NCP CAR PARK, BATH ROAD, WEST DRAYTON, GREATER LONDON

JERSEY CUDWEED MITIGATION STRATEGY

A Report to: Heathrow NCP Property Limited

Report No: RT-MME-157814

Date: August 2022

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REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 “Biodiversity, Code of practice for planning and development”.

Report Version	Date	Completed by:	Checked by:	Approved by:
Final	17/08/2022	Amelia Collins BSc (Ecological Project Officer)	Harry Stone MSc ACIEEM (Ecological Consultant)	Paul Roebuck MSc MCIEEM (South East Manager)

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management’s Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

DISCLAIMER

The contents of this report are the responsibility of Middlemarch. It should be noted that, whilst every effort is made to meet the client’s brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Middlemarch accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

CONTENTS

1. INTRODUCTION

1.1 PROJECT BACKGROUND

In June 2022, Heathrow NCP Property Limited commissioned Middlemarch to produce a Jersey Cudweed Mitigation Strategy associated with the commercial redevelopment of the site into an industrial estate with warehouse units and associated car parking areas.

The need for this strategy was identified in the Preliminary Ecological Appraisal which identified the presence of Jersey cudweed within the ephemeral/short perennial vegetation on site. This species is listed on Schedule 8 of the Wildlife and Countryside Act 1981 (as amended), making it unlawful to intentional pick, uproot, or destroy the wild plant or any seed or spore attached to the plant. A licence from Natural England is required before the site can be cleared, and a mitigation strategy is needed to obtain the licence.

Middlemarch has previously carried out a Preliminary Ecological Appraisal and Biodiversity Metric Assessment for Heathrow NCP Property Limited at this site. The findings of these surveys are detailed in Reports RT-MME-157814-01 Rev A and RT-MME-157814-02, respectively.

The overall aim of the mitigation strategy is to outline the translocation, establishment and management practices that will be undertaken in order to conserve the population of Jersey cudweed at the site.

1.2 SITE DESCRIPTION AND CONTEXT

The site under consideration comprises an irregularly shaped parcel of land situated on Bath Road in West Drayton, within the London Borough of Hillingdon. It measures approximately 1.6 ha in size and is centred at National Grid Reference TQ 07445 77070.

At the time of the survey, the site comprised a large disused airport car park with a parcel of woodland along its southern border. A disused site was situated to the north and a residential neighbourhood to the west. Trees lined the site's eastern boundary, followed by a large, steep road verge descending onto the M4.

The wider landscape comprises a mix of industrial and residential development interspersed with green spaces and reservoirs. Heathrow airport's northern runway is situated 250 m south of the site and extensive fields are situated to the east and west.

1.3 DESCRIPTION OF DEVELOPMENT

It is understood that the proposals include the commercial redevelopment of the site into an industrial estate with warehouse units and associated car parking. The existing access road at the site's eastern boundary will be closed and a new access road will be created through the woodland to the south. Soft landscaping is proposed along the site boundaries.

1.4 DOCUMENTATION PROVIDED

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.1.

Document Name / Drawing Number	Author
22-008-01 Soft Landscape Proposals Rev C	EPD Landscaping

Table 1.1: Documentation Provided by Client

2. BASELINE AND LEGISLATION

This Chapter provides a summary of the current baseline status of Jersey cudweed on site, established during the Preliminary Ecological Appraisal outlined in Section 1.1. It also provides a summary of relevant legislation and the impacts that would occur should in the absence of the mitigation strategy.

2.1 CURRENT STATUS AND LOCATION

The Phase 1 Habitat Survey was undertaken on 13th May 2022 by Harry Stone (Ecological Consultant) and Zeina Farhat (Ecological Project Officer).

During this survey, approximately 73 Jersey Cudweed plants were recorded within the ephemeral/short perennial vegetation in the north of the site. These plants were localised to an area of approximately 64 m^2, centred at National Grid Reference: TQ 07447 77144 and What3Words: 'pounds.avoid.museum'.

Plate 1.1: Overview of Jersey cudweed on site

Plate 1.2: Jersey cudweed specimen on site

Plate 1.3: Jersey cudweed specimen on site

2.2 LEGISLATION

This species is listed on Schedule 8 of the Wildlife and Countryside Act 1981 (as amended), making it unlawful to intentional pick, uproot, or destroy the wild plant or any seed or spore attached to the plant.

A licence from Natural England is required before the site can be cleared, and a mitigation strategy is needed to obtain the licence.

2.3 SUMMARY OF IMPACTS WITHOUT MITIGATION

The proposals for the site indicate that the area where Jersey Cudweed was identified will be directly impacted as it is within the footprint of the new warehouse building.

Therefore, in the absence of a mitigation strategy for this species, the proposals for the site would result in the intentional uprooting and destruction of the wild Jersey cudweed plants and any seeds or spores attached to the plants.

The mitigation strategy outlined in Chapter 3 will ensure the conservation and ongoing success of the population on site.

3. MITIGATION STRATEGY

This Chapter provides details of the translocation, establishment and management practices that will be undertaken in order to conserve the population of Jersey cudweed at the site.

3.1 AIMS AND OBJECTIVES

- To conserve the population of Jersey cudweed at the site;
- To successfully translocate individual plants and their seedbanks;
- To ensure the ongoing success of the population through appropriate management and monitoring of the translocation zones; and,
- To compensate the loss of ephemeral / short perennial habitat (classified as 'Vacant/derelict land/bareground in good condition' under UKHAB/Biodiversity Metric 3.1).

3.2 TRANSLOCATION

The plants and their seedbanks will be translocated to two locations within the site: a 410 m^2 area in the north east of the site, and a 50 m^2 area in the south east of the site. The locations of the Jersey Cudweed translocation zones are shown on Drawing '22-008-01 Soft Landscape Proposals Rev C' in Chapter 4. Translocation to two areas insures against plant translocation failures.

The translocation zones should be prepared to replicate the conditions such as drainage and nutrient levels present at the location of the existing Jersey cudweed population. The substrate at the location of the existing Jersey cudweed populations should be removed and re-distributed across the translocation zones. The final substrate in the translocation zones should aim for a depth of approximately 120-200 mm. The substrate should be relatively shallow but deep enough for some water retention.

Dependent on the time of year, individual Jersey cudweed plants should be uprooted by and/or under the supervision of a suitably qualified ecologist. They should be translocated as immediately as possible into prepared suitable substrates.

3.3 ESTABLISHMENT

During the initial establishment phase, the translocated population may have slow initial growth as it recovers from the translocation process and settles within the new environment.

The area should be kept clear of bramble and other encroaching scrub species that risk shading out small ephemeral / short perennial plant species. Any scrub removal should be manual, and all herbicide, insecticide, fungicide and other chemical control measures are prohibited in the translocation areas.

3.4 FUTURE MANAGEMENT AND MONITORING

To ensure the ongoing success of the translocated Jersey Cudweed populations, the following should be adhered to:

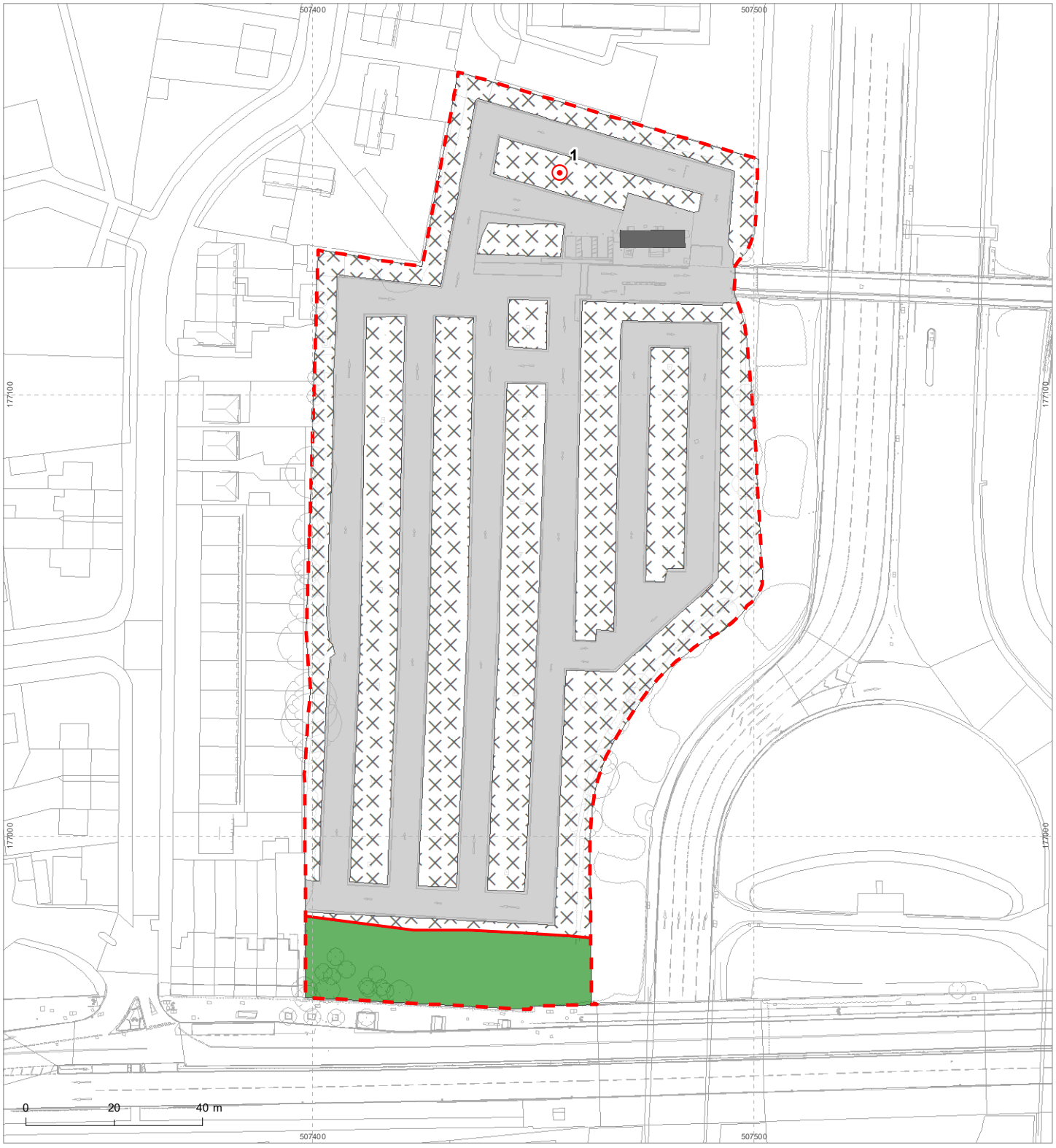
- Experimental ground disturbance (Gurney, 2004), such as raking or hoeing, is encouraged to maintain open conditions;
- Removal of encroaching scrub;
- No herbicides or other chemical control measures to be used within or adjacent to the translocation zones;
- No other organic material such as leaf, brash, soil or compost piles that would enrich substate should be piled or stored within the translocation zones;
- Removal of significant amounts of naturally occurring leaf litter or other organic matter to prevent enrichment; and,
- Erection of signage at the translocation to inform of the presence of Jersey cudweed and its legal protection to avoid any accidental negative impacts.

For the first 3 years post completion of the development and translocation / habitat establishment, the translocation zones should be surveyed annually by the licenced ecologist to assess the presence and abundance of Jersey cudweed and monitor the plant species present. The outcome of these surveys will be used to influence ongoing management practices if necessary.

4. DRAWINGS

Drawing C157814-01-01 – Phase 1 Habitat Map

Drawing 22-008-01 Soft Landscape Proposals Rev C



Legend

- Site boundary
- Wall
- Building
- Ephemeral/short-perennial
- Hardstanding
- Semi-natural broad-leaved woodland
- Target note
  - 1 Jersey cudweed *Gnaphalium luteoalbum*

Project	NCP Car Park, Bath Road, West Drayton, Greater London
Drawing	Phase 1 Habitat Map
Client	Aprirose Real Estate Investment
Drawing Number	C157814-01-01
Revision	00
Scale @ A4	1:1,250
Date	May 2022
Approved By	HS
Drawn By	RP

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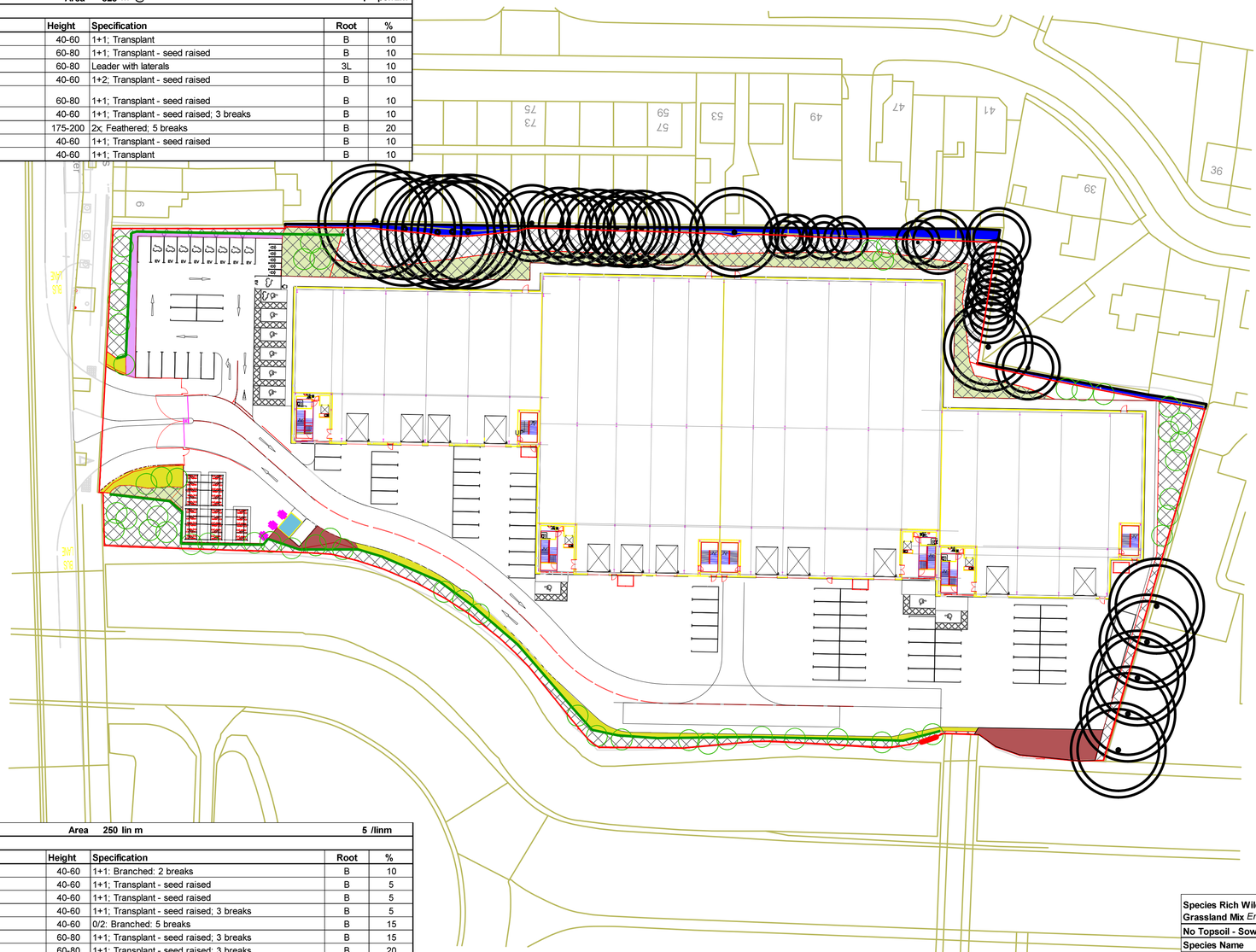
C157814-01-01

	Native woodland intermediate mix	Area	1162 m² @		2 per/m²
	Topsoil depth 300mm				
No.	**Species Name**	**Height**	**Specification**	**Root**	**%**
232	Corylus avellana	40-60	1+1; Branched: 2 breaks	B	10
465	Crataegus monogyna	40-60	1+1; Transplant - seed raised	B	20
232	Ilex aquifolium	60-80	Leader with laterals	3L	10
232	Rosa arvensis	40-60	1+1: Branched: 3 breaks	B	10
232	Rosa canina	60-80	1+1: Branched: 3 breaks	B	10
232	Malus sylvestris	60-80	1+1: Branched: 3 breaks	B	10
232	Sambucus nigra	60-80	1+1; Transplant - seed raised; 3 breaks	B	10
232	Viburnum lantana	60-80	1+2; Transplant - seed raised; 3 breaks	B	10
232	Viburnum opulus	60-80	1+2; Transplant - seed raised; 3 breaks	B	10

	Native woodland core mix	Area	828 m² @		1 per/2m²
	Topsoil depth 300mm				
No.	**Species Name**	**Height**	**Specification**	**Root**	**%**
41	Acer campestre	40-60	1+1; Transplant	B	10
41	Betula pendula	60-80	1+1; Transplant - seed raised	B	10
41	Ilex aquifolium	60-80	Leader with laterals	3L	10
41	Pinus sylvestris	40-60	1+2; Transplant - seed raised	B	10
41	Populus tremula	60-80	1+1; Transplant - seed raised	B	10
41	Prunus avium	40-60	1+1; Transplant - seed raised; 3 breaks	B	10
83	Quercus robur	175-200	2x Feathered; 5 breaks	B	20
41	Quercus robur	40-60	1+1; Transplant - seed raised	B	10
41	Ulmus glabra	40-60	1+1; Transplant	B	10

	Trees (Advanced heavy standards)				
No.	**Species Name**	**Height**	**Girth**	**Specification**	**Root**
5	Acer campestre	200-300	16-18	2x; Selected Standard; clear stem minimum 200cm; 4 breaks	RB
9	Betula utilis 'Jaquemontii' (Himalayan Birch)	200-300	16-18	2x; Selected Standard; clear stem 175-200cm; 5 breaks	RB
9	Carpinus betulus 'Fastigiata' (Fastigiate Hornbe	200-300	16-18	2x; Selected Standard; clear stem 175-200cm; 4 breaks	RB
9	Liquidambar styraciflua (Sweet Gum)	400-500	25-30	3x; Semi-mature; clear stem minimum 200cm	RB
9	Quercus robur 'Koster' (Koster (fastigiate) Oak	200-300	16-18	2x; Selected Standard; clear stem 175-200cm; 4 breaks	RB
13	Sorbus aria (Whitebeam)	200-300	16-18	2x; Selected Standard; clear stem 175-200cm; 4 breaks	RB



	Native mixed hedge	Area	250 lin m		5 /linm
	Topsoil depth 300mm				
No.	**Species Name**	**Height**	**Specification**	**Root**	**%**
125	Corylus avellana	40-60	1+1: Branched: 2 breaks	B	10
63	Crataegus laevigata	40-60	1+1; Transplant - seed raised	B	5
63	Crataegus monogyna	40-60	1+1; Transplant - seed raised	B	5
63	Euonymus europaeus	40-60	1+1; Transplant - seed raised; 3 breaks	B	5
188	Ligustrum ovalifolium	40-60	0/2: Branched: 5 breaks	B	15
188	Prunus spinosa	60-80	1+1; Transplant - seed raised; 3 breaks	B	15
250	Sambucus nigra	60-80	1+1; Transplant - seed raised; 3 breaks	B	20
63	Sorbus torminalis	60-80	1+2; Transplant - seed raised	B	5
125	Viburnum lantana	60-80	1+2; Transplant - seed raised; 3 breaks	B	10
125	Viburnum opulus	60-80	1+2; Transplant - seed raised; 3 breaks	B	10

	Ornamental groundcover mix	Area	100 m² @		5 per/m²
	Topsoil depth 300mm				
No.	**Species Name**	**Height**	**Specification**	**Root**	**%**
50	Berberis thunbergii 'Atropurpurea Nana'	15-20	Bushy: 3 breaks	2L	10
50	Bergenia 'Bressingham White'		Full pot	2L	10
50	Ceanothus thrysiflorus repens	30-40D	Bushy: 5 breaks	3L	10
50	Cornus alba "Spaethii"	40-60	0/1/1; Transplant-cutting raised; 3 brks	B	10
50	Euonymus fortunei 'Silver Queen'	15-20D	Bushy: 3 breaks	2L	10
50	Geranium 'Johnson's Blue'		Full pot	2L	10
50	Hebe 'Emerald Green'	20-30	Bushy: 3 breaks	2L	10
50	Prunus laurocerasus 'Zabeliana'	30-40D	Bushy: 3 breaks	3L	10
50	Rosa 'Nozomi'		Cutting: Bush: Strong	2L	10
50	Spiraea japonica 'Gold Mound'	30-40	Bushy: 6 breaks	3L	10

	Species Rich Wildflower Mix Meadow		m²
	Grassland Mix *Emorsgate EM4 for Clay Soils*	**Area 187**	@4g/m²
	No Topsoil - Sow seed directly into subsoil		
	Species Name		**%**
	Achillea millefolium	Yarrow	0.50%
	Betonica officinalis - Stachys officinalis)	Betony	1.00%
	Centaurea nigra	Common Knapweed	3.00%
	Galium verum	Lady's Bedstraw	1.50%
	Leucanthemum vulgare	Oxeye Daisy	1.00%
	Lotus conriculatus	Birdsfoot Trefoil	0.50%
	Plantago lanceolata	Ribwort Plantain	2.60%
	Primula veris	Cowslip	0.30%
	Prunella vulgaris	Selfheal	2.00%
	Ranunculus acris	Meadow Buttercup	3.00%
	Rhinanthus minor	Yellow Rattle	1.50%
	Rumex acetosa	Common Sorrel	1.50%
	Silene flos-cuculi - (Lychnis flos-cuculi)	Ragged Robin	0.10%
	Trifolium pratense	Wild Red Clover	0.10%
	Vicia cracca	Tufted Vetch	1.40%
	Agrostis capillaris	Common Bent	8.00%
	Cynosurus cristatus	Crested Dogstail	40.00%
	Festuca rubra	Slender-creeping Red-fescue	28.00%
	Phleum bertolonii	Smaller Cat's-tail	4.00%

Notes

Key

- Existing Trees
- Individual Trees
- Native Woodland Edge Mix
- Native Woodland Intermediate Mix
- Ornamental Groundcover Planting
- Native Hedge
- Species Rich Wildflower Meadow
- Ephemeral / short perennial vegetation- Jersey cudweed translocation zone

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Rev.	Amendment note	Drawn	Date	Auth'd
C	Revised site layout Chetwoods P5 layout amendment for Jersey Cudweed	KG	07.07.22	
B	Revised site layout	KG	01.07.22	
A	Revised site layout	KG	22.06.22	

Client

Heathrow NCP Property Limited

Project

Industrial development Bath Road Sipson

Title

Soft Landscape Proposals

Project No.		Drg. No.	Rev.
22-008		001	C
Date	Scale	Drawn	Checked
09.06.22	1:500 @ A1	KG	ES

Purpose of Issue

Planning

epd landscape

Glendale Countryside Limited
The Stables, Duxbury Park,
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Tel: 01257 460 461 www.epdlandscape.co.uk

5. REFERENCES

Department for Environment Food and Rural Affairs (2021). *Reintroductions and other conservation translocations: code and guidance for England: Version 1.1.* Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1031279/Reintroductions_and_other_conservation_translocations_code_and_guidance_for_England_v1.1.pdf

Gurney, M. (2004). *Jersey Cudweed Gnaphalium luteoalbum L. at Dungeness RSPB Reserve, East Kent*. WATSONIA-KINGS LYNN-BOTANICAL SOCIETY OF THE BRITISH ISLES-, 25(1), 107-113.

Middlemarch Environmental Limited (2022). *Preliminary Ecological Appraisal: NCP Car Park, Bath Road, West Drayton, Greater London.* Report RT-MME-157814-01 Rev A.

Middlemarch Environmental Limited (2022). *Biodiversity Metric Assessment: NCP Car Park, Bath Road, West Drayton, Greater London.* Report RT-MME-157814-02.