

Legend:

- PROPOSED NEW HEDGEROW (TYPE 2)
- EXISTING HEDGEROW (TYPE 1)
- PROPOSED WOODLAND MIX
- 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.

Proposed Woodland Mix
Species mix to comprise of High-Canopy: Dominants (<20%), Low-canopy: Sub-dominants (<20-25%), Understorey and Fringe: High-Shrubs (20-40%) and Understorey and Edge: Lower-Shrubs (15%-25%). Planting on embankments to be allowed to grow to reach maturity and to be concentrated on the lower portions of the embankments.

Woodland planting to be established using the 'Miyawaki Method'. This is one of the most effective tree planting methods for creating woodland cover quickly and is based on natural reforestation principles. Using the Miyawaki Method, trees can grow at a rate of around a meter per year. The main principles of the Miyawaki Method are to plant species of trees that would naturally occur in the area at a high density.

Trees to be planted at 1.5m x 1.5m spacings, whilst a mixed arrangement of shrubs are to be planted 600mm centres

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 LMP1.1-1.2 and maintained at a height of 3-4m unless otherwise specified

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

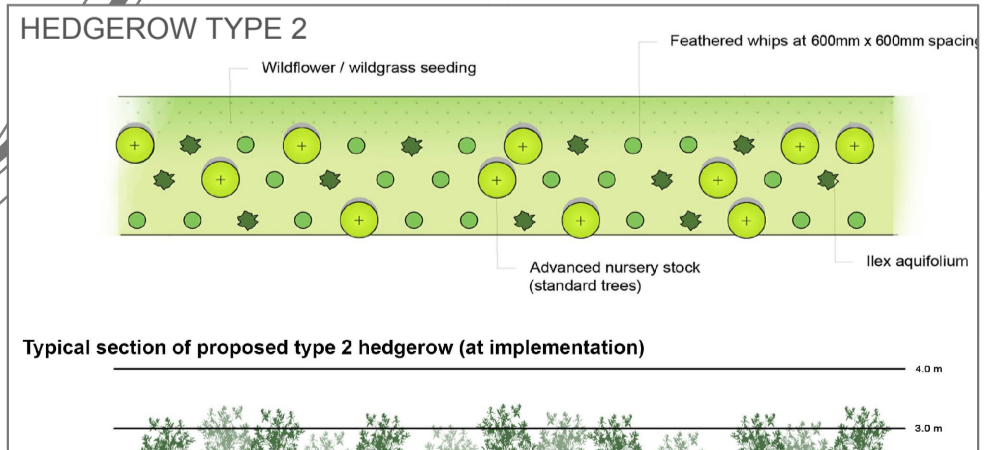
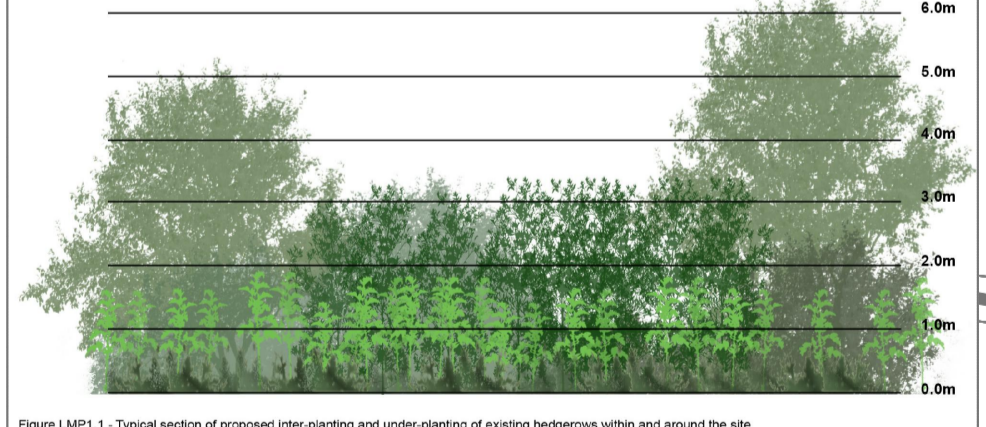
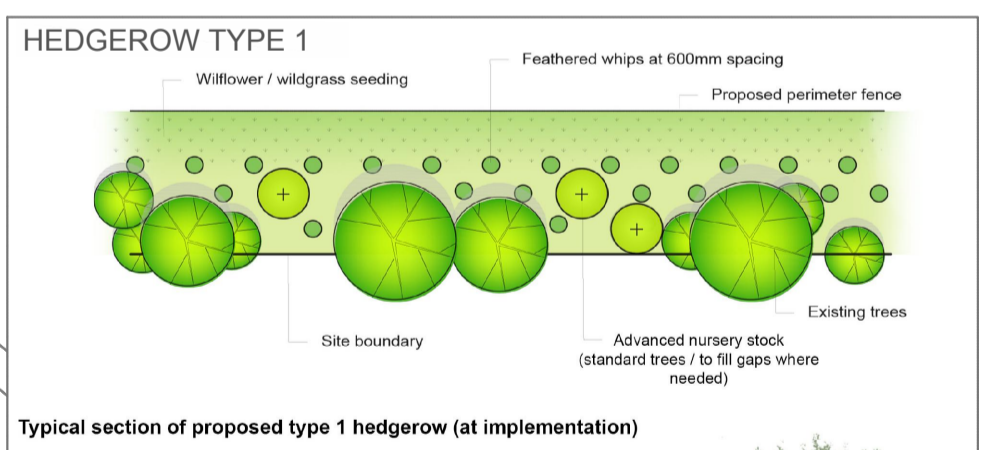


EXISTING HEDGEROW
Existing hedgerows to be retained and bolstered as necessary as per hedgerow type 1, where any notable gaps occur.

NEW HEDGEROW TYPE 2 (c. 310m)
Hedgerow type 2 consisting of a native whip planting mix and advanced nursery stock (standard trees). Hedgerow to be maintained at a height of approximately 4m.

NATIVE WOODLAND PLANTING MIX (c.3613sqm)
Native woodland planting mix planted to bolster the southern flank of the existing hedgerow. Area with a mix of native whips and advanced nursery stock (standard trees).

GRASS SEEDING
Areas disturbed during the construction phase to be re-seeded with a grass seeding of local provenance post-construction



NATIVE HEDGEROW SPECIES:

Botanical name	Common name	Size	%
Primary structure:			
<i>Crataegus monogyna</i>	Hawthorn	1+2tr 80-100cm / 10-12cm girth 3m br standard trees	60%
Secondary structure:			
<i>Prunus spinosa</i>	Blackthorn	1+2tr 80-100cm	15%
<i>Ilex aquifolium</i>	Holly	1+2tr 80-100cm	15%
Shrub species structure:			
<i>Rubus fruticosus</i>	Bramble	1+1tr 40-60cm	2.5%
<i>Corylus avellana</i>	Hazel	1+1tr 40-60cm	2.5%
<i>Rosa canina</i>	Dog-rose	1+1tr 40-60cm	2.5%
<i>Euonymus europaeus</i>	Spindle	1+1tr 40-60cm	2.5%

WOODLAND MIX (3613sqm):

Botanical name	Common name	Size	%
High Canopy (Dominants):			
<i>Quercus robur</i>	Pendunculate Oak	Standard Tree, 10-12cm, B	<20%
<i>Quercus petraea</i>	Sessile Oak	Standard Tree, 10-12cm, B	
<i>Pinus sylvestris</i>	Scots Pine	Standard Tree, 250-300cm, RB	
Low Canopy (Sub-dominants):			
<i>Alnus glutinosa</i>	Alder	90-120cm	20-25%
<i>Betula pubescens</i>	Downy Birch	90-120cm	
<i>Prunus avium</i>	Wild Cherry	90-120cm	
Understorey and fringe (higher shrubs):			
<i>Prunus Padus</i>	Bird Cherry	60-90cm	20-40%
<i>Corylus avellana</i>	Hazel	60-90cm	
<i>Ilex aquifolium</i>	Holly	60-90cm	
<i>Crataegus monogyna</i>	Hawthorn	60-90cm	
<i>Salix caprea</i>	Goat Willow	60-90cm	
<i>Salix purpurea</i>	Purple Willow	60-90cm	
Understorey and edge (lower shrubs):			
<i>Prunus spinosa</i>	Blackthorn	40-60cm	15-25%
<i>Rosa-canina</i>	Dog-rose	40-60cm	
<i>Euonymus europaeus</i>	Spindle	40-60cm	
<i>Salix aurita</i>	Eared Willow	40-60cm	
<i>Rubus fruticosus</i>	Bramble	40-60cm	

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Site location: **COUNTY SLIGO**

Drawing Title: **LANDSCAPE PLAN**

Project: **FIRLOUGH HYDROGEN PLANT**

Drawn by: **KCW** Checked by: **RB**

Drawing Ref: **LD.FRLGHYDRO**

Scale: **1:100 @ A1** Date: **JUNE 2023**

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