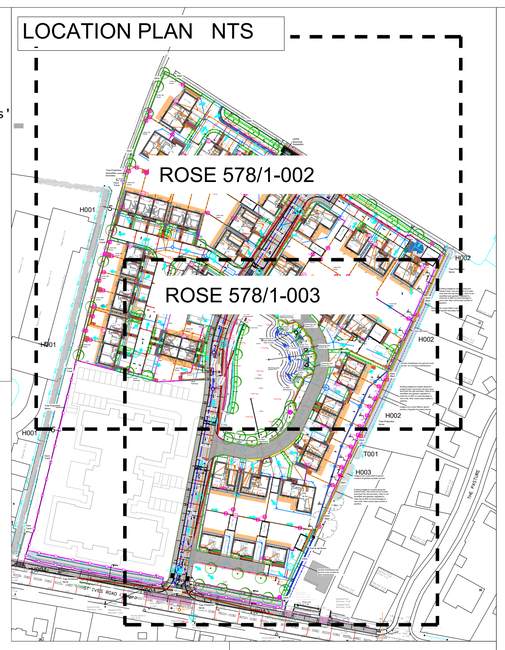
NOTES AND ABBREVIATIONS:
B = Bare root (bagged)
C = Container (or pot) grown, followed by size of the container (or pot)
EHS = Extra Heavy Standard 14-16cm girth
FORM = Shape of tree as supplied by the nursery
HABIT = Juvenile habit or plant shape as supplied by the nursery
QTY = Quantity
SIZE = Height or Spread of juvenile plant
SM = Semi-Mature 16-18cm girth plus
SS = Selected Standard 10-12cm girth
Std = (clear stem) Standard.
STOCK = Root condition/protection method eg Bare root
Trans = Transplant (or undercut seedling)
- Refer to specification for further information
- All plants to be completely hardened off
- Substitutions to be agreed with Landscape Architect
Plant Schedule generated by "Qscape" software 15/05/2025

SCHEDULE OF QUANTITIES

SOFT LANDSCAPE TO GENERAL AREAS:
139m2 Bulbs
10No. Climber 3L
601m2 Grass-Turf
1827m2 Emorsgate EL1 'Flowering Lawn' Mix
74m2 Emorsgate EM8 'Meadow Mixture for Wetlands'
260m Planting-Hedges-Native
280m Planting-Hedges
412m2 Planting-SemiNative Mixes
403m2 Planting-Shrubs and Herbaceous
37m Planting - Hedges - Strengthening
58No. Tree - EHS

HARD LANDSCAPE TO GENERAL AREAS:
9No. BREEAM - Bat Box - Flat
14No. BREEAM - Bird Box 1
56No. BREEAM - Hedgehog Hole
4No. BREEAM - Hedgehog Dome
22m Edging Timber
13m Edging Timber (with Geotextile)
40m2 Gravel over geotextile membrane
93m Railing Kneerail tTimber diamond
9m Retaining Wall
16m2 Slabs concrete s400x400 pStretcher
16No. Structural Cells - tree pit detail 1
299m Tree Root Barrier 1.5m Deep

LOCATION PLAN NTS



KEY

Existing Vegetation

EXISTING TREE AND HEDGE RETAINED. REFER TO HAYDEN'S AIA REPORT. TREE PROTECTION FENCE LOCATIONS WITH DIMENSIONS OFFSET FROM EDGE OF CANOPY INDICATED

KEY

Soft Works

PROPOSED EXTRA HEAVY STANDARD TREE (14-16CM) WITH DOUBLE STAKE, RUBBER TREE TIES & SPACERS, 65MM DIAM. X 1.5M LONG PERFORATED IRRIGATION PIPE & 50MM DEPTH BARK MULCH AFTER SETTLEMENT.

PROPOSED LOAD BEARING TREE PIT DETAIL, USING SINGLE LAYER STRUCTURAL CELL CRATED SYSTEM, SUCH AS DEEPROOT SILVA CELL 2X. REFER TO ELD DETAIL 1 FOR TREES.

PROPOSED NATIVE HEDGES, AT 4NO/M, LOCATED CENTRALLY IN HEDGE TRENCH, MINIMUM 1.2M WIDE, WITH RABBIT GAURDS AND 50MM DEPTH BARK MULCH AFTER SETTLEMENT.

PROPOSED HEDGE STRENGTHENING AT 1NO/M, LOCATED IN GAPS IN HEDGE, WITH RABBIT GAURDS AND 50MM DEPTH BARK MULCH AFTER SETTLEMENT.

PROPOSED ORNAMENTAL HEDGES PLANTED CENTRALLY IN HEDGE TRENCH, MINIMUM 1.2M WIDE, WITH 50MM DEPTH BARK MULCH AFTER SETTLEMENT.

PROPOSED SEMI NATIVE SHRUB MIXES, WITH 50MM BARK MULCH AFTER SETTLEMENT, TO 1M DIAM. TO BASE.

PROPOSED SHRUB AND HERBACEOUS PLANTING WITH 50MM DEPTH BARK MULCH AFTER SETTLEMENT.

PROPOSED SELF CLINGING CLIMBER, 3L.

PROPOSED BULB PLANTING SUCH AS NARCISSUS, GALANTHUS AND CROCUS AT 10NO/M2

PROPOSED TURF TO PLOT FRONTAGES.

PROPOSED 'FLOWERING LAWN', TYPE 'EL1', SOWN AT 4G/M2 TO CONTAIN 20% WILD FLOWERS AND 80% GRASS SPECIES. TO BE CUT AT REGULAR 7-10 DAY INTERVALS AT A HEIGHT OF 40-60MM UNTIL ESTABLISHED. FOLLOWING ESTALISHMENT A REGULAR CUTTING REGIME CAN BE FOLLOWED WITH ALL ARISINGS REMOVED FROM SITE. AVAILABLE FROM EMORSGATE SEEDS, TEL: 01533 829028.

PROPOSED 'MEADOW MIXTURE FOR WETLANDS', TYPE 'EM8', LOCATED AT THE BASE OF THE CENTRAL POS SWALE, SOWN AT 4G/M2 TO CONTAIN 20% WILD FLOWERS AND 80% GRASS SPECIES. TO BE CUT AT REGULAR 7-10 DAY INTERVALS AT A HEIGHT OF 40-60MM UNTIL ESTABLISHED. FOLLOWING ESTABLISHMENT A BIANNUAL CUTTING REGIME CAN BE FOLLOWED, (1ST CUT IN MARCH, SECOND CUT SEPTEMBER) WITH ALL ARISINGS REMOVED FROM SITE. AVAILABLE FROM EMORSGATE SEEDS, TEL: 01533 829028.

Hard Works

PROPOSED GRAVEL OVER GEOTEXTILE, 50MM DEPTH.

PROPOSED TIMBER PEG AND BOARD EDGING BETWEEN GRAVEL OVER GEOTEXTILE AND PLANTING. TIMBER EDGING TO BE 150 X 38MM, SECURED WITH WOODEN PEGS 50 X 600MM.

PROPOSED ROOT BARRIER, TYPE 'REROOT 2000 BARRIER', 2.0MM THICK X 1.5M WIDE, REF. RER220X1.5A, WITH JOINT TAPE, REF:RERJTA, SUPPLIED BY BLUE GREEN URBAN, TEL: 01580 830800, OR SIMILAR APPROVED.

EXISTING DITCH RETAINED.

PROPOSED GARDENS TO BE GRADED TO TO MEET EXISTING DITCH LEVEL ALONG EASTERN BANK NEXT TO EXISTING TREES/HEDGES.

PROPOSED FRENCH DRAIN TO BE A GRAVEL FILLED TRENCH, 1m DEEP X 0.5m WIDE (NO GEOTEXTILE MEMBRANE REQUIRED), WITH 300mm TOPSOIL OVER THE SURFACE TO ACT AS NATURAL FILTRATION TO AID DRAINAGE.

ECOLOGY
Bird boxes are to be used as appropriate for song thrush, dunnock and starling birds amongst other species and to be located on site in conjunction with the project ecologist. Available from www.nhbs.com or RSPB Ecosurv Ltd www.ecosurv.co.uk

fBtB PROPOSED BAT BOX TO BE SCHWEGLER "WOODCRETE" BAT BOX, TYPE "1FF", WALL-MOUNTED, OR INTEGRATED "1FR" BAT TUBES, OR SIMILAR APPROVED. ORIENTATION TO BE SOUTH, SOUTH WEST OR WEST ABOVE 3M HIGH ON NEW HOUSES. 9NO. IN TOTAL.

BB1 PROPOSED BIRD BOX, COLOUR BROWN, MOUNTED ONTO BUILDINGS A MINIMUM OF 3m ABOVE GROUND. TO BE MOUNTED BELOW GUTTERS ON EXTERNAL WALLS OF HOUSES, AVOIDING WINDOWS, PATIOS AND PATHS BELOW BIRD BOXES. BOXES SHALL BE SUITABLE FOR SPECIES APPROPRIATE TO THE SITE, SUCH AS SWIFT AND HOUSE SPARROW, USING SCHWEGLER SWIFT NEST BOXES AND SCHWEGLER SPARROW TERRACES, AS AGREED WITH PROJECT ECOLOGIST.
- BB1 - BIRD NEST BOXES - 14NO in TOTAL.

Hd PROPOSED HEDGE HOG HOLES IN BASE OF CLOSE BOARD/PANEL FENCES, 13 X 13CM IN SIZE, TO ALLOW MOVEMENT OF PROTECTED SPECIES. 51NO IN TOTAL.

Hd PROPOSED HEDGEHOG DOME TO BE SCHWEGLAR "WOODCRETE" HEDGEHOG DOME, COLOUR "BROWN", 480mm DIAMETER X 280mm HIGH. 4NO. IN TOTAL.

By developer

1800mm High 215mm solid brick wall
2400mm High Close Boarded Fence (50mm Overlap) on Steel Posts with Gravel Boards
2200mm High Close Boarded Fence on Concrete Posts with Gravel Boards
1800mm High Close Boarded Fence on Concrete Posts with Gravel Boards
1000mm High Close Boarded Fence on Concrete Posts with Gravel Boards
1800mm Hoop Top Metal Railings
1200mm Post & Rail Fence with 3 Rails
Patio - Bradstone Peak Riven in Buff - Rear Gardens
Patio - Bradstone Peak Riven in Buff - Front Gardens
Block Paved Service Strip. Refer to Drainage Engineer's details.
S 1800 x 900 Shed
S* 1800 x 1200 Shed
Swale
600mm high Timber Knee rail
Site lines
+8.40m Proposed Levels.
7.59m Exg Existing Central POS Levels
Proposed lighting columns 5m high.

PLANT SCHEDULE

TREES

QTY	CODE	PLANT NAME	STOCK	FORM	GIRTH/HEIGHT
5No.	Ace Str EHS	Acer campestre 'Streetwise'	C 85L	STD	14-16cm
2No.	Aln glu EHS	Alnus glutinosa	C 85L	STD	14-16cm
1No.	Aln Imp EHS	Alnus glutinose 'Imperalis'	C 85L	STD	14-16cm
4No.	Ame RH EHS	Amelanchier arborea 'Robin Hill'	C 85L	STD	14-16cm
2No.	Bet nig EHS	Betula nigra	C 85L	STD	14-16cm
2No.	Bet pen EHS	Betula pendula	C 85L	STD	14-16cm
3No.	Bet Jac EHS	Betula utilis var. Jacquemontii	C 85L	STD	14-16cm
22No.	Car bet EHS	Carpinus betulus	C 85L	STD	14-16cm
2No.	Car FF EHS	Carpinus betulus 'Frans Fontaine'	C 85L	STD	14-16cm
2No.	Mal SP EHS	Malus baccata 'Street Parade'	C 85L	STD	14-16cm
2No.	Pyr Red EHS	Pyrus calleryana 'Redspire'	C 85L	STD	14-16cm
2No.	Sor SS EHS	Sorbus aucuparia 'Sheerwater Seedling'	C 85L	STD	14-16cm
8No.	Til GS EHS	Tilia cordata 'Green Spire'	C 85L	STD	14-16cm

SHRUBS

QTY	CODE	PLANT NAME	STOCK	SIZE	SPACING
19No.	Abe Mas	Abelia x grandiflora 'Francis Mason'	C 3L	30-40cm	3/m2
95No.	Auc Roz	Aucuba japonica 'Rozannie'	C 3L	30-40cm	3/m2
22No.	Car HB	Caryopteris x clandonensis 'Heavenly Blue'	C 3L	20-30cm	3/m2
34No.	Cea BMo	Ceanothus 'Blue Mound'	C 3L	40-60cm	3/m2
22No.	Cho AzG	Choisya x dewitteana 'Aztec Gold'	C 3L	40-60cm	3/m2
50No.	Cho Azt	Choisya ternata 'Aztec Pearl'	C 3L	40-60cm	3/m2
35No.	Cis cor	Cistus x corbariensis	C 3L	30-40cm	4/m2
23No.	Cis Sun	Cistus pulverulentus 'Sunset'	C 3L	30-40cm	4/m2
49No.	Cor sMFi	Cornus sanguinea 'Midwinter Fire'	C 3L	40-60cm	3/m2
75No.	Cor aSV	Cornus alba 'Sibirica Variegata'	C 3L	40-60cm	3/m2
45No.	Cor Kel	Cornus sericea 'Kelseyi'	C 3L	40-60cm	4/m2
9No.	Esc AB	Escallonia 'Apple Blossom'	C 3L	40-60cm	3/m2
63No.	Euo SQ	Euonymus 'Silver Queen'	C 3L	20-30cm	4/m2
97No.	Euo Eme	Euonymus fortunei 'Emerald Gaiety'	C 3L	20-30cm	4/m2
140No.	Euo Ego	Euonymus fortunei 'Emerald 'n' Gold'	C 3L	20-30cm	4/m2
11No.	Heb MB	Hebe 'Midsummer Beauty'	C 3L	30-40cm	3/m2
15No.	Heb Mar	Hebe 'Margorie'	C 3L	30-40cm	3/m2
115No.	Heb eve	Hebe evenosa	C 3L	20-30cm	4/m2
15No.	Heb REd	Hebe albicans 'Red Edge'	C 3L	20-30cm	4/m2
8No.	Hyd WW	Hydrangea macrophylla 'White Wave'	C 3L	40-60cm	4/m2
17No.	Hyd Wu	Hydrangea macrophylla 'Wudu'	C 3L	40-60cm	3/m2
20No.	Hyp Hid	Hypericum 'Hidcote'	C 3L	40-60cm	4/m2
38No.	Lav Hid	Lavandula angustifolia 'Hidcote'	C 3L	20-30cm	4/m2
118No.	Lon May	Lonicera nitida 'Maygreen'	C 3L	30-40cm	3/m2
22No.	Phi Sno	Philadelphus 'Snowbelle'	C 3L	30-40cm	3/m2
14No.	Pho LRR	Photinia x fraseri 'Little Red Robin'	C 3L	40-60cm	4/m2
5No.	Pit TT	Pittosporum 'Tom Thumb'	C 3L	30-40cm	1/m2
16No.	Pru Ott	Prunus lauracersus 'Otto Luyken'	C 3L	30-40cm	3/m2
18No.	Ros Bo	Rosa 'Bonica'	C 3L	30-40cm	4/m2
56No.	Ros WFC	Rosa 'White Flower Carpet'	C 3L	30-40cm	4/m2
75No.	Sar con	Sarcoccoca confusa	C 3L	20-30cm	4/m2
33No.	Spi Sm	Spiraea nipponica 'Snowmound'	C 3L	40-60cm	3/m2
23No.	Vib dav	Viburnum davidii	C 3L	40-60cm	4/m2

HEDGES

QTY	CODE	PLANT NAME	STOCK	SIZE
264m	Lig ova Hedge 4/m	Ligustrum ovalifolium	C 3L	90-120cm
1056No. Plants spaced @ 4/m in a Double Staggered Row				
5m	Lon May Hedge 5L	Lonicera nitida 'May Green'	C 5L	40-60cm
15No. Plants spaced @ 3/m in a Single Row				
8m	Lon May Hedge 5L 4/m	Lonicera nitida 'May Green'	C 5L	40-60cm
32No. Plants spaced @ 4/m in a Double Staggered Row				
4m	Lon May Hedge 3L 5/m	Lonicera nitida 'May Green'	C 3L	30-40cm
20No. Plants spaced @ 5/m in a Double Staggered Row				
4m	Lon May Hedge 5L 5/m	Lonicera nitida 'May Green'	C 5L	40-60cm
20No. Plants spaced @ 5/m in a Double Staggered Row				
4m	Lon May Hedge 6/m	Lonicera nitida 'May Green'	C 3L	30-40cm
24No. Plants spaced @ 6/m in a Tripple Staggered Row				

HEDGE MIXES

PERCENT	QTY	PLANT NAME	STOCK	SIZE
59m CORNUS HEDGE MIX 1 planted @ 3/m in a double staggered row				
35%	62No.	Cornus Sibirica	C 3L	90-120cm
30%	53No.	Cornus alba 'Kesselringii'	C 3L	90-120cm
35%	62No.	Cornus alba 'Midwinter Fire'	C 3L	90-120cm
Individual varieties to be planted in groups of approximately 3-5 of same species.				
37m NATIVE HEDGE MIX 11 (Hedge Strengthening) planted @ 1/m in a Single Row				
25%	9No.	Carpinus betulus	B Trans	60-80cm
25%	9No.	Crataegus monogyna	B Trans	60-80cm
20%	7No.	Corylus avellana	B Trans	60-80cm
20%	7No.	Cornus sanguinea	B Trans	60-80cm
10%	4No.	Rosa canina	B Trans	60-80cm
To be planted in species groups of approximately 3 of same species.				
107m NATIVE HEDGE MIX 12A planted @ 4/m in a double staggered row				
40%	171No.	Ligustrum vulgare	B Trans	60-80cm
20%	86No.	Cornus sanguinea	B Trans	60-80cm
20%	86No.	Corylus avellana	B Trans	60-80cm
10%	43No.	Euonymus europaeus	B Trans	60-80cm
10%	43No.	Viburnum opulus	B Trans	60-80cm
Individual varieties to be planted in groups of approximately 3-5 of same species.				
102m NATIVE HEDGE MIX 19 planted @ 4/m in a double staggered row, 1.2m wide trench				
5%	19No.	Acer campestre	B Trans	60-80cm
60%	226No.	Crataegus monogyna	B Trans	60-80cm
5%	19No.	Corylus avellana	B Trans	60-80cm
5%	19No.	Euonmyus europaeus	B Trans	60-80cm
5%	19No.	Cornus sanguinea	B Trans	60-80cm
5%	19No.	Rosa canina	B Trans	60-80cm
5%	19No.	Ribes sanguinium	B Trans	60-80cm
10%	38No.	Malus sylvestris	B Trans	60-80cm
Individual varieties to be planted in groups of approximately 3-5 of same species.				

PLANT MIXES

PERCENT	QTY	PLANT NAME	STOCK	SIZE
298m2 NATIVE SHRUB MIX 5 planted @ 1.0m centres				
20%	60No.	Euonymus europaeus	C 3L	90-120cm
20%	60No.	Viburnum opulus	C 3L	90-120cm
20%	60No.	Viburnum lantana	C 3L	90-120cm
20%	60No.	Cornus sanguinea	C 3L	90-120cm
10%	30No.	Ligustrum vulgare	C 3L	90-120cm
10%	30No.	Corylus avellana	C 3L	90-120cm
Individual varieties to be planted in groups of approximately 3-5 of same species.				
118m2 NATIVE SHRUB MIX 9 planted @ 1m centres				
20%	23No.	Cornus sibirica	C 3L	90-120cm
30%	35No.	Corylus avellana	C 3L	90-120cm
15%	17No.	Viburnum opulus	C 3L	90-120cm
15%	17No.	Viburnum lantana	C 3L	90-120cm
15%	17No.	Ribes sanguinium	C 3L	90-120cm
5%	6No.	Ilex aquifolium	C 3L	90-120cm
Individual varieties to be planted in groups of approximately 3-5 of same species.				

CLIMBERS

QTY	CODE	PLANT NAME	STOCK	HEIGHT	HABIT
2No.	Hed Gla 10L	Hedera 'Glacier'	C 10L	80-100cm	Self-clinger
1No.	Hed Den	Hedera colchica 'Dentata Variegata'	C 5L	60-80cm	Self-clinger
3No.	Par hen	Parthenocissus henryana	C 3L	60-80cm	Self-clinger
4No.	Par Vei	Parthenocissus tricuspidata 'Veitchii'	C 3L	60-80cm	Self-clinger

LANDSCAPE SPECIFICATION

STANDARDS
All works shall confirm to BS 8545:2014, the new British Standard Trees: From Nursery to Independence in the Landscape – Recommendations; BS 3936 Part 1: 1992 (Trees & Shrubs); BS 3939 Part 4: 1984 (Forest Trees), in conjunction with the Code of Practice for Plant Handling issued by the Joint Liaison Committee of Plant Suppliers (1980). Enough plants shall be labelled so that when planted, one tree/shrub of each species in each border can be identified by labels.

Biosecurity of plant sourcing is vital. Contractors must demonstrate, with undisputed proof, that plants have certified 'Plant Passports' validating importation and ideally, at least 1 growing season in an approved UK nursery quarantine system, if imported from overseas.

IMPLEMENTATION PROGRAMME
Soft landscaping to be timetabled and implemented during the first planting season, (Mid-November to Mid-March), after the substantial completion of the hardworks. Planting shall take place in conjunction with the building programme, but must not be carried out when the ground is frozen or waterlogged, or during periods of persistent wind. **Soil stripping, moving or handling shall NOT take place when soils are saturated as this will create damaged soils and lead to waterlogging.**

SERVICES
No services have been cross referenced with soft landscape to date. Further reference is required to review service and utility locations to identify any potential conflicts. Client/engineer to review and advise accordingly.

DITCH CULTVERTING & EXISTING LEVELS
Eastern garden boundaries shall be regraded to marry with the opposite ditch level along existing gardens to permit culverting of the ditch. Backfilling with soil shall not exceed this esixtign level along the eastern side of the ditch to avoid suffocation of tree roots.

TOPSOIL PREPARATION
No topsoil stripping, moving or cultivation shall take place when soils are saturated or frozen as this will result in damage to the soil structure and lead to waterlogging post planting. Planting areas located below existing trees shall be hand dug and cultivated with topsoil insitu, adding 100mm of peat free compost. 50mm depth of BSI PAS 100:2011 compost/biofertiliser, or similar approved green waste/peat free compost shall be added to all other planting areas prior to final cultivation.

All new planting and grass areas outside of root protection areas shall be excavated to the specified depth and the base of all planting beds/ lawns ripped a further 250mm minimum, to provide free drainage. All arisings and debris shall be removed prior to topsoiling to include bricks, rubble or debris in subsoil layers.

If viable, existing topsoil shall be stripped, stored adn reused on site. If topsoil is imported, it hsall be 'as dug' if possible, as a free draining material and not be a blended/manufactured mix of soil and compost. Imported topsoil shall be of loam type; free of contamination and contain a maximum of 30% clay or sand/silt fines of 0.02mm to 0.5mm size to BS 3882:2015. A topsoil sample shall be taken from every 500m3 of topsoil imported, with topsoil 'Structure Analysis' provided to satisfy use as a 'General Landscape' material and that it is free of contamination.

If topsoil is imported as a 'multipurpose topsoil', to include natural topsoil from an approved source, or, a manufactured topsoil to BS 3882:2015, such as 'Green-Tree Topsoil' available from Green-tech: 01423 332 100. Imported topsoil shall be of loam type; free of contamination and contain a maximum of 35% clay or sand/silt fines of 0.02mm to 0.5mm size. 3no topsoil samples shall be taken from every 500m3 of topsoil imported, with topsoil 'Structure Analysis' provided to satisfy use as a 'General Landscape' material. A 'Declaration of Analysis' shall also be provided to identify:
- Location of topsoil source, and previous and current land use for Natural Soils only.
- Date of Sampling and Analysis.
- Test results including Contamination Parameters.
- Written confirmation of compliance with the relevant Topsoil Grade in BS3882:2015.

Any imported soil that does not meet project specifications for structure, texture, quality or chemistry may be rejected.

The Landscape Contractor is responsible for identifying to the Site Manager/LA areas where subsoil preparation or topsoil depth is not satisfactory, so inadequacies can be remediated before planting.

Topsoil stored on site as topsoil heaps up to 2.0m high and not trafficked by heavy plant. Topsoil shall be regularly treated with herbicide and prior to use, to prevent the spread of unwanted seed banks. Long term topsoil storage heaps shall be seeded with grass to prevent weed invasion.

- Shrub and lawn areas shall be thoroughly decompacted prior to spreading topsoil.
- Shrub beds shall be topsoiled to a minimum depth of 300mm;
- Hedgerows shall be topsoiled to a minimum depth of 300mm;
- Private grass/lawn areas shall be topsoiled to a minimum depth of 200mm; and
- Public grass areas to 150mm depth.

All shrub beds shall be cultivated to a depth of 250mm, graded to remove minor hollows and ridges and raked to a uniform grade and even tilth prior to planting operations. Finished topsoil levels of shrub and hedge beds shall be 65mm below adjacent, finished levels where bark is specified, to allow recessing 15mm below adjacent surfaces to prevent bark spillage after settlement. All new planting beds and hedgerows shall be covered with 50mm depth of WRAP approved, BSI PAS 100:2011 compost / biofertiliser prior to final cultivation, or similar approved green waste.

PROPOSED TREES – DELIVERY
All trees should be individually, clearly labelled, indicating the supplier's name, species, variety, cultivar and size. All trees shall be loaded and stacked in such a way as to minimize the possibility of breakage or crushing by the weight of the plants above or from the security ropes. On open lorries, the trees should be completely covered with secure, opaque sheeting. In closed lorries or containers, provision shall be made to ensure that the trees remain cool and moist at all times during transit.

All trees shall be lowered intact from the lorry by hand or machinery and not dropped onto the ground causing damage to the root system.

PROPOSED TREES – PLANTING
No bare root stock are permitted and all trees are specified as container grown stock to ensure a full and established root development within the container to provide thebest chances of establishment. If planted withint he growing season, rootballed trees shall be permitted. Trees of 12cm-14cm girth must have been transplanted at least three times on the nursery and contain a fully fibrous root system with obvious evidence of root pruning or transplanting, whilst being proportionate size to the stem diameter.

Containerised or container-grown trees shall be free from circling or girdled roots and the natural root flare shall be visible at all times. As the root systems of rootballed, containerised or container-grown trees are not visible until the time of planting, a sample of the actual root system shall be checked by the LA where practicable, by breaking open a small percentage of rootballs or containers. All wire used for rootballing should be non-galvanised.

Proof of Plant Passport or biosecurity measures shall be provided to the Landscape Architect prior to bringing trees to site.

STRUCTURAL CELLS BELOW PAVING
Refer to ELD Detail 1. These MUST be installed ahead of ANY surfacing works.

It is imperative that trees are planted exactly where indicated to avoid invalidation of NHBC/Zurich warranties through root impact on standard depth foundations. Trees shall be supplied to the sizes and stock shown on the plant schedule and planted in the locations shown. The root flare of the newly planted tree shall be clearly visible at the soil surface and not be buried by excess soil or mulch.

Once a rootballed tree has been positioned in the planting pit, hessian, twine and the wire cage shall be loosened, removing all wire that encircles the stem diameter.

Where tree planting is specified within or next to hard landscape areas, haunching to kerb adging around pits shall be controlled by shuttering, avoiding concrete spread into tree pits and planting areas.All trees shall be supported with a double stake as follows: All stakes shall be 75mm diameter and 2.5m long, pressure impregnated with preservative to BS:1282, of a softwood source, free of any projections or bark and pointed at one end.

It shall be **driven into the pit prior to planting**, to a depth 1.0m below the base of the pit, and following planting the stake shall be cut to a height of 1.0m above finished ground level. The tree shall be secured to the stake(s) using a "Rubberlock" standard belt tie with rubber spacer blocks, or similar approved, wrapped around the trunk and passed through a rubber collar/spacer between the trunk and stake to prevent movement and chafing allowing for the radial expansion of the stem. The tie shall be located 50mm below the top of the stake. Replace ties or adjust tension of ties as tree stem diameter increases to prevent strangulation. **Timber cross bars or hessian ties shall not be permitted.** Tree stakes shall avoid piercing of the rootball structure. Failure to do so will result in a replacement tree at the contractor's own expense.

All standard trees shall have a 2.5m long x minimum width of 60mm diameter, black perforated irrigation pipe wrapped about the rootball, with 75mm left above ground level within mulch, to permit irrigation during dry weather. Each pipe shall have a lockable cap to the end to prevent ingress of mulch, vermin or rubbish. Supplied by Green-Tech, Tel: 01423 332100.

Standard Trees and below: tree pits in soft landscape areas shall be excavated to create a square pit, a minimum size of 800 x 800 x 450mm deep, (no deeper than the existing rootball or container depth) or 1/3 larger than the rootball/container width.

The excavated tree pit soil shall be placed to one side, separating topsoil and subsoil as far as is practical and backfilled in the reverse order to retain natural soil profiles. All tree pits shall be thoroughly decompacted to sides and broken across the base prior to back-filling to eliminate glazed or smeared conditions, making allowance for soil settlement after planting. Soil is to be shaken around the roots in 150mm deep layers and firmed in by foot during backfilling. The tree pit should be saturated to field capacity immediately after planting to aid settlement.

SHRUBS & HEDGEROWS
Shrubs shall be planted at the centres indicated on the schedules. Plot hedgerow trenches shall be set as per the planting plan widths indicated, at 0.9m to 1.3m wide, with an offset to allow for future growth. Most plot frontage hedge trenches are 1.2m wide. Hedge plants shall be planted in either single or double rows as indicated by the schedules. Single rows of plants shall be offset from the back edges of pavements by a minimum of 0.5m for trenches 1.0m wide and 0.6m for trenches 1.2m wide. Double row hedges shall be offset by 0.3m, as specified. Planting shall be to the full width at maturity, avoiding obstruction/growth over pavements and the invasion of grass from lawns about the base of plants.

Lonicera 'May Green', 5L: Container grown stock, planted at the centre of a prepared trench 0.9m to 1.2m wide and 300mm deep in a single row at 3no/m located 0.35m apart, or double row at 4no/m, to create an evergreen hedge, allowing 450mm to 600mm for plant expansion to each side.
Ligustrum ovalifolium, 3L': Container grown stock, planted at the centre of a prepared trench 1200mm wide and 300mm deep in a single row at 3no/m located 0.35m apart, to create a semi evergreen hedge, allowing 600mm for plant expansion to each side.
Cornus & Native Hedge Mix 12A & 22: Bare root and container grown stock to be planted at the centre of a prepared trench 1200mm wide and 300mm deep in a double staggered row at 4no/m located 0.25m apart, set centrally 0.4m apart, with 0.4m tfor plant expansion to each side.
Native Hedge Mix 11 (Hedge Strengthening): Bare root stock to be planted into gaps within the existing hedge as required, to create a density of 4no plants per metre, to include existing hedge plants.

GRASS AREAS
Ensure ALL areas to be turfed and seeded have been fully treated with multiple applications of herbicide to eradicate perennial weeds and well cultivated, to produce a good quality turf or seed bed before turfing/sowing.

Turf shall be laid on a prepared base of topsoil 200mm deep for private residential areas and 150mm deep across formal and informal POS within the development's public areas, cultivated to a fine tilth with all stones larger than 15mm diameter removed. Other outer boundary areas shall be sown with Emorsgate seed mixes as below. Rear gardens shall be cultivated only and left to the occupier to either seed or turf unless otherwise instructed by the Developer.

All edges to lawns and borders in POS/gardens shall be 'cut in' with a half moon spade, to provide a recessed break between lawns and borders, to prevent the ingress of grass and to allow bark mulch to be recessed to prevent spillage.

Proposed Turf: Private lawn areas shall be turfed using a fine lawn turf such as Rolawn Medallion or similar approved. All turf is to be laid from boards to prevent ground compaction and butted up to adjacent turf with close joints, laid stretcher bond, with joints evenly butted and edges to be laid with whole turves. Turf to be evenly beaten with wooden beaters. Any inequalities in finished levels owing to variation in turf thickness or unequal consolidation of soil is to be adjusted by raking or packing fine soil under the turves to obtain an even surface. Prepared topsoil shall be levelled to 20mm below road kerb, with turf laid 25mm above adjacent paving after laying and beating. Water regularly until established.

The grass is to be cut to 50mm in height for first cut and to 35mm in height for subsequent cuts. All arisings shall be removed from site or finely cut and scattered. Areas that have not become successfully established shall be re-turfed in the next available season. Allow for 15-20 cuts per year, continuing cutting until November.

EMORSGATE WILDFLOWER MEADOWS – GRASS SEED MIXES
The POS shall be seeded using Emorsgate EL1, 'Flowering Lawn' seed mix and EM8, 'Wetland Mix'. All shall be sown at 4g/m2.

Ensure ALL areas to be seeded have been fully treated with multiple applications of herbicide to eradicate perennial weeds and well cultivated, to produce a good quality seed bed before sowing. Following eradication of weeds, cultivate or rake to produce a fine tilth and lightly roll to produce firm and even flowing contours, as a surface to receive seed.

Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed must be surface sown and shall be applied by machine. Sow in overlapping sections for best effects. Do not incorporate or cover the seed, but firm in with a roller to give good soil/seed contact.

Most of the sown species are perennial and will be slow to germinate and grow. This and the low sowing rate means that ground cover will take longer to develop as compared with conventional lawn sowings. The grass may take 12-18 months to knit together as a sward. There will not usually be any flowers until the second year. There will often be a flush of annual weeds from the soil in the first growing season. This weed growth shall be controlled by regular topping or mowing once every 3-4 weeks, depending on growth. This is essential to maintain structure, balance and diversity in grassland. Without management grassland becomes coarse and rank, loses both diversity and interest, and will eventually turn into scrub or woodland. All supplied by Emorsgate Seeds, Tel: 01553 829028. Refer to the suppliers sowing instructions if required on http://wildseed.co.uk/mixtures.

Sowing on damp soils is best completed either in the early autumn or in spring once the land has drained. Most plants need time to grow mature enough to withstand flooding. Most of the sown meadow species are perennial and will be slow to germinate and grow and will not usually flower in the first growing season. During the first season, there will often be a flush of annual weeds from the soil in the first growing season. This weed growth is easily controlled by topping or mowing.

Following establishment, maintenance for EL1 shall be by weekly or fortnightly as required to 40mm, with arisings finely chopped and scattered on site. EM8 in the base of the swale shall be managed like a hay crop, cut once in March/April and then left to grow until late August. The summer cut shall be left to dry to allow seeds to drop and then all arisings gathered and removed from site. A further monthly EM8 cut can be completed September to November. Arisings to be scattered on site.

SHEET MULCH (SWALE NATIVE PLANTING ONLY)
All shrubs shall be slit pit planted through a fully biodegradable wool-jute sheet mulch into 300mm depth of topsoil, located throughout all 1:2.5 banks along the eastern edge of the SUDs swale in the central POS, using 'Ecotex' 3m wide rolls supplied by Hy-Tex, Tel: 01233 720097 or 'Woolch Matting', laid with 30cm overlapping edges, secured to the ground with 300mm long timber pegs at 300mm centres and along edges to prevent lifting. **NO PLASTIC BASED SHEET MULCH MEMBRANES ARE PREMITTED.**

BARK MULCH
Prior to mulching individual trees and shrubs shall receive a layer of slow release fertiliser and watered to field capacity. All borders shall be covered with bark mulch to 50mm depth after settlement. Care must be taken not to bury ground cover plants with the mulch.

Mulch for all ornamental planting beds shall be with composted, medium grade bark mulch, chip sizes 5-35mm, with <15% wood content, minimal fines and pH value between 4.5 and 5.5. Spread to 50mm depth, allowing for finished depth of 50mm after settlement. All mulch shall be FSC certified and tested to accord with BS 4790:1987 for fire resistance. Mulch shall be pest, disease and weed free with no Methyl Bromide contamination or additives. Certification and typical mulch sample to be provided upon request. Substandard mulch will be rejected and replaced at the contractor's own expense. Typical bark mulch product accepted for general landscape purposes shall be 'Melcourte Spruce Ornamental' bark mulch, supplied by Melcourte, Tel: 01666 502 711 or similar approved.

A grass/weed free area of 1m diameter shall be maintained to the base of all trees, with bark mulch spread to 1.0m diameter and a depth of 50mm to allow for settlement. This shall include all trees located in grass verges, garden lawns and Emorsgate floral lawn within the site and POS. The root flare and the base of tree stems should be maintained free from mulch.

RABBIT & STRIMMER GUARD PROTECTION
All trees and native shrubs shall be protected by a 600mm high, clear plastic spiral guard with cane support, (native shrubs only). Individual trees planted in grass and POS floral lawns shall also be protected at the base utilising a 200mm high x 95mm wide, black Tubex strimmer guard. All evergreen shrubs (Ilex) in planting mixes shall be protected with a dark green polypropylene 'NetGuard', 600mm high x 300mm diameter with a 32mm x 32mm x 900mm long timber stake support. The base of all guards shall be in firm contact with the ground. All supplied by Tubex Ltd, Tel: 01685 888000.

ROOT BARRIERS
Vertical root barriers shall be provided around trees located next to drainage/water easements (Anglian water), or highway adopted roads/ pavements, which require protection if a clear 6m offset for tree planting cannot be achieved. To prevent root ingress into the easement area, a rigid, puncture resistant plastic sheet membrane, type ReRoot 2000 is specified, 2mm thick x 2m deep ref. RER220X2.0A, with joint tape, ref. RERJTA, supplied by Blue Green Urban, Tel: 01424 433233.

VALIDATION
The Landscape Architect may inspect the works, without notice, at any point during the project to ensure all soiling and planting specifications are complied with, to the required standards. Any works found