

Glenora Forest Recreation Development Report



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Summary

SSE Renewables & Coillte Renewable Energy are investigating the suitability of forest lands at Glenora, County Mayo for the development of wind farm projects. As part of this proposed development, the following document identifies a proposed approach to the development of recreational infrastructure in Glenora Forest. This document also identifies the strategic importance of this recreational infrastructure as part of the wider outdoor recreation development of the area.

ILC has engaged with community and agency representatives to identify the recreation potential of this forest and this document provides an overview of the emerging proposals.

Context

While there is a very low local population density in the area it is apparent that local residents make good use of the forest for recreation and there are a small but consistent number of walkers who traverse the Western Way via this forest. The Ceide Fields to the North allied to Ballycastle village and the spectacular cliff coastline is connected via the Western Way with the Ballycorrick, Owenwhinney and Wild Nephin area to the South via the Western Way. These two areas have significant, and as yet, only partially realised recreation and tourism potential. Glenora Forest has the potential to add value to the Western Way and increase its visibility locally.

Proposals

The forest is well positioned to enhance the cluster of the recreation and heritage developments at the Ceide Fields and Ballycastle village.

Specific outdoor recreation infrastructure for development within the forest includes a trailhead from which a looped and family friendly recreation walking and cycling trail can emanate. Glenora has potentially 17 km of looped trails. A viewing point, two seating areas and heritage interpretation facilities are recommended. An outdoor classroom and access to circa three environmental study sites within Glenora forest, with supporting equipment for these activities, is also proposed as part of a post construction in collaboration with the emerging Eco Centre in Ballycastle.

A walker/cyclist shelter south of Glenora Forest along the Western Way is also suggested. Such a shelter has the potential to provide a focal point for this route as well as provide a comfort point for the long-distance walker.

Development Approach

A twostep development approach is suggested:

- Step one: develop the Local Recreation Cluster at Glenora Forest for recreational walking and family/gravel bike cycling. Develop a trailhead in the north of the site, as well as a viewing point and heritage interpretation signage.
- Step two: support the strategic connection of the north coast/Ballycastle area and the Wild Nephin area, subsequent to windfarm development, through the upgrading of the Western Way surface and signage in the vicinity of Glenora Forest. Note that the Western Way will be closed for use during windfarm construction at this site.

Introduction

This Report provides an outline of the proposed recreation development associated with the proposed Glenora wind farm in the Coillte owned Glenora forest in North County Mayo.

Context

SSE Renewables & Coillte Renewable Energy (SSE & Coillte) are investigating the suitability of land at Glenora, County Mayo for the development of a wind farm project. This wind farm development provides an opportunity for a review and upgrading of the recreation potential of this site. This recreation potential has been considered with regard to local resident use as well as a means of enhancing the tourism value of the area. These recommendations were informed through local consultation and best practice.

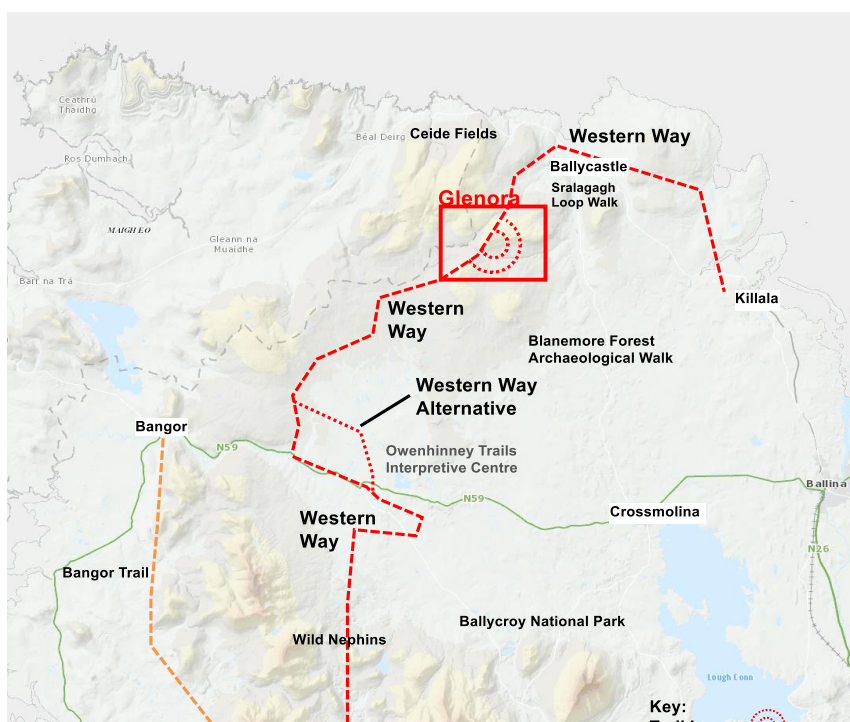
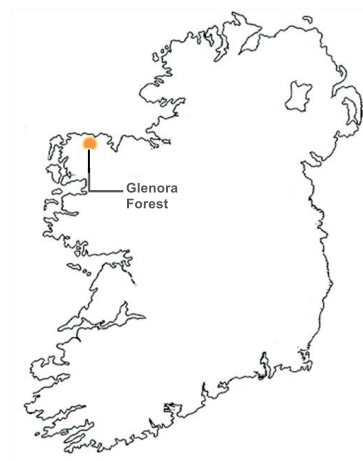


Figure 1: Glenora Forest and Surrounding Trails.

The following issues were also considered as part of this recreation planning approach:

- the operational requirements of the proposed wind farm and forest harvesting;
- making best use of the existing forestry & the proposed wind farm forest road infrastructure;
- statutory requirements relating to the site including nearby Special Areas of Conservation and other heritage obligations;
- community recreation development initiatives;
- the effective integration of the Western Way and the adjacent Ceide Fields and Ballycastle village amenity resources;

Strategic Context

There are two strategic contexts to the proposed recreation developments at the Glenora forest:

- The Western Way: extending from Oughterard to Ballina connects North Galway with North Mayo and the Sligo border. The trail transects the Glenora forest and hence links the Bellacorrick area to the south with the local village of Ballycastle.
- Oweninny Windfarm: located to the south, this windfarm straddles sections of the bog previously used for the Bord na Mona Bellacorrick generating station. The phase 2 development of this windfarm is underway. The embankments from the old Bord na Mona rail system at this site extend close to the Western Way and have potential to be redeveloped as walking and cycling trails. See box area in the south of the following Map. While outside of the remit of this report, such a development will provide a network of largely off-road linear and looped trails between Ballycastle and Bellacorrick and further south to the Nephin mountains via the Western Way.

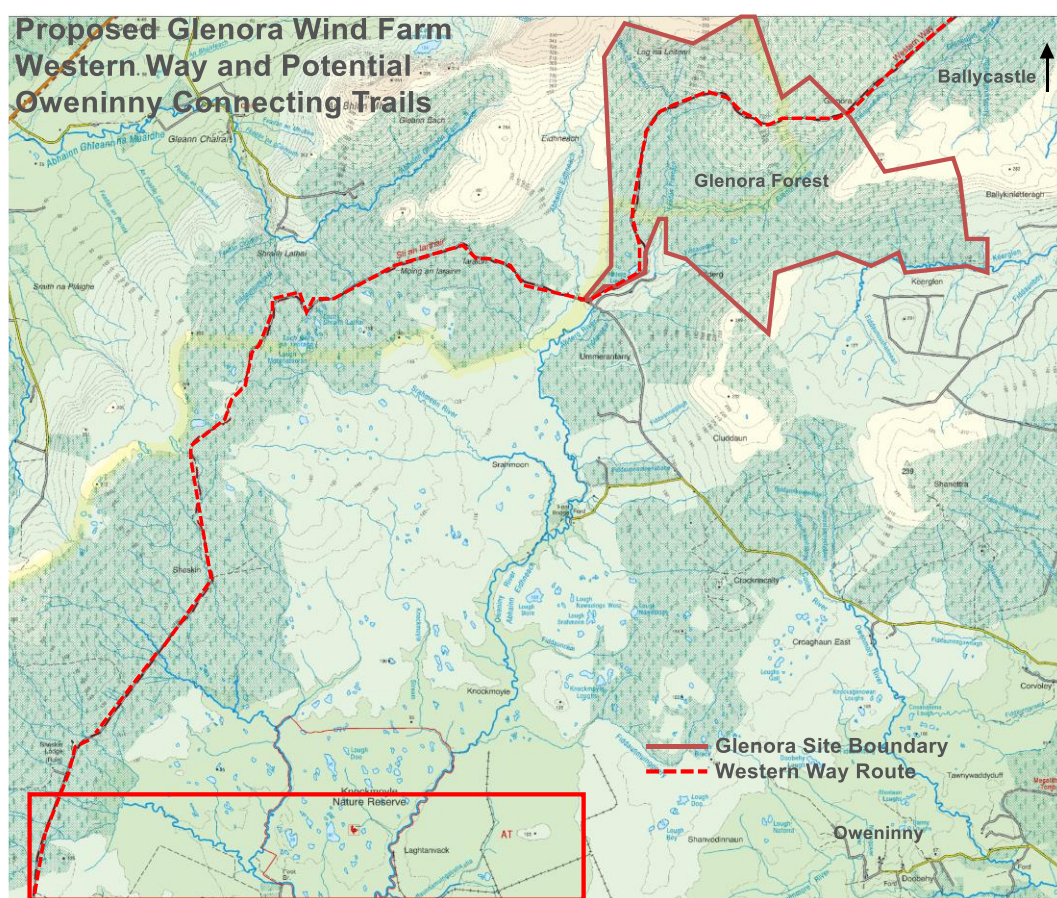


Figure 2: Glenora Forest and Oweninny Area.

Glenora Forest Profile

The following is an outline of the Glenora forest.

Current Recreation Use

It is apparent from the heat map analysis of the area below¹, that Glenora forest has a relatively low level of recreation use. The Western Way appears to be the primary activity venue in particular the Ballycastle to Ummerantarry section that traverses Glenora forest north and south.

It is also apparent that Glenora Forest has a lower level of recreational use compared to the nearby Blanemore Forest Walk. This suggests an interest in walking and cycling in the area but a lower level of awareness and accessibility to the Glenora forest.

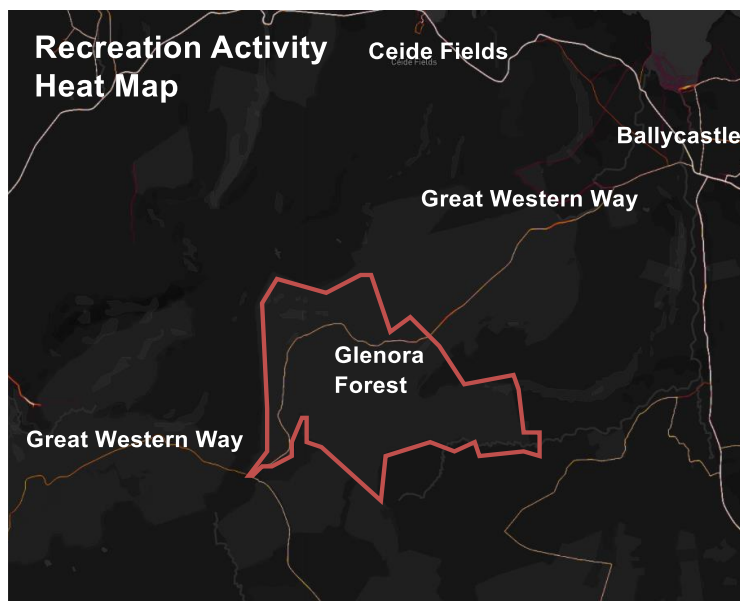


Figure 3: Glenora Area Heatmap.

Topography

Glenora forest is in an undulating landscape and the centre line of the forest, illustrated by the route of the Western Way, having a quasi-valley structure. High ground is primarily to the north and the northwest as well as to the southeast as illustrated in the following map shading and contours. This type of landscape while offering views of the surrounding area, especially to the southeast, it can also be moderately challenging for the walker given the occasional uphill trail routes.

Existing Resources in the Glenora Forest

Currently there is an extensive forest road system comprised of surfaced and unsurfaced trails as illustrated in the following map. The proposed windfarm is shaded in yellow. These surfaced trails are generally well defined, and they have a consistent and well drained surface. The lack of direction signage is however a challenge and in places the trail system is confusing for the walker navigating without a map.

¹ This heat map amalgamates the data from recreational user GPS devices. Mainly walkers and cyclists, this data is then presented visually along the routes used on the map. The brighter the trail lines are the greater the levels of recreational use.

Existing Trail Structures Glenora Forest

Currently there is an extensive forest road system comprised of surfaced and unsurfaced trails as illustrated below. The proposed windfarm is shaded in yellow.

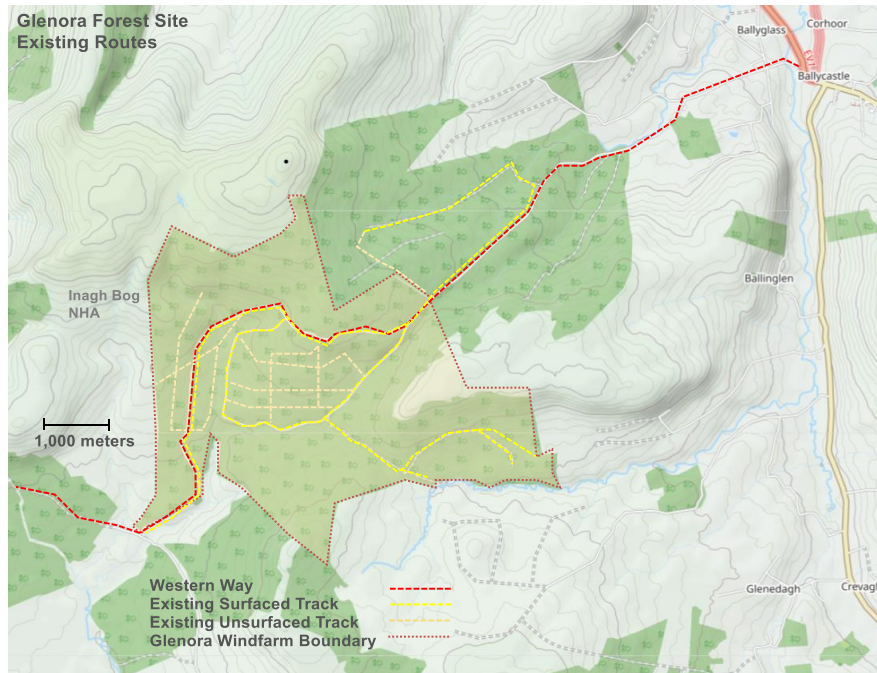


Figure 4: Existing Trails Glenora Forest.

Heritage and Conservation

The forest is bounded by Special Areas of Conservation (the Glenamoy Bog Complex, the Carrowmore Lake Complex and the Bellacorick Bog Complex SACs), however the forest itself is outside of these SACs. However, Glenora Forest is located within the 15-kilometre buffer zone of the SAC.

There are no discernible negative SAC impacts as a result of the proposed recreational trail developments as they remain within the forest footprint. The Western Way also appears to be located outside of the SAC however it acts as an SAC boundary in places.

Archaeology

Two archeologically sensitive sites have been identified to the west and north of the forest (A1 and A2), but both of these sites are outside of the proposed recreation areas.

A1: Craanog.

A2: Megalithic tomb - court tomb.

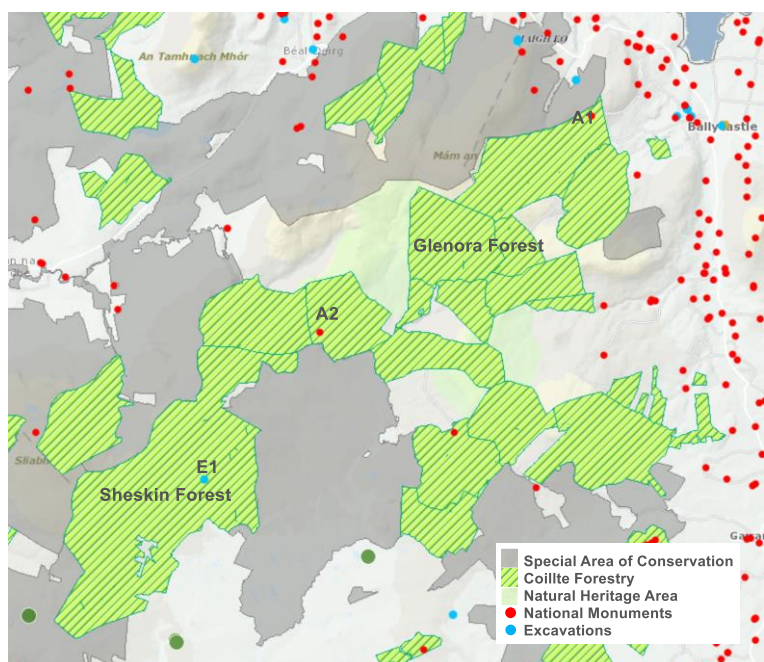


Figure 5: Archaeological Sites Glenora Forest Area.

Glenora Control Points

There are a number of positive control points within the proposed windfarm site which should be linked in with any recreation structures.

- PC1a: Proposed forest entry and trailhead.
- PC2: Elevated view to the East.
- PC3: Elevated view South and West.
- PC4: Valley view Southeast.
- PC5: Elevated view North.

The adjacent proposed turbine locations are identified to clarify the location and as possible routes towards some of the control points.

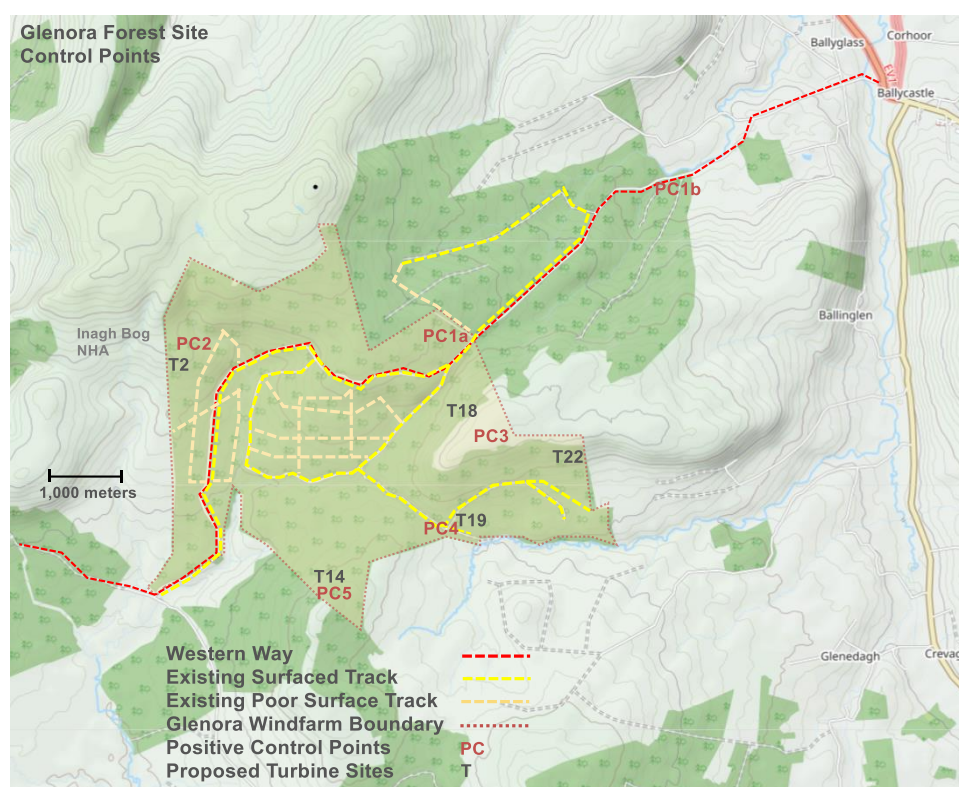


Figure 6: Positive Control Points Glenora Forest.

Glenora Development Options

Recreation demand for the Glenora Forest is primarily for the activities of walking and cycling. The development of cycling trails will target family type recreational cycling and potentially journeying as part of a gravel bike type experience. Mountain biking is not appropriate for this site due to the low levels of local demand and the proximity of the mountain bike trail system in Coolaney County Sligo (77km). There is no apparent demand for equestrian activities at this location.

Viewing points and possibly a signature arts or cultural installation is suggested. There is limited merit apparent for an outdoor gym type facility at this location given its relative remoteness. Links with the nearby Ceide fields and the built heritage of the area are likely to provide a key theme for the trails. These links to be realised via information panel type interpretation resources. Links with the archaeology of the area and environmental studies field work can also be supported.

There are two likely development directions for the site:

- **Local Tourism Recreation Cluster:** As part of a local cluster of recreation facilities including the Ceide Fields and Ballycastle. The development of trails in the forest will add value to recreational tourism of the area.

- **Recreational Journey Node:** Glenora Forest is linked by the Western Way to Ballycastle, the Owenwinney Visitor Centre and the Wild Nephin/Ballycroy National Park. The upgrading of the Western Way trail surface, directional signage and information signage is central to maximising the potential of this route. The provision of a simple walker and cyclists shelter at the midpoint between Bellacorick and Ballycastle will strengthen the attractiveness and the practical use of the Western Way as a thru-route.

Signage, trail surfaces and access barriers will be appropriate for individuals with ambulatory, and sight disabilities, however given their undulating nature, the trails are not appropriate for wheelchair users.

Proposed Glenora Walking and Cycling Trail

A walker at an average speed of 5 km h will complete a 4 km trail in circa 40 minutes, ideally as a loop or partial loop. The proposed recreation trail development is illustrated on the following map. The main walk and cycle trail is Altderg a 6 km loop commencing at the P1 trailhead, the linear trail to the T1 viewing area is a further 2 km round trip. The walking trails extending from this location will use the existing and proposed forest/wind farm roads which will be upgraded and signed to a standard suitable for recreational use.

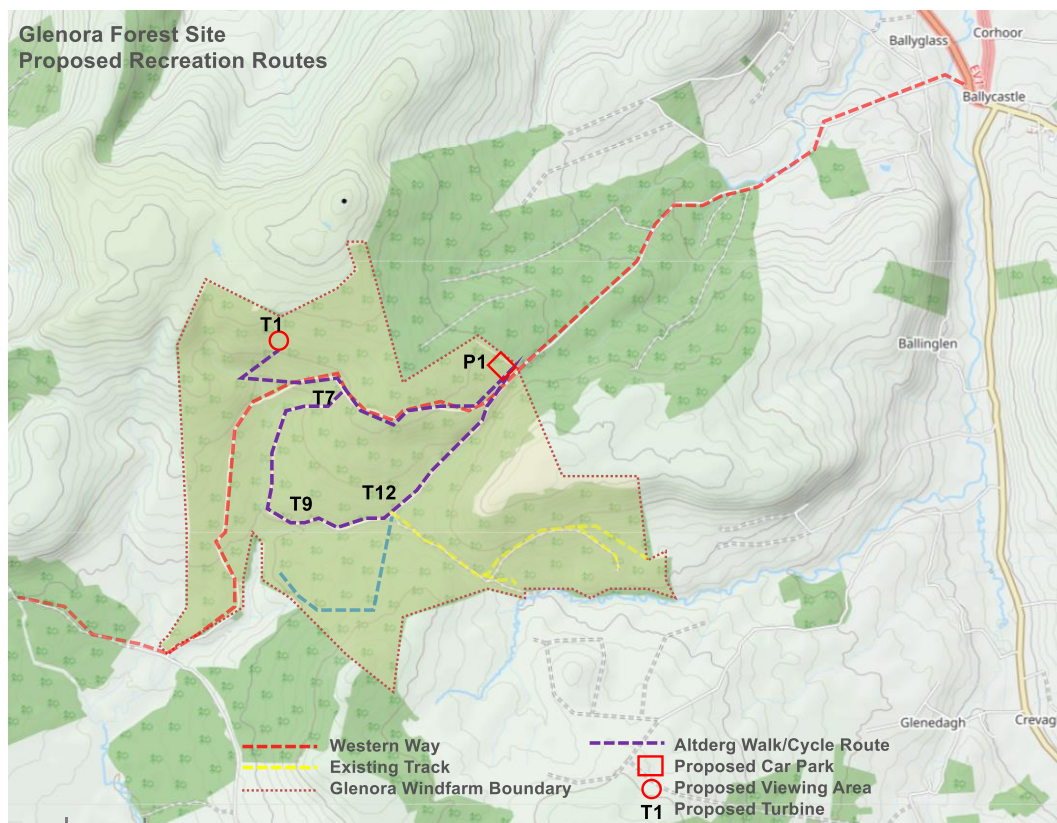


Figure 7: Proposed Recreation Trails Glenora Forest.

This trail will bring the walker to an elevated section of the forest and a viewing point at T1 as well as close to the valley floor and the Altderg river circa T9. There is also potential that the upgrading of this trail and the Western Way to Sheskin Forest in the south, will increase recreational cycling on this section of the Western Way. Further details on these routes and their supporting infrastructure are available in the following Appendix 1.

Trail Name	Altderg Walk / Cycle Route	Turbine View
Start Point	Car park	Car park
Length (km)	6 km	2 km
Time	1 hour fifteen minutes.	30 minutes
Degree of Difficulty	Easy - moderate	Easy
Meters Climb	75	30
Loop	Yes	No Linear
Trail Finish	Car Park	Car park



Figure 8: Overhead Image of Proposed Glenora Viewing Point.

Signage and Interpretation

Directional signage, maps and route information as well as information on Leave no Trace and on walker and cyclist respect for each other and the forest environment will be provided for the participant². Furthermore, the story of Glenora Forest, the wind farm and the role of wind power will be illustrated along the trails. Where possible signage will be wood based and include Glenora Forest branding like the Galway Wind Park example below.



- 1, Site information descriptor
- 2, Site heritage descriptor
- 3, Trail indicator
- 4, Wind farm information descriptor

² Additional information will be provided on dog walking including the requirement that all dogs remain on a lead and that dog owners must remove dog waste from the trail surface. Dog waste and litter bins will not be provided on the site.

There is an opportunity to illustrate the natural, social and built heritage of Glenora Forest as well as its contemporary role in wood and energy production. Interpretive resources and directional signage can be located around the site at the following locations.

- IP1 Introduction to Glenora.
- IP2 Glenora Heritage and Panorama
- IP3 The Western Way
- T1, T7, T9, T12: Story of wind power.
- F1, F2, F3: Finger signs, both directions.

Note that approximately 10 way-markers will be required along the walking trail to give directional comfort to participants. A bench seat is proposed at the viewing area, and in the vicinity of T12.

Appendix 1 includes examples of these various signage elements.

Trailhead

The Glenora forest trailhead provides the start and endpoint for walkers and cyclists.

The trailhead at P1 will provide the following facilities:

- Parking for circa 10 cars.
- Picnic bench.
- Interpretation Panel.

The trailhead surface will be crushed stone to dust and it may be necessary to fence the perimeter of the trailhead to contain children or prevent vehicle access to the trails. The route between the parking area and the trails will include a road barrier with a pedestrian and cycle entrance located to one side.

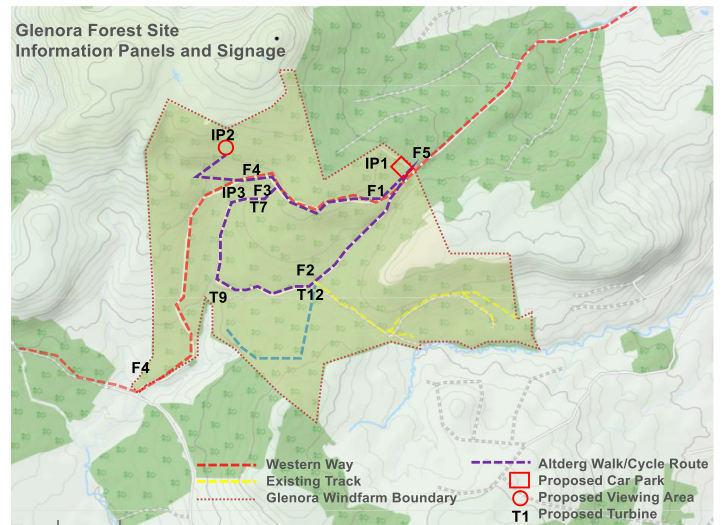


Figure 9: Forest Signage Detail.



Figure 10: Car Parking Detail.

Viewing Point

The area to the side of Turbine 1 is proposed as a viewing point of the surrounding forest, landscape and windfarm. This viewing area will include:

- Panorama Labeled Photograph of the Area.
- Seating Area.
- Interpretive Panels on the Heritage of the Area and the role of wind power.

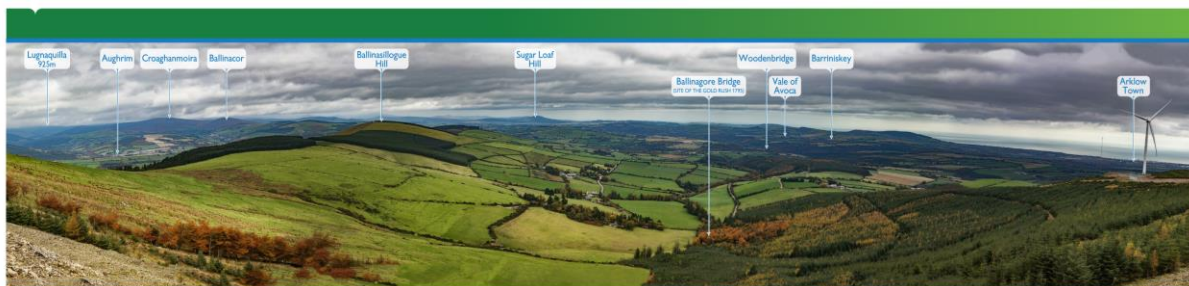


Figure 11: Sample Panorama Photograph.

Environmental Interpretation and Outdoor Classroom

Outdoor Classrooms are dedicated spaces in forests, parks and other outdoor locations, where participants, typically school children, study or take part in nature based environmental experiments. The Outdoor Classrooms typically are used as a medium for studying environmental or geography subjects but can also double up as micro performance spaces.

These facilities are typically open-air and so are weather dependant and seasonal and must be constructed in a manner which is robust and ideally sheltered from the wind by trees etc.

It is possible also to include fixed environmental education resources in the surrounding area.

There are several locations with the potential to house an outdoor classroom ideally within a 1km walk from the car park as well as sites in which various environmental audits and experiments can take place.



Figure 12: Sample Outdoor Classroom Examples.

Appendix 1: Recreation Infrastructure Samples

The following are reference samples of similar infrastructure recommended for the windfarm at Glenora.

Trail Surface
Circa 2 meter width, 804
to dust finish.



Path and Sleeper Steps.



Recreation Site Entrance
Panel



Recreation Area
Information Panel

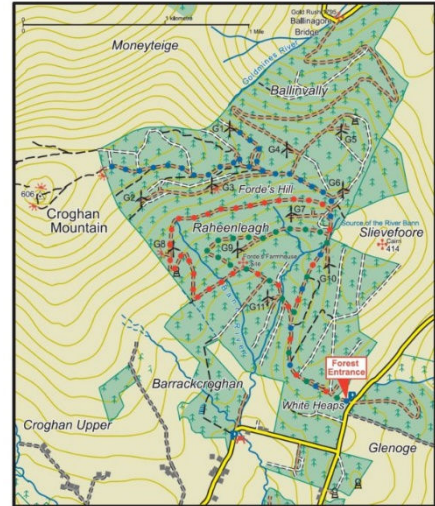


Waymarker, Wood and recycled Plastic. Both with direction roundels and trail branding/colour coding.



Recreation Area Trail Map

An Ráithín Liath - Raheenleagh



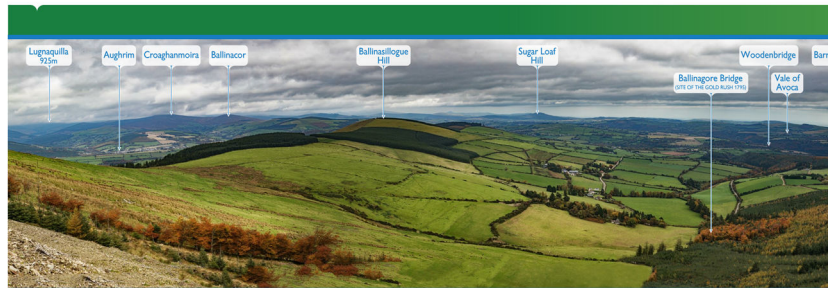
- | | |
|--|-------------------------------------|
| Píonmhóthar / Main Road | Camshíos / Car Park |
| Mionbhóthar / Minor Road | Ball páircála / Parking Spot |
| Bóthar Foraise / Forest Road | Láthair Oidhreachta / Heritage Site |
| Raon / Forest Track | Láthair Pioniceil / Picnic Area |
| Cosaín / Path | Múleann Gaoithe / Wind Turbine |
| Ionad Amhairc / Viewpoint | |
| Réadmhaoin Coltite / Coltite Properties | |
| Forais Crann Baucóirínigh | Croghan Trail |
| Conifer Forest | Forde's Farmhouse Trail |
| Forais Crann leathanduilleacha | Bann River Trail |
| Broadleaf Forest | |

Níor chóir go léimhneadh an léiriúchán ar an léarscáil de na bóithre, raonta agus cosaín taobh amuigh de réadmhaoin Coltite mar go bhfuil ceist áil tuighthe. The representation on the map of roads, tracks and paths outside Coltite property should not be interpreted as conferring a right of way.

Panorama View Panel



AMHARCHOINTE Ó THUADH
NORTHERLY VIEWPOINT



Post and Rail Fencing



Viewing Platform



Viewing Point with Information Panel



Post and Rail Access chicane, Information Panel and trail direction roundels.



Shelters

Two Adirondack type shelters are suggested for the route of the Western Way in the proximity of the windfarm. These shelters are positioned with their back to the prevailing weather and they can be used as a simple bivouacking base as well as a lunch spot. The photograph is of a shelter located in County Wicklow



Potential community Events



Nature and Wildlife information board



Appendix 1: Trail Classification

Class One Walking Trails:

Class One trails are multi-access trails which can accommodate users with reduced mobility, wheelchair users, people with a vision impairment, using crutches, with a buggy, with small children, older people and so on. These trails:

- Will be serviced by a vehicle parking area.
- Can readily facilitate frequent two-way traffic.
- Will have minimal cross slopes and gradient
- Will have a firm surface.
- No steps, waterbars, stiles, barriers or trip hazards of any kind.
- Should have resting places with seating approximately every 100m.

Trail Surface: Sealed non-slip surfaces, non-slip timber boardwalk, tarmac or compacted surface with no loose stone or gravel greater than 5mm.

Trail Width Range: 1800mm to 3000mm

Trail Gradient Range: Flat to 5% (Up to 8% allowed for ramps where required)

Class Two Walking Trails

These trails are for casual use, by people of all ages which are:

- Serviced by a vehicle parking area if appropriate.
- Reasonably flat and wide enough to accommodate two-way traffic.
- Will have a relatively smooth surface with minimal loose material.
- No waterbars or climb over stiles should be used. Steps should be minimal and if used should be limited.
- May use bridges and boardwalks.
- Should have resting places with seating approximately every 500m.
- May have lighting where provided in an urban area

Trail Surface: Consistent sealed surfaces, non-slip timber boardwalk or compacted aggregate - 20mm to dust stone.

Trail Width Range: 1200mm to 3000mm

Trail Gradient Range: Flat to 8%, desirable: 5% average

Class Three Walking Trails

- Typically relatively narrow undulating trails with moderate gradients.
- The surface may be variable including loose material and can be uneven in places.
- May include steps, protruding roots and rocks, water bars, stiles and gates.
- May include bridges, bog bridges and boardwalks.

Trail Surface: variable surfaces including some loose material not greater than 50mm in size

Trail Width Range: 600mm to 1200mm

Trail Gradient Range: Flat to 12%, desirable: 5% average.