

Cardiff Parkway Developments Ltd
Cardiff Hendre Lakes
2017 Badger Survey Report

Environmental Statement Appendix 7.15

Issue | 2 July 2018

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 252199

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Contents

	Page
1 Introduction	1
1.1 Background to project	1
1.2 Survey Objectives	1
1.3 Study Area	1
1.4 Legislation	2
2 Methodology	3
2.1 Desk Study	3
2.2 Survey Methods	3
2.3 Limitations	3
3 Results	4
3.1 Desk Study	4
3.2 Field Survey	4
4 Conclusions and Recommendations	5

Figures

Figure 1: Site Location and Study Area

Figure 2: Badger Survey Results

1 Introduction

Ove Arup & Partners Ltd has been commissioned by Cardiff Parkway Ltd to undertake baseline ecological surveys to inform the design and environmental assessment of a proposed new train station and expansion of the business park at St. Mellons, Cardiff.

1.1 Background to project

Cardiff Parkway Developments Ltd are proposing to develop a scheme that is an employment led development including a new railway station and park & ride facility. The site, centred on National Grid Reference (NGR) ST251808, and surrounding area are shown on Figure 1.

The site currently consists of predominantly arable and pastoral farming on the western edge of St. Mellons. The site's field boundaries are formed by hedge and tree lines with reens throughout. There is a lake, recreational grassland and woodland to the west of the site. The wider landscape comprises residential and commercial properties, and broad-leaved woodland to the north and west. To the south the land is bisected by the railway line with further neighbouring agricultural land. To the east there is agricultural land.

An extended Phase 1 habitat survey was undertaken in January 2017 to establish the habitats present on site and to assess the potential for legally protected species to be present. As a result of that survey and a desk study of available records, it was considered that there was the potential for badger to be present and therefore detailed species-specific surveys were required.

1.2 Survey Objectives

The survey was conducted with the following objectives:

- To identify the distribution of badgers (*Meles meles*) within the study area;
- To record the location and nature of badger setts within the study area;
- Where possible, to infer likely family boundaries that may influence mitigation and compensation design, if required; and
- To provide a sufficient information to inform the assessment of impacts on dormice from the proposed development as part of the Environmental Impact Assessment.

1.3 Study Area

For the purposes of this study, the survey area was based within the boundary of the scheme at the time of the survey, shown on Figure 1.

1.4 Legislation

Badgers are afforded legal protection under the Protection of Badgers Act 1992. The Act is based primarily on the need to protect badgers from persecution. It also contains restrictions that apply more widely. Under the Act it is an offence without a licence to:

- Wilfully kill, injure or cruelly ill-treat a badger or attempts to do so; or
- Intentionally or recklessly interfere with a sett (any place inhabited by a badger) including disturbing a badger while it is in a sett.

2 Methodology

2.1 Desk Study

Biodiversity information was obtained from the South East Wales Biodiversity Records Centre (SEWBRc)¹ on the 31st January 2017. The search included information on badgers up to 2km from the site centre point, and data was limited to the last 10 years.

2.2 Survey Methods

An initial site survey was undertaken during the Extended Phase 1 Habitat Survey for the project on the 26th January 2017 by Arup Ecologist Dr Adam Cross and an Assistant. An additional full detailed badger survey of the study area was undertaken on the 27th September 2017.

Any evidence of badger setts or other badger activity such as paths, latrines or signs of foraging found during the walk over was target noted and mapped. Survey methodology used and any setts recorded would be classified according to published criteria².

2.3 Limitations

Some areas of the survey area were inaccessible due to dense vegetation and health and safety concerns, e.g. cattle, railway line and deep waterbodies, although these were relatively limited in extent.

It should be stressed that the findings presented in this study represent those at the time of survey and reporting, and data collected from available sources. Ecological surveys are limited by factors which affect the presence of species, such as temporal weather conditions, migration patterns and behaviour.

The weather is not considered to be a limitation, as all surveys were undertaken during optimal weather conditions. Every effort has been made to ensure that the findings of the study present as accurate an interpretation as possible of the species and habitats within the study area.

¹ <http://www.sewbrec.org.uk/home.page>

² Harris, S., Cresswell, P., & Jefferies, D. (1989). Surveying Badgers

3 Results

3.1 Desk Study

Five records for badger was provided from the SEWBREC biodiversity information search, with the closest being from 1000m away north of the site in 2014. A full desk study is provided in the Extended Phase 1 and Desk Study Report³.

3.2 Field Survey

No badger setts were recorded during the surveys anywhere within the study area. The only potential badger signs recorded were a large mammal trail within the Marshfield SINC site, suspected to be from badgers, and a likely badger latrine in the centre of the site. The locations of these field signs are shown on Figure 2.

The habitats present on site are considered to provide suitable habitat for foraging badgers, whilst the low-lying nature of the site and the high water-table offer very low suitability for badger sett-building. However, as described in 2.3 Limitations above, the railway line was not accessible for survey due to health and safety concerns and dense vegetation creating a barrier. Given that the railway line is on a slight embankment, and thus higher than the surrounding water table, the presence of badger setts along the railway embankment cannot be ruled out. Pre-construction surveys should be conducted, with particular attention given to the railway line, and timed with consideration given to mitigation licence requirements and sett closure periods.

³ Arup (2017) Cardiff Hendre Lakes | 2017 Extended Phase 1 Habitat Survey Report

4 Conclusions and Recommendations

Limited evidence of badger activity was recorded within the site boundary. A single path and latrine were recorded suggesting that the site may lie on the edge of an existing badger social group territory. Given the absence of setts and the low level of badger signs recorded it is not considered necessary to undertake bait marking surveys.

However, as described above, the presence of badger setts along the railway line cannot be ruled out, and pre-construction surveys should be conducted, with particular attention given to the railway line, and timed with consideration given to mitigation licence requirements and sett closure periods.

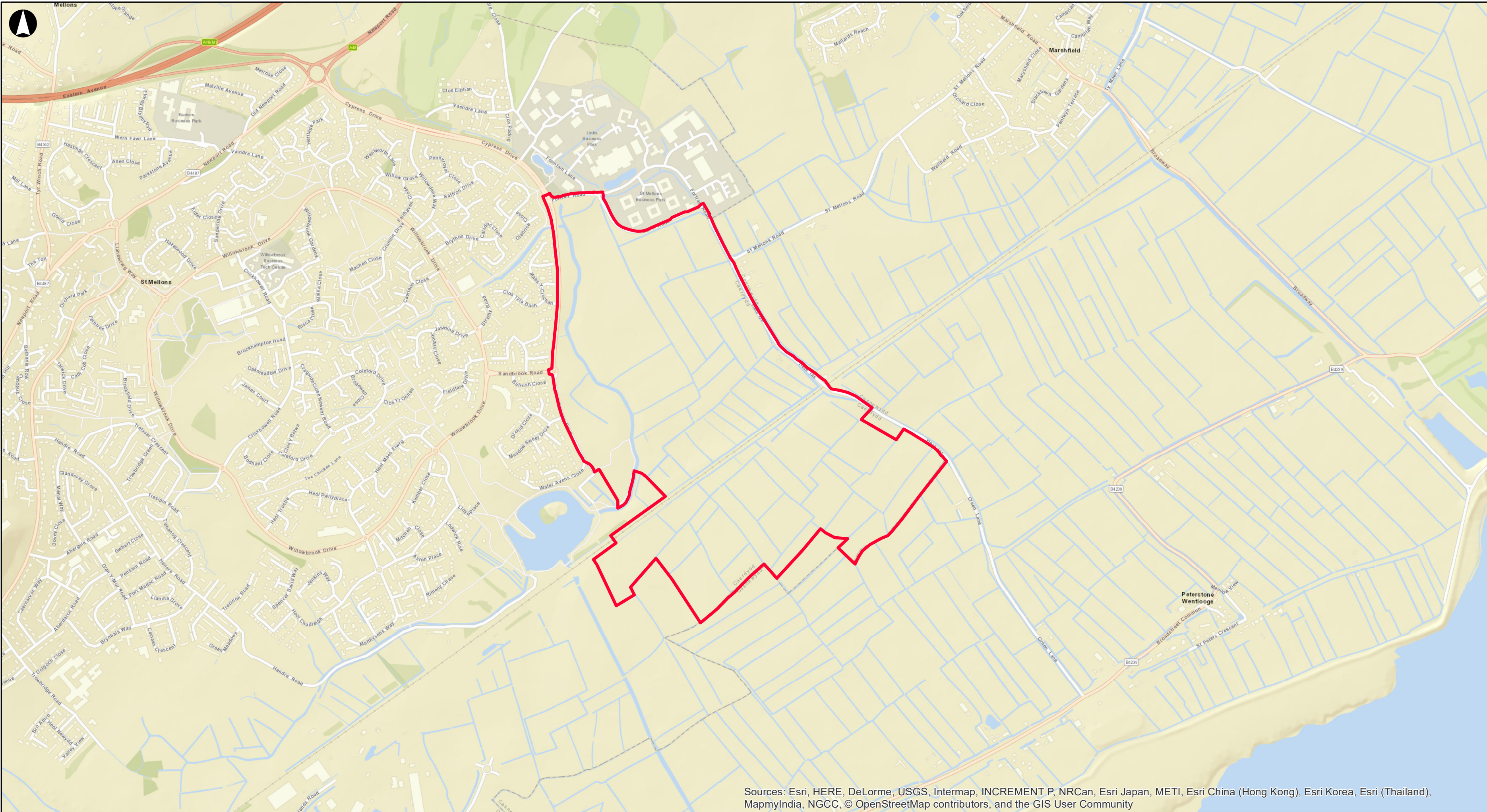
The survey can be carried out at any time of year, but sett detection is easiest during the winter months when vegetation has died back.

This report is the result of survey work undertaken between January and September 2017. This report refers, within the limitations stated, to the condition or proposed works of the site at the time of the surveys. Changes in legislation, guidance, best practice, etc. may necessitate a re-assessment/survey. No warranty is given as to the possibility of future changes in the condition of the site.

Figures

Figure 1: Site Location and Study Area

Figure 2: Badger Survey Results



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

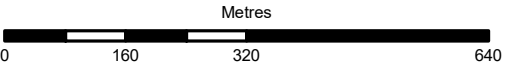
Legend

— Study Area Boundary

F1	2018-07-02	PW	PC	PC
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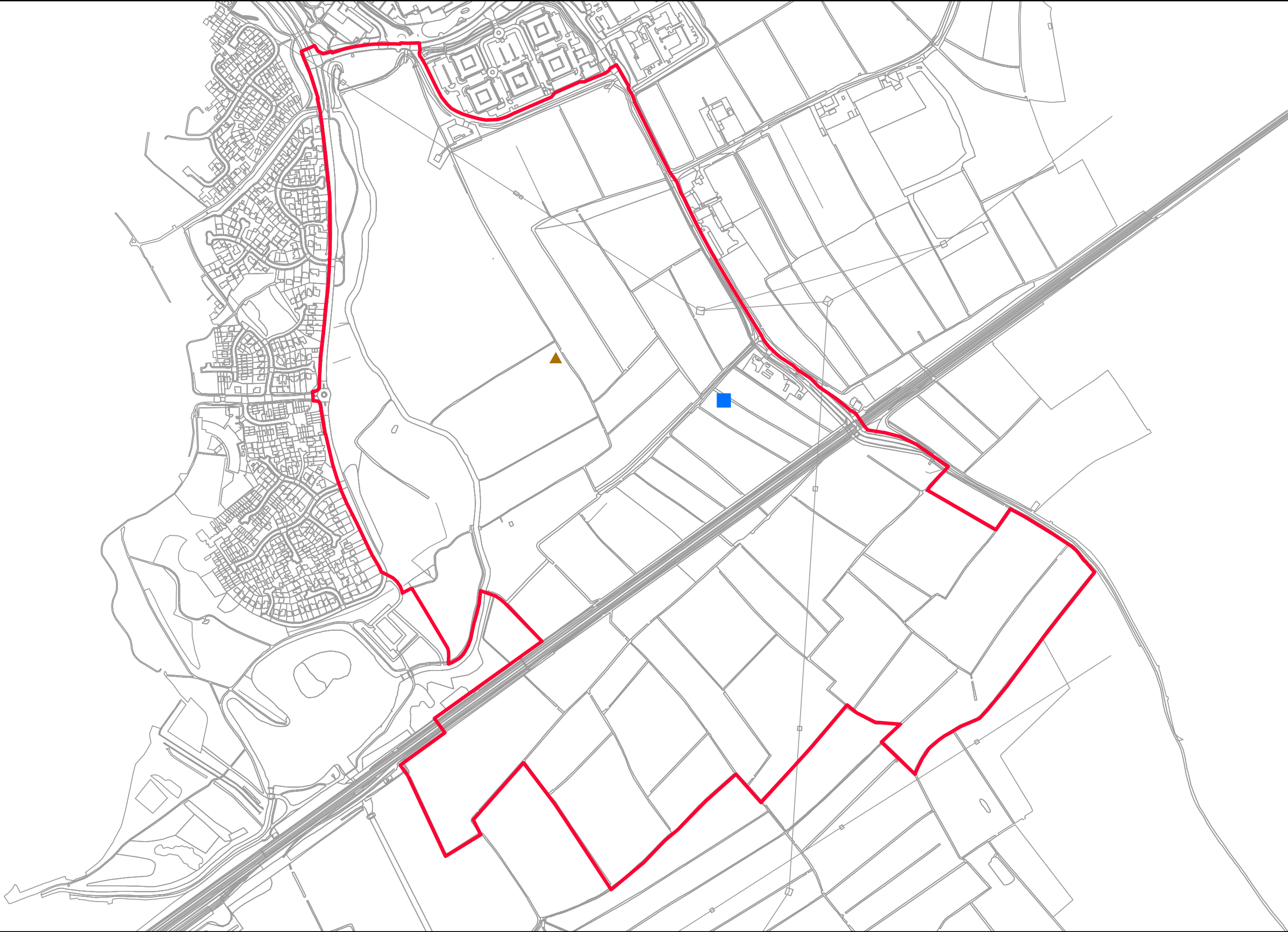
Client
Cardiff Parkway Developments Ltd

Job Title
Cardiff Hendre Lakes




Site Location and Study Area

Scale at A3
1:12,500

Job No 252199-00	Drawing Status For Issue
Drawing No 001	Issue F1



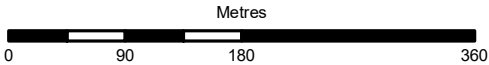
Legend

-  Possible latrine
-  Mammal path
-  Study Area Boundary

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Client
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Job Title
Cardiff Hendre Lakes

Badger Survey Results

Scale at A3
1:7,304

Job No 252199-00	Drawing Status For Issue
Drawing No 002	Issue F1