



College Road, Campdown

Hazel Dormouse Survey Presence/Likely Absence Report

For Hampshire Homes Ltd

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Executive Summary

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Summary

Site Location	The site is located to the west of Havant in Hampshire and is centred at Ordnance Survey National Grid Reference SU 690 069. The survey area comprises of large semi-improved grassland fields and is adjacent to Littlepark Wood SINC, with confirmed dormouse records.
Proposals	An Extended Phase 1 Habitat Survey was completed at the site in March 2017 (WYG, 2017). The survey identified the site as providing suitable habitat for hazel dormice.
This Survey(s)	This report summarises the results of the 2017 hazel dormouse survey that was conducted between June and October 2017.
Results	A dormouse and a nest was found within a nest tube on the eastern boundary. As the presence of dormice was confirmed at the site and the site is well connected by a network of hedgerows, dormice are considered likely to be present within suitable habitat (hedgerows and scrub) across the remainder of the site.
Additional Survey Recommendations	If the development does not proceed within the next two years, it may be that an update survey is required to inform a Natural England development licence to allow the works to proceed legally.
Mitigation and Enhancement Recommendations	To facilitate the proposed works, a Natural England European Protected Species Mitigation (EPSM) licence is required. The following mitigation and enhancement measures will be required for the site, to be detailed within the European Protected Species Mitigation (EPSM) licence, subject to approval from Natural England: • If the hedgerows will be removed under development, compensatory habitat of the same amount will be planted; • Infill planting of gappy hedgerows to enhance the habitats for dormice; • Installation of 40 nest boxes in retained hedgerow habitat focused mainly on the northern and western boundary of the northern field; • Future monitoring of dormice within the site, post-development.

1.0 Introduction

1.1 Background

WYG was commissioned by Hampshire Homes Ltd to undertake a hazel dormouse presence/likely absence surveys at the site known as College Road, Campdown with the aim of determining whether hazel dormice are present within the site boundary. This followed the completion of Extended Phase 1 Habitat Survey report in March 2017, that identified the site as offering high potential to support dormouse (WYG, 2017). Additionally, an adjacent woodland, Littlepark Wood, is a SINC designated for dormouse, and a hazel dormouse records were confirmed within proximity of the proposed development site.

This report has been prepared by Assistant Ecologist Dominika Muriénova GradCIEEM.

1.2 Site Location

The site is located to the west of Havant in Hampshire and is centred at Ordnance Survey National Grid Reference SU 690 069. The survey area, hereafter referred to as the 'site', is shown on Figure 1 and comprises of large semi-improved grassland fields of approximately 31ha.

The site is bounded by Scratchface Lane and the A3 (M) along the eastern boundary and College Road forming the western boundary. Further east of the site lies the residential area of Bedhampton. South of the site are agricultural fields with the B2177 Portsdown Hill Road and the residential dwellings of Farlington beyond. Directly north of the site is Littlepark Wood. Portsmouth Golf Course lies directly south west of the site. On the north western corner of the site lies South Downs College. Further south lies Chichester and Langstone Harbour, a designated Ramsar Site, Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI), along with Farlington Marshes a designated Local Nature Reserve (LNR).

1.3 Development Proposals

The proposed application is for a residential development of a minimum of 400 dwellings, public open space and sports facilities.

1.4 Purpose of the Report

The objectives of this assessment and the subsequent report are to:

- Determine the presence or likely absence of hazel dormice at the site;
- Provide an appraisal of the implications created by the potential presence of hazel dormice at the site;
- Establish if any potential effects on hazel dormice caused by the development are permissible; and
- Provide preliminary advice on mitigation strategies against any adverse effects on local hazel dormice population(s) which may arise as a result of the proposed development.

Note that, where possible, common names for flora and fauna have been used throughout this report for ease of reading.



1.5 Legislation

The hazel dormouse is legally protected in the United Kingdom under Schedule 5 of the Wildlife and Countryside Act (WCA) 1981; this legal protection was strengthened in 2000 by the Countryside and Rights of Way (CROW) Act 2000 in England and Wales. Under Schedule 12 of this Act, it is an offence to intentionally or recklessly damage, destroy or obstruct access to any structure used by hazel dormice for shelter or protection or to disturb an animal whilst occupying such a structure.

Further, hazel dormice are also afforded full legal protection under European legislation on Schedule 2 of the Conservation of Habitats and Species (Amended) Regulations 2010, which transposed the European 'Habitats' Directive (92/43/EEC) into UK law, making it a European protected species. In combination, these legislations make it an offence to:

- Intentionally or deliberately kill, injure or capture a dormouse;
- Damage, destroy or obstruct access to any structure or place used for shelter or protection by a dormouse;
- Deliberately disturb a dormouse while it is occupying a structure or place which it uses for that purpose.

The hazel dormouse is listed as a priority species in the UK Biodiversity Action Plan (UKBAP).

A European protected species mitigation licence (EPSM licence) from Natural England is required for any development works that would affect dormouse or dormouse habitat (e.g. hedgerows, scrub or woodland) where the species is known to be present.

2.0 Methodology

2.1 Field Surveys

The following methodologies have been used to identify the dormouse presence/likely absence on or near the site, which is relevant to the proposed development.

2.1.1 Desk Based Study

Site and species specific data has been sourced through direct consultation with the Hampshire Biodiversity Information Centre (HBIC). The area of search was taken as 2km, as recommended in the CIEEM's Guidelines for Preliminary Ecological Appraisal (2012). This provided the overall ecological context for the site and surrounding areas and potential basis for the dormouse survey.

2.1.2 Habitats

An extended Phase 1 habitat survey was undertaken on the site in March 2017 (WYG, 2017), which identified habitats within the site as offering high suitable habitat for dormouse. Hedgerows with mature and semi-mature trees as well as scattered semi-mature trees provide a suitable food source and nesting habitat for dormice. The site is also connected to Littlepark Wood, a SINC designated for dormouse, with confirmed dormouse records. As these habitats are connected, it was therefore assumed that dormouse are present on the site.

2.1.3 Dormouse Survey

A hazel dormouse survey was undertaken following the methodology as described in Bright *et al*, (2006), the English Nature *Dormouse Conservation Handbook*.

99 artificial nest tubes were placed around the suitable dormouse habitat (Figure 2). These are readily used by hazel dormice for breeding and daytime shelter. Tubes are made from stiff double walled black plastic sheet, 5 x 5cm in cross section and 25cm long. A small plywood tray is placed inside, projecting 5cm beyond the tube's entrance to allow the animals' easy access. The opposite end of the tube is sealed with a wooden block mounted on the tray. The tubes are suspended by wire or tape, fixed firmly underneath horizontal limbs, where they resemble a hollow branch. The tubes can be emptied without removing them by placing a plastic bag over the closed end and pushing in the wooden tray from the open end of the tube.

Nest tubes were located approximately 25m apart on length of approximately 2,460 meters of the suitable habitat. Tubes were positioned on trees and shrubs at between 1 and 2 metres from the ground. Tubes were distributed throughout hedgerows with mature trees, and semi-mature scattered trees. The location of the tubes is shown on Figure 3.

Number of survey visits

To prove the likely absence of dormice at a site, visits were proposed to be made to check the nest tubes each month between June and November. This would achieve 20 points, which is considered to be a reasonable survey effort based on the index of probability scoring system, (Bright *et al*, English Nature, 2006). The points system varies throughout the year as nest tubes are most likely to be occupied during May and August / September. However, as surveys can only determine presence or likely absence and cannot provide a population estimate, once presence of dormice has been

determined within a site dormice can be assumed to be present within all suitable and connected habitats.

Table 1 Index of probability of finding dormice present in nest tubes in any one month (Bright *et al*, English Nature, 2006)

Month	Index of probability
April	1
May	4
June	2
July	2
August	5
September	7
October	2
November	2

The dormouse survey was set up on 24th March 2017 and the dates for the dormouse surveys were:

- 26th June 2017, cumulative points total = 7;
- 10th July 2017, cumulative points total = 9;
- 1st August 2017, cumulative points total = 14;
- 4th September 2017, cumulative points total = 21;
- 11th October 2017, cumulative points total = 23;

Due to the elusive nature of dormice, nest tube surveys can only determine presence or likely absence of dormice and cannot provide a population estimate for the species.

2.2 Limitations

Surveys were completed according to the relevant guidelines and the majority of the site was accessible. Several tubes, mainly on the hedgerow adjacent to the college at northern boundary of the site, were overgrown and inaccessible during July survey. On consequent surveys the tubes were checked, and as such this is not considered a significant limitation.

Three tubes along the western boundary at College Road were found damaged during September survey as a result of hedge cutting. Other areas with the tubes were intact and not damaged, therefore this is not considered a significant limitation.

The details of this report will remain valid for a period of **two years** from the date of the last survey, after which the validity of this assessment should be reviewed to determine whether further updates are necessary. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

3.0 Results, Impacts and Recommendations

3.1 Survey Results

Table 2 Survey results

Date	Habitat/Location	Tube	Results
26 th June 2017	N/A	N/A	No dormouse signs observed
10 th July 2017	N/A	N/A	No dormouse signs observed
1 st August 2017	N/A	N/A	No dormouse signs observed
4 th September 2017	Hedgerow on the eastern boundary	42	Dormouse nest
11 th October 2017	Hedgerow on the eastern boundary	42	Dormouse nest

A dormouse and a dormouse nest have been recorded within a hedgerow along the eastern boundary during surveys on 4th September and 11th October 2017. This hedgerow is connected to most of the hedgerows within the site and therefore dormice are considered to be present within all hedgerows and scrub habitat. The location of dormouse record is shown on Figure 3.

Following the confirmed identification of dormice, this species was assumed to be present within most of the suitable habitats across the site that are connected. This applies especially to hedgerows on the northern boundary along the college and the eastern boundary along the A3, that are connected to the Littlepark Wood.

4.0 Impacts Resulting from Development and Proposed Mitigation

4.1 Impacts

No formal proposal for the site is available at the moment. Recommendations in the following sections will be considered for incorporation onto the development proposal.

There is the potential for indirect impacts on dormice during construction phase as a result of encroaching work/storage area to hedgerows.

4.2 Avoidance

It is recommended that site boundary will be kept intact and loss of hedgerows is avoided as far as possible. Protective fencing should be used to avoid impacts during construction with a buffer of 5m maintained between hedgerows and construction activity.

4.3 Mitigation

To maintain favourable conservation status of dormice within the site, compensatory habitat will be provided. If the hedgerows will be removed the amount of removed hedgerows will be planted elsewhere within the site as new hedgerows. It is likely that the defunct hedgerow which extends west from the eastern boundary will be lost due to development.

The new hedgerows should be planted with a diverse mix of native species including hawthorn, hazel, holly, blackthorn, elder, guelder rose and honeysuckle all of which will provide a food source and nesting habitat for dormice.

4.4 Mitigation to be Completed under Licence

Loss of habitat

If any hedgerows on the site are to be removed as part of the development, vegetation clearance will be carried out to discourage dormice from using them prior to work commencing, with the aim of displacing dormice into the surrounding hedgerows which will be retained. This will minimise the risk of dormice being killed or injured as a result of the work and will maintain access for them to foraging and commuting areas. It is proposed that all vegetation clearance works will be undertaken in a two-stage process in order to avoid the main dormouse hibernation and breeding seasons, in addition to the peak nesting bird season.

Winter vegetation clearance

Once the licence is approved and granted by Natural England, the above-ground vegetation will be cut to a minimum of 300mm, this will be undertaken between November and February. A dormouse licenced ecologist will undertake hand searches of all the vegetation to be removed prior to cutting. Dormice hibernate at ground level; therefore, the ground level vegetation (i.e. all vegetation below 300mm) will remain *in situ* and undisturbed.



Any torpid dormice found during the vegetation clearance will be left in situ and fenced off from the development. These areas will only be cleared once the dormouse has broken hibernation and moved of its own accord.

Summer vegetation removal

Stump and root removal will be undertaken between May and October, after the hibernation season is over, when dormice will be using arboreal habitats. This will be supervised by a dormouse licenced ecologist.

Installation of nest boxes

Forty standard design dormouse boxes will be erected within retained habitat focused on the northern and western boundary of the northern field. These boxes will provide long term shelter and breeding sites for dormice and will therefore enhance the habitat for dormice.

Toolbox Talks

Prior to construction works a toolbox talk will be given to all contractors by the named ecologist to explain the potential for discovering dormice during works and the procedure to take in the event a dormouse is found.

Management

Retained and created hedgerows and scrub habitat within the site should be managed in the long term to enhance fruit / seed production and minimise disturbance to hazel dormice. Pruning of hedgerows and control of scrub encroachment should be carried out over winter when dormice are hibernating at ground level.

The hedgerows should be cut once every three years to encourage the production of food such as berries.

Monitoring

As a requirement of the Natural England EPSM licence, dormouse boxes must be monitored by a licensed dormouse surveyor twice a year (May and October) for up to five years after completion of the scheme (or creation of new habitats), to be agreed with Natural England. Results of the monitoring surveys will inform the long term management of the site by allowing management prescriptions to be revised.

4.5 Enhancement

Where existing hedgerows are present it is recommended that these hedgerows are infilled with native planting to improve connectivity for dormice.

The new hedgerows should be planted with a diverse mix of native species including hawthorn, hazel, holly, blackthorn, elder, guelder rose and honeysuckle all of which will provide a food source and nesting habitat for dormice.

5.0 References

- Bright PW, Morris PA and Mitchell-Jones A (2006). Dormouse Conservation Handbook, 2nd Edition. English Nature, Peterborough.
- WYG (2017) Ecological Appraisal.

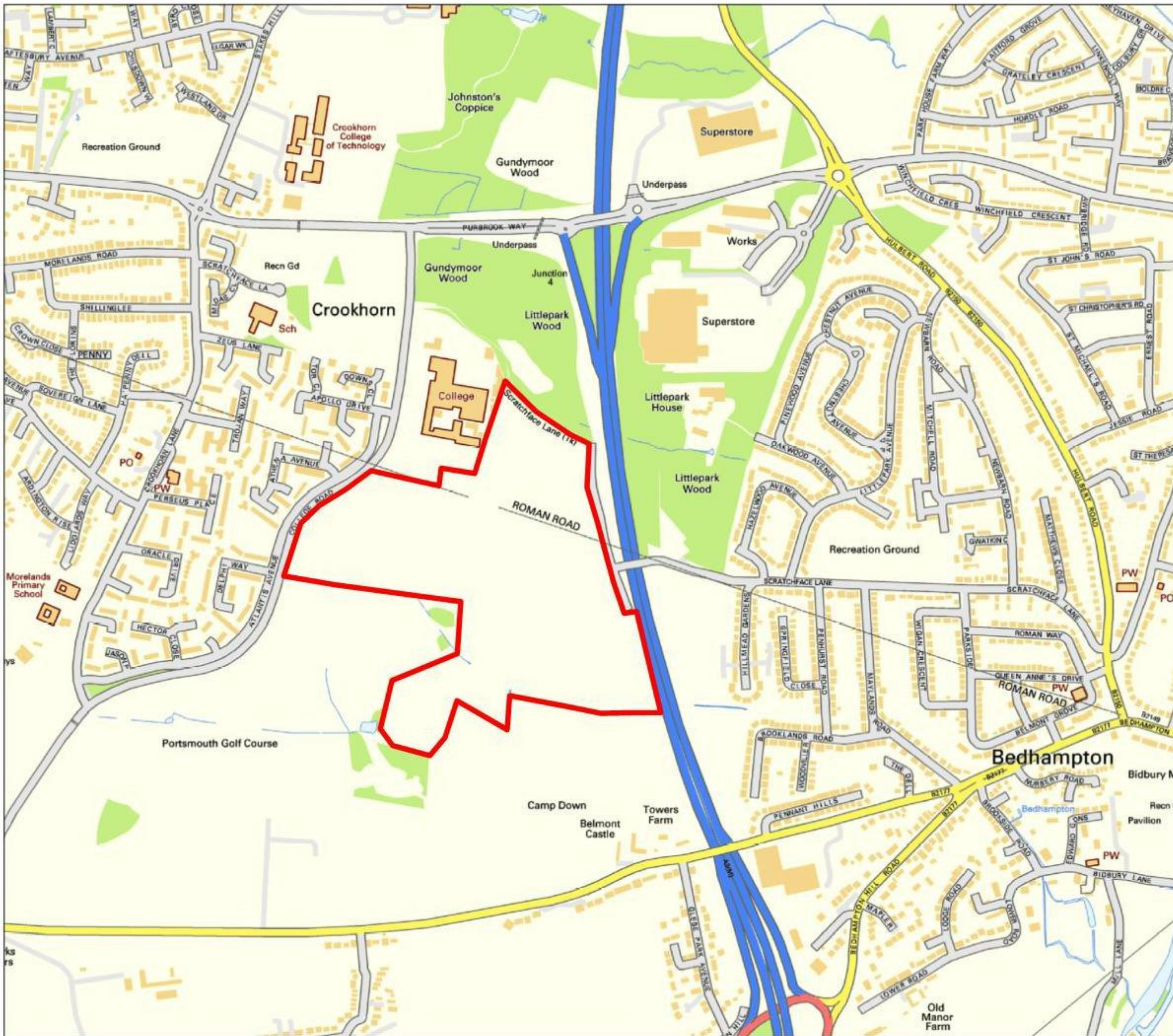


FIGURES

Figure 1 – Site Location Plan

Figure 2 – Phase 1 Habitat Plan

**Figure 3 – Location of Dormouse
Tubes**



Legend

— Site boundary

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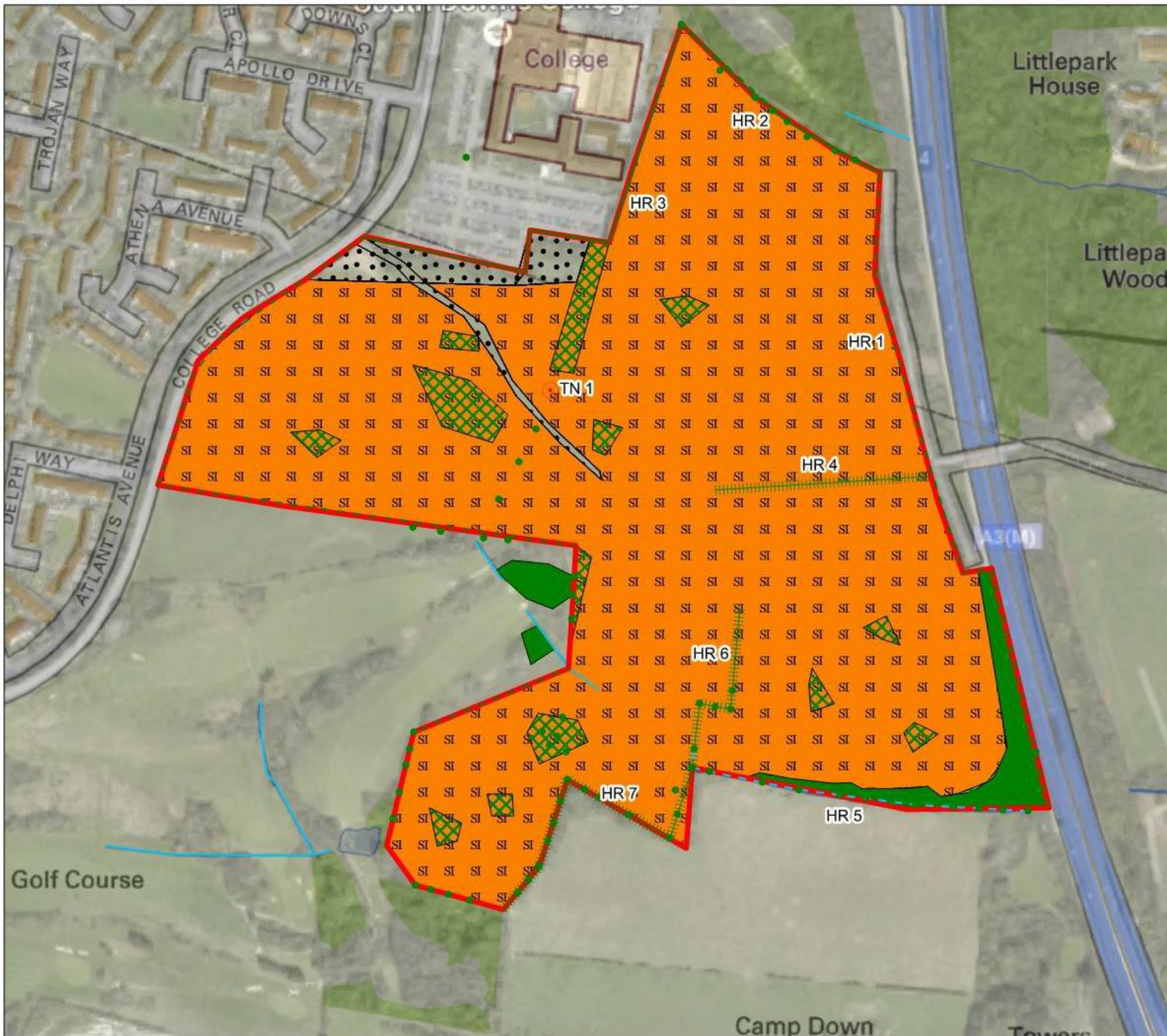
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Campdown, Havant

Site location plan

Scale at A3:	Drawn by: SC	Date: 02/02/17	Checked By: JS	Date: 23/03/2017	Approved By: DW	Date: 23/03/2017
Project No: A100376	Office: 45	Type: 94	Drawing No: Figure 1.	Revision		

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Legend

- Scattered tree
- Intact Hedgerow
- - - Defunct Species-poor
- - - Dry ditch
- Deadwood
- ||||| Species poor hedge and trees
- Site boundary
- Bare Ground
- Dense scrub
- Standing water
- Broadleaved woodland
- SI SI Semi improved grassland

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Campdown, Havant

Extended phase 1 habitat plan

Scale at A3:	Drawn by: Date:	Checked By: Date:	Approved By: Date:
	SC 02/02/17	JS 23/03/2017	DW 23/03/2017
Project No:	Office	Type	Drawing No.
A100376	45	94	Figure 2.
			Revision

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Rev	Date	Notes
A	30/10/17	Initial map production

Legend

- Site boundary
- Dormouse tubes

0 25 50 100 Metres



Location of Dormouse Tubes

**Campdown
Hampshire Homes Ltd**

Scale at A3: 1:3,000	Project No: A100376	Drawing No: Figure 3	Revision: A
Drawn by: Ben Blowers	Drawn date: 30/10/2017	Approved by: Dominika Muriénova	

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