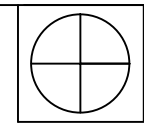


**Location:**  
 Distance to Site Boundary: 3626m  
 Horizontal Angle of View: 90 Degrees  
 Receptor Type: Minor Road / Church

**Viewpoint 7**



**Viewpoint 7 Southwest on L1026.** Photo viewpoint in a Southerly direction from an elevated location on the L1026 at St. Thomas, Church of Ireland, Rathmore, Aghnaccliffe. Whilst the ZTVI suggests potential visibility, due to intervening vegetation the proposal will not be visible from this location.

Local Landscape & Visual Effect from this View		Magnitude		Predicted Effect		Magnitude		Predicted Effect		Mitigation
Viewpoint	Landscape & Visual Sensitivity	(Establishment Stage)	(Establishment Stage)	(Operational Stage)	(Operational Stage)	(Restoration Stage)	(Restoration Stage)	(Restoration Stage)	(Restoration Stage)	
7	Medium (Landscape) Medium (Visual)	Medium	Moderate (A)	Low	Minor (A)	Very Low	Negligible (B)	Very Low	Negligible (B)	From this location no additional visual mitigation is required.
		Very Low	Negligible (A)	Very Low	Negligible (A)	Very Low	Negligible (B)	Very Low	Negligible (B)	
<b>client</b>	Breedon	<b>date</b>	April 2023	<b>scale</b>	NTS@A3	<b>by</b>	pjm	<b>notes</b>	Top image represents an actual eyelevel impression of the view printed at A3 & read at approx arms length. (A) = Adverse (B) = Beneficial (N) = Neutral	

Photo Viewpoint 7

**fig.9.12**

Aghnaccliffe  
 Quarry Extension  
 Co Longford

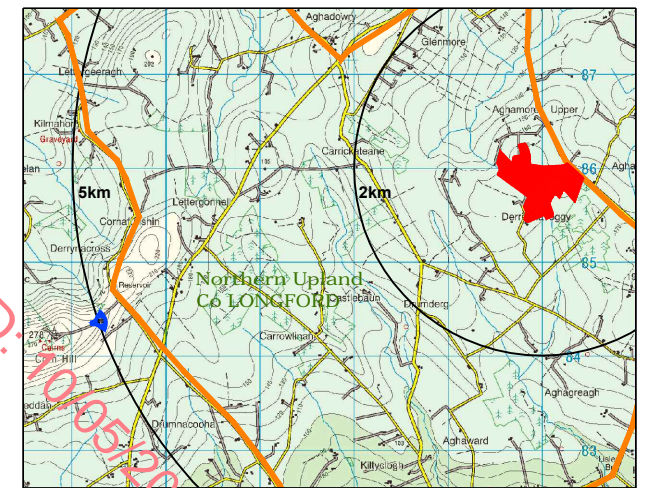
**mullin**  
 landscape architecture  
 559 Ormeau Road Belfast 07775752010  
 pete@mullin.ie mail@mullin.ie



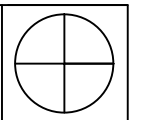
Eyelevel View



Panoramic View



**Location:** Northern Upland Co. LONGFORD  
**Distance to Site Boundary:** 5152m  
**Horizontal Angle of View:** 90 Degrees  
**Receptor Type:** Access Lane / Scenic Route



**Viewpoint 8** North from access lane off L1031. Photo viewpoint in a Northerly direction from an elevated location off the L1031 at Corn Hill. Whilst the ZTVI suggests potential visibility, due primarily to distance, both the proposed development and the existing operation are difficult to distinguish from this location. The proposals include relocation of stripped overburden partially visible from this location which would be planted with woodland species for habitat benefit.

Local Landscape & Visual Effect from this View		Mitigation						
Viewpoint	Landscape & Visual Sensitivity	Magnitude (Establishment Stage)	Predicted Effect (Establishment Stage)	Magnitude (Operational Stage)	Predicted Effect (Operational Stage)	Magnitude (Restoration Stage)	Predicted Effect (Restoration Stage)	Notes
8	Medium (Landscape) Medium (Visual)	Medium	Moderate (A) Very Low	Low	Minor (A) Negligible (A)	Very Low	Negligible (B) Negligible (B)	Relocation of stripped overburden to the south of the application area with woodland planting will result in establishment of a substantial screening.
client	Breedon	date	Feb 2023	scale	NTS@A3	by	pjm	notes: Top image represents an actual eyelevel impression of the view printed at A3 & read at approx arms length. (A) = Adverse (B) = Beneficial (N) = Neutral

Photo Viewpoint 8

**fig.9.13**

Aughnacliffe  
 Quarry Extension  
 Co Longford



**PLANT SCHEDULES**

W1 PIONEER WOODLAND MIX				@3750 Plants Per Ha			
% SPECIES	COMMON	SIZE	GROWN	HEIGHT/TRANSPLANT	DENSITY		
Pa 30	Pinus sylvestris	60-90cm	BR / Call	1 + 1 Branched	3750 Plants		
Sp 5	Salix cinerea	60-90cm	BR / Call	1 + 1 Branched	Per Hectare		
Bt 10	Betula pubescens	60-90cm	BR / Call	1 + 1 Branched	Per Hectare		
Bt 10	Betula pendula	60-90cm	BR / Call	1 + 1 Branched	Per Hectare		
Ap 20	Acer pseudoplatanus	60-90cm	BR / Call	1 + 1 Branched	Per Hectare		
Pa 20	Alnus glutinosa	60-90cm	BR / Call	1 + 1 Branched	Per Hectare		
Sp 5	Pinus spissa	60-90cm	BR / Call	1 + 1 Branched	Per Hectare		

W3 WIET WOODLAND MIX				@3750 Plants Per Ha			
% SPECIES	COMMON	SIZE	GROWN	HEIGHT/TRANSPLANT	DENSITY		
20	Salix cinerea	40-60cm	BR / Call	1 + 1 Branched	3750 Plants		
20	Betula pubescens	40-60cm	BR / Call	1 + 1 Branched	Per Hectare		
20	Alnus glutinosa	40-60cm	BR / Call	1 + 1 Branched	Per Hectare		
20	Salix fragilis	40-60cm	BR / Call	1 + 1 Branched	Per Hectare		

H1 LIVESTOCK HEDGEROW MIX				5 plants m <sup>2</sup> / m			
% SPECIES	COMMON	SIZE	GROWN	HEIGHT/TRANSPLANT	DENSITY		
Ua 70	Ulex europaeus	40-60cm	BR	1 + 1 Branched	172/ANSPLANTS		
Pa 30	Pinus spissa	40-60cm	BR	1 + 1 Branched	172/ANSPLANTS		

S1 SCRUB THORN MIX				100% Natural Regeneration			
% SPECIES	COMMON	SIZE	GROWN	HEIGHT/TRANSPLANT	DENSITY		
Ca 25	Crataegus monogyna	40-60cm	BR	1 + 1 Branched	100 plants/m <sup>2</sup>		
Ca 5	Corylus avellana	40-60cm	BR	1 + 1 Branched	100 plants/m <sup>2</sup>		
La 2	Lonicera xylosteum	40-60cm	BR	1 + 1 Branched	100 plants/m <sup>2</sup>		
Sc 5	Salix caprea	40-60cm	BR	1 + 1 Branched	100 plants/m <sup>2</sup>		
Va 5	Vernum opulus	40-60cm	BR	1 + 1 Branched	100 plants/m <sup>2</sup>		

LIGHT STANDARD TREES								
% SPECIES	COMMON	SIZE	HEIGHT	WEIGHT	APP. STEM	DENSITY		
Oj 34	Quercus robur	6-8m	2.5-2.75m	1.5 - 1.8m	As Shown			
Pa 33	Pinus Sylvestris	6-8m	2.5-2.75m	1.5 - 1.8m	As Shown			
Aa 33	Alnus glutinosa	6-8m	2.5-2.75m	1.5 - 1.8m	As Shown			

**G1 NURSE SPECIES RICH GRASSLAND**

This mix is a simple combination of low growing grasses that produce a short, open, 'heave-friendly' sward. The species and the low density of sward make it ideal as an open nurse sward which will allow natural regeneration and colonisation of species rich grassland whilst suppressing perennial weeds.

- Sowing Rate 12.5kg/ha @ 1.34g/m<sup>2</sup>
- 50% Festuca ovina
  - 25% Festuca rubra florida
  - 7.5% Deschampsia cespitosa
  - 7.5% Deschampsia flexuosa
  - 5% Agrostis capillaris
  - 5% Anthoxanthum odoratum

**Rehabilitation Concept**

The restoration of this proposed electric operation is focused on habitat creation. The site will be restored with a mix of habitats to create a rich and diverse landscape. Connectivity of part of a wider regional green infrastructure strategy should be explored with woodland and hedgerow a planting offering valuable green corridor connectivity.

Post extraction groundwater rebound will gradually fill over a number of years until it reaches a controlled official level of 160m AOD. From this level water will discharge northward or set out within the hydrological report. While the majority of rock face will be submerged, those that remain could offer site accommodation for nesting rapids. Steeper sided slopes would accommodate species rich grassland and native woodland. While the majority of the site will become a wetbody, all peripheral will be prepared, seeded and planted to create a mix of species rich grassland and native woodland.

The contained nature of this site offers potential to create a diverse habitat and potential nature reserve - subject to future planning permissions and agreements the site could offer a variety of objectives including nature hubs and passive recreation such as walking.

**Soil Management**

Soil Management: The site has been assessed and identified with some areas of high potential for soil improvement. As such, the following measures should be implemented prior to shipping operations and appropriately stored in an assigned location or where areas available for progressive restoration, should be carefully transported and spread.

**Soil Stratification:** Shipping should apply best practice guidance. **Soil Storage:** Location of shipped soils storage to be agreed on site. Storage berms should be clearly signed & protected. Storage berm height (maximum): 5m, temporarily seeded with rescue mix to suppress perennial weeds **Handling Soils:**

- Contamination: Do not mix topsoil with.
- Subsoil stone, hardcore, rubble or material from demolition work.
- Multiple handling: Keep to a minimum. Use or stockpile topsoil as soon as possible after shipping.
- Wet conditions: Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall or when it is wetter than the plastic limit less 5% to BS 1377-2.

**Spreading Soils:** Employ a contractor to spread, broken and remove before spreading topsoil. Use a minimum (maximum): 150mm (centimetre) from each layer before spreading the next.

**Grass seeds:** -Min 200 to 350mm. Cumb structure. Do not compact topsoil. Preserve a niche texture of separate visible curbs wherever possible.

**Proposed Woodland Planting**

Vegetation: 1.3 (Establishment) Mainstem shrub & woodland areas in a free condition (No herbicide application on site). Prune minor damage back to healthy wood and check for and treat disease. Cap up to replace damaged or failed plant material in accordance with the original planting specification, which shall form part of the management documentation. Check protective fencing, where used, and maintain in good condition.

**Year 1, 10**  
As conifers merge, remove guards and stakes and cease weed control. Thin out weakest specimens if planting becomes overcrowded and start to restrict growth. 1 no. basic-level inspection bi-annually by qualified professional (in autumn) to coincide with fungal felling to check physiological and biological condition.

At the end of this period determine if thinned to 5m to maintain continued grassland cover beneath. Felled trees to be used to create herbaceous **Proposed Grasslands**

**Preparation:** Ground preparation should follow the supplier's instructions with the removal of weeds, rubbish and stones of over 3mm diameter. The seed will be sown following extraction activities during times of sufficient warmth and moisture ideally in the spring or early autumn.

Most of the sown meadow species are perennial and will be slow to germinate and will not usually flower in the first growing season, there will often be a flush of annual weeds from the soil in the first growing season. This weed growth is easily controlled by topping or mowing (No herbicide applied on site)

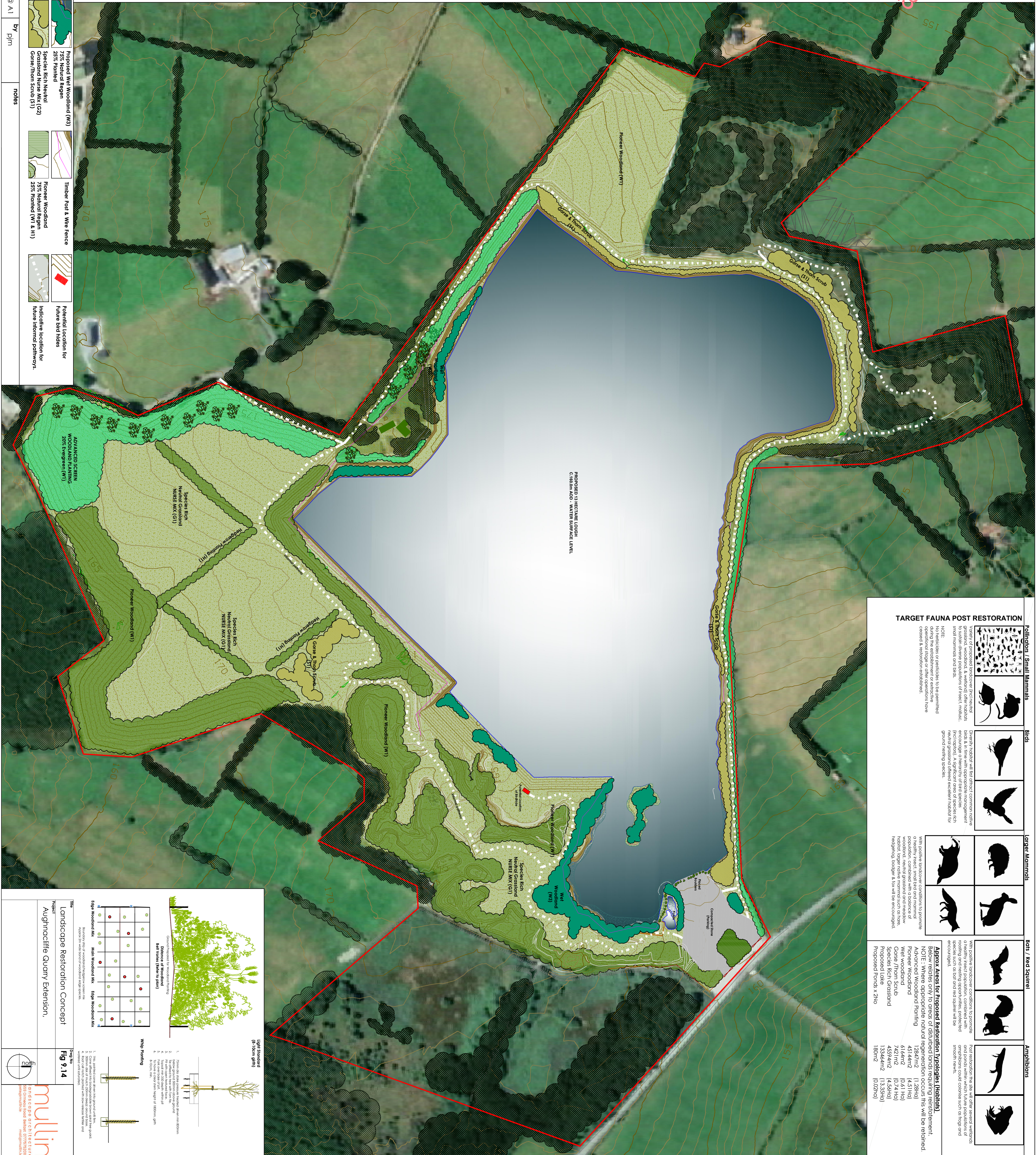
Avoid cutting in the spring and early summer if the mixture is autumn sown and contains Yellow Rattle, or if the mixture has been sown with a nurse of confided ornith. These sown annuals should be allowed to flower, then in mid-summer cut and remove the vegetation. It is important to cut back the orniths before they die back, set seed and collect; this cut will weed the developing meadow mixture and give it the space it needs to develop.

**Management:** Once established, sown areas can be managed in a number of ways which in association with soil fertility, will determine the character of the grassland. On poor stony soils one or two cuts at the end of the summer, or occasional light grazing, may be all that is required to maintain diversity and interest.

**Legend**

- Application Boundary
- Existing Hedgerow/Scrub & Woodland
- Proposed Advanced Screen Planting (W1 & H1) (100% Planted)
- Wetland Planted (100% Natural Colonization)
- Proposed Wet Woodland (W3) 75% Planted
- Species Rich Neutral Grassland Nurse Mix (G2)
- Timber Road & Wire Fence
- Pioneer Woodland 75% Natural Regen 25% Planted (W1 & H1)
- Potential location for future blind holes
- Indicative location for future informal pathways.

client: Breedon  
date: Jan 23  
scale: 1:1,500 @ A1  
by: pim  
notes:



**Pollinators / Small Mammals**

**Birds**

**Larger Mammals**

**Bats / Red Squirrel**

**Amphibians**

**Target Fauna Post Restoration**

Various icons representing different fauna species.

**Approx Areas for Proposed Restoration Typologies (Habitats)**

Typology	Area (m <sup>2</sup> )	Planting Density
Advanced Woodland Planting	12847m <sup>2</sup>	1.28/ha
Pioneer Woodland	45144m <sup>2</sup>	1.45/ha
Wet Woodland	61544m <sup>2</sup>	0.61/ha
Coarse / Thin Scrub	7421m <sup>2</sup>	0.74/ha
Species Rich Grassland	45397m <sup>2</sup>	1.45/ha
Proposed Lough	135344m <sup>2</sup>	1.35/ha
Proposed Roads x 2No	1859m <sup>2</sup>	1.86/ha

**NOTE:** While open to the public, the site will be managed as a nature reserve. The site will be managed as a nature reserve. The site will be managed as a nature reserve.

**Landscape Restoration Concept**

**Fig 9.14**

**Augnaccliff Quarry Extension.**

**Whip Planting**

**Light Standard (6-10cm girth)**

**mullin**

mullin architects