

LEGEND Hard Landscape

Proposed Paving

NOTE: Sub-base and base design to be suitable for vehicular or pedestrian usage to be determined by engineer. Specification and detail to engineers information.

PT1

Paving Type 1: Vehicular Tarmacadam
Colour: Grey
Specification: to engineers detail

PT2

Paving Type 2: Pedestrian Tarmacadam unless where vehicular access is required
Colour: Grey
Specification: to engineers detail

PT3

Paving Type 3 - Concrete Permeable block Paving
Product: Tegula Priora
Supplier: Marshalls or similar approved
Size/Colour/Bond: 240mm x 160mm/ Burnt Ochre / Stretcher
Note: All concrete block paving to meet BS EN 1338:2003 requirements

PT4

Paving Type 4 - Concrete Permeable block Paving
Product: Mistral Priora
Supplier: Marshalls or similar approved
Size/Colour/Bond: 240mm x 160mm/ Charcoal / Stretcher
Note: All concrete block paving to meet BS EN 1338:2003 requirements

PT5

Header Course - To match paving type
Supplier: Marshalls or similar approved
Note: All concrete block paving to meet BS EN 1338:2003 requirements

PT6

Paving Type 5: Concrete Slab Paving
Size/Colour: 450x450 / Textured Natural
Supplier: Marshalls or similar approved
Bond: Stacked
Slab paving to meet BS EN 1339:2003

PT7

Paving Type 6: Tumbled Setts
Size/Colour: 200x100mm / Anthracite Basalt or Grey Granite.
Note: All blocks to meet BS EN 1338 requirements

PT8

Paving Type 7 - Gravel
Product: Loose Gravel
Supplier: Local source to be approved
Size/Colour: 10-14mm/ Golden

Proposed Edging and Kerbs

NOTE: All substructure information to engineer's detail and specification

Road Kerb
Note: Marshalls Saxon or similar approved

Pin Kerb
Note: refer to engineers detail and specification

Proposed Fencing and Boundaries

NOTE: All fencing to relevant part of BS 1722.

Boundary Type 1: Close Board Fencing
Height: 1.8m
Supplier: Jacksons or similar approved

Boundary Type 2: Brick Wall with Brick Piers
Height: 1.8m
Note: To architects detail and specification

Gate - Single
Product: To match boundary type

Kissing Gate

Height 1.5m
Supplier: Local source to be approved

LEGEND Soft Landscape

Existing Trees

refer to arboricultural information for further details

Existing trees and vegetation to be retained and protected
in accordance with BS 5837:2012 'Trees in Relation to Design, Demolition and Construction Recommendations' refer to arboricultural information for further details - Barnell Tree Consultancy, Tree protection plan 17298-BT3

Existing trees and vegetation proposed to be removed
refer to arboricultural information for further details - Barnell Tree Consultancy, Tree protection plan 17298-BT3

Proposed Soft Landscape

refer to typical plant schedule and specification for further details

Proposed Large Tree Species

Proposed Medium Tree Species

Proposed Specimen Shrubs
Product: Container grown nursery stock (unless otherwise stated)

Proposed Native Shrub Planting
Product: Container grown nursery stock (unless otherwise stated)

Proposed Shrub Planting
Product: Container grown nursery stock (unless otherwise stated)

Proposed Native Hedge Planting
Product: Container grown nursery stock (unless otherwise stated)

Grass Type 1: Existing Grass
Retained

Grass Type 2: Proposed Amenity Grass
Supplier: British Seed Houses or similar & approved
Product: A22 Hard Wearing Seed Mixture

Grass Type 3: Proposed Basic General Purpose Meadow Mixture
Supplier: Emorsgate Seeds
Product: EM1
Size/Spec: Refer to plant schedule for details

Grass Type 4: Proposed Wild Flowers for Wetlands
Supplier: Emorsgate Seeds
Product: EM8
Size/Spec: Refer to plant schedule for details

Climbing Plants

General

Site Boundary

Private Garden to be cleared and graded

Existing Public Right of Way - Sussex Border Path

Diverted Public Right of Way - Sussex Border Path

PLANTING SCHEDULE

Indictative list of planting that could be used within the proposed landscape scheme. Refer to Drawings D2572_110 - 112

Proposed Tree Planting

Species	Common Name	Symbol	Size/Spec	Condition
Acer campestre	Field Maple	Ac	18-20cmg	RB :Clear Stem 175-200
Alnus glutinosa	Alder	Ag	18-20cmg	RB :Clear Stem 175-200
Betula nigra	River birch	Bn	16-18cmg	RB :Multi Stemmed
Carpinus betulus 'fastigiata'	Hornbeam	CbF	16-18cmg	RB :Clear Stem 175-200
Quercus robur	Oak	Qr	20-25cmg	RB :Clear Stem 175-200
Sorbus aucuparia	Rowan	Sa	16-18cmg	RB :Clear Stem 175-200
Ulmus carpinifolia 'New Horizon'	Elm	Uc	20-25cmg	RB :Std :Clear Stem min. 200

Proposed Ornamental Shrub Planting

Species	Common Name	Size/Spec	Condition	Density
Choyisia ternata 'Aztec Pearl'	Mexican Orange bush	60-80cm	10L	3m²
Cornus sericea 'Flaviramea'	Golden-twig Dogwood	60-80cm	10L	3m²
Euonymus fortunei 'Emerald Gaiety'	Spindle	30-40cm	5L	3m²
Exochorda macrantha 'The Bride'	Pearlbush	80-100cm	10L	3m²
Garrya elliptica 'James Roof'	Silk tassell	120-150cm	20L	1m²
Hydrangea paniculata 'Grandiflora'	hardy white-flowered hydrangea	60-90cm	10L	3m²
Lavandula angustifolia 'Hidcote'	English lavender	30-40cm	3L	3m²
Pachysandra terminalis 'Green Carpet'	Japanese spurge	10-20cm	3L	3m²
Perovskia atriplicifolia 'Blue Spire'	Russian Sage	30-40cm	3L	3m²
Philadelphus coronarius 'Aureus'	Mock orange	30-40cm	3L	3m²
Pittosporum tenuifolium 'Tom Thumb'	Tawhiwhi	30-40cm	5L	3m²
Sambucus nigra 'Black Beauty'	Elder	60-80cm	5L	3m²
Santolina chamaecyparissus	Cotton lavender	30-40cm	3L	3m²
Stachys byzantina 'silver Carpet'	Lamb's ear	30-40cm	3L	3m²
Viburnum plicatum 'Pink Beauty'	Japanese snowball	60-80cm	10L	3m²

Proposed Shade - Part Shade Perennial Mix Planting

Species	Common Name	Size/Spec
Anemone hybrida 'Honorable Jobert'	Japanese anemone	3L
Anthriscus sylvestris 'Ravenswing'	Cow parsley	3L
Aster novi-belgii 'Blue Lagoon'	Michaelmas daisy	2L
Aster sedifolius 'Nana'	Aster	2L
Astrantia major 'Claret'	Masterwort	2L
Aquilegia vulgaris 'Red Star'		2L
Eryngium yuccifolium	Button snake-root	2L
Luzula nivea	Snow rush	2L
Miscanthus sinensis 'Flamingo'	Eulalia 'Flamingo'	2L
Molinia caerulea 'Edith Dudzus'	Purple moor-grass	2L
Nepeta 'Six Hills Giant'	Catmint	2L
Organum 'Herrenhausen'	Oregano	2L
Rudbeckia maxima	Great coneflower	2L
Salvia nemorosa 'Ostfriesland'	Balkan clary 'Ostfriesland'	2L
Sanguisorba 'Tanna'	Great Burnet	2L
Sedum 'Matrona'	Stoncrop	2L
Verbenia bonariensis	Purpletop	2L

Proposed Sunny Front Border Planting

Species	Common Name	Size/Spec
Festuca glauca	Blue fescue	Grasses 1-1.5L
Lavandula angustifolia 'Hidcote'	English Lavender	Shrub 4m²
Perovskia atriplicifolia 'Blue Spire'		Shrub 3L
Rudbeckia fulgida sullivanti 'Goldsturm'	Coneflower	2L
Rudbeckia maxima	Great coneflower	2L
Salvia pratensis	Meadow Sage	Herbaceous 1L
Santolina chamaecyparissus	Cotton lavender	Shrub 1L
Stachys byzantina 'Silver Carpet'	Lamb's ear	Herbaceous 2L
Stipa tenuissima 'Pony Tails'	Mexican feather grass	Grasses 1-1.5L
Stipa tenuissima	Mexican feather grass	Grasses 1-1.5L
Vinca major	Greater periwinkle	Shrub 1L
Verbenia bonariensis	Purpletop	Herbaceous 1-1.5L

PLANTING SPECIFICATION AND MAINTENANCE NOTES

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.
These can be lifted and unloaded using a root hook and hoist. 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.

Tree Planting

The tree supplier is to be approved by landscape architect prior to any ordering of stock. 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, soil report provided by agronomist 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 be inspected by the landscape architect prior to planting. All tree pits are to have suitable irrigation pipe and end 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 best 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 case 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. The landscape architect is to inspect all tree pits prior to planting.

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 ground. 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.
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 (Vtax Q4HN) or similar approved at a ratio of 10 -7.5 -10.2 + TE. The second application 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 dependent 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.
Landscape Architect to inspect tree pits prior to planting.

Tree pit size guidelines:			Tree pit size (length, width, depth)
Tree size	Rootball Size		
16-18 cmg	50x50cm	80x80x65cm	
18-20 cmg	60x60cm	80x80x75cm	
20-25 cmg	60x60cm	90x90x75cm	

Proposed Shrub Planting

- To be planted in a minimum of 300mm depth of existing topsoil on site in the first available planting season after construction.

Proposed Hedge Planting

- To be planted in a minimum of 300mm depth of existing topsoil on site in the first available planting season after construction.
- Plants to be planted in staggered rows.

Proposed Native Hedge / Shrub Planting

Species	Common name	Size/Spec	Condition	Density
Acer campestre	Field Maple	90-120cm	B.R	10%
Corylus avellana	Hazel	90-120cm	B.R	10%
Crataegus monogyna	Hawthorn	90-120cm	B.R	20%
Ilex aquifolium	Holly	90-120cm	B.R	5%
Ligustrum Vulgare	Privet	90-120cm	B.R	5%
Prunus spinosa	Blackthorn	90-120cm	B.R	30%
Sambucus nigra	Elderberry	90-120cm	B.R	15%
Viburnum opulus	Gueldeer Rose	90-120cm	B.R	5%

Proposed Specimen Shrub

Species	Common name	Size/Spec	Condition	Density
Amelanchier lamarckii	snowy mespilus	14-16cm	B.R	
Magnolia stellata	star magnolia	14-16cm	B.R	

Proposed Climbing Plants

Species	Common Name	Size
Clematis armandii	Armand Clematis	100-150cm 10L
Lonicera periclymenum 'Graham Thomas'	Honeysuckle	100-150cm 10L
Pyracantha 'Saphyr Orange'		100-150cm 10L
Clematis montana 'Marjorie'		100-150cm 10L

EM3 - Special General Purpose Meadow Mixture (GT3)

EM3 meadow mixture contains a very wide range of species. It may be used to create a very diverse sward where conditions vary across a site. It is also useful in situations where precise soil and site characteristics have not been established before sowing. Sown at 4 grams per m²

Wild Flowers (20%)

Species	Common Name	%
Achillea millefolium	Yarrow	0.5
Betonica officinalis - (Stachys officinalis)	Betony	0.6
Centaurea nigra	Common Knapweed	2.5
Centaurea scabiosa	Greater Knapweed	0.8
Daucus carota	Wild Carrot	1
Filipendula ulmaria	Meadowweet	0.6
Galium album - (Galium mollugo)	Hedge Bedstraw	0.6
Galium verum	Lady's Bedstraw	2
Knautia arvensis	Field Scabious	0.4
Leontodon hispidus	Rough Hawkbit	0.3
Leucanthemum vulgare	Oxeye Daisy	0.6
Lotus corniculatus	Birdsfoot Trefoil	0.5
Origanum vulgare	Wild Marjoram	0.1
Plantago media	Hoary Plantain	0.5
Poterium sanguisorba - (Sanguisorba minor)	Salad Burnet	1
Primula veris	Cowslip	0.4
Prunella vulgaris	Selfheal	2
Ranunculus acris	Meadow Buttercup	2.5
Rhinanthus minor	Yellow Rattle	1
Rumex acetosa	Common Sorrel	0.6
Silene dioica	Red Campion	1.2
Silene flos-cuculi - (Lychnis flos-cuculi)	Ragged Robin	0.2
Trifolium pratense	Wild Red Clover	0.1

Grasses (80%)

Species	Common Name	%
Agrostis capillaris	Common Bent	8
Cynosurus cristatus	Crested Dogtail	40
Festuca rubra	Slender-creeping Red-fescue	28
Pheum bertolonii	Smaller Cat's-tail	4

EG8 - Meadow Mixture for Wetlands (GT4)

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. Sown at 4 grams per m²

Wild Flowers (20%)

Species	Common Name	%
Achillea millefolium	Yarrow	0.5
Achillea ptarmica	Sneezewort	0.2
Betonica officinalis - (Stachys officinalis)	Betony	1
Centaurea nigra	Common Knapweed	2.5
Filipendula ulmaria	Meadowsweet	2
Galium verum	Lady's Bedstraw	1.5
Geum rivale	Water Avens	0.4
Leucanthemum vulgare	Oxeye Daisy	0.6
Lotus pedunculatus	Greater Birdsfoot Trefoil	0.8
Plantago lanceolata	Ribwort Plantain	1
Primula veris	Cowslip	0.2
Prunella vulgaris	Selfheal	1.5
Ranunculus acris	Meadow Buttercup	2.5
Rhinanthus minor	Yellow Rattle	1.5
Rumex acetosa	Common Sorrel	1
Sanguisorba officinalis	Great Burnet	1
Silene flos-cuculi - (Lychnis flos-cuculi)	Ragged Robin	0.2
Succisa pratensis	Devil's-bit Scabious	0.6
Vicia cracca	Tufted Vetch	0.5

Grasses (80%)

Species	Common Name	%
Briza media	Quaking Grass (w)	2
Cynosurus cristatus	Crested Dogtail	32
Festuca ovina	Sheep's Fescue	24
Festuca rubra	Red Fescue (w)	12.8
Keeleria macrantha	Crested Hair-grass (w)	4.8
Pheum bertolonii	Smaller Cat's-tail (w)	4
Trisetum flavescens	Yellow Oat-grass (w)	0.4

Planting Guidelines

- All planting and landscape operations should comply with the requirements specified in BS 3936:4:2007 'Nursery Stock' (Part One) and BS4428:1989 'Code of Practice for General Landscape Operations' (excluding hard surfaces).
- All trees and nursery stock is to be planted in accordance with BS 8545:2014 'Trees: from nursery to independence in the landscape - Recommendations'
- All topsoil used for planting to be tested by an approved Topsoil Analyst and any required amelioration or soil improvements to be carried out in line with Analyst's report.
- All fertilizers are to be applied or supervised by qualified staff to avoid the action of phytomolysis.
- Nurseries to provide protocols for ensuring that plant stock is free of invasive species.
- No planting is to be carried out when the site is covered by frost.
- Irrigation of plant material to be carried out during periods of drought will be required to ensure successful establishment of all plant stock.
- All new planting to be protected from mammal grazing by individual guards or stock proof fencing.
- If planting is to be carried out outside the growing season, all bareroot / rootballed plant stock is to be substituted with containerised stock. Specification to be agreed with Landscape Architect prior to ordering and implementation.
- Overseeding of grass mixes required adjacent to and under proposed hedge and shrub planting is required to ensure successful establishment under planting.

Maintenance Notes - Overview

- All planted areas to be kept clear of weeds at all times throughout maintenance period.
- Planted areas to be forked through regularly to keep soil loose and aerated.
- All litter and debris to be removed from landscaped areas and carted off site.
- Plants pruned as instructed by the Landscape Contractor to promote healthy growth and to remove dead and diseased wood.
- Watering as required to maintain healthy growth.

Additional Notes

- Slope profiles to the open space areas are to be no steeper than 1:3 and to considering access for all.
- Contractors to ensure they are working to the latest British Standards as required.
- Existing levels to be preserved around existing trees and vegetation to be retained.
- Existing trees and vegetation to be retained are to be protected during construction to BS 5837:2012. Trees in relation to design, demolition and construction
- Any necessary tree works to be carried out by an approved tree surgeon to BS3998:2010 'Recommendations for Tree Works'.
- For all arboricultural issues refer to survey and reports carried out by other consultants
- Proposed Soft landscape subject to soil testing and supplier recommendations during detail design and prior to each phase coming forward.
- Health and safety protection to be implemented on recommendations of RoSPA water safety audit.
- Any necessary tree works to be carried out by an approved tree surgeon to BS3998:2010 'Recommendations for Tree Works'.
- Final location and tree species selection will be subject to service report and foundation depths to be provided by engineers. Services and lighting columns to be co-ordinated with tree positions.
- All new services are assumed to be located below road corridors at this stage.
- All levels by others.
- All tactile paving locations to be confirmed / provided by the engineers.