



LEGEND

SOFT LANDSCAPE

EXISTING TREES & VEGETATION



Existing Trees to be Retained  
To be protected in accordance with BS 5837:2012 'Trees in relation to Design, Demolition and Construction'




Existing Vegetation to be retained  
Existing vegetation to be cut back away from roads/pathways as appropriate to allow clear routes through the site


NOTE: Refer to FPCR arboricultural survey & report for details

Note: No dig construction to be carried out in any location where construction is within RPA of existing trees. Refer to Arboriculturalist's drawings & reports for further details

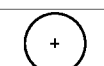
PROPOSED PLANTING




Proposed Woodland Planting  
Product: Bare root stock  
Size/Spec: Refer to plant schedule for details




Proposed Native Scrub Planting  
Product: Bare root stock  
Size/Spec: Refer to plant schedule for details




Proposed Tree Planting  
Size/Spec: Refer to plant schedule for details  
Note: Final location of trees to be determined with services alignment. Fruit trees to be sourced from local suppliers, such as Southern Fruit Trees (www.southernfruittrees.co.uk), Blackmoor (www.blackmoor.co.uk) or similar and approved.




Proposed Shrub Planting  
Product: Container grown plant stock  
Size/Spec: Refer to plant schedule for details



Proposed Single Species Hedge Planting  
Product: Container grown plant stock  
Size/Spec: Refer to plant schedule for details



Proposed Mixed Native Hedge Planting  
Product: Field grown plant stock  
Size/Spec: Double staggered row; refer to plant schedule for details



Proposed Climbing Shrub Planting  
Size/Spec: Refer to plant schedule  
Supplier: Local source to be approved  
Note: All batches of species are to be labeled prior to delivery

GT1

Grass Type 2a - Close-mown Amenity Grass  
Product: WFG20 Eco Species Rich Lawn Mixture  
Supplier: Germinall Seeds or similar approved

GT2a

Grass Type 2a - Close-mown Amenity Grass  
Product: WFG20 Eco Species Rich Lawn Mixture  
Supplier: Germinall Seeds or similar approved

GT2b

Grass Type 2b - Long Sward Amenity Grass  
Product: WFG20 Eco Species Rich Lawn Mixture  
Supplier: Germinall Seeds or similar approved

GT3

Grass Type 3: Meadow Grass  
Product: EM2 Standard General Purpose Meadow Mixture  
Supplier: Emorsgate Seeds

GT4

Grass Type 4: Proposed Wetland Mixture  
Spec: EM5 Meadow Mixture for Wetlands  
Supplier: Emorsgate Seeds or similar approved

CMS


Close Mown Strip To Meadow Edge

PFT XXX

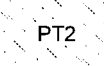
Private Garden  
To be cleared and graded, or cleared and turfed as per developer specification

HARD LANDSCAPE

PAVING TYPE



Paving Type 1 - Self Binding Gravel  
To Engineer's Specification



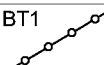
Paving Type 2 - Safety Surfacing  
Product: Resin bound mulch

EDGING TYPES

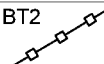


Edging Type 1 - Timber Edging  
To Engineer's Specification

BOUNDARY TYPES



Boundary Type 1 - Cleft Chestnut Post and Rail Fence  
Product: Treated softwood post and 3 horizontal bar fencing  
Height: 1200mm high



Boundary Type 2 - Estate Railings  
Product: Galvanised black vertical metal bar estate railings  
Height: 1200mm high


G1

Gate 1 - Self Closing Timber Pedestrian Gate  
To match BT1


G2

Gate 2 - Self Closing Timber Pedestrian Gate with Lockable Maintenance Leaf  
To match BT1

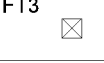
FURNITURE




Furniture Type 1 - Timber Seat with Backrest  
Size: 2000mm(l) x 340mm(d) x 450mm(h)




Furniture Type 2 - Modular Seat with Backrest  
Size: Bespoke




Furniture Type 3 - Timber Bollard  
Size/Colour: 500 mm (h, above ground) x 200mm (l) x 200mm (d)



Furniture Type 4 - Cycle Stand  
Size/Colour: 1000mm (l) x 825mm (h) x 60mm (d) / Mild steel brushed satin finish




Furniture Type 5 - Boulders  
Size: Various




Furniture Type 6 - Timber Picnic Bench  
Size: 2000mm (l) x 730mm (d) x 780mm (h)

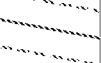
OTHER



Application Boundary



Banking into soft landscape  
Indicative to indicate levels change.

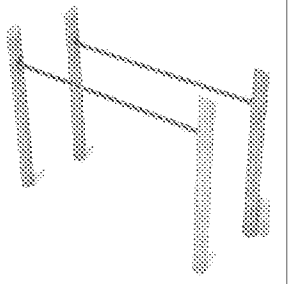


Existing Rising Main with 6m Easement

TRIM TRAIL EQUIPMENT

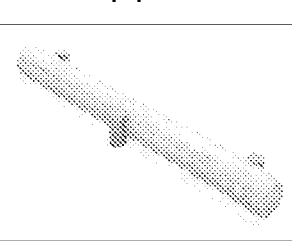
TT1

Trim Trail Equipment 1 - Fitness Trail Bars




TT2

Trim Trail Equipment 2 - Balance Beams



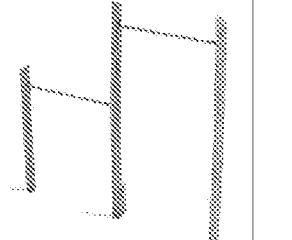
TT3

Trim Trail Equipment 3 - Fitness Trail Leapfrog



TT4

Trim Trail Equipment 4 - Upper Body Station



Notes on drawings

- Refer to engineers and specialist drawings and details for lighting, drainage, underground services.
- Final tree location to be fully coordinated with lighting layout, underground service runs and site drainage
- Extent of permeable paving to be confirmed by engineer's design.
- Levels information for the areas of open space in relation to the built form FFL's and retaining walls are to be read in conjunction with Engineer's proposed levels, boundary treatments to be coordinated with Landscape Architects and Engineers Site layout plans.
- Slope profiles to the open space areas are to be as slack as possible considering access for all.

TREE PLANTING SCHEDULE

PROPOSED TREES		Pot Size	Girth	Height	Specification	Qty.
Species						
Acer campestre 'Elsrijk'	RB	14-16cm			Extra Heavy Standard :Clear Stem min. 200cm :RB	49
Alnus glutinosa	RB	14-16cm			Extra Heavy Standard :Clear Stem min. 200cm :RB	16
Alnus glutinosa	RB	18-20cm			Advanced Nursery Stock :Clear Stem 175-200cm :RB	7
Betula nigra	RB	14-16cm			Extra Heavy Standard :Clear Stem 175-200cm :RB	29
Betula pendula	RB	16-18cm			Advanced Nursery Stock :Clear Stem 175-200cm :RB	30
Cercis canadensis 'Forest Pansy'	C4S	10-12cm			Selected Standard :Clear Stem 175-200cm :Containerised	5
Corylus avellana	RB	Multi-Stem	2.5-3.0m		Multi-Stemmed :Min 5 brks : :RB	23
Crataegus monogyna	RB	12-14cm			Heavy Standard :Clear Stem min. 200cm :RB	3
Hedera sexstylosa	C1S	2.0-2.5m			Heather :Bushy :Single stem :Containerised	7
Liquidambar styraciflua 'Worplesdon'	RB	16-18cm			Advanced Nursery Stock :Clear Stem min. 200cm :RB	8
Liquidambar styraciflua 'Worplesdon'	RB	20-25cm			Semi-Mature :Clear Stem min. 200cm :RB	1
Magnolia 'Elkayeth'	RB	12-14cm			Extra Heavy Standard :Clear Stem 175-200cm :RB	6
Magnolia stellata	RB	Multi-Stem	2.0-2.5m		Multi-Stemmed :Min 5 brks : :RB	12
Metasequoia glyptostroboides	RB	16-18cm			Advanced Nursery Stock :Clear Stem min. 200cm :RB	4
Prunus avium	RB	16-18cm			Advanced Nursery Stock :Clear Stem 175-200cm :RB	10
Prunus masalai	RB	16-18cm			Advanced Nursery Stock :Clear Stem min. 200cm :RB	6
Prunus yedoensis	RB	18-20cm girth			Advanced Nursery Stock :Clear Stem min. 200cm :RB	5
Quercus robur	RB	20-25cm			Semi-Mature :Clear Stem min. 200cm :RB	1
Quercus robur	RB	16-18cm			Advanced Nursery Stock :Clear Stem min. 200cm :RB	1
Salix caprea	RB	Multi-Stem	2.5-3.0m		Multi-Stemmed :Min 5 brks : :RB	12
Salix fragilis	RB	Multi-Stem	2.5-3.0m		Multi-Stemmed :Min 5 brks : :RB	4
Ulmus 'New Horizon'	RB	16-18cm			Advanced Nursery Stock :Clear Stem min. 200cm :RB	17
						Total: 269

INDICATIVE PLANTING SCHEDULE

Proposed Native Hedge Planting		Size/Spec	Condition
Species			
Crataegus monogyna		120-150cm	BR
Cornus sanguinea		120-150cm	BR
Prunus spinosa		120-150cm	BR
Acer campestre		120-150cm	BR
Corylus avellana		120-150cm	BR
Rosa canina		120-150cm	BR
Ligustrum vulgare		120-150cm	BR
Eunonymus europaeus		120-150cm	BR
Viburnum opulus		120-150cm	BR

Proposed Native Shrub Planting		Size/Spec	Condition
Species			
Cornus sanguinea		90-120cm	BR
Corylus avellana		90-120cm	BR
Crataegus monogyna		90-120cm	BR
Frangula alnus		90-120cm	BR
Ilex aquifolium		90-120cm	BR
Ligustrum vulgare		90-120cm	BR
Prunus spinosa		90-120cm	BR
Rosa canina		90-120cm	BR
Salix cinerea		90-120cm	BR
Sambucus nigra		90-120cm	BR
Ulex europaeus		90-120cm	BR
Lonicera periclymenum		90-120cm	BR

Proposed Ornamental Shrub Planting		Size/Spec	Condition	Density
Species				
Brachyglottis 'Sunshine'		40-60cm	C5	5/m²
Cornus alba 'Elegantissima'		40-60cm	C5	5/m²
Corylus ternata		40-60cm	C5	5/m²
Cytisus x praecox 'Allegro'		40-60cm	C5	5/m²
Daphne odora 'Aureomarginata'		30-40cm	C3	6/m²
Deutzia gracilis 'Nikko'		30-40cm	C3	6/m²
Hydrangea paniculata		30-40cm	C5	4/m²
Potentilla fruticosa		30-40cm	C3	6/m²
Salvia rosmarinus		30-40cm	C3	6/m²
Sarcococca hookeriana 'Purple Stem'		60-80cm	C5	5/m²
Gaillardia lylida		30-40cm	C5	5/m²
Viburnum tinus 'Eve Price'		40-60cm	C5	5/m²
Viburnum davidii		40-60cm	C5	5/m²

Proposed Herbaceous Planting		Size/Spec	Condition	Density
Species				
Anthemis tinctoria 'E.C.Buxton'		20-30cm	C3	9/m²
Anemone x hybrida 'Königin Charlotte'		30-40cm	C3	9/m²
Scabiosa columbaria subsp. ochroleuca		30-40cm	C3	9/m²
Anruncus 'Horatio'		30-40cm	C3	9/m²
Phlox russelliana		40-60cm	C5	6/m²
Nepeta 'Walker's Low'		15-20cm	C3	9/m²
Bergenia 'Silverlicht'		15-20cm	C3	9/m²
Salvia yangii 'Blue Spire'		40-60cm	C5	6/m²
Hylotelephium 'Herbststreu'		20-30cm	C3	9/m²
Geranium 'Brookside'		20-30cm	C3	9/m²
Geranium sylvaticum 'Mayflower'		15-20cm	C3	9/m²
Tiarrella 'Spring Symphony'		20-30cm	C3	9/m²
Brunnera macrophylla 'Jack Frost'		20-30cm	C3	9/m²
Liberia grandiflora		30-40cm	C3	9/m²

Proposed Ferns		Size/Spec	Condition	Density
Species				
Dryopteris affinis		30-40cm	C5 Full Pot	7/m²
Dryopteris filix-mas		30-40cm	C5 Full Pot	7/m²
Polystichum seiffertum		30-40cm	C5 Full Pot	7/m²
Asplenium scolopendrium		30-40cm	C5 Full Pot	7/m²

Proposed Bulb Planting		Size/Spec	Condition	Density
Species				
Camassia leichtlinii		Top size	Dry Bulb	25/m²
Tulip sylvestris		Top size	Dry Bulb	25/m²
Narcissus pseudonarcissus		Top size	Dry Bulb	25/m²

GENERAL SPECIFICATION NOTES

Proposed Tree Planting: Nursery Stock and Selection

All planting should comply with the requirements specified in BS 3938:1992 'Nursery Stock' (Part One). All nursery stock and trees are to be free of pest and diseases prior to being delivered to site. The Landscape architect reserves the right to reject trees and nursery stock that do not meet specifications as set out in the requirements and guidelines in BS 3938:1992 or in accordance with the landscape architects drawings. If a particular defect or substandard element can be corrected easily, appropriate remedies shall be applied and agreed with the landscape architect. If destructive inspection of a root ball is to be carried out, agreement should be in place prior as to the time and place of inspection. Inspection of shrub roots in containers or rootball can be carried out on site if required.

BS 8545:2014 'Trees: from nursery to independence in the landscape', is a new British Standard to assist people involved in tree selection, producing, planting and managing new trees in the landscape. A process for planting young trees that will result in them achieving 'independence in the landscape'. This means that they are healthy and have every chance of survival

Tree Handling

It is recommended that companies that do not have experience with handling large trees or the required equipment to do so seek advice from the landscape architect or tree supplier. Furthermore, specialist hauliers are to be used who will have the correct lifting equipment to deal with unloading large trees.

The landscape contractor must follow the industry guidance method for handling trees. Below are recommended industry standards.

Dormant tree sizes of 12-16cmg:

These can be lifted and unloaded using a root hook and hook. Even when the tree is dormant it is recommended to wrap the stem in hessian for additional protection when unloading maintaining the lifting weight on the root hooks.

Dormant tree sizes of 18-20cmg - 25-30cmg:

These can be lifted and unloaded using a 3 tonne sling in combination with a chain and root hooks. Even when the tree is dormant it is recommended to wrap the stem in hessian for additional protection when unloading.

Tree Planting

All trees are to be planted in the first available planting season after construction as root balled stock unless otherwise specified and agreed with the client. All tree pits are to be excavated 24 hours prior to delivery to reduce the time the rootball is out of the ground. All tree pits are to be excavated under favourable weather conditions to avoid deterioration of the soil structure and glazing. All excavations are to be carried out using a toothed bucket ensuring tree pit walls are not glazed, the walls of the tree pit can also be loosened with hand held tools.

Tree pit dimensions are subject to soil conditions and rootball size. Tree pits can never be excavated too wide in an unrestricted space (open ground), however they can be too deep. All trees are to be planted at the correct height which is the same depth as the tree was growing on the nursery. The root collar must remain visible. Tree pit sizes are to be agreed with landscape architect prior to excavations. All tree pits are to have suitable irrigation pipes and cap and aeration tubes if required (aeration tubes tend to be required for trees planted in a hard landscape environment). They are only required for the first two years after which they are superfluous. All irrigation pipes are to be placed as high as possible not at the base of the rootball. The tree would also benefit from an earth reservoir around the rootball on the surface to aid watering. The reservoir is backfilled with bark mulch to avoid soil glazing on the surface.

Note: Trees may sink after planting due to soil settlement. With sandy soils generally there will be a settlement of 10% and clay soils 20%, this will need to be considered by the landscape contractor when planting and therefore the tree may need to be planted slightly higher to accommodate soil settlement.

Note: Never excavate deeper than the highest water table to ensure organic matter does not come in contact with groundwater resulting in anaerobic digestion within the soil.

All hessian and wire supports around the rootball are to remain in place when planting (in some cases it may be required to loosen the hessian and wire). The hessian will quickly decompose. The wire will oxidize and also disappear in the soil eventually.

Trees planted within hard landscape areas are to have tree grilles and guards where specified. Subterranean cellular product is to be used to ensure the tree has a minimum of 9m3 growing area. Type and manufacture is to be agreed with the client and landscape architect prior to installation.

Trees are to be supported either by high anchoring, low anchoring or underground anchoring systems. The type of anchoring system is to be agreed with the landscape architect and detailed within the specification of works. For trees that are <10-12cmg use 1no untreated softwood stake at min 10cm diameter driven into the ground at least 1m depth (30cm of which must be in undisturbed ground), the stake is to be placed on the side of the prevailing wind. Trees >10-12cmg use 2no untreated softwood stakes at min 10cm diameter driven into the ground at least 1m depth with horizontal bracing bar. Trees >25-30cmg use 3no stakes in a triangle around the tree (1.4m above ground level) with horizontal bracing bars, tree bands are to be secured to the posts with galvanised nails.

Underground anchoring systems are to be used for large compact rootballs or trees within hard landscape with tree grilles to BS 4043:1989 'Recommendations for Transplanting Root-Balled Trees'. The type of anchoring system is to be agreed with the landscape architect. Biodegradable anchoring straps are to be used to ensure the straps do not grow into the trunk.

Note: There are benefits to using low level anchoring as field trials have demonstrated that the tree becomes independent in the ground quicker as a result of the wind rocking the tree that encourages root growth. However, this method is not recommended in exposed conditions or coastal locations due to a greater risk of the trunk breaking.

Ties and stakes are to be checked and adjusted every six months or after periods of strong wind and rain.

All topsoil is to conform to BS 3882:2015 'Multipurpose' or similar approved by an agronomist. The tree pit shall be backfilled with previously prepared topsoil excavated from the pit and additional topsoil as required. All backfilled material is to include an organic slow release fertilizer to ensure there is no adverse affect on soil organisms (Vmax O4-N) or similar approved at a ratio of 10 : 7.5 : 10 : 2 + TE. The second application is to be made 10-16 weeks after planting depending on soil type and weather conditions.

Tree pit root barrier are to be installed to all trees within 3m of any underground service routes or within 2.0m of kerb lines & hard surfaces & building foundations. Type of root barrier material is to be agreed with the landscape architect. The landscape contractor is to confirm locations of all services prior to implementation of trees. Prior to installation NJUG specification and requirements are to be referred too.

Guidance for Tree Pit Sizes within Soft Landscape Areas

Final tree pit size will vary depending on size of rootball, tree stock and soil type.

Below are general guidance sizes only. The landscape contractor is to speak to the grower to obtain exact sizes prior to delivery.

Tree pit size guidelines:

Tree size	Rootball Size	Tree pit size (length, width, depth)
14-16 cmg	80x50cm	80x80x65cm
18-20 cmg	80x60cm	80x80x75cm
20-25 cmg	70x60cm	90x90x75cm

Tree aftercare and pruning

When a tree is lifted/harvested it will lose a percentage of it's root system. As a result the roots are unable to supply the crown with the water demand being placed on the root system which can cause stress to the tree. As a result the tree will respond by reducing the amount of foliage, in some cases when the water storage is great the tree will shed wood from the crown. Watering the tree is important in the first two years after transplanting. In very hot conditions the canopy can dry out even when the rootball is moist simply because there is not enough root development yet. Therefore, the only solution is to reduce the canopy volume to reduce the stress.

All pruning is to be done by removing first and second wood only, all pruning works are to be carried out by appropriately trained landscape contractors.

It is recommended that hessian is placed around the tree stems after planting to prevent the overheating of the trunks.

The flow of water within the bark will normally prevent this, however, after planting less water is transplanted and as a result the trunk is at risk of sunburn. The setting sun will cause the most potential damage. Most of the damage will be visible on the western side of the tree. Trees with smooth bark are more vulnerable to sunburn than trees with rough bark.

Note: This is to only be done as a temporary measure as the tree is establishing, after which the hessian is to be removed.

Monitoring of the trees is to be carried out during the rectification period and as part of the long term management. The following points are to be considered and monitored:

- Watering, trees will require watering for the first two years after planting, after which they will generally look after themselves. The number of times they will depend on location, weather conditions and growing season. Therefore, as the tree is a growing organism the required experience and knowledge will

determine the number of times the tree is watered to ensure establishment. It is better to give the tree a lot of water once a week rather than water every day as this will encourage root development and prevent the tree becoming 'lazy'. Over watering will push oxygen away from the root system preventing root development.

- Soil condition, these can be carried out by a specialist to monitor the oxygen levels (that should ideally be 10-17%, 16-18% will be sufficient levels, 12-16% will be poor levels <5% shows acute root mortality). Soil moisture levels both within the rootball and surrounding ground to also be monitored.
- Soil compaction, traffic over planted areas or areas to be planted are to be limited or ideally avoided completely. When soil compaction is higher than 2.5MPa root development will not be possible.
- Canopy, monitor leaf development, size, colour and the amount of foliage that is within the crown. Length of new growth and bud development and size of buds.

Proposed Ornamental Shrub / Perennial Planting

- To be planted in a minimum of 300mm depth approved topsoil to BS 3882: 2015 'Multipurpose' in the first available planting season after construction.
- All shrubs are to be planted as container stock unless otherwise specified (5 or 10 litre), all stock is to be well rooted into the container but not pot bound.
- All shrubs are to be planted with a slow release organic fertilizer (vtxax or similar approved) and backfilled with a mixture of excavated top soil and compost (not peat based). A minimum of 50 mm approved ornamental grade bark mulch is to be applied to planting areas unless stated otherwise.

Proposed Hedge Planting

- To be planted in a minimum of 300mm depth approved topsoil to BS 3882: 2015 'Multipurpose' in the first available planting season after construction.
- All shrubs are to be planted as container stock unless otherwise specified (5litre), all stock is to be well rooted into the container. All hedge are to be planted in double staggered rows.
- All shrubs are to be planted with a slow release organic fertilizer (vtxax or similar approved) and backfilled with a mixture of excavated top soil and compost (not peat based). A minimum of 50 mm approved ornamental grade bark mulch is to be applied to planting areas unless stated otherwise.

Proposed Climbing Plants

- To be planted in a minimum of 300mm depth approved topsoil to BS 3882:2015 'Multipurpose' in the first available planting season after construction.
- All climbing plants are to be planted as container stock unless otherwise specified, all stock is to be well rooted into the container.
- All climbing plants are to be planted with a slow release organic fertilizer to a N.P.K ratio of 4:5:2:0:7.5+0.8%vtxax (vtxax or similar approved) and backfilled with a mixture of excavated top soil and compost (not peat based). A minimum of 50mm approved ornamental grade bark mulch is to be applied to planting areas unless stated otherwise.
- All climbers that are not self-supporting are to be supported using vine eyes and plastic coated steel wire, climbers are to be secured using plastic coated clips.

Planting Guidelines

- All planting and landscape operations should comply with the requirements specified in BS 3938:4-2007 'Nursery Stock' (Part One) and BS4428:1989 'Code of Practice for General Landscape Operations' (excluding hard surfaces).
- All trees are to be planted in accordance with BS: 8545:2014 'Trees: from nursery to independence in the landscape'
- All topsoil and testing to conform to BS 3882: 201