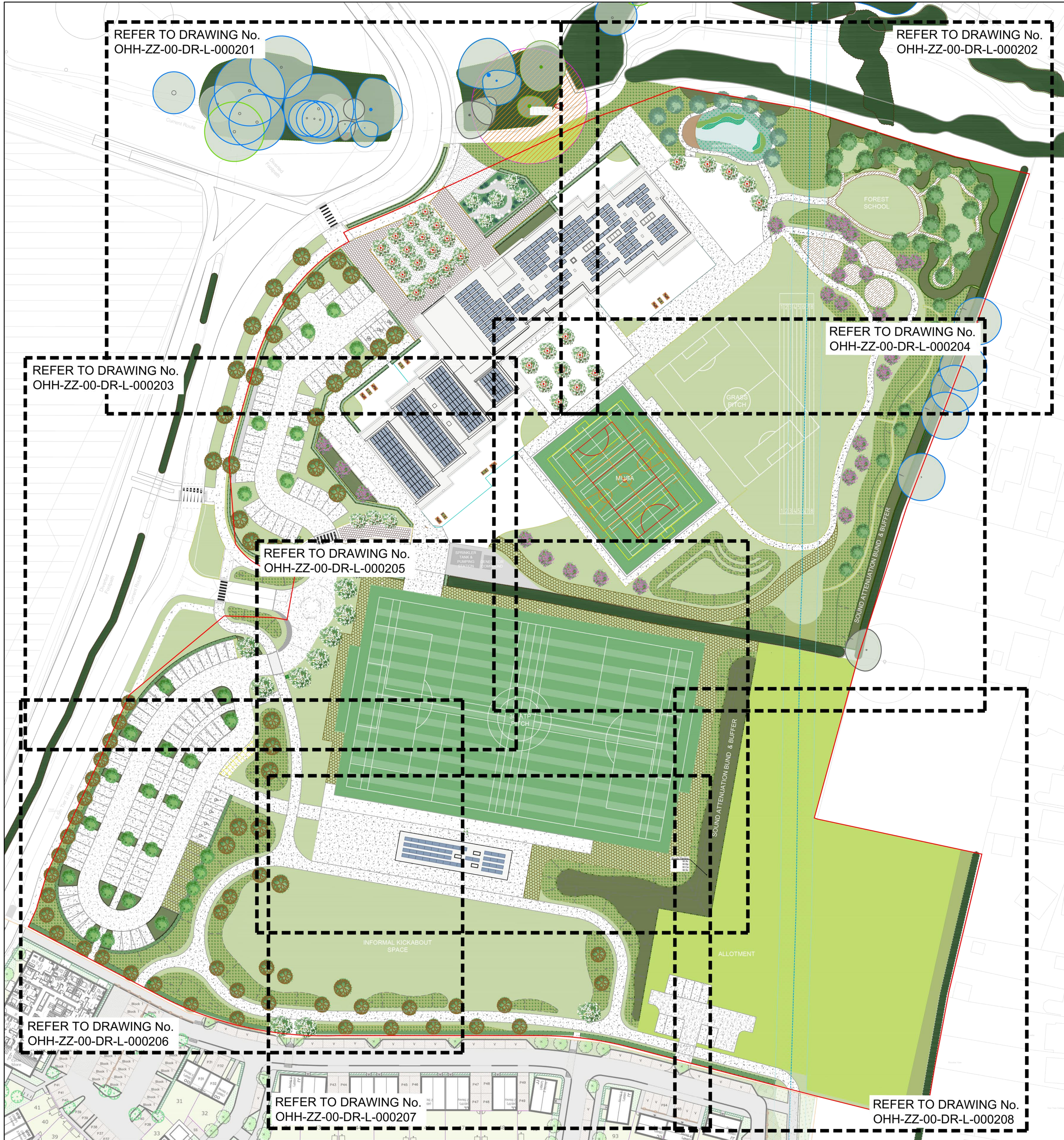




GENERAL PLANTING SPECIFICATION It is the responsibility of the developer to design foundations to accommodate all existing and proposed tree and shrub planting, with reference to the NHC Standards Chapter 4.2 (Building near Trees). Where any deviation from the landscape proposals or specification occurs within a scheme, the contractor shall request the relevant detail from the designer prior to proceeding. All planting operations shall be carried out in accordance with: Trees from nurseries to independence in the landscape BS 8545, and General landscape operations BS 4428. All plant stock to conform to the National Plant Specification. All plant stock to originate from within the UK. Plant handling and planting operations to be in accordance with HTA 'Handling and Establishing Landscape Plants', Parts I-III. Planting beds and tree pits shall be weeded free prior to the commencement of planting operations. Hand weeded or approved translocated systemic herbicide to the manufacturers instructions and to 1997 Control of Pesticides Regulations and 2003 COSHH regulations.	
3.	Topsoil to be fertile with maximum 35% clay content and 5% minimum organic content, pH 5.8 - 7.5 and to be free of perennial weeds, weed seeds and contamination. Maximum stone content 20% (20mm+ particle size), maximum size of stones 50mm in diameter. Existing topsoil to be ameliorated and/or screened if necessary to achieve this specification.
4.	The identification of topsoil and subsoil resources on site will be required to inform the detailed design of tree pits and planting beds, including the depth of topsoil horizons and the requirement for amelioration of the growing medium, prior to planting. All site/existing topsoil/subsoil will be subject to detailed testing in accordance with BS 3882 & BS 8601. All storage/striping to comply with the British Standard. If modifications to the soil are necessary, soil ameliorants will be used sparingly. Ideally the soil dug from the excavated pit should be used as the backfill medium and as far as practicable, replicate the horizons within the original soil profile.
5.	Imported topsoil to be to BS 3882:2015 Multi Purpose Grade, from an approved source, and to accord with the above specification. Refer to the landscape drawings for specific purpose topsoils.
6.	All nursery standard trees are to be fitted with irrigation pipe and inlet, sized as appropriate.
7.	No trees are to be planted within 3m of sewers or services (or other assessment recommended by the relevant statutory undertaker) without the use of tree root barriers, eg 'Greenleaf' Renoot 800/100 placed between the tree and services. The top edge of the root barrier should finish 10mm above any growing media or be encapsulated into the concrete haunch of the adjacent edgings. Contractor to ascertain the location of all sewers and services prior to tree planting.
8.	All planting beds to be mulched with matured coniferous bark, with an even particle size between 15 - 50mm, to a minimum depth of 75mm over weed free soil after completion of all planting and watering operations. Mulch to be free of pests, diseases, fungus and weeds, and with no fines or dust. Mulch source and sample to be approved.
9.	Soil conditioner: Sanitized and stabilised compost to BS1 PAS 100. Apply 50mm depth even coverage and incorporate into topsoil during cultivation operations, to a minimum depth of 150mm. Compost to be Compost Association certified, or from an approved supplier conforming to this specification. If no local supplies are available an alternative organic peat free compost may be specified, subject to the Landscape Architect's approval.
10.	Shrubs to be planted in pits 150mm wider and deeper than root spread backfilled with excavated topsoil/compost mixed with 'Sierrablend Floral' slow release fertiliser, quantity in accordance with manufacturer's recommendations.
11.	Shrubs to be planted in pits 150mm wider and deeper than root spread backfilled with excavated topsoil/compost mixed with 'Sierrablend Floral' slow release fertiliser, quantity in accordance with manufacturer's recommendations.
12.	Native hedge planting to be protected from rabbit damage with 'Tubex' spiral guards, or Net guards for bushy shrub species.
13.	Grass Areas: 13.1. Anenity grass areas are to have a minimum depth of 150mm topsoil brought to a fine till all stones over 40mm (25mm for lawns), in any direction removed. If importing soils a minimum of 550mm purpose subsoil is required below the topsoil layer.
14.	Grass Areas: 14.1. Anenity grass areas are to have a minimum depth of 150mm topsoil brought to a fine till all stones over 40mm (25mm for lawns), in any direction removed. If importing soils a minimum of 550mm purpose subsoil is required below the topsoil layer. Areas should be uniformly firmed. Pre-seeding fertiliser, eg British Seed Houses BSH2 to be applied prior to grass seeding in accordance with manufacturer's recommendations.
15.	Any stock planted outside the recognised planting season to be containerised.
16.	Containerised plant stock to have a fully developed root system within the specified pot size.
17.	Maintenance operations to be carried out as specified until planting becomes established (year 5 after planting).
18.	Trees - Inspect soil around newly planted trees should be regularly inspected for soil capping and compaction. Remedial action should be taken as necessary. Check stakes and ties and adjust if necessary in summer and winter. Remove stakes when no longer required, i.e. after 3 years. Prune out damaged branches or deadwood, cutting back so as not to affect branch collar. Progressively raise canopies of new trees to provide clearance for vehicles and pedestrians.
19.	Shrubs - Weed control measures to continue until canopy of shrubs is closed. Weeds to be cleared by hand or by application of translocated herbicide, with inspections made regularly through the growing season. Prune back any badly damaged shrubs to sound growth. Cut back plants adjacent to paths and access ways where necessary, retaining a balanced shape. Clear litter and debris from planted areas and cut leggy growth hard back to promote bushy growth.
20.	Mulches - replenish to original depth and hand-weed as necessary, at least once annually.
21.	Watering - In periods of dry weather apply sufficient water to maintain healthy growth. Allow 10L/m2 to planting beds and 20L/m2 per tree, twice a week, during the growing season (based on 800mm dia. rootball). Irrigation operations to be carried out for two full growing seasons.
22.	Refining - Ensure that all trees and shrubs are firmly bedded in the ground after strong winds, frost heave or other disturbances.
23.	Hedges - Prune hedge annually during winter period to shape and/or promote bushy growth.
24.	Grass Areas - Remove litter, twigs and debris prior to first cut of each Spring. Mow lawn areas regularly, cutting to a height of 50mm or greater under tree canopies to be cut 4 times to a height of 50mm or greater in the first season, and thereafter 3 times. All grasses to be removed.
25.	Protection/Restatement - Regularly inspect all planting and grassed areas, eg a month, for any post damage or vandalism/damage caused by others. Any damaged to be reported to the Employer and rectified in the next available season by replacement planting or reseedling/turfing, and protective measures if required.
26.	Existing trees to be retained are to be protected by fencing to BS 8537:2012, erected prior to construction commencing and maintained during building operations.
27.	Tree surgery to be carried out by an approved contractor in accordance with BS 3998:2010 and with the prior permission of the Local Authority. Existing trees are to have major deadwood and broken branches removed for safety reasons.

AbbrevVarietyCommon NameCodeHeight/ Girth cmDescriptionClear Stem (C/S) Feathered (F)NotesPlants for PollinatorsTOTAL									
FEATURE TREES									
TA7AB	Acer xfreemani 'Autumn Blaze'	Freeman maple	3x	16-18	Advanced nursery stock	C/S	Rootballed, 1.5m clear stem, 60cm dia. Rootball, 400-450cm high		
TA7AO	Acer rubrum 'October Glory'	red maple	3x	16-18	Advanced nursery stock	C/S	Rootballed, 1.5m clear stem, 60cm dia. Rootball, 400-450cm high		
TKp	Koeleria paniculata	pride of india	5x	20-25	Semi-mature	C/S	Rootballed, 1.5m clear stem, 60cm dia. Rootball, 500-550cm high		
TLW	Liquidambar styraciflua 'Worpleston'	sweet gum	3x	16-18	Advanced nursery stock	C/S	Rootballed, min. 1.5m clear stem, 60cm dia. Rootball, 400-450cm high		
TLU	Liriodendron tulipifera	tulip tree	3x	16-18	Advanced nursery stock	C/S	Rootballed, min. 1.5m clear stem, 60cm dia. Rootball, 400-450cm high		
TMSS	Malus 'Spring Snow'	crabapple	3x	14-16	Extra heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 400-450cm high		
TPy	Prunus yedoensis	Yoshino cherry	3x	14-16	Extra heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 400-450cm high		
TPP	Prunus avium 'Pena'	double gnan	3x	14-16	Extra heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 400-450cm high		
TPT	Prunus 'Ichyo'	cherry	3x	14-16	Extra heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 400-450cm high		
CAR PARK TREES									
TA&S	Acer campestre 'Streetwise'	field maple	3x	12-14	Heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 350-400cm high		
TApD	Acer platanoides 'Deborah'	Norway maple	3x	12-14	Heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 350-400cm high		
TC&S	Carpinus betulus 'Streetwise'	hornbeam	3x	12-14	Heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 350-400cm high		
FOREST SCHOOL TREES									
TPs	Pinus sylvestris	Scots pine	3x	14-16	Extra heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 400-450cm high		
TPs	Pinus sylvestris	Scots pine	5x	20-25	Semi-mature	C/S	Rootballed, 1.5m clear stem, 60cm dia. Rootball, 500-550cm high		
TOF	Quercus robur	English oak	5x	20-25	Semi-mature	C/S	Rootballed, 1.5m clear stem, 60cm dia. Rootball, 500-550cm high		
TLt	Tilia cordata	small-leaved lime	3x	14-16	Extra heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 400-450cm high		
INFORMAL KICKABOUT SPACE TREES									
TApCS	Acer platanoides 'Crimson Sentry'	Norway maple	3x	12-14	Heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 350-400cm high		
TFPA	Fagus sylvatica Var. 'Heterophylla Asplenifolia'	fern-leaved beech		16-18	Advanced nursery stock	C/S	Rootballed, min. 1.5m clear stem, 60cm dia. Rootball, 400-450cm high		
TMWB	Malus toro 'Boulevard Beauty'	Flowering Crab	3x	14-16	Extra heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 400-450cm high		
TOc	Ostrya carpinifolia	Hope-hornbeam	5x	20-25	Semi-mature	C/S	Rootballed, 1.5m clear stem, 60cm dia. Rootball, 500-550cm high		
TPH	Prunus 'Tai Haku'	cherry	3x	14-16	Extra heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 400-450cm high		
RAIN GARDEN TREES									
TA&B	Amelanchier x grandiflora 'Autumn Brilliance'	juneberry	3x	H350-400	Multistem	F	Rootballed, 1.5m clear stem, 60cm dia. Rootball, 350-400cm high		
TS&E	Sorbus commota 'Embley'	mountain ash	3x	12-14	Heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 350-400cm high		
SHRUB TREES									
TA&	Acer campestre	field maple	3x	12-14	Heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 350-400cm high		
TBP	Betula Albosinensis 'Red Panda'	birch	3x	H350-400	Multistem	F	Rootballed, 1.5m clear stem, 60cm dia. Rootball, 350-400cm high		
TNs	Nyssa sylvatica	Tupelo	3x	12-14	Heavy standard	C/S	Rootballed, 1.5m high clear stem, 40cm dia. Rootball, 350-400cm high		
NATIVE UNDERSTORY									
Abbrev	Variety	Common Name	Pot Size L	Height x Spread cm	Flowering Period	Group/swathe Quantity	Notes	Plants for Pollinators	TOTAL
Plant randomly in species groups of 7, 9 or 11 plants per group, avoiding straight lines. Nursery standard native trees to be planted as shown on the planting plan. Protect trees and shrubs with rabbit/ deer guards or shelters.									
WOODY PLANTING									
W.Ac	Acer campestre	Field maple	1+1	60/80	8	5	Bushy, well branched		
W.Bp	Betula pendula	Birch	1+1	60/80	8	5	Bushy, well branched		
W.Ca	Corylus avellana	Hazel	1+1	60/80	8	5	Bushy, well branched		
W.Sc	Salix caprea	Goat Willow	1+1	60/80	8	5	Bushy, well branched		
HEDGING									
Abbrev	Variety	Common Name	Pot Size L	Height x Spread cm	Flowering Period	Group/swathe Quantity	Notes	Plants for Pollinators	TOTAL
Plant a density of 7/10. Plants per m2 in a double staggered row. 30cm between rows, with plants at 20cm centres. Notch plant into weed free ground or into a 1.0m wide, weed free, strip cultivated to a depth of approx. 400mm. Ground shall be free draining.									
SHRUB TREES									
H.Fs	Fagus sylvatica	beech	1+1	60/80	8	3	Single stem with even branching		
SPECIES RICH NATIVE HEDGE MIX									
Ac	Acer campestre	Field maple	1+1	60/80	8	3	Single stem with even branching	10	
Ca	Corylus avellana	Hazel	1+1	60/80	8	5	Bushy, well branched	25	
Cm	Crataegus monogyna	Hawthorn	1+1	60/80	8	5	Bushy, well branched	25	
la	Ilex aquifolium	Holly	2 Litre	60/80	8	-	Well feathered with central leader	10	
lp	Lonicera periclymenum	Honeysuckle	1+1	60/80	8	-	Dominant central leader	10	
Ps	Prunus spinosa	Blackthorn	1+1	60/80	8	5	Bushy, well branched	5	
Sp	Eunonymus europaeus	Spindle	1+1	60/80	8	3	Bushy, well branched	5	
Vo	Viburnum opulus	Guelder Rose	1+1	60/80	8	2	Bushy, well branched	10	
SHRUBS									
Abbrev	Variety	Common Name	Pot Size L	Height x Spread cm	Flowering Period	Group/swathe Quantity	Notes	Plants for Pollinators	TOTAL
SCOOTER SHED MIX									
SHq	Hydrangea quercifolia 'Snow Queen'	hydrangea	5	50/60	7-9		Full pot, multiple growths. Min 3 brks	Y	
DEFENSE MIX									
SHq	Hydrangea quercifolia 'Snow Queen'	hydrangea	5	50/60	7-9		Full pot, multiple growths. Min 3 brks	Y	
SR	Rosa rugosa	rose	5	50/60	7-9		Full pot, multiple growths. Min 3 brks	Y	
SVt	Viburnum tinus	laurestinus	5	50-60	12-4		Full pot, multiple growths. Min 3 brks	Y	
PERENNIALS									
Abbrev	Variety	Common Name	Pot Size L	Height x Spread cm	Flowering Period	Group/swathe Quantity	Notes	Plants for Pollinators	TOTAL
Grasses to be planted in natural looking swathes in quantities stated in individual specification. Perennials to be planted in groups as stated in individual specification.									
MARGINAL MIX 1									
MCa	Carex acuta	slender spiked sedge	3	30/40	5-6		Full pot, multiple growths	Y	
Mlp	Liriodendron tulipifera	yellow flag iris	3	30/40	7-8		Full pot, multiple growths	Y	
Mis	Iris sibirica	Siberian iris	3	30/40	7-8		Full pot, multiple growths	Y	
MLs	Lythrum salicaria	purple loosestrife	3	30/40	6-9		Full pot, multiple growths	Y	
MARGINAL MIX 2									
MCa	Carex acutiformis	Lesser pond sedge	3	30/40	5-6		Full pot, multiple growths	Y	
MES	Eupatorium cannabinum	Joe Pye weed	3	30/40	7-9		Full pot, multiple growths	Y	
MCr	Comandra regia	royal fern	3	30/40			Full pot, multiple growths	Y	
CAR PARK MIX									
P.Gr	Geranium 'Orion'	Cranesbill	2	30/40	6-8		Full pot, multiple growths	Y	
P.Sa	Sedum autumnalis	Moor Grass	2	30/40	6-10		Full pot, multiple growths	Y	
SCOOTER SHED MIX									
P.Gr	Geranium 'Orion'	Cranesbill	2	30/40	6-8		Full pot, multiple growths	Y	
P.Sa	Sedum autumnalis	Greater Burnet	2	30/40	7-10		Full pot, multiple growths	Y	
P.Sa	Sedum autumnalis	Moor Grass	2	30/40	6-10		Full pot, multiple growths	Y	
P.Sg	Stipa gigantea	Golden Oats	5	60/70	6-7		Full pot, multiple growths	Y	
P.Vb	Veronica hastata 'Rosea'	verbena	2	30/40	6-9		Full pot, multiple growths	Y	
RAIN GARDEN MIX									
PAJH	Anemone hyb. 'Honore Jobert'	Japanese anemone	3	30/40	5-6		Full pot, multiple growths	Y	
PAs	Asplenium scolopendrium	hart's tongue fern	2	30/40			Full pot, multiple growths	Y	
P.CF	Calamagrostis 'Karl Foerster'	feather reed grass	3	30/40	6-8		Full pot, multiple growths	Y	
P.Gr	Geranium 'Rozanne'	geranium	2	30/40	8-10		Full pot, multiple growths	Y	
P.HW	Helianthus x hybridus Hargrave white speckled	lenten rose helianthus	3	30/40	2-4		Full pot, multiple growths	Y	
P.Pv	Persicaria amplexicaulis 'Blackfield'	red bistort	2	30/40	6-10		Full pot, multiple growths	Y	
P.Pr	Primula bulleyana	Bulley's primrose	2	30/40	5-7		Full pot, multiple growths	Y	
P.SM	Sedum bulleyana	stonecrop	3	30/40	8-10		Full pot, multiple growths	Y	
P.St	Stipagrostis	pony tails	3	30/40	6-10		Full pot, multiple growths	Y	
P.Vb	Veronica hastata 'Rosea'	verbena	2	30/40	6-9		Full pot, multiple growths	Y	
Grass & Meadow Specification List									
Abbrev	Variety	Notes	Plants for Pollinators	TOTAL					
To be laid as per manufacturers/suppliers instructions									
FOREST SCHOOL									
EW1	Emergate Seeds: EW1 Woodland Mixture	https://wildseed.co.uk/product/mixtures/complete-mixtures/special-habitat-mixtures/woodland-mixture/	Y						
BSIN									
EP1	Emergate Seeds: EP1 Pond Edge Mixture	https://wildseed.co.uk/mixtures/complete-mixtures/	Y						
SHRUB TREES									
EW1	Emergate Seeds: EW1 Special General Purpose Meadow Mixture	https://wildseed.co.uk/mixtures/complete-mixtures/	Y						
EW1	Emergate Seeds: EW1 Hedgerow Mixture	https://wildseed.co.uk/mixtures/complete-mixtures/	Y						
AMENITY LAWN									
AO	Bourne Amenity, 'Rhizomatous Tall Fescue (RTF) Turf'	http://Turf.Shizumoku.Tall Fescue - Products - Bourne Amenity - Amenity & Aggregate Suppliers	Y						