

14 Landscape and Visual

14.1 Introduction

This Landscape and Visual Assessment (LVIA) has been prepared in respect of a planning application for proposed modifications to the West Offaly Power (WOP) Station and associated ash disposal facility (ADF) to facilitate the continued operation of these facilities, the phased transition of that station to exclusive firing with biomass and the extension of the ADF, herein referred to as “the proposed development”, which is described in detail in Chapter 4 of this EIAR.

As the existing development is subject to the condition that all existing activity ceases in December 2020, the potential impacts of continued operation of WOP station and the ADF will also be assessed.

The LVIA report describes the landscape context of the proposed development and assesses the likely landscape and visual impacts on the receiving environment. Although closely linked, landscape and visual impacts are assessed separately.

Landscape Impact Assessment (LIA) relates to assessing effects of a Development on the landscape as a resource in its own right and is concerned with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character.

Visual Impact Assessment (VIA) relates to assessing effects of a development on specific views and on the general visual amenity experienced by people. This deals with how the surroundings of individuals or groups of people may be specifically affected by changes in the content and character of views as a result of the change or loss of existing elements of the landscape and/or introduction of new elements. Visual impacts may occur from; Visual Obstruction (blocking of a view, be it full, partial or intermittent) or; Visual Intrusion (interruption of a view without blocking).

Cumulative landscape and visual impact assessment is concerned with additional changes to the landscape or visual amenity caused by the proposed development in conjunction with other developments (associated or separate to it), or actions that occurred in the past, present or are likely to occur in the foreseeable future.

This LVIA uses methodology as prescribed in the following guidance documents:

- Environmental Protection Agency (EPA) publication ‘Guidelines on the Information to be contained in Environmental Impact Assessment Reports’ (updated draft 2017) and the accompanying Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (2017);
- Landscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape and Visual Impact Assessment (2013).

14.2 Methodology

Production of this Landscape and Visual Impact Assessment involved:

- A desktop study to establish an appropriate study area, and relevant landscape and visual designations in the Offaly County Development Plan (CDP) 2014-2020, the Roscommon County Development Plan 2014-2020 and the Galway County Development Plan 2015-2021, as well as other sensitive visual receptors. In addition, Fáilte Ireland’s “Guidelines on the Treatment of Tourism in an Environmental Impact Statement” was consulted. This stage culminates in the selection of a set of potential viewpoints from which to study the effects of the proposal.
- Fieldwork to establish the landscape character of the receiving environment and to confirm and refine the set of viewpoints to be used for the visual assessment stage.
- Assessment of the significance of the landscape impact of the development as a function of landscape sensitivity weighed against the magnitude of the landscape impact.
- Assessment of the significance of the visual impact of the development as a function of visual receptor sensitivity weighed against the magnitude of the visual impact. This aspect of the assessment is supported by photomontages prepared in respect of the selected viewpoints.
- Incorporation of mitigation measures to reduce potential impacts and estimation of residual impacts once mitigation has become established.

14.2.1 Landscape Impact Assessment Criteria

When assessing the potential impacts on the landscape resulting from a proposed development, the following criteria are considered:

- Landscape character, value and sensitivity;
- Magnitude of likely impacts;
- Significance of landscape effects.

The sensitivity of the landscape to change is the degree to which a particular landscape receptor (Landscape Character Area (“LCA”) or feature) can accommodate changes or new elements without unacceptable detrimental effects to its essential characteristics. Landscape Value and Sensitivity is classified using the following criteria set out in **Table 14-1**.

Table 14-1 Landscape Value and Sensitivity

Sensitivity	Description
Very High	Areas where the landscape character exhibits a very low capacity for change in the form of development. Examples of which are high value landscapes, protected at an international or national level (World Heritage Site/National

	Park), where the principal management objectives are likely to be protection of the existing character.
High	Areas where the landscape character exhibits a low capacity for change in the form of development. Examples of which are high value landscapes, protected at a national or regional level (Area of Outstanding Natural Beauty), where the principal management objectives are likely to be considered conservation of the existing character.
Medium	Areas where the landscape character exhibits some capacity and scope for development. Examples of which are landscapes, which have a designation of protection at a county level or at non-designated local level where there is evidence of local value and use.
Low	Areas where the landscape character exhibits a higher capacity for change from development. Typically this would include lower value, non-designated landscapes that may also have some elements or features of recognisable quality, where landscape management objectives include, enhancement, repair and restoration.
Negligible	Areas of landscape character that include derelict, mining, industrial land or are part of the urban fringe where there would be a reasonable capacity to embrace change or the capacity to include the development proposals. Management objectives in such areas could be focused on change, creation of landscape improvements and/or restoration to realise a higher landscape value.

The magnitude of a predicted landscape impact is a product of the scale, extent or degree of change that is likely to be experienced as a result of the proposed development. The magnitude takes into account whether there is a direct physical impact resulting from the loss of landscape components and/or a change that extends beyond the Application Site boundary that may have an effect on the landscape character of the area. **Table 14-2** refers.

Table 14-2 Magnitude of Landscape Impacts

Magnitude of Impact	Description
Very High	Change that would be large in extent and scale with the loss of critically important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an overall change of the landscape in terms of character, value and quality.
High	Change that would be more limited in extent and scale with the loss of important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an overall change of the landscape in terms of character, value and quality.

Magnitude of Impact	Description
Medium	Changes that are modest in extent and scale involving the loss of landscape characteristics or elements that may also involve the introduction of new uncharacteristic elements or features that would lead to changes in landscape character, and quality.
Low	Changes affecting small areas of landscape character and quality, together with the loss of some less characteristic landscape elements or the addition of new features or elements.
Negligible	Changes affecting small or very restricted areas of landscape character. This may include the limited loss of some elements or the addition of some new features or elements that are characteristic of the existing landscape or are hardly perceivable.

The significance of a landscape impact is based on a balance between the sensitivity of the landscape receptor and the magnitude of the impact. The significance of landscape impacts is arrived at using the following matrix set out in **Table 14-3**.

Table 14-3 Impact Significance Matrix

Sensitivity of Receptor					
Scale/Magnitude	<i>Very High</i>	<i>High</i>	<i>Medium</i>	<i>Low</i>	<i>Negligible</i>
Very High	Profound	Profound-substantial	Substantial	Moderate	Minor
High	Profound-substantial	Substantial	Substantial-moderate	Moderate-slight	Slight-imperceptible
Medium	Substantial	Substantial-moderate	Moderate	Slight	Imperceptible
Low	Moderate	Moderate-slight	Slight	Slight-imperceptible	Imperceptible
Negligible	Slight	Slight-imperceptible	Imperceptible	Imperceptible	Imperceptible

Note: The significance matrix provides an indicative framework from which the significance of impact is derived. The significance judgement is ultimately determined by the assessor using professional judgement. Due to nuances within the constituent sensitivity and magnitude judgements, this may be up to one category higher or lower than indicated by the matrix. Judgements indicated in orange are considered to be ‘significant impacts’ in EIAR terms.

14.2.1.1 Visual Impact Assessment Criteria

As with the landscape impact, the visual impact of the proposed development will be assessed as a function of sensitivity versus magnitude. In this instance the sensitivity of the visual receptor, weighed against the magnitude of the visual effect.

14.2.1.2 Sensitivity of Visual Receptors

Unlike landscape sensitivity, the sensitivity of visual receptors has an anthropocentric basis. It considers factors such as the perceived quality and values associated with the view, the landscape context of the viewer, the likely activity they are engaged in and whether this heightens their awareness of the surrounding landscape. A list of the factors considered by the assessor in estimating the level of sensitivity for a particular visual receptor is outlined below and used in **Table 14-16** below to establish visual receptor sensitivity at each VRP:

1. **Susceptibility of Receptors** - In accordance with the Institute of Environmental Management and Assessment (“IEMA”) Guidelines for Landscape and Visual Assessment (3rd edition 2013) visual receptors most susceptible to changes in views and visual amenity are;

- *“Residents at home;*
- *People, whether residents or visitors, who are engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focussed on the landscape and on particular views;*
- *Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience;*
- *Communities where views contribute to the landscape setting enjoyed by residents in the area; and*
- *Travellers on road rail or other transport routes where such travel involves recognised scenic routes and awareness of views is likely to be heightened”.*

Visual receptors that are less susceptible to changes in views and visual amenity include:

- *“People engaged in outdoor sport or recreation, which does not involve or depend upon appreciation of views of the landscape; and*
- *People at their place of work whose attention may be focussed on their work or activity, not their surroundings and where the setting is not important to the quality of working life”.*

2. **Recognised scenic value of the view** (County Development Plan designations, guidebooks, touring maps, postcards etc). These represent a consensus in terms of which scenic views and routes within an area are strongly valued by the population because in the case of County Developments Plans, for example, a public consultation process is required;

3. **Views from within highly sensitive landscape areas.** Again, highly sensitive landscape designations are usually part of a county's Landscape Character Assessment, which is then incorporated within the County Development Plan and is therefore subject to the public consultation process. Viewers within such areas are likely to be highly attuned to the landscape around them;
4. **Primary views from dwellings.** A proposed Development might be seen from anywhere within a particular residential property with varying degrees of sensitivity. Therefore, this category is reserved for those instances in which the design of dwellings or housing estates, has been influenced by the desire to take in a particular view. This might involve the use of a slope or the specific orientation of a house and/or its internal social rooms and exterior spaces;
5. **Intensity of use, popularity.** This relates to the number of viewers likely to experience a view on a regular basis and whether this is significant at county or regional scale;
6. **Connection with the landscape.** This considers whether or not receptors are likely to be highly attuned to views of the landscape i.e. commuters hurriedly driving on busy national route versus hill walkers directly engaged with the landscape enjoying changing sequential views over it;
7. **Provision of elevated panoramic views.** This relates to the extent of the view on offer and the tendency for receptors to become more attuned to the surrounding landscape at locations that afford broad vistas;
8. **Sense of remoteness and/or tranquillity.** Receptors taking in a remote and tranquil scene, which is likely to be fairly static, are likely to be more receptive to changes in the view than those taking in the view of a busy street scene, for example;
9. **Degree of perceived naturalness.** Where a view is valued for the sense of naturalness of the surrounding landscape it is likely to be highly sensitive to visual intrusion by distinctly manmade features;
10. **Presence of striking or noteworthy features.** A view might be strongly valued because it contains a distinctive and memorable landscape feature such as a promontory headland, lough or castle;
11. **Historical, cultural and / or spiritual significance.** Such attributes may be evident or sensed by receptors at certain viewing locations, which may

attract visitors for the purposes of contemplation or reflection heightening the sense of their surroundings;

12. **Rarity or uniqueness of the view.** This might include the noteworthy representativeness of a certain landscape type and considers whether the receptor could take in similar views anywhere in the broader region or the country;
13. **Integrity of the landscape character.** This looks at the condition and intactness of the landscape in view and whether the landscape pattern is a regular one of few strongly related components or an irregular one containing a variety of disparate components;
14. **Sense of place.** This considers whether there is special sense of wholeness and harmony at the viewing location; and
15. **Sense of awe.** This considers whether the view inspires an overwhelming sense of scale or the power of nature.

Those locations which are deemed to satisfy many of the above criteria are likely to be of higher sensitivity. No relative importance is inferred by the order of listing in the **Table 14-5** below. Overall sensitivity may be a result of a number of these factors or, alternatively, a strong association with one or two in particular.

14.2.1.3 Visual Impact Magnitude

The magnitude of visual effects is determined on the basis of two factors; the visual presence (relative visual dominance) of the proposal and its effect on visual amenity.

The magnitude of visual impacts is classified in **Table 14-4**.

Table 14-4 Magnitude of Visual Impact

Criteria	Description
Very High	The proposal intrudes into a large proportion or critical part of the available vista and is without question the most noticeable element. A high degree of visual clutter or disharmony is also generated, strongly reducing the visual amenity of the scene.
High	The proposal intrudes into a significant proportion or important part of the available vista and is one of the most noticeable elements. A considerable degree of visual clutter or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene.
Medium	The proposal represents a moderate intrusion into the available vista, is a readily noticeable element and/or it may generate a degree of visual clutter or disharmony, thereby reducing the visual amenity of the scene. Alternatively, it may represent a balance of higher and lower order estimates in relation to visual presence and visual amenity.

Low	The proposal intrudes to a minor extent into the available vista and may not be noticed by a casual observer and/or the proposal would not have a marked effect on the visual amenity of the scene.
Negligible	The proposal would be barely discernible within the available vista and/or it would not detract from, and may even enhance, the visual amenity of the scene.

14.2.1.4 Visual Impact Significance

As stated above, the significance of visual impacts is a function of visual receptor sensitivity and visual impact magnitude. This relationship is expressed in the same significance matrix and applies the same EPA definitions of significance as used earlier in respect of landscape impacts (**Table 14-3** refers).

14.3 Study Area

For the purpose of the visual impact assessment, two study areas have been addressed - that of the West Offaly Power (WOP) Station and that of the Ash Disposal Facility (ADF): two sites that lie approximately 5.5km apart. For the sake of brevity, the WOP Station study area is referred to as WOP station, while that of the West Offaly Ash Disposal Facility (ADF) is referred to as ADF. The receiving environment of both sites has strong overlaps, and their landscape baselines will be assessed together.

14.3.1 West Offaly Power (WOP) Station Study Area

It is anticipated that the proposed development is likely to be difficult to discern beyond approximately 2km and is not likely to give rise to significant landscape or visual impacts beyond approximately 1km. This is because of the context of the development setting: existing, large industrial buildings and structures providing strong visual absorption for the comparatively smaller/lesser additions that is the proposed development. In the interests of a comprehensive appraisal, a 2km radius study area is used in this instance, as it is highly unlikely that any significant impacts could give rise beyond this distance.



Figure 14-1 Study area for WOP Station

14.3.2 West Offaly Ash Disposal Facility (ADF) Study Area

It is anticipated that the proposed development is likely to be difficult to discern beyond approximately 4km and is not likely to give rise to significant landscape or visual impacts beyond approximately 2km. This is because the flat, open and exposed landscape surrounding the site for some distance often provides very limited visual absorption, potentially allowing for views of several kilometres. In the interests of a comprehensive appraisal, a 4km radius study area is used in this instance, as it is highly unlikely that any significant impacts could give rise beyond this distance, as well as being able to incorporate the River Shannon and the world-renowned heritage site of Clonmacnoise.

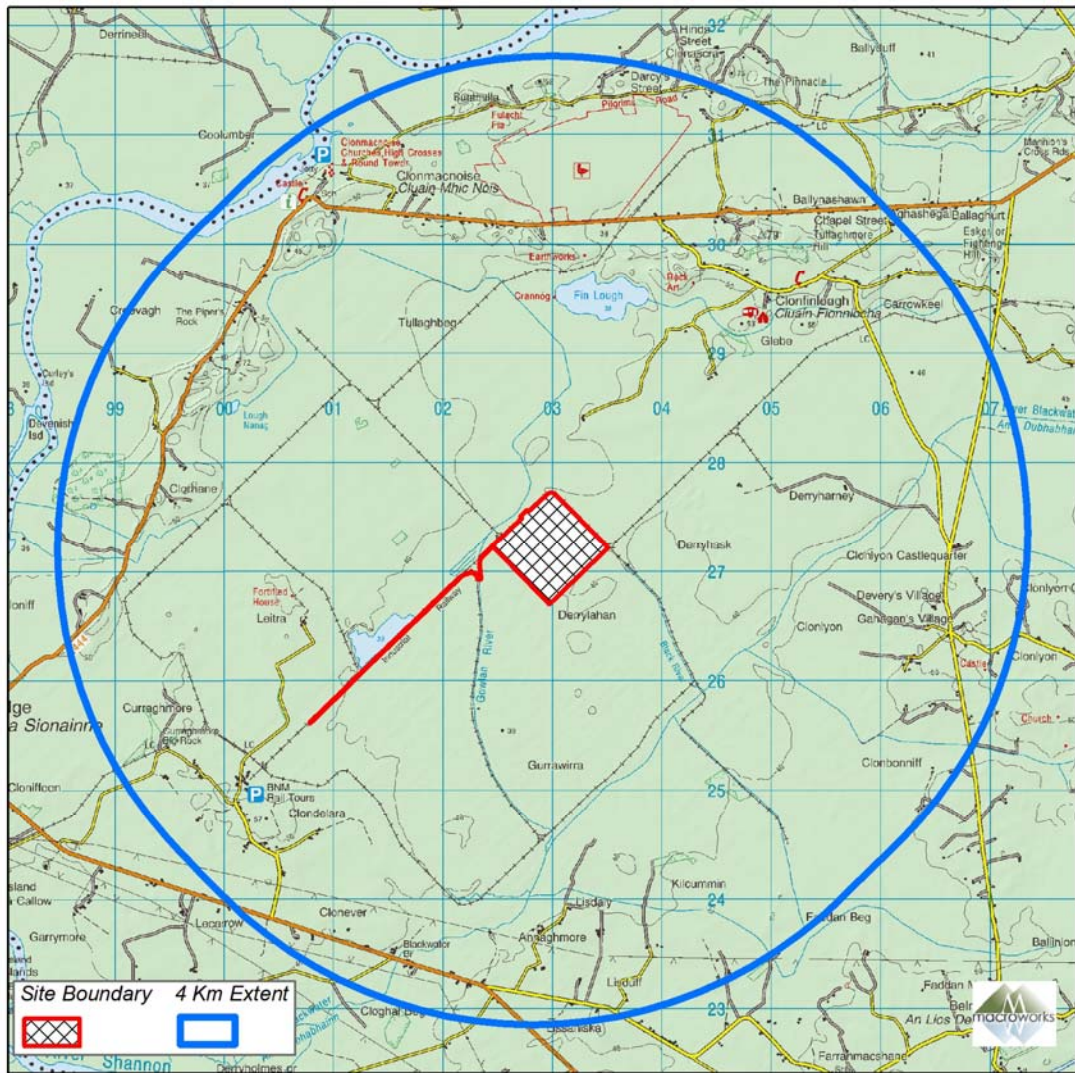


Figure 14-2 Study area for WOP ADF

14.3.3 Peat Supply to West Offaly Power Station Study Area

While outside the site boundaries, peat is exclusively supplied to the WOP station from Bord na Móna and harvested, under licence, from a defined number of existing supply bogs as follows:

- P0500-01- Boora Group;
- P0501-01- Derrygreenagh Group;
- P0502-01- Blackwater Group; and
- P0503-01- Allen Group.

The peat will principally be delivered to the station by rail, with some road deliveries and handled using existing plant facilities.

14.3.4 Biomass Supply to West Offaly Power Station Study Area

As referenced in **Chapter 4** of this EIAR, the type of biomass that will be used for electricity generation at WOP station will comprise of both indigenous (native) sources and imported biomass. Biomass will be transported to the WOP station by road. Further detail is provided in **Chapter 4** of this EIAR.

14.4 Receiving Environment

The landscape baseline represents the existing landscape context and is the scenario against which any changes to the landscape and visual context brought about by the development will be assessed.

A description of the landscape context of the proposed application site(s) and wider study area(s) is provided below under the headings of landform and drainage, vegetation and land use, centres of population and houses, transport routes and, lastly, public amenities and facilities. Although this description forms part of the landscape baseline, many of the landscape elements identified also relate to visual receptors i.e. places and transport routes from which viewers can potentially see the proposed development.

As the existing development is subject to the condition that all existing activity ceases in 2020, landscape and visual impacts will take this into consideration when assessing the impacts of the proposed continued operation of WOP Station and ADF.

A “baseline” scenario will be assessed whereby, post-2020, the WOP Station site will mostly comprise of a bare brownfield site, while the existing ADF will be a decommissioned and capped landfill site. Impacts therefore need to be assessed in a threefold manner: the baseline, the existing, and, lastly, the proposed development i.e. the continued operation and the transition to biomass scenario.

14.4.1 Landform and Drainage

The study areas for WOP Station and the associated ADF are located in the corner of northwest Offaly, with overlaps across the Shannon to County Galway (to the west) and County Roscommon (to the northwest). Representative of the broader county, the study areas are characterised by ostensibly flat landscapes with some undulation in the north, where the east-west running Esker Riada landscape undulates between 40m AOD to 70m AOD. Eskers are typically low-lying ridges composed of sand, gravel and boulders. The Esker Riada runs along the southern and eastern bank of the Shannon.

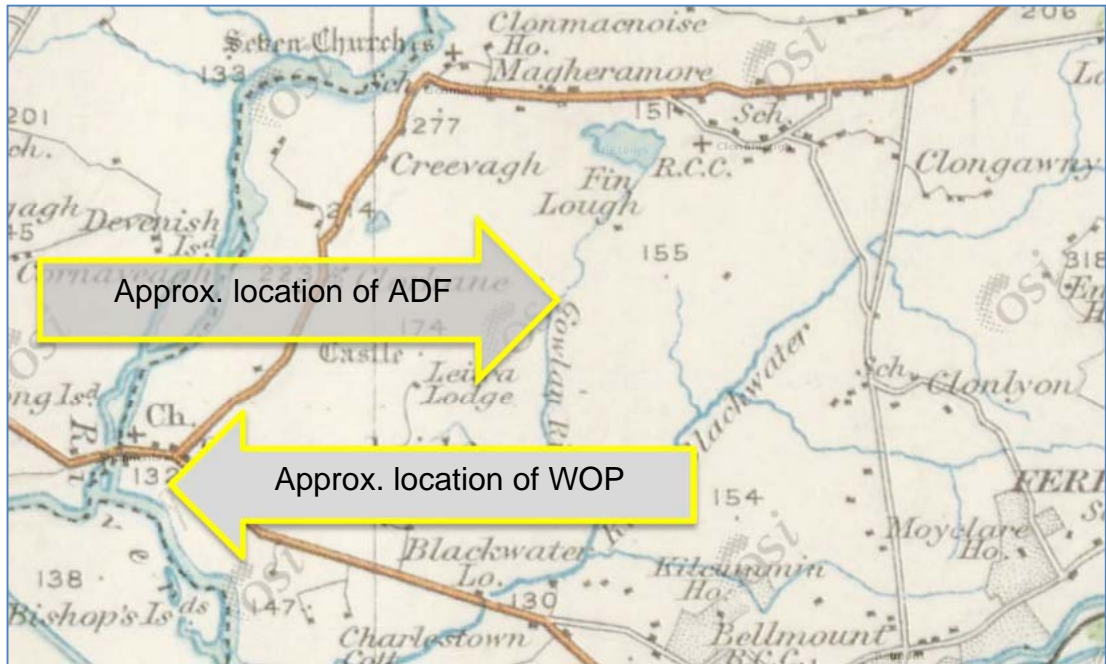


Figure 14-3 Drainage patterns of study areas, extract from Historic Map 6 Inch 1837-1842

The Shannon is the principal watercourse within the study area, which borders the western edge of the power station, as well as meandering within 4km northwest of the ADF. Naturally, its course marks the lowest elevations in the areas. Within 2-3km of all sides to the ADF, there are multiple smaller watercourses angling towards the Shannon, such as the Gowlan, Derryhask, Black and Blackwater Rivers. Fin Lough is located within 2km north of the ADF.



Figure 14-4 The Shannon River north of Shannonbridge

14.4.2 Vegetation and land use

Low-lying, exploited bog/peatland makes up the lion's share within the vicinity of the ADF, while pastoral farmland and callows are more prevalent near Shannonbridge. Much of the bog around the ADF has been drained and cultivated extensively over the last century - and intensively harvested for peat in recent decades by Bord na

Mona. It is designated, from 2000 Corine Data, as being “raised bog exploited”. Mongan Bog, between the esker and the R444, is deemed “raised bog intact.” There has been continuous production of electricity by ESB at WOP since 1965, when a 40 MWe unit was first commissioned.

While there is a minor degree of coniferous forest found in the ADF study area, there are several patches of transitional woodland scrub located in the study areas. Owing to the scale and intensity of peat harvesting across some parts of the study areas, it is a highly-modified, post-industrial landscape.

The study areas are nationally and internationally known for ancient religious traditions and monastic settlements. Aside from the ancient Pilgrim Road that runs along the Esker Riada, the ancient monastic site of Clonmacnoise is located in the northwest of the ADF, and is of international importance as a spiritual, historic, archaeological and cultural centre.



Figure 14-5 Mongan Bog, located between R444 and the Pilgrim Road

The site of the WOP Station is located on an existing industrial power station site that is located on the banks of the River Shannon, by the village of Shannonbridge. The site accommodates structures and activities representative of many power stations. These includes fuel/peat storage; handling areas; plant; the generation station itself, as well as a range of ancillary services, such as water treatment and management systems, offices and administration area. The site is accessed from a dedicated entrance off the R357 Regional Road. Bord na Móna supply peat to the station primarily via a private railway, which links the peat supply bogs and the on-site fuel storage and handling areas, but also by road transport.

The proposed extension of the ADF is located on the site of the existing ADF, operated by Bord na Móna, set in a remote area of cutaway bogland. The ADF is an engineered site and comprises of a number of lined landfill cells, each of which is filled, sealed and capped. It is accessible via a c. 3km roadway linking the site with the R357 from Shannonbridge to Cloghan, as well as being served by a dedicated Bord na Móna rail-line that links the station and the ADF site.

14.4.3 Centres of population and houses

The chief settlement in the area is Shannonbridge, a small village of less than 700 inhabitants on the River Shannon, which borders counties Offaly, Roscommon and Galway. Across the rural spread of the remainder of the study area, a number of residences also occur along the R444 and R357 regional roads. In addition, there are numerous small settlements, including Gahagan's Village and Clonmacnoise.



Figure 14-6 Shannonbridge is a small settlement of less than 700 inhabitants

14.4.4 Transport routes

While there are few roads within 2km radius of the ADF, there are numerous roads in the broader study areas. The R444 feeds into Shannonbridge from the northwest, via Clonmacnoise, while the R357 serves a similar function southeast and northwest of Shannonbridge. Otherwise, both study areas are populated by third class roads or laneways. In the north of the study area, the higher ground along the Esker Riada has served as a recognisable route through the bogs of the Irish midlands since ancient times, and continues today as the age-old Pilgrim Road to Clonmacnoise.

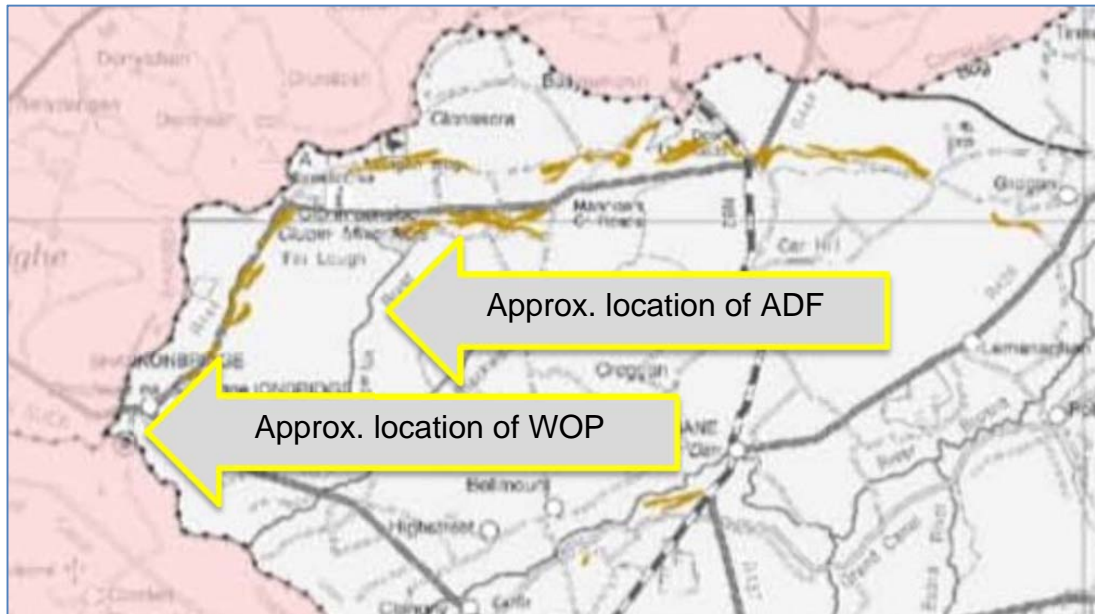


Figure 14-7 Alignment of Esker Riada (i.e. brown coloured marking)

Similarly, the Shannon was once the major transport route in this part of the country, even being routinely availed of by the Vikings. Across much of the bogs in the study areas, small-scale industrial railways criss-cross the landscape, consistent with Bord na Móna owned/operated bogs elsewhere in the midlands.

14.4.5 Public Amenities and Facilities

Between its three high crosses, a cathedral, seven churches and two round towers, the sixth century monastic site of Clonmacnoise attracts over 100,000 visitors each year. In addition, the area surrounding Clonmacnoise, including Mongan Bog, Fin Lough and Clonmacnoise Callows, are areas of broader visitor interest. Comparably popular, the Shannon River attracts multiple boaters, fisherman and other water sports enthusiasts. The Pilgrims Road still attracts numerous walkers trekking the ancient route each year. There is a campsite at Clonfinlough about 3km northeast of the ADF.

As the WOP western site boundary accounts for approx. 600m of the River Shannon's east bank, the existing plant is highly visible from this location, as well as at least 500m further up (i.e. north) and down (i.e. south) the river. According to Chapter 4 ("Project factors affecting Tourism") of Failte Ireland's "Guidelines on the treatment of tourism in an Environmental Impact Statement":

"Tourism can be affected both by the structures or emissions of new developments as well as by interactions between new activities and tourism activities – for example the effects of high volumes of heavy goods vehicles passing through hitherto quiet, scenic, rural areas. Tourism can be affected by a number of the characteristics of the new project such as: New Developments, Social Considerations, Land-uses and Activities. *"New Developments – will the development stimulate or suppress demand for additional tourism development in the area? If so, what type, how much and*

where? Marinas, golf courses, other major sporting facilities as well as theme parks and larger conference facilities can all stimulate the emergence of new accommodation, catering and leisure facilities often within an extensive area around a new primary visitor facility. Extensive urbanisation and large scale infrastructure as well as certain processing and extractive industries all have the potential to suppress demand for additional tourism – but usually only in the immediate locality of the new development. It should be noted however, that some types of new or improved large scale infrastructure – such as roads – can improve the visitor experience – by increasing safety and comfort or can convey a sense of environmental responsibility – such as wind turbines.” □

14.4.6 Landscape Planning Context

14.4.6.1 Offaly County Development Plan 2014-2020

Chapter 7 Heritage & Landscape

Section 7.1.3 (Landscape of Offaly) of the Development Plan states:

“County Offaly largely comprises a flat landscape which is particularly typified by its extent of boglands. It also contains an esker landscape which encapsulates the geographical change that emerged following the ice age and merits protection given its unique importance in providing scientific, recreational and amenity value.

...Offaly’s landscape is further marked by its ancient religious traditions and its monastic settlements. The Shannon River flows along the western boundary of the county and coupled with its callows area, its landscape is unique and of importance locally, nationally and internationally ... In the case of County Offaly, approximately 42,000 hectares of its landscape comprises Peatlands, with approximately 6,000 hectares classified as being highly sensitive areas and approximately 36,000 hectares classified as being of moderately sensitive areas.”

Section 7.8.4 (Waterways) of the Development Plan states:

“The Council recognises the immense value of the River Shannon and Callows as a key habitat. The Council’s policy will be to protect the landscape including the callows and views of special interest and also to encourage the development of Shannonbridge, Banagher and Shannon Harbour as focal points.”

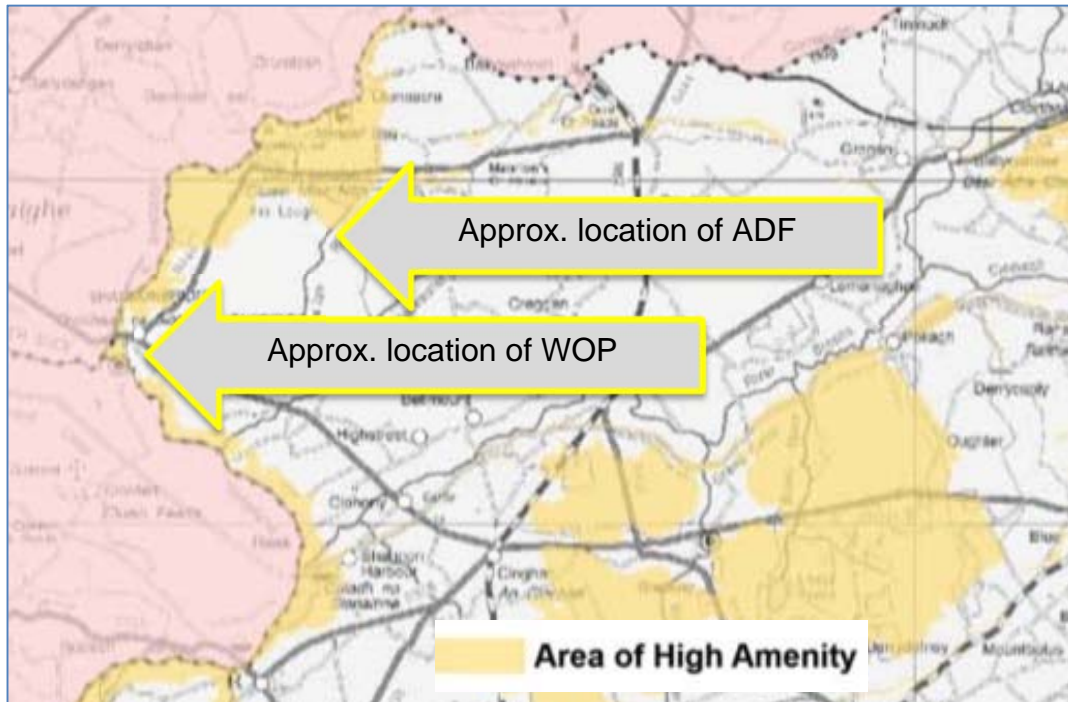


Figure 14-8 Areas of High Amenity in West Offaly.

Section 7.9 Areas of High Amenity of the Development Plan states:

AHAP-01

“It is Council policy to protect and preserve the county’s primary areas of high amenity namely the Slieve Bloom Mountains, Clonmacnoise Heritage Zone, Durrow High Cross, Abbey and surrounding area, the River Shannon, Lough Boora Parklands, Grand Canal, Croghan Hill, Raheenmore Bog, Pallas Lake, Clara Bog and Eskers, Eiscir Riada and other eskers... Notwithstanding the location of certain settlements, or parts of, for which there are settlement plans (towns, villages, ‘sráids’), within the Areas of High Amenity, it is not the intention of this policy to hinder appropriate sustainable levels of development (as set out in the plans and subject to proper planning).

“Further, it is policy to facilitate the sustainable extension and expansion of existing visitor, tourist related or other rural enterprises within the Areas of High Amenity, where such development is appropriate and where it can be demonstrated that it gives ‘added value’ to the extending activity and to the immediate area which is the subject of the ‘Area of High Amenity’ designation.”

AHAP-02

“It is Council policy, in both cases above, to ensure that issues of scale, siting, design and overall compatibility (including particular regard to environmental sensitivities) with the site’s location within an Area of High Amenity are of paramount importance when assessing any application for planning permission. The merits of each proposal will be examined on a case-by case basis.”

It should be noted that Offaly County Council describes “High Sensitivity Areas” as “Identified features or areas of natural beauty or interest which have extremely low capacity to absorb new development.”

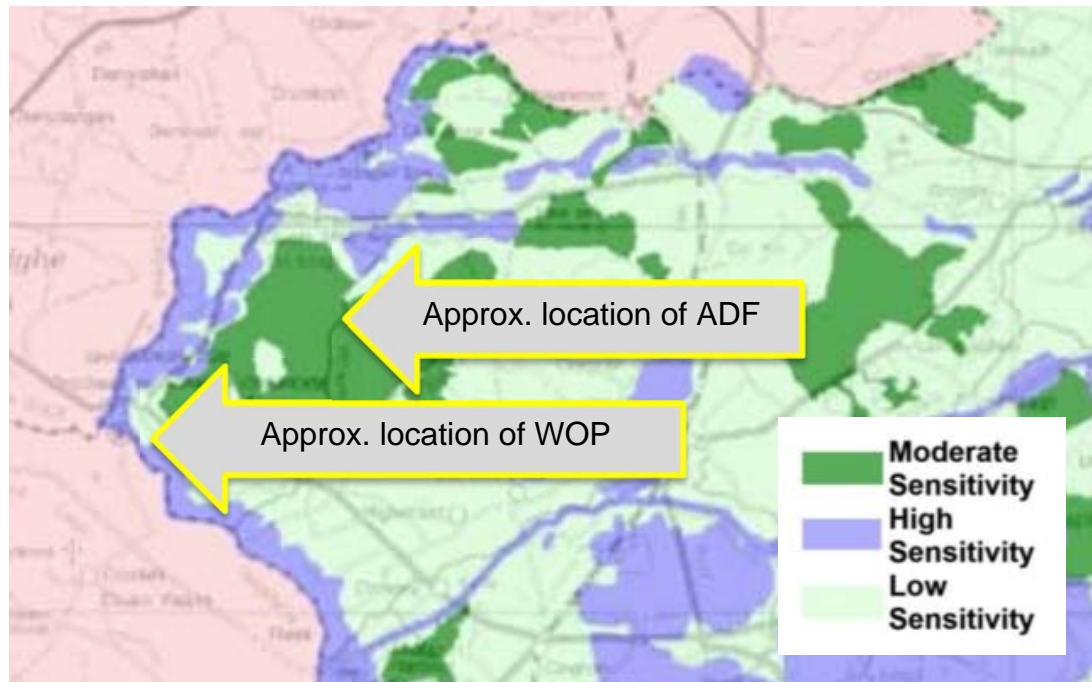


Figure 14-9 Offaly County Council sensitivity ratings in West Offaly.

The WOP Station site is partially located within a High Sensitivity Area, which is:

A) The River Shannon and Callows

Characteristics:

- The Offaly section of the River Shannon flows along the western boundary of the county and passes through Banagher, Shannonharbour and Shannonbridge.
- These lands are extremely liable to flood.
- There are local scenic views along the river and access to the local heritage sites such as Clonmacnoise and the Callows.
- The Shannon Callows are water meadows that are the breeding grounds for thousands of migrant wild birds. It is an important habitat within this river landscape.
- The Council recognises the immense value of the River Shannon as a major tourist resource and recreational asset.

Sensitivities:

- This area is extremely sensitive to all categories of development, given its scientific, ecological, recreational and scenic value.
- The protection of views of special interest and the landscape of this area is paramount.

- Development should not be of a nature which could damage the sensitive ecological habitats and the archaeological aspects of the river corridor. Moreover, the attractive waterside edge is open and flat and is therefore highly sensitive to development. Further, development at the waters edge is often inappropriate, as it would be exposed to view and is generally prohibited in that part of the Shannon River Valley that carries a nature designation.
- New development which is considered necessary should be located within towns, villages and pockets of existing vegetation to assist screening and should also be clustered together to avoid ribbon development. This will maintain long distant views out into the open countryside.

The ADF is located not within but *near* a High Sensitivity Area, which is:

(F) Bogland Areas

Characteristics:

- County Offaly contains a number of raised and blanket boglands.
- Clara bog, an important Natural Heritage Area (NHA), is also important for its visual amenities and scenic qualities.
- Other important bogland areas include the All Saints Bog, Sharavogue Bog, Slieve Bloom Blanket Bog and Raheenmore Bog.

Sensitivities:

- Offaly County Council has a strong policy of conservation of a representative sample of peatlands and the protection of peatland habitats.

The ADF is located *within* a cutaway bog, designated as a Moderate Sensitivity Area:

Cutaway Bog

Characteristics:

- Cutaway bogs cover a large part of the landscape of Offaly and in their entirety, are approximately 42,000 hectares. There are a number of land uses for cutaway bog, which include wilderness, grassland, forestry and recreation. Some cutaway bog landscapes are more robust and may be considered for other uses.

Sensitivities:

- The development of Lough Boora (designated as high sensitivity) acts as a prototype in the creation of parkland character.
- However, some of these cutaway bogs may be appropriate for other sensitively designed and located developments including renewable energy (wind farms, biomass crops) and/or industrial use.
- The Council recognises the need for a land use plan for the future development and utilisation of large areas of cutaway bog within Offaly.

Section 7.12.1 (Views and Prospects) of the Development Plan states:

“The designation of Areas of High Amenity and scenic amenity routes within County Offaly provide a basis for the protection of views and prospects of certain visually vulnerable features. However, there may be a number of individual views and prospects which warrant protection within the county. The protection of these views will be implemented on a case-by-case basis through the development management process, as appropriate. In particular, Table 7.11.6 lists the protected views within the county. This table and accompanying map (Map 7.18) lists the views ‘from’ i.e. the specific road and/or townlands from which the view is experienced and ‘to’ the particular amenity or area which is visible from that view. Site assessments, within the development management process will finally determine if the protected view will be affected by a proposed development.”

Please note, VO3 is the only designated view or prospect relevant to the study areas, which consists of:

View from: Pilgrims Road (Road No. L-07013) in the townlands of Clonmacnoise, Clonascra, Ballyduff and Bloomhill.

View to: Clonmacnoise and River Shannon, Eskers, Mongan Bog and Finlough.

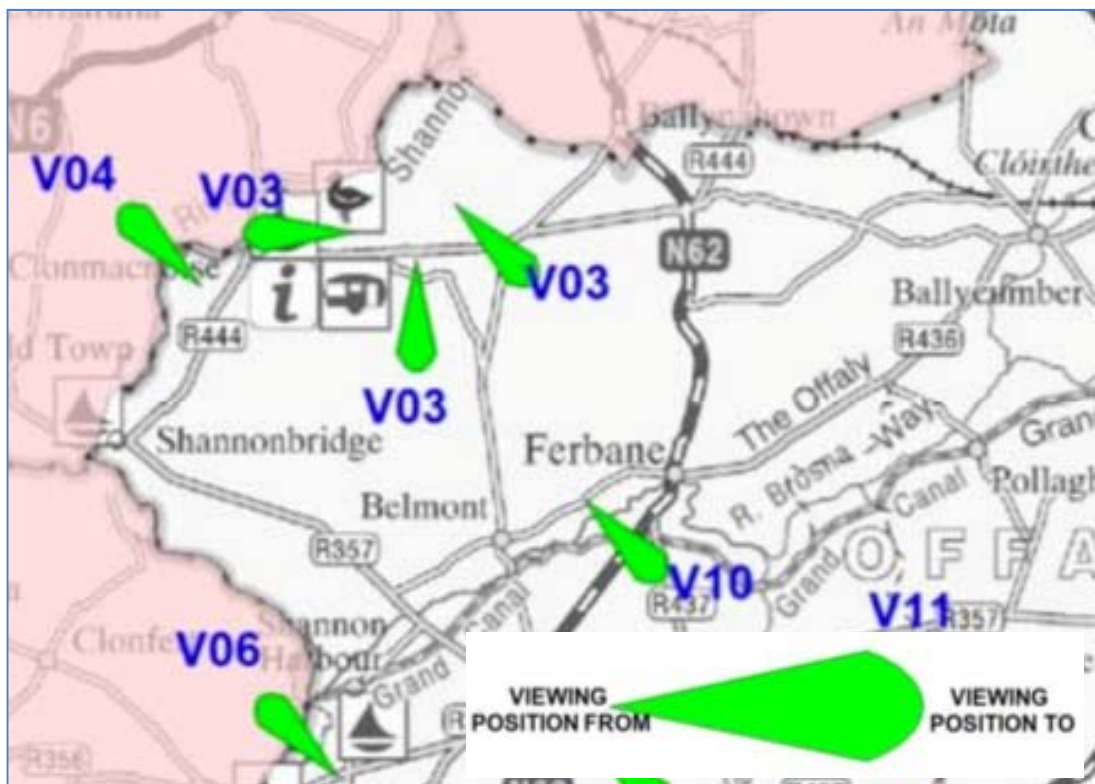


Figure 14-10 Designated views and prospects in northwest Offaly – extract from County Development Plan map 7.18. Note: the only view or prospect relevant to the study areas is V03.

Section 7.12.2 (Protection of Key Scenic Amenity Routes) of the Development Plan states:

“County Offaly contains a number of valuable scenic amenity routes which offer a very attractive cross- sectional view and overall impression of differing landscapes within Offaly as one traverses the county. The enjoyment of such varying landscapes for the visitor who regularly traverses the county and/or the local person can be lessened by both insensitive and/or excessive levels of roadside development. However, the Council acknowledges that in certain circumstances, some development may be necessary...”

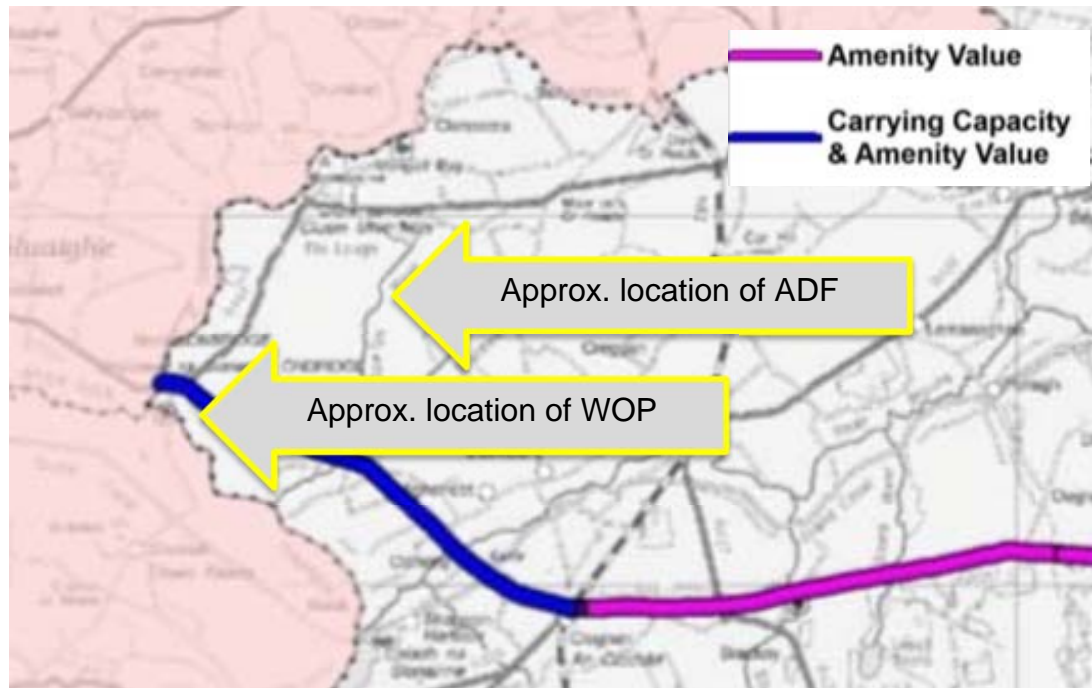


Figure 14-11 Designated scenic amenity route in northwest Offaly. Note: the only one in the study areas is R357 Blueball to Shannonbridge, as shown above in purple and navy marking.

There is just one designated view or prospect relevant to the study areas:

R357 Blueball to Shannonbridge. *This route links the N52 at Blueball to Shannonbridge. It passes through esker landscape, peatlands, undulating agricultural lands, Lough Boora Parklands and the callows area of the River Shannon in particular.*

Section 7.13 (Landscape and Amenity Policies) of the Development Plan states:

LAP-03 *It is Council policy to protect the county’s scenic amenity routes from insensitive levels of roadside development and excessive levels of development...*

LAP-05 *It is Council policy to protect the landscape comprising the River Shannon and flood plain including the callows and views of special interest from inappropriate development. However, appropriate development within settlements adjacent to the Shannon and its callows and which act as focal points for both residential and commercial / business, industry and recreation will be positively considered...*

14.4.6.3 Galway County Development Plan 2015-2021

As the study areas for the WOP Station encompass parts of County Galway, its CDP has been reviewed for potentially relevant designated/protected views/routes towards the site. As a result, no such viewpoints are of potential relevance to the site and the proposed development.

14.4.6.4 National Parks & Wildlife Service (NPWS)

According to the NPWS, the designations relevant to the study areas are as follows:

Special Protection Areas (SPA):

- Middle Shannon Callows SPA - Site code: 004096
- Mongan Bog SPA - Site code: 004017

Special Areas of Conservation (SAC):

- River Shannon Callows SAC - Site code: 000216
- Mongan Bog SAC - Site code: 000580
- Fin Lough (Offaly) SAC - Site Code: 000576
- Pilgrim's Road Esker SAC - Site code: 001776

Proposed Natural Heritage Areas (pNHA):

- River Shannon Callows - Site code: 000216
- Fin Lough (Offaly) - Site code: 000576
- Clonfinlough Esker - Site code: 000892
- Mongan Bog - Site code: 000580
- Lough Nanag Esker - Site code: 000910
- Clorhane Wood – Site code: 000894
- Clonlyon Bog – Site code: 000893

Natural Heritage Areas (NHA):

- Suck River Callows NHA - Site code: 000222

14.5 Impacts of the Development

14.5.1 West Offaly Power (WOP) Station

14.5.1.1 Landscape value & sensitivity

Landscape value and sensitivity are considered in relation to a number of factors highlighted in the Guidelines for Landscape and Visual Impact Assessment 2013, which are set out below and discussed relative to the proposal site and wider study area.

In terms of landscape quality (condition), the existing landscape of WOP station is a much modified, mechanised and degraded industrial site located on the banks of the River Shannon. The site accommodates structures and activities typical of a power

station, including fuel (peat) storage and handling areas and plant; the generation station itself; and a range of ancillary services including water treatment and management systems, offices and administration area. While some of these features are located within 100m of the Shannon, the quality/condition of this much-worked industrial landscape is low.

In terms of scenic quality, WOP Station abuts the River Shannon in an otherwise scenic setting (within the Shannon corridor), but the scenic quality of the site itself is poor. With regards to rarity or representativeness, the WOP Station site is typical of several energy generation stations in the Midlands.

In terms of conservation interests (as per section 14.4.2.2 of this report), either adjoining WOP Station or located close to it, is the Middle Shannon Callows SPA, River Shannon Callows SAC, the River Shannon Callows pNHA and the Suck River Callows NHA. However, aside from water-based sports and recreation upon the Shannon and its banks (bordering the site), there is no recreational value associated with the site, but there are numerous well-recognised public amenities, interests and facilities in the wider area. In terms of perceptual aspects, the Shannon once more governs the study area, with the small settlement of Shannonbridge being an age old crossing of the mighty river. Otherwise, the post-industrial peatland associated with Bord na Móna lands in the region is indicative of how the wider area is perceived.



Figure 14-13 View of the West Offaly Power station from across the Shannon

WOP Station is partially located within the aforementioned High Sensitivity Area that is the Shannon and its banks. However, these classifications can be wide-ranging, broad-stroke assessments that do not account for more localised, let alone site-specific, landscape values or sensitivities.

Overall, it is considered that this is a low-lying rural landscape that is not rare or distinctive for either Offaly or the Midlands. However, the WOP Station has had a long-established influence on the landscape character of this setting. In addition, the landscape of the site is a much-modified, industrialised landscape. Consequently,

the site is not compatible with the landscape sensitivity of the wider study area and Landscape Character Area. On balance of these reasons, the landscape sensitivity is deemed to be **Low**.

14.5.1.2 Magnitude of landscape effects

Baseline Scenario

As the existing development is subject to the condition that all existing activity ceases in 2020, this would lead to the plant being decommissioned, demolished and removed from site by or during 2022, in line with the conditions of its existing IE licence and planning permission. In effect, this would leave the site mostly as a bare brownfield site (i.e. the disused blending bunker building will remain on site), but would substantially reduce the industrial character of the immediate area, which can be considered a positive effect in relation to the existing scenario.

Against such a baseline scenario the continued use and conversion to biomass of the WOP Station, could be considered to represent a substantial and negative impact. However, this must also be balanced against the fact that the existing WOP Station represents a decades-old contribution to the landscape character of this locality and has become synonymous with the settlement of Shannonbridge. On balance of these factors, it is considered that the continued use and biomass conversion of the WOP Station represents a **Medium-low** magnitude of landscape impact when considered against a baseline scenario of a substantially decommissioned site.

Construction phase

In the 'baseline scenario' whereby the WOP Station has been decommissioned and substantially removed from the site, there would naturally be no "construction phase" associated with the project, and therefore there are no associated "construction phase" effects. Against such a baseline scenario, any construction phase effects of the conversion to biomass would be notable.

In the context of the continued use of a power station that has been present and operational for several decades, as well as its biomass conversion, there will be a higher intensity of site activity during the construction and operational phases of the proposed development than there is at present on site. Such activity will include the movement of construction machinery on-site, as well as HGVs travelling to and from the site. It may also include temporary construction lighting and the temporary storage of stripped earth and construction materials.

The construction phase is likely to take in the order of six to nine months to complete. Construction-related impacts will only result in temporary landscape and visual effects (i.e. effects lasting less than one year, according to the aforementioned Environmental Protection Agency publication 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports'). As part of the proposed development, a weighbridge, pellet storage silo, pellet intake and pellet conveyor, as well as two proposed biomass storage slabs to either side of the WOP Station, will be developed.

When considered in comparison to the 'baseline scenario,' the magnitude of landscape impact during construction phase is likely to be notable. However, in the context of the continued use and biomass conversion of the WOP Station, it is considered that the magnitude of landscape impact during construction phase is **Medium-low** in the immediate vicinity (<200m) of the proposed development. The magnitude of impact during construction phase is likely to reduce to **Low** and **Negligible** with increasing distance thereafter, as the perceived intensity of proposed construction works dissipates.

Operational phase

In the 'baseline scenario,' whereby the WOP Station has been decommissioned and substantially removed from the site, there would naturally be no "operational phase" associated with the project beyond 2022. In the case of the continued use and biomass conversion of the WOP Station, the operational phase effects are expected to be permanent and non-reversible.

In order to assess the magnitude of operational phase landscape effects on the site, the main proposed changes to the landscape must first be identified. Set within this tall, voluminous, long-established power station, the industrial function of the proposed development site is set within the industrial heritage of the existing landscape.

During the co-firing stage (i.e. to the end of 2027), peat will principally be delivered to the station by rail, with minor amounts arriving by road, and handled using existing plant facilities. Biomass will be transported by road. It will be fed directly into the modified conveyor belt system or deposited on large concrete aprons before being mechanically shovelled to the existing conveyor belt system and fed into the station's existing fuel feed system. The station will continue to produce ash, which will continue to be deposited in the ADF.

The development of fuel management and handling facilities on the existing WOP Station site will entail the use of existing open-air, hard-surfaced areas to accommodate bulk biomass deliveries and storage, as well as the development of new areas of hard-standing and a dedicated silo for pellets, to facilitate biomass deliveries and storage. In addition, the development will entail the development of new handling facilities to convey the biomass from new silos and hard-surfaced areas to the existing fuel handling systems - likely to be an elevated conveyor system.

The proposed Biomass Storage Slab A proposed to the north of the existing station, within the fuel handling area, will be used for the open storage of biomass. Biomass will typically be stockpiled with a central stockpile c.12m, and a smaller perimeter stockpile c.4m. The storage area will be enclosed within a 5m maximum height retaining wall. There is a proposed 3.6m high precast concrete moveable wall such as Alpha Bloc, to one side of Slab A, the silo and intake building. The reinforced concrete walls will be designed to support additional moments to allow for future fixing of a dust (wind protection) screen should this become necessary.

The proposed Biomass Storage Slab B, located to the southeast of the existing station, will be located immediately to the east of an existing, but disused, 16m-high

storage building. Biomass will be placed beside this shed and will be stockpiled to a height of 12m height. Around the stockpile, 3.6m precast concrete moveable alpha blocks are proposed, with a 1.8m mesh gate and fence proposed for its northern end.

The proposed pellet intake building, storage silo and conveyor area is to be located adjacent to Storage Slab A, and the existing IPS building and includes:

- Proposed 1 no. 260 cubic meter smooth wall steel pellet storage silo, approx. 14.7m high x 6m wide;
- Proposed 1 no. 17.2m high x 8m wide pellet intake building immediately adjacent to the silo;
- Proposed 9.1m long screw conveyor to transfer pellets from pellet silo to existing rising conveyor;
- Proposed 20m-long screw conveyor for emergency discharge of pellets from silo.

A proposed weighbridge will be located at Slab B. In terms of physical landscape effects, the proposed development will require excavation that would continue to evolve the much-modified, highly-industrialised landform of the site, while remaining within the existing footprint of the site. In this respect, the proposed development is not perceived to impose itself on the existing landscape fabric.

Within the site, some trees (i.e. 0.25 acres) will need to be removed in accordance with a felling licence, to the southeast of the location of the proposed biomass "Storage Slab B," prior to the commencement of construction. These semi-mature deciduous trees cover a planted area of roughly 50 m x 50 m. In this area, it will also be necessary to excavate material to reduce the level of the existing ground, which may be removed off site for disposal or reused.

Landscape impacts upon the WOP Station site are in the context of a much-worked, decades-old, industrialised site, where proposed, albeit moderate, changes to that landscape are consistent and compatible with its existing use, form and scale.

The likely landscape character of the proposed development will be little different, if not identical, to that currently on site. This is on the basis that the proposed development is built into the site, in close vicinity to similar and often larger structures. These changes include Storage Slab A and the proposed pellet intake building, storage silo and conveyor area that will be partially screened by the existing facilities, and Storage Slab B that will be screened from the Shannon by existing buildings, structure and vegetation, but is likely to be visible from residences located approx. 450m to the east.

When considered against the 'baseline scenario,' the magnitude of landscape impact during the operational phase is considerable as it represents the difference between a substantially cleared site and the retention and conversion of a substantial industrial complex. However, in the context of the continued use and conversion to biomass of a power station that has been present and operational for a number of decades, it is considered that the magnitude of landscape impact is **Low** in the immediate vicinity (<200m) of the proposed development, where it is contained within the same visual

context. The magnitude of impact is likely to reduce rapidly to **negligible** with increasing distance thereafter, as the proposed development becomes a proportionally smaller component of the overall landscape fabric, and just one of very many sizeable, industrial and/or mechanised features that have defined this industrial site for several decades.

Decommissioning

In the 'baseline scenario,' whereby the WOP Station has been decommissioned and substantially removed from the site, the magnitude of landscape impacts of any decommissioning phase would be deemed to be very similar to, if not identical with, the eventual decommissioning phase of the continued use and biomass conversion of the WOP station. The process of decommissioning will be similar to that of construction, but undertaken over a shorter time period and with structures receding from view as they are demolished rather than emerging into view as they are constructed. HGV movements to and from site will be similar in nature.

In accordance with EPA, IE Licence requirements, upon cessation of works at WOP, all remaining structures will be left in an environmentally safe and secure form. Following site decommissioning, the WOP station may undergo demolition in accordance with any planning requirements that may be imposed. The WOP site will be reinstated in accordance with the conditions of any planning permission granted. This will generally require the demolition of all but one surface structure (i.e. the disused blending bunker building), thereby mostly leaving a brownfield site.

Biomass Supply

In the 'baseline scenario,' whereby the WOP Station has been decommissioned and substantially removed from the site by 2022, there will be no landscape impacts associated with future biomass supply.

For the proposed continued use and biomass conversion of the WOP station, biomass will be sourced nationally and internationally, and will mark an increase in the numbers of the HGVs entering and exiting the site. This will have an operational visual impact, but one that is reflective of the nature of the proposed development and the use of the existing facility and is not deemed to be significant.

14.5.1.3 Significance of landscape effects

On the basis of the **Low** landscape sensitivity rating for the site and its immediate surrounds weighed against the highest level of landscape impact magnitude of **Medium-low** the significance of landscape effect is deemed to be no greater than **Slight-imperceptible** (in accordance with the significance matrix contained at **Figure 14.3**).

14.5.2 Ash Disposal Facility (ADF)

14.5.2.1 Landscape value & sensitivity

The proposed extension to the ADF will be located on the site of the existing ADF, located approx. 5.5km northeast of the aforementioned power station. The site is in

a remote area of cutaway bogland, characterised by the long-worked and highly-engineered ADF operated by Bord na Móna.

The footprint of the ADF cells, including the proposed extension, is approx. 518m wide, and almost 612m in length: a large area of approx. 317,000 metres squared, or 31.7 hectares. The ADF red line boundary area, however, is a total of 58.79ha, which entails the access road and all existing and proposed development on site. Out of this total, the proposed extended landfill comprises of 179,000 metres squared, including cells and associated embankments required to accommodate ash generated from Jan 2020 onwards.

An existing industrial rail line surrounds the site on its northern and western side. An existing access road runs close to the site's western boundary, near which are existing welfare facilities, which includes a canteen building, site office, stores building, toilet block, wash slab and container. Also close to its western boundary are the existing Bord na Mona silt ponds and existing main surface water drain, as well as the meandering River Gowlan.

Within the site, there is an existing slab and storage compound, partially completed embankments and a leachate storage lagoon. The ash is, and will be, stored in a number of large cells within the site, three of which are constructed/completed, while one is operational, and which reach finished levels approx. 6-8m higher than the existing, surrounding ground levels outside the site.



Figure 14-14 Ground view of the ADF (graphic supplied by ESBI) record in October 2016. Note: the digger is undertaking cell construction.

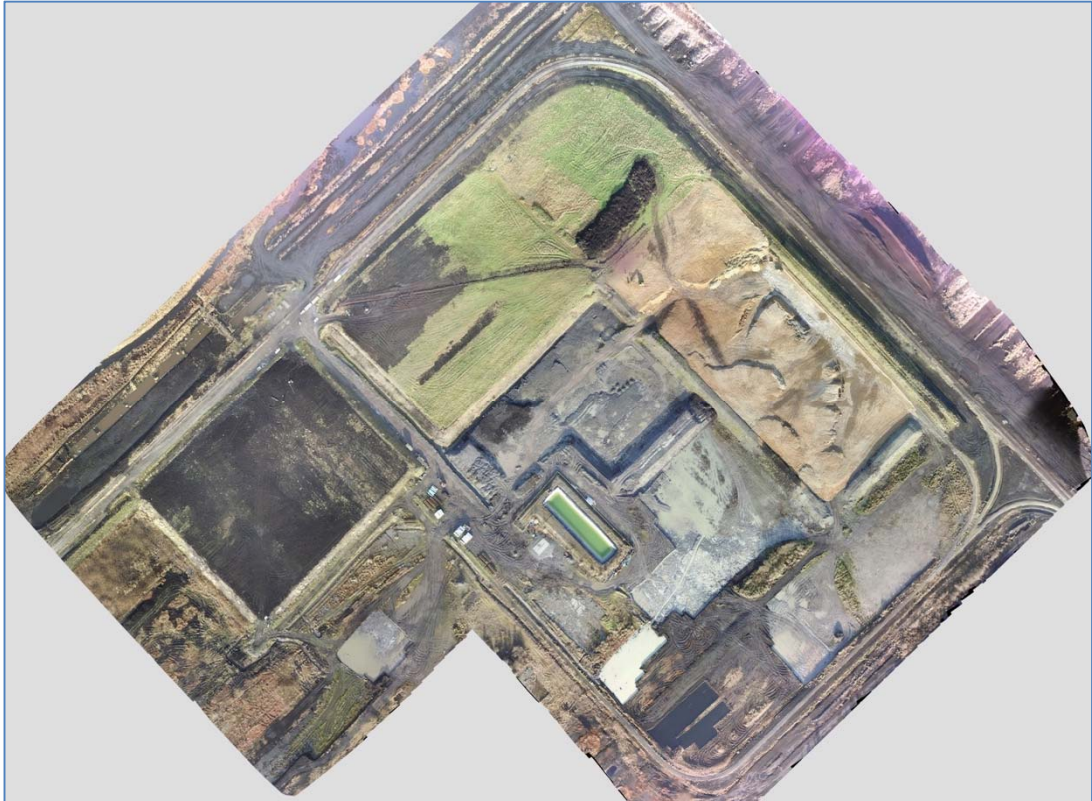


Figure 14-15 aerial drone capture of ADF (graphic supplied by ESBI)

Unlike the WOP Station, however, there is very limited scenic quality, rarity or representativeness regarding the ADF. While there is a considerable degree of recreational value in the north of the study area (e.g. Clonmacnoise, the Shannon, the Pilgrim Road) it is largely located over 3km from the ADF. In terms of conservation interests (as per section 14.4.2.2 of this report), the ADF is not located on or within 1km of any SPA, SAC, NHA or pNHA. Otherwise, the value and/or sensitivity is similar, if not identical, to the WOP station.

Landscape Sensitivity Summary

As raised in Section 14.4.2, the ADF is located within a cutaway bog, designated as a Moderate Sensitivity Area, but is also near a High Sensitivity Area. Like the WOP station, it is a much-modified site that has been intensively managed over many decades. The ADF is post-industrial, and bears the hallmarks of intensive cultivation over recent decades. Consequently, the sensitivity of this much-worked industrial landscape is again deemed to be **low**.

14.5.2.2 Magnitude of landscape effects

Baseline Scenario

As the existing development is subject to the condition that all existing activity ceases in 2020 this would mean that the ADF would cease to operate from thereon in.

However, no cells will be demolished or removed from the site. As cells 1, 2 and 3 are already closed and capped, it is proposed to cap the remaining area of Cell 4

during 2019. Cell 5 is currently accepting ash and Cell 6 is likely to be developed for the acceptance of ash up until 2020. Following any closure of the ADF, the remaining cells will be capped. The development of the ADF did not involve the construction of permanent structures or buildings, so does not necessitate any demolition.

On this basis, it is considered that the magnitude of landscape impact of the 'no development' scenario is likely to be **low-negligible**, or even Neutral.

Construction phase

In the 'baseline scenario', whereby the ADF will cease to operate, but no cells will be demolished or removed from the site, there would naturally be no "construction phase" associated with the project and, therefore, no further construction phase landscape effects.

The proposed development will utilise existing facilities at the ADF, while also developing additional landfill cells to receive additional volumes of ash associated with the extended operational life of the WOP Station. There is no predefined construction phase for this work, as both construction and operational phases will be ongoing until all 11 cells are eventually constructed, filled and capped. Consequently, there are strong and often inseparable overlaps between construction and operational phase landscape impacts.

The ash is, and will be, stored in a number of large cells within the site. It is proposed to eventually fill the site with 11 of the aforementioned cells. Three of these are constructed (with completed embankments); one is operational; two are under construction (replete with partially completed embankments), while five cells are proposed as part of this application. The five proposed cells will vary in length and width (see drawing reference QS-000206-01-D460-103) and can be up to 184m in length and reach finished levels approx. 6-8m above existing ground levels. Similar to the three existing, completed cells, the five proposed cells will have a GGL liner overlain with composite drainage layer and 1m of peat capping. Their profile will be slightly sloping, though are likely to appear ostensibly flat from a distance.

In addition, a new surface drain is proposed to run along the eastern edge of the proposed cells. Within the southern and eastern extent of the site there is a large area designated for excavation of additional capping and embankment material, if required. While similar-scaled cells exist already on the site, the creation of seven such cells (i.e. up to 184m in length, and approx. 6-8m above existing ground levels) creates a discernible impact upon the physical landscape of this large site.

Nonetheless, the proposed development within the site is in keeping with the landscape character of both the site and the wider, much-worked, post-industrial peatlands engulfing it across hundreds, if not thousands, of hectares.

When considered against the 'baseline scenario,' the magnitude of landscape impact during construction phase is likely to be notable. However, on the basis of the factors discussed above, it is considered that for the proposed development the magnitude of landscape impact during construction phase is likely to be **Medium-low** within 1km of the site, diminishing to low and negligible with increasing distance thereafter, as

the proposed development becomes a proportionally smaller component of the overall hinterland landscape fabric.

Operational phase

In the 'baseline scenario' there would be no "operational phase" associated with the project beyond 2022, however, none of the existing ash disposal cells will be demolished or removed so the landscape effects will be much the same as the existing scenario, albeit with no site activity.

In the proposed context, it should be noted that the ADF site is managed and operated by Bord na Móna, and only ash from the WOP Station will be disposed of at the site. This next phase of development will be facilitated by the continued use of existing infrastructure – including the rail-line and access road. Almost of all of the proposed works raised and assessed above during the construction phase of the development of the ADF remain relevant for the operational phase.

Operational-related effects are expected to be permanent (i.e. effects lasting over 60 year) and non-reversible, by definition of the aforementioned Environmental Protection Agency publication 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports.'

When considered against the 'baseline scenario,' the magnitude of landscape impact for the ADF site during the operational phase is likely to be notable. However, on the basis of the factors discussed above, it is considered that the magnitude of landscape during operational phase is likely to be **Medium-low** within 1km of the site, diminishing to low and negligible with increasing distance thereafter, as the proposed development becomes a proportionally smaller component of the overall hinterland landscape fabric.

Indirect impacts from peat harvesting

With regards to indirect impacts, across the Bord na Móna peatlands surrounding the ADF, peat harvesting is expected to continually and consistently reduce over the coming decade as the WOP Station continues its transition from peat to biomass. Accordingly, no new peat bogs will be opened for peat harvesting to supply WOP, but existing harvest bogs will continue in use, with reducing activity to 2027 (in terms of supplying peat to WOP). This will have both a landscape and visual impact on these peatlands during the operational phase of this project, but is a considerably indirect impact upon this project.

The proposed changes to the landscape of the ADF are consistent and compatible with its existing use, form, scale and land cover disturbance. In terms of duration, intensity and reversibility of activities, the likely landscape effects are moderate in the context of the working peatland landscape surrounding it for some distance.

Decommissioning

In the 'baseline scenario,' whereby the ADF will cease to operate but no cells will be demolished or removed from the site, the magnitude of landscape impacts of any decommissioning phase would be deemed to be broadly similar to the eventual decommissioning phase of the ADF site. Indeed, upon ceasing to deposit ash at the

WOP ADF, the cells containing compacted ash will be lined with a GCL liner with composite drain layer, over which a 1m layer of peat capping will be laid. While this 'legacy landform' will have an impact upon the immediate vicinity of the ADF, it is not expected to be untoward or out of character with this peat-strewn, vastly horizontal terrain.

On the basis of the factors discussed above, it is considered that the magnitude of landscape impact during operational phase is likely to be **low** within 1km of the site, diminishing to low and negligible with increasing distance thereafter.

14.5.2.3 Significance of landscape effects

On the basis of the **Low** landscape sensitivity rating for the site and its immediate surrounds weighed against the highest level of landscape impact magnitude of **Medium-low** the significance of landscape effect is deemed to be no greater than **Slight-imperceptible** (in accordance with the significance matrix contained at **Figure 14.3**).

14.5.3 Visual Impact Assessment - WOP station and ADF

14.5.3.1 Identification of Viewshed Reference Points as a Basis for Assessment

Viewshed Reference Points (VRP's) are the locations used to study the visual impacts of a proposal in detail. It is not warranted to include each and every location that provides a view of a development as this would result in an unwieldy report and make it extremely difficult to draw out the key impacts arising from the proposed development. Instead, the selected viewpoints are intended to reflect a range of different receptor types, distances and angles. The visual impact of a proposed development is assessed by Macro Works using up to 6 no. categories of receptor type as listed below:

- Key Views (from features of national or international importance);
- Designated Scenic Routes and Views;
- Local Community views;
- Centres of Population;
- Major Routes;
- Amenity and heritage features.

VRP's might be relevant to more than one category and this makes them even more valid for inclusion in the assessment. The receptors that are intended to be represented by a particular VRP are listed at the beginning of each viewpoint appraisal. The Viewshed Reference Points selected in this instance are set out in the **Table 14-5** and **Figures 14.16 & 14.17** below.

Table 14-5 Outline Description of Selected Viewshed Reference Points (VRPs)

VRP No.	Location	Direction of view
VP1	R444, within 300m south of Clonmacnoise	S/SE
VP2	Pilgrim Road on the Eiscir Riada	SW
VP3	Third-class <i>cul de sac</i> road northeast of ADF site	SW
VP4	Third-class <i>cul de sac</i> road southwest of ADF site	NE
VP5	Main Street, Shannonbridge	S/SE
VP6	R357 Scenic route south of Shannonbridge town centre	W/SW
VP7	Eastern entrance to WOP station	SW/W/NW
VP8	R357 west of Shannon	SE

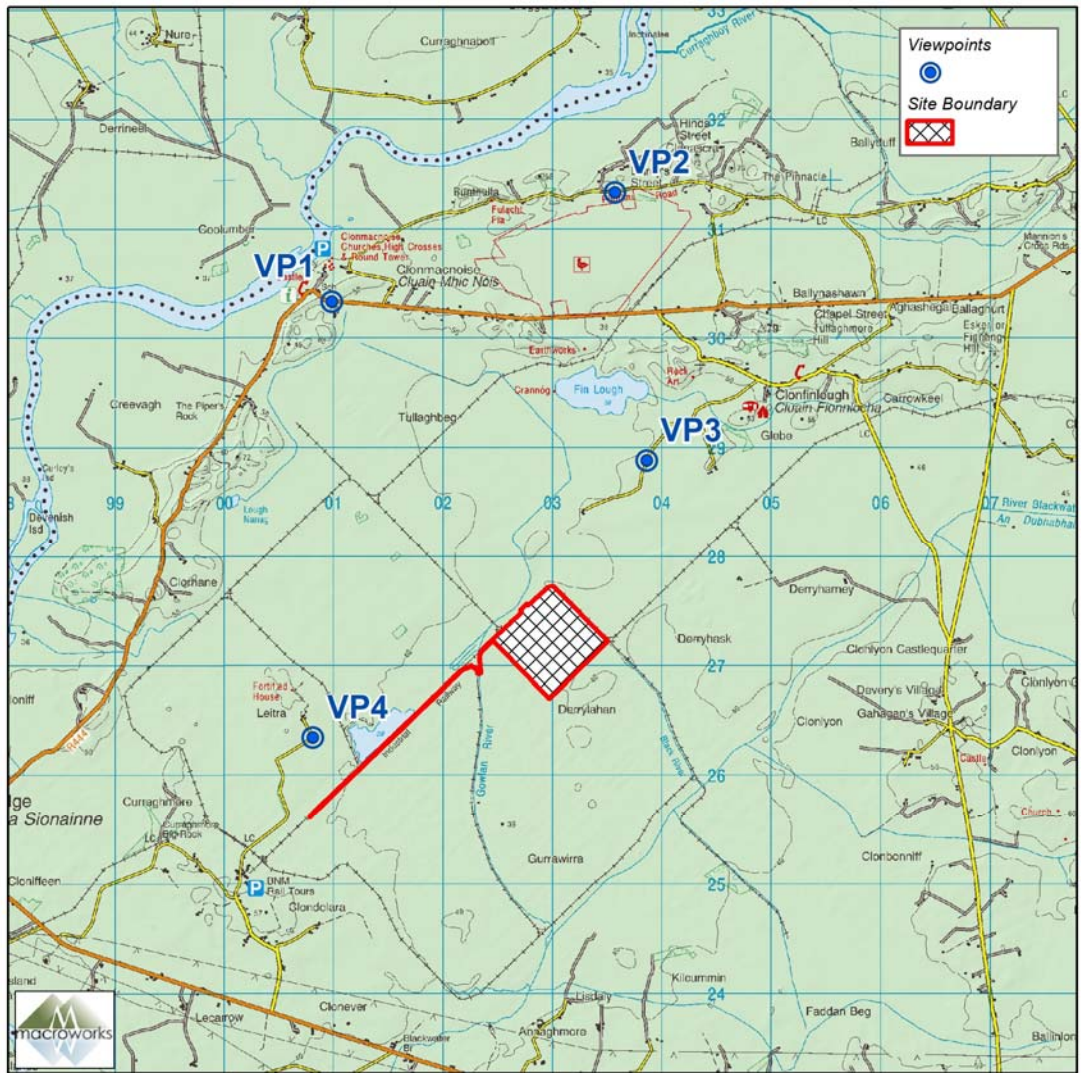


Figure 14-16 ADF viewpoint location map

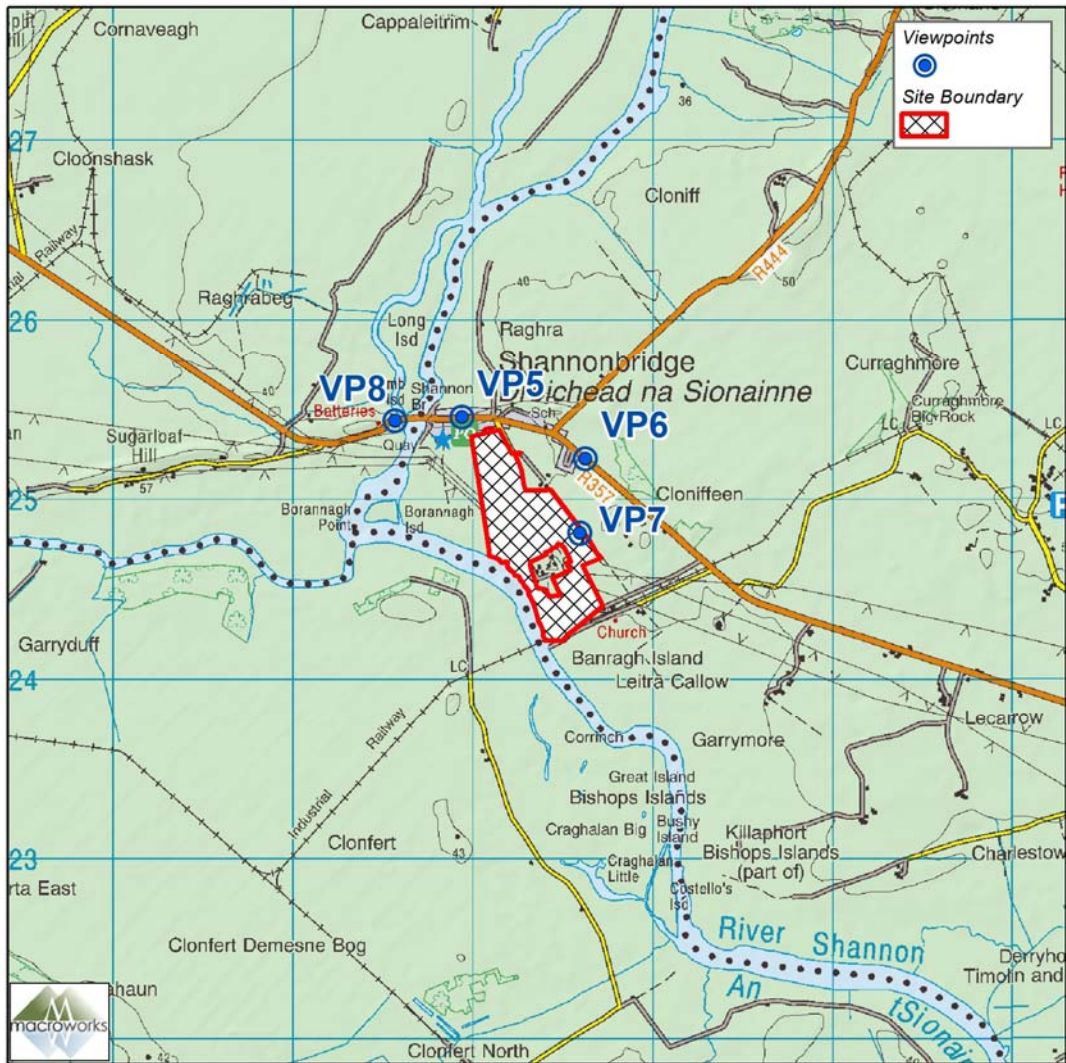


Figure 14-17 WOP viewpoint location map

14.5.3.2 Sensitivity of Visual Receptors

Scale of value for each criterion

Strong association	Moderate association	Mild association	Negligible association

Table 14-6 Analysis of Visual Receptor Sensitivity at Viewshed Reference Points

Values associated with the view	VP1	VP2	VP3	VP4	VP5	VP6	VP7	VP8
Susceptibility of viewers to changes in views	Dark Grey	Dark Grey	Light Grey	Light Grey	Light Grey	Dark Grey	Light Grey	Dark Grey
Recognised scenic value of the view	White	Dark Grey	White	White	White	White	White	White
Views from within highly sensitive landscape areas	Light Grey	Dark Grey	Light Grey	Light Grey	White	White	White	White
Primary views from residences	Dark Grey	White	White	Dark Grey	Dark Grey	Dark Grey	White	Light Grey
Intensity of use, popularity (number of viewers)	Dark Grey	Light Grey	Light Grey	Light Grey	Dark Grey	Dark Grey	Dark Grey	Dark Grey
Viewer connection with the landscape	Dark Grey	Dark Grey	Light Grey	Light Grey	Light Grey	Dark Grey	Light Grey	Dark Grey
Provision of vast, elevated panoramic views	Dark Grey	Dark Grey	Light Grey	Light Grey	White	White	White	Dark Grey
Sense of remoteness / tranquillity at the viewing location	Light Grey	Dark Grey	Dark Grey	Dark Grey	White	White	White	White
Degree of perceived naturalness	Light Grey	Light Grey	Light Grey	Light Grey	White	White	White	White
Presence of striking or noteworthy features	Light Grey	Light Grey	White	White	White	White	White	Dark Grey
Sense of Historical, cultural and / or spiritual significance	Dark Grey	Dark Grey	Dark Grey	Dark Grey	Dark Grey	Light Grey	White	Dark Grey
Rarity or uniqueness of the view	Light Grey	Light Grey	Dark Grey	Dark Grey	Dark Grey	Light Grey	Light Grey	Dark Grey
Integrity of the landscape character within the view	Light Grey	Light Grey	Dark Grey	Dark Grey	Light Grey	Light Grey	Light Grey	Light Grey
Sense of place at the viewing location	Light Grey	Light Grey	Light Grey	Light Grey	Light Grey	Light Grey	Light Grey	Dark Grey
Sense of awe	White	White	White	White	White	White	White	White
Overall sensitivity assessment	M	HM	ML	ML	L	L	L	M

N = Negligible; **L** = low sensitivity; **ML** = medium-low sensitivity **M** = medium sensitivity; **HM** = High-medium sensitivity; **H** = high sensitivity; **VH** = very high sensitivity

14.5.3.3 Magnitude of Visual Effects

The assessment of visual impacts at each of the selected viewpoints is aided by photomontages of the proposed development. Photomontages are a ‘photo-real’ depiction of the scheme within the view utilising a rendered three-dimensional model of the development, which has been geo-referenced to allow accurate placement and scale. For each viewpoint, the following images have been produced:

1. Baseline view;
2. Existing view;
3. Outline view (yellow outline showing the extent of the proposed development, overlaid on the photograph); and
4. The Proposed Development.

Viewshed Reference Point		Viewing distance to ADF	Direction of View
VP1	R444, within 300m south of Clonmacnoise	3.29km	S/SE
Representative of:	<ul style="list-style-type: none"> • Elevated views along the R444 near Clonmacnoise 		
Receptor Sensitivity	Medium		
Existing View	<p>Situated at the foot of a multiple-residence driveway upon the Esker Riada, this location is approx. 300m from the ancient monastic site of Clonmacnoise and less than 400m from the banks of the river Shannon, both of which are on the opposite side of the Esker to this viewpoint and the ADF site.</p> <p>Owing to landform, views towards the ADF site are not attainable further west along the road/esker, while further south is at a lower elevation. This location gives the sense of being at a higher elevation than it actually is, owing to the largely flat, broad bogland beyond: in such a horizontal landscape to the south/southeast, such low rises can serve as elevated viewing platforms.</p> <p>Nonetheless, views out south and southeast are far-reaching, owing to this increase in elevation and the lack of any roadside embankment or vegetation precluding views. To the south/right of the view, the edge of a residential driveway is visible, while to the east the R444 heads towards Currow. To the southeast, rough pasture and mature field boundaries occupy the middle-ground, before the land plateaus out onto the vast, much-modified, exploited, raised bog beyond, where the intensity of recent peat harvesting is evident.</p>		
Visual Impact of Proposed Development	<p>In the 'baseline scenario' the ADF has been decommissioned and capped, but has not been demolished or removed. As a result, there will be no change to the scale and intensity of built development, and therefore visual amenity, within this vista. Thus, the visual effect of this is deemed to be neutral, in comparison to the view of the existing ADF.</p>		

	<p>In the proposed context of continued operation, with sufficient effort and intent, a thin horizontal sliver that is the ADF can be discerned at a distance of over 3km - above and between treetops in the mid-ground. Its visual presence can be described as minimal in this context as it will have very similar form, tone and texture to the surrounding landscape.</p> <p>The dark hue of the peat capping each cell is consistent with the peatland to either side of it, while their broad, flat profile is compatible with the horizontal terrain about it. The ADF's potential visibility is further shrouded by the darkness of mature trees in the intervening landscape. The proposed development is a minute and distant element in the wider, and more appealing panorama, and one that is very unlikely to be noticed by a casual observer. The magnitude of visual impact is therefore deemed to be Low-negligible.</p>		
Summary	Based on the assessment criteria and matrices outlined at Section 1.1.3 the significance of residual visual impact is summarised below.		
	Visual Receptor Sensitivity	Visual Impact Magnitude	Significance of Visual Impact
Significance	Medium	Low-negligible	Slight-imperceptible

Viewshed Reference Point		Viewing distance to ADF	Direction of View
VP2	Pilgrim Road on the Eiscir Riada	3.66km	SW
Representative of:	<ul style="list-style-type: none"> Views from the ancient Pilgrim Road that leads from/to Clonmacnoise. 		
Receptor Sensitivity	High-medium		
Existing View	From the undulating, ancient Pilgrim Road that runs along the Esker Riada, this is an elevated view out over the intact, raised Mongan bog to the southeast, south and southwest. This is also permitted by a low, maintained roadside hedgerow; a hedgerow that may preclude such views at other times of the year. Some small-field, rough pasture is evident before and beyond Mongan		

	Bog. The low ridge that weaves upon the skyline beyond the bog is that along which the R444 runs (as per VP1), over 1.2km southwest of this location.		
Visual Impact of Proposed Development	<p>As the site is almost entirely obscured and unlikely to be visible with the naked eye, the 'baseline scenario' is no different to that of the existing view. Thus, the visual effect of this is deemed to be neutral, in comparison to the view of the existing ADF.</p> <p>Views of the ADF, or the peatlands surrounding it, are almost entirely precluded, owing to the aforementioned ridgeline over 1km south, southwest and southeast from this location. Consequently, the magnitude of visual impact is negligible.</p>		
Summary	Based on the assessment criteria and matrices outlined at Section 1.1.3 the significance of residual visual impact is summarised below.		
	Visual Receptor Sensitivity	Visual Impact Magnitude	Significance of Visual Impact
Significance	High-medium	Negligible	Imperceptible

Viewshed Reference Point		Viewing distance to ADF	Direction of View
VP3	Third-class <i>cul de sac</i> road northeast of ADF site	1.45km	SW
Representative of:	<ul style="list-style-type: none"> Landowners 1-2km northeast of the ADF 		
Receptor Sensitivity	Medium-low		
Existing View	<p>The nearest location to the ADF site from the public realm, this narrow, dead-end boreen terminates at a low-lying private residence approx. 800m northeast of the ADF site. However, owing to adjacent forestry and mid-height roadside hedgerows, the closest potential view of the site is from this slightly elevated location further back the boreen, almost 1.5km from the ADF (it is worth noting that this 2km-long boreen only serves three residences/properties, including the aforementioned). Mid-height roadside embankments/vegetation along both sides of this boreen</p>		

	<p>serve to funnel skyward views, and allow for very little evidence of the vast unfolding bogland to its southwest.</p> <p>From a field entrance on a more-elevated realm of this breen, pasture is evident in the foreground and middle distance. Mature trees spot the stacked field boundaries in the further distance, beyond which views are much harder to discern.</p>		
Visual Impact of Proposed Development	<p>The 'baseline scenario' is the same as that of the existing view. Thus, the visual effect of this is deemed to be neutral, in comparison to the existing view.</p> <p>Owing to intervening vegetation and landform, combined with a distance of almost 1.5km, the ADF is not visible from this location. In addition, this would remain the case if this viewpoint was located at the centre of the breen in the right of the view, owing to the height of roadside embankments/vegetation along both sides of this breen. Consequently, the magnitude of visual impact is Negligible.</p>		
Summary	<p>Based on the assessment criteria and matrices outlined at Section 1.1.3 the significance of residual visual impact is summarised below.</p>		
	Visual Receptor Sensitivity	Visual Impact Magnitude	Significance of Visual Impact
Significance	Medium-low	Negligible	Imperceptible

Viewshed Reference Point		Viewing distance to ADF	Direction of View
VP4	Third-class <i>cul de sac</i> road southwest of ADF site	1.87km	NE
Representative of:	<ul style="list-style-type: none"> Landowner to the southwest of the ADF 		
Receptor Sensitivity	Medium-low		
Existing View	<p>This location serves as a <i>de facto</i> driveway for a single landowner at the end of this dead-end breen. The property, set almost 2km southwest of the ADF, is an intensively farmed, virtual 1000m x 700m island of pasture, adrift in a sea of Bord na Mona peatland to</p>		

	<p>all sides. Further back the breen, the Bord na Mona Blackwater plant is located, albeit 3km southwest of the ADF. Aside from the aforementioned breen in VP3, it is the nearest location to the ADF from the public realm.</p> <p>Beyond the pasture in the middle and foreground, a thick copse/woodland of mostly deciduous vegetation is evident to the northeast, beyond which nothing else is visible in this horizontal landscape.</p>		
Visual Impact of Proposed Development	<p>The ‘baseline scenario’ and the existing view are one and the same. Thus, the visual effect of such a ‘baseline scenario’ is deemed to be neutral, in comparison to the existing view.</p> <p>Owing to intervening vegetation, combined with a distance of over 1.8km, the ADF is not visible from this location. Consequently, the magnitude of visual impact is Negligible.</p>		
Summary	<p>Based on the assessment criteria and matrices outlined at Section 1.1.3 the significance of residual visual impact is summarised below.</p>		
	Visual Receptor Sensitivity	Visual Impact Magnitude	Significance of Visual Impact
Significance	Medium-low	Negligible	Imperceptible

Viewshed Reference Point		Viewing distance to WOP	Direction of View
VP5	Main Street, Shannonbridge	121m	S/SE
Representative of:	<ul style="list-style-type: none"> Views from the centre of Shannonbridge 		
Receptor Sensitivity	Low		
Existing View	<p>This is a view from the main street of Shannonbridge looking southwards between roadside dwellings towards the existing WOP station. This facility represents a distinctive industrial backdrop to the southern extents of the settlement.</p>		
Visual Impact of Proposed Development	<p>In the ‘baseline scenario’ whereby the WOP Station has been decommissioned and substantially removed from the site, there will no longer be a view of the station buildings. Consequently, there</p>		

	<p>will be a reduced scale and intensity of built development within the scene and the visual effect of this is deemed to be positive, in comparison to the view of the existing WOP station. This is on the basis that a large industrial facility has been removed from view.</p> <p>In the proposed context of the continued operation of the WOP station and its conversion to biomass, the existing structures will remain and there will be some minor additional features. Most notable of these additions is the proposed 17.2m-high pellet intake building and yet this will be barely discernible above and between mature vegetation at the rear of the foreground residence, as well as in the context of the existing facility. Indeed, the proposed additions to the station are entirely consistent with the form, function, scale and appearance of the existing development.</p> <p>Whilst the continued operation of the WOP Station with modest additions represents the retention of an industrial backdrop to this scene, the proposed project represents only a very minor change to what is a long-established feature of this view. On balance, the magnitude of visual impact is deemed to be Low.</p>		
Summary	Based on the assessment criteria and matrices outlined at Section 1.1.3 the significance of residual visual impact is summarised below.		
	Visual Receptor Sensitivity	Visual Impact Magnitude	Significance of Visual Impact
Significance	Low	Low	Slight-imperceptible

Viewshed Reference Point		Viewing distance to WOP	Direction of View
VP6	R357 Scenic route south of Shannonbridge town centre	262m	W/SW
Representative of:	<ul style="list-style-type: none"> R357 Scenic route south of Shannonbridge 		
Receptor Sensitivity	Low		
Existing View	Located approx. 600m southeast of Shannonbridge along the busy R357, the absence of any roadside embankment or tall vegetation		

	<p>makes views west/southwest relatively open. Above the roadside fence and two small pastoral fields, the industrial bulk of the existing power plant above/behind the intervening trees (i.e. mature evergreen screen planting) makes the building highly conspicuous in this rural fringe setting. Nonetheless, in the 260+m between this location and the plant, there is a reasonable degree of visual absorption for lower buildings, structures and other development.</p>		
<p>Visual Impact of Proposed Development</p>	<p>The context of the 'baseline scenario' is that the WOP station is decommissioned, demolished and removed from the skyline. Without the visible structure of the existing station, this would become a fairly typical rural hinterland scene with a much reduced scale and intensity of development within view. The magnitude of visual impact is therefore deemed to be positive, in comparison to the existing view.</p> <p>Although reaching a maximum height of 12m, the higher reaches of the biomass stockpile proposed to the southeast of the power station is only likely to be faintly visible between intervening trees approx.450-500m southwest of this location. The scale, material and tone of the stockpile is not out of synch with the workings and precedent of the plant, or indeed, the intervening trees. At the stockpile's maximum height it transcends minute segments of the skyline between tree branches, but still remains dwarfed in vertical scale by the existing power plant.</p> <p>The proposed development at the northern end of the plant is not visible, as can be discerned from the outline view. The visual presence of the proposed development is deemed to be sub-dominant to the existing facility.</p> <p>In the busy, industrial setting of this scene, it is unlikely that the casual observer will notice the relatively minor, proposed changes to the WOP station and marginal increase to its visual envelope. Such changes will not result in a noticeable reduction in visual amenity. However, when balanced against the potentially positive effect of removing the WOP Station from view (baseline scenario), the magnitude of visual impact is considered to be Low.</p>		
<p>Summary</p>	<p>Based on the assessment criteria and matrices outlined at Section 1.1.3 the significance of residual visual impact is summarised below.</p>		
	<p>Visual Receptor Sensitivity</p>	<p>Visual Impact Magnitude</p>	<p>Significance of Visual Impact</p>

Significance	Low	Low	Slight-imperceptible
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Viewshed Reference Point		Viewing distance to WOP	Direction of View
VP7	Eastern entrance to WOP station	0m	SW/W/N W
Representative of:	<ul style="list-style-type: none"> Site entrance and eastern boundary of WOP plant. 		
Receptor Sensitivity	Low		
Existing View	<p>The road on which this viewpoint was selected is publicly accessible, serving as an alternative, if slightly indirect, approach road to Shannonbridge’s main street from south of the town. However, the road is, for the most part, used by multiple HGVs entering and exiting the site entrance.</p> <p>Across the wide turning circle of tarmac, and beneath the presence of a 110kV electricity line on twin utility poles, a dis-used, 16m-high shed, which does not form part of the current WOP station planning permission, is very evident behind tall security mesh gate and fencing to the southwest. This close to the WOP plant, we are experiencing industrial form and function, with little or no visual amenity to speak of.</p>		
Visual Impact of Proposed Development	<p>Although the disused, 16m-high blending shed will remain present in the decommissioned baseline scenario, the overall, site nonetheless will return to a primarily bare and brownfield one. To the south of this bulky blending shed, mature vegetation is apparent, while the 110kV electricity line continues to loom high within the site. As there is no discernible difference between the baseline and existing views, the visual effect of such a ‘baseline scenario’ is deemed to be neutral, in comparison to the existing view.</p> <p>In terms of the proposed development, which represents the continued operation and facilities in continuum with its conversion to biomass, the proposed biomass stockpile will be stored upon a large biomass storage slab in front of the existing shed.</p> <p>The stockpile has a maximum height of 12m and length of approx. 115m. Around the stockpile, a 3.6m precast concrete moveable</p>		

	<p>alpha blocks is visible, as is a 1.8m mesh gate and fence for its northern end.</p> <p>Owing to intervening vegetation within the site, no views can be attained from this location of the proposed works at the northern end of the site (e.g. separate proposed biomass stockpile, proposed pellet silo and pellet intake building). Indeed, from this location, no element of the proposed development is visible north of the site entrance gates. The immediate biomass stockpile along with its precast concrete walls surrounding it, will be openly visible from this close distance. However, the higher, and bulkier blending shed to its rear remains visually dominant.</p> <p>The proposed development will enclose the setting to a slightly greater degree, but will have little discernible impact on visual amenity and is entirely in keeping with the function and scale of the existing WOP Station. Consequently, it will not have a material effect on the nature of the scene and so the magnitude of visual impact is Low.</p>		
Summary	Based on the assessment criteria and matrices outlined at Section 1.1.3 the significance of residual visual impact is summarised below.		
	Visual Receptor Sensitivity	Visual Impact Magnitude	Significance of Visual Impact
Residual	Low	Low	Slight-imperceptible

Viewshed Reference Point		Viewing distance	Direction of View
VP8	R357 west of Shannon	432m	SE
Representative of:	<ul style="list-style-type: none"> The river Shannon and its west bank 		
Receptor Sensitivity	Medium		

<p>Existing View</p>	<p>Located on the western bank of the River Shannon in Co. Roscommon, this vista provides insight to the river’s eastern bank at Shannonbridge, and the WOP Stations presence and proximity to it. The visual baseline can be divided into distinct portions. The century’s old built heritage of the town and bridge is apparent to the far left/east and right/west of the view. Secondly, the broad majestic Shannon sweeps through the centre of the scene, fuelling its visual amenity while providing distinct recreational amenity upon its east bank. Thirdly there is the muscular and long-establish energy infrastructure upon the river’s east bank, in the form of the large and highly industrialised power plant embedded within a broad flat landscape, but also evident in several utility poles and pylons stacked upon the skyline, and multiple electricity lines crossing the river.</p>
<p>Visual Impact of Proposed Development</p>	<p>The context of the ‘baseline scenario’ is that the WOP Station is decommissioned, demolished and removed from the southeastern skyline. However, a considerable intensity of tall energy infrastructure will still be apparent within the vicinity of the site. The visual amenity of this scene would be marginally improved by the absence of the power plant and in comparison to the existing view, the effect would therefore be positive.</p> <p>The proposed development, however, represents the continued operation of the WOP Station and its conversion to biomass, and so the existing WOP structures will remain. Nestled before the large WOP Station, the proposed 17.2m-high pellet intake building is partially visible, with sufficient intent and concentration, marginally above the distant treeline. However, it is challenging for the casual observer to locate, and even if located, it remains dwarfed by the scale of the existing facility. The proposed development will have little material consequence for visual amenity in this visual context.</p> <p>On balance of the likely positive effect of decommissioning the WOP Station weighed against the very minor visual change to the existing scenario represented by its continued use and conversion to biomass, the magnitude of visual impact is deemed to be Low.</p>
<p>Summary</p>	<p>Based on the assessment criteria and matrices outlined at Section 1.1.3 the significance of residual visual impact is summarised below.</p>

	Visual Receptor Sensitivity	Visual Impact Magnitude	Significance of Visual Impact
Significance	Medium	Low	Slight

As can be observed from the visual impact significance of VPs 1-4, it is considered that the proposed extension of the ADF, located on the site of the existing ADF, has a Visual Impact Significance of no higher than ‘Slight-imperceptible’ at key receptors within the study area, and has an ‘Imperceptible’ Visual Impact Significance in three of the four viewpoints.

As can be observed from the visual impact significance of VPs 5-8, it is considered that though a noticeable piece of additional industrial infrastructure, the proposed continued use and conversion of the WOP station to biomass has a Visual Impact Significance of no higher than ‘Slight’ (VP8). Though it is acknowledged that decommissioning and substantial removal of the WOP Station in the future ‘baseline scenario’ would result in a positive effect due to the removal of a substantial piece of industrial development from the Shannonbridge skyline, this has also been balanced against the fact that this feature has a long legacy with this locality and forms the existing scenario. It can also be considered as more than just another industrial facility in terms of its landscape value in this setting, as it has been a place of local employment for decades and might be considered a symbol of a vibrant local industry.

Overall, the proposed development has an ‘Imperceptible’ Visual Impact Significance at half of the representative viewpoints, with ‘Slight’ being the highest visual impact magnitude of the proposed works.

In summary, it is not considered that any of the landscape and visual impacts of the proposed development will be significant in EIA terms during the construction, operational or decommissioning phase of the proposed development.

14.5.3.4 Visual Effects arising from offsite vehicle movements

As a result of the construction and operation of the proposed development at WOP Station and the ADF site, there is likely to be a noticeable increase in HGV traffic in the vicinity of these sites. This is mostly likely to affect the R357 and Shannonbridge town/village centre, as well as the R444.

The principle receptors of these visual impacts are the local and regional roads in the central study areas, and the attendant road users, as well as those working, living or involved in any activity near those roads. As receptors, major routes such as motorways and national roads will be much less sensitive to traffic related visual impacts from this project, due to base levels of vehicle movements on such roads and the very minor proportional change. Such roads are also busy conduits that have fewer adjacent residential receptors and, again, very high levels of baseline traffic. By comparison, it is the local and regional roads in the central study areas that will

experience the concentration of HGV traffic destined for the WOP from other parts of the County and Country.

HGV traffic related visual impacts are momentary in nature, due to the vehicle passing a stationary receptor in a matter of seconds. They are also a very familiar form of visual distraction that most would not equate with visual impact unless particularly frequent, and certainly not given priority over safety, noise, dust and vibration effects.

During the operational phase it is predicted that there will be an increase in HGV with the 95th percentile of 15 HGV deliveries per hour entering and leaving the site along the R357 and along the R444. The volume of increase is unlikely to be noticed by even those residents in closest proximity to the WOP and ADF and, in any event, not likely to be equated with visual impacts. There may be a temporary increase in HGV movements to and from the WOP during the construction and decommissioning stages, but these will not be marked compared to operational stage HGV activity.

For the reasons outlined above, traffic related visual impacts are not considered to be significant. Please refer to **Chapter 12** for more detailed information on any likely change in traffic quality or quantity that may arise as a result of the proposed development.

14.5.3.5 Visual Effects arising from Peat Supply impacts

While outside the site boundaries, peat supply for WOP is sourced from more than a dozen bogs in several counties across the Midlands of Ireland. As these Bord na Móna bogs have been commercially and extensively harvested for numerous decades, supplying peat to various energy infrastructure outlets/plants and homes in Ireland (i.e. outside/beyond the bogs), there is not likely to be any sizeable visual impact for receptors in the vicinity of these bogs as a result of them supplying their peat to a new or alternative outlet/plant.

The physical footprint of the WOP supply bogs will not change and no new bogs will be developed and for local receptors it will be perceived as a continuation of an existing and familiar activity and will not generate significant visual impacts.

In summary, it is not considered that any of the Visual Effects arising from Peat Supply impacts will be significant in EIA terms.

14.5.3.6 Visual Effects arising from Biomass supply impacts

Biomass supply for WOP will most likely be sourced from the Irish forest sector and residues/by-products from Irish sawmills, as well as being imported from overseas. The key point here is that the biomass production is generated (often as a by-product) from the continuation of existing activities. It will not generate visual effects at source, which were not planned or expected as part of normal forestry rotation of planting, felling and growing. Furthermore, because biomass will be sourced from a range of different sources at different locations there is a dispersal rather than concentration of visual effects at source.

In summary, it is not considered that any of the Visual Effects arising from Biomass Supply impacts will be significant in EIA terms.

14.5.4 Do-Nothing Scenario Impact

The “do nothing” scenario is the outcome that would occur if the proposed development was not constructed. From a Landscape & Visual perspective, were the proposed changes to the WOP Station never to take place, the visual baseline will still consist of a considerably large, visible and highly industrial power plant upon a much-worked, decades-old brownfield site near Shannonbridge. However, were the proposed development not to proceed, the stations would be decommissioned from 2020.

Current planning permission requires the plant to be demolished within 2 years of closure. Condition 8 (a) of the planning permission states that “The proposed power station complex shall be decommissioned, the buildings removed and the site reinstated within two years of the expiry date as outlined in condition number 2 above, in accordance with a restoration plan to be agreed with the planning authority prior to the commencement of development. In the event of the developer’s failure to activate the restoration works, the planning authority shall be empowered to notify the developer of its intention to activate the restoration plan and of its intention, within a period of 60 days, to call upon financial guarantees referred to under part (c) of this condition.”

Similarly, for the ADF, were the proposed changes to the site never to take place, the existing and long-established ash disposal facility would remain a highly engineered site comprising of several lined landfill cells, each of which is filled, sealed and capped. In summary, there would be no significant consequence in landscape or visual terms if the development did not proceed.

However, in the case of this project, it is important to note that the ‘do nothing’ scenario is not the same as the ‘no development’ scenario. For further information on the ‘no development’ scenario, see Section 14.4. In addition, the ‘do nothing’ scenario has been an integral part of the assessment since Section 14.1, and, thus, need not be expanded on further in this section.

In summary, it is not considered that any of the landscape and visual impacts of the ‘do nothing’ scenario will be significant in EIA terms.

14.6 Mitigation

In this instance, it is not considered necessary to provide specific additional landscape and visual mitigation measures. Instead, mitigation is embedded in the proposed development, in relation to the siting and design of features to ensure very low levels of effect. For the WOP Station site, such measures include making full use of the existing visual absorption within and around the site, by the deliberate siting of proposed elements behind or within existing structures, buildings or vegetation. In addition, development is contained along the more landscape and visually sensitive, Shannon-side of the development. Furthermore, the chosen materials and tone of the development are compatible with those already present and visible on site.

For the ADF, the existing and proposed cells are generally wide and broad, like the landscape engulfing it, and are capped in peat (like the surrounding land use) to reduce any unwarranted/unnecessary landscape and visual impacts.

14.7 Difficulties Encountered in Compiling Information

No particular difficulties were encountered in compiling information for this report.

14.8 Residual Impacts

There are no specific additional landscape and visual mitigation measures proposed and any 'embedded mitigation' is presented in the photomontage set used for the visual impact assessment at section 14.5. Thus, residual impacts are the same as predicted impacts for the purposes of this assessment.

14.9 Cumulative Impact

The cumulative impact of the proposed development and other existing and/or approved developments in the area was assessed by taking into account the existing baseline environment and the predicted impacts of this and other approved developments in the area.

In terms of any landscape or visual cumulative impacts across the Bord na Móna peatlands that supply WOP, it should be noted that peat harvesting is expected to continually and consistently reduce over the coming decade as the WOP station continues its transition from peat to biomass. Consequently, no new peat bogs will be opened for peat harvesting to supply WOP, but existing harvest bogs will continue in use, with reducing activity to 2027. Such a reduction in, and stoppage of, peat harvesting in these peatlands will reduce and ultimately terminate peat-production activities in these locations. It is therefore likely that associated landscape and visual impacts in the vicinity of supply bogs will reduce over the next decade. Accordingly, as a result of the proposed development the activities relating to the peat bogs that supply WOP are not considered to generate any notable landscape or visual cumulative impacts.

In respect of the proposed continued use and conversion to biomass of the WOP station, there is some potential for cumulative impacts to occur in-combination with the proposed/ approved Lumcloon Battery Storage site, located directly south of the proposed biomass storage slab east, and granted conditional planning permission in December 2017 (Planning reference: 17278). The application includes a single storey building and 4m-high MV switchgear room, as well as a main transformer, lighting, security hut, fencing and landscaping. Despite their proximity, battery storage facilities are low-rise developments with the main battery farm not exceeding 3-4m in height. Consequently, open views of both developments are unlikely from

locations within the surrounding public realm. Even where combined visibility might occur, the industrial nature of the two developments is compatible.

There is also potential for cumulative impacts to occur in this instance relating between the Edenderry Power Station (EPL), the Lough Ree Power (LRP) Station in Co. Longford and the proposed development (i.e. at both the power station and the ADF). EPL is approx. 60km from the proposed development, while the LRP Station is approx. 50km from the proposed development. Owing to the considerable distance and visual absorption, it is very unlikely that EPL, the LRP Station and the proposed development will be intervisible from any location, inside or outside the study area. Furthermore, due to these separation distances within the diverse and working rural landscape of the midlands, there is little sense of a proliferation of such facilities.

Other peat harvesting activities are carried out by Bord na Móna in relation to LRP and EPL and Bord na Móna also harvest peat for other end uses (e.g. horticulture). Third-party harvesting of peat also occurs on bogs throughout the Midlands, ranging from small scale turbary for domestic fuel to commercial scale peat removal for horticultural purposes. These activities are not considered to generate any notable landscape or visual cumulative impacts.

Given the very low levels of predicted landscape and visual impacts from the proposed development in its own right, it is considered that there will not be any significant cumulative effects arising from it in conjunction with other similar or related activities within the area.

14.10 References

- Environmental Protection Agency (EPA) publication ‘Guidelines on the Information to be contained in Environmental Impact Assessment Reports’ (updated draft 2017) and the accompanying Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (2017)
- Fáilte Ireland, Guidelines on the treatment of tourism in an Environmental Impact Statement
- Galway County Development Plan 2015-2021
- Landscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape and Visual Impact Assessment (2013)
- Offaly County Development Plan (CDP) 2014-2020
- Roscommon County Development Plan 2014-2020