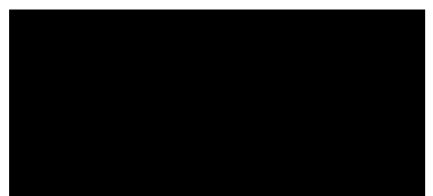


Lidsey Road, Woodgate

Biodiversity Enhancement Strategy

March 2022



20 Soames Place, Mulberry Grove
Wokingham, Berkshire RG40 5AT



Derek Finnie Associates Ltd. Registered in England and Wales Company No. 08152615

COMMISSIONED BY
Thakeham Client Ltd
on behalf of Southern Housing Group Limited
Thakeham House
Summers Place
Stane Street
Billingshurst
West Sussex
RH14 9GN

Lidsey Road, Woodgate

Biodiversity Enhancement Strategy

March 2022

Report Ref: DFA22017

Derek Finnie Associates Ltd
20 Soames Place
Wokingham
Berkshire
RG40 5AT

info@derekfinnie.com

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1 INTRODUCTION

1.1 Background

1.1.1 Derek Finnie Associates was commissioned by Thakeham Homes Ltd to provide ecological advice for a proposed development at Lidsey Road, Woodgate, here in referred to as the Site. The Site benefits from planning permission for the demolition of an existing dwelling and the construction of 71 replacement dwellings (70 net new dwellings), access arrangements, sustainable drainage measures, public open space, landscaping & all other associated works. The permission was granted subject to certain conditions; Condition 4 of the planning permission states:

Condition 4

The development shall be carried out in complete accordance with the precautionary approach, mitigation measures and other enhancements as set out in the following documents:

- *Ecology assessment [ref DFA21007V3]-section 6 “impacts mitigation and enhancement”;*
- *Bat survey report [ref 9896.21 10/07/20]-Section 5 “summary and recommendations”*
- *Reptile survey [ref DFA21027V2, May 21]-Section 4 “mitigation” habitat suitability index*
- *EDNA Test Report [letter dated 12 June 2019]-“Evaluation and recommendations” section; and*
- *Information to Inform a Habitat Regulations Assessment [ref DFA21025V2]*

The mitigation measures shall be implemented in full and permanently adhered to throughout the development of the site.

No development above damp proof course (DPC) level shall take place unless and until a biodiversity enhancement plan has been submitted (itself based on the measures identified in the above documents) for approval in writing by the local planning authority.

1.1.2 The following report, therefore, has been prepared to present the ecological enhancement measures that will be undertaken as part of the development and will be submitted to Arun District Council to discharge Condition 4.

2 ENHANCEMENTS

2.1 Proposed Works

2.1.1 The following enhancements were proposed within the submitted ecological appraisals:

- Planting of new native trees;
- Creation of two dedicated wildlife areas;
- Increase ecological permeability.
- Creation of species rich, wildflower meadows; and
- Installation of appropriate bat and bird boxes.

2.1.2 Each of these enhancement measures is discussed in more detail within Section 3, together with necessary long term management procedures, where appropriate.

3 IMPLEMENTATION

3.1 Native tree planting

- 3.1.1 Native tree planting, comprising the species given in Table 1, will be undertaken throughout the Site in appropriate locations. The location of the individual trees, along with the other areas of habitat creation, as depicted on Lizard Landscape Soft Landscape Infrastructure drawings (Drawing Nos: LLD2545-LAN-DWG-200 to 2004; reproduces as Appendix 1).

Table 1. Native tree species

Species	
Common Name	Scientific Name
Field maple	<i>Acer campestre</i>
Silver birch	<i>Betula pendula</i>
Hornbeam	<i>Carpinus betulus</i>
Wild cherry	<i>Prunus avium</i>
Rowan	<i>Sorbus aucuparia</i>

3.2 Wildlife Areas

- 3.2.1 Two areas, covering approximately 4000m², will be created within the Site, one within the centre of the Site, linked to the western boundary, and the second in the south east corner, adjacent to the southern boundary hedgerow; this direct connectivity will promote species movement in and out of the areas.
- 3.2.2 These areas will be sown with a species rich wildflower meadow mix, containing the species such as those shown table 2 (Wildflower Turf, Native Enriched), with a shade tolerant mix being used adjacent to the existing hedgerows and trees (Wildflower Turf, Shade 4.1). Once established they be managed in the style of a traditional hay meadow, with a cut being taken in late summer after most of the flowers have set seed.

Table 2. Wildflower Seed Mix

Species		Percentage
Common name	Scientific name	
Yarrow	<i>Achillea millefolium</i>	0.5
Betony	<i>Betonica officinalis</i>	0.8
Common knapweed	<i>Centaurea nigra</i>	3
Lady's bedstraw	<i>Galium verum</i>	1.5
Oxeye daisy	<i>Leucanthemum vulgare</i>	0.6
Birdsfoot trefoil	<i>Lotus corniculatus</i>	0.8
Ribwort plantain	<i>Plantago lanceolata</i>	3
Cowslip	<i>Primula veris</i>	0.4
Selfheal	<i>Prunella vulgaris</i>	2
Meadow buttercup	<i>Ranunculus acris</i>	3
Yellow rattle	<i>Rhinanthus minor</i>	1.5
Common sorrel	<i>Rumex acetosella</i>	1.5

Species		Percentage
Common name	Scientific name	
Ragged robin	<i>Silene flos-cuculi</i>	0.1
Red clover	<i>Trifolium pratense</i>	0.3
Tufted vetch	<i>Vicia cracca</i>	1
Common bent	<i>Agrostis capillaris</i>	10
Meadow foxtail	<i>Alopecurus pratensis</i>	2
Sweet vernal grass	<i>Anthoxanthum odoratum</i>	1
Quaking grass	<i>Briza media</i>	1
Crested dogstail	<i>Cynosurus cristatus</i>	36
Red fescue	<i>Festuca rubra</i>	24
Meadow barley	<i>Hordeum secalinum</i>	2
Small cat's-ear	<i>Phleum bertolonii</i>	4

- 3.2.3 The shade tolerant planting will also be augmented with approximately 4000 bulbs comprising wood anemone, snow drop, bluebell and autumn squill.
- 3.2.4 The SuDs basin will be finished with a species rich turf (such as Wildflower Turf No. 37, or similar), which will include the species in Table 3.

Table 3. SuDs Basin species

Species	
Common name	Scientific name
Sheep's fescue	<i>Festuca ovina</i>
Crested dog's tail	<i>Cynosurus cristatus</i>
Yellow oatgrass	<i>Trisetum flavescens</i>
Red fescue	<i>Festuca rubra</i>
Smooth stalked meadow grass	<i>Poa pratensis</i>
Sweet vernal grass	<i>Anthoxanthum odoratum</i>
Betony	<i>Stachys officinalis</i>
Bird's-foot trefoil	<i>Lotus corniculatus</i>
Bladder campion	<i>Silene vulgaris</i>
Common knapweed	<i>Centaurea nigra</i>
Common sorrel	<i>Rumex acetosa</i>
Cowslip	<i>Primula veris</i>
Red clover	<i>Trifolium pratense</i>

- 3.2.5 Native tree planting, utilising the trees listed in Table 1, will also be undertaken in these areas to add to the biodiversity value. The biodiversity value of the areas will be enhanced further by the creation of area of scrub, containing field maple *Acer campestre*, dogwood *Cornus sanguinea*, hazel *Corylus avellana* and hawthorn *Crataegus monogyna*.
- 3.2.6 Native hedgerows will also be created around the Site, comprising the species given in Table 4.

Table 4. Native hedgerow species

Species	
Common name	Scientific name
Field maple	<i>Acer campestre</i>
Hornbeam	<i>Carpinus betulus</i>
Dogwood	<i>Cornus sanguinea</i>
Hazel	<i>Corylus avellana</i>
Hawthorn	<i>Crataegus monogyna</i>
Spindle	<i>Euonymus europaeus</i>
Beech	<i>Fagus sylvatica</i>
Privet	<i>Ligustrum vulgare</i>

3.2.7 Overall, the creation of numerous species rich habitats, containing native species, will lead to an increase in biodiversity which will be managed in a sustainable manner in the long term.

3.3 Ecological Permeability

3.3.1 The creation of the wildlife area in the centre of the Site, which is more or less connected to a green corridor that runs from the wildlife area to the eastern boundary, will help facilitate movement through the centre of the Site. The boundary feature on the west, south and eastern boundary of the Site will be enhanced through appropriate re-enforcement planting, which will connect the south eastern wildlife area with the rest of the Site and the wider countryside.

3.3.2 Within the main development area, native hedgerows will be planted along the edge of the front gardens, creating green links the boundary features and the wildlife areas.

3.4 Species rich, wildflower meadows

3.4.1 The creation of species rich, wildflower areas are detailed in section 3.2.

3.5 Installation of bat and bird boxes

3.5.1 Advantage will be taken of the numerous mature trees that will be retained around the development parcel, with seven bird boxes being installed. The installation of bird boxes within the trees is preferable to integral boxes within the houses as there is likely to be higher uptake of boxes placed in more natural locations. Furthermore, it is likely that at least some homeowners will install bird boxes in their gardens, therefore duplication of boxes is avoided.

3.5.2 A range of bird boxes will be installed, including:

- Three Schwegler¹ 1B tit boxes;
- Two Schwegler 2H open fronted boxes; and
- Two Schwegler starling boxes;

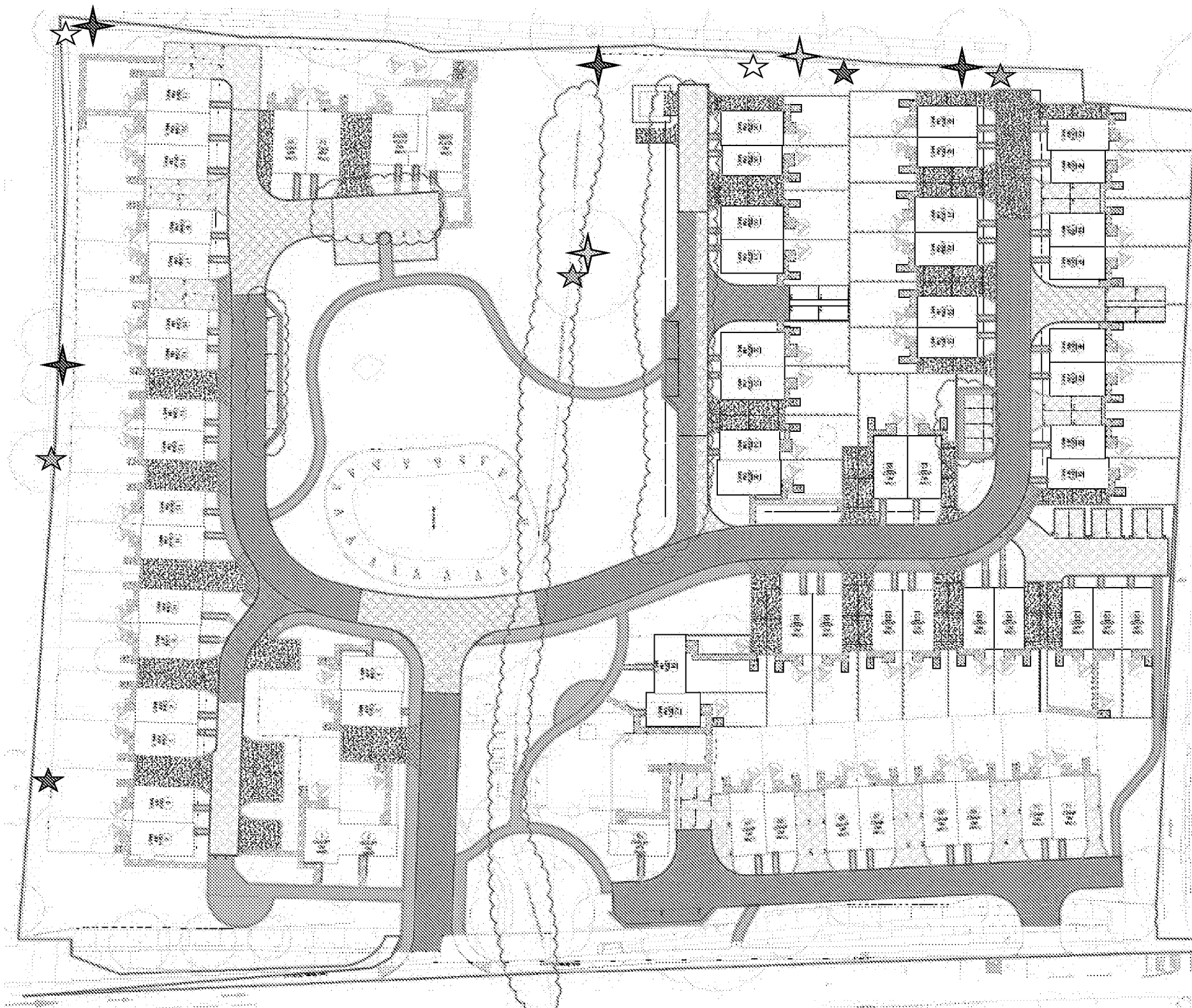
¹ Or similar



- 3.5.3 The boxes will be installed between 2m and 4m above the ground (5m in the case of the owl box) in retained trees. Indicative locations are shown on Figure 1, with the exact location being decided on site by the Project Ecologist.
- 3.5.4 A combination of six bat boxes will be installed on trees around the development providing roosting opportunities for bats at different times of the year. A total of two Schwegler 1FF and four Schwegler 2FNs will be installed in retained trees around the periphery of the development at a height of between 3m and 6m. Indicative locations are given on Figure 1, with the exact location being determined on site by the Project Ecologist.

4 SUMMARY

- 4.1.1 The implementation of the Biodiversity Enhancement Plan will ensure that a sustainable increase in the biodiversity value of the Site will be achieved and maintained through appropriate management in the long term.



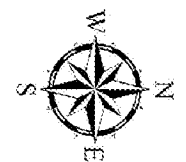
Legend:

Bird Boxes

- ★ Schwegler 1B
- ☆ Schwegler 2H
- ★ Schwegler Starling

Bat Boxes

- ★ Schwegler 1FF
- ★ Schwegler 2FN



Drawing No: Figure 1

Title: Box Locaitons

Date: March 2022

Project: Lidsey Road

Client: Thakeham



20 Soames Place
Wokingham
Berks RG40 5AT

info@derekfinnie.com

Appendix 1

Lizard Landscape

Landscape Plans

Legend

- Site Boundary**
- F1 - Proposed - Timber Close Boarded Fence**
To be 1200mm high. Supplier: *Jacksons Fencing (or equal and approved)*.
- F2 - Proposed - Timber Close Boarded fence**
To be 1800mm high. Supplier: *Jacksons Fencing (or equal and approved)*.
- F3 - Proposed - Post and Rail Fence**
To be 1100mm high with stock proofing. Supplier: *Jacksons Fencing (or equal and approved)*.
- F4 - Proposed - Wooden Playground Fencing**
To be 1050mm high. Supplier: *Jacksons Fencing (or equal and approved)*. Installed to BS EN 1176 playground safety standard.
- G1 - Proposed - Timber Garden Gate**
To be 1800mm high close boarded timber gate to match F2 - 1800mm high timber close boarded fence. Supplier: *Jacksons Fencing*.
- F5 - Proposed - Brick Wall**
To be 1800mm high brick screen wall with piers. Refer to architects details.
- F6 - Proposed - Masonry Retaining Wall**
Refer to architects details.
- Undefined service margin - no edging.
- K1 - Proposed - Aluminum Edging**
Aluminum edging to gravel pathways to be AluExcel. Supplier: *Kinley Systems (or equal and approved)*.
- K2 - Proposed - Kerbs, Edges & Channels**
As specified by *Bright Plan Civils*. Refer to engineer's details.
- PV1 - Proposed - Private Asphalt Access Road**
To be asphalt concrete paving. Refer to engineer's details.
- PV2 - Proposed - Block Paving**
Private access road to be Marshalls Keyblok. 100 x 200 x 60 mm. Colour: Vintage Charcoal. 90 deg herringbone. Refer to engineer's details.
- PV3 - Proposed - Block Paving**
Private access road to be (permeable) Marshalls Priora block paving. 100 x 200 x 60 mm; Colour: Charcoal. 90 deg herringbone. Refer to engineer's details.
- PV4 - Proposed - Private Asphalt Footway**
To be asphalt concrete. Refer to engineer's details.
- PV5 - Proposed - Private Asphalt Footpath**
Vehicular and pedestrian crossover to be asphalt concrete. Refer to engineer's details.
- PV6 - Proposed - Block Paving (Permeable)**
Shared drive to be Marshalls Priora block paving. 100 x 200 x 60 mm; Colour: Natural. 90 deg herringbone. Refer to engineer's details.
- PV7 - Proposed - Block Paving**
Shared drive to be Marshalls Keyblok. 100 x 200 x 60 mm; Colour: Natural. 90 deg herringbone. Refer to engineer's details.
- PV8 - Proposed - Asphalt Paving**
Private parking area to be asphalt concrete. Refer to engineer's details.
- PV9 - Proposed - Paving Slabs**
Private paths and patios to be given Saxon concrete paving flags, 450x450 - 50mm thick. Colour: Natural. Supplied by Marshalls. Refer to engineer's details.
- PV10 - Proposed - Concrete shed base.**
1.2 x 1.8 with lightly tamped finish
- PV11 - Proposed - Hoggin Surfacing**
Public pathways in POS to be surfaced with 14 - 0 mm AHS Self-Binding Path Gravel. Supplier: *AHS Ltd. (or equal and approved)*.
- PV12 - Proposed - Cork Safety Surfacing**
LEAP surface treatment to be *Corkeen*, a cork based impact attenuation surfacing. Supplier: *PlaySmart UK. (or equal and approved)*.
- PV13 - Proposed - Decorative Aggregate**
Decorative aggregate to be 20mm Golden Flint Gravel (or equal and approved).
- Proposed - Street Name Plate**
- Proposed - Park Bench**
To be: Beaufort Bench. Supplier: *Neptune Outdoor Furniture. (or equal and approved)*.
- Proposed - Park Bench**
To be: Beaufort Picnic Table. Supplier: *Neptune Outdoor Furniture. (or equal and approved)*.
- Proposed - Litter Bins**
To be: Pioneer Front Opening Litter Bin. Supplier: *Jaydee Living Ltd. (or equal and approved)*.

Existing - Trees to be Retained
Existing trees to be retained and protected on site in accordance with
BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations'.
(Refer to Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21)

Proposed - Native Tree Planting (Heavy)
Girth: 12-14 cm. Height: 3.5 - 4.0 m
Standard (Heavy) nursery stock
Clear stem: 2.0 m

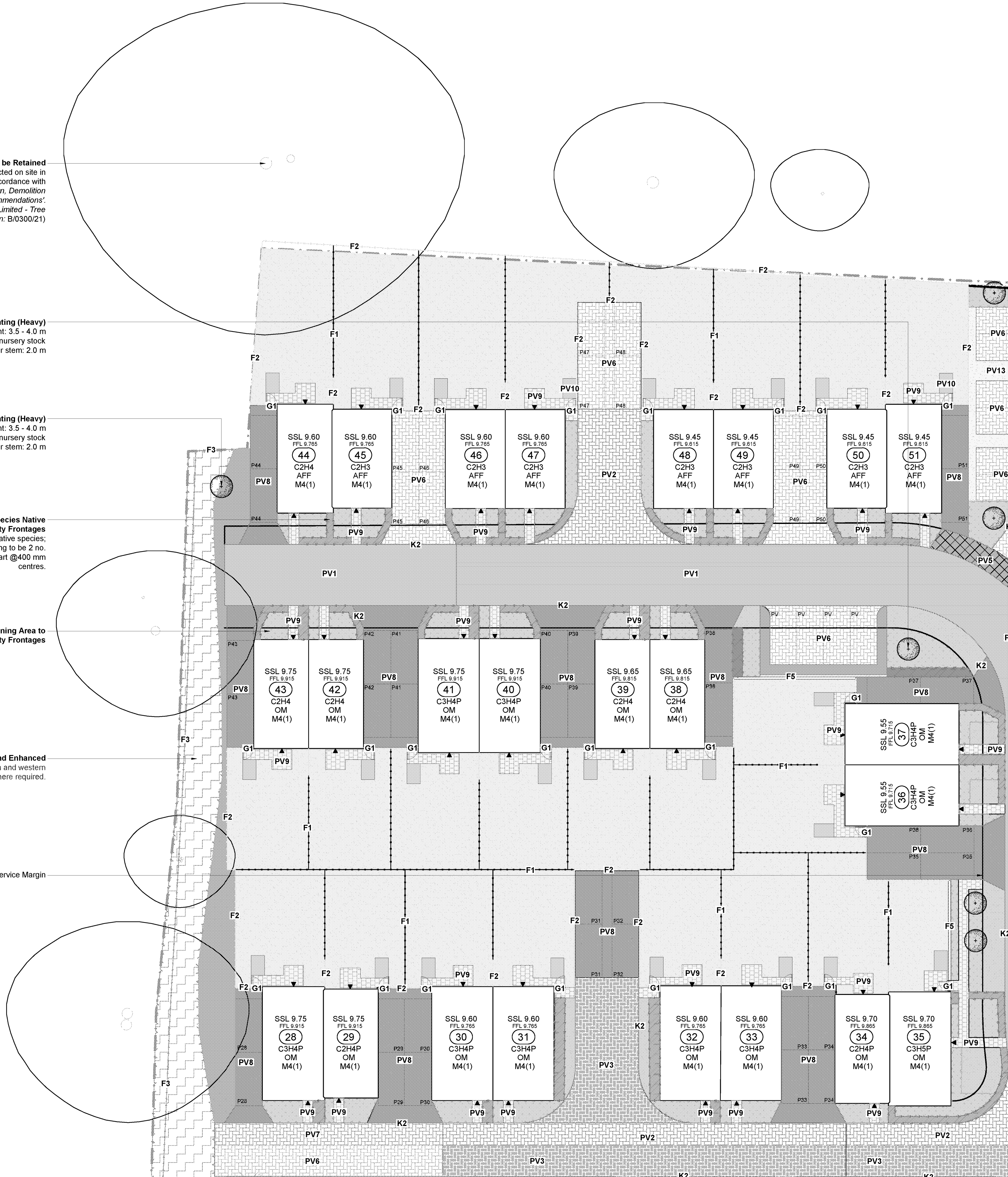
Proposed - Native Tree Planting (Heavy)
Girth: 12-14 cm. Height: 3.5 - 4.0 m
Standard (Heavy) nursery stock
Clear stem: 2.0 m

Proposed - Single Species Native Hedgerows to Property Frontages
Proposed hedgerow to be native species; 60-90cm whip; CG. Hedging to be 2 no. staggered rows set 400mm apart @400 mm centres.

Proposed - Ornamental Planing Area to Proposed Property Frontages

Existing - Hedgerow to be Retained and Enhanced
The existing hedgerows along the southern and western edges to be retained and in-filled where required.

Proposed Service Margin



Existing - Trees to be Retained
Existing trees to be retained and protected on site in accordance with
BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations'.
(Refer to Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21)

Existing - Trees to be Removed
All tree work and removal shall be carried out in accordance with BS 5837: 2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations' and BS3998: 2010 - 'Tree Work: Recommendations'. (Refer to Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21)

Existing - Vegetation
Existing vegetation to be retained where possible and enhanced.

Proposed - Native Trees Standard (Heavy)
Girth: 12 - 14 cm, Height: 3.5 - 4.0 m
Standard (Heavy) nursery stock. CG 45L
Support: Single-staked, CS: 2.0 m.

Proposed - Native Trees Standard (Extra Heavy)
Girth: 14 - 16 cm, Height: 4.0 - 4.5 m
Standard (Extra Heavy) nursery stock. CG 45L
Support: Double-staked, CS: 2.0 m.

Proposed - Hedgerows

Proposed - Native Shrub Planting Areas

Proposed - Planting Areas

Proposed - Native Enriched Wildflower Areas

Proposed - Native Woodland Flowering Bulb Planting Areas

Proposed - Wildflower Turf for SUDs

Proposed - Private Amenity Lawns

Proposed - Public Amenity Grassland

- Notes:**
- All alternatives to proposed materials to be fit for purpose, of equal quality and subject to Landscape Architect's approval.
 - For detailed soft landscape scheme proposals refer to LLD2545-LAN-DWG-200 series - *Soft Landscape Infrastructure Planting Plans 1 - 4, Detailed Planting Plans 1 - 4, LLD2545-LAN-SCH-001 - Detailed & Soft Landscape Infrastructure Planting Schedule and Specification and LLD2545-LAN-SPE-001 - Soft Landscape Specification*.
 - For details of proposed materials, features and fittings, refer to LLD2545-LAN-SCH-002 - *Hard Landscape Schedule*.

DRAFT ISSUE

Rev	Description	Date	Initials
01	Draft Issue	08.03.22	GL
00	Draft Issue	15.02.22	GL

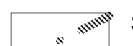
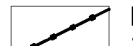
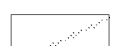
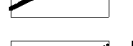
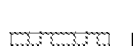
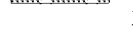
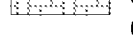
LIZARD
Landscape Design and Ecology

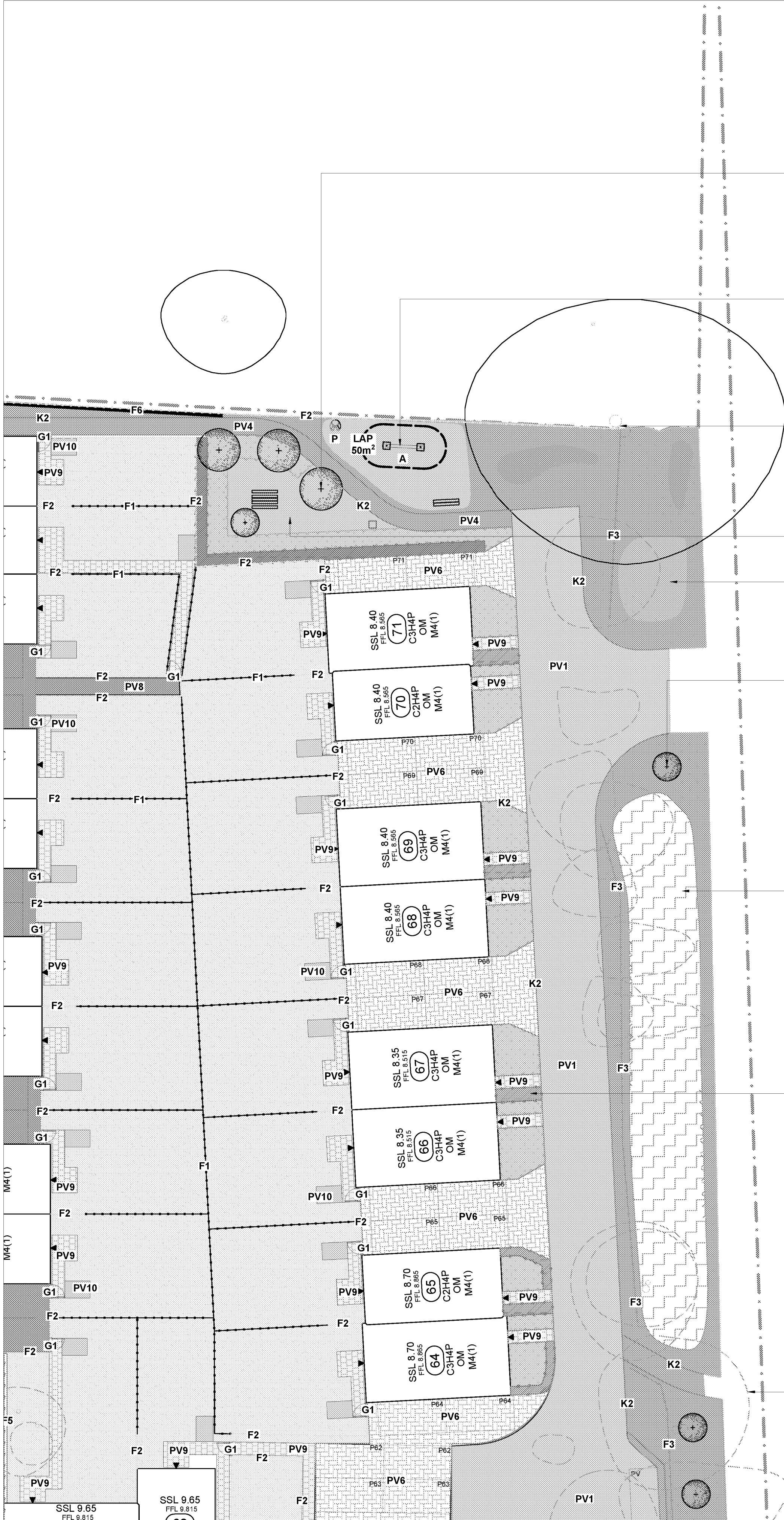
The Old Bank, 34 South Street, Tarring, Worthing, West Sussex, BN14 7JH
T. 01903 216033 E. lizardlandscape@btconnect.com W. lizardlandscapeecology.com

Client Thakeham Group Project Title and Location Wings Nursery Lidsey Road, Woodgate			
Drawing Title Hard and Soft Landscape General Arrangement Plan - 1 of 4			
Scale 1:200 @ A1	Drawn GL	Approved KM	Date 15.02.22
Drawing No LLD2545-LAN-DWG-100			Revision 01

Hard and Soft Landscape General Arrangement
Wings Nursery, Lidsey Road, Woodgate

Legend

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-  **Proposed - Litter Bins**
To be: Pioneer Front Opening Litter Bin. Supplier: *Jaydee Living Ltd. (or equal and approved)*.



Proposed - Native Tree Planting (Extra Heavy)
Girth: 14 - 16 cm. Height: 4.0 - 4.5 m
Standard (Extra Heavy) nursery stock
Clear stem: 2.0 m

LAP3 - Proposed - Local Area of Play (50m²)
Proposed LAP to be given one item of play equipment. For play equipment details refer to *LLD2545-LAN-SCH-002 - Hard Landscape Schedule*.

Existing - Trees to be Retained
Existing trees to be retained and protected on site in accordance with BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations'. (Refer to Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21)

Proposed - Public Amenity Grassland

Proposed - SuDS Planted with Wildflower Turf
Proposed swale to edge of development to be planted with WFT-SUD-37-Wildflower Turf for SuDS.

Proposed - Native Tree Planting (Heavy)
Girth: 12-14 cm, Height: 3.5 - 4.0 m
Standard (Heavy) nursery stock
Clear stem: 2.0 m

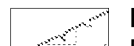
Existing - Roadside Boundary Vegetation to be Retained
The swales and existing vegetation along the eastern edge will be retained for screening and ecological purposes and improved with native infill planting and a meadow verge where required.

Proposed - Single Species Native Hedgerows
Proposed hedgerow to be native species; 60-90cm whip, CG. Hedging to be 2 no. staggered rows set 400mm apart @400 mm centres.

Proposed - Existing Trees to be Removed
All tree work and removal shall be carried out in accordance with BS 5837: 2012 – 'Trees in Relation to Design, Demolition and Construction – Recommendations' and BS3998: 2010 – 'Tree Work: Recommendations'. (Refer to Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21)

Existing - Trees to be Retained
Existing trees to be retained and protected on site in accordance with BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations'. (Refer to Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21)

Existing - Trees to be Removed
All tree work and removal shall be carried out in accordance with BS 5837: 2012 – 'Trees in Relation to Design, Demolition and Construction – Recommendations' and BS3998: 2010 – 'Tree Work: Recommendations'. (Refer to Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21)

 **Existing - Vegetation**
Existing vegetation to be retained where possible and enhanced.

 **Proposed - Native Trees Standard (Heavy)**
Girth: 12 - 14 cm, Height: 3.5 - 4.0 m
Standard (Heavy) nursery stock. CG 45L
Support: Single-staked, CS: 2.0 m.

 **Proposed - Native Trees Standard (Extra Heavy)**
Girth: 14 - 16 cm, Height: 4.0 - 4.5 m
Standard (Extra Heavy) nursery stock. CG 45L
Support: Double-staked, CS: 2.0 m.

 **Proposed - Hedgerows**

 **Proposed - Native Shrub Planting Areas**

 **Proposed - Planting Areas**

 **Proposed - Native Enriched Wildflower Areas**

 **Proposed - Native Woodland Flowering Bulb Planting Areas**

 **Proposed - Wildflower Turf for SUDs**

 **Proposed - Private Amenity Lawns**

 **Proposed - Public Amenity Grassland**

Notes:

- All alternatives to proposed materials to be fit for purpose, of equal quality and subject to Landscape Architect's approval.
- For detailed soft landscape scheme proposals refer to *LLD2545-LAN-DWG-200 series - Soft Landscape Infrastructure Planting Plans 1 - 4, Detailed Planting Plans 1 - 4, LLD2545-LAN-SCH-001 - Detailed & Soft Landscape Infrastructure Planting Schedule and Specification* and *LLD2545-LAN-SPE-001 - Soft Landscape Specification*.
- For details of proposed materials, features and fittings, refer to *LLD2545-LAN-SCH-002 - Hard Landscape Schedule*.

DRAFT ISSUE

Rev	Description	Date	Initials
01	Draft Issue	09.03.22	GL
00	Draft Issue	15.02.22	GL


The Old Bank, 34 South Street, Tarring, Worthing, West Sussex, BN14 7LH
T. 01903 216033 E. lizardlandscape@btconnect.com W. lizardlandscapeecology.com

Client Thakeham Group Project Title and Location Wings Nursery Lidsey Road, Woodgate			
Drawing Title Hard and Soft Landscape General Arrangement Plan - 2 of 4			
Scale 1:200 @ A1	Drawn GL	Approved KM	Date 15.02.22
Drawing No LLD2545-LAN-DWG-101			Revision 01

**Hard and Soft Landscape General Arrangement
Wings Nursery, Lidsey Road, Woodgate**

Legend

- Site Boundary**
- F1 - Proposed - Timber Close Boarded Fence**
To be 1200mm high. Supplier: *Jacksons Fencing (or equal and approved)*.
- F2 - Proposed - Timber Close Boarded fence**
To be 1800mm high. Supplier: *Jacksons Fencing (or equal and approved)*.
- F3 - Proposed - Post and Rail Fence**
To be 1100mm high with stock proofing. Supplier: *Jacksons Fencing (or equal and approved)*.
- F4 - Proposed - Wooden Playground Fencing**
To be 1050mm high. Supplier: *Jacksons Fencing (or equal and approved)*. Installed to BS EN 1176 playground safety standard.
- G1 - Proposed - Timber Garden Gate**
To be 1800mm high close boarded timber gate to match F2 - 1800mm high timber close boarded fence. Supplier: *Jacksons Fencing*.
- F5 - Proposed - Brick Wall**
To be 1800mm high brick screen wall with piers. Refer to architects details.
- F6 - Proposed - Masonry Retaining Wall**
Refer to architects details.
- Undefined service margin - no edging.
- K1 - Proposed - Aluminum Edging**
Aluminum edging to gravel pathways to be AluExcel. Supplier: *Kinley Systems (or equal and approved)*.
- K2 - Proposed - Kerbs, Edges & Channels**
As specified by *Bright Plan Civils*. Refer to engineer's details.
- PV1 - Proposed - Private Asphalt Access Road**
To be asphalt concrete paving. Refer to engineer's details.
- PV2 - Proposed - Block Paving**
Private access road to be Marshalls Keyblok. 100 x 200 x 60 mm; Colour: Vintage Charcoal. 90 deg herringbone. Refer to engineer's details.
- PV3 - Proposed - Block Paving**
Private access road to be (permeable) Marshalls Priora block paving. 100 x 200 x 60 mm; Colour: Charcoal. 90 deg herringbone. Refer to engineer's details.
- PV4 - Proposed - Private Asphalt Footway**
To be asphalt concrete. Refer to engineer's details.
- PV5 - Proposed - Private Asphalt Footpath**
Vehicular and pedestrian crossover to be asphalt concrete. Refer to engineer's details.
- PV6 - Proposed - Block Paving (Permeable)**
Shared drive to be Marshalls Priora block paving. 100 x 200 x 60 mm; Colour: Natural. 90 deg herringbone. Refer to engineer's details.
- PV7 - Proposed - Block Paving**
Shared drive to be Marshalls Keyblok. 100 x 200 x 60 mm; Colour: Natural. 90 deg herringbone. Refer to engineer's details.
- PV8 - Proposed - Asphalt Paving**
Private parking area to be asphalt concrete. Refer to engineer's details.
- PV9 - Proposed - Paving Slabs**
Private paths and patios to be given Saxon concrete paving flags, 450x450 - 50mm thick. Colour: Natural. Supplied by Marshalls. Refer to engineer's details.
- PV10 - Proposed - Concrete shed base.**
1.2 x 1.8 with lightly tamped finish
- PV11 - Proposed - Hoggin Surfacing**
Public pathways in POS to be surfaced with 14 - 0 mm AHS Self-Binding Path Gravel. Supplier: *AHS Ltd. (or equal and approved)*.
- PV12 - Proposed - Cork Safety Surfacing**
LEAP surface treatment to be *Corkeen*, a cork based impact attenuation surfacing. Supplier: *PlaySmart UK. (or equal and approved)*.
- PV13 - Proposed - Decorative Aggregate**
Decorative aggregate to be 20mm Golden Flint Gravel (or equal and approved).
- Proposed - Street Name Plate**
- Proposed - Park Bench**
To be: Beaufort Bench. Supplier: *Neptune Outdoor Furniture. (or equal and approved)*.
- Proposed - Park Bench**
To be: Beaufort Picnic Table. Supplier: *Neptune Outdoor Furniture. (or equal and approved)*.
- Proposed - Litter Bins**
To be: Pioneer Front Opening Litter Bin. Supplier: *Jaydee Living Ltd. (or equal and approved)*.

LAP2 - Proposed - Local Area of Play (200m²)
Proposed LAP to be given three items of play equipment. Area of LAP to be 200 m². For play equipment details refer to *LLD2545-LAN-SCH-002 - Hard Landscape Schedule*.

Proposed - Public Amenity Grassland

LAP1 - Proposed - Local Area of Play (133m²)
Proposed LAP to be given three items of play equipment. Area of LAP to be 133 m². For play equipment details refer to *LLD2545-LAN-SCH-002 - Hard Landscape Schedule*.

Existing - Trees to be Retained
Existing trees to be retained and protected on site in accordance with BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations'. (Refer to *Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21*)

Proposed - Flowering Bulb Planting Area
Proposed Flowering bulb planting area under existing mature oak.

Proposed - Native Shrub Planting Area

Proposed - Native Tree Planting (Heavy)
Girth: 12-14 cm, Height: 3.5 - 4.0 m
Standard (Heavy) nursery stock. CG 45L
Clear stem: 2.0 m

FS1 - Proposed - Fitness Trail Station
Proposed fitness trail exercise station to be Air Walker. For construction details refer to: PRO-500-092 PARALLEL BARS (FC25)_SF (Online Playgrounds)

Proposed - Bike Store
Refer to engineers details.

LEAP - Proposed - Local Equipped Area of Play (475m²)
Proposed LEAP to be given three items of play equipment. For play equipment details refer to *LLD2545-LAN-SCH-002 - Hard Landscape Schedule*.

Proposed - Existing Trees to be Removed
All tree work and removal shall be carried out in accordance with BS 5837: 2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations' and BS3998: 2010 - 'Tree Work: Recommendations'. (Refer to *Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21*)

Proposed - Single Species Native Hedgerows to Property Frontages
Proposed hedgerow to be native species: 60-90cm whip, CG. Hedging to be 2 no. staggered rows set 400mm apart @400 mm centres.

Proposed - Native Tree Planting (Extra Heavy)
Girth: 14 - 16 cm, Height: 4.0 - 4.5 m
Standard (Extra Heavy) nursery stock
Clear stem: 2.0 m

FS2 - Proposed - Fitness Trail Station
Proposed fitness trail exercise station to be Group Fitness Station. For construction details refer to: PRO-500-180 GROUP FITNESS STATION (Online Playgrounds)

Proposed - SuDS Planted with Wildflower Turf
Proposed attenuation basin to be planted with WFT-SUD-37-Wildflower Turf for SuDS.

Proposed - Ornamental Planing Area to Proposed Property Frontages

Existing - Hedgerow to be Retained and Enhanced
The existing hedgerows along the southern and western edges to be retained and in-filled where required.



Existing - Trees to be Retained
Existing trees to be retained and protected on site in accordance with BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations'. (Refer to *Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21*)

Existing - Trees to be Removed
All tree work and removal shall be carried out in accordance with BS 5837: 2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations' and BS3998: 2010 - 'Tree Work: Recommendations'. (Refer to *Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21*)

Existing - Vegetation
Existing vegetation to be retained where possible and enhanced.

Proposed - Native Trees Standard (Heavy)
Girth: 12 - 14 cm, Height: 3.5 - 4.0 m
Standard (Heavy) nursery stock. CG 45L
Support: Single-staked, CS: 2.0 m.

Proposed - Native Trees Standard (Extra Heavy)
Girth: 14 - 16 cm, Height: 4.0 - 4.5 m
Standard (Extra Heavy) nursery stock. CG 45L
Support: Double-staked, CS: 2.0 m.

Proposed - Hedgerows

Proposed - Native Shrub Planting Areas

Proposed - Planting Areas

Proposed - Native Enriched Wildflower Areas

Proposed - Native Woodland Flowering Bulb Planting Areas

Proposed - Wildflower Turf for SuDS

Proposed - Private Amenity Lawns

Proposed - Public Amenity Grassland

- Notes:**
- All alternatives to proposed materials to be fit for purpose, of equal quality and subject to Landscape Architect's approval.
 - For detailed soft landscape scheme proposals refer to *LLD2545-LAN-DWG-200 series - Soft Landscape Infrastructure Planting Plans 1 - 4, Detailed Planting Plans 1 - 4, LLD2545-LAN-SCH-001 - Detailed & Soft Landscape Infrastructure Planting Schedule and Specification and LLD2545-LAN-SPE-001 - Soft Landscape Specification*.
 - For details of proposed materials, features and fittings, refer to *LLD2545-LAN-SCH-002 - Hard Landscape Schedule*.

DRAFT ISSUE

Rev	Description	Date	Initials
01	Draft Issue	09.03.22	GL
00	Draft Issue	15.02.22	GL

LIZARD
Landscape Design and Ecology
The Old Bank, 34 South Street, Tarring, Worthing, West Sussex, BN14 7LH
T. 01903 216033 E. lizardlandscape@btconnect.com W. lizardlandscapeecology.com

Client
Thakeham Group
Project Title and Location
Wings Nursery
Lidsey Road, Woodgate

Drawing Title
Hard and Soft Landscape
General Arrangement Plan - 3 of 4

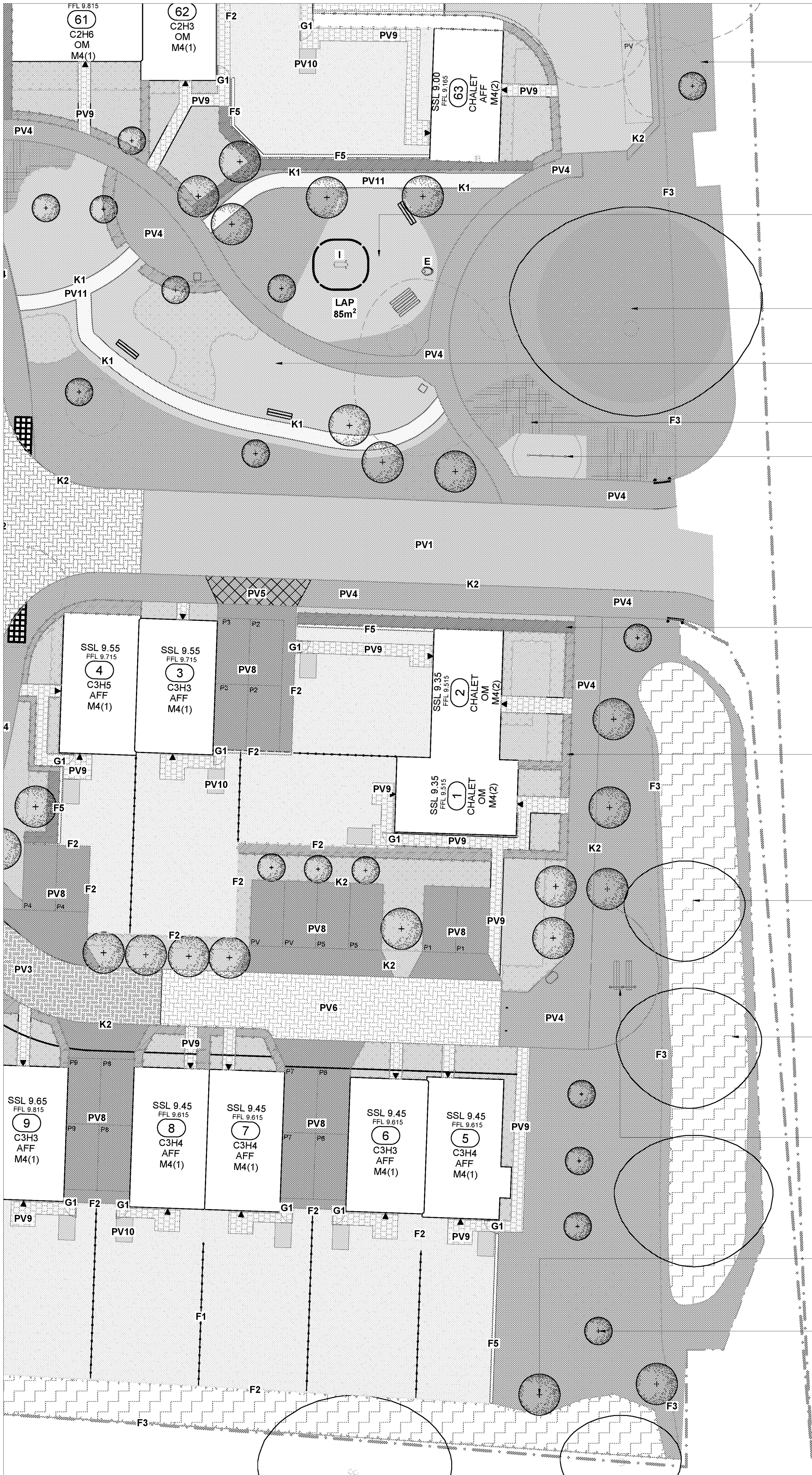
Scale: 1:200 @ A1
Drawn: GL
Approved: KM
Date: 15.02.22

Drawing No: LLD2545-LAN-DWG-102
Revision: 01

Hard and Soft Landscape General Arrangement
Wings Nursery, Lidsey Road, Woodgate

Legend

- Site Boundary**
- F1 - Proposed - Timber Close Boarded Fence**
To be 1200mm high. Supplier: *Jacksons Fencing (or equal and approved)*.
- F2 - Proposed - Timber Close Boarded fence**
To be 1800mm high. Supplier: *Jacksons Fencing (or equal and approved)*.
- F3 - Proposed - Post and Rail Fence**
To be 1100mm high with stock proofing. Supplier: *Jacksons Fencing (or equal and approved)*.
- F4 - Proposed - Wooden Playground Fencing**
To be 1050mm high. Supplier: *Jacksons Fencing (or equal and approved)*. Installed to BS EN 1176 playground safety standard.
- G1 - Proposed - Timber Garden Gate**
To be 1800mm high close boarded timber gate to match F2 - 1800mm high timber close boarded fence. Supplier: *Jacksons Fencing*.
- F5 - Proposed - Brick Wall**
To be 1800mm high brick screen wall with piers. Refer to architects details.
- F6 - Proposed - Masonry Retaining Wall**
Refer to architects details.
- Undefined service margin - no edging.
- K1 - Proposed - Aluminum Edging**
Aluminum edging to gravel pathways to be AluExcel. Supplier: *Kinley Systems (or equal and approved)*.
- K2 - Proposed - Kerbs, Edges & Channels**
As specified by *Bright Plan Civils*. Refer to engineer's details.
- PV1 - Proposed - Private Asphalt Access Road**
To be asphalt concrete paving. Refer to engineer's details.
- PV2 - Proposed - Block Paving**
Private access road to be Marshalls Keyblok. 100 x 200 x 60 mm; Colour: Vintage Charcoal. 90 deg herringbone. Refer to engineer's details.
- PV3 - Proposed - Block Paving**
Private access road to be (permeable) Marshalls Priora block paving. 100 x 200 x 60 mm; Colour: Charcoal. 90 deg herringbone. Refer to engineer's details.
- PV4 - Proposed - Private Asphalt Footway**
To be asphalt concrete. Refer to engineer's details.
- PV5 - Proposed - Private Asphalt Footpath**
Vehicular and pedestrian crossover to be asphalt concrete. Refer to engineer's details.
- PV6 - Proposed - Block Paving (Permeable)**
Shared drive to be Marshalls Priora block paving. 100 x 200 x 60 mm; Colour: Natural. 90 deg herringbone. Refer to engineer's details.
- PV7 - Proposed - Block Paving**
Shared drive to be Marshalls Keyblok. 100 x 200 x 60 mm; Colour: Natural. 90 deg herringbone. Refer to engineer's details.
- PV8 - Proposed - Asphalt Paving**
Private parking area to be asphalt concrete. Refer to engineer's details.
- PV9 - Proposed - Paving Slabs**
Private paths and patios to be given Saxon concrete paving flags, 450x450 - 50mm thick. Colour: Natural. Supplied by Marshalls. Refer to engineer's details.
- PV10 - Proposed - Concrete shed base.**
1.2 x 1.8 with lightly tamped finish
- PV11 - Proposed - Hoggin Surfacing**
Public pathways in POS to be surfaced with 14 - 0 mm AHS Self-Binding Path Gravel. Supplier: *AHS Ltd. (or equal and approved)*.
- PV12 - Proposed - Cork Safety Surfacing**
LEAP surface treatment to be *Corkeen*, a cork based impact attenuation surfacing. Supplier: *PlaySmart UK. (or equal and approved)*.
- PV13 - Proposed - Decorative Aggregate**
Decorative aggregate to be 20mm Golden Flint Gravel (or equal and approved).
- Proposed - Street Name Plate**
- Proposed - Park Bench**
To be: Beaufort Bench. Supplier: *Neptune Outdoor Furniture. (or equal and approved)*.
- Proposed - Park Bench**
To be: Beaufort Picnic Table. Supplier: *Neptune Outdoor Furniture. (or equal and approved)*.
- Proposed - Litter Bins**
To be: Pioneer Front Opening Litter Bin. Supplier: *Jaydee Living Ltd. (or equal and approved)*.



Proposed - Existing Trees to be Removed
All tree work and removal shall be carried out in accordance with BS 5837: 2012 – 'Trees in Relation to Design, Demolition and Construction – Recommendations' and BS3998: 2010 – 'Tree Work: Recommendations'. (Refer to Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21)

LAP4 - Proposed - Local Area of Play (85m²)
Proposed LAP to be given one item of play equipment. For play equipment details refer to LLD2545-LAN-SCH-002 - Hard Landscape Schedule.

Proposed - Flowering Bulb Planting Area
Proposed Flowering bulb planting area under existing mature oak.

Proposed - Public Amenity Grassland

Proposed - Native Shrub Planting Area

FS4 - Proposed - Fitness Trail Station
Proposed fitness trail exercise station to be Triple Bay Chin Up Fitness Station. For construction details refer to: PRO-500-093 CHIN UPS (FC13) (*Online Playgrounds*)

Proposed - Mixed Species Native Hedgerows
Proposed hedgerow to be mixed native species; 60-90cm whip; CG. Hedging to be 2 no. staggered rows set 400mm apart @400 mm centres.

Proposed - Single Species Native Hedgerows to Property Frontages
Proposed hedgerow to be native species; 60-90cm whip; CG. Hedging to be 2 no. staggered rows set 400mm apart @400 mm centres.

Existing - Trees to be Retained
Existing trees to be retained and protected on site in accordance with BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations'. (Refer to Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21)

Existing - Roadside Boundary Vegetation to be Retained
The swales and existing vegetation along the eastern edge will be retained for screening and ecological purposes and improved with native infill planting and a meadow verge where required.

FS3 - Proposed - Fitness Trail Station
Proposed fitness trail exercise station to be Abs Bench Fitness Station. For construction details refer to: PRO-500-051 ABS BENCH (FC14)_SF (*Online Playgrounds*)

Proposed - Native Tree Planting (Extra Heavy)
Girth: 14 - 16 cm, Height: 4.0 - 4.5 m
Standard (Extra Heavy) nursery stock
Clear stem: 2.0 m

Proposed - Native Tree Planting (Heavy)
Girth: 12-14 cm, Height: 3.5 - 4.0 m
Standard (Heavy) nursery stock
Clear stem: 2.0 m

Existing - Trees to be Retained
Existing trees to be retained and protected on site in accordance with BS 5837: 2012 – 'Trees in Relation to Design, Demolition and Construction – Recommendations'. (Refer to Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21)

Existing - Trees to be Removed
All tree work and removal shall be carried out in accordance with BS 5837: 2012 – 'Trees in Relation to Design, Demolition and Construction – Recommendations' and BS3998: 2010 – 'Tree Work: Recommendations'. (Refer to Beechdown Arboriculture Limited - Tree Protection and Retention Plan: B/0300/21)

Existing - Vegetation
Existing vegetation to be retained where possible and enhanced.

Proposed - Native Trees Standard (Heavy)
Girth: 12 - 14 cm, Height: 3.5 - 4.0 m
Standard (Heavy) nursery stock. CG 45L
Support: Single-staked, CS: 2.0 m.

Proposed - Native Trees Standard (Extra Heavy)
Girth: 14 - 16 cm, Height: 4.0 - 4.5 m
Standard (Extra Heavy) nursery stock. CG 45L
Support: Double-staked, CS: 2.0 m.

Proposed - Hedgerows

Proposed - Native Shrub Planting Areas

Proposed - Planting Areas

Proposed - Native Enriched Wildflower Areas

Proposed - Native Woodland Flowering Bulb Planting Areas

Proposed - Wildflower Turf for SUDs

Proposed - Private Amenity Lawns

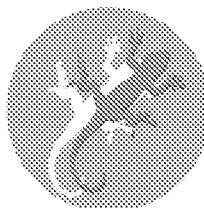
Proposed - Public Amenity Grassland

Notes:

- All alternatives to proposed materials to be fit for purpose, of equal quality and subject to Landscape Architect's approval.
- For detailed soft landscape scheme proposals refer to LLD2545-LAN-DWG-200 series - *Soft Landscape Infrastructure Planting Plans 1 - 4, Detailed Planting Plans 1 - 4, LLD2545-LAN-SCH-001 - Detailed & Soft Landscape Infrastructure Planting Schedule and Specification and LLD2545-LAN-SPE-001 - Soft Landscape Specification*.
- For details of proposed materials, features and fittings, refer to LLD2545-LAN-SCH-002 - *Hard Landscape Schedule*.

DRAFT ISSUE

Rev	Description	Date	Initials
01	Draft Issue	09.03.22	GL
00	Draft Issue	15.02.22	GL



LIZARD

Landscape Design and Ecology

The Old Bank, 34 South Street, Tarring, Worthing, West Sussex, BN14 7LH
T. 01903 216033 E. lizardlandscape@btconnect.com W. lizardlandscapeecology.com

<i>Client</i> Thakeham Group <i>Project Title and Location</i> Wings Nursery Lidsey Road, Woodgate			
<i>Drawing Title</i> Hard and Soft Landscape General Arrangement Plan - 4 of 4			
<i>Scale</i> 1:200 @ A1	<i>Drawn</i> GL	<i>Approved</i> KM	<i>Date</i> 15.02.22
<i>Drawing No</i> LLD2545-LAN-DWG-103			<i>Revision</i> 01

Hard and Soft Landscape General Arrangement Wings Nursery, Lidsey Road, Woodgate