LIDL HAVANT

Biodiversity Net Gain Report

BNG Report
ECO 20262
July 2024

Document status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
1	Final	Georgia Kelly	Elizabeth White	Elizabeth White	April 2024
2	Final	Georgia Kelly	Elizabeth White	Elizabeth White	July 2024

Approval for issue

Elizabeth White	16 July 2024

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Contents

1 INTRODUCTION 2
1.1 Purpose and Scope of this Report 2
1.2 Background 2

2 PRE-DEVELOPMENT SITE 3
2.1 Baseline Habitats 3
Artificial unvegetated, unsealed surface 3
Developed land, sealed surface 3
Broadleaved Woodland 3
Mixed Scrub 3
Broadleaved Tree 3
2.2 Baseline Habitat Unit Score 3

3 POST-DEVELOPMENT SITE 4
3.1 Habitats within the Development 4
Developed land; sealed surface 4
Artificial unvegetated, unsealed surface 4
Introduced shrub 4
Mixed scrub 4
Modified grassland – flowering lawn mixture 5
Modified grassland – shade tolerant mixture 5
Urban tree 5

4 CONCLUSIONS 6

REFERENCES 7

Figures

Figure 1 Baseline Habitat Plan 8
Figure 2 Landscape Strategy Plan 8
Figure 3 Previous Consented Scheme Landscape Strategy Plan 8

1 INTRODUCTION

1.1 Purpose and Scope of this Report

1.1.1 RPS was commissioned by Lidl Great Britain Limited to undertake an assessment of Biodiversity Net Gain (BNG), at the proposed site of a new Lidl store, located off Purbrook Way, Havant, Hampshire.

1.1.2 The Statutory Biodiversity Metric provides a comparison of the values (as defined by the Habitat Unit, River Unit and Hedgerow Unit scores) of the site prior to development and following development, habitat creation and enhancement.

1.1.3 This assessment takes into account Habitat Units only as there are no watercourses or hedgerows within the pre-development or post-development site.

1.1.4 Habitat Units are calculated based on the habitat type, area, distinctiveness, condition, ecological connectivity and strategic significance. For enhanced or created habitats the time required and difficulty of establishing the habitat are also taken into consideration.

1.1.5 The assessment for the Lidl Havant development has been undertaken in the Statutory Biodiversity Metric excel spreadsheet supplied alongside this report.

1.1.6 This report provides details of the following:

- The baseline habitats present within the site and the Habitat Unit score
- The habitats which will be created or retained within the post-development site and the Habitat Units score
- A comparison of the baseline and post-development Habitat Unit scores.

1.2 Background

1.2.1 The site is located to the north-west of Havant (OS grid reference SU 6941 0778). The site is bordered by B&Q to the east, Purbrook Way to the south, and the B&Q access road to the north and west. Generally, the surrounding area is urban in character, although north of the site is Neville's Park Wood.

1.2.2 The site comprises an area of land for which planning permission was previously granted (planning application ref APP/20/01221). After planning permission was granted habitat clearance works were undertaken at the site in autumn 2023 under ecological supervision (RPS, 2024).

1.2.3 Prior to clearance works, a Preliminary Ecological Appraisal (PEA), a dormouse survey and a bat survey of the site was undertaken by RPS throughout 2020 - 2021 (RPS, 2020 and RPS, 2012).

2 PRE-DEVELOPMENT SITE

2.1 Baseline Habitats

2.1.1 Following the clearance the current site consists predominantly of artificial unvegetated, unsealed surface and broadleaved woodland. The baseline habitats within the site are shown on Figure 1.

Artificial unvegetated, unsealed surface

2.1.2 The artificial unvegetated, unsealed surface covers 0.961 ha.

Developed land, sealed surface

2.1.3 At the east of the site is a road into the adjoining retail area covering 0.075 ha.

Broadleaved Woodland

2.1.4 The broadleaved woodland covers 0.1789 ha and is located at the south of the site. The woodland consists of young to semi-mature trees including white poplar *Populus alba*, wild cherry *Prunus avium*, ash *Fraxinus excelsior*, white willow *Salix alba* and goat willow *Salix caprea*. Smaller hawthorn *Crateagus monogyna*, willow, silver birch *Betula pendula* and holly *Ilex aquifolium* shrubs are present throughout. The woodland is classified as 'Other woodland; broadleaved' in 'Poor' condition.

Mixed Scrub

2.1.5 The mixed scrub covers 0.0624 ha and is located at the east of the site. The scrub consists of hawthorn, Scots pine *Pinus sylvestris,* turkey oak *Quercus cerris,* wild cherry *Prunus avium* and goat willow *Salix caprea*. The scrub is classified as 'Heathland and scrub; mixed scrub' in 'Poor' condition.

Broadleaved Tree

2.1.6 A single Scot's pine tree is present at the east of the site. The tree is classified as an 'Urban tree' in 'Good' condition and covers 0.0163 ha.

2.2 Baseline Habitat Unit Score

2.2.1 The baseline site achieves a score of **1.16 Habitat Units.**

3 POST-DEVELOPMENT SITE

3.1 Habitats within the Development

3.1.1 The proposed development will comprise a new Lidl store, consisting of a building, a car park, retaining structures and pedestrian footpath/cycleway and associated infrastructure with areas of landscaping around the perimeter.

3.1.2 The majority of the broadleaved woodland at the south of the site will be retained and new areas of shrubs and grassland will be planted / sown.

3.1.3 The extent of the habitats are shown on the Landscape Strategy Plan (Figure 2) and described below.

3.1.4 The new site proposals will retain a greater number of trees and create a greater extent of scrub than the previous consented scheme (Figure 3). There will also be a larger area of native scrub created and a larger area of shade-tolerant grassland.

Developed land; sealed surface

3.1.5 The majority of the site will comprise the new Lidl store and car park.

3.1.6 In total 0.6919 ha of 'Developed land, sealed surface' will be created post-development. This would deliver **0.00 habitat units.**

Artificial unvegetated, unsealed surface

3.1.7 An area of bark mulch will be created at the east of the site and a small area of gravel will be created at the west of the site.

3.1.8 In total 0.001 ha of 'Artificial unvegetated, unsealed surface' will be created post-development. This would deliver **0.00 habitat units.**

Introduced shrub

3.1.9 Sections of non-native shrubs and herbaceous planting will be planted around the perimeter of the car park. Species will include Hebe 'White Gem', *Euonymus fortunei* 'Emerald 'n' Gold', *Cornus stolonifera* 'Kelseyi' and *Hedera helix* 'Schafer Three', *Lonicera pileata* 'Loughgall Evergreen' and *Juniperus horizontalis* 'Wiltonii'.

3.1.10 In total 0.038 ha of 'Introduced shrub' will be created post-development. This would deliver **0.07 habitat units.**

Mixed scrub

3.1.11 Several sections of mixed native shrubs will be planted across the site. One of the sections will partially replace the mixed scrub removed during construction, while the second will comprise a new area of mixed scrub to the south.

3.1.12 The following species will be planted: wild privet *Ligustrum vulgare*, hazel *Corylus avellana*, blackthorn *Prunus spinosa*, holly *Ilex aquifolium*, guelder rose *Viburnum opulus* and dog rose *Rosa canina*.

3.1.13 In total 0.0529 ha of 'Mixed scrub' will be created post-development. This would deliver **0.20 habitat units.**

3.1.14 A small area (0.021 ha) of native groundcover mix is also being provided. This would deliver **0.07 habitat units.**

Modified grassland – flowering lawn mixture

3.1.15 Areas of flowering lawn will be sown around the northern and western site boundaries, using the Emorsgate seed mixture EL1 or similar and approved.

3.1.16 This seed mix provides a good distinctiveness grassland, and it has been assumed that a "Moderate" condition will be achieved for the purposes of BNG assessment.

3.1.17 To achieve moderate condition, this habitat will achieve between 3-4 of the criteria listed in Table 3.1, of which Criterion 1 is essential.

3.1.18 In total 0.039 ha of 'Modified grassland' will be created post-development, delivering **0.14 habitat units.**

Modified grassland – shade tolerant mixture

3.1.19 A shade tolerant flowering mixture will be sown at the south of the site adjoining the retained woodland. The area will be sown with Emorsgate seed mixture EH1 or similar and approved.

3.1.20 This seed mix provides a good distinctiveness grassland, and it has been assumed that a "Moderate" condition will be achieved for the purposes of BNG assessment.

3.1.21 To achieve moderate condition, this habitat will achieve between 3-4 of the criteria listed in Table 3.1, of which Criterion 1 is essential.

3.1.22 The creation of 0.1854 ha 'Modified grassland' will be created, delivering **0.64 habitat units**.

Table 3.1: Habitat condition criteria for modified grassland

Criterion no.	Criterion
1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type. Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward. **NB - This criterion is essential for achieving moderate condition (non-acid grassland types only).**
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.
3	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition1 and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area.
6	There are greater than 9 species per metre squared. **NB - This criterion is essential for achieving good condition (non-acid grassland types only).**

Urban tree

3.1.23 A total of 27 broadleaved trees will be planted throughout the site. A total of six species will be planted including: *Carpinus betulus* 'Lucas', *Acer campestre* 'Streetwise' and *Betula pendula* 'Tristis'.

3.1.24 The creation of 0.1099 ha of 'Poor' urban trees delivers **0.31 habitat units**.

4 CONCLUSIONS

4.1.1 The baseline site largely comprises artificial unvegetated, unsealed surface which will be lost, and broadleaved woodland and mixed scrub of which some will be removed to facilitate the development.

4.1.2 The post-development plans for the site include the planting of areas of introduced shrubs, scattered trees and buffer planting. Areas of grassland will be created using two different grassland mixtures selected to suit the conditions of each area.

4.1.3 The development requires the loss of a small section of woodland to create a footpath/cycleway into the site from the south. Given the required footprint for the built infrastructure and the requirement for retaining walls along the perimeter of the site it will be difficult to create new areas of woodland within the site, instead areas of native shrub planting have been provided. However, as such the Statutory Metric Trading Rules for Woodland are not met and there is a Habitat Unit shortfall of **0.23** A2 units. The Habitat Unit shortfall may be compensated for via purchasing Habitat Units or Statutory Credits.

4.1.4 The assessment above indicates that the development proposals will deliver a net gain of **94.23%** for habitats.

4.1.5 The total habitat units post-development delivered by the proposals is **2.25** units which is **1.09** units more than the baseline of 1.16 units.

REFERENCES

RPS (2020). Lidl: Land off of Purbrook Way, Havant, Hampshire – Preliminary Ecological Appraisal.

RPS (2021). Lidl: Land off of Purbrook Way, Havant, Hampshire – Dormouse and Bat Survey Report.

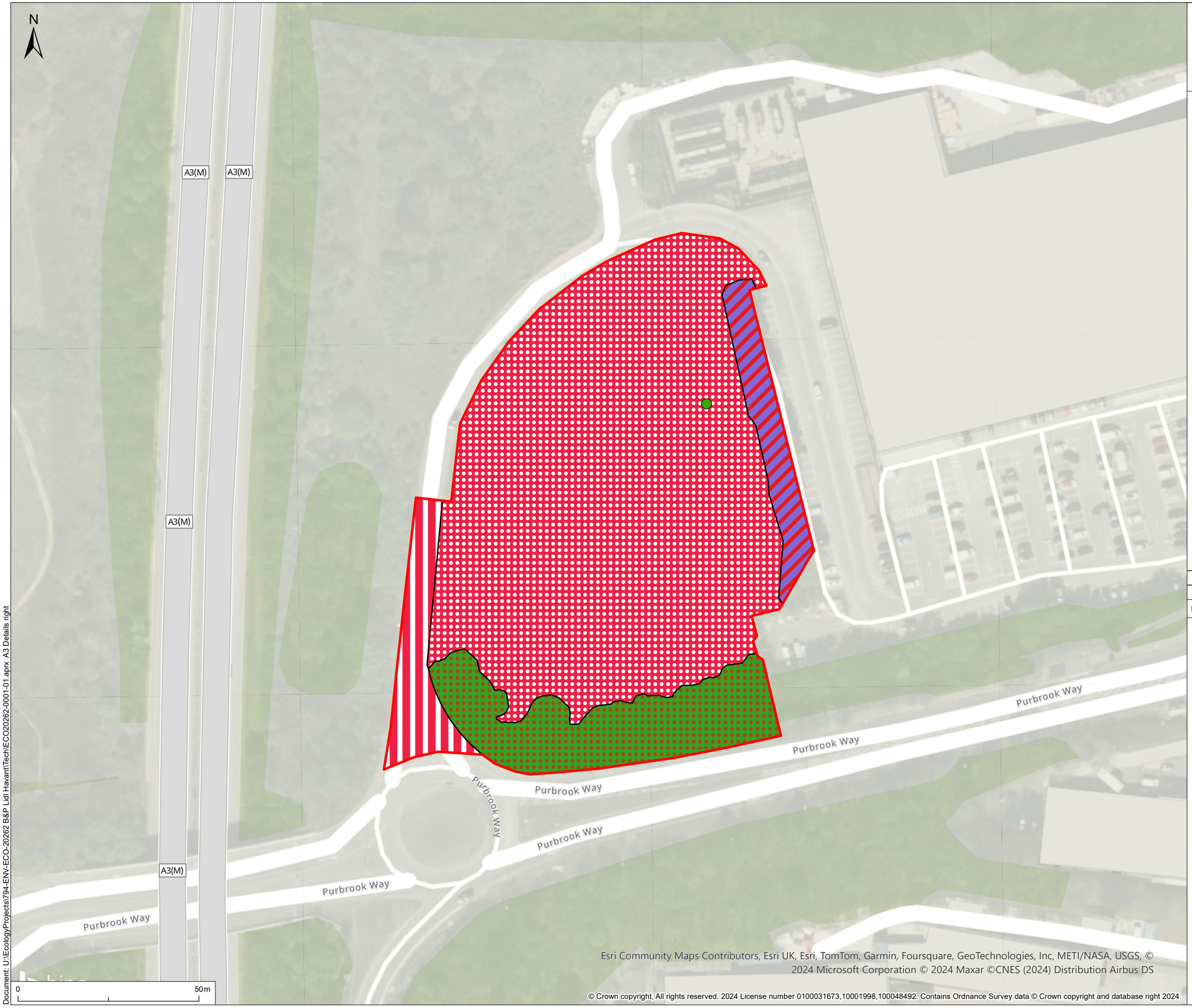
RPS (2024). Lidl: Land off of Purbrook Way, Havant, Hampshire – Technical Note: Habitat Clearance.

FIGURES

Figure 1 Baseline Habitat Plan

Figure 2 Landscape Strategy Plan

Figure 3 Previous Consented Scheme Landscape Strategy Plan



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Legend

- Site boundary
- u 32 - Scattered urban tree
- u1c - Artificial unvegetated unsealed surface
- w1g - Other woodland - broadleaved
- u1b - Developed land - sealed surface
- h3h - Mixed scrub

Rev	Description	By	CB	Date

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Project: Lidl Havant

Title: Baseline Habitats

Status	Drawn By	PM/Checked By
Draft	LP	GK/EW
Project Number	**Scale @ A3**	**Date Created**
ECO20262	1:1,000	09/04/24
Figure Number		**Rev**
1		01

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PLANT SCHEDULE

Tree Planting

RPS Tree Planting

No.	Abb. Text	Species	Form	Age	Girth	Height	Clear Stem	Root
1	Acr cm S	Acer campestre 'Streetwise'	Standard (Extra Heavy)	3x	18-20cm	450-500cm	min 200cm	RB
11	Be pnd T	Betula pendula 'Fastigiata'	Standard (Extra Heavy)	3x	16-18cm	400-450cm	min 200cm	RB
14	Crpns bt L	Carpinus betulus 'Lucas'	Standard (Extra Heavy)	3x	16-18cm	400-450cm	min 200cm	RB
1	Prs sy	Pinus sylvestris		5x		250-300cm	-	RB
3	Prn srg Rnc	Prunus sargentii 'Rancho'	Standard (Extra Heavy)	3x	18-20cm	450-500cm	min 200cm	RB
4	Tl cor R	Tilia cordata 'Rancho'	Standard (Extra Heavy)	3x	16-18cm	400-450cm	min 200cm	RB
37								

Native Shrub / Groundcover Planting

Native Shrub Infill Mix

Qty	Abb. Text	Species	Height	Habit	Age	Root	Container	Centres	Mix %
79	Cryls av	Corylus avellana	80-80cm	Branched	1/2	B		1.000	15.00 %
79	Il aq	Ilex aquifolium	60-80cm	Leader & Laterals	-	C	3L	1.000	15.00 %
159	Lgs vl	Ligustrum vulgare	60-80cm	Branched	-	C	3L	1.000	30.00 %
106	Prns sp	Prunus spinosa	40-80cm	Branched	1/1	B	-	1.000	20.00 %
26	Ra cn	Rosa canina	60-80cm	Branched	1/1	B		1.000	5.00 %
79	Vb op	Viburnum opulus	60-80cm	Branched	1/2	B		1.000	15.00 %
529									

Native Groundcover Mix

Qty	Abb. Text	Species	Container	Root	Height	Habit	Centres (m)	Mix %
168	Grn R	Geranium 'Rozanne'	2L	C			0.500	20.00 %
172	Hdr N	Hedera helix	3L	C	60-80cm	Several Shoots	0.700	40.00 %
172	Hdr H N	Hedera helix 'Hibernica'	3L	C	60-80cm	Several Shoots	0.700	40.00 %
512								

Shrub / Herbaceous Planting

Havant Mix A

Qty	Abb. Text	Species	Container	Root	Height	Habit	%age Mix
81	Hb pn P	Hebe pinguifolia 'Pagei'	3L	C	20-30cm(D)	Bushy	50.00 %
81	Hb vr	Hebe rerricosa	3L	C	30-35cm	Bushy	50.00 %
162							

Havant Mix B

Qty	Abb. Text	Species	Container	Root	Height	Habit	%age Mix
104	Eny fr EnG	Euonymus fortunei 'Emerald 'n' Gold'	3L	C	20-30cm(D)	Bushy	50.00 %
104	Eny fr H	Euonymus fortunei 'Harlequin'	3L	C	25-30cm(D)	Bushy	50.00 %
208							

Havant Mix C

Qty	Abb. Text	Species	Container	Root	Height	Habit	%age Mix
220	Hb WG	Hebe 'White Gem'	5-7.5L	C	30-40cm	Bushy	40.00 %
165	Lvn an R	Lavandula angustifolia 'Rosea'	5-7.5L	C	30-40cm	Bushy	30.00 %
330	Prv at BS	Perovskia atriplicifolia 'Blue Spire'	3L	C	30-40cm	Bushy	30.00 %
715							

Havant Mix D

Qty	Abb. Text	Species	Container	Root	Height	Habit	%age Mix
69	Brchyg S	Brachyglottis 'Sunshine'	3L	C	30-40cm	Branched	35.00 %
84	Crdh fr R	Ceanothus thyrsiflorus 'Repens'	3L	C	30-40cm(D)	Bushy	35.00 %
89	Snt ch	Santolina chamaecyparissus	5-7.5L	C	30-40cm	Bushy	30.00 %
252							

Havant Mix F

Qty	Abb. Text	Species	Container	Root	Height	Habit	%age Mix
28	Eard DR	Escallonia 'Donard Radiance'	3L	C	40-60cm	Bushy	50.00 %
40	Wg fl V	Weigela florida 'Variegata'	3L	C	40-60cm	Branched	50.00 %
68							

Havant Mix G

Qty	Abb. Text	Species	Container	Root	Height	Habit	%age Mix
21	Chay fr S	Choisya ternata 'Sundance'	3L	C	30-40cm	Bushy	35.00 %
15	Crdh BM	Ceanothus 'Blue Mound'	3L	C	30-40cm(D)	Bushy	35.00 %
13	Prns lauro OL	Prunus laurocerasus 'Otto Luyken'	3L	C	30-40cm	Bushy	30.00 %
49							

Havant Mix H

Qty	Abb. Text	Species	Container	Root	Height	Habit	%age Mix
82	Crns st K	Cornus stolonifera 'Kelseyi'	3L	C	20-40cm		30.00 %
79	Lnc pl	Lonicera pileata	3L	C	30-40cm(D)	Bushy	40.00 %
82	Src hm	Sarcococca humilis	3L	C	20-25cm	Bushy	30.00 %
240							

Havant Mix K

Qty	Abb. Text	Species	Container	Root	Height	Habit	%age Mix
49	Crns sn MWF	Cornus sanguinea 'Mid-Winter Fire'	3L	C	40-60cm	Branched	50.00 %
49	Crns sn WB	Cornus sanguinea 'Winter Beauty'	3L	C	40-60cm	Branched	50.00 %
98							

Havant Mix L

Qty	Abb. Text	Species	Container	Root	Height	Habit	%age Mix
21	Pyrs ccc RC	Pyracantha coccinea 'Red Cushion'	3L	C	30-40cm(D)	Bushy	50.00 %
21	Pyrc OC	Pyracantha 'Orange Charmer'	3L	C	40-60cm	Several Shoots	50.00 %
42							

Havant Mix M

Qty	Abb. Text	Species	Container	Root	Height	Habit	%age Mix
36	Brb fr A	Berberis frikartii 'Amstelveen'	3L	C	25-30cm	Bushy	50.00 %
36	Brb md P	Berberis media 'Parkjuweel'	3L	C	25-30cm	Bushy	50.00 %
72							

Seed Mixes

EH1 Hedgerow Mixture
(sow at 40 kg / hectare or 4g / m2)

Composition:
Emorsgate EH1 (or equal approved) contains wild flowers and grasses that are tolerant of light shade and is suitable for sowing beneath newly planted or established hedges and on woodland edges, rides and glades.

Wildflowers (30%)

%	Latin name	Common name
6.5	Achillea millefolium	Yarrow
1.2	Agrimonia eupatoria	Agrimony
4.4	Anthriscus sylvestris	Cow Parsley
6.4	Bellorica officinalis - (Glaucyo officinalis)	Betony
1.8	Centaurea nigra	Common Knapweed
2.0	Dipsacus fullonum sylvestris	Wild Teasel
2.0	Galium album - (Galium mollugo)	Hedge Bedstraw
1.5	Galium verum	Lady's Bedstraw
1.0	Geranium pratense	Meadow Crane's-bill
0.6	Hypericum perforatum	Perforate St John's Wort
0.3	Lathyrus sylvestris	Narrow-leaved Everlasting-pea
1.0	Leucanthemum vulgare	Ox-eye Daisy - (Moon Daisy)
0.5	Origanum vulgare	Wild Marjoram
0.7	Plantago lanceolata	Ribwort Plantain
1.0	Prunella vulgaris	Self Heal
2.0	Silene dioica	Red Campion
0.5	Silene latifolia	White Campion
1.0	Stachys sylvatica	Hedge Woundwort
0.5	Verbascum thapsus	Great Mullein
0.5	Vicia cracca	Tufted Vetch
0.8	Vicia sativa ssp. segetalis	Common Vetch

Grasses (80%)

%	Latin name	Common name
1.0	Agrostis capillaris	Common Bent
2.0	Anthoxanthum odoratum	Sweet Vernal-grass (w)
7.0	Brachypodium sylvaticum	False Brome (w)
20.0	Cynosurus cristatus	Crested Dogstail
2.0	Festuca arundinacea	Tall Fescue (w)
28.0	Festuca rubra	Slender-creeping Red-fescue
12.0	Poa nemoralis	Wood Meadow-grass

EL1 Flowering Lawn Mixture
(sow at 40 kg / hectare or 4g / m2)

Composition:
Emorsgate EL1 (or equal approved) contains slow growing grasses with a selection of wild flowers that respond well to regular short mowing.

Wild Flowers (30%)

%	Latin name	Common name
1.0	Bellis perennis	Common Daisy
4.0	Leontodon hispidus	Rough Hawkbit
1.0	Leucanthemum vulgare	Oxeye Daisy - (Moon Daisy)
3.0	Lotus corniculatus	Birdsfoot Trefoil
1.0	Prunella vulgaris	Selfheal
3.0	Ranunculus acris	Meadow Buttercup
0.3	Trifolium pratense	Wild Red Clover

Grasses (70%)

%	Latin name	Common name
10.0	Agrostis capillaris	Common Bent
40.0	Cynosurus cristatus	Crested Dogstail
28.0	Festuca rubra	Red Fescue
4.0	Phleum bertolonii	Smaller Cat's-tail

PLANTING SPECIFICATION

EXISTING TREES AND SHRUBS

Where existing trees & shrubs are to be retained they should be subject to a full arboricultural inspection for safety. Any surgery required shall be in accordance with BS 3998 (2010) 'Tree Work - Recommendations', shall comply with any existing T.P.O requirements and shall require the prior approval of the Landscape Architect.

Avoid damage to branches, trunks and roots of trees. All existing trees & hedges to be retained are subject to BS 5837 (2012) 'Trees in relation to design, demolition and construction - Recommendations', and should be fully fenced off, prior to the commencement of any works, in accordance with Figure 2 (p20) at the full extent of the root protection area, as determined by section 4.6 (p10-11) and Annex D (p40).

No storage of materials, disposal of rubbish, site fires, spillage of oil and chemicals, ground compaction, excavation or changes in level shall be carried out within existing tree / hedge canopies.

New shrub planting pits below existing trees to be hand dug to avoid conflict with tree roots. Avoid increasing ground levels below existing trees. Free-draining, neutral acidity topsoil (e.g. with a high sand content), should be employed to achieve the minimum 450mm depth growing medium.

PLANTING

All plants and planting to comply with the requirements of all current / relevant British Standard specifications including BS 8545 (2014) 'Trees from Nursery to Independence in the Landscape', BS 3936: Part 1 (1992), Part 2 (1990) and Part 4 (2007) and BS 4043 (1989) where applicable, BS 4428 (1989). All plants to be supplied in accordance with the plant schedule and with regard to imported stock and notifiable diseases within the Plant Health Act 1967 (revised 2009). Any plant material planted outside the recognised planting season (Nov-Feb), to be containerised stock and supplied at the sizes specified. Where possible, trees and shrubs of UK provenance are preferred.

TREE PLANTING

A suitable method of foundation allowing for existing ground conditions is to be provided to accommodate the proposed tree planting. All trees are to be planted as shown ensuring a minimum of 5 metres from buildings and 3 metres from drainage and services. Where necessary, root barriers to be installed (supplier GreenBlue Urban Ltd or equal approval), as recommended by structural engineer. Allow for the use of container grown stock during the period 1 April to 31 October, and field grown stock from 1 November to 31 March.

NOTE: BELOW GROUND PREPARATION OF ALL TREE PITS IS TO BE AGREED WITH LOCAL AUTHORITY TREE OFFICER PRIOR TO INSTALLATION. WHERE TREES ARE PLANTED WITHIN OR DIRECTLY ADJACENT HARD PAVED AREAS, SUFFICIENT ROOTING VOLUME MUST BE PROVIDED INCLUDING (IF REQD) THE USE OF A MODULAR CELL STRUCTURE SUCH AS SILVACELL (OR EQUAL APPROVED)

SHRUB PLANTING

Where a shrub planting mix has been specified, plants to be grouped in 3 No. (min.) to 7 No. (max.) single species groups. Larger species to be located towards the rear of planting beds (i.e. where against a screen wall / house frontage), or towards the centre of an island planting bed. Thorny species to be located centrally within the planting bed. **Banks with a gradient exceeding 1:3 to include a cellular soil confinement system (e.g. Greenfix geoweb, or equal approved).**

RABBIT PROTECTION

Contractor to assess site for presence of rabbits. If rabbits are present, contractor is to provide rabbit proof fencing to either a) the entire site boundary, or b) the boundary of all planting beds. Contractor to ensure all existing and new vegetation (ornamental and native) and seeding is protected.

TOPSOIL REQUIREMENTS

To BS 3882 (2015) 'Specification for topsoil' as qualified by full contract specification. All areas shall be cultivated to a minimum depth of 150mm. Full weed, rubbish and stones over 20mm gauge shall be removed. Earth to be rolled as required and raked in two directions. Applied to all newly planted areas (except wildflower / meadow planting), to manufacturers' recommendations where appropriate. Full analysis of existing and imported topsoil required prior to use.

Shrub / structure planting beds	-	450mm depth
Heavy standard tree pits	-	1500mm dia. x 450mm depth (Note: 450mm depth subsoil to be provided below)
Grass areas	-	100mm depth

Where necessary increase tree pit dimensions to ensure that tree pits are at least 75mm deeper and 150mm wider than rootball. Break up bottom of pits to a depth of 150mm. Compacted glazed sides of pits should be roughened.

TOPSOIL IMPROVEMENTS

Applied to all newly planted areas, to manufacturers' recommendations where appropriate:

1) Incorporate 75mm depth of soil conditioner into topsoil during cultivation;
2) Incorporate Enmag CRF granular fertilizer at approx 140g per pit to standard tree pit backfill and 70g per pit to structural / ornamental shrub planting;
3) Watering - supply minimum 54 litres / tree + 4.5 litres/shrub at planting;
4) Mulch - After weeding and watering, lightly fork over planted areas before applying a min. 70mm depth 50-100mm grade bark mulch. Ornamental Bark to consist of predominantly matured British Pine Bark with an even nominal particle size distribution of 5-30mm with 0% dust & fines & less than 5% wood content. The product shall be pest, disease & weed free & not have been treated with Methyl Bromide or any additives. The product shall have been tested in accordance with the requirements of BS 4790:1987, for fire resistance.
5) Geotextile membrane to be installed between topsoil and bark mulch, with min. 200mm overlap and holes cut for planting. Sufficient pegs to be installed to prevent membrane from lifting. Main Contractor to ensure back mulch is retained in place on sloping ground.

PLANT MATERIAL TREATMENT

NB All to be British grown stock and fully hardened off.

Root Dip:	-	Proprietary Root Dip applied to all bare rooted stock (1) at time of lifting at nursery and (2) prior to planting.
Anti-Dessicant:	-	Proprietary anti-dessicant to be applied to foliage of all containerised / rootballed material in leaf, specimen conifers and evergreens etc. (1) prior to transportation and (2) during any delay in planting.
Pruning:	-	Allow for pruning of all deciduous trees and shrubs by 1/3rd following planting at Landscape Architects direction or as indicated in the planting schedule.
Tree Stakes:	-	Stakes to be pressure treated, round, smooth and peeled Larch or Chestnut, not less than 100mm in diameter. Advanced nursery stock - double staked with cross bar.

TURFED AREAS

Turf to BS 3969 (1998+A1:2013) 'Recommendations for Turf for general purposes' from an approved source. When topsoil is reasonably dry and workable, grade to smooth, flowing contours removing all minor hollows and ridges. Cultivate soil to full depth and break up any compacted topsoil. Apply approved herbicide to control perennial weeds and allow period of time to elapse as recommended by manufacturer before final cultivation. Apply proprietary fertiliser. Reduce top 25mm topsoil to a fine tilth by further cultivation. Remove stones exceeding 50mm in any dimension. Lay turf with broken joints, well butted up, working from planks laid on previously laid turves, during appropriate season and weather conditions. Adjust levels by raking out or filling with fine soil under turves. Consolidate by lightly and evenly firming with wooden beaters as laying proceeds. Do not use rollers. Dress turf with fine topsoil and brush in to fill joints. Thoroughly water completed turf within 24 hours of laying.

TURFED AREAS: ESTABLISHMENT CUT

Water all grass areas to maintain healthy growth. When grass is 50mm high remove debris, litter and any stones later in dry conditions cut grass to between 25-30mm. Remove and dispose of all arisings.

SEEDED AREAS

Seeding generally to BS 4428 (1998) 'Code of practice for general landscape operations'. When topsoil is reasonably dry and workable grade to smooth flowing contours removing all hollows and ridges. Cultivate soil to full depth and break up any compacted topsoil. Apply approved herbicide to control perennial weeds and allow period of time to elapse as recommended by manufacturer before final cultivation. Apply proprietary pre-seeding fertiliser. Reduce top 25mm of topsoil to a fine tilth by further cultivation. Remove stones exceeding 50mm in any dimension. Sow approved grass seed mixture in accordance with suppliers recommendations during appropriate season and weather conditions, e.g. Germinal (www.germinal.com) Mix A2 (Quality Lawn) (or equal approved) at 50gms/m2. Lightly harrow or rake then roll and cross-roll with lightweight roller.

Banks with a gradient exceeding 1:3 to include a cellular soil confinement system (e.g. Greenfix geoweb, or equal approved) and to be hydroseeded.

SEEDED AREAS: ESTABLISHMENT CUT

When grass is between 40-75mm high remove stones and debris exceeding 50mm in any dimension and roll with a lightweight roller. About 48 hours later cut grass to approximately 35mm high. Remove and dispose of all arisings.

PROTECTIVE FENCING

The contractor shall maintain fencing until all site works are completed. The contractor will then remove the fencing and reinstate the ground. The fencing will remain the property of the contractor. Within the area so fenced, the existing ground level shall be neither raised nor lowered, all excavations shall then be carried out by hand. The Local Planning Authority shall be advised in writing when the protective fencing has been erected so that it can be checked on site before development commences, and shall thereafter be maintained during the period of construction.

MAINTENANCE

Regular visits (minimum 20 No.) required during the defects liability / rectification period to maintain all planted areas in a weed and litter free condition using a combination of chemical spray and hand weeding to be agreed with the Landscape Architect. Any plant found to be dead, dying or otherwise defective shall be replaced during the next planting season. Maintenance to include watering, pruning, pest and disease control and re-mulching as required. Watering shall be carried out as necessary to maintain healthy growth, and where possible should adhere to Annex G of BS 5542:2014. Final visit to be immediately prior to handing over and to include a fertilizer treatment of Enmag CRF granular fertilizer (6:20:10) at 100g/m2 and 25mm depth bark mulch top up to all planted areas.

SAFETY PRECAUTIONS

The landscape sub-contractor is to take all safety precautions to prevent any injury to any persons. The landscape sub-contractor shall comply with the requirements of the Health & Safety at Work Act 1974 and current Construction, Design and Management Regulations (2015).

WILDFLOWER MANAGEMENT

Do not use fertiliser

Control weeds before sowing. Annual weeds may be hoed, buried or killed with a contact herbicide. Perennial weeds should be eradicated by a translocated glyphosate-based herbicide.

Sow mixtures either from early March to early May, or from early August to mid September; cultivate the ground to provide a fine, weed free seed bed, firm if necessary. Sow evenly at 4gms / m2, thoroughly mix one part seed with four parts dry sand to easily distribute.

Rake seed in lightly with spring-tined rake and firm soil by treading or, preferably, rolling. Water with a fine spray and keep well watered and free from unwanted plants.

Cut the sward every six-eight weeks during the first year after sowing and remove the cuttings, in the following years cut in early spring before growth starts and in October once wild flowers have been shed - remove all cuttings.

BIOSECURITY

RPS GROUP ARE COMMITTED TO THE PROTECTION OF THE UK ENVIRONMENT AND RECOGNISE THE IMPORTANCE OF RISKS POSED BY IMPORTED PESTS AND DISEASES

- All trees and shrubs are to be sourced responsibly, in the first instance, from UK Nurseries / suppliers, where they have been propagated and/or grown on for a minimum of 5 years in the UK (2 years for shrubs);
- In light of this, all suppliers shall be approved, shall share our values and must have a sound Biosecurity Policy / Management Systems in place to demonstrate the traceability of their stock, and an awareness of the prevalence of all current biosecurity threats, both domestically and abroad;
- The contractor is responsible for ensuring that they operate in strict accordance with the latest guidelines set out by DEFRA, including regularly checking for updates in relation to the latest threats / diseases; i.e. (http://planthealthportal.defra.gov.uk)
- Inspections will be carried out at selected nurseries and plant health certification / passports will be sought to identify traceability of tree and shrub stock as required.

KEY

- Existing trees / vegetation to be retained and protected in accordance with BS 5837:2012 (Root Protection Areas shown. Refer to RPS Tree Removal and Protection Plan JSL5098 / 701)
- Existing tree groups / scrub to be coppiced (Refer to RPS Tree Survey Report and Arboricultural Impact Assessment JSL5098 / 770)
- Existing trees to be removed (Root Protection Areas shown. Refer to RPS Tree Removal and Protection Plan JSL5098 / 701)
- Proposed specimen tree planting (GreenBlue Urban Rolltop barriers to be installed where required)
- Proposed native shrub structure planting
- Proposed native embankment groundcover planting
- Proposed ornamental shrub / herbaceous planting
- Proposed flowering lawn (EL1) (Supplier: Emorgate seeds or equal approved)
- Proposed shade tolerant wildflower meadow (EH1) (Seeding in areas subject to coppicing / felling of existing vegetation. Refer to RPS Tree Protection / Removal Plan JSL5112 / 701). (Supplier: Emorgate seeds or equal approved)
- Proposed gravel (over weed suppressant membrane)
- Hazel Dormouse boxes (to ecologist's specification)
- Bat boxes (to ecologist's specification)

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Notes

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3. This drawing should be read in conjunction with all other relevant drawings and specifications.

Drawing Scale Bar (ensure drawing is printed to the correct sheet size)

1:200 @ A1	0	2m	4m	6m	8m	10m	12m	14m	15m	16m	18m	20m				
1:100 @ A3	0	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m					

NORTH

Rev	Description	By	Chd	Date
P08	Amendment to accord with AIA. Additional tree planting added.	JBT	DMB	11.07.24
P07	Native groundcover planting added to eastern and northern boundary of store. Dormouse and bat boxes added to southern boundary.	JBT	DMB	24.06.24
P06	Updated TRRP information added	JBT	DMB	19.06.24
P05	Amendment to accord with latest site layout, footpath + retaining wall positions	JBT	DMB	12.06.24
P04	Amendment in accordance with ecology comments	JBT	DMB	11.04.24
P03	Amendment to planting to accord with embankment	JBT	DMB	04.04.24
P02	Updates in accordance with revised site layout + retaining wall	JBT	DMB	02.04.24
P01	First issue	JBT	DMB	22.03.24

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Client: Lidl Great Britain Ltd.

Project: Lidl Havant

Title: Detailed Soft Landscape Proposals

Status	Scale	Date Created
Planning	1:200 @A0	Mar 2024
Task Team Manager	**Information Author**	**Task Information Manager**
JBT	JT	DMB

Document Number: 5098-RPS-XX-EX-DR-L-9001

Project Code - Originator - Zone - Level - Type - Role - Drawing Number

RPS Project Number	Suitability	Revision
794-PLN-LAN-5098	S3	P08

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3 Crpns bt L
3 Be pnd T
2 Crpns bt L
Native Shrub Infill Mix
11 Cryls av
11 Il aq
22 Lgs vl
15 Prns sp
4 Rs cn
11 Vb op
Groundcover Embankment Mix 02
51 Hdr hl GR
4 Hypr ms
13 Lnc pl LE
5 Mhn rep
8 Ru BA
6 Vnc mn BV
2 Crpns bt L
Havant Native Hedge Mix
21 Acr cm
5 Crns sn
21 Crg mn
13 Cryls av
11 Il aq
11 Lgs vl
5 Prv sp
11 Rs cn
8 Vb op
Havant Mix C
21 Hb WG
16 Lvn an R
13 Prv at BS
1 Crpns bt L
Groundcover Embankment Mix 02
260 Hdr hl GR
20 Hypr ms
67 Lnc pl LE
25 Mhn rep
41 Ru BA
33 Vnc mn BV
3 Tl crd R
Havant Mix K
20 Crns sn MWF
20 Crns sn WB
Havant Mix C
23 Hb WG
17 Lvn an R
13 Prv at BS
Groundcover Embankment Mix 02
50 Hdr hl GR
4 Hypr ms
13 Lnc pl LE
5 Mhn rep
8 Ru BA
6 Vnc mn BV
Havant Mix A
11 Hb pn P
11 Hb vr
Groundcover Embankment Mix 01
38 Cnth th R
42 Ery jp
250 Hdr hl ST
26 Hypr ms
32 Jnp hr W
22 Jsm nd
Groundcover Embankment Mix 02
142 Hdr hl GR
11 Hypr ms
36 Lnd pl LE
14 Mhn rep
23 Ru BA
18 Vnc mn BV
3 Be pnd T
Groundcover Embankment Mix 01
41 Cnth th R
44 Ery jp
264 Hdr hl ST
27 Hypr ms
34 Jnp hr W
24 Jsm nd
1 Prns sy
Groundcover Embankment Mix 02
72 Hdr hl GR
6 Hypr ms
19 Lnc pl LE
7 Mhn rep
11 Ru BA
9 Vnc mn BV
Groundcover Embankment Mix 02
63 Hdr hl GR
5 Hypr ms
16 Lnc pl LE
6 Mhn rep
10 Ru BA
8 Vnc mn BV
Groundcover Embankment Mix 02
59 Hdr hl GR
5 Hypr ms
15 Lnc pl LE
6 Mhn rep
9 Ru BA
7 Vnc mn BV
Groundcover Embankment Mix 02
29 Hdr hl GR
2 Hypr ms
7 Lnc pl LE
3 Mhn rep
5 Ru BA
4 Vnc mn BV
3 Prn srg Rnc
4 Acr cm S
Havant Mix K
32 Crns sn MWF
32 Crns sn WB
Havant Mix B
30 Ery fr EnG
30 Ery fr H
2 Crpns bt L
Havant Mix C
22 Hb WG
17 Lvn an R
13 Prv at BS
Havant Mix B
11 Ery fr EnG
11 Ery fr H
Groundcover Embankment Mix 02
41 Hdr hl GR
3 Hypr ms
10 Lnc pl LE
4 Mhn rep
6 Ru BA
5 Vnc mn BV
Havant Mix A
41 Hb pn P
41 Hb vr
Groundcover Embankment Mix 02
54 Hdr hl GR
4 Hypr ms
14 Lnc pl LE
5 Mhn rep
8 Ru BA
7 Vnc mn BV
Groundcover Embankment Mix 01
26 Cnth th R
28 Ery jp
168 Hdr hl ST
17 Hypr ms
21 Jnp hr W
15 Jsm nd
Havant Mix B
33 Ery fr EnG
33 Ery fr H
Havant Mix C
47 Hb WG
31 Lvn an R
24 Prv at BS
3 Be pnd T
Havant Mix A
45 Hb pn P
45 Hb vr
Havant Mix B
40 Ery fr EnG
40 Ery fr H
Havant Mix C
28 Hb WG
21 Lvn an R
17 Prv at BS
Havant Mix A
30 Hb pn P
30 Hb vr
Havant Mix G
11 Chry fr S
8 Cnth BM
6 Prns lauro OL
Havant Mix D
6 Brchyg S
9 Cnth th R
9 Snt ch
Havant Mix G
42 Chry fr S
29 Cnth BM
25 Prns lauro OL
Havant Mix H
28 Crns st K
26 Lnc pl
28 Src hn
Havant Mix F
22 Escl DR
31 Wg fl V
Havant Mix D
15 Brchyg S
22 Cnth th R
23 Snt ch
Havant Mix A
19 Hb pn P
19 Hb vr
1 Acr cm S
Havant Mix B
23 Ery fr EnG
23 Ery fr H
Havant Native Hedge Mix
39 Acr cm
10 Crns sn
39 Crg mn
24 Cryls av
19 Il aq
19 Lgs vl
10 Phu sp
19 Rs cn
14 Vb op
Havant Mix A
37 Hb pn P
37 Hb vr
Havant Mix C
38 Hb WG
28 Lvn an R
22 Prv at BS
2 Prns av
Havant Mix J
3 Acb jp C
3 Chry fr
3 PRZ ws BR
3 Prns lauro OL
Havant Mix H
34 Crns st K
32 Lnc pl
34 Src hn
Havant Mix H
17 Crns st K
16 Lnc pl
17 Src hn
Havant Mix C
18 Hb WG
13 Lvn an R
11 Prv at BS
Havant Mix D
12 Brchyg S
18 Cnth th R
19 Snt ch
Existing verge treatment retained
Trees removed to assist with visibility
1 Be pnd T
Havant Mix A
36 Hb pn P
36 Hb vr
Havant Mix M
52 Brb fr A
52 Brb mo P
Havant Mix L
16 Pryc coc RC
16 Prn OC
SLOW
NO STOPPING
KEEP CLEAR
Cul de sac
Havant Road
Havant Road
Havant Road