

LEGEND

	Existing River / Water Body
	Existing Trees retained and managed (See arborists report)
	Existing Hedgerows Manage to maturity, thinning where required and supplementing with the Native trees and hedgerow mix as listed below (density indicative to reflect site requirements)
	Native Hedge planting* (710m²)
	Trees - feathered trees 2.1 - 2.5m ht. - min 3m. ctrs <i>Alnus incana</i> - 20% <i>Betula pubescens</i> - 20% <i>Fagus sylvatica</i> - 5% <i>Fraxinus excelsior</i> (if permitted) - 20% <i>Malus sylvestris</i> * - 10% <i>Quercus petraea</i> - 20% <i>Sorbus aria</i> * - 5%
	Shrubs - 60-90cm ht., in random groups of 5-15 no at 2-4m/sq.m <i>Comus sanguinea</i> * - 10% <i>Corylus avellana</i> - 20% <i>Crataegus europaeus</i> * - 20% <i>Ilex aquifolium</i> - 10% <i>Ligustrum vulgare</i> * - 10% <i>Prunus spinosa</i> * - 10% <i>Rosa canina</i> * - 10% <i>Viburnum opulus</i> * - 10%
	Proposed Street Trees (452 no.) Planted in same species groups or lines on individual streets
	Large Trees in public realm <i>Acer campestre</i> 'Streetwise' 16-18 cm gth, 4-6m ht <i>Acer campestre</i> 'Elsrijk' 16-18cm gth, 4-6m ht <i>Corylus colurna</i> 14-16cm gth, 5-6m ht <i>Quercus robur</i> 'Fastigiata' 16-18cm gth, 4-6m ht <i>Tilia cordata</i> 'Greenspire' 16-18cm, 5-6m ht <i>Ulmus 'Lobel'</i> 16-18cm, 5-6m ht
	Small - Medium Trees in front gardens <i>Betula pendula</i> 14-16cm, 3-4m ht <i>Malus sylvestris</i> * 14-16cm, 3-4m ht <i>Pyrus 'Chanticleer'</i> * 14-16cm, 3-4m ht <i>Sorbus aria</i> 'Lutescens' 14-16cm, 3-4m ht <i>Sorbus aucuparia</i> * 12-14cm, 2.5-3.5m ht
	Proposed Parkland, Open Spaces and Feature Trees To include species from the above list and selected species from the following:
	Large Trees - in parkland(218no.) <i>Aesculus hippocastanum</i> * 14-16cm, 4.25-6m ht <i>Alnus glutinosa</i> 14-16cm, 3-4m ht <i>Castanea sativa</i> * 14-16cm, 4.25-6m ht <i>Fagus sylvatica</i> 14-16cm, 4.25-6m ht <i>Pinus sylvestris</i> 120-150cm, RB <i>Populus tremula</i> 14-16cm, 4.25-6m ht <i>Quercus petraea</i> 14-16cm, 4.25-6m ht
	Specimens: <i>Carpinus betulus</i> 20-25cm, 6m ht <i>Cedrus atlantica</i> 'Glaucia' 20-25cm ht, 6m ht <i>Pinus radiata</i> 1.9m-2m ht, RB <i>Quercus pallustis</i> 20-25cm, 6m ht
	Small - Medium Trees - open spaces and public realm(152 no.) <i>Betula pubescens</i> 14-16cm, 3-4m ht <i>Prunus padus</i> * 14-16cm, 3-4m ht <i>Pyrus 'Chanticleer'</i> * 14-16cm, 3-4m ht <i>Sorbus aria</i> 'Lutescens' 14-16cm, 3-4m ht <i>Sorbus aucuparia</i> * 12-14cm, 2.5-3.5m ht
	Underplanted with selected bulbs - Narcissus and Hyacinthoides non-scripta
	Proposed Small to Medium Trees to Gardens(201 no.)
	Trees <i>Arbutus unedo</i> * 12-14cm, 2.5-3.5m ht <i>Betula pendula</i> 12-14cm, 2.5-3.5m ht <i>Malus floribunda</i> 12-14cm, 2.5-3.5m ht <i>Prunus 'Kanzan'</i> 12-14cm, 2.5-3.5m ht <i>Prunus padus</i> 'Fastigiata' 12-14cm, 2.5-3.5m ht <i>Pyrus 'Chanticleer'</i> 14-16cm, 3-4m ht <i>Sorbus aucuparia</i> 12-14cm, 2.5-3.5m ht
	Tall Shrubs <i>Acer palmatum</i> 150-175cm ht <i>Amelanchier Canadensis</i> * 150-175cm ht <i>Lavatera olibia</i> * 50-175cm ht <i>Ptelea trifoliata</i> * 50-175cm ht <i>Syringa vulgaris</i> * 150-175cm ht
	Birch Thicket (340m²) Whips planted at 5m ² <i>Betula pubescens</i>
	Orchard Trees(26 no.) 10-12cm, 2.5m ht. Indicative species list below <i>Malus 'Summer Red'</i> , <i>Prunus domestica</i> 'Victoria', * <i>Pyrus communis</i> 'Conference'
	Mixed Native Woodland planting(10535m²) Natural regeneration from adjacent woodland and feathered trees from Irish seed banks planted at minimum 3m centres in groups of 5-11
	Trees - fthd trees 2.1 - 2.5m ht. - min 3m. ctrs <i>Betula pendula</i> <i>Fagus sylvatica</i> <i>Fraxinus excelsior</i> (if permitted) <i>Prunus avium</i> * <i>Quercus petraea</i> <i>Ulmus glabra</i>
	Shrubs - 60-90cm ht., in random groups of 5-15 no at 2-4m/sq.m <i>Comus sanguinea</i> * <i>Ligustrum vulgare</i> * <i>Prunus spinosa</i> * <i>Rosa canina</i> * <i>Viburnum opulus</i> *
	Proposed Mixed Native Woodland Planting(10718m²)
	Trees - fthd trees 2.1 - 2.5m ht. - min 3m. ctrs <i>Alnus incana</i> - 20% <i>Betula pendula</i> - 20% <i>Fagus sylvatica</i> - 10% <i>Fraxinus excelsior</i> (if permitted) - 20% <i>Quercus petraea</i> - 20% <i>Sorbus aria</i> * - 10%
	Shrubs - 60-90cm ht., in random groups of 5-15 no at 2-4m/sq.m <i>Comus sanguinea</i> * - 10% <i>Crataegus europaeus</i> * - 20% <i>Ilex aquifolium</i> - 10% <i>Ligustrum vulgare</i> * - 10% <i>Prunus spinosa</i> * 20% <i>Rosa canina</i> * - 20% <i>Viburnum opulus</i> * - 10%

PLANTING NOTES

GENERAL CLEARANCE BEFORE PLANTING AND SPREADING TOPSOIL

- All rubble, stone over 150 mm, general rubbish and builders' debris to be cleared from the proposed planting areas to the depth of the cultivated medium depending if trees, shrubs or grass (see spec for depths) and removed from site to an approved tip prior to any cultivation works
- The planting area shall be treated with an approved herbicide 2 weeks before spreading topsoil

SITE PREPARATION

- Following herbicide treatment (duration depending on herbicide type) the entire area shall be leveled to a medium grade prior to topsoil being spread.
- Topsoil to be cultivated so free of grass, pernicious weeds and weed seed, stones larger than 50 mm and other debris. Similarly the top 50 mm of subsoil for grass areas should be free of grass, pernicious weeds and weed seed, stones larger than 30 mm and other debris.
- Topsoil to be spread in 150 mm layers and gently firmed. Subsoil to be spread in 300 mm layers and gently firmed.

PLANT MATERIAL

- All plant material shall be pest and disease free
- Topsoil shall be supplied in accordance with BS3882.
- All plants to be planted at the same depth as previously grown
- Sufficient soil must be removed to allow all roots to fully spread. Care must be taken with root systems - with dry, damaged roots being carefully pruned prior to planting

PLANTING

General

Times of year for planting:

- Deciduous trees and shrubs : November to March.
- Conifers and evergreens : November to March
- Container grown plants : At any time if ground and weather conditions are favorable.
 - Watering and weed control : Provide as necessary.

Refer to Plant Schedule for species, sizes and planting densities.

Whips

- All whips to be pit planted as per detail
- Soil ameliorants can be premixed with the soil applied or mixed in during planting.
- Soil ameliorants to consist of an approved compost at 10L per m²; and 50g/m² of 10.10.10 NPK slow release fertilizer.

Trees

- Soil ameliorants to consist of an approved compost, at 20L for each feathered tree and 12-14cm gth tree, 35L for each 14-18cm gth tree and 50L for each 20-25 cm gth tree and 150g/tree of 10.10.10 NPK slow release fertilizer.
- For further details, see drawing no. tree planting details.

Hedges

- Soil ameliorants can be premixed with the soil applied or mixed in during planting, but must be through full width of trench.
- Soil ameliorants to consist of an approved compost at 10L per m²; and 50g/m² of 10.10.10 NPK slow release fertilizer.

	Ornamental Shrub Planting Indicative species list
	Low to medium height ornamental shrubs/plants. pot size and planted 3/m² unless specified
	<i>Choisya temata</i> 'Sundance' 45-60cm 3L pot <i>Calamagrostis 'Karl Foerster'</i> 45-60cm 3L pot <i>Cytisus scoparius</i> * 45-60cm 3L pot <i>Helleborus niger</i> * 2L pot at 5m ² <i>Hebe 'Mrs Winder'</i> * 45-60cm 3L pot
	<i>Lavandula angustifolia</i> * 45-60cm 3L pot <i>Lonicera pileata</i> 45-60cm 3L pot <i>Pachysandra terminalis</i> 2L pot at 5m ² <i>Philadelphus coronaries</i> * 45-60cm 3L pot <i>Viburnum tinus</i> * 45-60cm 3L pot
	Ornamental Grasses - planted in drifts, 45-60cm at 2/m ² . Underplanted with Allium 'Purple Sensation' bulbs in key areas at 5/m ²
	<i>Stipa gigantea</i> , <i>Molinia caerulea</i> , <i>Stipa tenuissima</i> , <i>Calamagrostis x acutiflora</i> , 'Karl Foerster', <i>Carex sp</i> (greens, golds, whites), <i>Pennisetum alopecuroides</i>
	Perennial Planting 2l min pot size and planted at 5/m ² unless specified. Underplanted with Allium 'Purple Sensation' bulbs in key areas at 5m/2
	<i>Achillea sp. (deep reds/whites)*</i> <i>Aquilegia species (purples, whites)*</i> <i>Anemone x hybrid</i> 3l pot planted at 4/m ² * <i>Lavandula angustifolia</i> 'Blue Cushion'* <i>Echinacea purpurea</i> *
	<i>Knautia macedonica</i> <i>Agastache 'Black Adder'</i> <i>Sedum 'Brilliant'</i> <i>Verbena bonariensis</i> *
	Ornamental Hedge Planting Planted in staggered rows of single species 60-90cm at 3/lin.m
	<i>Fagus sylvatica</i> , <i>Prunus lusitanica</i> *, <i>Taxus baccata</i> , <i>Lonicera nitida</i> , <i>Griselinia littoralis</i>
	Swale Planting Low-Medium height shrubs/plants. Max height 60-150mm. 2L min. pot size and planted at 5/m ² unless specified.
	For the base and inlet on moisture-retentive soils
	Plants tolerate temporarily wet soil as well as dry
	<i>Actaea racemosa</i> 15% <i>Butomus umbellatus</i> 10% <i>Caltha palustris</i> 10%* <i>Lychnis flos-cuculi</i> 15%* <i>Iris pseudocorus</i> 15% <i>Lythrum salicaria</i> 15%* <i>Typha angustifolia</i> 10% <i>Sparganium erectum</i> 10%
	<i>Ajuga reptans</i> 1L pot size at 7/m ² - 10%* <i>Astilbe vars</i> 10%* <i>Lythrum salicaria</i> 10%* <i>Campanula glomerata</i> 1L pot size at 7/m ² 10% <i>Deschampsia cespitosa</i> 10% <i>Eupatorium cannabinum</i> 10% <i>Filipendula vulgaris</i> 15% <i>Iris pseudocorus</i> 10%* <i>Iris sibirica</i> 10%*
	Meadow Planting Native Irish biodiversity seed mix for sun and partial shade. Recommended product: Sandro's Irish Wildflower Conservation Grade Seed Mixture. Sowing 1.5 grams per metre.
	Sample species include; <i>Annual Mayweed</i> , <i>Birdsfoot Trefoil</i> , <i>Bladder Campion</i> , <i>Bluebell</i> , <i>Burdock</i> , <i>Cat's Ear</i> , <i>Common Sorrel</i> , <i>Corn Marigold</i> , <i>Corn Poppy</i> , <i>Corncockle</i> , <i>Cornflower</i> , <i>Cowslip</i> , <i>Devil's-bit Scabious</i> , <i>Eyebright</i> , <i>Flag Iris</i> , <i>Foxglove</i> , <i>Kidney Vetch</i> , <i>Common Centaury</i> , <i>Lesser Knapweed</i> , <i>Musk Mallow</i> , <i>Marjoram</i> , <i>Purple Loosetrife</i> , <i>Ragged Robin</i> , <i>Red Bartsia</i> , <i>Red Campion</i> , <i>Red Clover</i> , <i>Rough Hawkbit</i> , <i>Shepherd's Purse</i> , <i>Smooth Hawkbit</i> , <i>St. Johnswort</i> , <i>Vetch Common</i> , <i>White Campion</i> , <i>Wild Angelica</i> , <i>Wild Valerian</i> , <i>Yellow Agrimony</i> , <i>Yellow Rattle</i> .

* Species selected for their pollinating qualities.

	1. Private grass 2. Amenity grass		Seating Type 1 - 2m wide timber bench Type 2 - Concrete bench
	Reinforced Grass		1. Bins 2. Bike stands
	Landform		1. Bollards 2. Lights in ground
	Road Surface - Black tarmacadam - Rolled top tarmac		Light columns
	Shared Surface - Rolled top tarmac		Free Standing Walls Retaining Walls / Elements
	Concrete Areas		Concrete Play Forms
	Feature Paving - Patterned concrete to key spaces with stone highlights & concrete setts		Pumping Station - Location indicative - To eng. specification
	Footpath - Brushed concrete - Concrete paviour		Substation - To eng. specification
	Shared Cycle & Pedestrian lane -Tarmacadam		Play Surface/Safety Surface - Coloured rubber wetpour play surface to ISEN 116/177
	Rolled Dust/Self - Binding Gravel Path - Ballylusk 10mm or similar		Formal Play Equipment - Supplier: KOMPAN or similar
	Bridges and Boardwalks - Recycled black plastic		Fitness Trail Equipment - Supplier: KOMPAN or similar
	Selected PCC Pavers/Slabs - To private treshold areas		Informal Natural Play - Logs, sensory planting, boulders, play steps
	Parking Bays - PCC pavers 120x160x80mm - Natural, silver or charcoal finish to complement street facades and reinforce character areas. - Alternate colours for details and highlights. - N.B Permeable paving to private areas only		Tennis Tables
	Attenuation Area		
	Railing - 1.2m high vertical bar railing		

NOTE:
LEGEND TO BE READ WITH THE LANDSCAPE MASTERPLAN DRAWING 18306-2-101.
ADDITIONAL DETAIL IS PROVIDED IN THE ACCOMPANYING LANDSCAPE STRATEGY & DESIGN REPORT 18306-2-D04.

REV	DATE	AMENDMENT
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PROJECT: RESIDENTIAL DEVELOPMENT ON RATHMULLAN ROAD, DROGHEDA, CO.MEATH	DATE: SEPT 2019
DRAWING: HARD & SOFT LANDSCAPE MATERIALS SPECIFICATION	SCALE: DRAWN: CHECKED: EO EO
	DRAWING NO: 18306-2-102