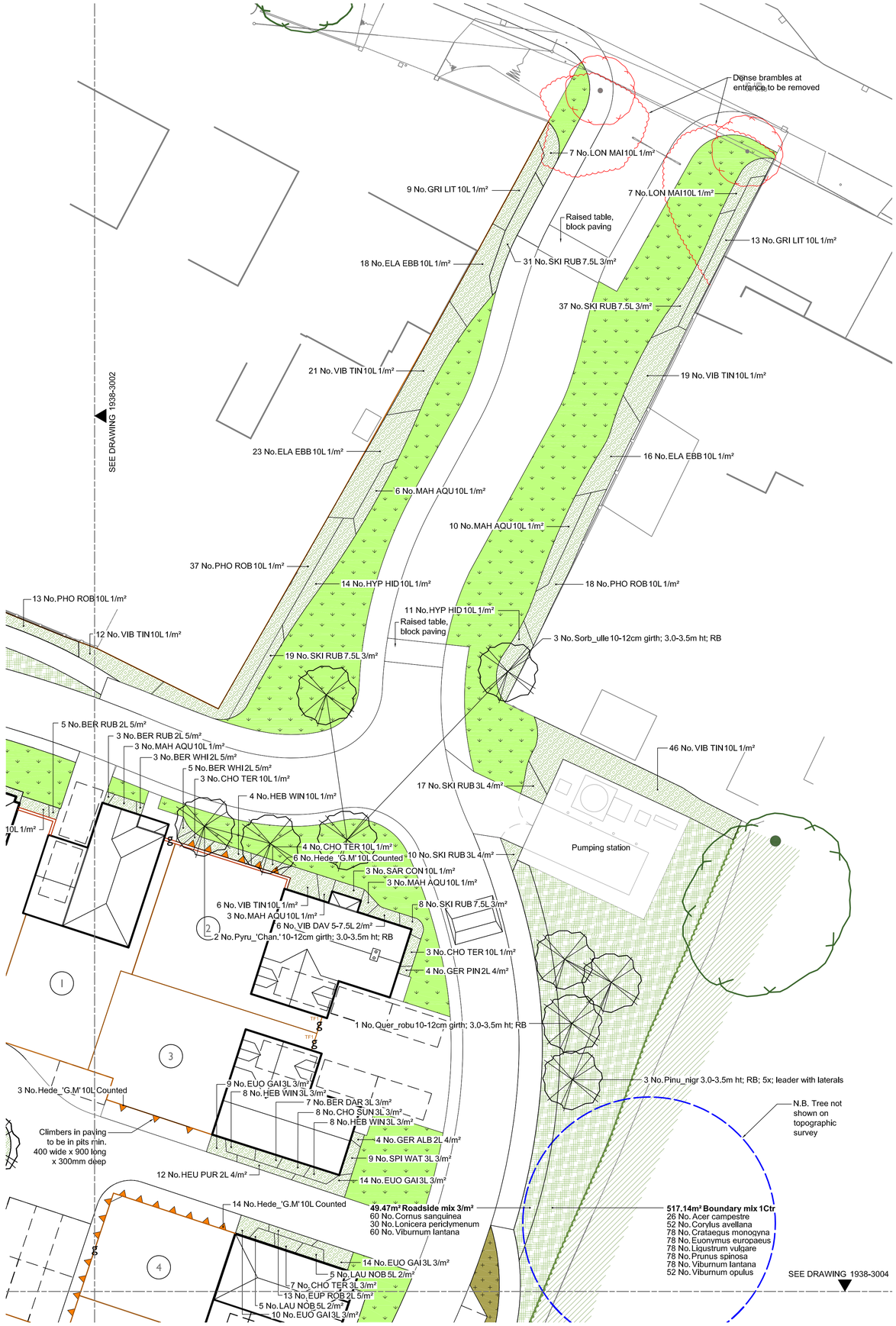


SPECIFICATION NOTES

1. General.
This plan to be read in conjunction with the following documents:
- Architectural drawings by Urban Pulse Design
- Arboricultural report by Barrell Tree Consultancy
- 5 year Landscape Management Plan by terra firma

2. General landscaping.
i. Existing levels to be preserved around retained existing trees and vegetation. Existing trees and vegetation to be retained are to be protected in accordance with BS5837: 2012 during construction and Arboricultural Method Statement by Barrell Tree Consultancy.
ii. All landscape works to be undertaken by competent persons, with appropriate training and equipment.
iii. All arisings to be removed from site at contractor's expense unless noted otherwise.

3. Services.
The contractor must ascertain for himself/herself the exact location of underground services before commencing work.

4. Soil Materials Generally.
i. Purity: Soils shall be free from roots, stolons, rhizomes, propagules of perennial or invasive weeds couch grass, bindweed, docks, Japanese knotweed, giant hogweed and horsetail/marestail (Equisetum avense).
ii. Foreign matter; On visual inspection, free from non-soil material, brick and other building materials and wastes, sharps, and any other foreign matter or material or substance that would render the soil or soil ameliorant unsuitable for use.
iii. Contamination: Do not use topsoil, subsoil, sand or compost contaminated with rubbish or other materials that are:
- •Corrosive, explosive or flammable;
- •Hazardous to human or animal life;
- •Detrimental to healthy plant growth.

iv. Give notice: If any evidence or symptoms of soil contamination are discovered on the site or in topsoil, subsoil, sand or compost or other planting media to be used.

5. Soil testing
Each soil source (Imported and site-won subsoil and topsoil - see items 6-9 below) shall be analysed by Tim O'Hare Associates, Howbery Park, Wallingford, Oxon OX10 8BA, Tel: 01491 822653, Email: info@toha.co.uk; www.toha.co.uk (or equivalent approved).

6. Subsoil for general planting areas (sample of site-won and/or imported subsoil to be sent for testing to check compliance with parameters below)
Provide subsoil as necessary to make up deficiency on site. Natural or manufactured subsoil (from approved source) will be acceptable (within parameters given below). Subsoil to be tested to determine suitability for proposed use for planting; test report to be submitted for approval and to enable amelioration recommendations. Subsoil should be free from commonly tested contaminants, including asbestos. Subsoil parameters to be within the following:

Parameter	Unit	Lower Limit	Upper Limit
Clay (<0.002mm)	%	5	35
Silt (0.002-0.05mm)	%	0	35
Sand (0.05-2.0mm) Of which at least 40% shall fall into fine to medium sand range	%	50	90
Stones (2-50mm)	%DW	--	50
Stones (>50mm)	%DW	--	0
pH Value	Unit	5.5	8.5
Electrical Conductivity (1:2.5 water extract)	µS/cm	--	1500
Electrical Conductivity (CaSO4 extract)	µS/cm	--	2800
Exchangeable Sodium Percentage	%	--	15
Organic Matter	%	--	1.5

7. Subsoil for tree pits (sample of site-won and/or imported subsoil to be sent for testing to check compliance with parameters below)
Provide subsoil as necessary to make up deficiency on site. Natural or manufactured subsoil (from approved source) will be acceptable (within parameters given below). Subsoil to be tested to determine suitability for proposed use; test report to be submitted for approval and to enable amelioration recommendations. Subsoil should be free from commonly tested contaminants,
including asbestos. Subsoil parameters to be within the following:

Parameter	Unit	Lower Limit	Upper Limit
Clay (<0.002mm)	%	5	18
Silt (0.002-0.05mm)	%	0	25
Sand (0.05-2.0mm) Of which at least 40% shall fall into fine to medium sand range	%	60	90
Stones (2-50mm)	%DW	--	50
Stones (>50mm)	%DW	--	0
pH Value	Unit	5.5	8.5
Electrical Conductivity (1:2.5 water extract)	µS/cm	--	1500
Electrical Conductivity (CaSO4 extract)	µS/cm	--	2800
Exchangeable Sodium Percentage	%	--	15
Organic Matter	%	--	1.5

8. Topsoil for general landscapes (sample of site-won and/or imported topsoil to be sent for testing to check compliance with parameters below and to inform any necessary amelioration - see 9, below)
Existing topsoil to be stripped and re-used, provided soil is within parameters given below when analysed. Imported topsoil to be good quality sandy loam or manufactured topsoil (from approved source, meeting parameters given below). Topsoil (site-won or imported) is to be tested to determine suitability for proposed use and should be free from commonly tested contaminants, including asbestos; test report to be submitted:

Parameter	Unit	Lower Limit	Upper Limit
Clay (<0.002mm)	%	5	18
Silt (0.002-0.05mm)	%	0	35
Sand (0.05-2.0mm) Of which at least 40% shall fall into fine to medium sand range	%	50	85
Stones (2-20mm)	% dry wt.	0	20
Stones (20-50mm)	% dry wt.	0	15
Stones (>50mm)	% dry wt.	-	0
pH Value	Unit	5.5	8.5
Electrical Conductivity (1:2.5 water extract)	µS/cm	--	1500
Electrical Conductivity (CaSO4 extract	µS/cm	--	2800
Exchangeable Sodium Percentage	%	--	15
Organic Matter	%	4.0	8.0
Total Nitrogen	%	0.15	--
Carbon: Nitrogen Ratio	--	--	20:1
Extractable Phosphorus	mg/l	26	100
Extractable Potassium	mg/l	240	1200
Extractable Magnesium	mg/l	50	600

9. Amelioranr: fertilizer and compost (contractor is responsible for submitting a sample of imported or site-won topsoil (to inform requirements).
Topsoil amelioration to be determined by analysis. Once amelioration requirements ascertained as required, approved (peat free) composts to PAS100 and/or fertilizers to be incorporated during cultivation at required rate to full depth of growing medium.

10. Soil handling and depths.
Management of soils to be in accordance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites
i. Topsoil and subsoil to be handled (i.e. excavated and/or imported, stored, spread, cultivated) in accordance with method agreed in writing by landscape architect or soil scientist prior to work commencing. All topsoil and subsoil areas shall be thoroughly cultivated by hand or suitable machinery to the full depth of the topsoil layer, incorporating ameliorants as required. If compaction is suspected in sub-grade, subsoil or topsoil surfaces, these should be ripped as necessary to decompact and ensure adequate drainage.
ii. Hand cultivations shall be carried out to achieve the required finish on areas where machine cultivation is impossible ie adjacent to kerbs, manholes and footpath junctions, around retained trees etc. Surplus plant matter, rubbish and surface stones having any dimension greater than 25 mm shall be collected and removed from the site. Topsoil and subsoil is to be stored in heaps, maximum of 2m in height, providing soil is reasonably dry and friable during stripping and handling - using a tracked excavator. To protect from wet weather once final height is achieved, an excavator should regrade the sides and top of stockpile to firm surface by tracking across it to form a smooth gradient.
iii. Final topsoil depth (allowing for settlement) to be 300mm for tree pits and general planting areas and 150mm for grass. Finished soil levels to be 25mm below adjoining paving or kerbs for planted areas and 10mm below for areas where turf is to be laid: not less than 150mm below dpc of adjoining buildings; shrub areas to be higher than adjoining grass areas by 25 mm. Topsoil to be spread in lightly compacted layers, max. 150mm depth, gently firm each layer before spreading the next.

12. Plant handling and establishment.
Plant handling shall be in accordance with 'Handling and establishing landscape plants', published by the CPSE through the JCLI. (http://www.gohelios.co.uk/nps/handling_establishment.aspx). The contractor shall comply with Part 3: Recommendations for plant handling from delivery to site to ensure successful establishment.

13. General planting notes.
Details for tree, hedge and general planting to be finalised once final site conditions are known (i.e compaction and permeability of ground). General plant stock to conform to BS 3936, advanced nursery stock to BS 8545, and planting to BS 4428. Plants shall be first class examples of their species or variety, free from all pests and diseases, with good fibrous root systems and materially undamaged. All planting operations to be in general compliance with BS4428: 'Code of Practice for general landscape operations'.
Only carry out all planting while soil and weather conditions are suitable:
- •Do not plant during periods of frost or strong winds. Plant only during the following periods
- •Deciduous and coniferous trees: Late October to late March (rootball and bare root)
- •Container grown plants: At any time if ground and weather conditions are favourable. Ensure that adequate watering is provided

Setting out of planting beds to be approved by Landscape Architect before work commences. Ensure that plant beds are neatly defined, and rise from adjacent paved areas as specified above. All tree pits, tree circles in lawn and planting beds are to be mulched with approved bark mulch to 75mm depth after planting.

14. Tree planting
Any proposed substitutions of species shown on plan to be approved by landscape architect prior to planting. Details for tree planting to comply with BS8545. As a guide all trees to be planted in square pits with base undisturbed unless drainage / compaction problems known. Plant at a depth where the root flare is clearly visible at the soil surface. Where trees have been supplied with the root flare too deep excess soil or fibrous root growth should be removed before planting. All trees to have 'Pildder' tree irrigation/aeration system installed as supplied by Platipus 01737 762300 www.platipus-anchors.com or approved equivalent. Water-in heavily after planting and mulch surface, ensuring mulch is not in contact with trunk of tree. Tree support to comply with BS 8545: RB trees to have double stake and bridge with adjustable tie; tree stakes to be stained black. Any necessary remedial tree works are to be carried out by an approved tree surgeon to BS 3998. Trees planted within grass areas to be set in mulched earth circles, 1m diameter around tree trunk, with turf trimmed neatly to form circle. Requirements for root barriers or similar measures to be confirmed.
i. **Trees up to 20cm girth.**
Depth of tree pits to be the same as the rootball and with overall width to be 150mm wider than the diameter of the rootball (75mm min. from rootball edge to tree pit side). Pits to be backfilled with 300mm depth of specified topsoil over subsoil as per spec.

15. Native shrub mix.
All plants to be planted in cultivated planting beds with species randomly mixed for natural effect, and planted in groups of 3-9 plants of any one species. Plants to be notch- or pit-planted. Plant on grid at spacing given in schedule. Provide and install each plant with an appropriate sized recyclable staked green tree or shrub shelter (available from Tubex Ltd phone 01621 874201 or similar approved). Position shelter stake on windward side of plant, drive vertically into bottom of pit before planting, to a min. depth of 300mm and consolidate backfill material around stake; attach shelter to stake with a minimum of two ties.

16. Shrub and Ground Cover Planting.
All plants to be planted into cultivated planting beds (with 300mm depth specified topsoil) at densities shown in plant schedule, backfilled with same topsoil. Fertiliser to be incorporated as required to ensure establishment and continued thriving of plants - type and application rate to be determined by analysis.

17. Climbers.
All climbers to be planted as 19. above and provided with steel line wires attached to the wall or fence (min 3 no.) at 300mm vertical spacing with climbers spread out and tied to wires using appropriate horticultural ties. Climbers in paving to be in pits min. 400 wide x 900 long x 300mm deep filled with suitable topsoil. Fertiliser to be incorporated as required to ensure establishment and continued thriving of plants - type and application rate to be determined by analysis.

18. Grass.
Turfing and seeding shall be carried out only during appropriate seasons and while soil and weather conditions are suitable for the relevant operations. Only machinery and tools suitable for the site conditions and the work to be carried out shall be used. Hand tools shall be used around trees, plants and in confined spaces where it is impractical to use machinery. The soil shall be weed free prior to turfing and seeding. Contact herbicide as specified should be applied to all areas of weed growth 4-6 weeks before grassing and repeated if necessary to maintain a weed free bed. Where deep rooted weeds are present (docks, thistles etc.) approved Glyphosate-based herbicide should be applied as a spot treatment. Turf or seed shall be laid on prepared, levelled soil (minimum 150mm depth) in the areas indicated on the drawings in accordance with BS 4428:1989 'Code of practice for general landscape operations'. All grass areas to be approved landscape quality seed for general amenity areas and lawn turf for garden areas.

19. Maintenance.
Establishment maintenance for all planting for 5 years from Practical Completion to include weed control, watering and replacement of failures to original specification in the planting season following failure in accordance with terra firma Landscape Management Plan.

Plant schedule

Trees

Species	Specification	Qty.
Betula pendula	10-12cm girth; 3.0-3.5m ht; RB	6 No.
Populus tremula	10-12cm girth; 3.0-3.5m ht; RB	11 No.
Prunus 'Accolade'	10-12cm girth; 3.0-3.5m ht; RB	2 No.
Prunus padus	10-12cm girth; 3.0-3.5m ht; RB	5 No.
Pyrus calleryana 'Chanticleer'	10-12cm girth; 3.0-3.5m ht; RB	2 No.
Quercus robur	10-12cm girth; 3.0-3.5m ht; RB	4 No.
Sorbus ulleungensis 'Olympic Flame'	10-12cm girth; 3.0-3.5m ht; RB	6 No.

Conifers

Species	Specification	Qty.
Pinus nigra	3.0-3.5m ht; RB; 5x; leader with laterals	3 No.

Native Shrubs

Species	Specification	Density	Mix Name	% Mix	Qty.
Acer campestre	60-80cm ht, BR transplants	1Ctr	Boundary mix	5%	30 No.
Corylus avellana	60-80cm ht, BR transplants	1Ctr	Boundary mix	10%	59 No.
Viburnum opulus	60-80cm ht, BR transplants	1Ctr	Boundary mix	10%	59 No.
Crataegus monogyna	60-80cm ht, BR transplants	1Ctr	Boundary mix	15%	88 No.
Euonymus europaeus	60-80cm ht, BR transplants	1Ctr	Boundary mix	15%	88 No.
Ligustrum vulgare	60-80cm ht, BR transplants	1Ctr	Boundary mix	15%	88 No.
Prunus spinosa	60-80cm ht, BR transplants	1Ctr	Boundary mix	15%	88 No.
Viburnum lantana	60-80cm ht, BR transplants	1Ctr	Boundary mix	15%	88 No.
Lonicera periclymenum	60-80cm ht, BR transplants	3/m²	Roadside mix	20%	189 No.
Cornus sanguinea	60-80cm ht, BR transplants	3/m²	Roadside mix	40%	374 No.
Viburnum lantana	60-80cm ht, BR transplants	3/m²	Roadside mix	40%	374 No.

Shrubs

Abbreviation	Species	Height	Pot Size	Specification	Density	Qty.
AUC CRO	Aucuba japonica 'Crotonifolia'	30-40cm	3L	Bushy; 3 brks; C	3/m²	9 No.
BER DAR	Berberis darwinii	30-40cm	3L	Bushy; 4 brks; C	3/m²	88 No.
BER DAR	Berberis darwinii	40-60cm	10L	Bushy; 6 brks; C	1/m²	3 No.
CHO PEA	Choisya 'Aztec Pearl'	40-60cm	10L	Bushy; 7 brks; C	1/m²	5 No.
CHO PEA	Choisya 'Aztec Pearl'	30-40cm	3L	Bushy; 5 brks; C	3/m²	73 No.
CHO TER	Choisya ternata	40-60cm	10L	Bushy; 7 brks; C	1/m²	10 No.
CHO TER	Choisya ternata	30-40cm	3L	Bushy; 4 brks; C	3/m²	85 No.
CHO SUN	Choisya ternata 'Sundance'	30-40cm	3L	Bushy; 4 brks; C	3/m²	52 No.
COT PUR	Cotinus coggygria 'Royal Purple'	60-80cm	10L	Branched; 5 brks; C	1/m²	16 No.
COT PUR	Cotinus coggygria 'Royal Purple'	30-40cm	3L	Branched; 3 brks; C	3/m²	20 No.
ELA EBB	Elaeagnus x ebbingei	60-80cm	10L	Branched; 6 brks; C	1/m²	81 No.
EUO GAI	Euonymus fortunei 'Emerald Gaiety'	20-30cm	3L	Bushy; 7 brks; C	3/m²	195 No.
EUO HUG	Euonymus japonicus 'Jean Hugues'	30-40cm	2L	C; Bushy; C	0.3Ctr	375 No.
GRI LIT	Griselinia littoralis	40-60cm	10L	Bushy; 7 brks; C	1/m²	22 No.
HEB GLO	Hebe 'Autumn Glory'	20-30cm	3L	Bushy; 5 brks; C	3/m²	18 No.
HEB WIN	Hebe 'Mrs Winder'	40-60cm	10L	Bushy; 9 brks; C	1/m²	10 No.
HEB WIN	Hebe 'Mrs Winder'	30-40cm	3L	Bushy; 5 brks; C	3/m²	96 No.
HED RIP	Hedera helix 'Green Ripple'	40-60cm	2L	Several Shoots; 3 brks; C	3/m²	19 No.
HYP HID	Hypericum 'Hidcote'	40-60cm	10L	Bushy; 9 brks; C	1/m²	25 No.
HYP HID	Hypericum 'Hidcote'	30-40cm	3L	Bushy; 5 brks; C	3/m²	18 No.
HYP TRI	Hypericum x moserianum 'Tricolor'	20-30cm	3L	Bushy; 5 brks; C	6/m²	106 No.
LAU NOB	Laurus nobilis	60-80cm	5L	Leader with Laterals; C	2/m²	19 No.
LON MAI	Lonicera nitida 'Maigrün'		10L	Bushy; 10 brks; C	1/m²	99 No.
MAH AQU	Mahonia aquifolium	40-60cm	10L	Branched; 4 brks; C	1/m²	30 No.
MAH AQU	Mahonia aquifolium	30-40cm	3L	Branched; 3 brks; C	3/m²	33 No.
OSM BUR	Osmanthus x burkwoodii	30-40cm	3L	Bushy; 4 brks; C	3/m²	11 No.
PHO ROB	Photinia x fraseri 'Red Robin'	60-80cm	10L	Branched; 7 brks; C	1/m²	68 No.
PHO ROB	Photinia x fraseri 'Red Robin'	30-40cm	3L	Branched; 6 brks; C	3/m²	12 No.
PHY LUT	Physocarpus opulifolius 'Luteus'	30-40cm	3L	Branched; 4 brks; C	2/m²	18 No.
ROS BON	Rosa 'Bonica'	30-40cm	2L	Roses - Cutting; Bush; 4 brks; C	3/m²	22 No.
ROS UPR	Rosmarinus officinalis 'Miss Jessopp's Upright'	30-40cm	3L	Bushy; 4 brks; C	3/m²	14 No.
SAR CON	Sarcococca confusa	40-60cm	10L	Bushy; 8 brks; C	1/m²	7 No.
SAR CON	Sarcococca confusa	20-30cm	3L	Bushy; 6 brks; C	4/m²	13 No.
SKI RUB	Skimmia japonica 'Rubella'	30-40cm	3L	Bushy; 3 brks; C	4/m²	132 No.
SKI RUB	Skimmia japonica 'Rubella'	40-60cm	7.5L	Bushy; 4 brks; C	3/m²	106 No.
SPI WAT	Spiraea japonica 'Anthony Waterer'	30-40cm	3L	Branched; 6 brks; C	3/m²	81 No.
VIB DAV	Viburnum davidii	30-40cm	5-7.5L	Bushy; 4 brks; C	2/m²	25 No.
VIB DAV	Viburnum davidii	20-30cm	3L	Bushy; 3 brks; C	3/m²	16 No.
VIB TIN	Viburnum tinus	40-60cm	10L	Bushy; 7 brks; C	1/m²	119 No.
VIB TIN	Viburnum tinus	30-40cm	3L	Bushy; 4 brks; C	2/m²	8 No.
WEI RUB	Weigela 'Bristol Ruby'	40-60cm	3L	Branched; 4 brks; C	2/m²	18 No.

Herbaceous

Abbreviation	Species	Height	Pot Size	Specification	Density	Qty.
ACH MOO	Achillea 'Moonshine'		2L	Full Pot; C	4/m²	27 No.
BER RUB	Bergenia 'Bressingham Ruby'		2L	Full Pot; C	4/m²	21 No.
BER WHI	Bergenia 'Bressingham White'		2L	Full Pot; C	5/m²	8 No.
EUP ROB	Euphorbia amygdaloides robbiae		2L	Full Pot; C	5/m²	13 No.
GER ALB	Geranium macrorrhizum 'Album'		2L	Full Pot; C	4/m²	21 No.
GER PIN	Geranium x oxonianum 'Wargrave Pink'		2L	Full Pot; C	4/m²	19 No.
HEU PUR	Heuchera micrantha 'Palace Purple'		2L	Full Pot; C	4/m²	20 No.
PEN BLO	Penstemon 'Apple Blossom'		2L	Full Pot; C	4/m²	9 No.
PER SUP	Persicaria affinis 'Superba'		2L	Full Pot; C	5/m²	10 No.
SED BRI	Sedum spectabile 'Brilliant'		2L	Full Pot; C	5/m²	4 No.
TIA COR	Tiarella cordifolia		2L	Full Pot; C	5/m²	11 No.

Climbers

Abbreviation	Species	Height	Pot Size	Specification	Density	Qty.
Hede_'G.M'	Hedera algeriensis 'Gloire de Marengo'	100-150cm	10L	Frame or trellis; several shoot; 5 brks; C	Counted	23 No.
PYR GLO	Pyracantha 'Orange Glow'	100-125cm	10L	Caned; Leader with Laterals; 6 brks; C	Counted	36 No.

0m 5m 10m

Topographical survey information - dwg 'Yapton' job no. 13,4718 by K. A. Rylance Ltd. dated Nov. 2013

Existing trees to be retained in accordance with BS 5837:2012- refer to tree survey and Arboricultural Method Statement by Barrell Tree Consultancy

Root protection areas for retained trees (Category A and B only) - refer to tree survey and Arboricultural Method Statement by Barrell Tree Consultancy

Proposed specimen tree - requirements for measures to protect new and existing services from roots to be confirmed

Proposed native shrub mix

Proposed shrub and groundcover planting

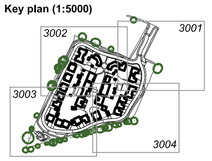
Proposed climber trained against vertical surface or support

Proposed lawn / amenity seeding, suitable for clay soil

Proposed amenity grass mix: Emorsgate EM4 - meadow mixture for clay soils

NOTE:
- Rear gardens to be laid to lawn and planted at owners discretion.
- Areas beneath building overhangs to be gravel where in front of windows or paving slabs to doors.
- Refer to drawing 1938-3001 for specification notes, plant schedule and key plan.
- Refer to drawings 1938-1001 to 1004 for hard materials and boundary treatments.

Key plan (1:5000)



rev.	date	by	chk	notes
P01	08.03.18	TJ	AC	Initial issue.

drawing notes	Do not scale from this drawing. Figure dimensions only to be taken from this drawing. All dimensions to be checked on site. The original version of this drawing was produced in colour - monochrome copies should not be relied upon to accurately reflect all drawing elements. **This drawing has been prepared for planning purposes only and should not be used for quantification, tender or construction.**
purpose of issue	PLANNING
project	Burndell Road, Yapton
drawing title	Soft landscape proposals (sheet 1 of 4)
drawing no.	1938-3001 based on dwg. 18-1012-005-A by Urban Pulse Design dated 26.02.18 — P01
scale	1:200 @ A1 — date 08.03.18 — drawn by TJ — checked by AC

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