

**legend**

-  Application Area
-  Distance from Site in Kilometers

<b>client</b>	<b>date</b>	<b>scale</b>	<b>by</b>	<b>notes</b>
McTigues	Jan. 22	1:50000@A3	pm	

**Location & Context**

**fig. 9.1**

Clonascragh  
Sand & Gravel Pit,  
Taum







**Viewpoint 1a North from high point within the application area. (Intervisibility Image)**

This image was taken in an Northerly direction from the application area to illustrate potential visibility from the site, conversely this illustrates locations within the surrounding landscape from which the site may be seen. This is known as intervisibility and forms the basis of a ZTVI (the site's Zone of Theoretical Visual Influence or Visual Envelope). The approximate visual envelope is reflected in Figure 9.2.

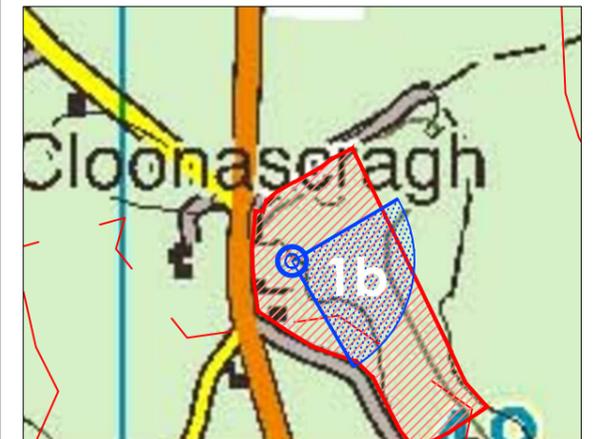


**Location:** Viewpoint 1a  
**Distance to Site Boundary:** N/A  
**Horizontal Angle of View:** 90 Degrees



**Viewpoint 1b East from high point within the application area. (Intervisibility Image)**

This image was taken in an Easterly direction from the application area to illustrate what is visible from the site, conversely this illustrates points within the surrounding landscape from which the site may be seen. This is known as intervisibility and forms the basis of a ZTVI (the site's Zone of Theoretical Visual Influence or Visual Envelope). The approximate visual envelope is reflected in Figure 9.2.



**Location:** Viewpoint 1b  
**Distance to Site Boundary:** N/A  
**Horizontal Angle of View:** 90 Degrees



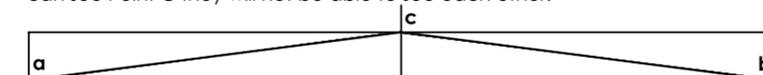
images to illustrate approximate extent of visual envelope  
 (Refer to Figure 9.2 Visual Analysis for ZTVI)

images for illustrative purposes

images for illustrative purposes

**notes**

Lines of Intervisibility  
 Intervisibility lines (IV) exist where a terrain feature, such as a ridgeline or hill interrupts the line of sight along the ground and prevents observation of the lands beyond.  
 An observer positioned on a ridgeline of an intervisibility line (Point C) can see in both directions. However, although observers positioned at either Point A or B can see Point C they will not be able to see each other.



client  
 McTigues

date  
 Feb. 22

by  
 pjm

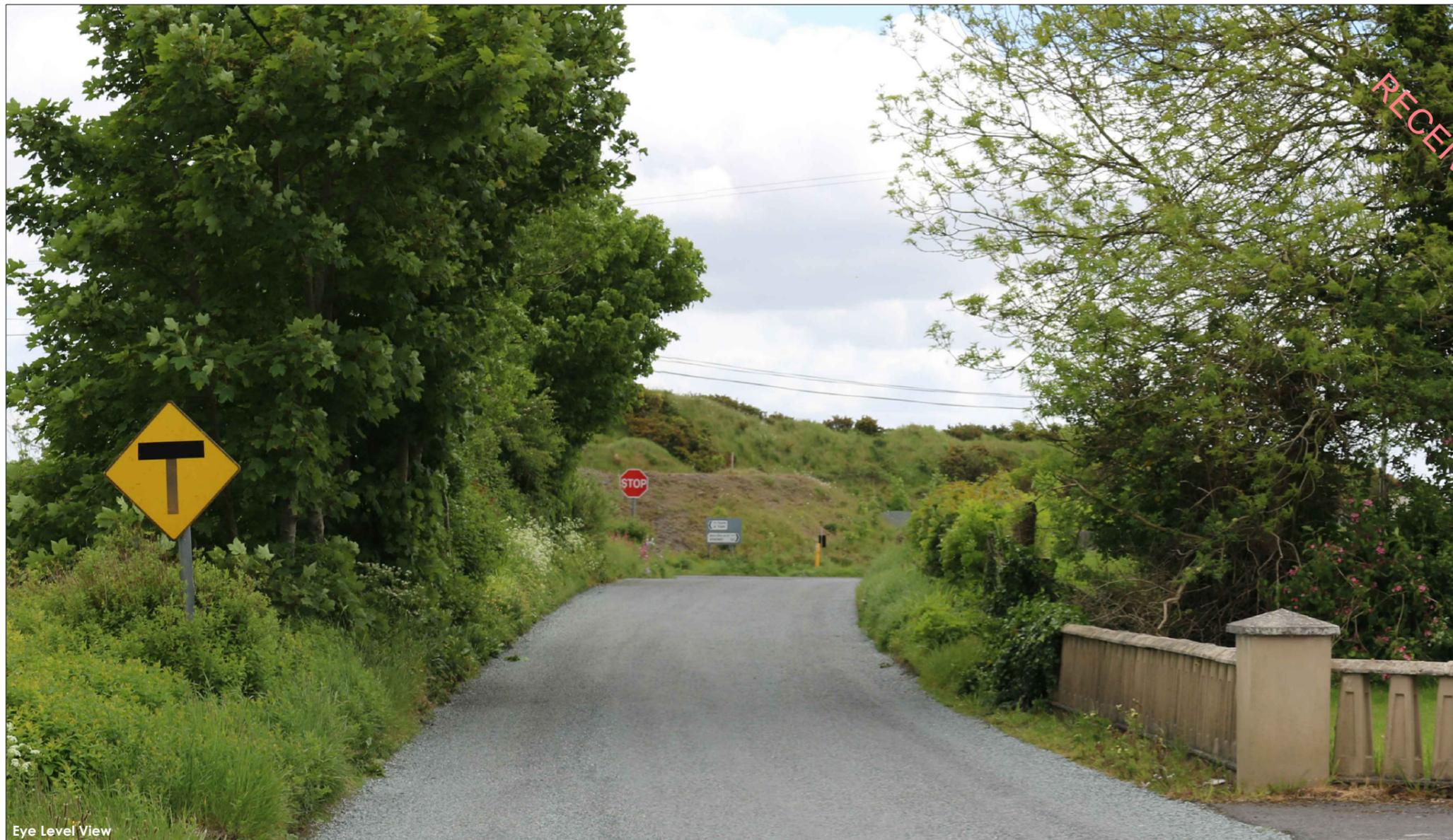
Landscape Analysis

**fig.9.3**



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Eye Level View



Panoramic View



**Location:**  
 Distance to Extraction Area: 166m  
 Horizontal Angle of View: 90 Degrees  
 Image Direction: Southeast  
 Receptor Type: Direct View / Road Junction / Sequential

**Relevant Definitions of Effect** (Refer to LVIA for all Assessment Criteria)

**Landscape Effects**  
**Major**  
 Substantial alteration to elements/features of the baseline (pre-develop) conditions. Notably affect an area of recognised national landscape quality. Substantial alteration to the character, scale or pattern of the landscape.  
**Moderate**  
 Alteration to elements/features of the baseline conditions. Affects an area of recognised regional landscape quality. Alteration to the character, scale or pattern of the local landscape.  
**Minor**  
 A minor shift away from baseline conditions. The Development partially changes the character of the site without compromising the overall existing landscape character area.  
**Negligible**  
 No or very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable.

**Visual Effects**  
**Major**  
 Major/substantial alteration to elements/features of the baseline (pre-development) conditions. Where the proposed development would cause a very noticeable alteration in the existing view. This would typically occur where the proposed development closes an existing view of a landscape of regional or national importance and the proposed development would dominate the future view.  
**Moderate**  
 Alteration to one or more elements/features of the baseline conditions such that post development character/attributes of the baseline will be materially changed. This would typically occur where the proposed development closes an existing view of a local landscape and the proposed development would be prominent in the future view.  
**Minor**  
 A minor shift away from baseline conditions. This occurs where change arising from the alteration would be discernible but the underlying character / composition / attributes of the baseline condition will be similar to the pre-development. It would also occur where the proposed development newly appears in the view but not as a point of principal focus or where the proposed development is closely located to the viewpoint but seen at an acute angle and at the extremity of the overall view.  
**Negligible**  
 Where there is no discernible improvement or deterioration in the existing Landscape Character Area or the view.

**Viewpoint 2 View East from L6141** - View in the direction of the subject site from minor road running perpendicular to Athenry Road (R347). From this location disturbed ground associated with the existing works is clearly visible. The proposals include reduction in height, profiling and planting these landforms to integrate more naturally with the relatively level / low lying topography typical of the area. Whilst visual disturbance is expected during the establishment phase, once complete these proposed operations will result in beneficial outcomes in visual terms from this location.

Local Landscape & Visual Effect from this View		Predicted Effect (Establishment Stage)		Predicted Effect (Operational Stage)		Predicted Effect (Restoration Stage)		Mitigation
Viewpoint	Landscape & Visual Sensitivity	Magnitude	Predicted Effect	Magnitude	Predicted Effect	Magnitude	Predicted Effect	
2	Low (Landscape) Medium (Visual)	Low Medium	Negligible Moderate	Low Low	Negligible Minor	Medium Low	Minor Minor	Lowering and profiling existing boundary overburden tips. Planting with woodland and hedgerow species.

<b>client</b> McTigues	<b>date</b> Feb. 22	<b>scale</b> 1:15000@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.
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Photo Viewpoint 2

fig.9.5



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Eye Level View



Panoramic View



**Location:**  
 Distance to Extraction Area: 572m  
 Horizontal Angle of View: 90 Degrees  
 Image Direction: Southeast  
 Receptor Type: Sequential View / Minor Road

**Relevant Definitions of Effect** (Refer to LVIA for all Assessment Criteria)

**Landscape Effects**

Major

Substantial alteration to elements/features of the baseline (pre-develop) conditions. Notably affect an area of recognised national landscape quality. Substantial alteration to the character, scale or pattern of the landscape.

Moderate

Alteration to elements/features of the baseline conditions. Affects an area of recognised regional landscape quality. Alteration to the character, scale or pattern of the local landscape.

Minor

A minor shift away from baseline conditions. The Development partially changes the character of the site without compromising the overall existing landscape character area.

Negligible

No or very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable.

**Visual Effects**

Major

Major/substantial alteration to elements/features of the baseline (pre-development) conditions. Where the proposed development would cause a very noticeable alteration in the existing view.

This would typically occur where the proposed development closes an existing view of a landscape of regional or national importance and the proposed development would dominate the future view.

Moderate

Alteration to one or more elements/features of the baseline conditions such that post development character/attributes of the baseline will be materially changed.

This would typically occur where the proposed development closes an existing view of a local landscape and the proposed development would be prominent in the future view.

Minor

A minor shift away from baseline conditions. This occurs where change arising from the alteration would be discernible but the underlying character / composition / attributes of the baseline condition will be similar to the pre-development.

It would also occur where the proposed development newly appears in the view but not as a point of principal focus or where the proposed development is closely located to the viewpoint but seen at an acute angle and at the extremity of the overall view.

Negligible

Where there is no discernible improvement or deterioration in the existing Landscape Character Area or the view.

**Viewpoint 3 View East from L6141** - View in the direction of the subject site from minor road running perpendicular to Athenry Road (R347). From this location a small portion of disturbed ground associated with the existing works is visible. The proposals include reduction in height, profiling and planting these landforms to integrate more naturally with the relatively level / low lying topography typical of the area. Whilst visual disturbance is expected during the establishment phase, once complete these proposed operations will result in beneficial outcomes in visual terms from this location.

Viewpoint	Local Landscape & Visual Effect from this View Landscape & Visual Sensitivity	Predicted Effect (Establishment Stage)		Predicted Effect (Operational Stage)		Predicted Effect (Restoration Stage)		Mitigation
		Magnitude	Predicted Effect	Magnitude	Predicted Effect	Magnitude	Predicted Effect	
3	Low (Landscape) Medium (Visual)	Low	Negligible	Low	Negligible	Medium	Minor	Lowering and profiling existing boundary overburden tips. Planting with woodland and hedgerow species.
		Low	Minor	Low	Minor	Low	Minor	

<b>client</b> McTigues	<b>date</b> Feb. 22	<b>scale</b> 1:15000@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.
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Photo Viewpoint 3

fig.9.6



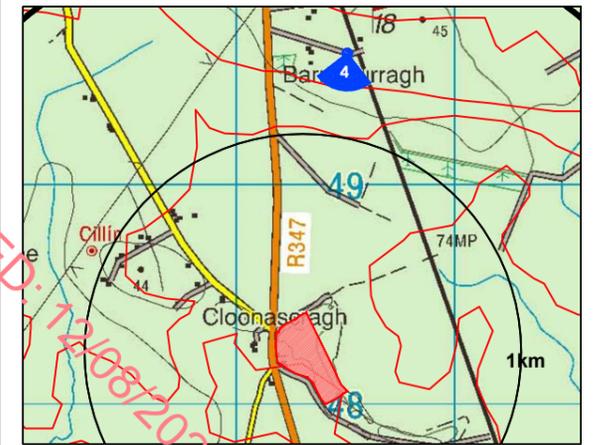
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Eye Level View



Panoramic View



**Location:**  
 Distance to Extraction Area: 1238m  
 Horizontal Angle of View: 90 Degrees  
 Image Direction: South  
 Receptor Type: Minor Access Road  
**Viewpoint 4**  
 Sequential Oblique

**Relevant Definitions of Effect** (Refer to LVIA for all Assessment Criteria)

**Landscape Effects**

**Major**

Substantial alteration to elements/features of the baseline (pre-develop) conditions. Notably affect an area of recognised national landscape quality. Substantial alteration to the character, scale or pattern of the landscape.

**Moderate**

Alteration to elements/features of the baseline conditions. Affects an area of recognised regional landscape quality. Alteration to the character, scale or pattern of the local landscape.

**Minor**

A minor shift away from baseline conditions. The Development partially changes the character of the site without compromising the overall existing landscape character area.

**Negligible**

No or very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable.

**Visual Effects**

**Major**

Major/substantial alteration to elements/features of the baseline (pre-development) conditions. Where the proposed development would cause a very noticeable alteration in the existing view. This would typically occur where the proposed development closes an existing view of a landscape of regional or national importance and the proposed development would dominate the future view.

**Moderate**

Alteration to one or more elements/features of the baseline conditions such that post development character/attributes of the baseline will be materially changed. This would typically occur where the proposed development closes an existing view of a local landscape and the proposed development would be prominent in the future view.

**Minor**

A minor shift away from baseline conditions. This occurs where change arising from the alteration would be discernible but the underlying character / composition / attributes of the baseline condition will be similar to the pre-development.

It would also occur where the proposed development newly appears in the view but not as a point of principal focus or where the proposed development is closely located to the viewpoint but seen at an acute angle and at the extremity of the overall view.

**Negligible**

Where there is no discernible improvement or deterioration in the existing Landscape Character Area or the view.

**Viewpoint 4 View South from Access to golf course** - View in the direction of the subject site from access road running perpendicular to Athery Road (R347). From this elevated location a portion of the existing disturbed ground associated with the existing works is visible, however the application area would be largely screened from this location by a large existing shed structure on lands to the north adjoining the subject site.

Photo Viewpoint 4

Local Landscape & Visual Effect from this View		Magnitude Predicted Effect		Magnitude Predicted Effect		Magnitude Predicted Effect		Mitigation
Viewpoint	Landscape & Visual Sensitivity	(Establishment Stage)	(Establishment Stage)	(Operational Stage)	(Operational Stage)	(Restoration Stage)	(Restoration Stage)	
4	Low (Landscape) Medium (Visual)	Low	Negligible	Low	Negligible	Medium	Minor	Lowering and profiling existing boundary overburden tips. Planting with woodland and hedgerow species.
		Low	Minor	Low	Minor	Low	Negligible	
<b>client</b>	McTigues	<b>date</b>	Feb. 22	<b>scale</b>	1:15000@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.

fig.9.7



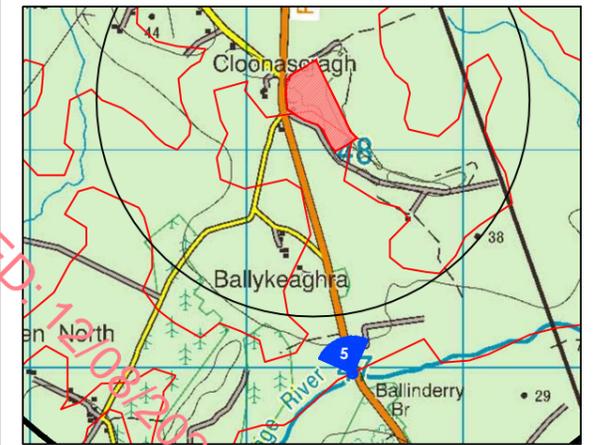
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Eye Level View



Panoramic View



**Location:** Viewpoint 5  
 Distance to Extraction Area: 1241 m  
 Horizontal Angle of View: 90 Degrees  
 Image Direction: North  
 Receptor Type: R347 Road  
 Sequential Oblique

**Relevant Definitions of Effect** (Refer to LVIA for all Assessment Criteria)

**Landscape Effects**

Major

Substantial alteration to elements/features of the baseline (pre-develop) conditions. Notably affect an area of recognised national landscape quality. Substantial alteration to the character, scale or pattern of the landscape.

Moderate

Alteration to elements/features of the baseline conditions. Affects an area of recognised regional landscape quality. Alteration to the character, scale or pattern of the local landscape.

Minor

A minor shift away from baseline conditions. The Development partially changes the character of the site without compromising the overall existing landscape character area.

Negligible

No or very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable.

**Visual Effects**

Major

Major/substantial alteration to elements/features of the baseline (pre-development) conditions. Where the proposed development would cause a very noticeable alteration in the existing view. This would typically occur where the proposed development closes an existing view of a landscape of regional or national importance and the proposed development would dominate the future view.

Moderate

Alteration to one or more elements/features of the baseline conditions such that post development character/attributes of the baseline will be materially changed. This would typically occur where the proposed development closes an existing view of a local landscape and the proposed development would be prominent in the future view.

Minor

A minor shift away from baseline conditions. This occurs where change arising from the alteration would be discernible but the underlying character / composition / attributes of the baseline condition will be similar to the pre-development.

It would also occur where the proposed development newly appears in the view but not as a point of principal focus or where the proposed development is closely located to the viewpoint but seen at an acute angle and at the extremity of the overall view.

Negligible

Where there is no discernible improvement or deterioration in the existing Landscape Character Area or the view.

**Viewpoint 5 View North from R347 bridge over Grange River** - View in the direction of the subject site from the R347. From this location the existing development is completely screened by intervening woodland. Whilst the ZTVI model suggests potential visibility from this location, the existing structure planting (which does not form part of the ZTVI model) will completely screen the proposal.

Photo Viewpoint 5

Local Landscape & Visual Effect from this View		Magnitude Predicted Effect		Magnitude Predicted Effect		Magnitude Predicted Effect		Mitigation
Viewpoint	Landscape & Visual Sensitivity	(Establishment Stage)	(Establishment Stage)	(Operational Stage)	(Operational Stage)	(Restoration Stage)	(Restoration Stage)	
5	Low (Landscape) Medium (Visual)	Low	Negligible	Low	Negligible	Medium	Minor	Lowering and profiling existing boundary overburden tips. Planting with woodland and hedgerow species.
		Very Low	Negligible	Very Low	Negligible	Very Low	Negligible	
<b>client</b>	McTigues	<b>date</b>	Feb. 22	<b>scale</b>	1:15000@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.

fig.9.8



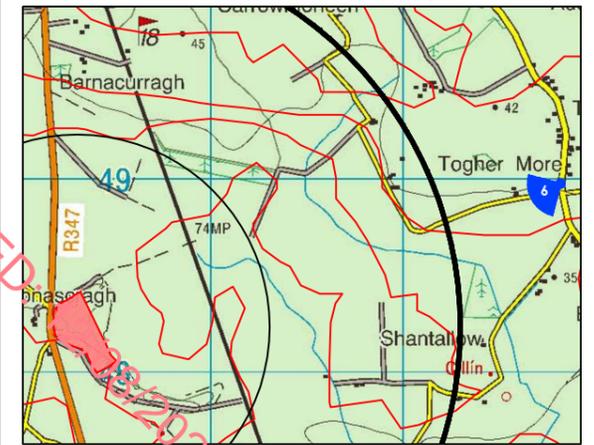
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Eye Level View



Panoramic View



**Location:**  
 Distance to Extraction Area: 2440m  
 Horizontal Angle of View: 90 Degrees  
 Image Direction: Southwest  
 Receptor Type: Minor Road  
 Sequential Oblique

**Relevant Definitions of Effect** (Refer to LVIA for all Assessment Criteria)

**Landscape Effects**  
**Major**  
 Substantial alteration to elements/features of the baseline (pre-develop) conditions. Notably affect an area of recognised national landscape quality. Substantial alteration to the character, scale or pattern of the landscape.  
**Moderate**  
 Alteration to elements/features of the baseline conditions. Affects an area of recognised regional landscape quality. Alteration to the character, scale or pattern of the local landscape.  
**Minor**  
 A minor shift away from baseline conditions. The Development partially changes the character of the site without compromising the overall existing landscape character area.  
**Negligible**  
 No or very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable.

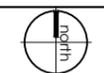
**Visual Effects**  
**Major**  
 Major/substantial alteration to elements/features of the baseline (pre-development) conditions. Where the proposed development would cause a very noticeable alteration in the existing view. This would typically occur where the proposed development closes an existing view of a landscape of regional or national importance and the proposed development would dominate the future view.  
**Moderate**  
 Alteration to one or more elements/features of the baseline conditions such that post development character/attributes of the baseline will be materially changed. This would typically occur where the proposed development closes an existing view of a local landscape and the proposed development would be prominent in the future view.  
**Minor**  
 A minor shift away from baseline conditions. This occurs where change arising from the alteration would be discernible but the underlying character / composition / attributes of the baseline condition will be similar to the pre-development. It would also occur where the proposed development newly appears in the view but not as a point of principal focus or where the proposed development is closely located to the viewpoint but seen at an acute angle and at the extremity of the overall view.  
**Negligible**  
 Where there is no discernible improvement or deterioration in the existing Landscape Character Area or the view.

**Viewpoint 6** View Southeast from junction of Togher More Road and L2114 - View in the direction of the subject site from junction with L2114. From this location the existing development is completely screened by intervening structures. Whilst the ZTVI model suggests potential visibility from this location field survey confirms the proposals will be completely screened.

Local Landscape & Visual Effect from this View		Predicted Effect (Establishment Stage)		Predicted Effect (Operational Stage)		Predicted Effect (Restoration Stage)		Mitigation
Viewpoint	Landscape & Visual Sensitivity	Magnitude	Predicted Effect	Magnitude	Predicted Effect	Magnitude	Predicted Effect	
		(Establishment Stage)	(Establishment Stage)	(Operational Stage)	(Operational Stage)	(Restoration Stage)	(Restoration Stage)	
6	Low (Landscape) Medium (Visual)	Low Very Low	Negligible Negligible	Low Very Low	Negligible Negligible	Medium Very Low	Minor Negligible	Lowering and profiling existing boundary overburden tips. Planting with woodland and hedgerow species.
<b>client</b>	McTigues	<b>date</b>	Feb. 22	<b>scale</b>	1:15000@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.

Photo Viewpoint 6

fig.9.9



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**Restoration Concept**  
 Site Restoration is focused on habitat creation along peripheral slopes incorporating species rich grassland, sand martin habitat and woodland with reinstatement to agricultural grazing land within the former quarry floor.

Slooper slopes would accommodate replacement sand martin habitat species rich grassland and native woodland/ scrub.

Post-extraction, areas would be prepared through cross ripped and harrowing to establish free drainage. These operations would be followed by light filling prior to grass seeding as illustrated.

**Proposed Management of Woodland Planting - Years 1-5**

Maintain shrub & woodland areas in a weed free condition  
 Prune minor damage back to healthy wood and check for and treat disease.  
 Gap 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. As canopies merge into years 4-5, remove guards and stakes and cease weed control. Thin out weakest specimens if planting becomes overcrowded and start to restrict growth.  
 At the end of this period determine if thinned to 5m to maintain continued grassland cover beneath. Felled trees to be used to create hibernacula.

**Proposed Grasslands**

**Preparation**  
 Ground preparation should follow the supplier's instructions with the removal of weeds, rubbish and stones of over 75mm diameter. The seed will be sown following extraction activities during times of sufficient warmth and moisture, ideally in late spring or early autumn.

**First year management**  
 Most of the sown meadow species are perennial and will be slow to germinate and grow 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 cornfield annuals. These sown annuals should be allowed to flower, then in mid-summer cut and remove the vegetation. It is important to cut back the annuals before they die back, set seed and collapse; this will reveal the developing meadow mixture and give it the space it needs to develop.

**Management once established**  
 In the second and subsequent years sown areas can be managed in a number of ways which, in association with soil fertility, will determine the character of the grassland.  
 On shallow soils one or two cuts in the summer, or occasional light grazing, may be all that is required to maintain diversity and interest.  
 On deeper soils best results are usually obtained by traditional meadow management based around a main summer hay cut in combination with autumn and possibly spring mowing or grazing. Meadow grassland is not cut or grazed from spring through to late July/August to give the sown species an opportunity to flower.  
 Refinement of options would tailor by the project and form part of future management plans.  
 After flowering in July or August take a 'hay cut', cut back with a scythe, petrol trimmer or tractor mower to c. 50mm. Leave the 'hay' to dry and shed seed for 1-7 days before remove from site.  
 Mow or graze the re-growth through to late autumn/winter to c. 50mm and again in spring if needed.

**H1 LIVESTOCK HEDGEROW MIX**

Code	%	SPECIES	COMMON	SIZE	GROWN	HEIGHT/TRANSPL	DENSITY
Cr	75	Crataegus monogyna	Hawthorn	40-60cm	BR	1 + 1 Branched	5 per lin m
Ca	5	Corylus avellana	Hazel	40-60cm	BR	1 + 1 Branched	1 per lin m random selection & distribution (See Detail)
Psp	5	Prunus spinosa	Blackthorn	40-60cm	BR	1 + 1 Branched	
Ia	5	Ilex aquifolium	Holly	40-60cm	BR	1 + 1 Branched	
Sc	5	Salix caprea	Goat Willow	40-60cm	BR	1 + 1 Branched	
Vo	5	Viburnum opulus	Guelder Rose	40-60cm	BR	1 + 1 Branched	

**G1 TRADITIONAL GRAZING PASTURE MIX (Applied to Quarry Floor Post Restoration)**

Contains a selection of grasses and clovers which complement each other to produce a productive sward. May not be as high yielding as modern ryegrass leys but is more stable & dependable over a range of soil and weather conditions, with less need for inputs of fertiliser and chemicals. It is ideally suited to low input extensive grazing systems.

Grasses 95%

%	Latin name	Common name
12	Cynosurus cristatus	Crested Dogstail
9	Dactylis glomerata	Cocksfoot
12	Festuca rubra	Strong creeping Red-fescue
35	Lolium perenne	Perennial Ryegrass
6	Phleum bertolonii	Smaller Cat's-tail
9	Poa pratensis	Smooth-stalked Meadow-grass
12	Schedonorus pratensis	Meadow Fescue

Clovers, legumes and herbs 5%

%	Latin name	Common name
3	Trifolium pratense	Red Clover (Ag)
2	Trifolium repens	Small Leaved White Clover (Ag)

**Pollinators / Small Mammals**

**Birds**

Variety of proposed landcover (incl acid grassland, woodland, hazel copse, & wetland) offer habitats to sustain diverse populations of insect, mollusc, small mammals and birds.

NOTE:  
 No herbicides or pesticides to be permitted during the establishment or extractive operational stage or after operations have ceased & restoration established.

**Larger Mammals**

**Amphibians**

With positive landcover conditions to promote a healthy insect, small bird and mammal population, combined with a balance of woodland, acid grassland and meadow habitat, larger native mammal such as hare, hedgehog, badger & fox will be encouraged.

Smooth newts and frog populations are present in the area. The post restoration proposal will include wetland & new ponds for newts and other amphibians.

**Legend**

- Existing Regenerative Trees & Scrub
- Marginal / Aquatic / Wetland (Natural colonization)
- Areas of Regenerative Woodland / Gorse / Thorn Scrub
- Proposed Grazing Pasture Mix (G1)
- Sand faces retained for Sandmartin colonies
- Proposed Native Hedgerow (H1)

client: Mc Iguess | job no.: 20.102 | date: Feb. 22 | scale: 1:1000 @A1 | by: pjm | notes: | Rev: |

Restoration Proposal  
 CLOONASCRAUGH, TUAM, CO. GALWAY

MDA -22-102-100  
 Fig. 9.10

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