

IMPLEMENTATION AND MAINTENANCE GUIDELINES

1.0 GENERAL

All plants shall conform to BS 3938 and be in accordance with the National Plant Specification. Supplying nurseries shall be registered under the HTA Nursery Certification Scheme. All plants shall be packed and transported in accordance with the Code of Practice for Plant Handling as produced by CPSE. Planting shall not be carried out in the top 150mm of topsoil during final cultivations. All extraneous matter of cold drying winds. All bare root stock shall be root dipped in an approved water retaining polymer.

If the formation level is compacted it should be replaced before topsoiling.

Topsoil depths to be 400mm for shrub beds and 150mm for grass areas.

2.0 ORNAMENTAL SHRUBS AND TREES

2.1 Ground Preparation

Where necessary treat existing weeds with a glyphosate based herbicide and allow a suitable period as recommended by the manufacturer for this to take effect. A general purpose slow release fertiliser at the rate of 10g/m<sup>2</sup> and Tree Planting and Mulching Compost at the rate of 20litres/m<sup>2</sup> are to be incorporated into the top 150mm of topsoil during final cultivations. All extraneous matter of cold drying winds. All bare root stock shall be root dipped in an approved water retaining polymer.

Tree pits are to be excavated and the base broken up a further 150mm with the sides well scarified to prevent smearing. All trees up to and including selected standards are to be supported with single 75mm diameter stakes. All rootball, container grown and trees over heavy standard size shall be double staked. Any feature trees semi mature in size to be secured with a below ground anchoring system (such as a deadman anchor). Stakes should be driven into undisturbed ground before planting the tree, taking care to avoid underground services and cables etc.

2.2 Planting

Shrubs and hedges are to be set out as shown on the drawing and pit planted into the prepared soil with minimal disturbance to the rootball and well firmed in.

Trees are to be placed into the pits and backfilled with topsoil incorporating slow release fertiliser and Tree planting and mulching compost as specified. Firm trees in well and secure with proprietary rubber tree ties and spacers.

Water in all trees and shrubs at the end of each day of planting.

Spread ornamental pine bark mulch to a depth of 75mm across all new planting areas, ensuring groundcover plants are not buried.

2.3 Maintenance

The landscape contractor shall maintain all areas of new planting for a period of 12 months following practical completion. All stock deemed to be dead, dying or diseased within the defects period shall be replaced by the contractor at his own cost.

The site is to be visited monthly throughout the year to undertake the following operations:

**Weed clearance:** All planting areas are to be kept weed free by hand weeding or herbicide treatment.

**Watering:** All trees are to be brought up to field capacity at each visit and each tree is to receive 20 gallons.

**Staking:** All tree ties and stakes are to be checked and adjusted if too loose, too tight or if chaffing is occurring. Any broken stakes are to be replaced.

**Formative pruning:** Any damaged shoots/branches are to be pruned back to healthy wood. Plants are to be pruned in accordance with good horticultural practice to maintain healthy well shaped specimens.

3.0 GRASS

3.1 Preparation

The area to be turfed or seeded shall be sprayed out with a glyphosate herbicide and cultivated to a depth of 100mm removing all weeds, debris and stones over 25mm diameter. The surface shall be raked to smooth flowing contours with a fine tith, incorporating pre-seeding fertiliser at 70 g/m<sup>2</sup>.

3.2 Delivery and Storage

Turf shall be supplied in accordance with BS3936.

Turf shall be Medallion grade as supplied by Rolawn. It shall be close textured and green in colour and be sufficiently fibrous to withstand handling. Turves shall be regular in shape, 300mm wide and of uniform thickness (minimum 25mm). The grass shall be closely mown and shall not exceed 25mm in height.

Turf shall be stacked in piles of up to 1 metre. It shall not be laid in frosty or waterlogged conditions and shall not be stacked in rolls for more than three days.

3.3 Turf

Turfing operations shall be in accordance with BS 4626.

Whole turves shall be laid around the perimeter of the area to be turfed. The central area shall be laid in rows with staggered joints, well butted together, working from plants positioned on turves already laid. The turf shall be watered on completion. Any unevenness shall be made good by lifting the turf and adjusting the levels. Should shrinkage occur, fine topsoil shall be brushed into the joints.

3.4 Seeding

Grass seed shall be sown in April during calm weather and not when the ground is frost bound or waterlogged. Seed shall be sown in two equal sowings in transverse directions at 35 g/m<sup>2</sup>. After sowing the contractor shall lightly rake the seed into intimate contact with the soil.

3.5 Initial cut

When newly seeded and turfed areas reach 50mm they should be lightly rolled out and cut to a height of 30mm. All arisings shall be removed. Any bare patches shall be made good at this time. Seeded areas shall be cut for a second time when the sward reaches 50mm high.

4.0 TOPSOIL

4.1 Existing Topsoil

Pre-planting herbicide application:-

Apply by suitable spraying apparatus, an approved translocated systemic herbicide to the manufacturer's instructions and to 1997 Control of Pesticides Regulations and 2003 COSHH regulations on all beds, except those which are both weed free and are to receive agrotextile sheet mulch. Spray immediately if any weeds are present. If none are showing, but there may be a delay before planting, or the area is to be seeded, spray after one month following cultivation, to allow dormant seed to terminate. All spraying shall be carried out by skilled and qualified operatives, using protective clothing, in suitable weather (no wind) and any damage caused by spray drift, from incorrect usage or spillage, shall be rectified at the contractor's own cost. Repeat as necessary to ensure complete kill and rake off all dead material from site.

Carry out the following works to the existing topsoil on site to ensure it conforms to BS 3882:2015, being free from rocks larger than 50mm diameter, concrete, all roots, wires, brick, and have less than 20% clay. Allow for pre-application of herbicide as above. Fertilize with 100g per meter square of Vitax 'Nutricote 180' slow release fertiliser or equivalent approved, in accordance with the manufacturer's instructions. For beds less than 5 metres in width, fork over thoroughly or machine rotavate and to a depth of 300mm, ensuring that the sub-grade and topsoil are completely broken up and free draining, relieving any compaction. For beds greater than 5 metres in width, break up the sub-grade and topsoil using a tractor mounted subsoiler or ripper at 500mm centres to a depth of 500mm, except where there are services, or within 10 metres of tree stems or 3 metres of existing hedges. Do not rip areas where roots greater than 10mm diameter are encountered.

4.2 Imported Topsoil

Any imported topsoil for making up ground, shall conform to BS 3882:2015, and be free from rocks (over 50mm diameter), concrete, roots, wires and brick, and have less than 20% clay.

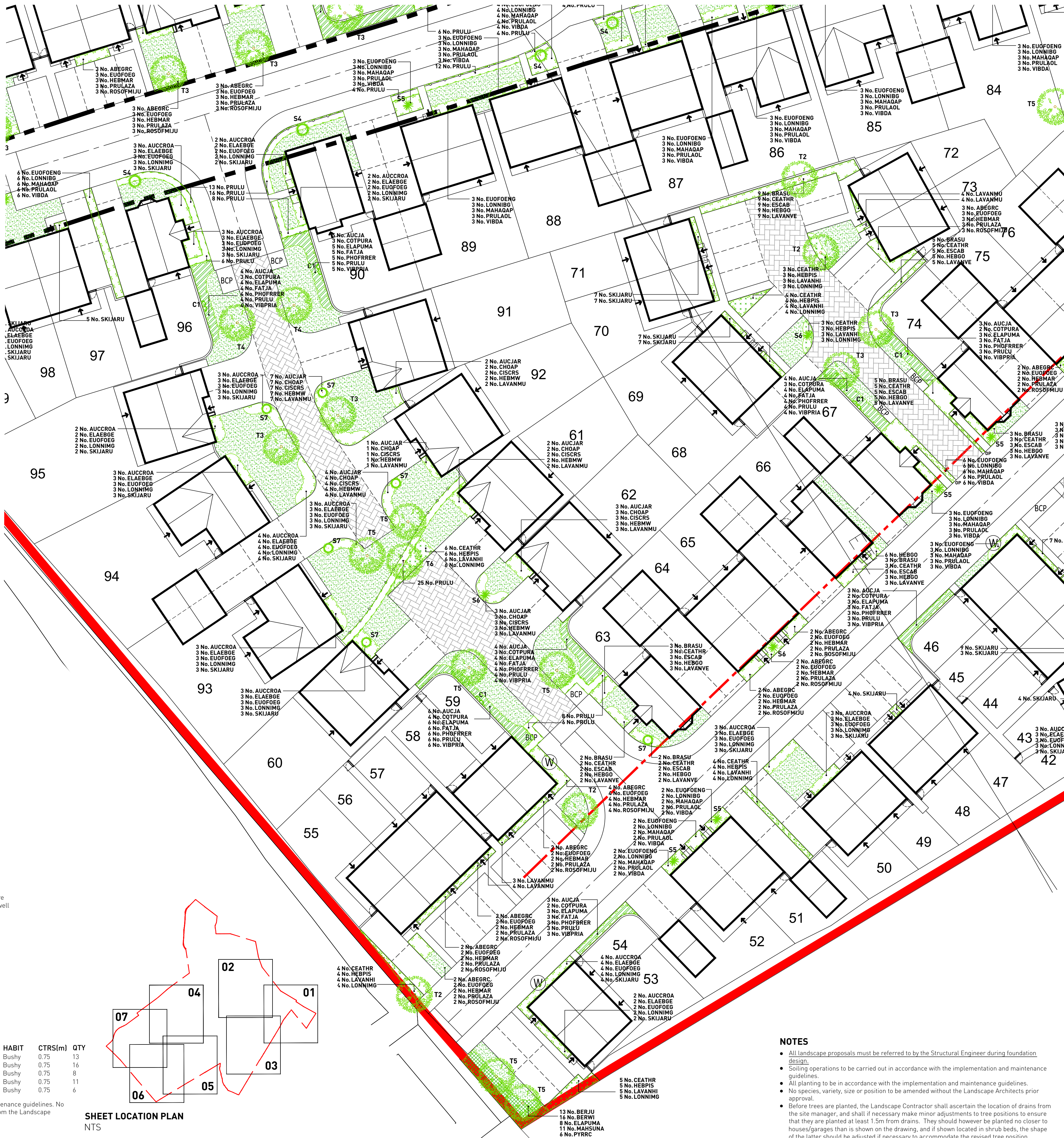
KEY

- Site Boundary
- Existing Trees and Vegetation to be Retained
- Soft Landscape Proposals  
Refer to plant schedule for details.
- Premium grade turf  
Rolawn medallion grade turf to plot frontages or similar approved, laid to implementation and maintenance guidelines specification.
- Water main easement
- Other easements
- Tarmacadam surfaced footpath  
Tarmacadam surface to footpaths, pcc edging.
- Tarmacadam surfaced footpath (Adoptable Highway)  
Tarmacadam surface to footpaths, pcc edging.
- Hoggin footpath  
50mm rolled hoggin surface on 100mm type 1 sub base. To be timber edged and cambered on both sides to shed surface water. Fines are essential to ensure the surface compacts. Self binding gravel layer to be well compacted with vibratory roller.
- Trodden footpath through National Forest Planting (outside of development)

| AMENITY SHRUB MIX 3 - defensive mix |                              |        |          |       |         |
|-------------------------------------|------------------------------|--------|----------|-------|---------|
| ABBR                                | SPECIES                      | SUPPLY | SIZE(cm) | HABIT | CTRS(m) |
| BERJU                               | Berberis julianae            | 10L    | 40/80    | Bushy | 0.75    |
| BERWI                               | Berberis wilsoniae           | 10L    | 40/80    | Bushy | 0.75    |
| ELAPUMA                             | Elaeagnus pungens 'Maculata' | 10L    | 40/60    | Bushy | 0.75    |
| MAHSUNA                             | Mahonia media 'Winter Sun'   | 10L    | 30/40    | Bushy | 0.75    |
| PYRRRC                              | Pyracantha 'Red Cushion'     | 10L    | 40/60    | Bushy | 0.75    |

All shrubs to be planted in accordance with the implementation and maintenance guidelines. No shrub species, size or location should be altered without prior approval from the Landscape Architect. Individual species to be planted in groups of 3-7.

SHEET LOCATION PLAN



PLANT SCHEDULE

TREES

| REF | SPECIES                           | SUPPLY | SIZE(cm) | GIRTH(cm) | CTRS(m)  | QTY |
|-----|-----------------------------------|--------|----------|-----------|----------|-----|
| T1  | Aspen 'Sagepestre'                | EHStd  | 450/425  | 16/18     | as shown | 9   |
| T2  | Betula pendula                    | EHStd  | 450/425  | 16/18     | as shown | 21  |
| T3  | Carpinus betulus 'Frans Fontaine' | EHStd  | 425/600  | 14/16     | as shown | 13  |
| T4  | Malus 'Evereste'                  | EHStd  | 425/600  | 14/16     | as shown | 15  |
| T5  | Prunus sargentii                  | EHStd  | 425/600  | 14/16     | as shown | 23  |
| T6  | Sorbus aucuparia 'Joseph Rock'    | EHStd  | 425/600  | 14/16     | as shown | 6   |

All trees to be planted in accordance with the implementation and maintenance guidelines. The tree planting schedule and landscape proposals must be referred to by the Structural Engineer during foundation design. No tree species, size or location should be altered without prior approval from the Landscape Architect.

SPECIMEN SHRUBS

| REF | SPECIES                        | SUPPLY | SIZE(cm) | HABIT       | CTRS(m)  | QTY |
|-----|--------------------------------|--------|----------|-------------|----------|-----|
| S1  | Juniperus 'Sky Rocket'         | 35L    | 125/150  | Bushy       | as shown | 8   |
| S2  | Phormium 'Jester'              | 25L    | 100/125  | Triple Crwn | as shown | 5   |
| S3  | Phormium 'Sundowner'           | 25L    | 100/125  | Triple Crwn | as shown | 5   |
| S4  | Photinia x fraseri 'Red Robin' | 70L    | 175/200  | Standard    | as shown | 30  |
| S5  | Phormium 'Platt's Black'       | 25L    | 100/125  | Triple Crwn | as shown | 16  |
| S6  | Phormium 'Yellow Wave'         | 25L    | 100/125  | Triple Crwn | as shown | 16  |
| S7  | Buxus sempervirens             | 50L    | 120/140  | Cone        | as shown | 20  |

C1 Trachelospermum jasminoides 25L 180 On Treltis as shown 19

All feature shrubs to be planted in accordance with the implementation and maintenance guidelines. No feature shrub species, size or location should be altered without prior approval from the Landscape Architect.

HEDGEROWS

| ABBR  | SPECIES              | SUPPLY    | SIZE(cm) | HABIT | CTRS(m) | QTY |
|-------|----------------------|-----------|----------|-------|---------|-----|
| ELAEB | Elaeagnus x ebbingei | 10L       | 80/100   | Bushy | 0.50    | 551 |
| PRULU | Prunus lusitanica    | 1m trough | 100/120  | Bushy | 1.00    | 746 |

All hedgerow shrubs to be planted in accordance with the implementation and maintenance guidelines. No hedgerow shrub species, size or location should be altered without prior approval from the Landscape Architect. Hedgerow shrubs to be planted in a single row within a 50cm wide bed and mulched in accordance with implementation and maintenance guidelines. Hedgerow shrubs to be trimmed back at time of planting to promote growth and define the hedgerow. Elaeagnus species to be cut to 80cm height and Prunus to 100cm, unless located within visibility splay where the maximum height of the hedgerow should be 60cm.

SHRUB MIX 1 - North Facing

| ABBR      | SPECIES                              | SUPPLY | SIZE(cm) | HABIT | CTRS(m) | QTY |
|-----------|--------------------------------------|--------|----------|-------|---------|-----|
| *EUOFOENG | Euonymus fortunei 'Emerald 'n' Gold' | 10L    | 30/40    | Bushy | 0.70    | 163 |
| LONNIBG   | Lonicera nitida 'Baggesen's Gold'    | 10L    | 40/60    | Bushy | 0.70    | 163 |
| *MAHAQAP  | Mahonia aquifolium 'Apolo'           | 10L    | 40/60    | Bushy | 0.70    | 163 |
| PRULALOL  | Prunus laurocerasus 'Otto Luyken'    | 10L    | 60/80    | Bushy | 0.70    | 163 |
| VIBDA     | Viburnum davidii                     | 10L    | 40/60    | Bushy | 0.70    | 163 |

SHRUB MIX 2 - North Facing

| ABBR      | SPECIES                            | SUPPLY | SIZE(cm) | HABIT | CTRS(m) | QTY |
|-----------|------------------------------------|--------|----------|-------|---------|-----|
| AUCCROA   | Aucuba japonica 'Crotonifolia'     | 10L    | 40/60    | Bushy | 0.70    | 200 |
| ELAEBGE   | Elaeagnus ebbingei 'Gilt Edge'     | 10L    | 40/60    | Bushy | 0.70    | 200 |
| *EUOFOENG | Euonymus fortunei 'Emerald Gaiety' | 10L    | 30/40    | Bushy | 0.70    | 200 |
| *LONNIBG  | Lonicera nitida 'May Green'        | 10L    | 40/60    | Bushy | 0.70    | 200 |
| *SKIJARU  | Skimmia japonica 'Rubella'         | 10L    | 40/60    | Bushy | 0.70    | 200 |

SHRUB MIX 3 - East/West Facing

| ABBR     | SPECIES                         | SUPPLY | SIZE(cm) | HABIT | CTRS(m) | QTY |
|----------|---------------------------------|--------|----------|-------|---------|-----|
| *BRACHY  | Brachyglottis 'Sunshine'        | 10L    | 40/60    | Bushy | 0.70    | 14  |
| *CEATHR  | Ceanothus thyrsiflorus repens   | 10L    | 40/60    | Bushy | 0.70    | 14  |
| *HEBALRE | Hebe albicans 'Red Edge'        | 10L    | 30/40    | Bushy | 0.70    | 14  |
| PRULAZA  | Prunus laurocerasus 'Zabeliana' | 10L    | 60/80    | Bushy | 0.70    | 14  |
| VIBDA    | Viburnum davidii                | 10L    | 40/60    | Bushy | 0.70    | 14  |

SHRUB MIX 4 - East/West Facing

| ABBR     | SPECIES                           | SUPPLY | SIZE(cm) | HABIT | CTRS(m) | QTY |
|----------|-----------------------------------|--------|----------|-------|---------|-----|
| AUCJAR   | Aucuba japonica 'Rozannie'        | 10L    | 40/60    | Bushy | 0.70    | 116 |
| CHOAP    | Choisya 'Aztec Pearl'             | 10L    | 40/60    | Bushy | 0.70    | 116 |
| *CISCIRS | Cistus x crispus 'Sunset'         | 10L    | 40/60    | Bushy | 0.70    | 116 |
| *HEBWM   | Hebe 'Mrs Winder'                 | 10L    | 30/40    | Bushy | 0.70    | 116 |
| *LAVANMU | Lavandula angustifolia 'Munstead' | 10L    | 30/40    | Bushy | 0.70    | 116 |

SHRUB MIX 5 - South Facing

| ABBR     | SPECIES                       | SUPPLY | SIZE(cm) | HABIT | CTRS(m) | QTY |
|----------|-------------------------------|--------|----------|-------|---------|-----|
| BRASU    | Brachyglottis 'Sunshine'      | 10L    | 40/60    | Bushy | 0.70    | 94  |
| *CEATHR  | Ceanothus thyrsiflorus repens | 10L    | 40/60    | Bushy | 0.70    | 94  |
| ESCAP    | Escallonia 'Apple Blossom'    | 10L    | 60/80    | Bushy | 0.70    | 94  |
| *HEBGO   | Hebe 'Great Orme'             | 10L    | 30/40    | Bushy | 0.70    | 94  |
| *LAVANVE | Lavandula angustifolia 'Vera' | 10L    | 30/40    | Bushy | 0.70    | 94  |

SHRUB MIX 6 - South Facing

| ABBR     | SPECIES                            | SUPPLY | SIZE(cm) | HABIT | CTRS(m) | QTY |
|----------|------------------------------------|--------|----------|-------|---------|-----|
| ABEGRC   | Abelia grandiflora 'Compacta'      | 10L    | 30/40    | Bushy | 0.70    | 126 |
| *EUOFOEG | Euonymus fortunei 'Emerald Gaiety' | 10L    | 30/40    | Bushy | 0.70    | 126 |
| *HEBMAR  | Hebe 'Marjorie'                    | 10L    | 30/40    | Bushy | 0.70    | 126 |
| PRULAZA  | Prunus laurocerasus 'Zabeliana'    | 10L    | 60/80    | Bushy | 0.70    | 126 |
| ROSOFMJU | Rosmarinus 'Miss Jessop's Upright' | 10L    | 40/60    | Bushy | 0.70    | 126 |

SHRUBS/HERBACEOUS - Single species

| ABBR     | SPECIES                              | SUPPLY | SIZE(cm) | HABIT | CTRS(m) | QTY |
|----------|--------------------------------------|--------|----------|-------|---------|-----|
| EUOFOENG | Euonymus fortunei 'Emerald 'n' Gold' | 10L    | 30/40    | Bushy | 0.60    | 9   |
| HEBGO    | Hebe 'Great Orme'                    | 10L    | 30/40    | Bushy | 0.60    | 6   |
| HEBMAR   | Hebe 'Marjorie'                      | 10L    | 30/40    | Bushy | 0.70    | 10  |
| HEBWM    | Hebe 'Mrs Winder'                    | 10L    | 30/40    | Bushy | 0.70    | 74  |
| LAVANMU  | Lavandula angustifolia 'Munstead'    | 10L    | 30/40    | Bushy | 0.60    | 15  |
| SKIJARU  | Skimmia japonica 'Rubella'           | 10L    | 40/60    | Bushy | 0.60    | 77  |

AMENITY SHRUB MIX 1 - to rear garden boundaries

| ABBR     | SPECIES                         | SUPPLY | SIZE(cm) | HABIT | CTRS(m) | QTY |
|----------|---------------------------------|--------|----------|-------|---------|-----|
| AUCJA    | Aucuba japonica                 | 5L     | 40/60    | Bushy | 0.75    | 174 |
| COTPURA  | Cotinus coggygia 'Royal Purple' | 5L     | 40/60    | Bushy | 0.75    | 123 |
| ELAPUMA  | Elaeagnus pungens 'Maculata'    | 5L     | 40/60    | Bushy | 0.75    | 174 |
| FATJA    | Fatsia japonica                 | 5L     | 40/60    | Bushy | 0.75    | 174 |
| PHOFRRER | Photinia fraseri 'Red Robin'    | 5L     | 40/60    | Bushy | 0.75    | 174 |
| PRULU    | Prunus lusitanica               | 5L     | 40/60    | Bushy | 0.75    | 174 |
| VIBPRIA  | Viburnum tinus 'Eve Price'      | 5L     | 40/60    | Bushy | 0.75    | 174 |

AMENITY SHRUB MIX 2 - to car parking areas

| ABBR    | SPECIES                          | SUPPLY | SIZE(cm) | HABIT | CTRS(m) | QTY |
|---------|----------------------------------|--------|----------|-------|---------|-----|
| CEATHR  | Ceanothus thyrsiflorus repens    | 10L    | 40/60    | Bushy | 0.70    | 63  |
| HEBPIS  | Hebe pinguiifolia 'Sutherlandii' | 10L    | 30/40    | Bushy | 0.70    | 63  |
| LAVANHI | Lavandula angustifolia 'Hidcote' | 10L    | 30/40    | Bushy | 0.70    | 63  |
| LONNIBG | Lonicera nitida 'May Green'      | 10L    | 40/60    | Bushy | 0.70    | 63  |

All shrubs to be planted in accordance with the implementation and maintenance guidelines. No shrub species, size or location should be altered without prior approval from the Landscape Architect. Individual species to be planted in groups of 3-7. Lower growing species to be planted at the front of the shrub bed. Low growing species marked with \* above.

NOTES

- All landscape proposals must be referred to by the Structural Engineer during foundation design.
- Soiling operations to be carried out in accordance with the implementation and maintenance guidelines.
- All planting to be in accordance with the implementation and maintenance guidelines.
- No species, variety, size or position to be amended without the Landscape Architects prior approval.
- Before trees are planted, the Landscape Contractor shall ascertain the location of drains from the site manager, and shall if necessary make minor adjustments to tree positions to ensure that they are planted at least 1.5m from drains. They should however be planted no closer to houses/garages than is shown on the drawing, and if shown located in shrub beds, the shape of the latter should be adjusted if necessary to accommodate the revised tree position.
- All planting must be mulched in accordance with the implementation and maintenance guidelines.
- If planting is required outside the October-March season, bare root shrubs will be replaced by 3L pot grown plants, and trees will be replaced by a containerised equivalent to be approved by the project landscape architect.