SPECIFICATION NOTES - REFER ALSO TO THE MEASURED WORKS SCHEDULE.

A) Setting out

1. Planting shall be set out exactly as shown on the drawing, and measured from existing fixed points. Curved beds shall be set out using radii scribed on the ground using two pointed stakes and a line between, or with site marker paint. The junction between convex and concave curves shall be cut to form a smooth and even flowing line. Check that all setting out conforms to the plan before cultivation and planting works are carried out. Failure to do so may result in rejection of the work by the landscape architect and may require amendment at the contractor's expense.

2. All planting beds shall be a minimum of 1 metre wide, except where there is insufficient space, due to the constraints of walls and path edgings and their foundations. With narrow beds between walls/ fences and path edgings, ensure that the bed has space free from concrete footings before planting. If the bed is sealed with concrete, then the landscape contractor shall contact the site manager or landscape architect to determine if footings are excessive and can be reduced or else, the bed can be paved. The width of all beds will be checked by the inspecting landscape architect and where the width is not as drawn, the contractor shall re- cultivate them to the specified width at his own expense.

B) Ground preparation

1. Pre-planting herbicide application:- Apply by suitable spraying aparatus, 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 germinate. 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.

2. Carry out the following works to the existing topsoil on site to ensure it Conforms to BS 3882:2007, being free from rocks larger than 50m diameter, concrete, all roots, wire, brick, and have less than 20% clay. Allow for pre-application of herbicide as above. Fertilise with 100g per meter square of Hortibase CRF (16-8-12) slow release fertilizer, in accordance with the manufacturer's instructions. For beds less than 5 meters in width, fork over thoroughly or machine rotovate soil to a depth of 300mm, ensuring that the subgrade and topsoil are completely broken up and free draining, relieving any compaction. For beds greater than 5 metres in width, break up the subgrade 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 meters of tree stems or 3 meters of existing hedges. Do not rip areas where roots greater than 10mm diameter are encountered.

3. Determine before submitting a tender, the extent of support from the site manager with ground preparation: ensure soil of all planting beds is graded to a level 65mm below adjacent grass or paved surfaces, (90mm below where agro- textile set mulch is not specified), within 400-600mm of edges to ensure bark or wood chip mulches are retained. Where grass is proposed, then the soil level shall be flush (maximum 10mm below - but never proud) of adjacent paved surfaces, to receive rain water run off. The landscape contractor is responsible for ensuring that the final product conforms to the specification even where the developer and/or main contractor have failed to supply and spread topsoil to the recessed level. The landscape contractor shall allow for adjustment of levels, as specified above, including for re-grading subsoil and topsoil. Where beds are sloping, ensure that topsoil is graded to the specified levels below pavement & grass surfaces within 400mm of the edges of the bed. This is to allow for sheet mulch and bark or wood chip mulch so that mulch does not spill out on to pavements and also to allow surface water to drain from paths on to planted areas.

4. For sloping areas to be turfed adjacent to paved areas, topsoil levels shall be graded flush with the finished pavement level (or up to 10mm below),to allow surface water to drain from pavements to soft areas. Soil of grass areas should therefore never be proud of paved areas. Soil levels more than 10 mm below pavement edges will cause mower damage on cutting.

5.Imported topsoil (where specified and sanctioned by the employer) for making up ground, shall conform to BS 3882: 2007, and be free from rocks (over 50mm diameter), concrete, roots, wire and brick, and have less than greater than 20% clay. Such soil shall be cultivated as set out above. Representative samples shall first be approved by the landscape architect before being supplied to site. No imported soil shall be supplied to site without a written instruction.

C) Planting

1. All planting must be carried out in accordance to the specification and schedule of quantities accompanying these drawings. Refer to the specification for the preparation of existing topsoil and required depths for planting, turfing, and standard trees, and also for maintenance requirements.

2. No substitutions will be accepted without the prior agreement of the inspecting landscape architect. The contractor shall replace at once at his own cost any stock size, species or variety of plant which has not been specified on the planting plan and schedule, unless prior agreement to a substitution by the landscape architect has been received. All plants shall be true to size specified in the schedule of plants and associated notes, (3L pots are 19cm diameter and 15cm deep). All shrubs, (other than ground cover), shall be 400-600mm height and spread, or otherwise specified for the pot size by the HTA National Plant Specification and be bushy, healthy, disease free stock, not pot bound, leggy or spindly. There should be a minimum of 5 breaks per shrub. This specification is the minimum standard required and any stock falling below this standard, in the sole opinion of the inspecting landscape architect,shall be lifted and replaced at the contractor's expense.

3. All shrubs, herbaceous plants, whips and transplants shall be watered in on planting with 20 litres per square metre. Trees shall be watered in with 25 litres per tree position. Water thereafter during the contract period at weekly intervals with 30 litres of water.

4. Proposed large feathered or standard trees to be true to the species, variety and size as specified on the planting plan, to include 1.6m chestnut stake 600mm above ground and 1000mm below ground) and 1No. sackcloth tie with spacing device positioned 25mm maximum from the top of the post.

5. Turf to be of cultivated grade such as Rowlawn "Medallion", or other of similar quality and source, approved by the landscape architect. The contractor shall replace at once any turf rejected by the landscape architect at his own cost.

6.Self clinging climbing shrubs or wall shrubs, with "S" drawn after the climber name, shall be trained to the wall/fence with heavy duty, plastic coated garden wire. Training wires shall be attached vertically to the wall/fence by means of 125mm long stainless steel eye screw fittings. Position 1No. at 250mm from ground, and 1No. 250mm from top of the wall/fence, and string the wire tightly between the fixings. Train the climber to the wire with plastic coated garden wire tags.

7. Twining varieties of climber, with "T" drawn after the climber's name (in specially prepared pits or general shrub beds) shall be trained to walls/ fences by mounting ready-made trellis panels 1.8 x 1.8m generally (but 1.8 x 0.6m for corners or where space is restricted). Include for adapting any panels for locations where walls or fences are lower than 1.8m. Fix trellis panels to the walls/ fences using non rusting screws 125mm long (to be approved), incorporating 50mm cube wood spacing blocks to ensure that the panel is mounted sufficiently far from the wall/ fence to allow twining of stems. Ensure that all timber is pressure impregnated with a non phyto-toxic preservative and then painted with a dark brown non phyto-toxix preservative wood stain such as Sadolin "Classic" walnut or similar and approved. Ensure that the trellis is not in contact with the ground. Train the climbing shrub to the trellis with plastic coated garden wire tags.

8. Climbers specified outside proposed shrub beds shall have specially prepared climber pits. Climber pits shall be 400mm x 400mm and 600mm deep (minimum size), and be backfilled with topsoil (from site - unless otherwise agreed). Ensure the base of the pit is thoroughly broken up and free draining before back filling with topsoil.Ensure no damage to foundations and services, and make good all structures and surfaces disturbed. Fertilise with 50g of Hortibase CRF (16-8-12) slow release fertilizer. Water with 15 litres of water per climber pit.

D) Mulch

1. When specified by the additional specification notes on this plan, supply and spread suitable biodegradeable sheet mulch over planting beds, previously, cultivated, graded and fertilized topsoil before planting, and peg down at a minimum of 500mm centres, (300mm at edges) and beds less than 1m wide. Pegging this densely is essential to prevent flaps of material becoming exposed. Refer to the specification for biodegradable sheet mulch on plan.

2. Following planting supply and spread evenly Melcourt Industries "Edwards of Brandon" to a depth of 50mm, (75mm if no sheet mulch specified), over all planted areas. Finished mulch levels shall be no higher than 15mm below pavement or grass levels to avoid any spillage onto pavements or lawns. N.B. no substitution of mulch type will be acceptable. It is essential to have a no-fines, large particled, brown wood chip to reduce weed growth, reduce wind blow and prevent rapid break down.

E) BS codes

1. All workmanship and materials shall conform to the following codes:-
A) General landscape operations (excluding hard surfaces) - BS 4428:1989.
B) Trees in relation to construction- BS 5837: 2012 and BS 6549:1999. BS 3998:2010 (recommendations for tree works) unless otherwise specified.
Arboricultural Association - Standard Conditions of Contract and Specifications of Tree Works 1996.
C) Nursery stock in accordance with latest horticultural trade association nursery stock specification entitled "National Plant Specification 2001".
Plants shall conform to:
-BS 8545 : 2014 Trees from Nursery to Independence in the Landscape
-BS 3936-1 : 1992 Nursery Stock - Specification for trees and shrubs.
-BS 3936-2 : 1990 Nursery Stock- Specification for roses + AMD 6628.
-BS 3936- 4 : 2007 Nursery stock- Specification for forest trees.
-BS 3936-9 : 1998 Nursery stock- Specification forbulbs, corms and tubers.
-BS 3936-10 : 1990 Nursery stock- Specification for ground cover shrubs.
-CPSE-Committee for Plant Establishment, Handling and establishing landscape plants 1996, Part 3, paragraphs 6.2 to 6.6.
D) Glossary for Landscape Works BS 4428 :1989
E) Turf - BS 3969:1998- recommendations for turf for general purposes.
F) Seeding - EEC Regulations 1974. Use blue labelled certified varieties to EC purity and germination regulations. When requested, submit an officia seed Testing Station Certificate of germination, purity and composition.
G) Topsoil - BS 3882: 2015
H) Pesticides: Control of Pesticides Regulations 1997;The Health and Safety at Work Act 1974; the COSHH Regulation 2003, the product COSHH sheet Water Supply (Water Quality.) Regulations amended 2000; Control of Pollution Act 1974; Hedgerow ACT 1997; Wildlife and Countryside Act 1981; Countryside and Rights of way Act 2000.

GENERAL NOTES FOR THE DEVELOPER.

A) Tree protection

1. Any existing trees to be retained, are the responsibility of the main contractor on site who shall take all necessary protective measures set out in BS 5837:2012 to ensure no damage to stems or roots, to prevent compaction from vehicles or storage of materials, contamination of soil from spilages, scorching from fires and instability or stress from changes of soil level. The landscape contractor is however responsible for ensuring that neither plant, materials or labour are cause of any damage to existing trees, and like the employer, the landscape contractor shall replace at once any tree damaged on site, supplying and planting a tree of the same species and size, at his own cost. Protection barriers will comprise a scaffold framework in accordance with Figure 2 of BS 5837:2012 (The BS).
The framework will consist of vertical and horizontal scaffolds with vertical tubes spaced at no more than 3m
intervals and driven into the ground. Weld mesh (Heras or similar) panels will be securely fixed on to this
framework with wire or scaffold clamps. Tubes will be driven into the ground to a minimum depth of 600mm.
Supporting struts will be fixed to the inside of the barrier to ensure maximum rigidity.

B) Ground work

1. Soil levels: soil levels for shrub beds and grass areas should have any compacted subgrade thoroughly broken up by machine before instructing the ground worker to spread topsoil or the landscape contractor to commence work or the beds will become waterlogged in wet weather and the plants and turf will die.

2. Top soil spread from on site should be to the following minimum depths:- Shrub beds: 350mm. Grass areas 150mm. allow for excavation of 415mm of the subgrade for shrub beds to leave beds 65mm below finished pavement or grass areas in order to receive sheet and bark mulch, (90mm below where sheet mulch is not to be used). Tree pits will be dug by the landscape contractor. Top soil shall be spread for grass areas flush with any areas of paving and after settlement, the soil level should be no greater than 10mm below paved areas to allow for turf. For areas to be grass seeded, the soil level shall be flush with any finished paved surfaces after settlement (or to a maximum of 5mm below) to allow for rain water to drain onto soft surfaces. Settlement shall be no greater than the tolerances given or problems will be encountered with mowing (the blades in danger of touching concrete edgings) or where soil is proud of pavements, then drainage problems will be encountered.

3. Existing topsoil and imported soil shall conform to BS 3882:2007, and be free from compaction, rocks/bricks greater than 50mm diameter, concrete, wire, roots, debris, oil, cement and builders rubble. Soil shall have a clay content of less than 20%.

C) Hardworks

1. Hard works, unless otherwise agreed, shall be carried out by the developer or main contractor, and all materials and workmanship shall be in accordance with the construction details and the layout plan.

2. All paths and edgings shall be set out properly to lines and radii, with all curves scribed on the ground using pointed pegs and string or site marker paint, achieving flowing natural arcs. Setting out shall be agreed with the landscape contractor and subsequently the landscape architect.

3. Hard surfaces shall be constructed after suitable base courses have been laid, taking full account of local site conditions, soft spots and substrate. The indicative depths of base courses are minimum depths assuming suitable substrate conditions.

4. All metalwork shall be finished hot dipped galvanized in accordance with BS EN ISO1460. The galvanizer shall be responsible for the thorough removal of all galvanizing smuts (fettling) to the complete satisfaction of the Landscape Architect. The decorating contractor shall prepare the galvanized surface by washing with detergent and water and scrubbing with a scouring pad until all dirt, grease, white rust & sulphates have been removed & then allowed to dry thoroughly. Supply and paint 'Icosit 6630' from Sika Ltd (tel. 01707 374444) applied with a turkhead brush strictly in accordance with the manufacturers instructions, COSHH regulations and the product COSHH sheet. Apply 2No. coats of paint with a dry film thickness of 100 microns per coat. Apply paint only when galvanized surface is thoroughly dry at temperatures above five degrees celsius and in any event above the current dew point temperature. Paint work will be subject to inspection by experts and if found wanting, shall be stripped off, re-prepared and applied entirely at the decorating contractors own cost.

5. All wood work to use ACQ water based wood preservative applied by vacuum pressure by Permawood or other similar and approved company. The timber shall then be stained with 3No. coats of Sadolin 'Classic,' colour 'Walnut' strictly in accordance with the manufacturers instructions, COSHH Regulations 2003 and product COSHH sheet.

GENERAL NOTES

-ALL DIMENSIONS IN MILLIMETRES
-DO NOT SCALE OFF THIS DRAWING
-ALL DIMENSIONS TO BE CHECKED ON SITE

SCHEDULE OF PLANTS

SHRUBS

QTY	CODE	PLANT NAME	STOCK	SPACING	SHC	DFB	MIN HEIGHT/SPREAD
27No.	Cor Aur	Corylus avellana "Aurea"	C.G. 3L	3/m2	F	3.75	400-600 x 400-600mm
48No.	Cor Ele	Cornus alba "Elegantissima"	C.G. 5L	3/m2	D	2.25	400-600 x 400-600mm
76No.	Cor Spa	Cornus alba "Spaethii"	C.G. 5L	3/m2	D	2.25	400-600 x 400-600mm
28No.	Hyp Hid	Hypericum "Hidcote"	C.G. 10L	3/m2	C		600-800 x 600-800mm
56No.	Vib tin	Viburnum tinus "Eve Price"	C.G. 5L	3/m2	D	2.25	400-600 x 400-600mm

SPECIMENS PLANTED IN BEDS, GRASS OR GRAVEL

QTY	CODE	PLANT NAME	STOCK	SHC	DFB
11No.	COR AVE	Corylus avellana	C.G. 10L	E	3.75

FEATHERED TREES

QTY	CODE	PLANT NAME	STOCK	SIZE	DFB	MAX Ht	WD
13No.	Ace cam	Acer campestre	O.G. FTH	180-210cm	17m	22m	M
4No.	Ame Rob	Amelanchier lamarckii "Robin Hill"	O.G. FTH	150-180cm	7m	8m	M
4No.	Bet pen	Betula pendula	C.G. 15L FTH	180-210cm	7m	14m	L
4No.	Car bet	Carpinus betulus	O.G. FTH	180-210cm	9m	17m	L
5No.	Cra Cri	Crataegus 'Crimson cloud'	O.G. FTH	8-10cm	13m	10m	H
5No.	Cra mon	Crataegus monogyna	O.G. FTH	180-210cm	13m	10m	H
4No.	Pru avi	Prunus avium	O.G. FTH	180-210cm	13m	17m	M
4No.	Pru Vic	Prunus "Victoria"	O.G. FTH	150-180cm	10m	8m	M
12No.	Que rob	Quercus robur	C.G. 15L FTH	200-250cm	25m	20m	H
1No.	Sal alb	Salix alba	O.G. FTH	180-210cm	30m	24m	H

STANDARD TREES

QTY	CODE	PLANT NAME	STOCK	SIZE	DFB	MAX Ht	WD
6No.	ACE CAM	Acer campestre	O.G. STD	8-10cm	17m	22m	M
2No.	ACE STR	Acer campestre "Streetwise"	O.G. STD	10-12cm	6m	8m	M
6No.	BET PEN	Betula pendula	C.G. 25L STD	8-10cm	7m	14m	L
1No.	CAR BET	Carpinus betulus	O.G. STD	8-10cm	9m	17m	L
13No.	CAR FRA	Carpinus betulus "Frans Fontaine"	O.G. STD	8-10cm	9m	16m	L
5No.	FAG SYL	Fagus sylvatica	C.G. 25L STD	8-10cm	15m	20m	M
1No.	JUG REG	Juglans regia	O.G. STD	10-12cm	14m	18m	M
2No.	LIQ STY	Liquidamber styraciflua	O.G. STD	8-10cm	12m	16m	M
5No.	MAL SYL	Malus sylvestris	O.G. FTH	180-210cm	8m	10m	M
6No.	QUE ROB	Quercus robur	C.G. 25L STD	10-12cm	25m	20m	H
3No.	TIL COR	Tilia cordata	O.G. STD	10-12cm	17m	22m	M

EXTRA HEAVY STANDARD TREES (AND SEMI MATURE IF APPLICAPLE)

QTY	CODE	PLANT NAME	STOCK	SIZE	DFB	MAX Ht	WD
2No.	CAR BET*	Carpinus betulus	R.B XHVYSTD	14-16cm	9m	17m	L
3No.	CAR FRA*	Carpinus betulus "Frans Fontaine"	R.B XHVYSTD	14-16cm	9m	16m	L
4No.	LIQ STY*	Liquidambar styraciflua	R.B XHVYSTD	14-16cm	12m	16m	M
2No.	QUE ROB*	Quercus robur	R.B XHVYSTD	16-18cm	25m	20m	H

NATIVE HEDGE MIXES

QTY	%	PLANT NAME	STOCK	SPACING	SIZE	DFB	MAX HT	W
506m		Native hedge mix 01: double staggered row						
950 No.	30%	Crataegus monogyna	O.G. WHP	6/m	60-90cm	13m	10m	H
634No.	20%	Corylus avellana	O.G. WHP	6/m	60-90cm	4m	8m	L
476No.	15%	Acer campestre	O.G. WHP	6/m	60-90cm	17m	15m	M
317No.	10%	Ilex aquifolium	C.G. cell-grown	6/m	15-30cm	6m	12m	M
158No.	5%	Euonymous Europaeus	O.G. WHP	6/m	60-90cm	4m	4m	M
158No.	5%	Pyrus communis	O.G FTH	6/m	60-90cm	7m	9m	M
158No.	5%	Malus sylvestris	O.G. WHP	6/m	60-90cm	6m	12m	
158No.	5%	Viburnum opulus	O.G. WHP	6/m	60-90cm	4m	5m	M
158No.	5%	Sambucus nigra	O.G.	1m CRS	60-90cm	5m	10m	L
21m		Native hedge mix 02: double staggered row Coppice hedge						
38No.	30%	Cornus sanguinea	O.G. WHP	6/m	60-90cm	2.5m	3m	M
38No.	30%	Corylus avellana	O.G. WHP	6/m2	60-90cm	3m	6m	L
19No.	15%	Acer campestre	O.G. WHP	6/m	60-90cm	17m	15m	M
19No.	15%	Fagus sylvatica	O.G. WHP	6/m	60-90cm	15m	20m	M
12No.	10%	Viburnum opulus	O.G. WHP	6/m	60-90cm	4m	5m	M
22m		Native hedge mix 03: double staggered row						
40No.	30%	Corylus avellana	O.G. WHP	6/m	60-90cm	4m		
27No.	20%	Cornus sanguinea	O.G. WHP	6/m	60-90cm	2.25m		
27No.	20%	ligustrum vulgare	O.G. WHP	6/m	60-90cm	3.75m		
27No.	20%	Viburnum opulus	O.G. WHP	6/m	60-90cm	3.75m		
14No.	10%	Viburnum lantana	O.G. WHP	6/m	60-90cm	3.75m		
44m		Native hedge mix 04: double staggered row						
26No.	10%	Corylus avellana	O.G. WHP	6/m	60-90cm	4m	8m	L
145No.	55%	Crataegus monogyna	O.G. WHP	6/m	60-90cm	13m	10m	H
13No.	5%	Viburnum opulus	O.G. WHP	6/m	60-90cm	4m	5m	M
40No.	15%	Acer campestre	O.G. WHP	6/m	60-90cm	17m	15m	M
13No.	5%	Malus sylvestris	O.G. WHP	6/m	60-90cm	6m	12m	
13No.	5%	Ilex aquifolium	C.G. cell-grown	6/m	15-30cm	6m	12m	M
13No.	5%	Prunus avium	O.G. WHP	6/m	60-90cm	4m	4m	M

PLANT MIXES

QTY	%	PLANT NAME	STOCK	SPACING	SIZE	DFB	MAX HT
113m2		GROUND COVER MIX A (individual species to be planted in groups of approx 20)					
34No.	10%	Hebe rakaiensis	C.G. 3L	3/m2			
68No.	20%	Euonymus "Emerald & Gold"	C.G. 3L	3/m2			
102No.	30%	Lonicera "Maygreen"	C.G. 3L	3/m2			
136No.	40%	Rosa grouse	C.G. 3L	3/m2			
849m2		NATIVE BUFFER PLANTING MIX A (individual species to be planted in groups of approximately 10)					
255No.	10%	Cornus sanguinea	O.G. WHP	3/m2	60-90CM		
382No.	15%	Crataegus monogyna	O.G. WHP	3/m2	60-90CM		
382No.	15%	Corylus avellana	O.G. WHP	3/m2	60-90CM		
255No.	10%	Malus sylvestris	O.G. FTH		180-210cm	8m	10m M
382No.	15%	Euonymus europaeus	C.G. 3L	3/m2			
127No.	5%	Ilex aquifolium	C.G. 3L	3/m2			
382No.	15%	Salix caprea	O.G. WHP	3/m2	60-90CM		
382No.	15%	Viburnum opulus	O.G. WHP	3/m2	60-90CM		
101m2		ORNAMENTAL BUFFER PLANTING MIX A (individual species to be planted in groups of approximately 10)					
35No.	35%	Cornus sanguinea	O.G. WHP	1/m2	60-90cm	2.5m	3m M
35No.	35%	Corylus avellana	O.G. WHP	1/m2	60-90cm	3m	6m L
30No.	30%	Viburnum opulus	O.G. 3L	1/m2		2.5m	M

SEED MIXES

AREA	SEED MIX NAME	
3546m2	Floral lawn mix	(EL1 – FLOWERING LAWN MIXTURE by Emorsgate Seeds refer to Measured Works Schedule)
2754m2	Wet wildflower meadow mix	("EM8" Mix by Emorsgate Seeds, refer to Measured Works Schedule)
5959m2	Wildflower meadow mix	("EM4" Mix by Emorsgate Seeds, refer to Measured Works schedule)
873m2	Highways verge mix	(Suffolk County Council (SCC) Highway verge mix)

NOTES AND ABBREVIATIONS:

G51
Group of trees containing, dead elms: fell and remove dead wood and plant 40No whips, with shrub shelters, stakes and weed matt;pegged.
Mix Species

10No. Tilia Cordata	25% WHP	1.2m - 1.5m	O.G
10No. Prunus Avium	25% "	1.2m - 1.5m	"
10No. Acer campestre	25% "	0.9m - 1.m	"
10No. Carpinus Betulus	25% "	1.2m - 1.5m	"

R.B. = Root-balled stock
C.G. = Container grown stock
O.G. = Open ground stock, to be planted Nov 1st - March 1st
FTH = Feathered tree
STD = Standard tree
HVYSTD = Heavy Standard tree
XHVYSTD = Extra Heavy standard tree
BLE = Broad Leaf Evergreen
CON = Conifer
L = Litre container
DFB = "Distance from Buildings" based on minimum building foundation depths
Max Ht = "Maximum Height" of tree
WD = "Water Demand" of tree
SHC = Shrub Height Classification
  A = < 600mm mature height
  B = 600mm - 1.8m mature height
  C = > 1.8m mature height with low water demand and slow growth
  D = 1.8m - 3m mature height
  E = 3m - 5m mature height
  F = >5m mature height
  Note: Plants not classified within the JBA SHC are NOT designated as shrubs. JBA understand shrubs to be defined as those plants of perennial habit with woody stems.

-Girth size is given for standard trees, otherwise all sizes refer to height. All sizes are the minimums acceptable.
-Shrubs specified as 3 litre size shall be 400-600mm minimum height and spread and 2 litre stock shall be 300-400mm minimum height and spread. These heights and spreads in relation to pot size are just a guide and the "National Plant Specification" sizes will be accepted (but will be seen as the absolute minimum acceptable). Any shrub supplied which are smaller than this will be rejected at once.
-Cornus varieties shall be twice transplanted and pruned to form bushy rounded plants. Leggy plants with few branches will be rejected, as will leggy plants which have been pruned hard.
-Plants shall be completely hardened off, any plants which show signs of scorching after planting will be rejected.

REFER TO THE ACCOMPANYING MEASURED WORKS SCHEDULE DOCUMENT FOR MORE INFORMATION
CHANGES TO SUPPLIERS/MANUFACTURERS ARE TO BE EQUAL AND APPROVED.
SUBSTITUTIONS TO SHRUB/TREE VARIETIES ARE TO BE AGREED WITH LANDSCAPE ARCHITECT.
DO NOT SCALE FROM THIS DRAWING
ALL DIMENSIONS TO BE CHECKED ON SITE

Wild Flower Meadow Mix

%	Latin name	Common name
0.5	Achillea millefolium	Yarrow
0.2	Achillea ptarmica	Sneezewort
1	Betonica officinalis - (Stachys officinalis)	Betony
2.5	Centaurea nigra	Common Knapweed
2	Filipendula ulmaria	Meadowsweet
1.5	Galium verum	Lady's Bedstraw
0.4	Geum rivale	Water Avens
0.5	Leucanthemum vulgare	Oxeye Daisy
0.6	Lotus pedunculatus	Greater Birdsfoot Trefoil
1	Plantago lanceolata	Ribwort Plantain
1	Primula veris	Cowslip
1	Prunella vulgaris	Selfheal
2	Ranunculus acris	Meadow Buttercup
1.5	Rhinanthus minor	Yellow Rattle
1	Rumex acetosa	Common Sorrel
2	Sanguisorba officinalis	Great Burnet
0.5	Silaum silaus	Pepper Saxifrage
0.2	Silene flos-cuculi - (Lychnis flos-cuculi)	Ragged Robin
0.6	Succisa pratensis	Devil's-bit Scabious
20		

Grasses

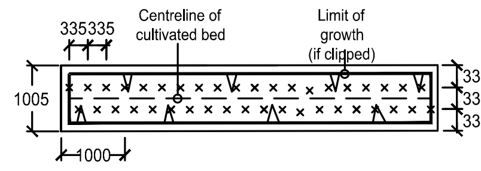
%	Latin name	Common name
10	Agrostis capillaris	Common Bent
2	Alopecurus pratensis	Meadow Foxtail (w)
2	Anthoxanthum odoratum	Sweet Vernal-grass (w)
2	Briza media	Quaking Grass (w)
32	Cynosurus cristatus	Crested Dogstail
1	Deschampsia cespitosa	Tufted Hair-grass (w)
24	Festuca rubra	Slender-creeping Red-fescue
1	Hordeum secalinum	Meadow Barley (w)
6	Schedonorus pratensis - (Festuca pratensis)	Meadow Fescue (w)

Highway Verge Mix

%	Latin name	Common name
10	Agrostis castellanna "Highland"	Highland Bent
15	Festuca rubra ssp. Litoralis "Dawson Lowgrow"	Red Fescue
15	Festuca rubra Pruinoas "Merlin"	Red Fescue
25	Festuca rubra ssp. Rubra "Ruby"	Red Fescue
20	Festuca longifolia "Scandis"	Blue Fescue
15	Poa pratensis "Parade"	Meadowgrass

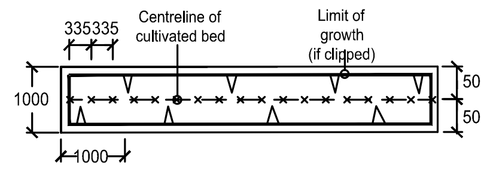
SPECIFICATION FOR HEDGE PLANTING

SPECIFICATION FOR NATIVE AND SEMI-NATIVE HEDGES e.g. Mixed native species, Carpinus betulus & Fagus sylvatica.
Hedges containing native and semi-native planting in mixes shall be planted in two straight rows set 335mm apart at a density of 6 plants per linear metre. The two rows shall be placed in the centre of the bed and shall be offset so that the plants are alternate and not opposite each other. Plants to be open ground stock 600-900mm high.

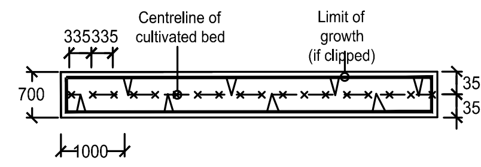


SPECIFICATION FOR ORNAMENTAL HEDGE PLANTING - LARGE GROWING SPECIES e.g. Osmanthus heterophyllus, Ligustrum ovalifolium, Viburnum tinus, Cotoneaster lacteus, Euonymus japonicus 'Aureopictus', Escallonia 'Apple Blossom' & Griselinia littoralis.

Hedges containing large ornamental species shall be planted in a single straight row at a density of 3 plants per linear metre. The row shall be placed in the centre of the bed. Hedge plants to be 3L container grown stock, 400-600mm height and spread unless otherwise stated.



SPECIFICATION FOR ORNAMENTAL HEDGE PLANTING - SMALL GROWING SPECIES e.g. Buxus sempervirens, Osmanthus delavayi, Lavendula spica 'Hidcote,' Hebe topiara & Lonicera nitida.
Hedges containing small ornamental species shall be planted in a single straight row at a density of 3 plants per linear metre. The row shall be placed in the centre of the bed. Hedge plants to be 3L container grown stock, 300-400mm height and spread unless otherwise stated.



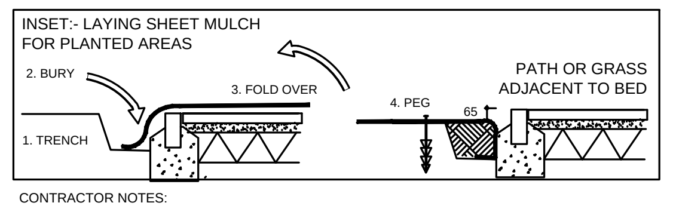
NB. Hedges adjacent to gravel areas shall have the cultivated strip separated from gravel by a timber edge 75 x 25mm of ACQ treated timber stained with 3No. coats of Sadolin 'Classic' colour 'Walnut' (dark brown wood stain) according to specification.

SPECIFICATION FOR BIODEGRADABLE SHEET MULCH FOR PLANTING

INTRODUCTION
Biodegradable sheet mulch is a woven, natural fibre, biodegradable fabric of sufficient strength to last 3-6 months to ensure weed suppression and successful plant establishment when newly disturbed soil triggers significant weed generation. The water porous product helps the ground stay moist and weed free, speeding plant growth and establishment greatly.

SPECIFICATION
1. Prepare and Cultivate imported or existing topsoil including fertlizers as necessary and water to field capacity.
N.B. Ensure that the finished soil level is at least 65mm below adjacent pavement or grass levels to receive sheet and bark mulch. For sloping beds ensure that soil levels are 65mm below pavements or grass areas within 600mm of bed edges.
2. Place suitable biodegradable sheet mulch over soil to be planted. Unroll materials, placing in overlapping rows (overlap to be no less than 50mm).
3. Bury 200mm flap of material at the extreme edges of the planting bed, or nail to concrete haunch of path edging with masonary nails @ 1m centres
4. Secure material in position by hammering in 300mm plastic pegs at 500mm centres. (300mm centres @ edges of beds).
5. Place plants on beds in intended positions.
6. Cut the fabric with sissors in "+" shape for each plant position, 400mm across.
7. Pit plant the plants, holding back the flaps of fabric, and carefully replace around the stem. Spread topsoil under sheet if friable. Remove all compacted topsoil clods from site, ensure no soil is left on top of sheet.
8. Once all the plants are planted, cover the fabric all over with 50mm of coarse, graded, free of fines large wood chip mulch available from Edwards of Brandon Tel: 01842 813555.
9. Finally, water the bed thoroughly to field capacity. (Ensure that each plant receives 2 gallons of water if the soil is dry or in warm weather conditions, otherwise apply 25L/m2).

INSET:- LAYING SHEET MULCH FOR PLANTED AREAS

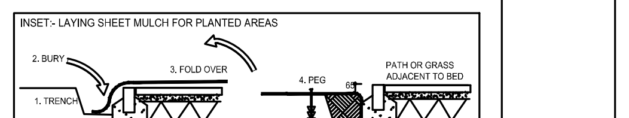


CONTRACTOR NOTES:
- DO NOT USE BIODEGRADABLE SHEET MULCH ON SLOPES GREATER THAN 1:3 WITHOUT THE USE OF GRAVEL BOARDS AT 1 - 1.5m CENTRES ALONG THE CONTOURS TO RETAIN THE BARK COVER.
- FOR GRAVEL/SHINGLE AREAS UTILISE A NON-BIODEGRADABLE POLYPROPYLENE WOVEN FABRIC SUCH AS "COVERTEX" FROM HY-TEX U.K. LTD, TEL: (01233) 720097.

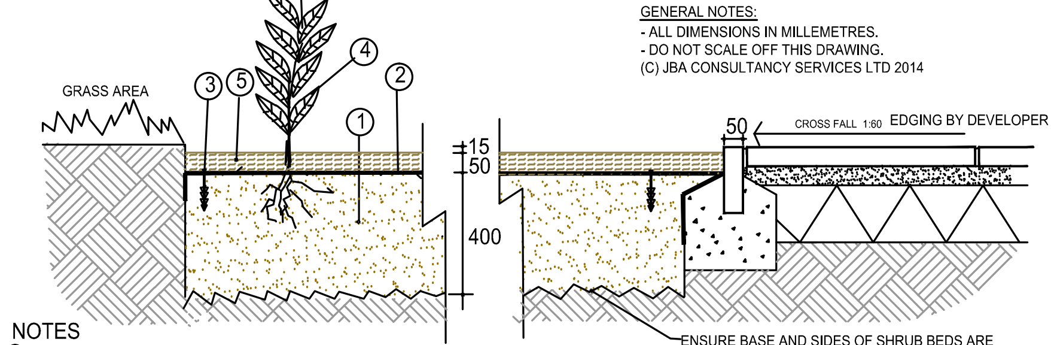
INSET DETAIL 1: SHRUB BED WITH COURSE WOOD CHIP MULCH OVER SUITABLE BIODEGRADABLE SHEET MULCH.

NOT TO SCALE

INSET:- LAYING SHEET MULCH FOR PLANTED AREAS



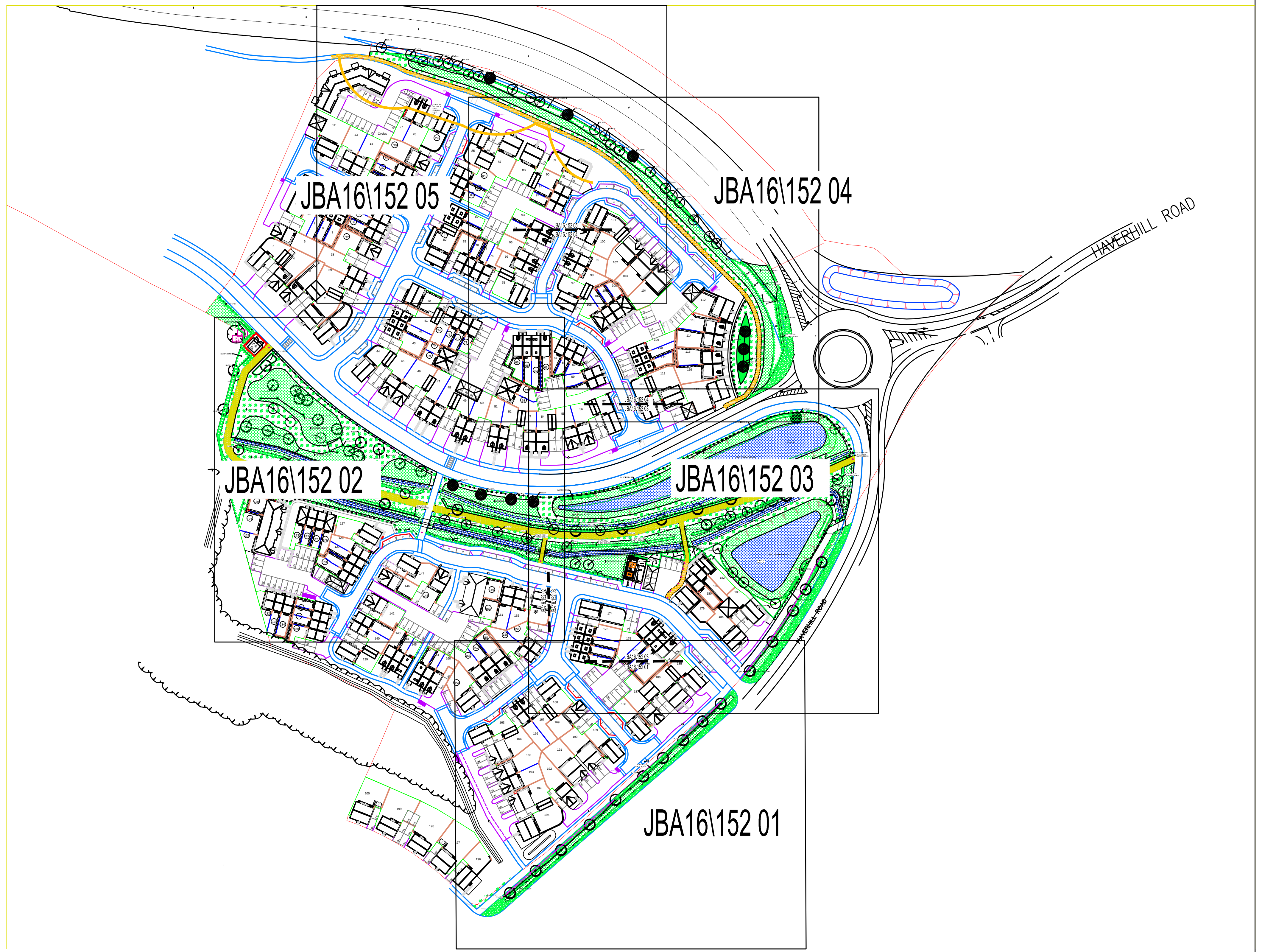
GENERAL NOTES:
- ALL DIMENSIONS IN MILLEMETRES.
- DO NOT SCALE OFF THIS DRAWING.
(C) JBA CONSULTANCY SERVICES LTD 2014



NOTES
① Existing topsoil to be rotovated to a depth of 400mm ensuring that the ground is completely broken up and is free draining. Complete ground preparation as specified within the measured works schedule, ensuring finished soil levels are 65mm below adjacent pavement or grass surfaces. If soil is dry, water liberally, prior to laying sheet mulch.
② Suitable biodegradable sheet mulch to be unrolled and placed in overlapping rows (overlap to be a minimum of 50mm). To be laid by burying 200mm flap of material at the extreme edges of the shrub area; and folding over itself (refer to inset on sheet mulch specification). Tuck in sheet on the opposite side of the proposed shrub area and fasten close to tucked in part with plastic pegs.
③ Suitable pegs hammered in at 500mm centres to secure sheeting. Increase frequency to 300mm centres at edges to secure sheet mulch at margins.
④ Supply and pit plant shrubs through sheeting. Refer to pit planting through sheet mulch specification.
⑤ "Coarse graded free-of-fines large wood chip mulch" to be darkened from aging (3-6 months minimum) available from Edwards of Brandon. Tel: (01842) 813555. Mulch to cover all of biodegradable fabric to a min depth of 50mm once all plants are planted. Ensure finished levels are 15mm below adjacent turf or hard surfaces.

N.B. (A) Do not use biodegradable sheet mulch on slopes greater than 1:3 without the use of gravel boards at 1 - 1.5m centres along the contours to retain the bark cover.
(B) For gravel/shingle areas utilise a non-biodegradable polypropylene woven fabric such as "Covertex" from Hy-tex U.K. Ltd. tel: (01233) 720097. Cover the fabric all over with 40mm of clean, washed, cream / buff coloured gravel, 20mm gravel, unless otherwise stated in the key.

PIT PLANTING THROUGH SHEET MULCH SPECIFICATION
A) Place plants on sheet in intended positions
B) Cut "+" shape in to the fabric with scissors or sharp knife for each plant position. Each cut to be approximately 300mm - 500mm depending on the size of the shrub.
C) Hold back the fabric using stones etc and excavate pits of appropriate size, for example:-
-350mm depth and 300mm radius of stem, for plants specified in 10L containers.
-300mm depth and 250mm radius of stem, for plants specified in 3L or smaller containers.
D) Ensure pit sides / base are well broken up.
E) Pit plant so the nursery mark is flush with the ground.
F) Backfill with imported or existing topsoil mixed with Vitax "Q4 HN" fertiliser to suppliers instructions and 25L non peat compost per m2.
G) Firm in and replace flaps of fabric tightly around base of plant stem. ensure there is no soil what so ever over the sheet mulch. Peg as necessary.
H) Water plants with 20L/plant for 10L stock and 10L/plant for 3L or smaller stock using a fine spray hose.
I) Spread "coarse graded free-of-fines large wood chip mulch" 50mm deep. Finished surface levels to be 15mm below adjacent turf or paving.



KEY

SOFT WORKS

⊕	PROPOSED FEATHERED TREE, INCLUDING STAKE AND TIE. SEE SPECIFICATION NOTES A1, B2-3, B5, C1-4, D1-2 AND E1.
⊕	PROPOSED STANDARD TREE, INCLUDING DOUBLE STAKE AND TIE. SEE SPECIFICATION NOTES A1, B2-3, B5, C1-4, D1-2 AND E1.
⊗	PROPOSED EXTRA HEAVY STANDARD TREE, INCLUDING DOUBLE STAKE AND TIE. SEE SPECIFICATION NOTES A1, B2-3, B5, C1-4, D1-2 AND E1.
▭	SHRUB AND HERBACEOUS PLANTING, INCLUDING BARK MULCH (ACCORDING TO SPECIFICATION). SEE SPECIFICATION NOTES A1-2, B1-3, C1-3, D1-2 AND E1.
▭	NATIVE WHIP AND SHRUB PLANTING IN MIXES, INCLUDING BIODEGRADABLE SHEET AND BARK MULCH (ACCORDING TO SPECIFICATION. SEE SPECIFICATION NOTES A1-2, B1-3, C1-3, D1-2 AND E1.
▭	HEDGE PLANTING, INCLUDING BIODEGRADABLE SHEET AND BARK MULCH (ACCORDING TO SPECIFICATION). REFER TO HEDGE SCHEDULES ON PLAN AND THE SCHEDULE OF QUANTITIES. SEE SPECIFICATION NOTES A1-2, B1-3, B5, C1-3, D1-2 AND E1.
🟩	HIGHWAY VERGE SEEDED AREA UNLESS OTHERWISE STATED ON PLAN. SEE SPECIFICATION NOTES B4, C5 AND E1.
▨	FLORAL LAWN SEEDED AREA. REFER TO PLANT SCHEDULE FOR SPECIFICATION OF MIX.
↓	WILDFLOWER MEADOW SEEDED AREA. REFER TO PLANT SCHEDULE FOR SPECIFICATION OF MIX.
↓	WETLAND WILDFLOWER SEEDED AREA. REFER TO PLANT SCHEDULE FOR SPECIFICATION OF MIX.
✡	MARGINAL PLANTING. REFER TO SCHEDULE FOR FURTHER INFORMATION.
▽	BULB PLANTING IN MIXES, SPRING FLOWERING VARIETIES, REFER TO SCHEDULE FOR FURTHER INFORMATION.
✪	EXISTING TREE TO BE RETAINED, SEE GENERAL NOTE A1 AND E1. IF PREPARED, SEE ALSO JAMES BLAKE ASSOCIATES PLAN AND SCHEDULE FOR ANY SURGERY WORKS.
↓	EXISTING VEGETATION GROUP OR HEDGE TO BE RETAINED, SEE GENERAL NOTE A1 AND E1. IF PREPARED, SEE ALSO JAMES BLAKE ASSOCIATES PLAN AND SCHEDULE FOR ANY SURGERY WORKS.
▬	REQUESTED OAK NHBC LINE. NOTE DEEPER FOUNDATIONS NEEDED
╍	RIBBED ROOT BARRIER REROOT 1000 AVAILABLE FROM WWW.GREENBLUE.COM, TEL.01580 830 800 OR SIMILAR AND APPROVED, INSTALLED TO MANUFACTURER'S INSTRUCTIONS.
○	HOGGIN FOOTPATH LAID OVER 150mm CONSOLIDATED DEPTH OF SUITABLE GRANULAR FILL, OVER GEOTEXTILE MEMBRANE. EDGING TO BE TIMBER BOARD 20x125x2400mm, TO BE PRESSURE TREATED
⁘	ROADWAYS AND FOOTPATHS TO BE BITUMEN MACADAM TO ENGINEER'S SPECIFICATION AND TO HIGHWAY'S AUTHORITY APPROVAL.
●	KNEE RAIL 450mm HEIGHT, TIMBER POST AND METAL RAIL.
⋒	MAINTENANCE ACCESS POINT 3.4m WIDE WITH LOCKABLE METAL SWING GATE.
Ⓛ	STREET LIGHTING
●	DROP BOLLARD, TYPE RTR8 HEAVY DUTY TELESCOPIC BOLLARD, COLOUR JET BLACK. AVAILABLE FROM MARSHALLS TEL: 03333314799
◇	BAT BOX TYPE HABIBAT INTEGRATED BOX TO BE INSTALLED NO LOWER THEN 5M AVAILABLE FROM WWW.HABIBAT.COM, TEL.01642 724 626 OR SIMILAR AND APPROVED, INSTALLED TO MANUFACTURER'S INSTRUCTIONS
B2	BIRD BOX TYPE SCHWEGLER 1B NEST BOX AVAILABLE FROM WWW.GARDENATURE.CO.UK, TEL. 01255514451 OR SIMILAR AND APPROVED, INSTALLED TO MANUFACTURER'S INSTRUCTIONS
B1	BIRD BOX TYPE MANTHORPE SWIFT BRICK AVAILABLE FROM WWW.MANTHORPE.CO.UK, TEL. 01773514200 OR SIMILAR AND APPROVED, INSTALLED TO MANUFACTURER'S INSTRUCTIONS

LANDSCAPE PROGRAMMING

DUE TO NATIONAL PLANT SHORTAGE: PLANTS MAY TAKE UP TO 4 WEEKS TO BE DELIVERED. EARLY LEAD-IN FOR SOFT LANDSCAPE IS ESSENTIAL.

REV.	DATE	INITIALS	DETAILS
L	01/04/2019	CR	LPA COMMENTS 28.03.2019
K	12/02/2019	CR	LPA COMMENTS 16.01.2019
J	29/10/2018	AJW	CLIENTS COMMENTS - 29.10.2018
I	17/10/2018	AJW	CLIENTS AND LPA COMMENTS 17.10.2018
H	11/07/2018	JM	CLIENTS COMMENTS 11.07.2018
G	11/06/2018	JM	UPDATED TO NEW LAYOUT AND CLIENTS COMMENTS 05.06.2018
F	07/03/2018	JM	UPDATED TO NEW LAYOUT AND LPA COMMENTS
E	15/02/2018	JM	UPDATED TO NEW LAYOUT RECEIVED 24/01/2018
D	14/07/2017	JM	UPDATED TO CLIENT COMMENTS RECEIVED 14/07/2017
C	16/06/2017	JM	UPDATED TO CLIENT COMMENTS & NEW LAYOUT
B	31/05/2017	JM	UPDATED TO CLIENT COMMENTS & NEW LAYOUT
A	23/12/2016	DCG	UPDATED TO CLIENT COMMENTS & NEW LAYOUT

CLIENT
PERSIMMON HOMES ESSEX

DWG. TITLE
DETAILED SOFT LANDSCAPEING PROPOSAL FOR POS

SITE
HAVERHILL ROAD, HAVERHILL

PURPOSE OF ISSUE
PLANNING

DRG BY	CHECKED	AUTH'D	SCALE	DATE	DWG NO.	REV.
DCG	JBA	JBA	1:250@A1	JULY 2016	JBA16\152-06	L

James Blake Associates
HEAD OFFICE
The Black Barn, Hall Road, Lavenham, Suffolk, CO10 9QX
Tel: (01787) 248216 Fax: (01787) 247264
jamesblake@jba-landmarc.com www.jba-landmarc.com
LANDSCAPE ARCHITECTURE o ARBORICULTURE o ECOLOGY