

## **Lostock, Northwich, Cheshire**

### Reptile Survey

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Prepared by:  
RPS, Oxford

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# Contents

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	Page No
<b>1</b>	
Introduction	1
<b>2</b>	
Methodology	3
<b>3</b>	
Results	4
<b>4</b>	
Conclusions and Recommendations	5

# Figures & Appendices

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## Tables

**Table 1** Reptile survey results

## Figures

**Figure 1** Site Location Plan

**Figure 2** Locations of Refugia

## Appendices

**Appendix 1** Legislation in relation to reptiles

**Appendix 2** References

## Summary

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- S.1 RPS was commissioned to undertake a presence/absence reptile survey for the proposed Sustainable Energy Plant which will be located on land owned by Brunner Mond within the area formerly occupied by the Lostock Power Station, off Griffiths Road, Lostock, Northwich.
- S.2 RPS used local sub-consultants, Avian Ecology, to gather the reptile survey data through May and June 2010. This report has been prepared by RPS to complete the ecological baseline required for the planning application submitted in February 2010.
- S.3 The survey followed the UK recommended reptile survey guidelines set out in Froglife's Advice Sheet 10. An initial walkover survey was undertaken of the whole site in 2009 to establish areas of suitable habitat for reptiles on the proposed development site. As a result of the initial walkover survey, only areas identified as containing suitable reptile habitat were surveyed in May and June 2010. This included the rough grassland, dense/scattered scrub and railway embankment on site.
- S.4 The presence/absence reptile survey was undertaken during May and June 2010 when reptiles are active. No reptiles were found during the course of this survey.
- S.5 The proposed development works at the former Lostock Power Station would not have any significant adverse impacts on reptiles.

# 1 Introduction

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- 1.1 RPS was instructed by Brunner Mond in 2009 to carry out an ecological inspection of the proposed Sustainable Energy Plant located within the area formerly occupied by the Lostock Power Station, off Griffiths Road, Lostock, Northwich. This ecological walkover established the need for detailed protected species surveys and thus RPS was commissioned to carry out a reptile survey during the appropriate time of year in 2010. This report has been prepared by RPS to complete the ecological baseline provided in the planning application which was submitted in February 2010.
- 1.2 All six native species of reptile in Britain (three species of snake and three species of lizard) are legally protected, and all are UK Biodiversity Action Plan priority species. The legal and conservation status of native British reptiles is given in Appendix A.
- 1.3 The project site is located adjacent to the Trent and Mersey Canal, west of the A530 between Northwich and Lostock Gralam (Figure 1). The landscape is predominantly industrial and urban to the west and south, and agricultural to the east and north. However, land in the immediate vicinity of the project site has been in industrial use for many years.
- 1.4 The majority of the site comprises buildings and hardstanding. There are two large areas of grassland in the north and the south-east of the site and smaller areas of grassland to the south and west of the site. Scrub and tall ruderal vegetation has grown up around disused buildings and narrow drainage channels pass through the site. The site is dissected by the Trent and Mersey Canal.
- 1.5 The survey focused on areas within the proposed development area that were shown by the Phase 1 Habitat Survey undertaken by RPS in 2009 to offer suitable reptile habitat.
- 1.6 The specific objectives of the reptile survey were:
- To determine the presence/likely absence of reptiles in the areas of suitable habitat that may be affected by the development; and
  - To determine the relative population size of any reptile populations present using the guidelines set out in Froglife's Advice Sheet 10 (Froglife, 1999).

- 1.7 This report outlines the methods used in the survey (section 2), presents the results that were obtained (section 3), and gives recommendations for mitigation work arising from the results of the survey (section 4).

## 2 Methodology

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- 2.1 The presence/absence reptile survey was undertaken during May and June 2010 when reptiles are active. The reptile survey was undertaken by an experienced ecologist from Avian Ecology (appointed on behalf of RPS) and was conducted within areas previously identified as containing habitat suitable for reptiles during an ecological walkover conducted by RPS in 2009.
- 2.2 The survey was conducted according to standard methods outlined in Froglife's Advice Sheet 10 (Froglife, 1999) and the JNCC Herpetofauna Workers' Manual (Gent and Gibson, 2003).
- 2.3 The reptile survey was conducted using artificial refugia made from roofing felt. These warm up in the sun and provide shelter and basking opportunities for reptiles, which can be recorded on or underneath the refuges in suitable weather conditions.
- 2.4 In early May 2010, 27 artificial refugia were placed in the two main areas of suitable rough grassland and scrub identified during the ecological walkover. The location of these is illustrated on Figure 2. The felts were then left prior to the first survey visit being undertaken in order to allow them to 'settle' and flatten vegetation beneath.
- 2.5 A total of seven survey visits were then conducted to the artificial refugia once settled. These seven visits (lifts) involved inspecting all the refugia for basking reptiles either on the top or beneath the tin or felt mat. Searching for reptiles by direct observation whilst walking between refuges was also carried out on these visits. On each visit, each refuge was lifted and the number and species of any reptile observed were recorded (if any).
- 2.6 In addition, natural refugia present on the site such as large stones, pieces of wood and areas of debris were searched for reptiles and any casual observations were also noted.
- 2.7 All seven survey visits were conducted in weather conditions suitable for recording reptile activity i.e. an air temperature between 9 and 18°C and the felt mats had sufficiently absorbed heat to attract basking reptiles.

### 3 Results

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- 3.1 Site visits were made on the 12<sup>th</sup>, 17<sup>th</sup>, 22<sup>nd</sup> and 26<sup>th</sup> May and the 1<sup>st</sup>, 8<sup>th</sup> and 15<sup>th</sup> June 2010. Each survey visit was conducted in weather conditions suitable for recording reptile activity as far as possible i.e. an air temperature between 9 and 18°C and avoiding periods of strong wind or heavy rain.
- 3.2 Two main areas were focused on during the reptile survey which may form part of the construction laydown facilities as part of the development proposals. These areas of land area shown on Figure 2.
- 3.3 The survey results and climatic conditions are provided in the table below.

<b>Table 1: Survey results</b>		
<b>Visit No. &amp; Date</b>	<b>Weather Conditions</b>	<b>No. of Reptiles</b>
1 – 12/05/10	10 degrees	0
2 – 17/05/10	13 degrees	0
3 – 22/05/10	14 degrees	0
4 – 26/05/10	9 degrees	0
5 – 01/06/10	10 degrees	0
6 – 08/06/10	9 degrees	0
7 – 15/06/10	14 degrees	0

- 3.3 Weather conditions during the course of the surveys were ideal for recording reptile activity on the proposed development land. The warm, sunny weather experienced during May and June across the UK provided optimal survey conditions for reptiles.
- 3.4 Table 1 concludes that no reptiles were recorded on site during the presence/absence survey at the former Lostock Power Station.

## 4 Conclusions and Recommendations

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- 4.1 A presence/absence reptile survey was conducted by Avian Ecology on behalf of RPS at the former Lostock Power Station land for Brunner Mond. The survey was conducted in accordance with Froglife's Advice Sheet 10.
- 4.2 The JNCC Herpetofauna Working Manual and Froglife's guidelines state that May and June is an adequate time to be conducting reptile surveys. Lifts were also made under suitable climatic conditions.
- 4.3 The survey was conducted on two main areas of rough grassland and scrub habitat. The northern area of grassland suffers a level of disturbance due to dog walkers, playing children etc. It should be noted that grass cutting also occurs in this area. The second area surveyed along Griffiths Road is quite densely vegetated in parts with rough tussocky grassland and bramble patches, this area is relatively undisturbed.
- 4.4 The results of this survey show that reptiles are not present within these two areas on the proposed development land at the former Lostock Power Station site. The lack of reptiles on the two areas surveyed may be due to the isolated nature of the Lostock site, severed by road networks and other industrial units which may have resulted in the lack of connectivity to wider offsite green corridors for wildlife.
- 4.5 Given that no reptiles have been recorded within the vicinity of the former Lostock Power Station site, the proposed development will not have any significant adverse impacts on reptiles.

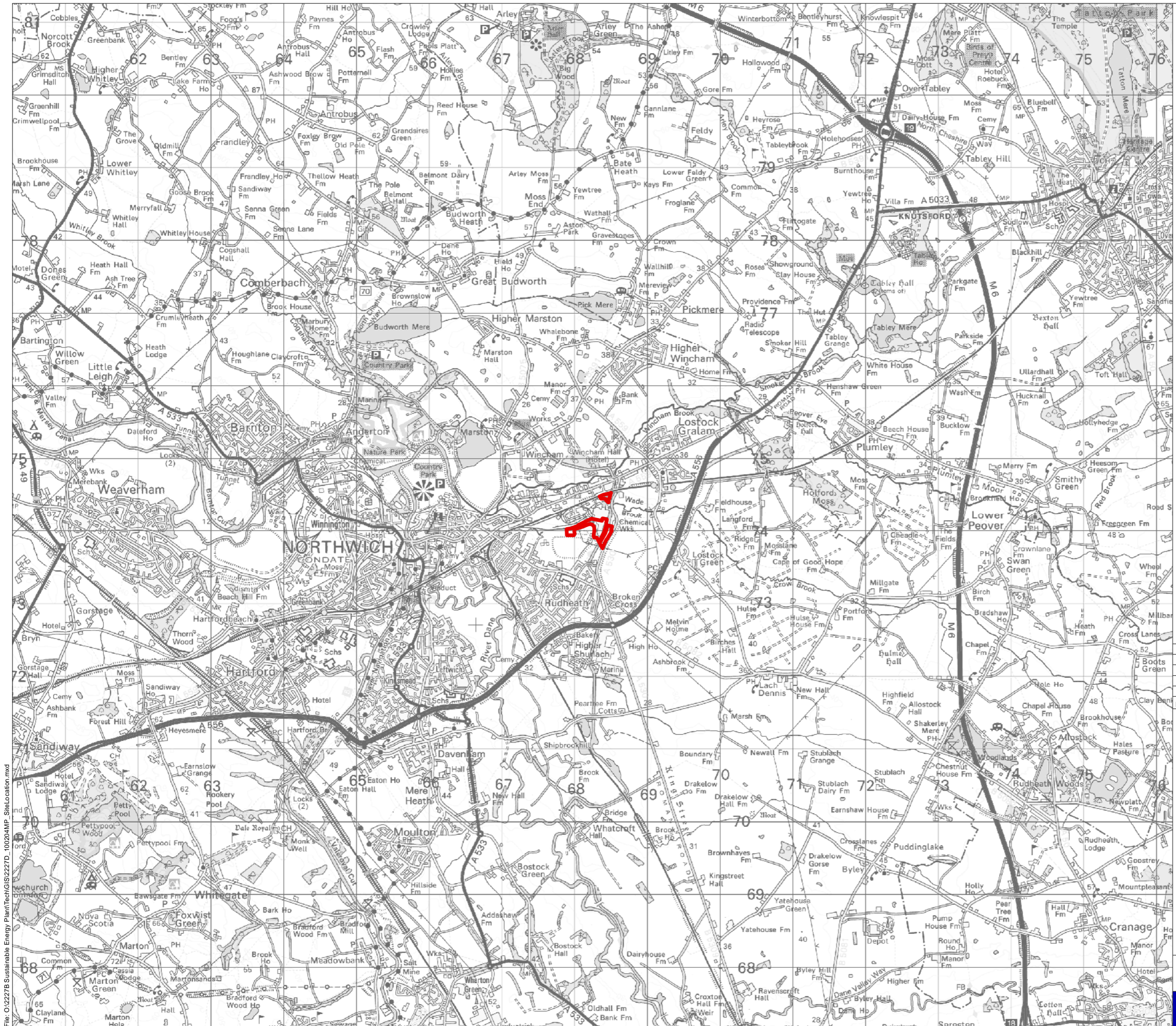
## Figures

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**Figure 1**

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**Site Location Plan**



**Legend**

 Proposed Site Boundary

Rev:	Date:	Amendment:	Name:	Checked:

■ Data Source: RPS 2010

Status: FINAL



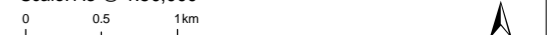
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■ Client: Brunner Mond & E.ON

Project: Lostock Sustainable Energy Plant

Title: Site Location

Scale: A3 @ 1:50,000



Date: Feb 2010 Datum: OSGB36 Projection: BNG

Drawn: MP Checked: AR Job Ref: JNP2227

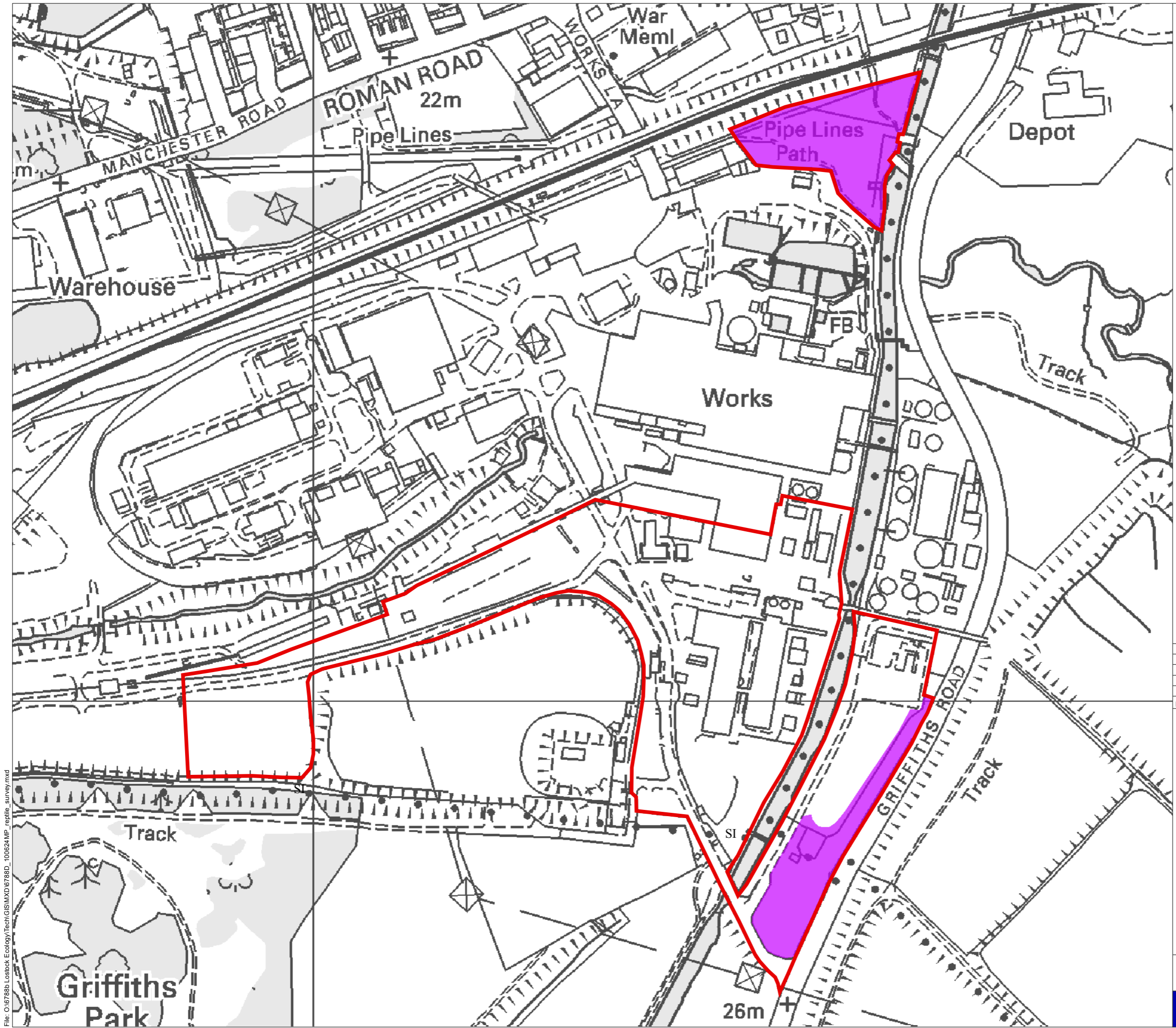
■ Figure No: 1.1

Revision: -

## Figure 2

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**Locations of Refugia**



**Legend**

- Proposed Site Boundary
- Areas surveyed for reptiles

Rev:	Date:	Amendment:	Name:	Checked:

■ Data Source: RPS 2010  
 Status: FINAL

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 Project: Lostock Sustainable Energy Plant

Title: Location of Refugia

Scale: A3 @ 1:3,000  
 0 50 100m

Date: Jun 2010 Datum: OSGB36 Projection: BNG  
 Drawn: MP Checked: KS Job Ref: JR2227

■ Figure No: 2 Revision: -

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## Appendices

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## **Appendix 1**

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### **Legislation in relation to reptiles**

- The slow worm (*Anguis fragilis*), the viviparous lizard (*Zootoca vivipara*), the grass snake (*Natrix natrix*) and the adder (*Vipera berus*) are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are protected under sections 9.1 and 9.5 of that Act against intentional killing or injury, and against sale. The Act also states that reasonable efforts must be taken to avoid the unintentional killing of Schedule 5 animals, including slow worms, viviparous lizards, grass snakes and adders. All four species are also UK Biodiversity Action Plan priority species. All four species are currently known to occur in Surrey.
- The sand lizard (*Lacerta agilis*) and the smooth snake (*Coronella austriaca*) are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are fully protected under that Act. They are protected against intentional killing or injury, against sale, against intentional or reckless damage or destruction to any structure or place used for shelter or protection and against intentional or reckless disturbance while occupying a structure or place used for shelter or protection. The sand lizard and smooth snake are also protected under Schedule 2 of the Conservation (Natural Habitats, &c.) Regulations 1994. Species protected under Schedule 2 of these Regulations are known as European protected species. It is an offence to deliberately capture or kill a wild animal of a European protected species; to deliberately disturb any such animal; to deliberately take or destroy the eggs of such an animal; or to damage or destroy a breeding site or resting place of such an animal. This applies to all life stages of the animals. Sand lizards and smooth snakes are also UK Biodiversity Action Plan priority species. Sand lizards and smooth snakes are restricted in their distribution but are known to occur in the south and south-east of the UK.

## Appendix 2

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### References

## References

Froglife. 1999. *Froglife Advice Sheet 10. Reptile Survey: An Introduction to Planning, Conducting and Interpreting Surveys for Snake and Lizard Conservation*. Froglife.

Gent and Gibson (Eds). 2003. *Herpetofauna Workers' Manual*. Joint Nature Conservation Committee, Peterborough.

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