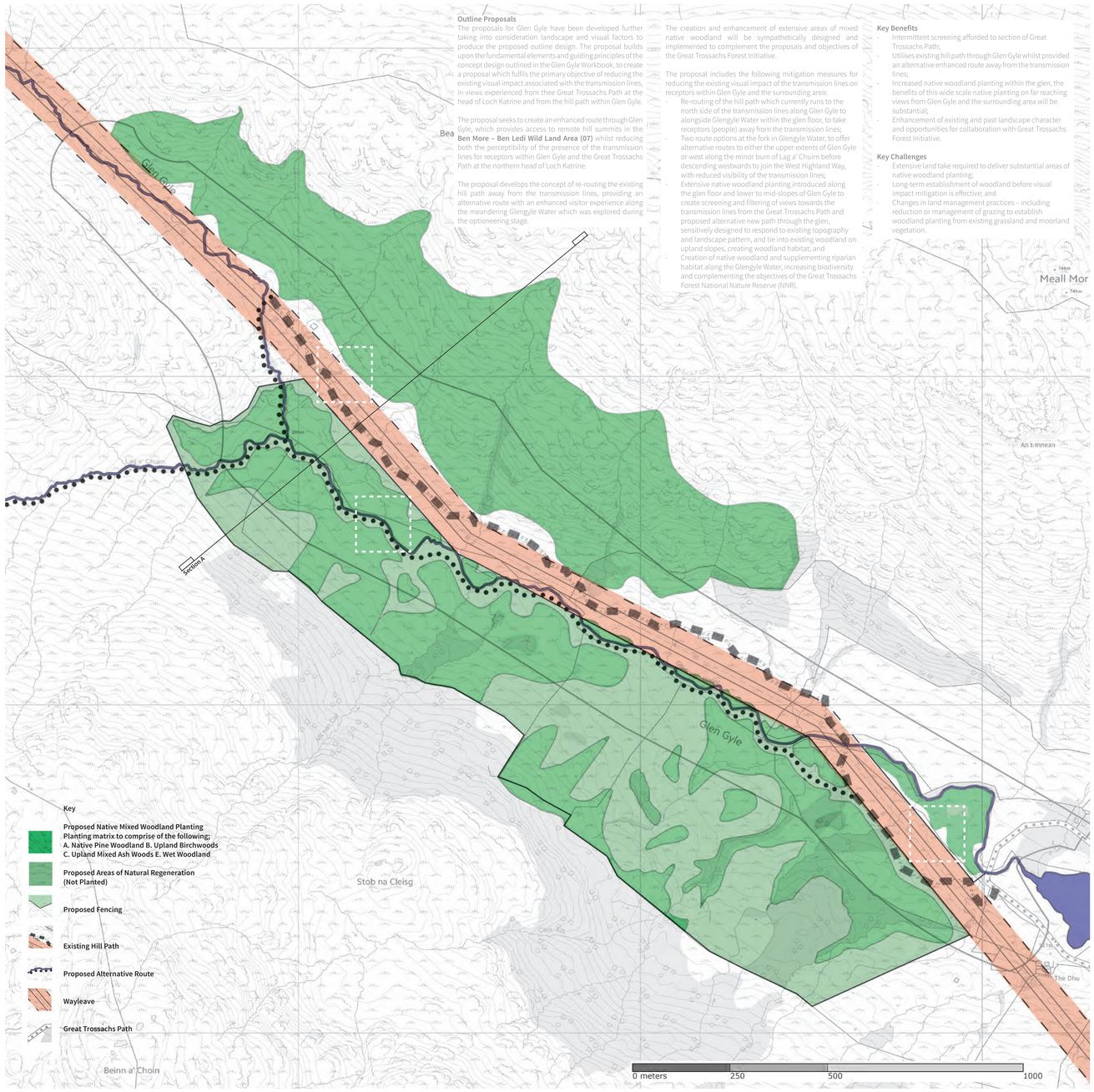
Outline Plan



Outline Proposals

The proposals for Glen Gyle have been developed further taking into consideration landscape and visual factors to produce the proposed outline design. The proposal builds upon the fundamental elements and guiding principles of the concept design outlined in the Glen Gyle Workbook, to create a proposal which fulfils the primary objective of reducing the existing visual impact associated with the transmission lines, in views experienced from thee Great Trossachs Path at the head of Loch Katrine and from the hill path within Glen Gyle.

The proposal seeks to create an enhanced route through Glen Gyle, which provides access to remote hill summits in the **Ben More – Ben Ledi Wild Land Area (07)** whilst reducing both the perceptibility of the presence of the transmission lines for receptors within Glen Gyle and the Great Trossachs Path at the northern head of Loch Katrine.

The proposal develops the concept of re-routing the existing hill path away from the transmission lines, providing an alternative route with an enhanced visitor experience along the meandering Glengyle Water which was explored during the optioneering stage.

The creation and enhancement of extensive areas of mixed native woodland will be sympathetically designed and implemented to complement the proposals and objectives of the Great Trossachs Forest Initiative.

The proposal includes the following mitigation measures for reducing the existing visual impact of the transmission lines on receptors within Glen Gyle and the surrounding area:

- Re-routing of the hill path which currently runs to the north side of the transmission lines along Glen Gyle to alongside Glengyle Water within the glen floor, to take receptors (people) away from the transmission lines;
- Two route options at the fork in Glengyle Water, to offer alternative routes to either the upper extents of Glen Gyle or west along the minor burn of Lag a' Chuirn before descending westwards to join the West Highland Way, with reduced visibility of the transmission lines;
- Extensive native woodland planting introduced along the glen floor and lower to mid-slopes of Glen Gyle to create screening and filtering of views towards the transmission lines from the Great Trossachs Path and proposed alternative new path through the glen, sensitively designed to respond to existing topography and landscape pattern, and tie into existing woodland on upland slopes, creating woodland habitat; and
- Creation of native woodland and supplementing riparian habitat along the Glengyle Water, increasing biodiversity and complementing the objectives of the Great Trossachs Forest National Nature Reserve (NNR).

Key Benefits

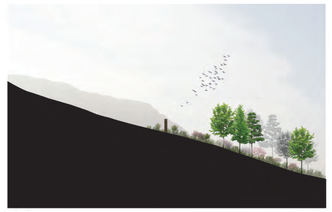
- Intermittent screening afforded to section of Great Trossachs Path;
- Utilises existing hill path through Glen Gyle whilst provided an alternative enhanced route away from the transmission lines;
- Increased native woodland planting within the glen, the benefits of this wide scale native planting on far reaching views from Glen Gyle and the surrounding area will be substantial;
- Enhancement of existing and past landscape character and opportunities for collaboration with Great Trossachs Forest Initiative.

Key Challenges

- Extensive land take required to deliver substantial areas of native woodland planting;
- Long-term establishment of woodland before visual impact mitigation is effective; and
- Changes in land management practices – including reduction or management of grazing to establish woodland planting from existing grassland and moorland vegetation.

Indicative Cross Section A

Indicative Sections

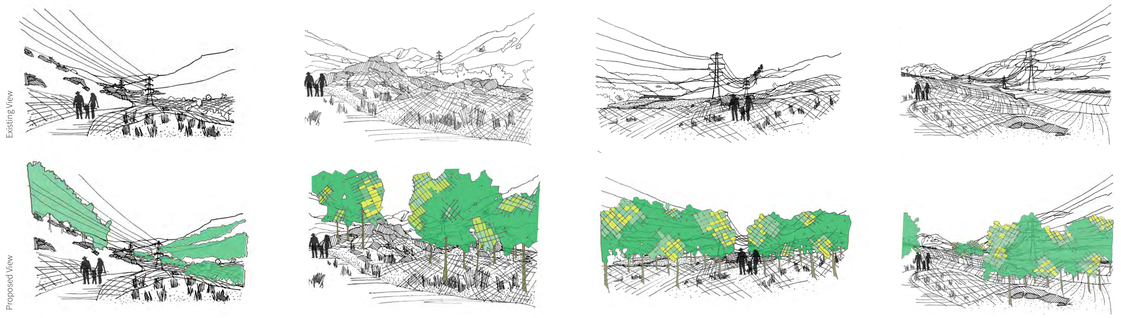


Section 1
Illustrating the proposed treatment of the upland edge of the proposed native woodland planting. The section shows the proposed fenceline in relation to the edge of the proposed planting. It is proposed to leave a swathe of land, of varying width and design, between the woodland edge and the fenceline to encourage natural regeneration within this area and a feathering out of the woodland edge to create a more natural 'edge zone' with increased biodiversity value. he woodland edge will vary in design along the wayleave in accordance with the principles outlined below.

Section 2
Illustrating the proposed new path along the Glengyle Water with associated new native woodland planting. Native woodland planting is proposed to supplement the existing tree line along the Glengyle Water, to screen the view of the line from users of the proposed path. Widescale native woodland planting is proposed to the glen floor and lower slopes which will assist in screening view of the line and provide added benefits of strengthening riparian habitat and increasing biodiversity value.

Section 3
Illustrating the treatment proposed to the wayleave corridor. The section shows the proposed fenceline in relation to the edge of the proposed planting. It is proposed to leave a swathe of land, of varying width and design, between the woodland edge and the fenceline to encourage natural regeneration within this area and a feathering out of the woodland edge to create a more natural 'edge zone' with increased biodiversity value. The woodland edge will vary in design along the wayleave in accordance with the principles outlined below.

Indicative Sketches



Sketch 1
Illustrating indicative view from existing hill path down Glen Gyle to Loch Katrine and the Great Trossachs Path.
The proposed native woodland planting will provide a blackcloth to the line, reducing visual impact of the line for users of the existing hill path.

Sketch 2
Illustrating indicative view from existing hill path over the section which runs along the valley floor, looking up Glen Gyle to Beinn Ducteach.
The proposed native woodland planting will provide intermittent screening of the line to the path at this point, reducing visual impact of the line on users of the existing hill path. Sensitive design of proposed woodland planting will also ensure that views of Beinn Ducteach will still be possible from sections of the path.

Sketch 3
Illustrating indicative view from existing hill path over the section which runs along the valley floor, looking down Glen Gyle to Loch Katrine and the Great Trossachs Path.
The proposed native woodland planting will provide intermittent screening of the line from the path at this point, reducing visual impact of the line for users of the existing hill path.

Sketch 4
Illustrating indicative view from path to the lower valley side, looking up Glen Gyle to to Beinn Ducteach.
The proposed native woodland planting will provide intermittent screening to the line from the path at this point, reducing visual impact of the line for users of the existing hill path. Sensitive design of proposed woodland planting will also ensure that views of Beinn Ducteach will still be possible from sections of the path.

Native Woodland Principles

The introduction of extensive native woodland will be implemented in line the **Biodiversity Action Plan for the National Park (Wild Park 2020)** which notes that expanding and restoring native woodland is one of the major goals for Forestry Commission land in the National Park. Appropriate woodland mixes of native species of trees and lower growing vegetation will be developed sympathetically, with reference to the geographical location, elevation, topography, soil type, hydrology and biodiversity of the specific area. Within Glen Gyle the following woodland mixes are proposed, subject to more detailed survey and understanding of the areas to be planted.

Woodland mixes shown are for guidance purposes only with species and percentage mix of each woodland type indicative. Woodland mixes will be subject to further development during the detailed design stage.

A. Native pine woodland

Altitudinal range from sea level to over 600m on steeply sloping ground with dry to damp acidic soils. Occurs with upland oakwood, upland birchwood and wet woodland habitats and also in patches within non-native conifer plantations.

Woodland Layer (Primary) 85%
Pinus sylvestris (Scot's pine)
Woodland Layer (Secondary) 15%
Betula pendula (Silver birch)
Betula pubescens (Downy birch)
Sorbus acuparia (Rowan)
Alnus glutinosa (Alder)
Salix cinera (Grey willow)
Ilex aquifolium (Holly)
Corylus avellana (Hazel)
Shrub/ Understorey Layer
Salix aurita (Eared willow)
Juniperus communis (Juniper)

B. Upland birchwoods

Moderate/ steep slopes generally below 400m, with well drained soils, but can extend well above this, can also occur in mosaics with Upland oakwoods, upland mixed ashwoods and wet woodland habitats.

Woodland Layer Primary 85%
Betula pendula/ pubescens (Birch spp.)
Woodland Layer (Secondary) 15%
Pinus sylvestris (Scot's pine)
Shrub/ Understorey Layer
Juniper (Juniperus communis)
Eared willow (Salix aurita)
Aspen (Populus tremula)
Grey willow (Salix cinera)

C. Upland mixed ashwoods

Moderate/ steep slopes with moist soils below 300m, in association with upland oakwood, upland birchwood and wet woodland habitats. Is also found in scattered patches on steep crags up to about 500m.

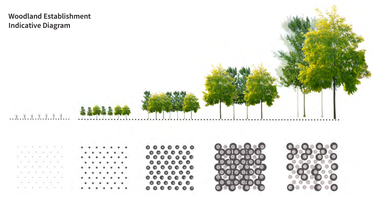
Woodland Layer (Primary) 85%
Fraxinus excelsior (Common ash)
Ulmus glabra (Wych elm)
Woodland Layer (Secondary) 15%
Grey willow (Salix cinera)
Hazel (Corylus avellana)
Downy birch (Betula pubescens)
Elder (Sambucus nigra)
Sorbus acuparia (Rowan)
Shrub/ Understorey Layer
Blackthorn (Prunus spinosa)
Dog rose (Rosa canina)
Eared willow (Salix aurita)
Gorse (Ulex europaeus)

E. Wet woodland

Flushed slopes, wet hollows, valley floors and edges of wetlands, rivers streams and lochs in upland and lowland situations.

Woodland Layer (Primary) 100%
Grey willow (Salix cinera)
Goat willow (Salix caprea)
Downy Birch (Betula pubescens)
Alder (Alnus glutinosa)
Shrub/ Understorey Layer
Eared willow (Salix aurita)
Osier (Salix viminalis)
Hawthorn (Crataegus monogyna)

Woodland Establishment Indicative Diagram



1 year old
Whips at 0.5m-1.0m height and 15cm wide; trunk 2cm wide
Age: 1 year
Canopy: 15cm
Height: 5m-1.0m

5 years old
Growth 2.0m-3.5m height and 0.6m wide; trunk 8-10cm wide
Age: 5 years
Canopy: 0.6m
Height: 2.0-3.5m

10 years old
6.0-7.5m height and 1.2m wide; trunk 15-20cm wide
Age: 10 years
Canopy: 1.2m
Height: 60-7.5m
Girth: 15-20cm
Thinning: every 5-10 years

25 years old
10-15m height and 7m wide; trunk 25cm wide
Age: 25 years
Canopy: 7m
Height: 10-15m
Girth: 25cm
Thinning: every 5-10 years

40 years old
20-30m height and 10-15m wide; trunk 30-40cm wide
Age: 40 years
Canopy: 10-15m
Height: 20-30m
Girth: 30-40cm
Thinning: every 5-10 years

Indicative Visuals

Visual 1
Illustrating screening afforded from lower slope path. Views will be largely screened at this point, reducing visual impact of the line on users of the path.

Visual 2
Illustrating screening afforded from glen floor section of path. Views of the line will be largely screened at this point, with views of Beinn Duchteach still possible.

Visual 3
Illustrating screening afforded from lower slope path. Views of the line will be largely screened at this point, reducing visual impact of the line on users of the path.

Woodland Edge Treatments indicative Plan Diagrams

The above plan diagrams illustrate the proposed edge treatment in situations likely to arise during the design development and implementation of native woodland planting in Glen Gyle. These are intended to act as a guide for edge treatments in the scenarios likely to be encountered.

Treatments all propose naturalistic design of the permanent woodland and woodland edge through creation of glades, rides, scalloped edges, habitat islands and feathered edges to upland slope sides through sensitive following of natural hollows and depressions within the existing landform.
Clockwise from top left:
Native woodland edge to existing forestry and open space, Native woodland planting to lower slopes and wayleave edge, New native woodland edge to wayleave.

LUC

SP ENERGY NETWORKS™

Changing the VIEW
Glen Gyle | YW3

Drawing No. LUC_6333_001_PLN
Scale: Not To Scale
Date: 17.03.17
Version: A
Status: Draft