



Management and Maintenance Plan for Orchid Translocation

Land at Langstone Technology Park,
.....

www.phlorum.com

Management and Maintenance Plan for Orchid Translocation

Land at Langstone Technology Park, Havant, PO9 1SA

10/06/2021

PRC Architecture and Planning

12 Warren Yard

Milton Keynes

MK12 5NW

Document Control:

Project no.	Project
10538	Land at Langstone Technology Park, Havant, PO9 1SA

Rev	Written by:	Checked by:	Authorised by:	Date:
Rev0	Paul Carter	Ric hard Schofield	Richard Schofield	11 June 2021

This report has been prepared for the exclusive use of the commissioning party and may not be reproduced without prior written permission from Phlorum Limited.

All work has been carried out within the terms of the brief using all reasonable skill, care and diligence.

No liability is accepted by Phlorum for the accuracy of data or opinions provided by others in the preparation of this report, or for any use of this report other than for the purpose for which it was produced.

Contents

.....

1.	Introduction.....	1
2.	Project Outline	3
3.	Previous Reports	4
4.	Grassland Translocation	5
5.	Habitat Management Plan.....	7

Appendix A – Landscape Plan

Appendix B – Bird and Bat Boxes

1. Introduction

Background

1.1 Phlorum Limited was commissioned by PRC Group LTD to compile a Management and Maintenance Plan for Orchid Translocation in relation to the proposed development at Langstone Technology Park, Havant, PO9 1SA, here on referred to as 'The Site'. The site address is Langstone Technology Park, Havant, PO9 1SA.

1.2 This follows from the decision notice from Havant Borough Council, which states in condition 8:

"The development hereby permitted shall be carried out in accordance with the Biodiversity Enhancement Plan (The Ecology Co-op, October 2019). In addition, prior to the commencement of developing the new industrial units full details of the translocation of the species-rich grassland containing orchid species and the long term management and maintenance of the translocation area shall be submitted to and approved in writing by the Local Planning. The translocation shall take place in accordance with timing provisions as may be approved as part of the details. The translocation process itself and subsequent management and maintenance of the translocation site shall thereafter take place in accordance with the approved management and maintenance details. The details of the translocation area and its management and maintenance shall also be shown on the detailed landscaping plan required in accordance with condition No.13.

Reason: In the interests of biodiversity and the protection of habitat having due regard to policies CS11 and DM8 of the Havant Borough Local Plan (Core Strategy) 2011 the Wildlife and Countryside Act 1981 (as amended) and the National Planning Policy Framework"

1.3 The National Grid Reference for the centre of the site is SU 71249 05736. The survey area extended over approximately 16 hectares (ha).

1.4 Previous ecological reports which have been carried out and should be referred to include:

-  Preliminary Ecological Appraisal (Ecology Co-op, June 2019);
-  Bat Emergence Survey Report (Ecology Co-op, June 2019); and
-  Biodiversity Enhancement Plan (Ecology Co-op, June 2019).

Proposed Development

1.5 It is understood that the proposed development involves the demolition of building 1000 and associated works, the erection of new flexible use industrial units and a new parking layout.

Biodiversity Enhancement Report

- 1.6 This document has been compiled in the context of the proposals stated in this introduction and based on information made available by the client at the time. Alterations to the scheme and changes in ecological legislation may necessitate amendments to this document at a later stage.

2. Project Outline

Aims and Objectives

- 2.1 The Preliminary Ecological Appraisal (Ecology Co-op, 2019) identified an area of grassland to the south of the gym which was botanically rich and contained:
"Luzula species., orchid species Orchidaceae sp., oxeye daisy Leucanthemum vulgare, yarrow, ribwort plantain, creeping cinquefoil, creeping buttercup, daisy, common cats ear Hypochaeris radicata, dove's-foot crane's-bill, bristly ox-tongue, common mouse ear, greater plantain and common ragwort Plantago major"
- 2.2 Condition 8 of the decision notice relating to this site requires *"full details of the transplantation of the species-rich grassland containing orchid species and the long term management and maintenance of the translocation area"*
- 2.3 The purpose of this translocation management and maintenance plan, is to describe the methods to be used to successfully move this area of grassland, and maintain it for the continued success of the species present.

3. Previous Reports

- 3.1 Several reports have been produced for this site, with the following three being particularly relevant to this current document.

PEA 2019

- 3.2 The PEA survey was carried out by The Ecology Co-op in June 2019.

Biodiversity Enhancement Plan

- 3.3 Biodiversity Enhancement Plans were produced by the Ecology Co-op in October 2019, and by Phlorum in March 2021.

Draft Translocation Area

- 3.4 In June 2021 Ecology Co-op produced a map outlining suitable areas for receptor sites as alternatives to those given in their original report.

4. Grassland Translocation

Grassland Translocation

- 4.1 The area of grasslands supporting orchids was determined to have higher ecological value and it is recommended that this area is transplanted. An area of 20 – 30m² will be translocated to a new location in full sun within the site. The recommended location for translocation is shown in Figure 1 in Appendix A.
- 4.2 3 potential areas to act as receptor sites. These were identified by Ecology Co-op (2021) as being more suitable than those originally marked in earlier reports.
- 4.3 Of the three potential areas, the one in the north-west of the site is the preferred location of the receptor site for the orchids.
- 4.4 The process will consist of the following:
 - ➊ The translocation receptor site will be assessed by an ecologist to ensure it does not have important species itself, and is in a suitable location. The vegetation present will be cut to ground level throughout the season to reduce grass vigour and prevent nutrients building.
 - ➋ The proposed translocation receptor site will be turf stripped using a digger to create an area of bare ground. This will be 15cm lower than the current soil level.
 - ➌ The turf which is due to be translocated from the donor site will first be cut to reduce water demand from plants within the sward and then will be stripped to a depth of at least 15cm using a digger.
 - ➍ The lifted turf and associated soil will be laid in the new location on the bare ground which has been created.
 - ➎ If the receptor areas are larger than the donor sites the suitable areas should be marked out with pegs for removal, and the remaining areas should continue to be cut to ground level throughout the season to remove grass vigour and fertility.
 - ➏ The optimum time for this translocation to take place is between late August and the end of September during mild and wet weather to improve establishment or during early mid-March to early May when the ground contains sufficient moisture to reduce the requirement for watering.
- 4.5 The area of translocated turf will have an on-going management plan involving a reduced cutting regime to allow the wildflower area to develop. See section 5.
- 4.6 The sward should be cut (with the cuttings being removed and composted) between mid-August and late September every year. If the sward is growing too vigorously cutting in the spring could take place (March / April). This management will allow wildflowers to grow.

Equipment Required

- 4.7 Specialist equipment from an experienced grassland translocation contractor:
-  Plate or fork with guillotine attached to a tracked loading shovel or similar approved machine, such as a turf cutter, which can cut turves using a wide and untoothed bucket, tracked loading shovel, broad untoothed dykeing bucket or similar approved machine. The bucket must be flat bottomed with straight sides to cut neat rectangular shaped turves (x 1).
 -  Machine to cut and remove topsoil from receptor site (x1).
 -  Small low loader (x 1).

Ecological Supervision Required

-  Ecologist to assess and peg out receptor areas at Langstone Technology Park.
-  Clerk of works to supervise removal and re-instatement of turves.

5. Habitat Management Plan

Translocated Grassland

- 5.1 The paragraphs below include prescriptions for area of grassland translocated from the donor site south of the gym.

Aims

-  To establish areas of new planting;
-  To ensure that common grasses do not become dominant; and
-  To create conditions for the orchids to thrive.

Actions

-  The sections of transplanted soil and plants must be placed in their new positions immediately to ensure they don't dry out.³
-  Once all donor turfs are in position, they should be gently firmed down and watered.
-  If the receptor areas are larger than the donor area then the receptor site containing non-donor grass must be cut short regularly and have all arisings immediately removed. This should occur for the first two years in order to reduce the vigour of existing grasses and reduce soil fertility.
-  The newly relocated sections must then be managed according to the schedule below.

Monitoring and Maintenance

First 6 Months

-  Water to establish the new transplants and keep watered in dry weather during the first season.
-  Monitor for common generalist species, such as plantain and buttercup, to ensure they do not dominate the sward.
-  Hand weed common generalist species if they are becoming dominant.
-  Keep vegetation cut short and remove all arisings. Cutting can occur through the winter if conditions are dry.
-  Do not stand on the ground if possible and certainly not in wet weather as this will cause compaction.
-  Areas of bare ground must **not** be oversown.

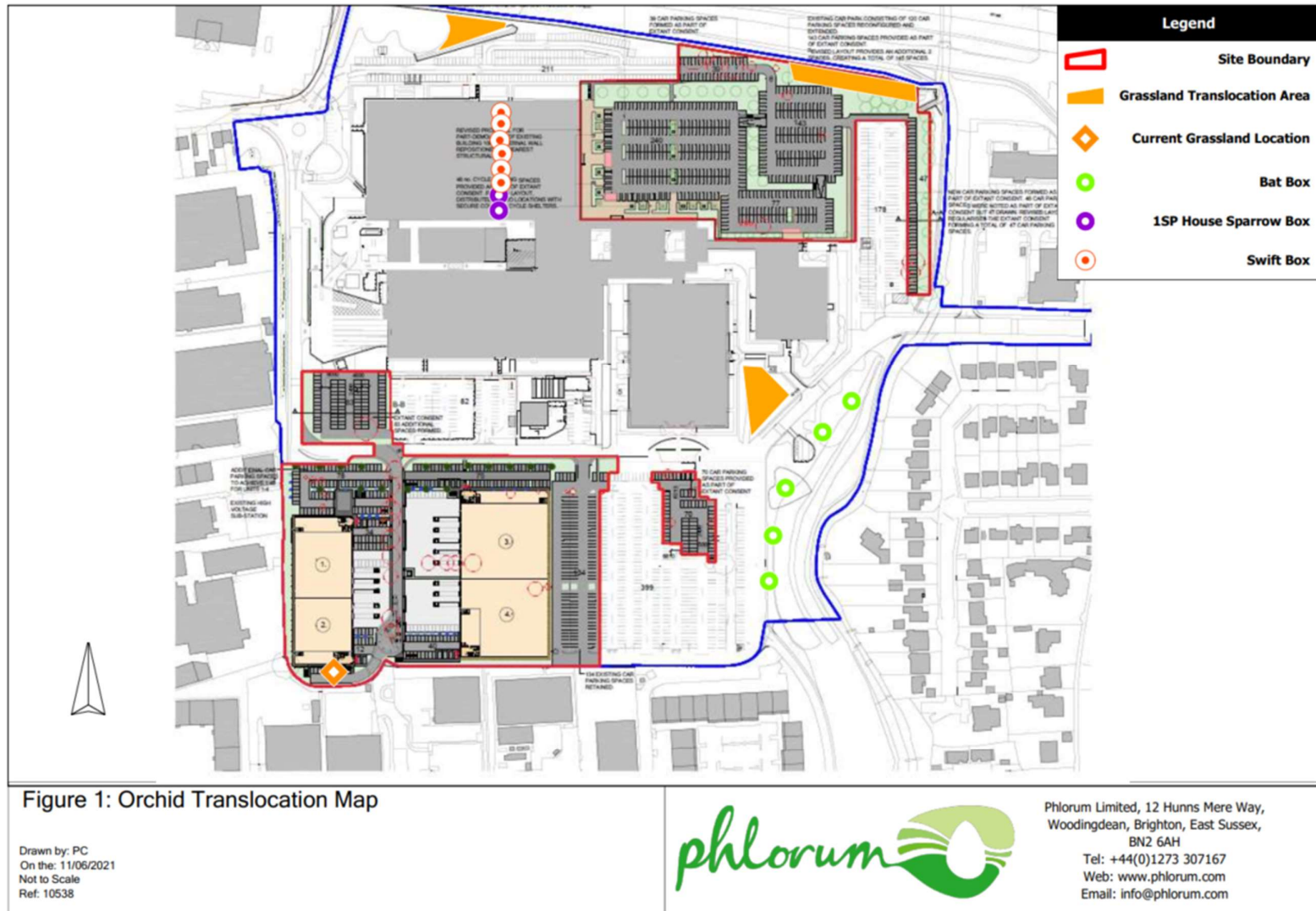
Long Term Management

-  All cutting must stop in February and the vegetation allowed to grow and flower.
-  Dominant species must be monitored and hand weeded.
-  Watering should not be required.
-  Cutting must not happen until the orchids have flowered and their seed pods have split naturally.
-  Once the orchids have seeded (between July and September), then the whole area can be cut short. The arisings should be left on the areas not containing the translocated sward, in order for the seeds to colonise the adjoining areas. After between 3 and 7 days, the arisings must be removed.
-  Avoid compaction at all times.
-  Keep the sward short between late summer and February.

Appendix A

Translocation Map

Management and Maintenance Plan for Orchid Translocation
Land at Langstone Technology Park, Havant, PO9 1SA





Phlorum Limited

Head Office & Registered Office:

Unit 12
Hunns Mere Way
Woodingdean
Brighton
East Sussex
BN2 6AH
T: 01273 307 167

Northern Office:

Ground Floor
Adamson House
Towers Business Park
Wilmslow Road
Didsbury
Manchester
M20 2YY
T: 0161 955 4250

Western Office:

One Caspian Point
Pierhead Street
Cardiff Bay
Cardiff
CF10 4DQ
T: 029 2092 0820

info@phlorum.com
www.phlorum.com

Registered in England & Wales. Reg No. 4967256