

- KEY:**
- Site Boundary
  - Proposed Trees
  - Proposed Native Hedge (Maintained at 1.5-2 m high)
  - Proposed Ornamental Hedge (Initially clipped to 0.5m high and subsequently maintained at 0.6m high, offset 0.5m from back of highway boundary with a 0.5m bark mulch strip)
  - Proposed Native Shrubs
  - Proposed Native Woodland Mix
  - Proposed Ornamental Shrubs
  - Proposed Amenity Grass Seed (Emorsgate EL1 Flowering Lawn Mixture. Sown at 40kg/ha)
  - Proposed Wet Wildflower Mix (Emorsgate EM8 Meadow Mixture for wetlands. Sown at 40kg/ha)
  - Proposed Wildflower Mix (Emorsgate EM2 Standard General Purpose Meadow Mixture. Sown at 40kg/ha)
  - Proposed Feature Shrub
  - Proposed Root Barrier (ReRoot 1000 or equivalent)

**PLANTING NOTES**  
 All plants to be supplied in accordance with the HTA National Plant Specification and from a HTA certified nursery. All plants and trees to be planted in accordance with BS3996 and BS8545. Delivery and handling of all plant material to be in accordance with BS4428/2:2012/CLC/PCSE Code of Practice for 'Handling and Establishing Landscape Plants' Parts 1, 11 and 13 and BS8545.  
**Planting Pit and Trench Preparation**  
 Tree pits in soft landscape to be excavated to 1m x 1m x 1m depth prior to topsoiling and all shrub planting areas excavated to 400mm depth. All proposed hedge planting trenches to be excavated to 600mm depth. Unless otherwise specified, all tree pits in hard landscape to be 2m x 2m x 1m, backfilled with compacted Urban Tree Soil.  
 The preparation of planting pits, beds or trenches shall comply with the appropriate British Standards, namely BS4043, BS4428, BS5837 and BS8545.  
 Excavation of planting pits, beds or trenches shall not take place when the ground is frozen or waterlogged such that damage may occur to the structure of the soil. All excavated areas to be backfilled with either the excavated soil or imported topsoil to be BS3882-General purpose grade. All topsoiled areas to be clear of rocks and rubble larger than 50mm diameter and any other debris that may interfere with the establishment of plants. The Contractor shall break up and cutsize at the base of the trenches or planting pits. The sides of the trenches or planting pits shall be loosened with a fork or other similar implement. All stones and the like over 75mm in any dimension, deleterious matter, weeds and weed roots brought to the surface by any subsoiler or excavation shall be removed off site. The Contractor shall remove off site the excavated subsoil/fill material when preparing planting pits. The imported topsoil should make up any deficiencies caused by the removal of the subsoil/fill material. Trenches and pits shall have the topsoil and any subsoil/fill material thoroughly broken up and mixed prior to backfilling.  
 All trees shall be supplied root balled, unless otherwise stated. Root balled trees shall be well grown, healthy and with a compact, contained rootball. They shall be nursery grown and have been regularly watered. Prior to planting, all plant material shall be stored and sorted at in accordance with best practice.  
**Planting**  
 All plants shall be planted in a random fashion avoiding formal regimented lines at densities indicated in the schedule, unless otherwise specified. Unless otherwise specified, all hedgerows shall be planted in single rows and hedgerow mixes shall be planted in groups of 7, 8, 9, 13x at densities indicated on the schedule. Ornamental shrub planting mixes shall be planted in groups of 5, 7 & 11s and native shrub planting mixes shall be planted in groups of 9, 13 & 15s, with a cane and protective spiral guard included to all native planting. The selection, procurement, handling, storage and planting operations of all proposed trees shall be in accordance with BS8545:2014 - Trees: from nursery to independence in the landscape, recommendations.  
 Planting and associated operations shall comply with BS4043, BS4428, BS5837 and BS8545. Unless otherwise stated planting shall be carried out during the period of 1 Nov to 31 March when the ground is not frozen or waterlogged. If planting is required outside this period agreement shall be sought and all bare root plants shall be substituted with container grown stock.  
 Provide Bamboo cane support and 'TreeBo' Biodegradable Spiral Guards' (Green-tech Product code: 160PS101-PRO) or similar to all native shrubs and hedgerows, young sapling trees, whips and feather planting, ensuring that the main or terminal bud is protruding out above the top of the spiral.  
**Watering**  
 All plants shall be watered in to field capacity immediately after planting and mulched with 50mm depth of medium grade crushed mulch. The Contractor shall water the trees, shrubs and hedges once planted so that the entire tree pit or planted area is moistened to field capacity, i.e. the amount of water retained by previously saturated soil once full drainage has ceased. Watering to field capacity shall continue frequently and on a regular basis as considered necessary by the landscape contractor and as necessary to ensure the successful establishment and continued thriving of all planting. Additional watering shall be undertaken during summer months and/or periods of drought. Post planting management and maintenance specifically for new tree planting shall include ongoing irrigation and formative pruning as outlined in BS8545. The period over which regular irrigation required for transplanted trees is likely to be at least two full growing seasons to ensure successful establishment. As the root system develops the frequency of irrigation can be reduced.  
**Staking**  
 All trees with soft landscape areas to be double staked with cross bar and tied, using 1.5m long, 75mm diameter rounded tree stakes 75mm brace, rubber tie and spacer block. Stakes not to extend more than 850mm above ground level. All trees within hardstanding/highways visibility plays to be clear stem to 1.5m high unless otherwise specified. Trees within hardstanding / specific pits to be undergirded gayed unless otherwise specified.  
**Root Barriers**  
 Root barriers (ReRoot 1000 or equivalent) to be included adjacent to buildings and services where necessary. Landscape contractor shall check all planting operations comply with appropriate standards and that in the absence of detailed surveys, any necessary underground investigations are undertaken to ensure there are no conflicts with existing or proposed utilities/services or foundations.  
**PROTECTION OF EXISTING VEGETATION TO BE RETAINED**  
 Existing trees to be retained shall be protected in accordance with BS5837, from commencement to completion of all works on site.

N.B. All planting proposals including tree planting have been developed in order to create a high quality environment and gain planting consent for the development. All tree species have been reviewed in line with NHBC guidance (2017) and in the absence of any building foundation depths or detailed soil analysis information for the site. Where possible only low and moderate water demand species are proposed in close proximity to new buildings. A number of varied cultivars of these species as well as ornamental species that have a smaller overall mature height (which are not currently assessed within NHBC guidance 2017) are proposed to provide variety in the scheme and engineer's should consider these locations & species. Where necessary new building foundation depths shall be designed to accommodate the approved tree species, site specific shrinkage and tree water demand in line with NHBC standards 2017 (Chapter 4.2 - Building Near Trees). Planting plans have been prepared for planning purposes and in the absence of fully detailed ground investigations, geological or hydrological surveys and planting design or species choice may be subject to change - suitability should be confirmed on site by the landscape contractor. Detailed site specific soil analysis and suitable site drainage should be checked by landscape contractor to ensure planting can be implemented in accordance with approved drawings prior to implementation.

**REVISIONS**

REV	DATE	NOTE	BY	CHKD
A	06.07.23	Updated to Redline Boundary redline boundary	JB	CW

**CONSTRUCTION ISSUE**

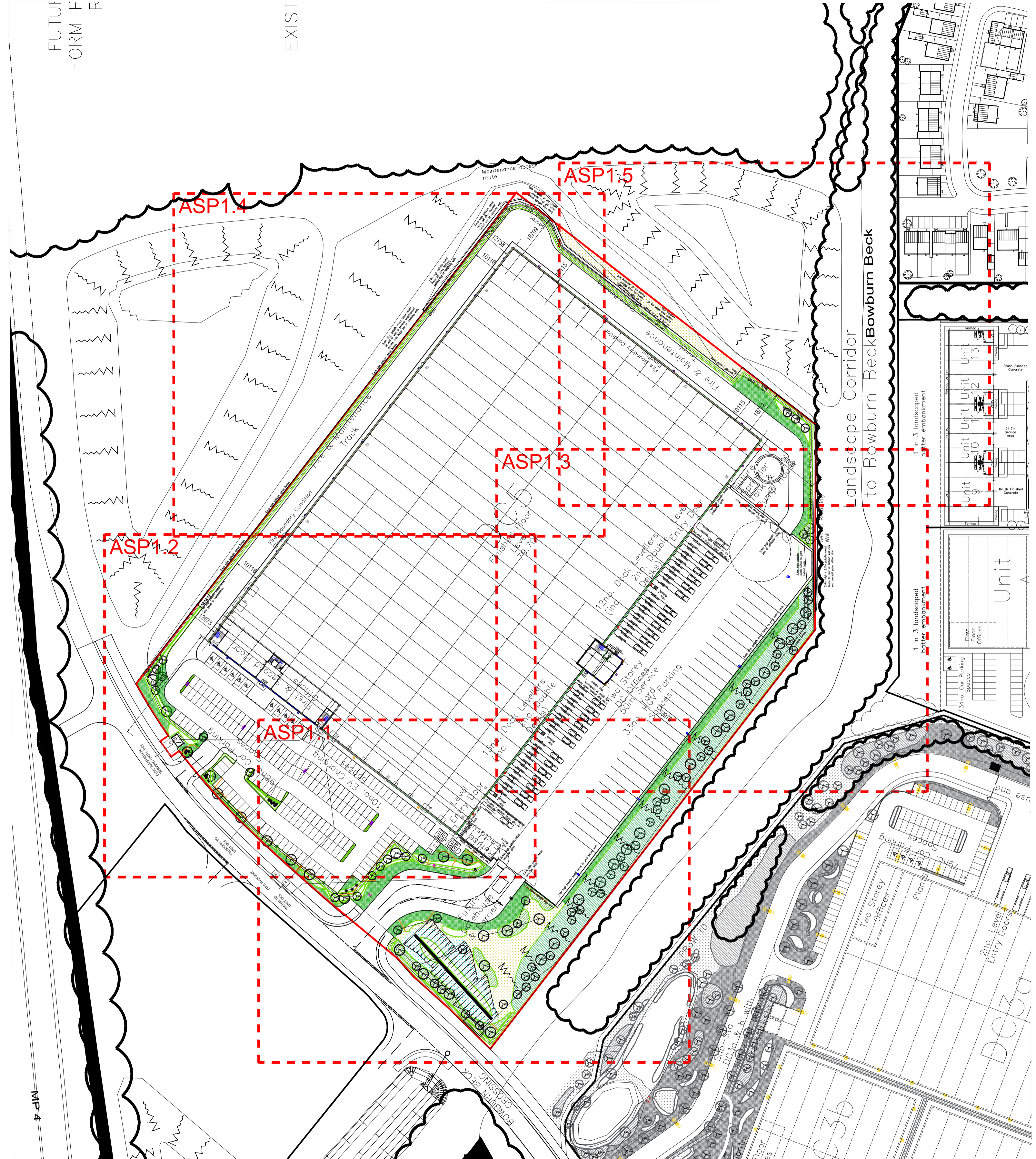
**aspect landscape planning**

TITLE  
**Integra 61, Bowburn - Parcel DC5  
 Planting Plan Overview**

CLIENT  
**Integra 61(Durham) Ltd**

SCALE	DATE	DRAWN	CHKD
1:1000@A1	APR 2022	CW	CW

DRAWING NUMBER	REVISION
5725.DC5_CON_PP.1.0	A



Planting Schedule						
Number	Abbreviation	Species	Specification	Height	Density	
16	-	Ac	Acer campestre	Heavy Standard :Clear Stem min. 200 :RB	12-14cm 3.5-4.0m	
5	-	ACE ELS	Acer campestre 'Elsrijk'	Extra Heavy Standard :Clear Stem min. 200 :RB	14-16cm 4.0-4.5m	
2	-	ACECOLA	Acer platanoides 'Columnare'	Extra Heavy Standard :Clear Stem min. 200 :RB	14-16cm 4.0-4.5m	
4	-	Ag	Alnus glutinosa	Heavy Standard :Clear Stem min. 200 :RB	12-14cm 3.5-4.0m	
3	-	BETEDIN	Betula utilis 'Edinburgi'	Extra Heavy Standard :Clear Stem min. 200 :RB	14-16cm 4.0-4.5m	
14	-	Cav	Corylus avellana	Heavy Standard :Clear Stem min. 200 :RB	12-14cm 3.5-4.0m	
6	-	Cmo	Crataegus monogyna	Heavy Standard :Clear Stem min. 200 :RB	12-14cm 3.5-4.0m	
9	-	FAGSY	Fagus sylvatica	Heavy Standard :Clear Stem min. 200 :RB	12-14cm 3.5-4.0m	
3	-	L1	Lindodendron tulipifera	Heavy Standard :Clear Stem min. 200 :RB	12-14cm 3.5-4.0m	
3	-	LIQST	Liquidambar styraciflua	Advanced Nursery Stock :Clear Stem min. 200 :RB	16-18cm 4.0-4.5m	
7	-	MALSY	Malus sylvestris	Heavy Standard :Clear Stem min. 200 :RB	12-14cm 3.5-4.0m	
6	-	Pav	Prunus avium	Heavy Standard :Clear Stem min. 200 :RB	12-14cm 3.5-4.0m	
7	-	Qr	Quercus robur	Heavy Standard :Clear Stem min. 200 :RB	12-14cm 3.5-4.0m	
1	-	Sa	Salix alba	Heavy Standard :Clear Stem min. 200 :RB	12-14cm 3.5-4.0m	
10	-	Sar	Sorbus aria	Heavy Standard :Clear Stem min. 200 :RB	12-14cm 3.5-4.0m	
6	-	Tc	Tilia cordata	Heavy Standard :Clear Stem min. 200 :RB	12-14cm 3.5-4.0m	
1	-	ULMNEW	Ulmus 'New Horizon'	Extra Heavy Standard :Clear Stem min. 200 :RB	14-16cm 4.0-4.5m	
Total :103 -						
Shrubs						
Number	Abbreviation	Species	Specification	Height	Pot Size	Density
130	-	CORST	Cornus stolonifera	Branched :6/7 brks 60-80cm	5L	3/m²
21	-	HEBRA	Hebe rakaiensis	Bushy :5/6 brks 30-40cm	5L	3/m²
16	-	MaA	Mahonia aquifolium 'Apollo'	Bushy :3/4 brks 30-40cm	5L	3/m²
15	-	PHOTEGS	Phormium tenax 'Gold Sword'	15 leaves :C	80-100cm	10L Counted
42	-	PRULAOL	Prunus laurocerasus 'Otto Luyken'	Branched :6/7 brks 60-80cm	5L	3/m²
Total :193 -						
Prunus lusitanica hedge						
Number	Abbreviation	Species	Specification	Height	Pot Size	Density
193	-	PRULUM	Prunus lusitanica 'Myrtifolia'	Bushy :4/6 brks :Clipped level at 0.5m high	60-80cm	5L 4/m
Total :193 -						
RED ROBIN HEDGE						
Number	Abbreviation	Species	Specification	Height	Pot Size	Density
30	-	PRR	Photinia fraseri 'Red Robin'	Bushy :4/6 brks :Clipped level at 0.5m high	60-80cm	5L 3/m
Total :30 -						
Medium Mix 1						
Number	Abbreviation	Species	Specification	Height	Pot Size	Density
29	-	BRASU	Brachyglottis 'Sunshine'	Bushy :2/4 brks 30-40cm	5L	3/m² 15%
37	-	ESCRE	Escallonia 'Red Elf'	Bushy :5/6 brks 30-40cm	5L	3/m² 20%
37	-	EISQ	Euonymus fortunei 'Silver Queen'	Bushy :4/5 brks 30-40cm	5L	3/m² 20%
37	-	HEBNB	Hebe 'Nicola's Blush'	Bushy :4/5 brks 30-40cm	5L	3/m² 20%
46	-	Lah	Levandula angustifolia 'Hidcot'	Bushy :3/4 brks 30-40cm	5L	3/m² 25%
Total :186 -						
Large Mix 1						
Number	Abbreviation	Species	Specification	Height	Pot Size	Density
5	-	EcGE	Elaeagnus ebbingei 'Gilt Edge'	Bushy :6/7 brks :C	60-80cm	5L 3/m² 25%
5	-	PHOFRB	Photinia fraseri 'Birmingham'	Bushy :6/7 brks :C	40-60cm	5L 3/m² 25%
5	-	PITTE	Pittosporum tenuifolium	Bushy :6/7 brks :C	40-60cm	5L 3/m² 25%
5	-	VIBPRIA	Viburnum tinus 'Eve Price'	Bushy :6/7 brks :C	60-80cm	5L 3/m² 25%
Total :20 -						
Large Mix 3						
Number	Abbreviation	Species	Specification	Height	Pot Size	Density
178	-	CHOTE	Choisya ternata	Bushy :3/4 brks 40-60cm	5-7.5L	3/m² 20%
178	-	CORSAMF	Cornus sanguinea 'Midwinter Fire'	Bushy :3/4 brks 60-80cm	5-7.5L	3/m² 20%
178	-	CORSTKEG	Cornus stolonifera 'Kelsey Gold'	Bushy :3/4 brks 60-80cm	5-7.5L	3/m² 20%
178	-	Os	Osmanthus burkwoodii	Bushy :5/6 brks 40-60cm	5L	3/m² 20%
178	-	PRRR	Photinia fraseri 'Red Robin'	Bushy :3/4 brks 40-60cm	5-7.5L	3/m² 20%
Total :890 -						
Native Hedge Mix						
Number	Abbreviation	Species	Specification	Height	Density	
296	-	Cav	Corylus avellana	BR :Double staggered row	60-80cm 5m	10%
1471	-	Cmo	Crataegus monogyna	BR :Double staggered row	60-80cm 5m	50%
296	-	ILEAQ	Ilex aquifolium	C :Double staggered row	60-80cm 5m	10%
149	-	LIGVJ	Ligustrum vulgare	BR :Double staggered row	60-80cm 5m	5%
296	-	PRUSP	Prunus spinosa	BR :Double staggered row	60-80cm 5m	10%
296	-	ROSCA	Rosa canina	BR :Double staggered row	30-40cm 5m	10%
149	-	VIBOP	Viburnum opulus	BR :Double staggered row	60-80cm 5m	5%
Total :2953 -						
Native Shrub Mix						
Number	Abbreviation	Species	Specification	Height	Density	
299	-	CORSA	Cornus sanguinea	BR :Branched :2/3 brks :1+1	160-80cm 3m²	
226	-	Cav	Corylus avellana	BR :Branched :2/3 brks :1+1	160-80cm 3m²	
299	-	LIGVJ	Ligustrum vulgare	BR :Branched :2/3 brks :1+1	160-80cm 3m²	
226	-	PRUSP	Prunus spinosa	BR :Branched :2/3 brks :1+1	160-80cm 3m²	
226	-	ROSCA	Rosa canina	BR :Branched :2/3 brks :1+1	160-80cm 3m²	
226	-	VIBOP	Viburnum opulus	BR :Branched :2/3 brks :1+1	160-80cm 3m²	
Total :1502 -						
Native Woodland Mix						
Number	Abbreviation	Species	Specification	Height	Density	
100	-	Ac	Acer campestre	Transplant :1+1 :BR	60-80cm	1.5Ctr
90	-	Ag	Alnus glutinosa	Transplant :1+1 :BR	60-80cm	1.5Ctr
90	-	BETPE	Betula pendula	Transplant :1+1 :BR	60-80cm	1.5Ctr
10	-	BETPE	Betula pendula	Feather :2+2 :BR	175-200cm	1.5Ctr
10	-	CARBET	Carpinus betulus	Feather :2+2 :BR	175-200cm	1.5Ctr
50	-	CORSA	Cornus sanguinea	Transplant :1+1 :BR	60-80cm	1.5Ctr
50	-	Cav	Corylus avellana	Transplant :1+1 :BR	60-80cm	1.5Ctr
100	-	Cmo	Crataegus monogyna	Transplant :1+1 :BR	60-80cm	1.5Ctr
90	-	ILXQA	Ilex aquifolium	Leader With Lateralis :1+1 :C	60-80cm	1.5Ctr
90	-	Pav	Prunus avium	Transplant :1+1 :BR	60-80cm	1.5Ctr
10	-	Pav	Prunus avium	Feather :2+2 :BR	125-150cm	1.5Ctr
100	-	PRUSP	Prunus spinosa	Transplant :1+1 :BR	60-80cm	1.5Ctr
90	-	Qr	Quercus robur	Transplant :1+1 :BR	60-80cm	1.5Ctr
10	-	Qr	Quercus robur	Feather :2+2 :BR	175-200cm	1.5Ctr
100	-	Rca	Rosa canina	Transplant :1+1 :BR	60-80cm	1.5Ctr
10	-	Sau	Sorbus aucuparia	Feather :2+2 :BR	175-200cm	1.5Ctr
Total :1000 -						
Attenuation Base Mix						
Number	Abbreviation	Species	Specification	Pot Size	Density	
195	-	CARPE	Carex pendula	Clump	1L 10/m²	
519	-	CARRI	Carex riparia	Clump	1L 10/m²	
195	-	ERIAN	Eriophorum angustifolium	Clump	1L 10/m²	
389	-	LYTSA	Lytium salicaria	Plug, Well Rooted	0.5L 10/m²	
Total :1298 -						

**Amenity Grass Mix**  
 Emorsgate EL1 Flowering Lawn Mixture or similar. Sown at 40kg/ha

**Wetgrass Mix**  
 Emorsgate EM8 Meadow Mixture for wetlands or similar. Sown at 40kg/ha

**Wildflower Grass Mix**  
 Emorsgate EM2 Standard General Purpose Meadow Mixture or similar. Sown at 40kg/ha

NB: Species within planting mixes to be planted in groups of 3, 5, and 7's in random positions ensuring that contrasting colours are provided.