LEGEND: SOFT LANDSCAPING

- GROUND COVER: deciduous shrub ground cover planting with specimen shrubs.
- GROUND COVER: evergreen shrub ground cover planting with specimen shrubs.
- GROUND COVER: herbaceous ground cover planting with specimen shrubs.
- GROUND COVER: ornamental grass ground cover planting as detailed.
- GROUND COVER: coniferous ground cover planting as detailed.
- HEDGE: evergreen shrub hedge as detailed.
- DECIDUOUS HEDGE: shrub hedge as detailed, reinforced with timber post & wire fence where indicated.
- GRASS: cultivated turf to road frontages, existing areas to be made good with seed.
- WILDFLOWER MEADOW AREAS: to be seeded with Germinal Seeds Amenity mix as agreed; refer to notes.
- WOODLAND PLANTING: native screen planting mix as detailed.
- ORNAMENTAL GRAVEL: pea gravel from local source; 50-75mm minimum depth; refer to notes.
- TREE PLANTING: deciduous tree planting with NHBC radii. Tree Canopy spread illustrated at 25 years growth.
- TREE PLANTING: coniferous tree planting with NHBC radii. Tree Canopy spread illustrated at 25 years growth.
- EXISTING TREES: to be retained in accordance with BS 5837 'Trees in relation to Construction' 2012.
- EXISTING TREES: to be removed in accordance with tree survey recommendations.
- EXISTING TREES: to be removed to facilitate development.

NHBC Guidelines 2017 Chapter 4.2 'Building near trees':

NHBC tree radii illustrated based on Medium soils assuming foundation depth of 0.9m. Buildings within the NHBC tree radius should be designed so that their foundations are to a suitable depth in accordance with the NHBC guidelines.

Asterisk (*) on planting tags identify shrubs with a mature height above 1.5m where adjacent foundation should be designed by Engineers in accordance with NHBC guidelines 2017 Tables 3 or 5 of sections D & E.

Plant Schedule

Trees

No.	Species Name	Specification	Girth	Height	Density
5 -	Betula pendula	3x :Extra Heavy Standard :Clear Stem 175-200 :5 brks :RB :PG 1	14-16cm	400-450cm	Counted
2 -	Betula utilis jacquemontii	3x :Extra Heavy Standard :Clear Stem 175-200 :5 brks :RB :PG 1	14-16cm	400-450cm	Counted
46 -	Corylus avellana (*)	Branches: 1+2 :3 brks :BR :PG 7		60-80cm	0.45Ctr Double Staggered at 0.3m offset
3 -	Corylus colurna	3x :Extra Heavy Standard :Clear Stem 175-200 :5 brks :RB :PG 7	14-16cm	400-450cm	Counted
93 -	Crataegus monogyna (*)	1+1 :Transplant :B :PG 1		60-80cm	0.45Ctr Double Staggered at 0.3m offset
69 -	Crataegus monogyna (*)	1+1 :Transplant :B :PG 1		40-60cm	1Ctr
3 -	Magnolia kobus	3x :Extra Heavy Standard :Clear Stem 150-175 :5 brks :RB :PG 1	14-16cm	350-425cm	Counted
3 -	Prunus 'Sunset Boulevard'	3x :Extra Heavy Standard :Clear Stem 175-200 :5x :RB :PG 1	14-16cm	400-450cm	Counted
3 -	Quercus robur	3x :Extra Heavy Standard :Clear Stem 175-200 :5 brks :RB :PG 1	14-16cm	400-450cm	Counted
3 -	Sorbus aria	3x :Extra Heavy Standard :Clear Stem 175-200 :5 brks :RB :PG 1	14-16cm	400-450cm	Counted

Conifers

No.	Species Name	Specification	Spread	Height	Density
15 -	Juniperus squamata 'Blue Carpet'	Branched :C :PG N			3/m²
5 -	Pinus sylvestris	4x :Leader & laterals :RB :PG N		200-250cm	Counted

Shrubs

No.	Species Name	Specification	Spread	Height	Pot Size	Density
96 -	Aucuba japonica 'Rozannie'	Bushy :3 brks :C :PG 1		30-40cm	3L	3/m²
67 -	Berberis thunbergii 'Atropurpurea'	Branched :5 brks :C :PG 8		30-40cm	3L	2/m²
80 -	Brachyglottis 'Sunshine'	Branched :4 brks :C :PG 8		30-40cm	3L	3/m²
18 -	Ceanothus 'Blue Mound'	Branched :5 brks :C :PG 8			3L	3/m²
77 -	Ceanothus thyrsiflorus repens	Bushy :5 brks :C :PG 8			3L	3/m²
58 -	Cornus alba 'Sibirica' (*)	Branched :3 brks :C :PG 7		40-60cm	3L	2/m²
34 -	Cornus sanguinea (*)	1+2 :Branched :3 brks :B :PG 7		60-80cm		0.45Ctr Double Staggered at 0.3m offset
173 -	Cornus sanguinea (*)	1+2 :Branched :3 brks :B :PG 7		60-80cm		1Ctr
63 -	Escallonia 'Apple Blossom' (*)	Bushy :4 brks :C :PG 9		40-60cm	3L	3/m²
150 -	Escallonia 'Donard Radiance' (*)	Bushy :4 brks :C :PG 9		40-60cm	3L	0.45Ctr Double Staggered at 0.3m offset
83 -	Euonymus fortunei 'Emerald 'n' Gold'	Bushy :7 brks :C :PG 8		20-30cm	3L	3/m²
47 -	Hebe 'Midsummer Beauty' (*)	Bushy :5 brks :C :PG 9		30-40cm	3L	3/m²
12 -	Hebe 'Mrs Winder'	Bushy :5 brks :C :PG 9		30-40cm	3L	3/m²
10 -	Hebe 'Red Edge'	Bushy :5 brks :C :PG 9			3L	4/m²
28 -	Hebe 'Sutherlandii'	Bushy :5 brks :C :PG 9			3L	4/m²
12 -	Hedera helix 'Glacier' (*)	Several shoots :3 brks :C :PG 11		40-60cm	2L	3/m²
53 -	Hypericum 'Hidcote'	Bushy :5 brks :C :PG 8		30-40cm	3L	3/m²
111 -	Hypericum x moserianum	Bushy :7 brks :C :PG 8		30-40cm	3L	4/m²
104 -	Ilex aquifolium (*)	Bushy :3 brks :C :PG 1		40-60cm	3L	1Ctr
9 -	Lavandula angustifolia 'Hidcote'	Bushy :5 brks :C :PG 10		20-30cm	3L	3/m²
79 -	Lonicera nitida 'Baggesen's Gold' (*)	Bushy :5 brks :C :PG 2			5L	0.45Ctr Double Staggered at 0.3m offset
231 -	Lonicera nitida 'Baggesen's Gold' (*)	Bushy :5 brks :C :PG 2			5L	3/m²
69 -	Lonicera nitida 'Lemon Beauty'	Bushy :3 brks :C :PG 2			2L	3/m²
21 -	Mahonia aquifolium 'Apollo'	Branched :2 brks :C :PG 8		20-30cm	3L	4/m²
62 -	Photinia fraseri 'Red Robin' (*)	Branched :6 brks :C :PG 1		30-40cm	3L	3/m²
3 -	Photinia x fraseri 'Little Red Robin'	Bushy :6 brks :C :PG 1		30-40cm	3L	4/m²
33 -	Physocarpus opulifolius 'Diablo' (*)	Branched :4 brks :C :PG 2		30-40cm	3L	2/m²
161 -	Prunus laurocerasus 'Etna' (*)	Bushy :4 brks :C :PG 8		40-60cm	3L	0.45Ctr Double Staggered at 0.3m offset
23 -	Prunus spinosa (*)	1+1 :Branched :2 brks :B :PG 1		60-80cm		0.45Ctr Double Staggered at 0.3m offset
69 -	Rosa canina (*)	Branched :5 brks :PG 21 (Roses)		50-60cm	3L	1Ctr
33 -	Ruscus aculeatus	Several shoots :3 brks :C :PG N		20-30cm	2L	4/m²
173 -	Sambucus nigra (*)	1+0 :Branched :3 brks :B :PG 1		40-60cm		1Ctr
82 -	Sarcococca hookeriana digyna	Bushy :6 brks :C :PG 8		30-40cm	5L	0.45Ctr Double Staggered at 0.35m offset
188 -	Skimmia japonica 'Rubella'	Bushy :4 brks :C :PG 8		30-40cm	5L	3/m²
80 -	Skimmia x confusa 'Kew Green'	Bushy :4 brks :C :PG 8		30-40cm	3L	3/m²
48 -	Spiraea japonica 'Fire Light'	Bushy :6 brks :C :PG 6		30-40cm	3L	3/m²
90 -	Viburnum davidii	Bushy :4 brks :C :PG 1		30-40cm	5-7.5L	3/m²
34 -	Viburnum opulus (*)	1+2 :Branched :3 brks :B :PG 8		60-80cm		0.45Ctr Double Staggered at 0.3m offset
104 -	Viburnum opulus (*)	1+2 :3 brks :B :PG 8		80-100cm		1Ctr
74 -	Viburnum tinus 'Eve Price' (*)	Bushy :5 brks :C :PG 1		30-40cm	5L	2/m²
110 -	Vinca major 'Variegata'	Several shoots :3 brks :C :PG 6			2L	5/m²

Herbaceous

No.	Species Name	Specification	Spread	Height	Pot Size	Density
18 -	Acanthus mollis	Full Pot :C :PG HB			2L	3/m²
3 -	Alchemilla mollis	Full Pot :C :PG HB			2L	3/m²
8 -	Bergenia 'Silberlicht'	Full Pot :C :PG HB			2L	7/m²
29 -	Bergenia cordifolia 'Purpurea'	Full Pot :C :PG HB			2L	5/m²
20 -	Geranium endressii	Full Pot :C :PG HB			2L	4/m²
3 -	Lamium maculatum 'White Nancy'	Full Pot :C :PG HB			1L	6/m²
6 -	Rudbeckia 'Goldsturm'	Full Pot :C :PG HB			2L	4/m²
5 -	Tiarella cordifolia	Full Pot :C :PG HB			2L	5/m²

Grasses

No.	Species Name	Specification	Spread	Height	Pot Size	Density
12 -	Carex elata 'Aurea'	Full Pot :PG GR			2L	4/m²
82 -	Carex pendula	Full Pot :PG GR			2L	3/m²

PLANNING NOTES (SOFT LANDSCAPE):

1. SOILS: Subgrade / subsoil to be prepared in accordance with BS 8601:2013 and BS 4428:1989 and scarified or ripped to 300mm depth prior to spreading topsoil to alleviate compaction and promote drainage. Imported and as saved topsoil to be in accordance with BS 3882: 2015 'Multipurpose Grade' with minimum soil organic matter contents 1% greater than the minima value (or as approved). Imported topsoil (and 'as saved' if requested) is to be laboratory tested to BS 3882:2015 and ameliorated as required to meet the required characteristics as detailed within Table 1 of BS 3882:2015 specification. Grass areas to be a minimum depth of 150mm, Shrub beds 450mm depth and forestry / transplants 300mm depth. Any weed / grass growth to be sprayed out with appropriate herbicide at least 10 days prior to cultivation. Incorporate proprietary non peat compost to BSI PAS 100 to 50mm depth evenly worked into soil.

N.B Proposed services (electric, water, gas etc) in landscape areas should be installed as a minimum below the required topsoil depths and clearly identified in accordance with service / utility requirements.

2. BUILDING FOUNDATION DESIGN: All landscape proposals are to be referred to by the structural engineer during foundation design.

3. PROPOSED PLANTING: Should planting be required outside of the planting season (October – March) any bare root or rootballed stock specified is to be replaced with containerised stock to an appropriate or similar specification to the approval of the landscape architect prior to ordering.

4. EXISTING TREES: Where trees are to be retained they should be subject to a full arboricultural inspection to assess condition and safety. Retained trees shall be protected from damage by erection of 2.3m weldmesh fencing on a scaffold framework in accordance BS 5837:2012 Figure 2. These barriers shall be maintained in position and in good condition until works are complete. Fencing to be located in accordance with Table D.1 at a radius of 12 times the stem diameter (single stem trees) or based on the combined stem diameter for multistem trees (trees with more than one stem arising below 1.5m above ground level) refer to Clause 4.6. Further precautions are to be taken as detailed within BS 5837:2012 6.2.4.

5. TREE SURGERY / REMOVAL: Tree surgery and tree removal to be carried out by an Arboricultural Association approved Tree surgeon in accordance with BS 3998:2010. Arisings to be removed to a licensed tip.

6. TREE PLANTING: All trees to be in accordance with BS 3936 and The National Plant Specification – 'Rootballed Trees' recommendations. Trees to be planted in accordance with BS 4428:1989 and double staked (10-12cm - 14-16cm girth trees) or triple staked (16-18cm - 18-20cm girth trees) and tied in prepared pits. Tree pits in open field / un-compacted ground conditions to be 1000mm x 1000mm (at least 75mm greater than that of the root system) with pit depth to be based on the planting depth of the tree (distance from root flare to underside of rootball) in accordance with BS 8545:2012. Topsoils and subsoils to be excavated and stored separately for reuse. Tree pit to be backfilled with stored subsoil and topsoil at depths to replicate the existing soil horizons. Topsoil to be mixed enriched with 40L of peat free tree planting compost. Root balls to be encircled by Root Rain Metro or similar irrigation pipe. Well water after planting. The base of trees to planted in grass areas are to be covered with 75mm amenity grade bark mulch such as Melcourt 'Amenity' Bark Mulch (or similar approved by the landscape architect) to 1.0 metre diameter and kept weed free.

In confined urban areas i.e car parks & housing estates where trees are to be planted in heavily compacted ground. Small tree pits (Mature canopy 3m) should have a minimum of 4.24m3 soil rooting volume, Medium tree pits (Mature Canopy 5m) should have a minimum of 11.8m3 soil rooting volume, Large tree pits (Mature canopy 8m) should have a minimum of 24m3 soil rooting volume. Tree pits are to be excavated to achieve the above uncompacted growing volume with pits without cells being approximately 2.5m x 2.5m backfilled with excavated subsoil and topsoil (as described above) mixed with 160L of peat free tree planting compost. Where groups of trees or avenues are planted the pits are to be combined to achieve the required growing volume. Tree pits in poorly draining soils are to be positively drained, connecting into the surface water drainage system to engineers details.

Suitable foundations are to be provided to accommodate proposed tree planting and retained trees in accordance with the NHBC Standards. The NHBC radii are illustrated as a guide only; based on an assumed medium soil volume change potential and minimum foundation depths; this information should not be relied upon for construction purposes. In locations close to footpaths and roadways linear root barriers GreenBlue Urban, ReRoot or similar are to be installed in accordance with manufacturers instructions. Where proposed tree locations conflict with services, trees are to be relocated in accordance with the appropriate utilities guidance notes subject to client / local authority approval. Proprietary root barrier GreenBlue Urban, ReRoot or similar to be installed in accordance with manufacturers instructions where relocation is not considered appropriate.

7. SHRUB & HERBACEOUS PLANTING: plants to be in accordance with BS 3936 and handled in accordance with CPSE guidelines and planted in accordance with BS 4428:1989. Nursery stock supplier to be approved by the Landscape Architect. All shrubs to have a minimum of three breaks, except Hedera with a minimum of two. Well water plants immediately after planting and prior to spreading of mulch. Planting areas to be covered with 75mm depth amenity grade bark mulch such as Melcourt 'Amenity' Bark Mulch (or similar approved by the landscape architect) and kept weed free.

8. HEDGE PLANTING: plants to be in accordance with BS 3936 and handled in accordance with CPSE guidelines and planted in accordance with BS 4428:1989. Hedge plants to be pit planted in double staggered rows 300mm apart at 450mm centres (or as scheduled). Well water plants immediately after planting and prior to spreading of mulch. Planted areas to be covered with 75mm depth bark mulch and kept weed free. Where necessary plants to be protected from rabbits with rabbit fence and / or individual rabbit mesh guards securely staked. Unless otherwise indicated on the drawing it is assumed that all hedges are to be maintained at a maximum height of 1.5m for the purposes of the NHBC guidelines.

9. FORESTRY PLANTING: plants to be in accordance with BS 3936 and planted in accordance with BS 4428:1989, subgrade to be cross ripped at 1.2m intervals prior to planting to alleviate compaction. Transplants to be planted at 1 metre centres (or as scheduled) in random groupings of 3-5 and 7-10 shrub species depending on numbers of plants. Tree species to be evenly distributed throughout the planted area. Transplants to be root dipped with Alginure prior to planting. Planted areas to be kept weed free and protected from rabbits, with rabbit fence and / or individual mesh tree guards securely fixed to timber stake(s).

10. TURFING: Grass turf areas to be Tillers 'Arena' or similar approved cultivated turf, laid in accordance with BS 4428:1989. Topsoil to be rototvated and levelled as required and any debris or stones greater than 50mm diameter removed. Pre-turfing fertiliser to be applied in accordance with manufacturers instructions. Turf to be laid from planks with broken joints well butted up, pegged to slopes where required. Well water after laying to avoid shrinkage.

11. SEEDING: grass areas to be seeded in accordance with BS 4428:1989 during March, April or September. Topsoil to be rotovated and levelled as required and any debris or stones greater than 20mm diameter removed. Pre-seed fertiliser to be applied in accordance with manufacturers instructions. Lightly rake areas after sowing. Seed to be Germinal Seeds mix A19 'All Purpose Landscaping' sown at 35g/m2, including:

- 30% CORAIL (Slender Creeping Red Fescue)
- 25% RAISA (Chewings Fescue)
- 20% ABERELF (Perennial Ryegrass)
- 20% CADIX (Perennial Ryegrass)
- 5% HIGHLAND (Browntop Bent)

12. WILDFLOWER SEEDING: grass areas to be seeded in accordance with BS 4428:1989 during March, April or September. Unimproved topsoil to be imported, rotovated and levelled as required and any debris or stones greater than 20mm diameter removed. Lightly rake areas after sowing. Seed to be Germinal Seeds mix WFG4 'Neutral Soils' sown at 5.0 g/m².

13. GRAVEL: Gravel areas to be ornamental gravel, from local source 10-20mm, laid on geotextile membrane to a depth of 50-75mm.

14. MAINTENANCE: To be carried out at approximately monthly intervals to include the following:
   a. Eradicate weeds by hand or appropriate chemical means.
   b. Cut out dead or / and damaged stock or branches, prune as required.
   c. Ensure all shrubs and trees are firmed in, securely staked and tied.
   d. Collect litter, sweep and tidy site.
   e. Apply suitable non-residual pesticides, fungicides, fertilisers and water as required.
   f. Carry out grass mowing to turf when attained 100mm, cut to 35mm (50mm for shaded areas).
   g. All hedges to plot frontages be maintained at a max height of 1.0m. Hedges and shrub planting within visibility splays to be maintained in accordance with current highways design guidelines.

15. PRUNING: to be carried out in accordance with BS 7370 Part 4, ensuring site operatives are fully trained. Recommendations are based on general pruning required to maintain plant health and vigor. Broad pruning principles are classified as follows within the plant schedule, refer to RHS Pruning Groups and species information for further details:

PG 1 Light Pruning
PG 2 Early-Flowering Shrubs
PG 3 Basal Shooting Shrubs
PG 4 Summer Flowering Shrubs
PG 5 Winter / Early Spring Flowering Shrubs
PG 6 Summer / Autumn Flowering Shrubs
PG 7 Pruning for Stems and Foliage

PG 8 Early Flowering Evergreen Shrubs
PG 9 Late Flowering Evergreen Shrubs
PG 10Evergreen Shrubs
PG 11Vigorous Climbers
PG 12Moderately Vigorous Climbers
PG 13Wall Trained Shrubs

PG C1 Clematis Pruning Group
PG C2 Clematis Pruning Group
PG N Pruning Generally Required
PG F Fruit Tree Pruning (specific to species)

PG BC Bamboo Cultivation
PG HB Herbaceous (specific to species)
PG GR Grasses (specific to species)
(Roses) Specific Requirements for Roses

16. WATERING: all plant material to be watered in dry periods until established during April through to September with a fine rose until the water penetrates the topsoil to at least 5cm depth and achieves field capacity. Frequency of watering regime to be determined by weather conditions, soil conditions and underlying geology, all plant beds to be watered to ensure soil is consistently moist to promote successful establishment. As a guide only it is suggested that during hot, dry periods, plants are to be watered every six to ten days. For individual trees it is suggested that 18 watering visits per year are carried out commencing late March (prior to budburst) and utilising a minimum of 50 litres of water per tree. Soil probe to be used to determine soil saturation to full depth of root ball.

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rev	date:	amendments:	alt:
A	07.04.2020	as instructed	DP
B	27.07.2020	to co-ord with revised layout	DP
C	28.07.2020	as instructed	DP
D	12.08.2020	to co-ord with revised layout	DP

bea landscape design ltd

client: Lovells

project: Southwater Way Telford

title: Detailed Soft Landscape Proposals

status: PLANNING

date:	drawn:	number:
Apr 2020	DP	20-014-03
scale@A0:	checked:	revision:
1:250	ECH	D

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