Document Control Sheet	
Client:	Welwyn Services Ltd.
Project:	Vicars Grove Closed Landfill
Title:	BIRD MITIGATION (Bird Box Location and Design)

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4. Nomenclature

CRoW	Countryside Rights of Way Act 2000
DEFRA	Department for Environment, Food and Rural Affairs
EN	English Nature
NBN	National Biodiversity Network
HBRC	Hertfordshire Biological Records Centre
HCC	Hertfordshire County Council
NE	Natural England
PPS9	Planning Policy Statement 9 (Biodiversity and Geological Conservation)
RSPB	Royal Society for the Protection of Birds
SAC	Special Areas of Conservation
SNCO	Statutory Nature Conservation Organisations
SSSI	Site of Special Scientific Interest
VGCL	Vicars Grove Closed Landfill
WACA	Wildlife and Countryside Act 1981

5. Introduction

5.1 Terms of Reference

QSP Ltd was engaged in March 2011 by Welwyn Services Ltd. to undertake preparation of a Bird Box location Scheme at Vicars Grove Closed Landfill Site (hereafter referred to as 'the site'), near Hitchin, Hertfordshire. The potential need for a Bat Box Plan was raised by Hertfordshire County Council as part of a Planning Application.

This document summarises the detailed investigation in bird box design and location.

5.2 Objectives

The principal objectives were to:

- Provide a scheme outlining the design of bird boxes for the site
- Provide a scheme outlining the location of the bird boxes for the site

5.3 Site Location

The site is located north of the Little Almshoe Lane, approximately 1km from the southern extremis of Hitchin, and 1km west of Little Almshoe village (Fig.1). The B656 is located 500m to the east of the site; Stevenage is approximately 2.7km to the east of the site. The site is located within an existing Green Belt, and surrounded by arable and pastoral farmland. The site is approximately 8 hectares in area and is made up of three key areas; semi-natural woodland (Fig.2), spoil heaps and ruderal/scrub (Fig. 3), and the site working area of hard-standing (Fig.4).

Vicar's Grove
Little Almshoe Lane
Nr. Hitchin
Hertfordshire

NGR: TL 1925NE

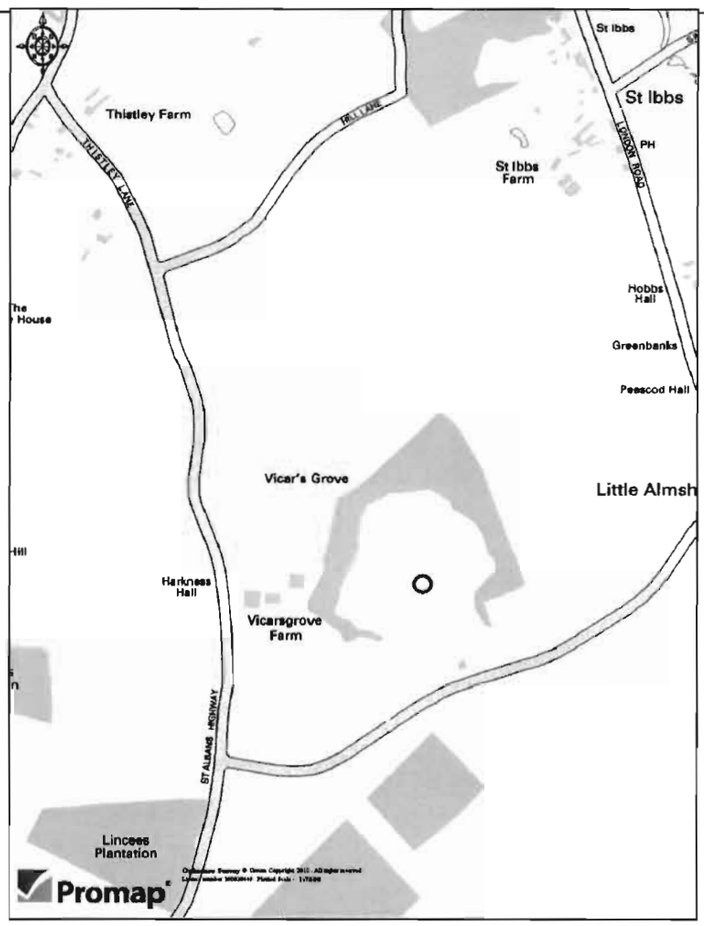

Figure 1: Vicars Grove Pit Location Map



Figure 2: Semi-ancient Woodland at Vicars Grove Pit



Figure 3: Ruderal/Spoil Heaps at Vicars Grove Pit



Figure 4: Working Area at Vicars Grove Pit

6. Legislation

6.1 Legislation Pertaining to Birds in England

In the UK, all wild birds, their roosts, nests and their eggs are protected by law.

In England, Scotland and Wales the legislation that protects wild birds is the Wildlife and Countryside Act 1981, and in Northern Ireland, The Wildlife (Northern Ireland) Order 1985.

In England and Wales the law has been amended by the Countryside and Rights of Way Act 2000 and in Scotland by the Nature Conservation (Scotland) Act 2004.

The amount of protection afforded to wild birds varies depending on whether the species are listed on various Schedules or Licences.

6.2 National Planning Policy and Legislation

Planning Policy Statement 9 sets out guidance on Planning and Biodiversity and Geological Conservation, and sets out a number of principles. These principles include:

- Decisions should aim to maintain, enhance, restore or add to biodiversity and geological conservation interests
- Promote opportunities for the incorporation of beneficial biodiversity and geological features within the design of development
- Development proposals where the principal objective is to conserve or enhance biodiversity and geological conservation interest should be permitted
- The need to prevent harm promote

PPS9 states that Local and Planning Authorities should ensure that species are protected from the adverse effects of development.

7. Bird Box Design

7.1 Bird Box Design

Bird boxes provide an artificial roost for many bird species in the UK. A number of pre-constructed bird boxes may be bought from a wide range of outlets. However, for the purposes of this project the client opted to construct their own artificial roosts based on the design protocols set out by the Royal Society for the Protection of Birds (www.rspb.org.uk).

Boxes should be carefully put together ensuring no draughts. Drainage holes should be drilled in the base and the roof should be attached with hinges or rubber stripping. Soft wood bird boxes should be treated with a water based preservative on the exterior only and not around the entrance.

The entrance hole should be at least 125mm above the floor of the nest box. Entrance holes should be sized dependent on bird species to be encouraged.

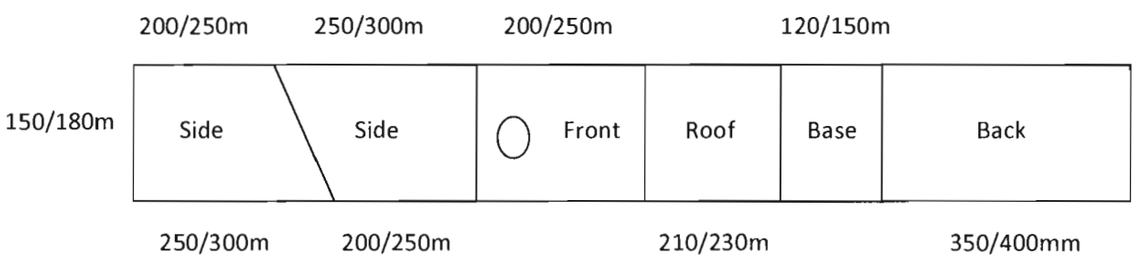

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Figure 5: Bird Box Design

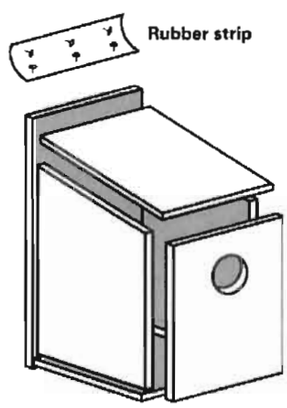


Figure 6: Bird Box Side View

8. Bird Box Location Plan

8.1 Introduction

A number of factors were taken into account when developing the Bird Box Location Plan:

- Height of the trees likely to house the artificial roosts (bird boxes may be placed at a range of heights depending on species to be encouraged)
- Secondary vegetation
- Girth of the trees likely to house the artificial roosts
- Health of the trees likely to house the artificial roosts
- Proximity to the tree- and hedge-line
- Aspect for placement of artificial roosts (to provide a range of roosting temperatures)
- Likely sources of prey species
- Likely sources of interference
- Likely source of predatory species

8.2 Walk-over Survey

A Walk-over survey was carried out on 25th March 2011 to ascertain the nature of the semi-natural woodlands on site, whilst taking into account the points raised in the introduction to Section 8 of this document.



Figure 7: Potential Bird Box Location



Figure 8: Tree Location Close to Woodland Perimeter

8.3 Location Plan

Five key areas or zones have been identified as suitable areas for Bird Box placement (Bird Box Location Plan; Appendix 4).

Zone 1 is located along the bottom south-western arc of the woodlands and will have two bird boxes.

Zone 2 is located along the western arm of the woodlands on site, backing onto the cattle farm and will have two bird boxes.

Zone 3 is located along the western spire of the woodlands to the northern most tip of the site and will have three bird boxes.

Zone 4 is located along the eastern side of the woodlands and will have two bird boxes each placed facing a different direction to allow for different roosting temperatures.

Zone 5 comprises the final section of woodland closest to the site entrance and will have three nest boxes.

All nestboxes must be attached by wire loops to the trees. The different sized entrance holes are for specific species: 25mm (blue tits, coal tits and marsh tits, and similar); 28mm (great tits, tree sparrows, and pied flycatchers, and similar); 32mm (nuthatches, and similar).

The farmland surrounding the woodlands is seasonably used for game shooting, and regular shooting of pigeon and rabbit populations throughout the year. For these reasons it is considered inappropriate to place any owl boxes in the woodlands.

	Zone 1	Height	Entrance Size
A	West Facing	1.8m	25mm
B	South-east Facing	3m	28mm
	Zone 2		
A	West Facing	3.5m	25mm
B	West Facing	4m	28mm
	Zone 3		
A	West Facing	1.8m	25mm
B	West Facing	3m	28mm
C	South-east Facing	5m	32mm
	Zone 4		
A	South-west Facing	3.5m	25mm
B	South-east Facing	4m	28mm
	Zone 5		
A	West Facing	3.5m	25mm
B	West Facing	4m	28mm
C	South Facing	1.5m	32mm

Figure 9: Aspect Placement for Bird Boxes

9. Conclusions and Recommendations

10.1 Introduction

With careful placement of well-designed, well-designed nest boxes it is hoped to encourage a range of native bird species to the site.

10.2 Recommendations

Bird boxes shall be sited from September 2011 onwards, to allow birds to enter the nestboxes during Autumn and Winter.

Bird boxes should be cleaned out at the beginning of September each year. Disinfectant or pesticides should not be used on any nest boxes, instead boiling water should be used to clean the interior; the boxes should be thoroughly dry before closing the lid.

If insects – such as bees – take up residence in the nest boxes, they should be left alone and a replacement nest box should be put up near to the original.

Avoid inspecting the bird boxes during the nesting season.

10.3 Conclusion

The bird box locations have been carefully planned with regard to aspect, bird species and potential for successful usage.

10. References

Planning Policy Statement 9 (2005): Biodiversity and Geological Conservation. TSO. London.

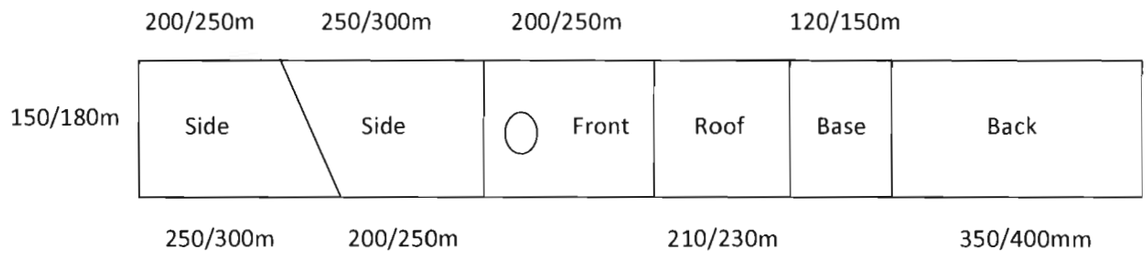
Wild Birds and the Law England and Wales: A guide to Bird Protection Today (2010). RSPB. Sandy.

www.rspb.org.uk

11. Appendix 1: Site Risk Assessment

Off-site/Desk-Top Risk Assessment			
Project name & reference	Vicars Grove 541	Site Location	Little Almshoe Lane, Nr Hitchin
Site description	Closed Inert Landfill sites		
Date	07/04/11		
Client H&S contact	Paul Smith	07973 827 309	
	Email: paulsmith.welwynservices@live.co.uk		
Local Information:			
Nearest A&E hospital location	Hertford A and E		
Environment: Yes/No Details			
Steep slopes	yes	Spoil heaps	
Water features	no		
Uneven or soft ground	yes	Poor capping	
Underground/confined spaces	no		
Liable to fire/flood, etc.	no		
Poor lighting	no		
Noise/vibration	no		
Hot/cold	no		
Urban/urban fringe area	no		
Hazardous Substances Yes/No Details			
Asbestos	no		
Hazardous waste	no		
Chemicals	no		
Dust	poss	On dry and windy days	
Biological agents	no		
Radiation	no		
Electricity	no		
Other (please specify)			
Site Use: Yes/No Details			
Site manned?	yes	During operations	
Public access/use	no		
History of antisocial/criminal use	no		
Construction work	yes	restoration	
Vehicles/Fork-lift present	yes	Lifting vehicles and transport vehicles	
Fixed Plant present	no		
Mobile plant present	yes	Crushers and screeners	
Survey Requirements and Site Access Yes/No Details			
Entry into roofs	no		
Entry into derelict/disused buildings	no		
Entry into underground structures	no		
Entry onto ladders/ scaffold	no		
Accessible parking	no		
Other hazards			
Landfill Gas	no		
Adders	no	None recorded on site or in close vicinity	
This Assessment carried out by:		Russell Carter	

13. Appendix 3: Bird Box Design Plan



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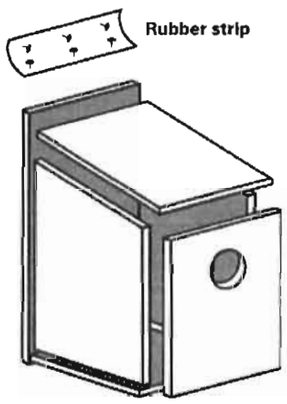
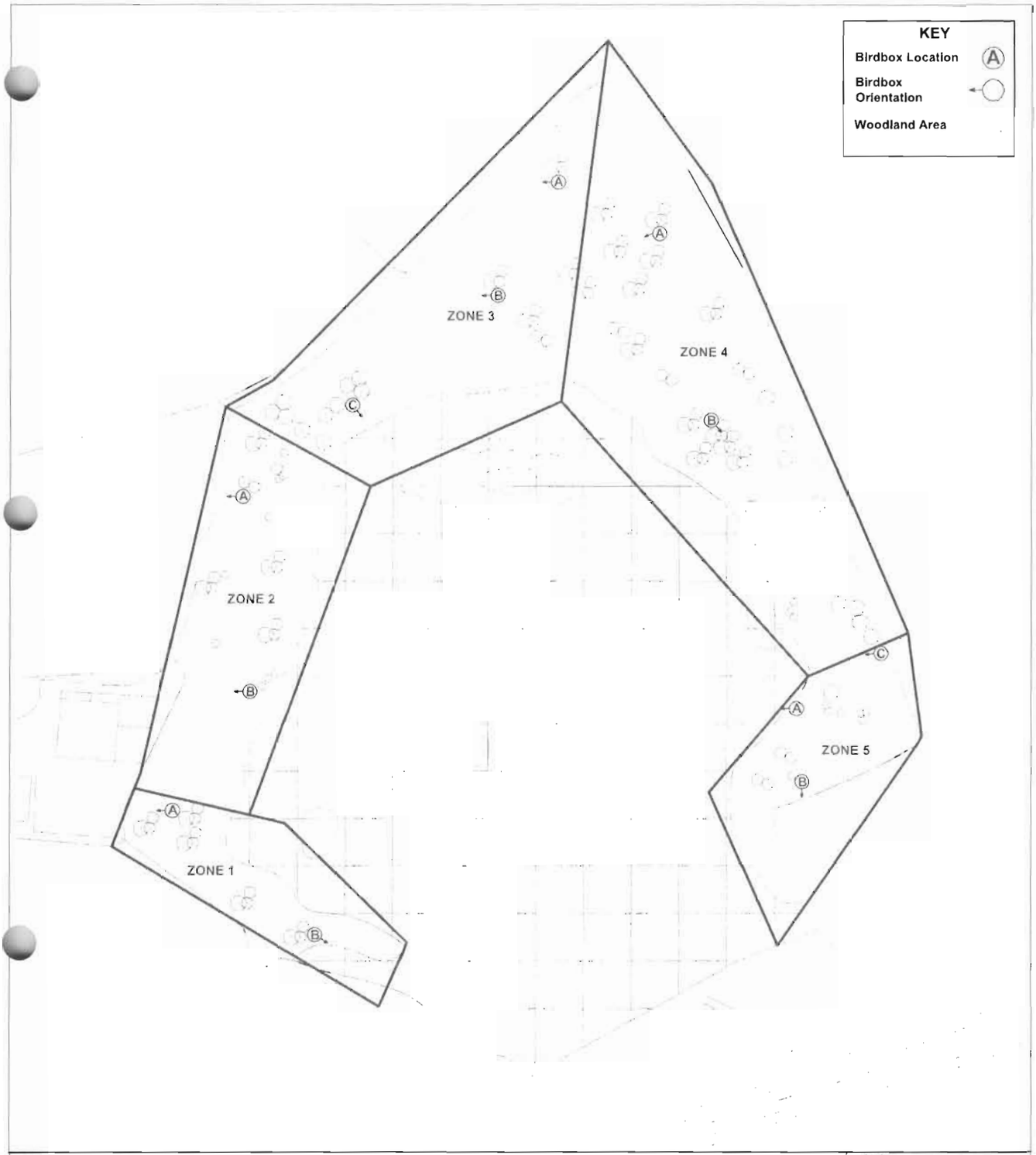


14. Appendix 4: Bird Box Location Plan



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Client:
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AL7 2DP

VICARS GROVE INERT LANDFILL SITE

BIRD BOX LOCATIONS

Scale:	Drawn by:	Date:
Not to scale	REH	April 2011

Drawing No: