
Client	BMBC

Map date	Size	Author	Version
2022-04-19	A3	Riley, Julia	V01

8 ES10 Roundabout Initial Works



8 References

Andrews , H., 2018. *Bat Roosts in Trees A Guide to Identification and Assessment for Tree-Care and Ecology Professionals.* Exeter: Pelagic Publishing.

Andrews, H., 2016. *Bat Tree Habitat Key,* Bridgwater: AEcol.

ARG UK, 2018. *Advice Note 11: Managaging Habitats for Adders: Advice for Land Managers,* s.l.: Amphibian and Reptile Groups of the United Kingdom.

Averis, B., 2013. *Plants and Habitats. An Introduction to common plants and their habitats in Britain and Ireland.* 1st Edition ed. s.l.:B Averis.

Bat Conservation Trust, 2017. *The state of the UK's bats 2017,* s.l.: Bat Conservation Trust.

Blakesley, D. & Buckley, P., 2016. *Grassland Restoration and Management.* Exeter: Pelagic Publishing.

BTO, 2018. *Bird of Conservation Concern 4 : the Red List for Birds.* [Online]
Available at: https://www.bto.org/science/monitoring/psob
[Accessed 01 2018].

Cheviot Trees, 2014. *Planting Advice.* [Online]
Available at: http://www.cheviot-trees.co.uk/planting_advice.html
[Accessed 23 January 2019].

CIEEM, 2013. *Guidelines for Preliminary Ecological Appraisal,* Winchester: Chartered Institute of Ecology and Environmental Mangement .

CIEEM, 2017. *GUIDELINES FOR ECOLOGICAL REPORT WRITING Second Edition,* Winchester: Chartered Institute of Ecology and Environmental Management.

CIEEM, 2018. *The Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine,* Winchester: Chartered Institute of Ecology and Environmental Management.

Collins, J., ed., 2016. *Bat Survey for Professional Ecologists: Good Practice Guidance.* 3rd ed. s.l.:The Bat Conservation Trust.

Edgar, P., Foster, J. & Baker, J., 2010. *Reptile Habitat Management Handbook,* Bournmouth: Amphibian and Reptile Conservation.

English Nature/The Wildlife Trusts, 1999. *The Lowland Grassland Management Handbook.* 2nd ed. s.l.:s.n.

Eurobats, 2018. *Publication Series N0.8 Guidelines for consideration of bats in lighting projects,* Bonn: Eurobats.

Froglife, 1999. *Froglife Advice Sheet 10, Reptile Survey, An introduction to planning, conducting and interpreting surveys for snake and lizard conservation.,* s.l.: Froglife.

Hampton, P., 2007. A comparison of the succes of artificial cover types for capturing amphibians and reptiles. *Amphibia-Reptilia,* 28(3), pp. 433-437.

Institute of Lighting Professionals, 2018. *Guidance Note 08/18 Bats and artificial lighting in the UK,* Rugby: Institute of Lighting Professionals.

JNCC, 2007. *UK BAP priority habitats.* [Online]
Available at: http://jncc.defra.gov.uk/page-5718
[Accessed 23 November 2018].

JNCC, 2010. *The Handbook for Phase 1 habitat survey, A technique for enironmental audit.* [Online]
Available at: http://jncc.defra.gov.uk/PDF/pub10_handbookforphase1habitatsurvey.pdf

JNCC, 2018. *Guidance on contents and use of the Conservation Designations Spreadsheet.* [Online]
Available at: http://jncc.defra.gov.uk/page-3418
[Accessed 01 2018].

Microsoft, 2017. *Bing Maps.* [Online]
Available at: https://www.bing.com/maps/
[Accessed 2017].

Ministry of Housing, Communities & Local Government, 2018. *National Planning Policy Framework,* London: s.n.

Mitchell-Jones, A. J., 2004. *Bat Mitigation guidelines.* s.l.:English Nature.

Mitchell-Jones, A. J. & McLeish, A. P., 2004. *Bat Workers Manual.* Peterborough: Joint Nature Committee.

NARRS, 2007. *Reptile Habitat Guide.* [Online]
Available at: http://www.narrs.org.uk/documents/Reptile_habitat_guide.pdf
[Accessed July 2017].

Natural England, 2011. *Technical Information TIN102 Reptile Mitigation Guidelines,* s.l.: Natural England.

Oldham, R. S., Keeble, J., Swan, M. & Jeffcote, M., 2000. Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus). *Herpetological Journal,* 10(4), pp. 143-155.

QGIS, 2018. *QGIS 2.18.17,* s.l.: s.n.

Rose, F., 2006. *The Wild Flower Key: How to identify wild flowers, trees and shrubs in Britain and Ireland.* s.l.:Frederick Warne.

Stace, C., 2010. *New Flora of the British Isles 3rd Edition,* Cambridge: Cambridge University Press.

Stone , E. L., 2013. *Bats and Lighting: Overview of current evidence and mitigation,* Bristol: University of Bristol.

Wildscapes, 2021. *Ecological Impact Assessment Goldthorpe Highways Mitigation scheme V02,* Sheffield: Wildscapes CIC Ltd.