

LANDSCAPE SPECIFICATION

For proposed SOFT and HARD works and at:
Millets, Thorpe Road, Weeley, Essex, CO16 9JN

Prepared by:
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Date:
11 11 2020

Project Ref: 1231

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1 Design Strategy

- 1.1 The following specification is for the new landscape areas associated with residential development at previously Millets site, Thorpe Road, Weeley, Essex, CO16 9JN.
- 1.2 The specification is accompanied by the soft works plans at the appendices of this report:
 - 1231-01 Thorpe Rd soft works
 - 1231-02 Thorpe Rd hard works
- 1.3 The landscape specification and soft works drawing have been prepared to discharge conditions 3, 4 and 5 of planning application 18/01839/FUL (Tendring District Council).
- 1.4 There are some trees and hedgerows to be retained on the site boundaries which require protection during all landscaping works.

2 Planting area preparation

- 2.1 Areas of new landscaping to boundaries and gardens should be protected throughout the construction phase to avoid ground compaction, where possible.
- 2.2 Any areas that are unavoidably subject to compaction should have topsoil removed and stored until landscaping can take place; these areas should be cultivated and de-compacted prior to reapplication of topsoil.
- 2.3 In areas of new landscaping, existing ground cover, understorey vegetation, leaf litter and other surface debris shall be removed using hand operated tools only, e.g. chainsaws, brush cutters, rakes etc. Care shall be taken to ensure tools do not cause impact damage to neighbouring tree RPAs, stems or branches. Particular care to be taken when new planting within the RPAs of retained trees takes place.
- 2.4 A suitable approved systemic herbicide shall be applied 4 weeks prior to cultivation at no more than manufacturer's approved rates by spot treatment to emergent weeds only, taking care to prevent spray drift onto the stems or leaves of trees to be retained, where necessary.
- 2.5 If necessary, a second application may be applied at least 2 weeks prior to cultivation.
- 2.6 Within the RPAs of the trees to be retained, there shall be NO raising of levels with imported topsoil, and these areas will be protected throughout development phase.
- 2.7 Areas of hard landscaping in RPAs of trees, there will be a build-up of hard landscaping materials using a reduced dig system as detailed in the Arboricultural Method Statement.

Sub soil:

- 2.8 Ideally subsoil reclaimed from the site is reused. Imported subsoil should match as closely as possible those on site. Alternatively, if current soil condition is poor, imported subsoil shall meet the following specification:
 - Texture 5-50% clay
 - PH 6-7.5
 - Stones <20%
- 2.9 To be free from toxic substances, weed seeds, plastic, metals etc. Subsoil shall be spread to a minimum of 250mm below new grass and shrub areas. Tree pits to be constructed as described in Section 3 'Planting Specification'. Subsoil to be spread by hand or using a back-acting track vehicle to cause minimum compaction and loss of soil structure. No soil handling shall be undertaken when the soil is wetter than the plastic limit.

Top soil:

- 2.10 Ideally topsoil reclaimed from site is reused. Imported topsoil should match as closely as possible those on site. Alternatively, if the current soil condition is poor, general purpose grade as described in Table 2, Topsoil Characteristics of BS 3882 - Specification for topsoil should be used. Soil shall be stored in heaps not exceeding 1.5 metres high. Heaps shall be graded to shed water and avoid ponding, maintained in a weed-free condition and protected from contamination or trespass by heavy machinery.
- 2.11 Topsoil shall be lightly consolidated in layers not exceeding 150mm using track laying machinery. Works shall not be undertaken in periods of wet weather.
- 2.12 Topsoil shall be laid to the following minimum depths:
- 150mm below new grass areas;
 - 400mm beneath new shrub areas.
- 2.13 Finished levels, after settlement, shall be as follows:
- 25mm above adjacent paving, new grassed areas and non-mulched shrub beds;
 - 75mm below adjacent paving and grass for mulched planting beds.
- 2.14 Tree pits to be back filled with topsoil to BS3882 specification.

Soil improvement:

- 2.15 Compost and fertilisers to be incorporated into the top 200mm of each square metre of topsoil for all new planting areas.

3 Planting specification

- 3.1 The planting shall be carried out in the first planting (seeding) season following completion of the development (between December and March inclusive).
- 3.2 All plant stock, plant handling and planting to be undertaken in accordance with the following British Standard Specifications and Code of Practice:
- BS 3936:1992 Part 1 Nursery Stock - Specification for trees and shrubs;
 - BS 3936:1981 Part 10 Nursery Stock - Specification for ground cover plants;
 - BS 4428:1989 - Code of Practice for General Landscaping Operations (excluding hard surfaces);
 - BS 8545:2014 Trees from Nursery to Independence in the Landscape;
 - The Code of Practice for Plant Handling 2002 (Horticultural Trades Association).

Plant Stock:

- 3.3 Plant stock to be supplied in accordance with the size and description specified on the plant schedule.
- 3.4 Plant stock shall be healthy, vigorous, free from pests and diseases and suitably hardened off for the proposed situation of planting, and lifted at a time in accordance with good nursery practice. Stock shall have a well formed fibrous root system and be free from perennial weeds. The form of trees shall be in accordance with BS 3936: 1992 Part 1 Section 7 - Form of trees.

Plant Handling:

- 3.5 All plant materials shall be lifted, bundled, labelled, packaged, transported, temporarily stored and planted in accordance with the procedures and methods illustrated in the publication, "Plant Handling" (Horticultural Trades Association) and relevant sections of BS 4043:1989 - Recommendations for transplanting of root-balled trees.

Shrub Planting:

- 3.6 All bare root stock shall be planted between December and March inclusive. Plants shall be delivered to site in quantities which can be planted the same day. No plant roots shall be allowed to dry out.
- 3.7 2L and 3L pot grown shrubs shall be planted in pits 350x350x350mm and back-filled gently with original topsoil combined with 1kg of slow release fertiliser per 300 square metres. (Isobutizidene divrea or sulphur-coated urea or similar approved).

3.8 Plant stock shall be watered in same day with 5 litres per plant.

Hedge planting:

- 3.9 All bare root stock shall be planted between December and March inclusive. Plants shall be delivered to site in quantities which can be planted the same day. No plant roots shall be allowed to dry out.
- 3.10 Plant handling as with Shrub planting: staggered rows as specified on the soft works plan per linear metre. L or T shaped notches, remove weeds, large stones to 50cm x 50cm. Back-filled gently with original topsoil and insert whip and cane support and photo-degradable guards need to be applied.

Select Standard or Heavy Standard Tree Planting:

- 3.11 Pits to be prepared to 800 x 800 x 800mm or 75mm larger than rootball. Sides to be scarified if sides have become compacted during excavation. Excavated material of usable quality to be retained in separated topsoil and subsoil for reuse where possible.
- 3.12 Standard Trees to be single staked using one stake (50mm diameter), driven into ground 300mm below bottom of pit at 45 degree angle.
- 3.13 Trees to be centrally located and stem placed in an upright position. Pit to be back-filled with original subsoil and topsoil to match previous levels, or subsoil and topsoil as described in section 2. Backfill firmly with original top soil, to 50mm above previous ground level to allow for settlement where possible.
- 3.14 Saw stakes to leave 600mm above soil level. Fix adjustable tree ties to each stake using biodegradable tree ties. Deer protection 120cm spiral tubes.
- 3.15 Bark mulch 50-100mm deep, 1m diameter.
- 3.16 Water in same day with 50 litres per tree.
- 3.17 All works shall be carried out to the minimum standard according to BS 3936:1992 -Nursery stock specification for trees and shrubs and BS 8545:2014 Trees from Nursery to Independence in the Landscape.

Mulch:

- 3.18 Planting beds shall be spread with a medium grade bark mulch to a settled depth of 75mm. Mulch to be free from fines, weeds, disease and contaminants.

4 Maintenance

- 4.1 External space shall be maintained by the Developers agent during the time of implementation. Thereafter the maintenance of all shared landscaped areas will be the responsibility of a management company and private gardens by residents.

Regular visits:

- 4.2 Recommended maintenance to include the following operations:
- Hand weed planting beds;
 - Remove litter;
 - Sweep mulch spillage;
 - Re-firm plant stock as necessary;
 - Adjust stakes and ties as necessary;
 - Prune plant stock as required to encourage good form and maintain the width of footways;
 - Check all plant stock and report signs of pests, disease, death and damage;
 - Maintain paths free of debris and overhanging plants;
 - Inspect paths for build-up of algae and apply treatment to maintain a slip free surface.

Watering:

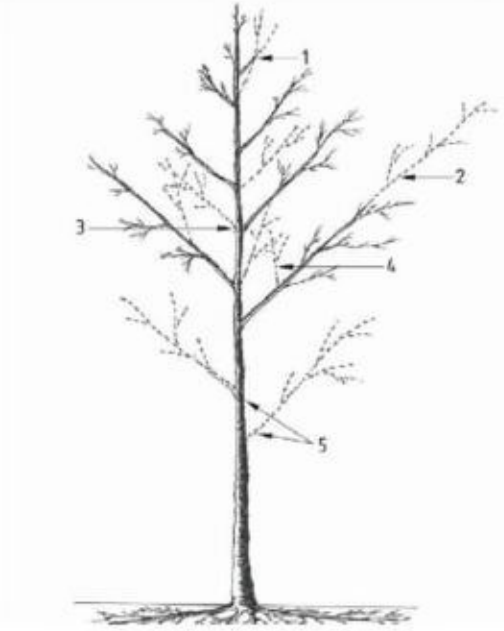
- 4.3 Recommended plant stock to receive the following quantities of water in the first 24 months:
- Select standard trees - 25 litres on 10 occasions throughout the growing season, or when less than 30mm precipitation at the end of any 4 week period;
 - Hedgerows - 20 litres per m² on three occasions throughout growing season, or when less than 30mm precipitation at the end of any 4 week period;
 - Shrub borders - on 10 occasions throughout the growing season, or when less than 30mm precipitation at the end of any 4 week period.

Plant replacements:

- 4.4 Within 5 years of completion of the development all dead, dying and vandalised plant stock to be replaced at the end of each growing season throughout the maintenance period.

Management of new trees:

- 4.5 Trees shall be inspected every autumn in order to assess their condition and identify tree work requirements. Tree works shall be carried out in accordance with the recommendations of the assessment in accordance with BS8545 Trees from Nursery to Independence in the Landscape.



4.6 Formative pruning of trees (BS8545:2014)

- Co dominant leader to be removed
- Over vigorous laterals to be subordinated
- Opposite branches to be removed
- Upright growth into crown to be removed
- Lower branches from nursery to be kept subordinated and to not form part of final scaffold

-  Likely extension growth following pruning



4.7 Lateral branches subordinated to retain size at no more than 50% diameter of main stem at point of attachment.



- 4.8 Included branch unions or weak forks to be pruned out.



- 4.9 Co-dominant leaders to be pruned out or subordinated to the main leader.

Hedgerows:

- 4.10 Trim outside of the bird nesting season in late February. Maintain hedgerow at 0.75m width and 1.8m high.

Grass cutting:

- 4.11 Grass to be cut throughout the first growing season to maintain a sward of 40mm to create tillering of grasses and make good coverage. To be edged and clippings removed and watered as necessary.
- 4.12 Second growing season and ongoing mow regularly to 25mm sward ornamental lawns and 40mm sward for wild flora lawns.

Management plan:

	Year 1	Year 2	Year 3	Year 4	Year 5
Shrub pruning	Maintain good form. Remove herbaceous material in spring before new growth. Replace, dead dying and diseased stock Climbers to be re tied where necessary and supporting wires applied	Maintain good form. Remove herbaceous material in spring before new growth. Replace, dead dying and diseased stock Top up mulch Climbers to be re tied where necessary and supporting wires applied	Maintain good form. Remove herbaceous material in spring before new growth. Replace, dead dying and diseased stock Climbers to be re tied where necessary and supporting wires applied	Maintain good form. Remove herbaceous material in spring before new growth. Replace, dead dying and diseased stock Top up mulch Climbers to be re tied where necessary and supporting wires applied	Maintain good form. Remove herbaceous material in spring before new growth. Replace, dead dying and diseased stock Climbers to be re tied where necessary and supporting wires applied
Lawn care	Regular mowing throughout the first growing season to maintain a 25mm sward. Maintain tidy edges and remove arisings	Regular mowing between May and October 25mm sward. Wildflora lawn at 40mm, pause mowing in June to Oct Maintain tidy edges and remove arisings	Regular mowing between May and October 25mm sward Maintain tidy edges and remove arisings	Regular mowing between May and October 25mm sward Maintain tidy edges and remove arisings	Regular mowing between May and October 25mm sward Maintain tidy edges and remove arisings
Hedgerows	Formative pruning, reduce to 75cm to encourage bushy growth.	Formative pruning, reduce to 1m to encourage bushy growth.	Boundary hedgerow Maintain at 1.5m height and 1.0m width. Interior hedgerows Maintain at 1.2m height and .5m width. Remove canes and guards	Boundary hedgerow Maintain at 1.5m height and 1.0m width. Interior hedgerows Maintain at 1.2m height and .5m width.	Boundary hedgerow Maintain at 1.5m height and 1.0m width. Interior hedgerows Maintain at 1.2m height and .5m width. Remove canes and guards
Inspection of tree health	Yearly Check tree health. Ensure good form by formative pruning	Yearly Check tree health. Ensure good form by formative pruning	Yearly Check tree health. Ensure good form by formative pruning	Yearly Check tree health. Replace, dead dying and diseased stock Remove stakes and ties	Yearly Check tree health. Replace, dead dying and diseased stock Remove guards

5 Plant schedule

Trees - Selected Standard: Native = (n); wildlife friendly = (w); multi-stemmed (MS)					
Name	Girth	Root condition	Habit		Number
Acer campestre (n)	10-12cm	Root balled	10-15m native tree		8
Alnus glutinosa (n)	10-12cm	Root balled	15-20m native related to species present adjacent site		6
Carpinus betulus (n)	10-12cm	Root balled	Tree up to 20m with good Autumn colour		9
Larix decidua (w)	10-12cm	Root balled	Deciduous conifer up to 30m		9
Sorbus aucuparia 'Edulis' (w)	10-12cm	Root balled	Ornamental tree to 12m red edible berries in autumn		3

Shrubs and Perennials: Native = (n); wildlife friendly = (w); multi-stemmed (MS)					
Name	Pot Size	Height	Habit	Density per sqm	Number
Anemone x hybrida 'Richard Ahrens' (w)	2l	20-30cm	Late summer white flowers at 1.5m	7	29
Blechnum spicant (n)	2l	20-30cm	Evergreen native fern 45cm	7	8
Euonymus fortunei 'Emerald Gaiety' (w)	2l	20-30cm	Variegated green and white evergreen 50 - 100cm	5	14
Geranium 'Johnson's Blue' (w)	2l	20-30cm	Summer flowers blue clump forming 50cm	7	19
Hebe rakaiensis (w)	2l	20-30cm	Evergreen with white summer flowers bright green foliage up to 100cm	5	6
Hebe 'Garden Beauty Blue' (w)	2l	20-30cm	Evergreen shrub with summer blue flowers 100cm	5	33
Lavandula 'Munstead' (w)	2l	30-40cm	Evergreen grey foliage with summer spikes of mauve flowers 75cm	5	30

Ruscus aculeatus (n)	3l	20-30cm	Evergreen native 75cm	3	19
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Native Species Hedge Plants - 8 per linear metre in staggered rows: Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Size	Root condition	Habit	Density per lsqm	Number
Acer campestre (n)	60cm	Bare rooted	Deciduous	1	74
Corylus avellana (n)	60cm	Bare rooted	Deciduous	2	148
Crataegus monogyna (n)	60cm	Bare rooted	Deciduous	4	296
Rosa canina (n)	60cm	Bare rooted	Deciduous	0.5	37
Ulmus glabra (n)	60cm	Bare rooted	Deciduous	0.5	37

Formal or Single Species Hedge Plants - 5 per linear metre in staggered rows (formal): Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Size	Root condition	Habit	Density per lsqm	Number
Carpinus betulus (n)	60 - 90cm	Bare rooted	Deciduous	5	260
Ligustrum vulgare (n)	60 - 90cm	3l pot or bare rooted	Deciduous	5	210

Climbers: Native = (n); wildlife friendly = (w); multi-stemmed (MS)

Name	Pot Size	Height	Habit	Density per lm	Number
Clematis armandii 'Apple Blossom' (w)	3l	60cm	Evergreen with early white fragrant flowers 8m	1	6
Hydrangea petiolaris (w)	3l	60cm	Deciduous self supporting climber with white flowers good in shade	1	5


Rosa 'The Generous Gardener' (n)	3l	60cm	Repeat flowering climbing rose 4m	1	5
Vitis coignetiae (w)	3l	40-60cm	Good autumn colour up to 12m	1	3

6 Hard works schedule

<p>Material</p>	<p>Marshalls Permeable Driveline Piora Block Paving 'Bracken' 100 x 200 x 60mm (or similar) Construction to be completed in accordance with SuDS engineering on site. Sub base to be permeable</p> 
<p>Usage</p>	<p>Areas indicated on hard works plan</p>

<p>Material</p>	<p>Marshalls Firestone paving 'Fired York' concrete paving, 600 x 300 x 38mm</p> 
<p>Usage</p>	<p>Areas indicated on hard works plan</p>

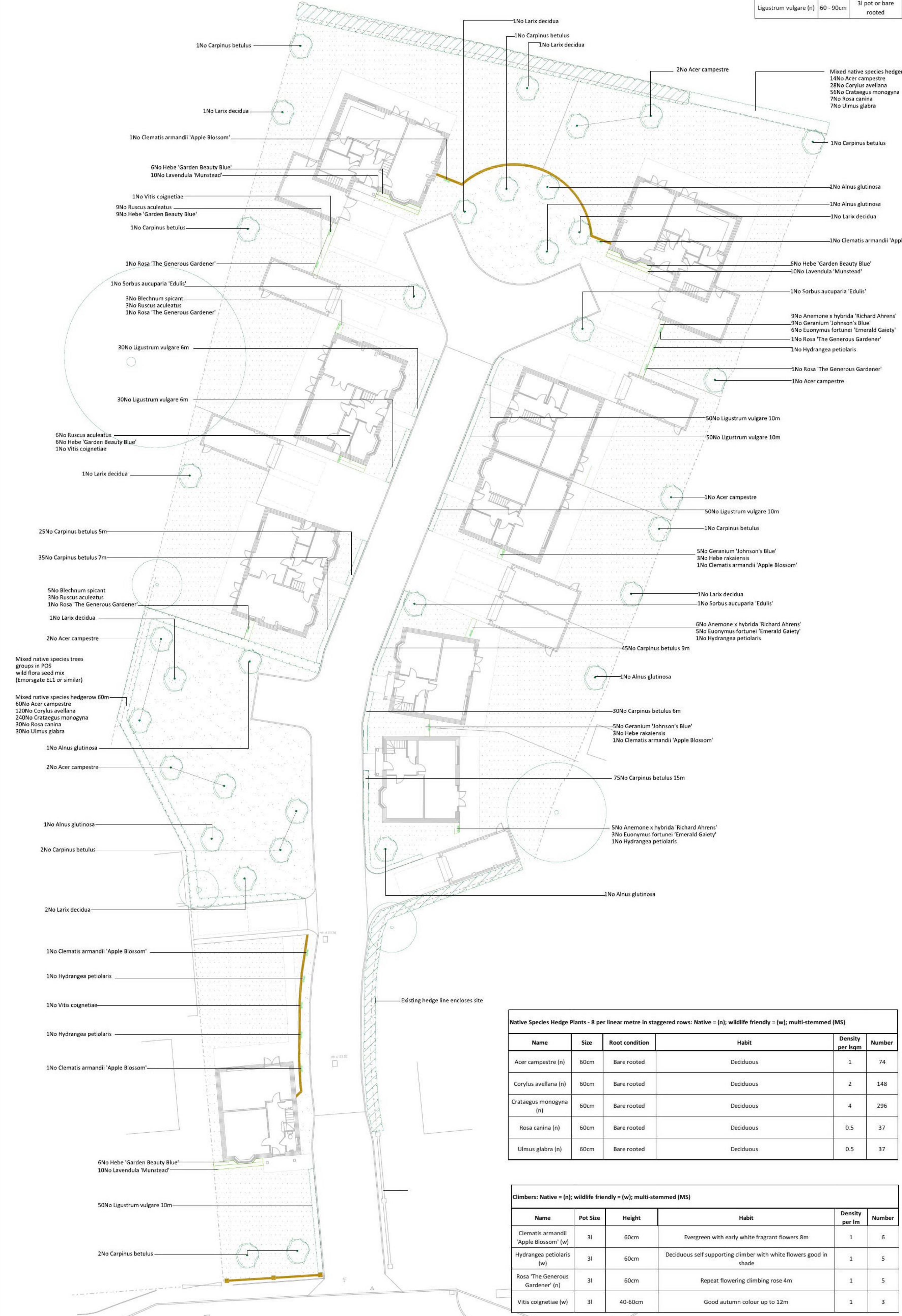
<p>Material</p>	<p>Bird box - Vivara Pro Burgos Woodstone Swift Box 245 (h) x 380 (w) x 265mm (d)</p> 
<p>Usage</p>	<p>Areas indicated on hard works plan</p>

Material	Bat box Schwegler 1FF bat boxes favoured by Pipistrelle and Noctule 
Usage	6m above ground level southeast facing

Trees - Selected Standard: Native = (n); wildlife friendly = (w); multi-stemmed (MS)				
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Formal or Single Species Hedge Plants - 5 per linear metre in staggered rows (formal): Native = (n); wildlife friendly = (w); multi-stemmed (MS)					
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The planting shall be carried out in the first planting (seeding) season following completion of the development (between December and March inclusive).

All plant stock, plant handling and planting to be undertaken in accordance with the following British Standard Specifications and Code of Practice:

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- BS 3936:1998 Part 10 Nursery Stock - Specification for ground cover plants;
- BS 4428:1989 - Code of Practice for General Landscaping Operations (excluding hard surfaces);
- BS 8545:2014 Trees from Nursery to Independence in the Landscape;
- The Code of Practice for Plant Handling 2002 (Horticultural Trades Association).

LEGEND (SOFT WORKS)

- Retained tree
- Semi mature tree, rootballed
- Grasses, ferns and herbaceous mix
- Hedging
- Climber
- Species Rich Lawn - Wild flora lawn mix Emorsgate EL1 (or similar)
- Mown amenity grass -The Grass Seed Store Basic hard wearing (or similar)

Notes
Plan to be read in conjunction with the engineer and landscape drawings.

No measurements to be scaled off drawing. Worked from figured dimensions only.

All dimensions shown on drawing are shown in millimetres unless otherwise stated.

All dimensions and levels to be checked on site. Landscape Architect to be notified immediately of any discrepancies prior to the commencement of works.

Native Species Hedge Plants - 8 per linear metre in staggered rows: Native = (n); wildlife friendly = (w); multi-stemmed (MS)						
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Climbers: Native = (n); wildlife friendly = (w); multi-stemmed (MS)						
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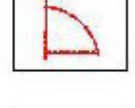
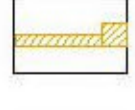
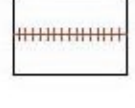
Date	Reason for revisions	By

Client: Dovercourt Building Contracts
 Project: Millets, Thorpe Road, Weeley, Essex, CO16 9JN
 Drawing Title: Soft works
 Scale: 1:200 @ A1 Date: Sept 2020
 Drawing Number: 1231-01 Revision Number: -

APPENDIX 1



LEGEND (HARD WORKS)

-  Bituminous macadam, black with concrete kerbs
-  Marshall's Firestone paving 'Fired York' 300 x 600 x 38mm, concrete paving (or similar)
-  Marshall's Permeable Driveline Piora Block Paving 'Bracken' 100 x 200 x 60mm (or similar), stretcher bond Edging concrete flat top 50 w x 150 d x 940mm l
-  Close Board fence -1800mm high in total, 1500mm high close board with 300mm high trellis top, treated timber, rough sawn treated timber
-  Timber gates, 1800mm height and 1200mm width
-  New brick wall and pillars to match new brick elements
-  Timber post and rail fence 1200mm ht
-  Hedgehog highway, 15 x 15cm hole at fence base to allow passage, should be signposted to avoid blocking up by residents
-  Bat box - 2 x Schwegler 1FF boxes
-  Bird box - 2 x Vivara Pro Burgos Woodstone Swift Box

Notes
Plan to be read in conjunction with the engineer and landscape drawings.

No measurements to be scaled off drawing. Worked from figured dimensions only.

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All dimensions and levels to be checked on site. Landscape Architect to be notified immediately of any discrepancies prior to the commencement of works.



Date	Reason for revisions	By

Client
Dovercourt Building Contracts

Project:
Milets, Thorpe Road, Weeley, Essex, CO16 5JN

Drawing Title:
Hard works

Scale: 1:200 @ A1 Date: Sept 2020

Drawing Number: 1231-02 Revision Number:

APPENDIX 2

