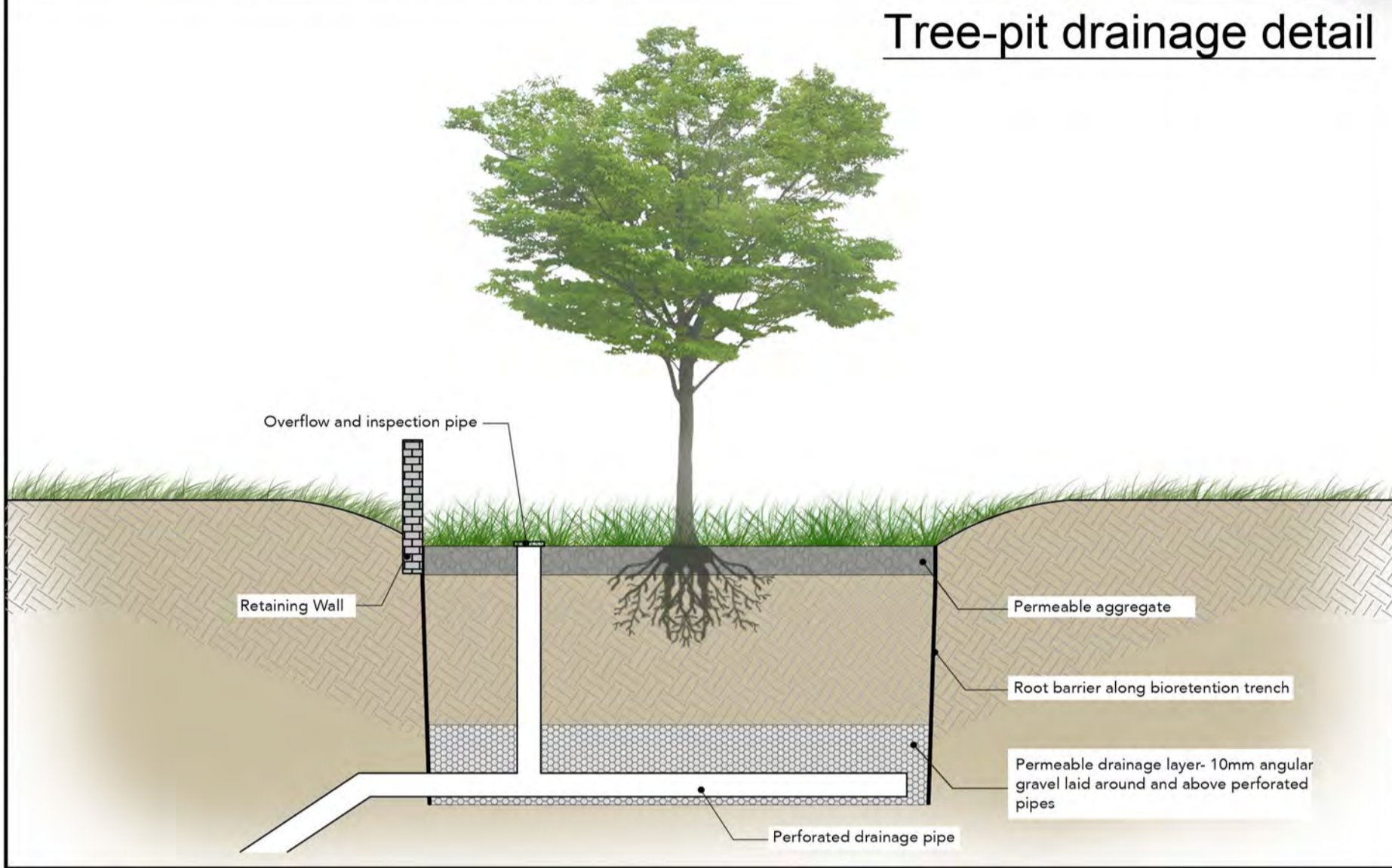


Appendix H – Landscape and Ecological Mitigation Plan

Layered softening/screening approach to western boundary



Tree-pit drainage detail



PROPOSED NATIVE TREES:

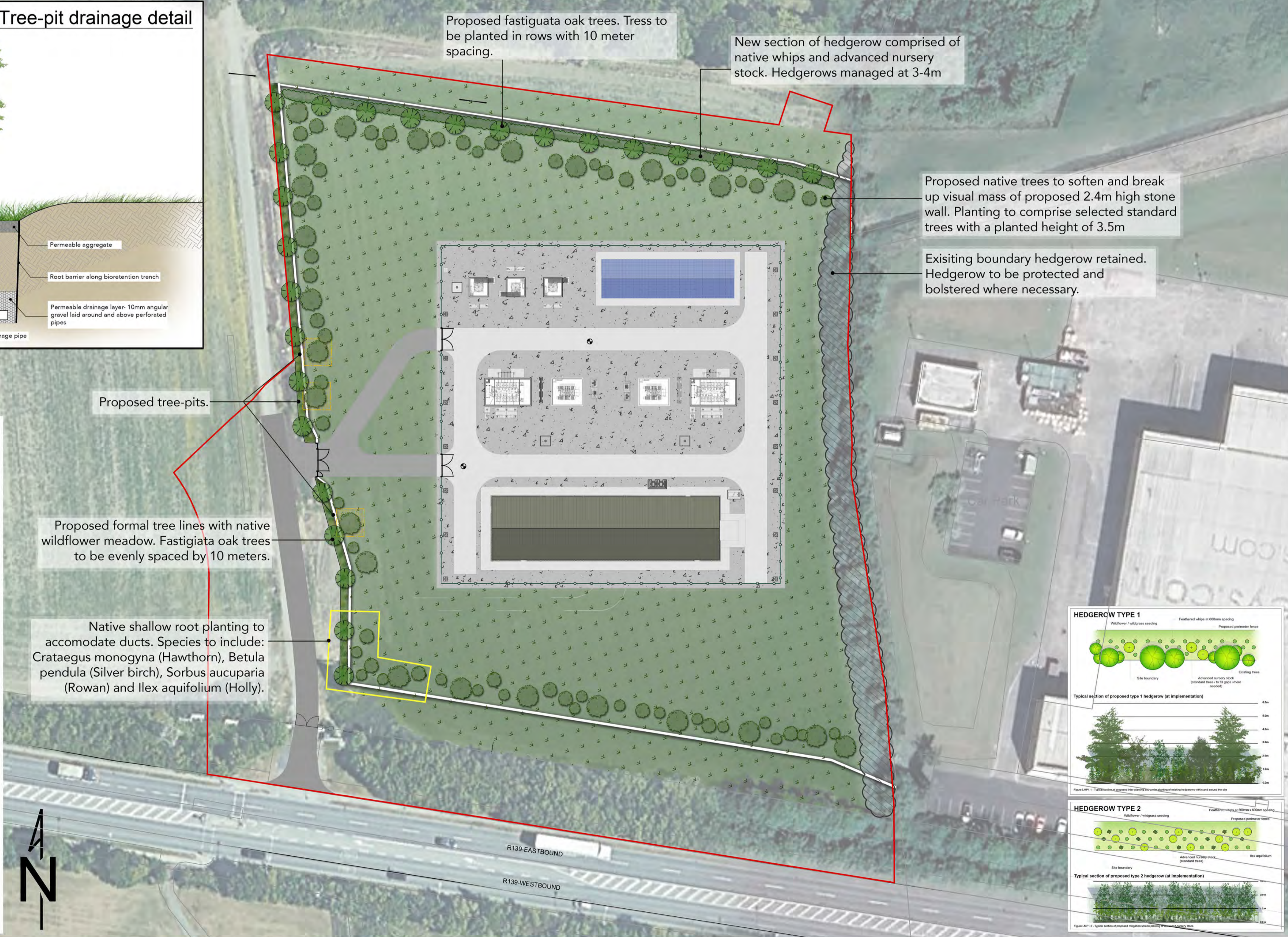
Botanical name	Common name	Size
<i>Prunus spinosa</i>	Blackthorn	Various sizes ranging from light standards to heavy standards to provide structural diversity
<i>Alnus glutinosa</i>	Alder	
<i>Betula pubescens</i>	Downy birch	
<i>Prunus avium</i>	Wild cherry	
<i>Crataegus monogyna</i>	Hawthorn	
<i>Betula pendula</i>	Silver birch	
<i>Sorbus aucuparia</i>	Rowan	
<i>Ilex aquifolium</i>	Holly	

NATIVE HEDGEROW SPECIES :

Botanical name	Common name	Size	%
<i>Primary structure:</i>			
<i>Crataegus monogyna</i>	Hawthorn	80-100cm / 10-12cm girth 3m br standard trees	60%
<i>Secondary structure:</i>			
<i>Prunus spinosa</i>	Blackthorn	80-100cm	15%
<i>Quercus robur</i>	Pendunculate oak	80-100cm	15%
<i>Shrub species structure:</i>			
<i>Salix cinerea</i>	Grey willow	40-60cm	2.5%
<i>Viburnum opulus</i>	Gelder rose	40-60cm	2.5%
<i>Rosa canina</i>	Dog-rose	40-60cm	2.5%
<i>Lonicera periclymenum</i>	Honeysuckle	40-60cm	2.5%

NATIVE WILDFLOWER MEADOW MIX:

Species	Common name	Height	Density
<i>Lotus corniculatus</i>	Bird's-foot trefoil	20-30cm	1.5g/m2
<i>Trifolium pratense</i>	Red clover	30-40cm	1.5g/m2
<i>Succisa pratensis</i>	Devil's Bit Scabious	30-40cm	1.5g/m2
<i>Knautia arvensis</i>	Field Scabious	30-40cm	1.5g/m2
<i>Galium verum</i>	Lady's Bedstraw	30-40cm	1.5g/m2
<i>Centaurea nigra</i>	Knapweed	40-60cm	1.5g/m2
<i>Leucanthemum vulgare</i>	Oxeye Daisy	30-40cm	1.5g/m2
<i>Linum perenne</i>	Blue flax	30-40cm	1.5g/m2



Legend:

- PROPOSED NATIVE TREES
- PROPOSED OAK TREES
- EXISTING HEDGE RETAINED
- PROPOSED NATIVE HEDGEROW
- NATIVE WILDFLOWER MIX
- GRASSLAND/MEADOW MANAGEMENT
- SITE BOUNDARY

Notes
 The function of the proposed mitigation planting is primarily for screening, but it will also enhance the ecological corridors that area already present within the surrounding trees lines and hedgerows.
 It is imperative to use native Irish species in so far as possible as they are adapted to Irish conditions and therefore more likely to thrive compared to imported stock. Selected species should also represent woodland and hedgerows in the surrounding environs although non-native species are not to be used, unless otherwise agreed with the Planning Authority.

All plants supplied shall be exactly true to name as shown in the plant schedules. Varieties with variegated and/or coloured leaves will not be accepted, and any plant found to be of this type upon leaving-out shall be replaced by the contractor. Bundles of plants shall be marked in conformity with BS3936: Part 1: 1965 and BS3936: part 4: 1966. The nursery supplier shall replace any plants which, on leaving out, are found not to conform to the labels.

Hedgerows
 Mitigation screen planting shall consist of a mixture of native hedgerow species that are prevalent in the immediate area. Planting to consist of feathered whips (of various sizes) and advanced nursery stock (where necessary) in staggered rows at a spacing of 600mm.

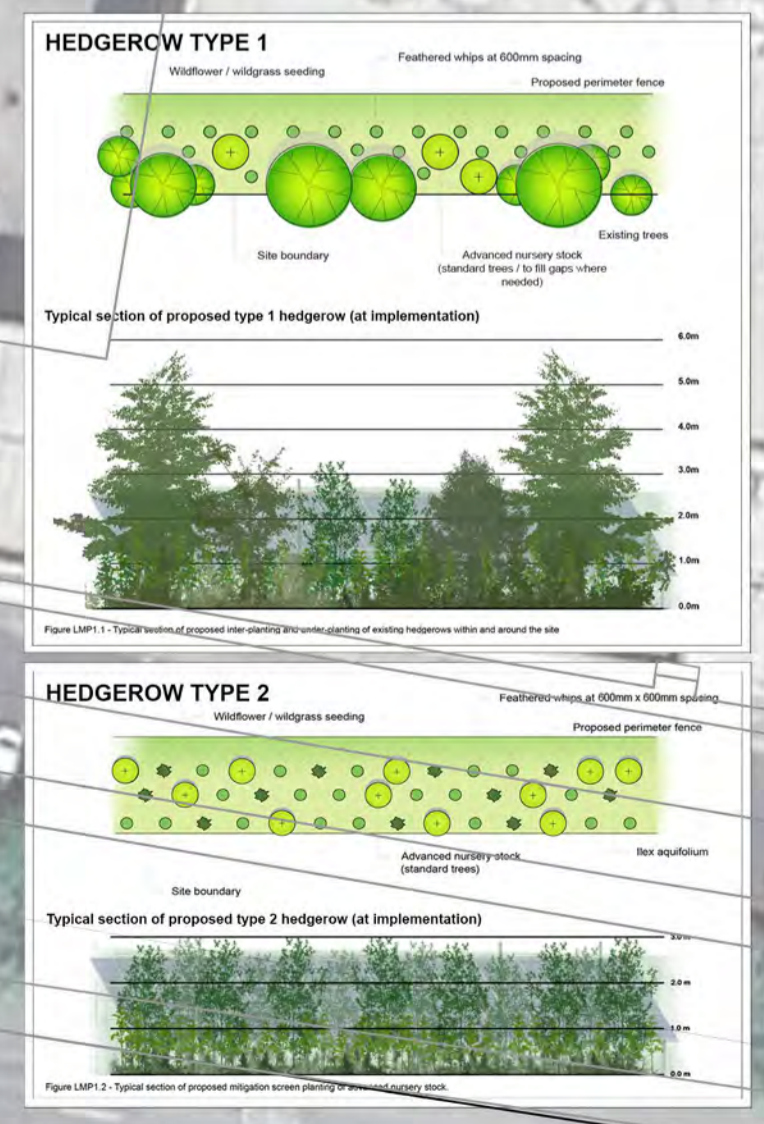
All native species will be planted as whips, with the primary and secondary structure species to be of a minimum height of 80-100cm and the other shrub species to be of a minimum height of 40-60cm.

Existing and new sections of hedgerow to be planted and bolstered as per diagram LMP1.1 and maintained at a height of 3-4m unless otherwise specified.

Field Margins/Grassland Management
 Field margins to be planted and/or managed in accordance with the BRIDE project EIP techniques. A minimum width of 2m from the base of the hedgerow is recommended. It will be important to fail these margins every year during the period of September 15th to February 28th. A full management regime in accordance with best practice will be adhered to, ensuring that the species will thrive through natural regeneration. Field margin management techniques and wildflowers have been shown to increase biodiversity on solar farms, with numbers of pollinators clearly benefiting from these food sources and an increased presence of other animals in these margins being evident as well when compared to improved grassland margins managed more intensely.

Species mix to be finalised in conjunction with the project ecologist.

Landscape Figures
 Existing Hedgerow Bolstered (Type 1) - 151 linear meters
 New Hedgerow (Type 2) - 124 linear meters
 Proposed Native Trees - 55 no.
 Proposed Oak Trees - 26 no.
 Native Wildflower Mix - 218 sqm



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 ESB Major Projects

Site location:
 COUNTY DUBLIN
 Drawing Title:
 LANDSCAPE AND ECOLOGICAL MITIGATION PLAN
 Project:
 BELMAYNE 110KV SUBSTATION

Drawn by:
 RAH

Checked by:
 RB

Drawing Ref:
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Scale:
 1:500 @ A1

Date:
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