PLANTING SCHEDULE (plants to be selected from the following)

Tree Planting

Abb. Text	Species	Form	Age	Girth	Height	Clear Stem	Root
Acr cm	Acer campestre	Standard (Extra Heavy)	3x	16-18cm	400-450cm	min 200cm	RB
Acr cm S	Acer campestre 'Streelwise'	Standard (Extra Heavy)	3x	18-20cm	450-500cm	min 200cm	RB
Acr rbA	Acer rubrum 'Armstrong'	Standard (Extra Heavy)	3x	18-20cm	450-650cm	min 200cm	RB
Aln gl	Alnus glutinosa	Standard (Extra Heavy)	3x	16-18cm	400-450cm	min 200cm	RB
Be pnd	Betula pendula	Standard (Extra Heavy)	3x	16-18cm	400-450cm	min 200cm	RB
Be ut	Betula utilis jacquemontii	Standard (Extra Heavy)	3x	18-20cm	450-500cm	min 200cm	RB
Lrd tl	Liriodendron tulipifera	Standard (Extra Heavy)	3x	16-18cm	400-450cm	min 200cm	RB
Mls ny	Malus sylvestris	Standard (Extra Heavy)	3x	16-18cm	400-450cm	min 200cm	RB
Prns cr	Prunus cerasifera	Standard (Extra Heavy)	3x	16-18cm	400-450cm	min 200cm	RB
Pyrs cf C	Pyrus calleryana 'Chanticleer'	Standard (Extra Heavy)	3x	18-20cm	450-500cm	min 200cm	RB
Qr rb	Quercus robur	Standard (Extra Heavy)	3x	16-18cm	400-450cm	min 200cm	RB
Srbs ac	Sorbus aucuparia	Standard (Extra Heavy)	3x	16-18cm	400-450cm	min 200cm	RB
Til cr GS	Tilia cordata 'Green Spire'	Standard (Extra Heavy)	3x	18-20cm	450-500cm	min 200cm	RB

Native Buffer Planting Mix

Abb. Text	Species	Height	Habit	Age	Root	Centres	Mix %
Crns san	Cornus sanguinea	60-80cm	Branched	1/2	B	1.000	15.00 %
Cr mon	Crataegus monogyna	60-80cm	Branched	1/1	B	1.000	15.00 %
Ligs vl	Ligustrum vulgare	60-80cm	Branched	1/1	B	1.000	30.00 %
Prns sp	Prunus spinosa	60-80cm	Branched	1/1	B	1.000	20.00 %
Rs can	Rosa canina	60-80cm	Branched	1/1	B	1.000	5.00 %
Vb op	Viburnum opulus	60-80cm	Branched	1/2	B	1.000	15.00 %

Native Hedge Mix

Abb. Text	Species	Root	Height	Habit	Form	Age	Container	Centres [m]	Mix %
Crns sn	Cornus sanguinea	B	60-80cm	Branched		1/2		0.250	15.00 %
Crtg mn	Crataegus monogyna	B	60-80cm		Transplant	1/1		0.250	25.00 %
Crylls av	Corylus avellana	B	60-80cm	Branched		1/2		0.250	15.00 %
Il aq	Ilex aquifolium	C	60-80cm	Leader & Laterals			3L	0.250	15.00 %
Rs ar	Rosa arvensis	B	60-80cm	Branched		1/1		0.250	15.00 %
Vb op	Viburnum opulus	B	60-80cm	Branched	Transplant	1/2		0.250	15.00 %

Shrub Planting

Abb. Text	Species	Container	Root	Height	Habit	Centres [m]
Chsy AP	Choisya 'Aztec Pearl'	3L	C	30-40cm	Bushy	0.600
Crns sl A	Cornus alba 'Aurea'	3L	C	60-80cm	Branched	0.600
Eny fr EG	Euonymus fortunei 'Emerald Gaiety'	5J7.5L	C	30-40cm(D)	Bushy	0.450
Grs lt	Griselinia littoralis	3L	C	40-60cm	Bushy	0.600
Hb rk	Hebe rakaiensis	3L	C	20-30cm	Bushy	0.450
Hb S	Hebe sutherlandii	3L	C	20-30cm(D)	Bushy	0.450
Lnc nl M	Lonicera nitida 'Maigreen'	3L	C	30-40cm(D)	Bushy	0.600
Lvn an R	Lavandula angustifolia 'Rosea'	3L	C	20-30cm	Bushy	0.450
Mhn aq A	Mahonia aquifolium 'Apollo'	3L	C	20-30cm	Branched	0.600
Mhn nvl WS	Mahonia media 'Winter Sun'	3L	C	30-40cm	Bushy	0.600
Olr x ha	Olearia x haastii	3L	C	30-40cm	Bushy	0.600
Prns lauro OL	Prunus laurocerasus 'Otto Luyken'	3L	C	30-40cm	Bushy	0.600
Src on	Sarcococca confusa	3L	C	20-30cm	Bushy	0.450
Vb dv	Viburnum davidii	3L	C	20-30cm	Bushy	0.450
Vb tb EP	Viburnum tinus 'Eve Price'	3L	C	30-40cm	Bushy	0.500

Wetland Mix

Abb. Text	Species	Root	Height	Habit	Form	Age	Centres	Mix %
Aln gl	Alnus glutinosa	B	175-200cm		Feathered	2x	1.500	20.00 %
Be pb	Betula pubescens	B	125-150cm		Feathered	2x	1.500	10.00 %
Be pnd	Betula pendula	B	175-200cm		Feathered	2x	1.500	5.00 %
Crylls av	Corylus avellana	B	60-80cm	Branched		1/2	1.000	10.00 %
Ppl ng	Populus nigra	B	60-80cm	Leader & Laterals			1.500	10.00 %
Rhmns ct	Rhamnus cathartica	B	60-80cm	Leader & Laterals		1/1	1.000	15.00 %
Rhmns fr	Rhamnus frangula	B	60-80cm	Leader & Laterals		1/1	1.000	15.00 %
Slx cp	Salix caprea	B	125-150cm	Branched	Feathered	2x	1.500	15.00 %

Marginal Planting Mix

Abb. Text	Species	Container	Root	Propagation Method	Centres (m)	Mix %
Ber er	Berula erecta	0.5L	C	Seed or Vegetative	0.400	10.00 %
Clth pl	Caltha palustris	0.5L	C	Seed or Vegetative	0.400	15.00 %
Crx rp	Carex riparia	0.5L	C	Seed or Vegetative	0.400	15.00 %
Epl hr	Epilobium hirsutum	0.5L	C	Vegetative	0.400	10.00 %
Flp ul	Filipendula ulmaria	0.5L	C	Vegetative	0.400	10.00 %
Ir ps	Iris pseudacorus	0.5L	C	Seed or Vegetative	0.400	10.00 %
Lts pd	Lotus pedunculatus	0.5L	C	Seed or Vegetative	0.400	10.00 %
Lyt sl	Lythrum salicaria	0.5L	C	Vegetative	0.400	10.00 %
Phlr ar	Phalaris arundinacea	0.5L	C	Vegetative	0.400	10.00 %

EM1 Basic General Purpose Meadow Mixture
(sow at 40 kg / hectare or 4g / m2)

Composition
Emorsgate EM1 is a simple meadow mixture suitable for a wide range of soil types. The wild flowers are robust and showy, and the grasses are fine and slow growing.

Wild Flowers (20%)

%	Latin name	Common name
4.0	*Centaurea nigra*	Common Knapweed
0.5	*Knautia arvensis*	Field Scabious
4.4	*Leucanthemum vulgare*	Oxeye Daisy - (Moon Daisy)
3.0	*Poterium sanguisorba - (Sanguisorba minor)*	Salad Burnet
0.1	*Prunella vulgaris*	Selfheal
4.5	*Silene dioica*	Red Campion
3.5	*Silene vulgaris*	Bladder Campion

Grasses (80%)

%	Latin name	Common name
8.0	*Agrostis capillaris*	Common Bent
28.0	*Cynosurus cristatus*	Crested Dogstail
24.0	*Festuca rubra*	Red Fescue
4.0	*Phleum bertolonii*	Smaller Cat's-tail
16.0	*Poa pratensis*	Smooth-stalked Meadow-grass

EG21 Fine Lawn Grass Mix
(sow at 250 kg / hectare or 25g / m2)

Composition:
Emorsgate EG21 (or similar approved) contains fine leaved varieties of bent and fescue grasses. This mixture is ideal for producing a first class lawn but also has the qualities required for a low maintenance grass sward.

Grasses (100%)

%	Latin name	Common name
10	*Agrostis capillaris*	Common Bent
50	*Festuca rubra*	Slender-creeping Red-fescue
40	*Festuca rubra ssp. commutata*	Chewing's Fescue

EM8 Meadow Mixture For Wet Soils
(sow at 40 kg / hectare or 4g / m2)

Composition:
EM8 contains species suitable for seasonally wet soils and is based on the vegetation of traditional floodplain and water meadows. Soils in wet meadows may flood for short periods in winter, but are usually well drained in summer.

Wild Flowers (20%)

%	Latin name	Common name
0.5	*Achillea millefolium*	Yarrow
0.4	*Achillea ptarmica*	Sneezewort
1.0	*Betonica officinalis - (Stachys officinalis)*	Betony
3.0	*Centaurea nigra*	Common Knapweed
0.4	*Filipendula ulmaria*	Meadowsweet
3.0	*Galium verum*	Lady's Bedstraw
0.5	*Geum rivale*	Meadow Crane's-bill
1.0	*Lathyrus pratensis*	Meadow Vetchling
1.8	*Leucanthemum vulgare*	Oxeye Daisy - (Moon Daisy)
0.2	*Lotus pedunculatus*	Greater Birdsfoot Trefoil
1.0	*Plantago lanceolata*	Ribwort Plantain
0.5	*Primula veris*	Cowslip
0.4	*Prunella vulgaris*	Selfheal
0.8	*Ranunculus acris*	Meadow Buttercup
0.8	*Rhinanthus minor*	Yellow Rattle
1.4	*Rumex acetosa*	Common Sorrel
0.1	*Sanguisorba officinalis*	Great Burnet
0.3	*Silaum silaus*	Pepper Saxifrage
1.7	*Silene flos-cuculi - (Lychnis flos-cuculi)*	Ragged Robin
0.3	*Succisa pratensis*	Devil's-bit Scabious
0.6	*Taraxacum officinale*	Dandelion
0.8	*Vicia cracca*	Tufted Vetch

Grasses (80%)

%	Latin name	Common name
10.0	*Agrostis capillaris*	Common Bent
4.0	*Alopecurus pratensis*	Meadow Foxtail (w)
3.0	*Anthoxanthum odoratum*	Sweet Vernal-grass (w)
3.0	*Briza media*	Quaking Grass (w)
24.0	*Cynosurus cristatus*	Crested Dogstail
2.0	*Deschampsia cespitosa*	Tufted Hair-grass (w)
32.0	*Festuca rubra*	Slender-creeping Red-fescue
3.0	*Hordeum secalinum*	Meadow Barley (w)

PLANTING SPECIFICATION

EXISTING TREES AND SHRUBS

Where existing trees & shrubs are to be retained they should be subject to a full arboricultural inspection for safety.

Any surgery required shall be in accordance with BS 3998 (2010) 'Tree Work - Recommendations', shall comply with any existing T.P.O requirements and shall require the prior approval of the Landscape Architect.

Avoid damage to branches, trunks and roots of trees. All existing trees & hedges to be retained are subject to BS 5837 (2012) 'Trees in relation to design, demolition and construction - Recommendations', and should be fully fenced off, prior to the commencement of any works, in accordance with Figure 2 (p20) at the full extent of the root protection area, as determined by section 4.6 (p10-11) and Annex D (p40).

No storage of materials, disposal of rubbish, site fires, spillage of oil and chemicals, ground compaction, excavation or changes in level shall be carried out within existing tree / hedge canopies.

PLANTING

All plants and planting to comply with the requirements of all current / relevant British Standard specifications including BS 8545 (2014) 'Trees from Nursery to Independence in the Landscape', BS 3936: Part 1 (1992), Part 2 (1990) and Part 4 (2007) and BS 4043 (1989) where applicable. BS 4428 (1989) . All plants to be supplied in accordance with the plant schedule and with regard to imported stock and notifiable diseases within the Plant Health Act 1967 (revised 2009). Any plant material planted outside the recognised planting season (Nov-Feb), to be containerised stock and supplied at the sizes specified. Where possible, trees and shrubs of UK provenance are preferred.

TREE PLANTING

A suitable method of foundation allowing for existing ground conditions is to be provided to accommodate the proposed tree planting. All trees are to be planted as shown ensuring a minimum of 5 metres from buildings and 3 metres from drainage and services. Where necessary, root barriers to be installed (supplier: GreenBlue Urban (www.greenblueurban.com), or equal approved), as recommended by structural engineer. Allow for the use of container grown stock during the period 1 April to 31 October, and field grown stock from 1 November to 31 March.

SHRUB PLANTING

Where a shrub planting mix has been specified, plants to be grouped in 3 No. (min.) to 7 No. (max.) single species groups. Larger species to be located towards the rear of planting beds or towards the centre of an island planting bed. Thorny species to be located centrally within the planting bed.

RABBIT PROTECTION

Contractor to assess site for presence of rabbits. If rabbits are present, contractor is to provide rabbit proof fencing to either a) the entire site boundary, or b) the boundary of all planting beds. Contractor to ensure all existing and new vegetation (ornamental and native) and seeding is protected.

TOPSOIL REQUIREMENTS

To BS 3882 (2015) 'Specification for topsoil' as qualified by full contract specification. All areas shall be cultivated to a minimum depth of 150mm. Full weed, rubbish and stones over 20mm gauge shall be removed. Earth to be rolled as required and raked in two directions. Applied to all newly planted areas (except wildflower / meadow planting), to manufacturers' recommendations where appropriate.

Shrub / structure planting beds - 450mm depth

Heavy standard tree pits - 1500mm dia. x 450mm depth (450mm depth subsoil to be provided below)

Grass areas (excluding wildflower mix) - 150mm depth

Where necessary increase tree pit dimensions to ensure that tree pits are at least 75mm deeper and 150mm wider than rootball. Break up bottom of pits to a depth of 150mm. Compacted glazed sides of pits should be roughened.

Full analysis of existing and imported topsoil required prior to use.

TOPSOIL IMPROVEMENTS

Applied to all newly planted areas, to manufacturers' recommendations where appropriate:

1) Incorporate 75mm depth of soil conditioner into topsoil during cultivation;
2) Incorporate Emmag CRF granular fertilizer at approx 140g per pit to standard tree pit backfill and 70g per pit to structural / ornamental shrub planting;
3) Watering - supply minimum 54 litres / tree and 4.5 litres / shrub at planting;
4) Mulch - lightly fork over planted areas before applying a 75mm depth 50-100mm grade bark mulch. Note: all trees are to have minimum 300mm dia 'weed free' mulched areas around the base to eliminate the risk of strimmer damage. Ornamental Bark to consist of predominantly matured British Pine Bark with an even nominal particle size distribution of 5-35mm with 0% dust & fines & less than 5% wood content. The product shall be pest, disease & weed free & not have been treated with Methyl Bromide or any additives. The product shall have been tested in accordance with the requirements of BS 4790:1987, for fire resistance. NB - Watering to be carried out prior to application of bark mulch.

PLANT MATERIAL TREATMENT

NB All to be British grown stock and fully hardened off.

Root Dip - Proprietary Root Dip applied to all bare rooted stock (1) at time of lifting at nursery and (2) prior to planting.

Anti-Desiccant - Proprietary anti-desiccant to be applied to foliage of allcontainerised / rootballed material in leaf, specimen conifers and evergreens etc.
(1) prior to transportation and (2) during any delay in planting.

Pruning - Allow for pruning of all deciduous trees and shrubs by 1/3rd following planting **at Landscape Architects direction** or as indicated in the planting schedule.

Tree Stakes & Ties - Stakes to be pressure treated, round, smooth and peeled Larch or Chestnut, not less than 100mm in diameter. Advanced nursery stock - double staked with cross bar.

TREE STAKES, TIES & GUARDS

Trees planted within grassed areas to be provided with appropriate conical strimmer guards. Stakes to be pressure impregnated softwood, round, peeled, straight, free of projections and pointed at one end. Minimum length and thickness to be determined as follows:

Tree type	Min Dia.	Overall Height	Height exposed above ground
Ex / Hvy Std	100mm	1.8m	0.6m

Tree type	No. stakes	No. ties
Ex / Hvy Std	2	1

GRASS SEEDED AREAS

Grass seeding generally to BS 4428 (1998) 'Code of practice for general landscape operations'. When topsoil is reasonably dry and workable grade to smooth flowing contours removing all hollows and ridges. Cultivate soil to full depth and break up any compacted topsoil. Apply approved herbicide to control perennial weeds and allow period of time to elapse as recommended by manufacturer before final cultivation. Apply proprietary pre-seeding fertilizer. Reduce top 25mm of topsoil to a fine tilth by further cultivation. Remove stones exceeding 50mm in any dimension. Sow approved grass seed mixture in accordance with suppliers recommendations during appropriate season and weather conditions, e.g. Germinal (www.germinal.com) Mix A2 (Quality Lawn) (or equal approved) at 50gms/m2. Lightly harrow or rake then roll and cross-roll with lightweight roller.

GRASS SEEDED AREAS: ESTABLISHMENT CUT

When grass is between 40-75mm high remove stones and debris exceeding 50mm in any dimension and roll with a lightweight roller. About 48 hours later cut grass to approximately 35mm high. Remove and dispose of all arisings.

WILDFLOWER MANAGEMENT

Do not use fertiliser

Control weeds before sowing. Annual weeds may be hoed, buried or killed with a contract herbicide. Perennial weeds should be eradicated by a translocated glyphosate-based herbicide.

Sow mixtures either from early March to early May, or from early August to mid September, cultivate the ground to provide a fine, weed free seed bed, firm if necessary. Sow evenly at 4gms / m2, thoroughly mix one part seed with four parts dry sand to easily distribute.

Rake seed in lightly with spring-tined rake and firm soil by treading or, preferably, rolling. Water with a fine spray and keep well watered and free from unwanted plants.

Cut the sward every six-eight weeks during the first year after sowing and remove the cuttings, in the following years cut in early spring before growth starts and in October once wild flowers have been shed - remove all cuttings.

PROTECTIVE FENCING

The contractor shall maintain fencing until all site works are complete. The contractor will then remove the fencing and reinstate the ground. The fencing will remain the property of the contractor.

Within the area so fenced, the existing ground level shall be neither raised nor lowered, all excavations shall then be carried out by hand.

The Local Planning Authority shall be advised in writing when the protective fencing has been erected so that it can be checked on site before development commences, and shall thereafter be maintained during the period of construction.

MAINTENANCE

Regular visits (minimum 18 No.) required during the defects liability / rectification period to maintain all planted areas in a weed and litter free condition using a combination of chemical spray and hand weeding to be agreed with the Landscape Architect. Maintenance to include watering, pruning, pest and disease control and re-mulching as required. Grass areas to be mowed at 2 week intervals during the growing season.

Structure planting areas shall be maintained as non competitive weed free environment by repeated applications of a glyphosate based herbicide. Persistent weeds and unwanted scrub shall be spot treated as necessary with an alternative herbicide to be agreed with the Landscape Architect.

Watering shall be carried out as necessary to maintain healthy growth or as required by the Landscape Architect.

NB: Final visit to be immediately prior to handing over and to include a fertilizer treatment of Emmag CRF granular fertilizer at 100g / m2 and a 25mm depth bark mulch top up to all planted areas.

BUFFER PLANTING: FEATHERED TREES AND WHIPS

Notch planting will not be permitted. All feathered trees and whips will be planted in prepared pits 600mm diameter x 600mm deep for feathered trees and 300mm diameter x 300mm deep for whips.

Each plant shall be placed upright in the centre of the pit with the roots spread evenly outwards and downwards without restriction, and backfilled with topsoil (to BS 3882: 2015), incorporating TPMC Tree Planting Compost (Amenity Land Solutions) (or equal approved) well mixed with topsoil backfill at a rate of 50:50 in consolidated layers, shaking the trees to remove voids.

Incorporate Emmag CRF granular fertilizer at approx 140g per pit to feathered tree pit backfill and 70g per pit to structural shrub / whip planting backfill.

Supply water at a minimum 4.5 litres / whip and 18 litres / feathered tree prior to bark mulching.

Feathered trees shall be staked using 1.0m long Larch or Chestnut stakes, round, smooth, and peeled with 75mm diameter at the point and not less than 50mm at the butt end, driven at least 600mm into the ground. Trees will be secured to the stake using a single 'Tom Tie' (www.toms.co.uk) or similar approved securely nailed at a point 50mm from the top of the stake to ensure no rubbing or excessive movement.

The plant shall be well firmed, with the soil level 10mm above nursery level to allow for settlement. Clear away surplus soil and after watering apply a minimum 75mm deep x 300mm diameter collar of 50-75mm grade coarse bark mulch. All tree species to be fitted with proprietry rabbit guards such as Tubex Ventex (www.tubex.com) (or equal approved).

SAFETY PRECAUTIONS

The landscape sub-contractor is to take all safety precautions to prevent any injury to any persons. The landscape sub-contractor shall comply with the requirements of the Health & Safety at Work Act 1974 and current Construction, Design and Management Regulations (2015).

All subject to Local Authority approval.

10m SCALE 1:1000

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Notes

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4. The scheme is subject to statutory approvals, surveys and design development.
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BIOSECURITY

RPS GROUP ARE COMMITTED TO THE PROTECTION OF THE UK ENVIRONMENT AND RECOGNISES THE IMPORTANCE OF RISKS POSED BY IMPORTED PESTS AND DISEASES

1. All trees and shrubs are to be sourced responsibly, in the first instance, from UK Nurseries / suppliers, where they have been propagated and/or grown on for a minimum of 5 years in the UK (2 years for shrubs);
2. In light of this, all suppliers shall be approved, shall share our values and must have a sound Biosecurity Policy / Management Systems in place to demonstrate the traceability of their stock, and an awareness of the prevalence of all current biosecurity threats, both domestically and abroad;
3. The contractor is responsible for ensuring that they operate in strict accordance with the latest guidelines set out by DEFRA, including regularly checking for updates in relation to the latest health controls / diseases; i.e. (http://planthealthportal.defra.gov.uk)
4. Inspections will be carried out at selected nurseries and plant health certification / passports will be sought to identify traceability of tree and shrub stock as required.

Key

- Existing trees to be retained and protected (in accordance with Tree Protection Plan LB08135_007)
- Existing hedgerow to be retained and protected (in accordance with Tree Protection Plan LB08135_007)

Proposed Soft Landscape

- Proposed tree planting (locations may be locally adjusted to avoid conflict with below ground services)
- Native buffer planting mix (species selected to avoid conflict with overhead and underground services, to include cornus spp, crataegus monogyna, ligustrum vulgare, prunus spinosa, rosa canina and viburnum opulus)
- Proposed native hedge planting (planted in double staggered row, 4 plants per linear metre)
- Proposed ornamental shrub / herbaceous planting (species selected to include nectar rich plants for pollinators)
- Proposed close mown lawn (EG21) (Supplier: Emorsgate Seeds or equal approved)
- Proposed wildflower meadow (EM1) (Supplier: Emorsgate Seeds or equal approved)
- Proposed shade tolerant grass (EH1) (Supplier: Emorsgate Seeds or equal approved)

Proposed Swales / Wetland Areas

- Proposed wet woodland mix
- Proposed marginal planting
- Proposed flood meadow (EM8) (Supplier: Emorsgate seeds or equal approved)

Rev	Description	By	Ckd	Date
P03	Planning Submission	JBT	JAT	17/05/23

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Client
Envision AESC Wates

Project
Envision AESC Giga Factory

Title
Proposed Landscape Plan

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TH	JBT	TSR

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