

REPORT

Boston Alternative Energy Facility

Outline Reptile Precautionary Method of Working (PMoW)

Client: Alternative Use Boston Projects Ltd

Planning Inspectorate
Reference: EN010095

Document Reference: 9.32

Pursuant to: APFP Regulation: 5(2)(q)

Reference: PB6934-RHD-ZZ-XX-RP-Z-4039

Status: Final/0.0

Date: 11 November 2021



HASKONINGDHV UK LTD.

Westpoint
Lynch Wood
Peterborough Business Park
Peterborough
PE2 6FZ
Industry & Buildings
VAT registration number: 792428892

+44 1733 3344 55 **T**
info@uk.rdhv.com **E**
royalhaskoningdhv.com **W**

Document title: Boston Alternative Energy Facility

Document short title: Outline Reptile Precautionary Method of Working

Reference: PB6934-RHD-ZZ-XX-RP-Z-4039

Status: 0.0/Final

Date: 11 November 2021

Project name: Boston Alternative Energy Facility

Project number: PB6934

Author(s): Claire Smith

Drafted by: Claire Smith

Checked by: Paul Salmon

Date: 09/11/21

Approved by: Matthew Hunt

Date: 11/11/21

Classification

Project related

Unless otherwise agreed with the Client, no part of this document may be reproduced or made public or used for any purpose other than that for which the document was produced. HaskoningDHV UK Ltd. accepts no responsibility or liability whatsoever for this document other than towards the Client.

Please note: this document contains personal data of employees of HaskoningDHV UK Ltd.. Before publication or any other way of disclosing, this report needs to be anonymized.

Table of Contents

1	Introduction and Legislation	1
1.1	Overview	1
1.2	The Application Site	1
1.3	The Proposed Development	2
1.4	Legislation	3
2	Precautionary Method of Working (PMoW) for reptiles	3
2.1	Briefing	3
2.2	Reptile habitats	4
2.3	Habitat manipulation and hand search	4
2.4	Procedure to follow if reptiles are found on site	5
3	References	6
Appendices		
A1	Identification	8
A2	Toolbox Talk	12
A3	Reptile Mitigation Areas	15

1 Introduction and Legislation

1.1 Overview

1.1.1 This Precautionary Method of Working (PMoW) presents the ecological mitigation measures for reptile species that are committed to within the Environmental Statement (ES) Chapter 12 Terrestrial Ecology (document reference 6.2.12, APP-050) and the Outline Landscape and Ecological Mitigation Strategy (OLEMS) (document reference 7.4, APP-123), for the Boston Alternative Energy Facility (the Facility).

1.1.2 This document sets out the methods to be employed by the Contractor (on behalf of Alternative Use Boston Projects Ltd.) to minimise and avoid any adverse impacts to reptiles and to ensure that the activities associated with the Facility are reasonably unlikely to result in an offence being committed under the legislation afforded to reptiles.

1.2 The Application Site

1.2.1 The Application Site covers 26.8 hectares (ha) and comprises two components (as shown on the **Location Plan**, document reference 4.1, APP-011):

- the Principal Application Site (NGR TF33950 42241), which covers 25.3 ha and will contain all of the operational infrastructure; and
- the Habitat Mitigation Area, which covers 1.5 ha and is located approximately 170 m to the south east of the Principal Application Site, encompassing an area of saltmarsh and small creeks at the margins of The Haven that will be enhanced.

1.2.2 The Principal Application Site is neighboured to the west by the Riverside Industrial Estate and to the east by The Haven, a tidal waterway of the River Witham between The Wash and the town of Boston. The A16 public highway is approximately 1.3 km to the west. The Application Site is entirely within the administrative area of Boston Borough Council.

1.2.3 The Principal Application Site comprises undeveloped and previously developed land enclosed by a network of drainage ditches and forms part of a wider emerging industrial/commercial area.

1.2.4 A detailed description of the Application Site location and surroundings is provided in **Chapter 5 Project Description** of the ES (document reference 6.2.5, APP-043).

1.3 The Proposed Development

1.3.1 The proposed Facility would deliver approximately 80 megawatt electric (MWe) of renewable energy to the National Grid using RDF as a feedstock into a Thermal Treatment facility generating power via steam turbine engines.

1.3.2 The Facility would comprise the following main elements:

- a wharf and associated infrastructure (including re-baling facility, workshop, transformer pen and welfare facilities);
- a refuse derived fuel (RDF) bale contingency storage area, including sealed drainage, with automated crane system for transferring bales;
- conveyor system running in parallel to the wharf between the RDF storage area and the RDF bale shredding plant. Part of the conveyor system is open and part of which is under cover (including thermal cameras);
- bale shredding plant;
- RDF bunker building;
- thermal treatment plant comprising three nominal 34 MWe combustion lines (circa 120 megawatt thermal (MWth)) and associated ductwork and piping, transformer pens, diesel generators, three stacks, ash silos and ash transfer network; and air pollution control residues (APCr) silo and transfer network;
- turbine plant comprising three steam turbine generators, make-up water facility and associated piping and ductwork;
- air-cooled condenser structure, transformer pen and associated piping and ductwork;
- Lightweight Aggregate (LWA) manufacturing plant comprising four kiln lines, two filter banks with stacks, storage silos for incoming ash, APCr, and binder material (clay and silt), a dedicated berthing point at the wharf, silt storage and drainage facility, clay storage and drainage facility, LWA workshop, interceptor tank, LWA control room, aggregate storage facility and plant for loading aggregate / offloading clay or silt;
- electrical export infrastructure;
- two carbon dioxide (CO₂) recovery plants and associated infrastructure, including chiller units;
- associated site infrastructure, including site roads, pedestrian routes, car parking, site workshop and storage, security gate, control room with visitor centre and site weighbridge; and

- habitat mitigation works for redshank and other bird species comprising of improvements to the existing habitat through the creation of small features such as pools/scrapes and introduction of small boulders (Habitat Mitigation Works) within the Habitat Mitigation Area.

1.3.3 The construction period for the whole development, including pre-construction enabling works and commissioning, is anticipated to be up to 55 months, as per the Indicative Construction Programme (document reference 9.18, REP1-031).

1.3.4 The Facility would be designed to operate for an expected period of at least 25 years, after which ongoing operation will be reviewed and if it is not appropriate to continue operation the plant will be decommissioned. The wharf structure would replace a section of the current primary flood defence bank (without impacting on the integrity of the bank) and the flood defence element would form a permanent structure that is not anticipated to be decommissioned.

1.4 Legislation

1.4.1 Adder *Vipera berus*, grass snake *Natrix natrix*, slow worm *Anguis fragilis*, and common lizard *Zootoca vivipara* are protected under Sections 9(1) and 9(5) of Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

1.4.2 All common reptile species are also listed under Section 41 of the NERC Act 2006. As such, it is an offence to intentionally kill and injure common reptile species, and also offer for sale, possess for transporting for the purpose of sale or publishing advertisements to buy or sell these species.

2 Precautionary Method of Working (PMoW) for reptiles

2.1 Briefing

2.1.1 This PMoW sets out the steps that will be put in place to ensure that the risk of disturbance or damage to reptiles is minimised during construction. It contains details of pre-works briefings, working methods and emergency procedures that must be adhered to by construction operatives during construction.

2.1.2 The contents of this PMoW will be explained to the Contractor by a Suitably Qualified Ecologist through a toolbox talk (as detailed within **Appendix A2**). It will then be the Contractor's responsibility to ensure the measures detailed in the sections below are undertaken and supervised by a Suitably Qualified Ecologist. The ecologist will explain to site personnel how to identify reptiles and what to do if one is found (**Appendix A1**). The ecologist will ensure that a copy of the PMoW is available on site during the works and that contact details are provided to the

Contractor in case a reptile is found during the works.

2.2 Reptile habitats

- 2.2.1 There are no recent records of reptiles within 2 km of the Facility, and none were observed during the 2017 and 2018 ecological field surveys. However, there are suitable habitats (i.e. areas of scrub, tall ruderals, hedgerows and semi-natural broadleaved woodland) present within the Facility which reptiles could use, should they be present.
- 2.2.2 The location of the areas that have been identified as suitable for reptiles, and to which this document applies, are shown in **Appendix A3**.
- 2.2.3 Given the absence of reptile records within the Principal Application Site, no specific reptile survey of these areas has been undertaken. However, as presented in **Chapter 12 Terrestrial Ecology** of the ES (document reference 6.2.12, APP-050), mitigation measures for reptiles have been identified and form the basis of this document.

2.3 Habitat manipulation and hand search

- 2.3.1 All habitat manipulation works within the reptile mitigation areas (as shown on the Reptile Mitigation Areas figure (**Appendix A3**)) will be undertaken when reptiles are active (which is typically March – September, inclusive but is weather and temperature dependent) and a maximum of one week prior to works within that area commencing.
- 2.3.2 Prior to the commencement of habitat manipulation works within the reptile mitigation areas, a hand search of each area will be undertaken by a Suitably Qualified Ecologist. Hand searching will include parting areas of vegetation to look for reptiles and carefully checking underneath any potentially suitable refuges for reptiles. Failure to do so could result in an offence being committed.
- 2.3.3 Following completion of the hand search, clearance of tall or dense vegetation within the reptile mitigation area(s) will be undertaken using a strimmer or brush cutter with all arisings raked and removed from the area on the same day. All cutting of vegetation will be supervised by a Suitably Qualified Ecologist and undertaken in a phased way that comprises cutting vegetation to an initial height of no less than 150mm at the first cut, 75mm at the second cut and 30mm at the third cut. The cutting of vegetation will commence from the furthest extent of the reptile mitigation area(s) so that any reptiles, should they be present, can move into an area that will not be accessed or disturbed by the works associated with the Facility.

- 2.3.4 Any reptiles found during the hand search and/or habitat manipulation works will be moved by a Suitably Qualified Ecologist to a pre-identified and suitable location (which has been identified prior to the habitat manipulation works commencing).
- 2.3.5 Following the removal of tall/dense vegetation, each reptile mitigation area will be maintained at a height of 30mm through regular mowing or strimming (carried out as above) to discourage reptiles from returning to the area(s).
- 2.3.6 Construction works associated with the Facility will not be permitted to start within any of the reptile mitigation areas until hand searching and habitat manipulation works have been completed and the Suitably Qualified Ecologist has advised the area(s) is clear for the works to proceed.

2.4 Procedure to follow if reptiles are found on site

- 2.4.1 The habitat manipulation and hand search works will be undertaken and completed during the reptile active season (which is typically between March – September inclusive, although temperature dependant).
- 2.4.2 If any reptiles are found during the works, and when the ecologist is not on site, the works should cease immediately until advice has been obtained from a Suitably Qualified Ecologist.
- 2.4.3 Any other amphibians found (i.e. frogs and toads) should be left to move away of their own accord. If they do not move away from the footprint of the works, they can be carefully moved by hand by either the Suitably Qualified Ecologist (if on site) or an appointed Contractor representative, taking care to any avoid injury and relocated in a suitable area (i.e. dense vegetation) within the immediate surrounds.
- 2.4.4 The temporary storage of materials and plant will be stored on areas not suitable for reptiles (i.e. on existing hard standing, areas of bare ground and not in areas of dense vegetation). Anything left on site overnight will be carefully checked by hand before being moved; if a reptile is found, advice should be sought from a Suitably Qualified Ecologist about the best way to proceed.



3 References

Froglife (1999) Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10, Froglife, Halesworth.

Royal HaskoningDHV (RHDHV) (2021). Boston Alternative Energy Facility: Environmental Statement.

Royal HaskoningDHV (RHDHV) (2021). Boston Alternative Energy Facility: Outline Landscape and Ecological Mitigation Strategy.

Appendix A1

Identification



A1 Identification

A1.1 Adder

A1.1.1 Adders have a dark zig-zag running along the back and a dark V on the back of the head. A full-grown adult adder can be up to 65cm long. Typically, males are pale green, and females are brown. Although as with all reptiles, colouration varies and becomes duller as sloughing (skin shedding) approaches. They have a poisonous bite, but this is rarely fatal to humans.



A1.2 Grass Snake

A1.2.1 The grass snake is the largest UK snake. Grass snakes are typically grey-green in colour, often with black spots and a yellow / cream / orange collar. Black lines run down from their large golden eyes to their top lips. Their underside is usually white or pale yellow with a checkering of blue-black and white markings. Their forked tongues are blue-black.



A1.3 Slow Worm

A1.3.1 The slow worm is a lizard which has evolved into a legless form with the development of a burrowing habit. Appearance is always shiny; males are grey, females brown with dark sides and a thin line down the back.



A1.3.2 The slow worm can be found in almost any open or semi-open habitat. It likes warmth but instead of basking in the open sun it prefers to hide under a stone,

log or piece of discarded rubbish such as a sheet of corrugated iron or plank of wood exposed to the sun.

A1.4 Common Lizard

A1.4.1 The common or viviparous lizard is widespread. It is a small, very quick brown lizard. Typical adult size is approximately 15cm (including its tail) and coloration is commonly some shade of brown with patterns of spots or stripes. Unusual colour variations are common, everything from yellow through various shades of green to jet black are encountered.





Appendix A2

Toolbox Talk

A2 Toolbox Talk

A2.1 Background to the project

A2.1.1 This Precautionary Method of Working (PMoW) has been produced in relation to ecological mitigation for reptile species, as committed to within the Environmental Statement (document reference 6.2) and the updated Outline Landscape and Ecological Mitigation Strategy (OLEMS) (document reference 7.4, APP-123), for the Boston Alternative Energy Facility (the Facility).

A2.2 Reptiles

A2.2.1 There are no recent records of reptiles within 2 km of the Facility, and none were observed during the 2017 and 2018 ecological field surveys. However, there are suitable habitats (i.e. areas of scrub, tall ruderals, hedgerows and semi-natural broadleaved woodland) present within the Facility which reptiles could use, should they be present.

A2.2.2 The location of these habitats, and for which this document applies to, are shown on the Reptile Mitigation Areas figure (**Appendix A3**).

A2.3 Legislation

A2.3.1 Adder, grass snake, slow worm, and common lizard are protected under Section 9 of the Wildlife and Countryside Act 1981 (as amended) in respect of intentionally killing or injuring.

A2.4 Precautionary Method of Working (PMoW)

Staff briefing

A2.4.1 This toolbox talk will be presented by a Suitably Qualified Ecologist as a summary of the PMoW to staff working on the site. A Site Supervisor that will be present on site for the duration of the works will be appointed as the site's Ecological Representative.

Habitat manipulation and hand search

A2.4.2 All habitat manipulation works within the reptile mitigation areas (as shown in **Appendix A3**) will be undertaken when reptiles are active (which is typically March – September, inclusive but is weather and temperature dependent) and a maximum of one week prior to works commencing on site.

- A2.4.3 Prior to the commencement of habitat manipulation works within the reptile mitigation area(s), a hand search of each area will be undertaken by a Suitably Qualified Ecologist. Hand searching will include parting areas of vegetation to look for reptiles and carefully checking underneath any potentially suitable refuges for reptiles. Failure to do so could result in an offence being committed.
- A2.4.4 Following completion of the hand search, clearance of tall or dense vegetation within the reptile mitigation area(s) will be undertaken using a strimmer or brush cutter with all arisings raked and removed from the area on the same day. All cutting of vegetation will be supervised by a Suitably Qualified Ecologist and undertaken in a phased way that comprises cutting vegetation to an initial height of no less than 150mm at the first cut, 75mm at the second cut and 30mm at the third cut. The cutting of vegetation will commence from the furthest extent of the reptile mitigation area(s) so that any reptiles, should they be present, can move into an area that will not be accessed or disturbed by the works associated with the Facility.
- A2.4.5 Any reptiles found during the hand search and/or habitat manipulation works will be moved by a Suitably Qualified Ecologist to a pre-identified and suitable location (which has been identified prior to works commencing).
- A2.4.6 Following the removal of tall/dense vegetation, each reptile mitigation area will be maintained at a height of 30mm through regular mowing or strimming to discourage reptiles from returning to the area(s).
- A2.4.7 Construction works associated with the Facility will not be permitted to start within any of the reptile mitigation areas until hand searching and habitat manipulation works have been completed and the Suitably Qualified Ecologist has advised the area(s) is clear for the works to proceed.

Machinery and materials

- A2.4.8 All machinery and materials will be stored within the designated site compound area. However, should the storing of machinery and/or materials be required outwith the designated site compound area, these will be within areas of unsuitable habitat for reptiles, such as but not limited to areas of hard standing.
- A2.4.9 Machinery will only be permitted to track within the working area(s) on agreement from a Suitably Qualified Ecologist that the hand search has been completed.

Supervision

- A2.4.10 A Suitably Qualified Ecologist will supervise all works contained within this PMoW and where works are required within the reptile mitigation areas.

Reinstatement

A2.4.11 On completion of works within the reptile mitigation areas, soil and topsoil will be appropriately reinstated.

A2.4.12 No spoil or open excavations will be left overnight. Where it is necessary for excavations to remain open overnight the backfill and spoil will be checked by an ecologist for reptiles prior to its movement.

A2.5 What to do if a reptile is found on site

A2.5.1 The habitat manipulation works will be undertaken and completed during the reptile active season (which is typically between March – September inclusive, although temperature dependant).

A2.5.2 If any reptiles are found during the works, the works should cease immediately until advice has been obtained from a Suitably Qualified Ecologist.

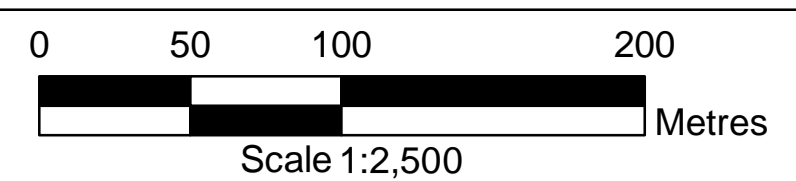
A2.5.3 Any other amphibians found (i.e. frogs and toads) should be left to move away of their own accord. If they do not move away from the footprint of the works, they can be carefully moved by hand, taking care to any avoid injury and relocated in a suitable area (i.e. dense vegetation) within the immediate surrounds.

A2.5.4 The temporary storage of materials and plant will be stored on areas not suitable for reptiles (i.e. on existing hard standing, areas of bare ground and not in areas of dense vegetation). Anything left on site overnight will be carefully checked by hand before being moved; if a reptile is found, advice should be sought from a Suitably Qualified Ecologist about the best way to proceed.

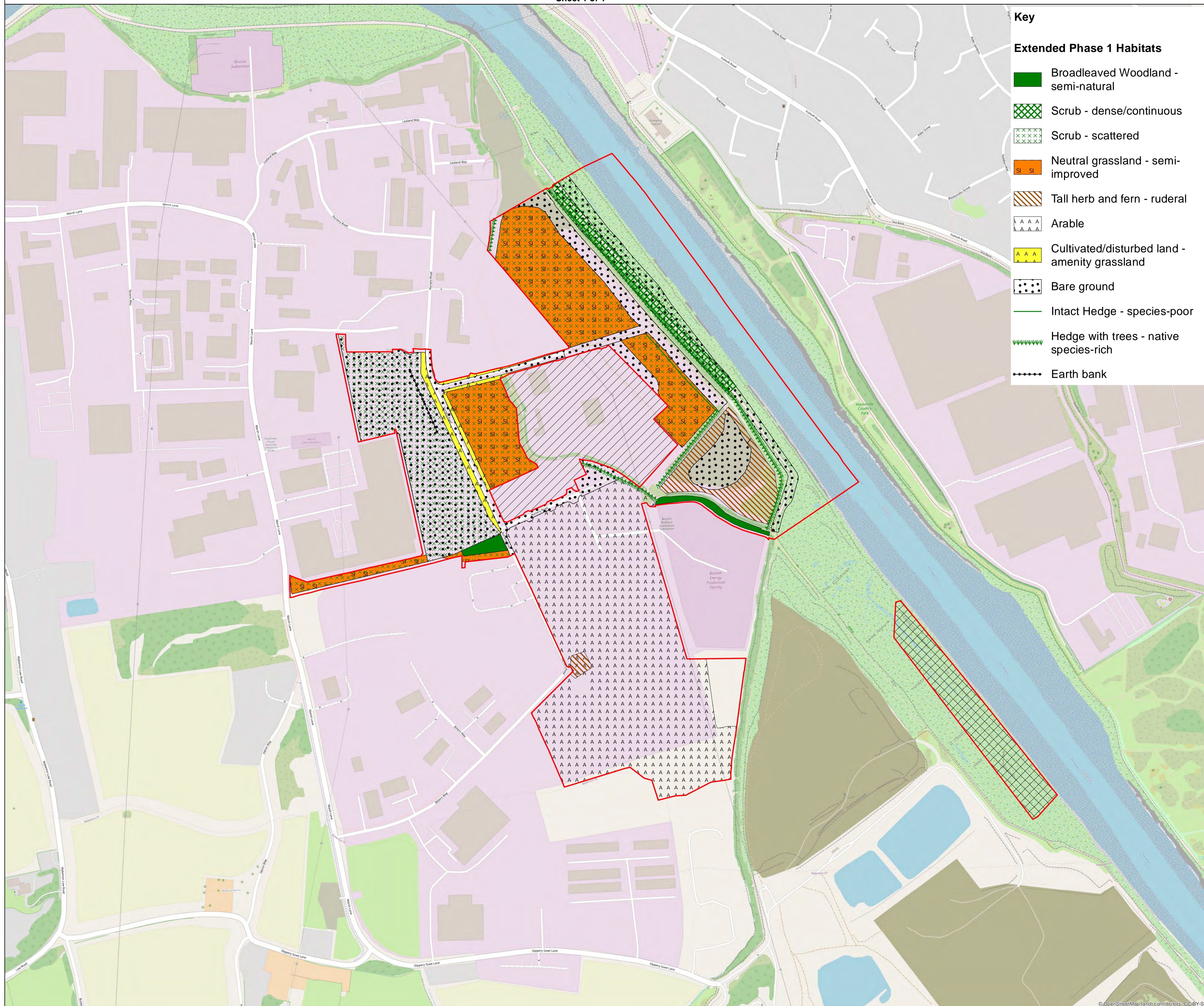
Appendix A3

Reptile Mitigation Areas

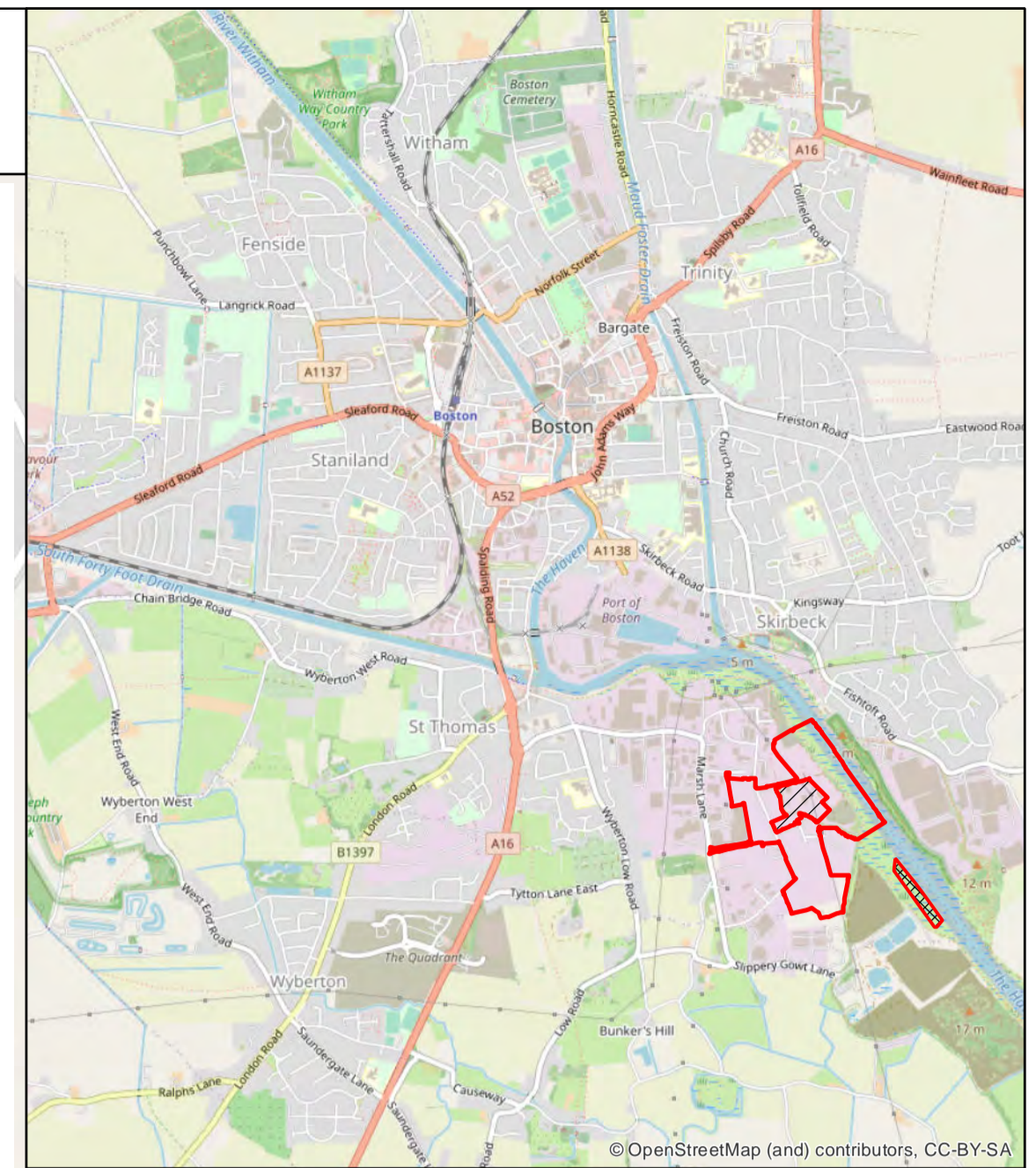




BOSTON ALTERNATIVE ENERGY FACILITY DEVELOPMENT CONSENT ORDER
Regulation 5(2)(o) - Reptile Mitigation Areas
BOSTON BOROUGH COUNCIL
Sheet 1 of 1



- Key**
- Extended Phase 1 Habitats**
- Broadleaved Woodland - semi-natural
 - Scrub - dense/continuous
 - Scrub - scattered
 - Neutral grassland - semi-improved
 - Tall herb and fern - ruderal
 - Arable
 - Cultivated/disturbed land - amenity grassland
 - Bare ground
 - Intact Hedge - species-poor
 - Hedge with trees - native species-rich
 - Earth bank



- Key**
- Order limits
 - Habitat Mitigation Area
 - Land outside Order limits

Royal HaskoningDHV
Enhancing Society Together

Westpoint,
 Lynch Wood Business Park,
 Peterborough, PE2 6FZ
 Tel +44 (0)1733 334455
 Email info.peterborough@rhdhv.com
 Website www.royalhaskoningdhv.com

APPLICANT **ALTERNATIVE USE BOSTON PROJECTS LTD**

Disclaimer
 Do not scale from this drawing. Check all dimensions on site before fabrication or setting out. This document is copyright and may not be reproduced without permission of the owner.

REPRODUCED FROM ORDNANCE SURVEY MAPS
 WITH PERMISSION FROM
 THE CONTROLLER OF
 HER MAJESTY'S STATIONERY OFFICE.
 CROWN COPYRIGHT RESERVED.
 LICENCE NUMBER. 100017728

REV	DATE	DESCRIPTION	BY	CHK	APP
0	11/11/21	For submission	JT	AG	PS

TITLE BOSTON ALTERNATIVE ENERGY FACILITY DEVELOPMENT CONSENT ORDER
Regulation 5(2)(o) - Reptile Mitigation Areas
BOSTON BOROUGH COUNCIL
Sheet 1 of 1

Application Number EN010095			
DRAWN JT	CHECKED AG	APPROVED PS	
DATE 11/11/2021	SCALE @A1 1:2,500	REF PB6934	
DRAWING NUMBER PB6934-RHD-01-ZZ-DR-4026		STATUS SO	REVISION 0