

**RPS-MCOS Ltd.  
LANDSCAPE &  
VISUAL ASSESSMENT**

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# 1 LANDSCAPE AND VISUAL IMPACT ASSESSMENT

## 1.1 Introduction

This assessment has been conducted to examine the receiving environment's capacity to successfully absorb the proposed extension to an existing non hazardous waste facility, near Killarney, County Kerry.

In landscape and visual terms the main component of the proposed development will be the extension of the existing Material Recovery Facility (MRF) at Aughacurreen. The current 720 sq.m structure will be extended by 2,503 sq.m to a total size of 3,223 sq.m and will extend from the current footprint. This proposed development will be accompanied by appropriate drainage and run-off systems, services and an on site access road. These facilities will be accommodated on the site which is approximately 2.2 hectares in size.

The facility currently processes 16,500 tonnes per annum non hazardous waste and the proposed waste intake will be increased to 40,000 tonnes per annum. A site visit was conducted during the month of July. In terms of visual permeability it should be noted that the degree of visual screening is at its highest during this time of year.

The landscape and visual impact assessment in accordance with Environmental Protection Agency (EPA) guidelines requires that:

- the character of the surrounding landscape is defined;
- the visibility of the proposed development is established;
- the significance of this visual intrusion upon the visual receptors such as houses, viewpoints along roads and amenity/landmark areas is quantified; and,
- mitigation and or compensatory measures are proposed to diminish any significant impact associated with the proposal.

### 1.1.1 Methodology

The assessment methodology is based upon guidelines from the Department of the Environment Heritage and Local Government (DoEHLG) Landscape and Landscape Assessment Consultation Draft of Guidelines for Planning Authorities (June 2000), Environmental Protection Agency (EPA) Guidelines on the Information to be contained in Environmental Impact Statements (March 2002), (EPA) Advice Notes on Current Practise: in the preparation of Environmental Impact Statements (1995), The Landscape Institute & Institute of Environmental Assessment (LI/IEA) Guidelines for Landscape and Visual Impact Assessment, 2nd Edition 2002 and Highways Agency Design Manual for Roads & Bridges (1994).

RPS Group Ltd Planning and Environmental Consultants have carried out the assessment. Preparation for the report included a:

- Desk top study of available data and published literature to establish landscape baseline;
- Site visits to establish landscape baseline;
- Interpretation of Site Master Plan; and,
- Preparation of a photographic record.

### 1.1.2 Terminology

The following terminology has been used to describe type and duration of impacts.

- Positive Impact – A change, which improves the quality of the existing environment;

- Neutral Impact – A change which does not affect the quality of the existing environment; and
- Negative Impact – A change, which reduces the quality of the existing environment.

The aesthetic quality of the landscape is influenced by a balance of elements including scale of the landscape in human terms, sense of enclosure, type of texture, sense of colour, extent of diversity. This landscape quality can be categorised using a 5 point scale as described in the DMRB (2000) Volume 11, Section 3, Part 5 as follows:

- Highest quality landscape
- Very attractive landscape
- Good landscape
- Ordinary landscape
- Poor landscape

The Landscape Institute Guidelines for Landscape and Visual Impact Assessment, 2nd Ed., states that impacts can be of a direct, indirect, secondary or cumulative nature. Direct effects are those, which are directly attributable to a defined element or characteristic of the proposal. An indirect or secondary effect is an effect, which is not as a direct result of the proposed development and is often produced away from site or as a result of a complex pathway or secondary association. Cumulative effects result from additional changes to the landscape caused by the proposed development in conjunction with other developments or actions that occurred in the past, present or are likely to occur in the foreseeable future.

The degree of visual impact is also affected by a number of key factors that include:

- The Scale And Mass Of The Development: The scale of the proposed development has been assessed in terms of its setting within the landscape around the Aughacreen area.
- The Receiving Environment: The development has been assessed in relation to its surroundings. The angles of view and relationships to the topography and the foreground and background elements, which can affect the degree of impact, have been considered.
- Distance: As a general rule, the greater the distance of the viewpoint from the site, the less the impact. The elevation of the viewpoint has also been considered.
- Observer Group: Whether the observer is moving at speed along a road or receiving direct views would vary the degree of impact.

The degree of visual intrusion the development has also affects the receiving environment and can be illustrated through the creation of a Visual Envelope Map (VEM). This map outlines the areas of landform from which there is a view of the proposed development. The degree of intrusion, and therefore its impact, is dependant upon a variety of factors including terrain, vegetation cover, and other landscape features that screen views of the development. It should be appreciated that VEMs are not accurate indicators and that it is not normally possible to assign a tolerance to them (Highways Department 1994, p. AIII/2).

The following terminology will be used to describe duration of impacts and sensitivity of the receiving environment:

Table 1.1 Duration of impacts

Description	Years
Temporary impact	Impact lasting for 1 year or less
Short term impact	1 – 7 years

Medium term impact	7 – 15 years
Long term impact	15 – 60 years
Permanent impact	Impact lasting over 60 years

Table 1.1 defines the duration of impacts and is based upon EPA Guidelines.

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Table 1.2 Sensitivity of receiving environment.

Sensitivity type	Acceptability to development
Low sensitivity	All development kinds
Moderate sensitivity	Many development kinds
High sensitivity	Few development kinds
Special sensitivity	Acceptable only in accordance with designation recommendations.
Unique sensitivity	Negligible alteration

Table 1.2 characterises the sensitivity of the landscape, and its ability to absorb the proposed development. Sensitivity can be described as low, moderate, high, special or unique and is based upon DoELG Landscape and Landscape Assessment.

Table 1.3 Magnitude of impacts

Magnitude of impacts	Typical criteria
HIGH	Total loss of or major alteration to key elements/features/characteristics of the baseline i.e. pre-development landscape or view and/or introduction of elements considered to be totally uncharacteristic when set within the attributes of the receiving landscape
MEDIUM	Partial loss of or alteration of one or more key elements/features/characteristics of the baseline i.e. pre-development landscape or view and/or introduction of elements that maybe prominent but may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the receiving landscape
LOW	Minor loss of or alteration of one or more key elements/features/characteristics of the baseline i.e. pre-development landscape or view and/or introduction of elements that may not be uncharacteristic when set within the attributes of the receiving landscape.
NEGLIGIBLE	Very minor loss or alteration to one or more key elements/features/characteristics of the baseline i.e. pre-development landscape or view and/or introduction of elements that are not uncharacteristic with the surrounding landscape – approximating the 'no change' situation.

Table 1.3 defines the magnitude of impact (scale extent and duration of an effect) as high medium, low or negligible (LI/IEA, 2002 p 145). The degree of intrusion and therefore the development's impact is dependant upon a variety of factors including terrain, vegetative cover, and other landscape features that screen views of the development (Refer to Table 1.4).



Table 1.4 Degree of Visual Intrusion

HIGH	Highly visible within the receiving environment
MODERATE	Partially screened and visible within the receiving environment
LOW	Heavily screened and partially visible within the receiving environment

### 1.1.3 Mitigating impacts on the landscape

The Primary mitigation measures are per EPA Guidelines are as follows:

- Total avoidance of certain negative landscape and visual effects- particularly in terms of sensitive and or prominent landscapes.
- Reduction. Reduce certain impacts where avoidance is not possible. Requires detail consideration of the environmental constraints contained on the site.
- Remedy and minimise the possible adverse negative impact

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## 1.2 Receiving Environment

The site for the proposed extension of the existing non hazardous waste facility is situated approximately 4.5 km northwest of Killarney in County Kerry. The site is 2.2 hectares in size and is located within a rural context dominated by pastoral lands.

The landscape character of the area is defined by a combination of agricultural farmlands, and bog lands and forest areas with a back drop of mountains to the northwest (Slieve Mish) and south (Magillicuddy Reeks).

The sensitivity of the receiving environment can be classed as being moderate to low. This classification has been arrived at due to the existing site usage, landscape character and the rural context in which the facility is located.

### 1.2.1 Site Context

The site is set within a triangle defined by Killarney, Tralee, and Killorgan (Refer to Figure 1.1). In terms of the proposed development site's local context, the site is located within the townland of Aghacurreen. The site is set within a series of local districts that include: Aghalee (located to the north); Knockasarnet (Located to the east); Nunstown and Caher (South) and Curragh directly west of the site.

The topography of the site and surrounding lands is generally low lying. The most prominent hillside in the site's vicinity and a local landmark is located northwest of the site<sup>1</sup>. Prominent vista's and views to the site are possible from this area, known as Barleymount West and East (Refer to Figure 1.2).

A north facing ridgeline that runs on a west-east axis characterizes the undulating agricultural landscape. This sloping landscape consists mainly of a series of medium sized open fields, hedgerows and an internal access route. The hedgerows consist of mature and semi mature species including Ash, Alder, Birch, Shrub and other under storey vegetation include Blackthorn, Holly, Honey suckle and Ivy.

Direct access to and from the site is possible via a series of county roads that connect to the N22 (Refer to Transportation Access and Traffic Report).

As stated previously the proposed extension is set within a rural context that is predominantly pastoral. Other land use within the surrounding area includes:

- Planted forest directly west.
- A series of residential properties found along the main access road, as well as to the south and south-east of the site. Further east of the site there are a number of farm dwellings, fields and building stuctures.

### 1.2.2 Landscape Character

As the site is located outside the urban fringe of Killarney, but is still in relatively close proximity to the town, various and mixed land use practices can be identified in the Aughacurreen area. The following landscape character types were identified:

#### **Agriculture farmlands**

Managed agricultural farmland is common throughout the area. As well as adjacent to the site, these practices were found on the southern and the eastern boundaries.

<sup>1</sup> Set upon this local high point are two dwellings of which one is associated with farming practices

**Rough damp grassland**

Relatively small fields of rough damp grassland were found to the north of the site, between the northern hedgerows (of the site) and the back of the residential properties. These grassland patches are in the main very wet and represent a variety of grass and sedge species.

**Bog land, meadow fields**

Towards the west of the site, adjacent to the forest, is a large open field predominantly consisting of wet meadows. This open landscape slopes up to a small hill. Generally, the soil conditions within this area can be described as wet.

**Forest**

The forest consists of one species of coniferous trees semi mature in size. The forest forms a dense buffer on the western section of the site. The forest screens views to site from properties located south of there.

**Woodland**

A woodland pocket in the very southern tip of the site is found on the edge of the managed forest area, in close proximity to the holding tank on the south-western side of the existing Material Recovery Facility. This space is characterised by the rough grassland and by a series of mature native trees.

**Residential**

Residences within a 500m of boundary of the facility were identified as possible sensitive receptors and are discussed in further detail in Section 1.4. Drawing No. DG0001-02 provides details on the locations of residences within a 500m boundary from the facility.

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## Landscape Quality

The quality of the landscape is classed as good – this classification has been arrived due to the degree of residential developments and farm complexes within the area which is tempered by the spectacular back drop of the Macgillycuddy's Reeks to the south of Killarney and the Slieve Mish Mountains to the north-west.

### 1.2.3 Significance

With respect to the site no designated sites were identified within the immediate vicinity which include the following categories:

- Natural Heritage Areas (NHAs)
- Special Areas for Conservation (SPAs)
- Special Protection Areas (SPAs)

With respect to the site no designated views or prospects were identified within the immediate vicinity.

With respect to the proposed development site no recreation and tourism areas were identified.

### 1.2.4 Site Visibility

Site visibility will greatly depend on the vegetation cover and time of year. The site is located in a generally low lying area and is exposed to long range views to the northwest; and also to shorter range views from the northern side as well as southwest of the site.

- Looking at the site from the south a varied degree of visual screening is possible, due to the double hedgerow set alongside the private access road to the site.
- The site is generally exposed on the north-west and to a lesser extent on the north-eastern boundaries.
- Visual permeability from the surroundings areas to the west and south-west of the site is currently not possible, due to the dense screening provided by the forest's dense vegetation.
- On approach to the site, visibility from the roadside is general poor (when travelling along the main access road from east to west)

The hedgerows found on the site (in particular on the north-eastern and south-eastern boundaries) represent the majority of existing screening vegetation. Permeability in the winter months would typically be much higher because the majority of species are deciduous (Refer to Table 1.5)

Table 1.5 Detail description of existing hedgerows on the site<sup>2</sup>

AREA	DESCRIPTION	HEIGHT	SCREENING ABILITY	PREDOMINANT SPECIES	MAINTENANCE
Northeast Boundary	Mature hedgerow in corporation with a 2 metre earth mound adjacent to the site entrance. Sparse under storey planting.	15m+	Low due to deciduous vegetation and low under storey vegetation.	Alder	No visible Maintenance; Mature falling tree.
Southeast Boundary	Semi-mature hedgerow in corporation with earth mound 1-1.5m in height.	12m+	Fair Dense in parts due to ivy. Trees mostly deciduous.	Alder Ivy Hawthorn	Yes. Gaps along access road has been amended.

## 1.2.5 Characteristics of the Proposed Development

Located on lands with a zoning of general development (Kerry County Council Development Plan 2003-2009), the proposed extension of the existing Material Recovery Facility will see most of the existing site layout remaining unchanged. This includes the site entrance; weighbridge and temporary office structures. The existing Material Recovery Facility will be extended by 2,503 sq.m to a total size of 3,223 sq.m and will not exceed the existing structure's height (Ridgeline is 9.45m above Foundation Ground Level (FGL)). The proposed development will be accompanied appropriate drainage and run-off systems, services and an on site access road.

No formal boundary treatment, in terms of fencing and gates has been proposed. Possible light pollution is contained and limited to the proposed five wall mounted lamps located 5m above ground level. These units are directed to the ground in order to minimise the effects of light pollution.

## 1.3 Synopsis of Views

In order to assess the possible landscape and visual impacts that the proposed development would have on the receiving environment, a Visual Envelope Map (VEM) was generated. From this the site can be evaluated in terms of immediate and long-range visibility and the impact the development may have on various points, (these impacts can be positive, negative or neutral) The impact the development may have over the short and long term is evaluated on the basis of these points (Refer to Figure 1.4).

The proposed development site is visually exposed in terms of long range views from the north-west to the site. Short-range visibility extends along southern boundary (the main access road to the site), and the higher lying areas to the south west and southeast of the site. A series of images have been taken to illustrate this (Refer to Figure 1.5 for view point locations). A series of possible sensitive receptors are identified in Table 1.6.

<sup>2</sup> Refer to Appendix A for detailed recommendations on landscape mitigation measures.