

**KNOCKHARLEY LANDFILL LTD.**

**ENVIRONMENTAL IMPACT ASSESSMENT REPORT  
(EIAR) FOR THE PROPOSED DEVELOPMENT AT  
KNOCKHARLEY LANDFILL**

**VOLUME 2 – MAIN EIAR**

**CHAPTER 13 – LANDSCAPE & VISUAL IMPACT  
ASSESSMENT**

**NOVEMBER 2018**



Knockharley Landfill Ltd.

Kentstown, Navan, Co. Meath

ENVIRONMENTAL BALANCE IN DESIGN AND CONSTRUCTION





# TABLE OF CONTENTS

Page

<b>13</b>	<b>LANDSCAPE &amp; VISUAL IMPACT</b>	<b>1</b>
13.1	INTRODUCTION	1
13.1.1	<i>Proposed Development</i>	1
13.1.2	<i>Landscape and Visual Assessment Overview Proposed</i>	1
13.2	ASSESSMENT METHODOLOGY	1
13.2.1	<i>Landscape and Visual Impact Assessment (LVIA) Study Area</i>	1
13.2.2	<i>Definition of Landscape</i>	1
13.2.3	<i>Relevant Guidance and Legislation</i>	2
13.2.4	<i>Methodology Overview</i>	2
13.2.5	<i>Baseline Landscape and Visual Information</i>	3
13.2.6	<i>Existing Landscape Assessment</i>	3
13.2.7	<i>Visual Impact Assessment</i>	3
13.2.8	<i>Visual Sensitivity</i>	5
13.2.9	<i>Visual Impact Magnitude</i>	7
13.2.10	<i>Visual Impact Significance</i>	7
13.3	EXISTING ENVIRONMENT	8
13.3.1	<i>Landscape Baseline</i>	10
13.3.2	<i>Visual Baseline</i>	13
13.3.3	<i>Visual Receptors</i>	15
13.4	POTENTIAL IMPACTS	18
13.4.1	<i>Potential Impact of the Proposed Development</i>	18
13.4.2	<i>Potential Landscape Impacts</i>	18
13.4.3	<i>Potential Visual Impacts</i>	19
13.5	CUMULATIVE IMPACT	44
13.6	MITIGATION MEASURES	45
13.6.1	<i>Requirement for Mitigation</i>	45
13.6.2	<i>Proposed Mitigation Measures</i>	45
13.7	RESIDUAL IMPACTS AFTER MITIGATION	45
13.8	MONITORING	46
13.9	CONCLUSION & SUMMARY	46
13.9.1	<i>Landscape Character</i>	46
13.9.2	<i>Visual Impact</i>	46
13.10	REFERENCES	46

## LIST OF TABLES

### Page

TABLE 13-1:	LANDSCAPE VALUE AND SENSITIVITY .....	4
TABLE 13-2:	MAGNITUDE OF LANDSCAPE IMPACTS .....	4
TABLE 13-3:	LANDSCAPE IMPACT SIGNIFICANCE MATRIX.....	5
TABLE 13-4:	MAGNITUDE VALUE AND SENSITIVITY .....	7
TABLE 13-5:	VISUAL IMPACT SIGNIFICANCE MATRIX.....	8
TABLE 13-6:	PROTECTED VIEWS WITHIN 5KM OF THE PROPOSED DEVELOPMENT LOCATION * .....	16
TABLE 13-7:	VIEWPOINT LOCATIONS .....	19
TABLE 13-8:	VISUAL SIGNIFICANCE IN THE VIEWPOINTS .....	43

## LIST OF FIGURES

FIGURE 13-1:	SITE LOCATION AND LANDSCAPE STUDY AREA .....	9
FIGURE 13-2:	EXCERPT FROM MEATH LANDSCAPE CHARACTER ASSESSMENT SHOWING RANGE OF LCA'S .....	12
FIGURE 13-3:	ZTV MAP 5KM STUDY AREA .....	14
FIGURE 13-4:	PROTECTED VIEWS AND PROSPECTS .....	17
FIGURE 13-5:	PROTECTED VIEWS IN THE VICINITY OF THE SITE .....	21

## LIST OF PLATES

PLATE 1:	LOCATION OF THE PERMITTED SOLAR FARM (PLAN. REF. AA180145) .....	44
----------	--	----

## 13 LANDSCAPE & VISUAL IMPACT

### 13.1 Introduction

This chapter of the Environmental Impact Assessment Report (EIAR) describes the existing landscape in the vicinity of the proposed development location and the visual character of the local landscape. This chapter addresses the likely significant landscape and visual effects of the proposed development at Knockharley Landfill, County Meath.

#### 13.1.1 Proposed Development

The existing landfill facility operates under an Industrial Emission (IE) licence (Licence No: W0146-02) from the Environmental Protection Agency (EPA) which permits the disposal of up to 200,000 tonnes per annum. Pursuant to planning reference PL17.220331, An Bord Pleanála in granting permission for this site placed a management condition (Condition 3 of the governing permission) on the site restricting disposal at the facility to 132,000 tonnes per annum until December 2010, thereafter reducing to 88,000 tonnes per annum for disposal. Permission is now sought for further development from An Bord Pleanála by the applicant. A detailed description of the proposed development is set out in Chapter 2 Description of Development in Volume 2 of this EIAR.

#### 13.1.2 Landscape and Visual Assessment Overview Proposed

This assessment provides a description of the existing landscape context and of the proposed development in that context and identifies any significant landscape and visual effects. Effects are considered with regard to vulnerability of the landscape to change, and to the location of visual receptors relative to the proposed development. The assessment adopts the following structure:

- Section 13.2 Assessment Methodology
- Section 13.3 Existing Environment
- Section 13.4 Description of the Proposed Development
- Section 13.5 Mitigation Measures
- Section 13.6 Landscape and Visual Effects
- Section 13.7 Conclusion

### 13.2 Assessment Methodology

#### 13.2.1 Landscape and Visual Impact Assessment (LVIA) Study Area

The Study Area for this Landscape and Visual Impact Assessment extends to 20 km from the site boundary of the proposed development. All desktop studies, site visits, baseline mapping, Zone of Theoretical Visibility (ZTV) maps and Viewshed Reference Points (VRPs) informing the assessment extend to the full study Area. For the purposes of Cumulative Assessment, other relevant developments beyond the 20 km radius Study Area are also considered.

Reference to the site in this chapter is to the proposed development area at Knockharley Landfill that lies at the center of the Study Area.

#### 13.2.2 Definition of Landscape

This Assessment adopts the definition of landscape presented in the European Landscape Convention, and as such the term 'landscape' refers equally to areas of rural countryside and urban – built up – areas.

The European Landscape Convention, adopted in 2000, defines landscape as follows:

*“An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors” (Council of Europe 2000)*

### 13.2.3 Relevant Guidance and Legislation

The landscape and visual impact assessment has had regard to the following guidance reference material:

- Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report, EC, 2018
- Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports EPA, 2017.
- Landscape and Landscape Assessment, Consultation Draft of Guidelines for Planning Authorities, Department of Environment and Local Government, 2000.
- Guidelines for Landscape and Visual Impact Assessment, 3<sup>rd</sup> Edition, The Landscape Institute, 2013.
- Advice Note 01/11 – Photography & Photomontage in Landscape and Visual Impact Assessment, The Landscape Institute, 2011.
- Meath County Development Plan 2013-2019

### 13.2.4 Methodology Overview

The landscape and visual impact assessment includes a review of the site and study area in terms of characterising the receiving environment. The existing landscape character was evaluated using criteria such as landform, land cover and land use, features of interest and focal points, designations and views and prospects as well as the scale of the receiving visual environmental, quality of the environment and amenity and the valued aspects integral to how the character is experienced or perceived.

The landscape of the area is described in terms of its existing character, landscape values and the landscape's sensitivity to change. The assessment considers the sensitivity of views and the degree of change that may arise as a result of the proposed development, and also the sensitivity of receptors.

In this assessment, the term 'receptors' means viewers within the general environment as well as residential properties. Although the study area extends to 20 km, given the landform and land use within the vicinity of the site the assessment has generally focused on the 5 km zone around the site area.

The methodology used for the landscape assessment entailed the following:

- A desktop study of the site in relation to its overall context locally, regionally and nationally including a review of landscape planning context, including the County Development Plan, landscape character types, designated landscape and protected views.
- Visiting the site and its environs to assess the following:
  - Quality and type of view in the area;
  - The extent of the visual envelope, i.e. the potential area of visibility of the site in the surrounding landscape; and
  - The character and quality of the surrounding landscape in relation to the position of the proposed development.
- Preparation and review of Zone of Theoretical Visibility (ZTV) maps, including cumulative visibility.
- Undertaking Route Screening Assessment.
- Preparation of representative Viewshed Reference Point (VRPs)/Photomontages.
- Assessment of potential likely significant landscape and visual effects, including cumulative effects.

### 13.2.5 Baseline Landscape and Visual Information

An initial desktop study was undertaken to identify the relevant policies and guidelines, nationally and locally to be considered in the assessment.

### 13.2.6 Existing Landscape Assessment

The landscape character, values and sensitivity of the area in the vicinity of the proposed development location is outlined in accordance with the Department of Environment and Local Government Guidelines - *Landscape and Landscape Assessment, Consultation Draft of Guidelines for Planning Authorities, 2000*. In these guidelines landscape character, values and sensitivity are defined as:

- **Landscape character** can be established for an area where there is visual distinctiveness and identity through a continuity of similar characteristics. This description outlines 'what is physically on the land surface', resulting from geology, soils, hydrology, topography, vegetation and land-use.
- **Landscape values** can be described as the environment or cultural benefits that are derived from various landscape resources. These resources may include physical and visual components.
- **Landscape sensitivity** can be described as the extent to which a landscape can accommodate change without unacceptable loss of existing character or interference with values.

The baseline condition in relation to the landscape character of the area of the proposed development was assessed by means of a desk-based study to assess the available information in relation to the sensitive landscapes in the area of the proposed development, the current presence of sensitive visual receptors in the area and the presence of sites of cultural significance in the vicinity of the proposed development.

Once the baseline assessment had been carried out, an assessment of both the positive and negative impacts of the proposed development on the surrounding area in terms of the visual impact was undertaken. These impacts are presented in this section, as well as the mitigation measures proposed, if appropriate, to mitigate any negative impacts.

The data and publications used to compile the baseline assessment are listed below:

- Meath County Council County Development Plan (CDP) 2013 -2019
- Kentstown Written Statement (as per Variation No. 2 of CDP 2013 – 2019)
- Regional Planning Guidelines for the Greater Dublin Area 2010 - 2022

The proposed development site was visited by personnel from Fehily Timoney and Company in March 2015 and February 2018. A site walkover and windscreen survey of the surrounding area was undertaken. The purpose of the site walkover and the windscreen survey was to assist in the characterisation of the landscape in the local and broader context, in addition to identifying sensitive receptors.

### 13.2.7 Visual Impact Assessment

The landscape impact assessment describes the likely nature and scale of changes to individual landscape elements and characteristics, and the consequential effect on landscape character.

Existing trends of change in the landscape are taken into account. The potential landscape impact is assessed based on the landscape sensitivity and on the scale or magnitude of landscape effects.

The sensitivity of the landscape resource is a function of its land use, landscape patterns and scale, visual enclosure and distribution of visual receptors and the value placed on the landscape.

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 features without unacceptable detrimental effects to its essential characteristics.

Landscape Value and Sensitivity is classified using the following criteria:

**Table 13-1: Landscape Value and Sensitivity**

Sensitivity	Description
<b>Very High</b>	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.
<b>High</b>	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
<b>Medium</b>	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.
<b>Low</b>	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.
<b>Negligible</b>	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 proposal site boundary that may have an effect on the landscape character of the area.

**Table 13-2: Magnitude of Landscape Impacts**

Magnitude of Impact	Description
<b>Very High</b>	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.
<b>High</b>	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.
<b>Medium</b>	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.
<b>Low</b>	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.
<b>Negligible</b>	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.

**Table 13-3: Landscape Impact Significance Matrix**

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

\*Light grey shading indicates a level of impact that is considered to be 'significant' in EIA terms

### 13.2.8 Visual Sensitivity

Unlike landscape sensitivity, visual sensitivity has an anthropocentric basis. Visual sensitivity is a two-sided analysis of receptor susceptibility (people or groups of people) versus the value of the view on offer at a particular location.

To assess the susceptibility of viewers and the amenity value of views, the assessors use a range of criteria and provide a four-point weighting scale to indicate how strongly the viewer/view is associated with each of the criterion. Susceptibility criteria is extracted directly from the IEMA *Guidelines for Landscape and Visual Assessment* (2013), whilst the value criteria relate to various aspects of a view that might typically be related to high amenity including, but not limited to, scenic designations. These are set out below:

1. **Susceptibility of receptor group to changes in view.** This is one of the most important criteria to consider in determining overall visual sensitivity because it is the single category dealing with viewer susceptibility. In accordance with the IEMA *Guidelines for Landscape and Visual Assessment* (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 Development Plans, at least, 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 with 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. **Intensity of use, popularity.** Whilst not reflective of the amenity value of a view, this criterion 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;
  5. **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.
  6. **Sense of remoteness and/or tranquillity.** Remote and tranquil viewing locations are more likely to heighten the amenity value of a view and have a lower intensity of development in comparison to dynamic viewing locations such as a busy street scene, for example;
  7. **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 obvious human interventions;
  8. **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;
  9. **Historical, cultural or spiritual value.** Such attributes may be evident or sensed at certain viewing locations that attract visitors for the purposes of contemplation or reflection heightening the sense of their surroundings;
  10. **Rarity or uniqueness of the view.** This might include the noteworthy representativeness of a certain landscape type and considers whether other similar views might be afforded in the local or the national context;
  11. **Integrity of the landscape character in view.** This criterion considers 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;
  12. **Sense of place.** This criterion considers whether there is special sense of wholeness and harmony at the viewing location; and
  13. **Sense of awe.** This criterion considers whether the view inspires an overwhelming sense of scale or the power of nature.

Those locations where highly susceptible receptors or receptor groups are present, and which are deemed to satisfy many of the view value criteria above are likely to be judged to have a high visual sensitivity and vice versa.

### 13.2.9 Visual Impact Magnitude

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

Visual presence is a somewhat quantitative measure relating to how noticeable or visually dominant the proposal is within a particular view. This is based on a number of aspects beyond simply scale in relation to distance. Some of these include the extent of the view as well as its complexity and the degree of existing contextual movement experienced. The backdrop against which the development is presented and its relationship with other focal points or prominent features within the view is also considered. Visual presence is essentially a measure of the relative visual dominance of the proposal within the available vista and is expressed as such i.e. minimal, sub-dominant, co-dominant, dominant, highly dominant.

It should be noted that as a result of this two-sided analysis, a high order visual presence can be moderated by a low level of effect on visual amenity and vice versa.

The magnitude of visual impacts is classified in the following table:

**Table 13-4: Magnitude Value and Sensitivity**

Criteria	Description
<b>Very High</b>	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 disorder or disharmony is also generated, strongly reducing the visual amenity of the scene
<b>High</b>	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 disorder or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene
<b>Medium</b>	The proposal represents a moderate intrusion into the available vista, is a readily noticeable element and/or it may generate a degree of visual disorder 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
<b>Low</b>	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
<b>Negligible</b>	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

### 13.2.10 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 significance matrix in Table 13.5 over.

**Table 13-5: Visual Impact Significance Matrix**

	Sensitivity of Receptor				
Scale/Magnitude	Very High	High	Medium	Low	Negligible
Very High	Profound	Profound-substantial	Substantial	Moderate	Slight
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

*\*Light grey shading indicates a level of impact that is considered to be 'significant' in EIA terms*

*\*Note: The significance matrices provided above at table 14.3 and table 14.5 provide 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.*

It should be noted that short term impacts on the visual landscape due to temporary tree felling are not considered in this assessment. The mitigated scenario will only consider the final phase when all tree felling has been carried out and proposed forestry planting has been completed and trees are fully grown.



### 13.3 Existing Environment

The proposed development site is in a western lowland area of County Meath. The site location and the associated 5km study area is identified in Figure 13.1 herein.



Co. Meath

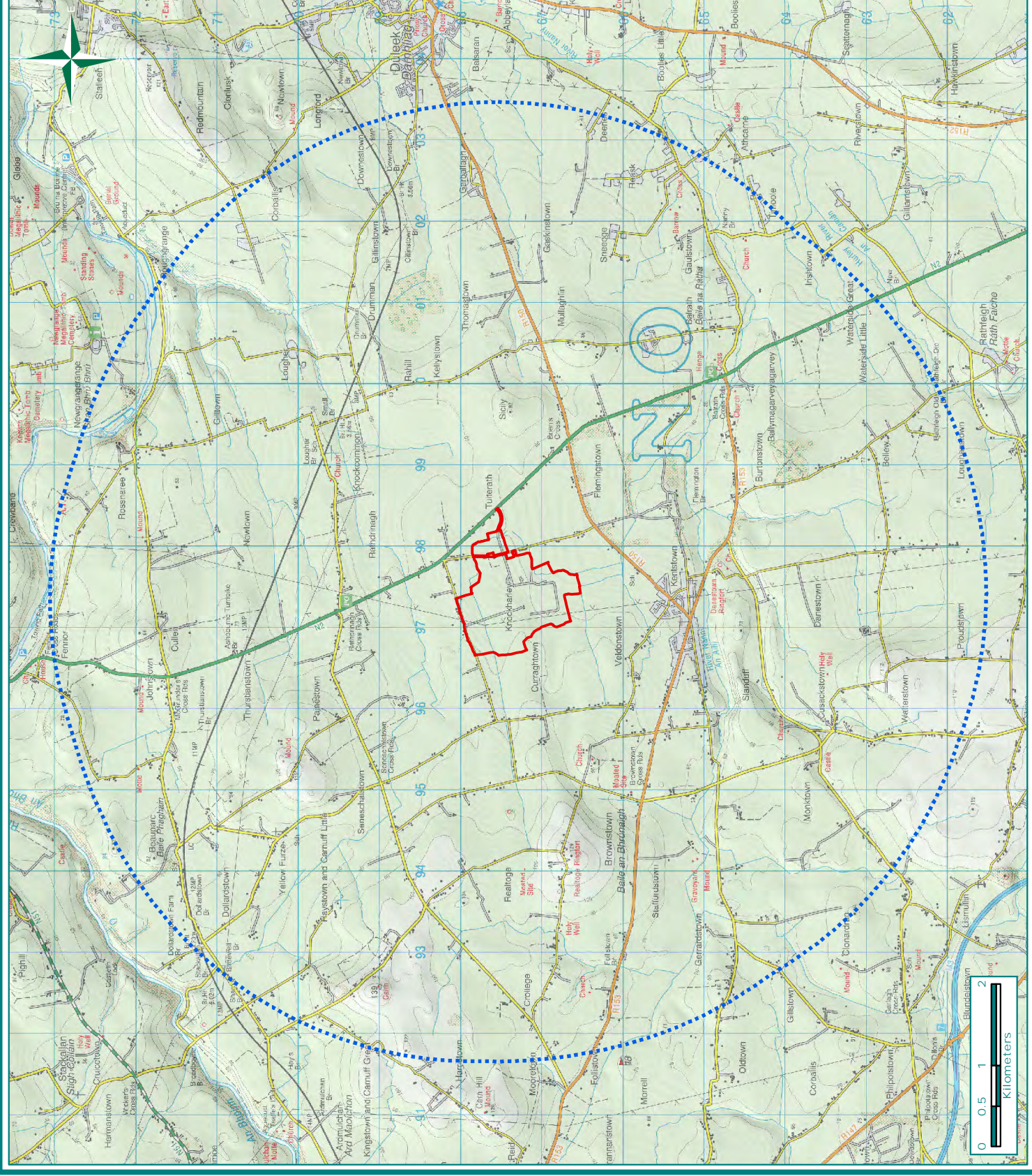
**Legend**

-  Site Boundary
-  5km Distance from Site Boundary

Date	18/05/2018
Client Name	Knockharley Landfill Ltd.
Project Title	Proposed Development at Knockharley Landfill
Figure Title	Site Location Map Indicating 5km Distance from Site Boundary
Figure No.	13.1
Rev.	A
Scale	1:65,000 @ A4

**FEHILY TIMONEY & COMPANY**  
**CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES**

Core House, Ballyduff Road, Cork, T12 D733, Ireland  
 T: +353-21-494135, F: +353-21-4444  
 Unit 16, PEZA, North Park Business Park, Dublin 11, D11 PXT0, Ireland  
 T: +353-1-6683900, F: +353-1-6683901  
 W: www.fehilytimoney.ie, E: info@ftco.ie





### 13.3.1 Landscape Baseline

The landscape baseline represents the existing landscape context and is the scenario against which any changes to the landscape brought about by the proposal will be assessed. This also includes reference to any relevant landscape character appraisals and the current landscape policy context (both are generally contained within County Development Plan).

The landfill site itself is generally characterised by the field network pattern of the wider landscape setting into which the landfill cells and associated infrastructure and facilities have been placed. While this has necessitated the removal of part of the hedgerow landscape infrastructure, significant sections of it remain on the site and additional structure planting has been undertaken since the commencement of landfill operations, particularly along the boundaries to provide screening and a suitable buffer between the site and residences associated with the local road network.

A general description of the landscape context of the proposed development site and wider study area is provided below. Additional descriptions of the landscape as viewed from each of the selected viewpoints are provided under the detailed assessments later.

#### 13.3.1.1 Landform and Drainage

The central study area (5 km radius) contains the proposed development site. The site is contained in a generally flat and gently undulating terrain, between the River Boyne to the north and the River Nanny to the South. The River Boyne and the River Nanny are the principal watercourses within the study area. The general topography of the area is low-lying. The landfill site is located within the catchment area of the River Nanny which flows west to east some 1.5 km to the south. The site is sloped with elevations ranging from 70 mOD in the north west to 55 mOD in the south east of the site. The site is a mix of constructed landfill and associated facilities with some woodland and wet grassland.

The Knockharley or Flemingstown stream entering the site from the western boundary at Knockharley is a 1st order tributary of the River Nanny. The stream flows from the west in an easterly direction. A second tributary, the Kentstown Stream flows east along the southern licensed boundary before turning south and joining the Veldonstown Stream, just upstream of its confluence with the Knockharley or Flemingstown Stream.

#### 13.3.1.2 Land Use and Land Cover

The existing Knockharley Landfill site comprises 135.2 hectares (333-acre site) with the existing landfill footprint positioned near the centre of the landholding, aligned approximately north-south through the centre of the site.

Within the site boundary are also located:

- a complex of buildings comprising of an administration building, two weighbridges, inspection slab, quarantine slab, machinery/maintenance garage, car parking and other facilities. These are located within the administration area to the east of the landfill cells.
- a leachate storage lagoon located to the south of the administrative buildings
- a surface water attenuation pond situated to the south of the landfill
- a landfill gas compound located to the south east of the landfill footprint
- access road and internal site roads and underground and over ground services

The vast majority of the 5 km radius study area is farmed landscape consisting of fields of crops and pastures. There are small blocks of broad-leaved forest throughout the study area. The agricultural land is a patchwork of medium to large sized fields divided by hedgerows, which are mainly used for tillage and crop production and some animal grazing. Intensive pig farming and other agricultural industries are also present in the wider vicinity of the landfill. Within the flat lowland landscape, the local road network is characterised by a broadly spaced rectilinear pattern with dwellings hugging the roadside.

Although there are numerous settlements within the study area, the only one that noticeably contributes to urban land cover in a broader context is Kentstown village which is located c. 900 m south of the proposed development site.

According to the CORINE 2012 landcover dataset (and terminology used therein), land cover near the proposed development primarily comprises a dump<sup>1</sup> (132), non-irrigated lands (211), pastures (231), broad-leaved forest (311) and discontinuous urban fabric (112). A map of this 2012 CORINE land cover dataset, is included in Figure 6.4.

The land use zoning mapping for County Meath as set out in the Meath County Development Plan identifies the lands within the vicinity of the site as unzoned white lands.

The facility is located in a rural area in the townlands of Kentstown and Tuiterrath, Co. Meath, approximately 1.5 km north of Kentstown village. The village of Slane is located 7 km north of the site, the town of Duleek is located 7 km to the east and the town of Navan is 10 km to the west. The N2 national primary route runs in a northwest-southeast direction east of the site, with a dedicated access road to the site off the N2. The access road from the N2 to the administration area is approximately 900 m running east to west. This is the only access point to the site for customers and construction vehicles.

A local road county road CR384 traverses the eastern portion of the site in a north-south direction. This road also runs directly adjacent to the northern boundary of the site for a distance of approximately 400m.

### 13.3.1.3 Landscape Policy Context and Designations

A Landscape Character Assessment was prepared for County Meath in 2007 and this is incorporated into the County Development Plan 2013–2019 as Appendix 7. The Landscape Character Assessment identifies four generic Landscape Character Types (LCT's) for the county including; Hills and Upland Areas; Lowland Areas; River Corridors and Estuaries and; Coastal Areas. The site is fully contained within the 'Lowland Landscape' Type as identified in Figure 13.2 overleaf.

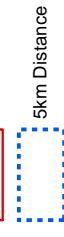
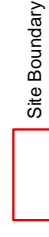
---

<sup>1</sup> Knockharley landfill









### Legend



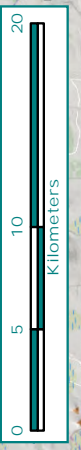
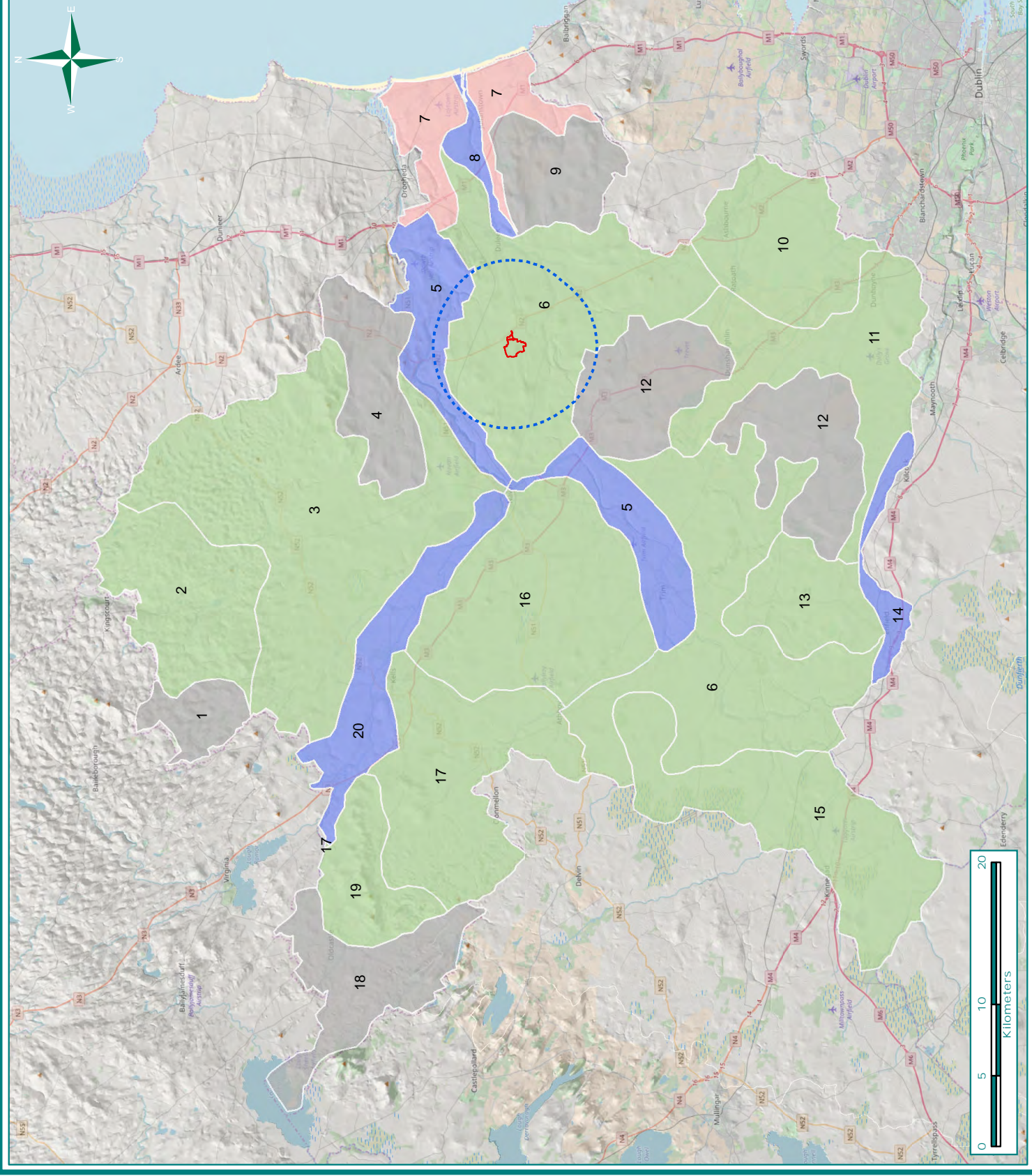
Meath County Development Plan 2013 - 2019  
Landscape Character Areas

-  Lowland Landscape
-  River Corridors & Estuaries
-  Hills & Upland Areas
-  Coastal Landscape

Date	18/05/2018
Client Name	Knockharley Landfill Ltd.
Project Title	Proposed Development at Knockharley Landfill
Figure Title	Landscape Character Types and Landscape Character Areas
Figure No.	13.2
Rev.	A
Scale	1:371,510 @ A4

**FEHILY TIMONEY & COMPANY**  
 CONSULTANTS IN  
 ENGINEERING &  
 ENVIRONMENTAL  
 SCIENCES

Core House, Ballyduff Road, Cork, T12 D733, Ireland  
 T: +353-21-4964138, F: +353-21-4464  
 Unit 16 JS Plaza, North Park Business Park, Dublin 11, D11 PXT0, Ireland  
 T: +353-1-6683900, F: +353-1-6683901  
 W: www.fehilytimoney.ie, E: info@ftco.ie





These LCTs are sub-divided into 20 geographically specific landscape character areas (LCAs) with the sensitivity of the LCA's being defined as *"its overall resilience to sustain its character in the face of change and its ability to recover from loss or damage to its components"*.

The Landscape Character Assessment identifies the proposed development location as being located within LCA 6 – Central Lowlands, which is of the "Lowland Areas" LCT.

LCA 6 is described as follows:

*"The landscape character around settlements tends to be a well-managed patchwork of small pastoral fields, dense hedgerows and small areas of broadleaved woodland particularly in the Kildalkey environs where there are estate landscapes with large mature parkland trees. The landscape is predominantly rolling pastureland, although the landscape surrounding Castlerickard has greater diversity than elsewhere in the lowlands with estate landscape, large conifer plantations, and birch woodland around the Boyne river corridor.*

*In more remote areas, away from settlements, single-track roads wind through less well-managed farmland with rough pasture, overgrown hedgerows and less woodland. Farmland is a variety of scales with square – rectangular fields divided by hedgerows, which are usually clipped to eye-level adjacent to road corridors but are less well managed away from roads. The agricultural landscape comprises a series of small farms rather than few large ones. Views within this area are generally limited by the complex topography and mature vegetation except at the tops of drumlins where panoramic views are available particularly of the Hill of Tara uplands and Skryne Church."*

A number of recommendations are outlined in relation to LCA 6 including among them, the recommendation to *"maintain the visual quality of the landscape by avoiding development that would adversely affect short range views between drumlins"*.

The potential capacity of the LCA to accommodate various type of development is presented –while no reference is made to landfill or waste facility type development, the most relevant comparator is considered to be "agricultural buildings", given the similar structural form that the proposed IBA facility building and the biological treatment facility building will take. It is identified that *"large agricultural buildings would be a change of character"* and *"overall the potential capacity to accommodate such development is medium."*

### Neighbouring Areas

Other LCAs beyond the Central Lowlands are:

- Tara Skyrne Hills – located approximately 6 km to the south (Hills and Upland Areas LCT)
- Bellewstown Hills – located approximately 8 km to the east (Hills and Upland Areas LCT)
- Boyne Valley – located approximately 7 km to the north (River Corridor and Estuaries LCT)

Given their distance from the proposed development location, no visual impacts will be realised at these LCAs and they are not considered further.

#### 13.3.2 Visual Baseline

The visual baseline for this landfill development establishes both the nature of visibility within the study area and the important receptor locations from which the development might be viewed.

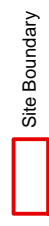
Only those parts of the study area that potentially afford views of the proposed development are of interest to this part of the assessment. Therefore, the first part of the visual baseline is establishing a 'Zone of Theoretical Visibility' (ZTV), which is presented in the ZTV map Figure 13.3 herein. This visibility is described as 'potential' or 'theoretical' because ZTV maps are computer generated outputs based on a 'bare-ground' terrain model and take no account of screening by the likes of vegetation and buildings. In flat landscapes, such as this, vegetation screening is usually the main determinant of visibility. Thus, the ZTV maps are more useful for determining where the development will definitely not be visible from rather than where they will be visible from.





Co. Meath

**Legend**



Site Boundary



5km Distance from Site Boundary

Zone of Theoretical Visibility - % of Landfill Site Potentially Visible



20%



40%



60%



80%



100%

Zone of Theoretical Visibility calculation based on the following parameters:

- observer height 1.5m
- landfill height 85m
- calculated to a radius of 5km from site boundary

Date 18/05/2018

Client Name

Knockharley Landfill Ltd.

Project Title

Proposed Development at Knockharley Landfill

Figure Title

Zone of Theoretical Visibility (ZTV) within 5km Radius of Site Boundary

Figure No.

13.3

Rev.

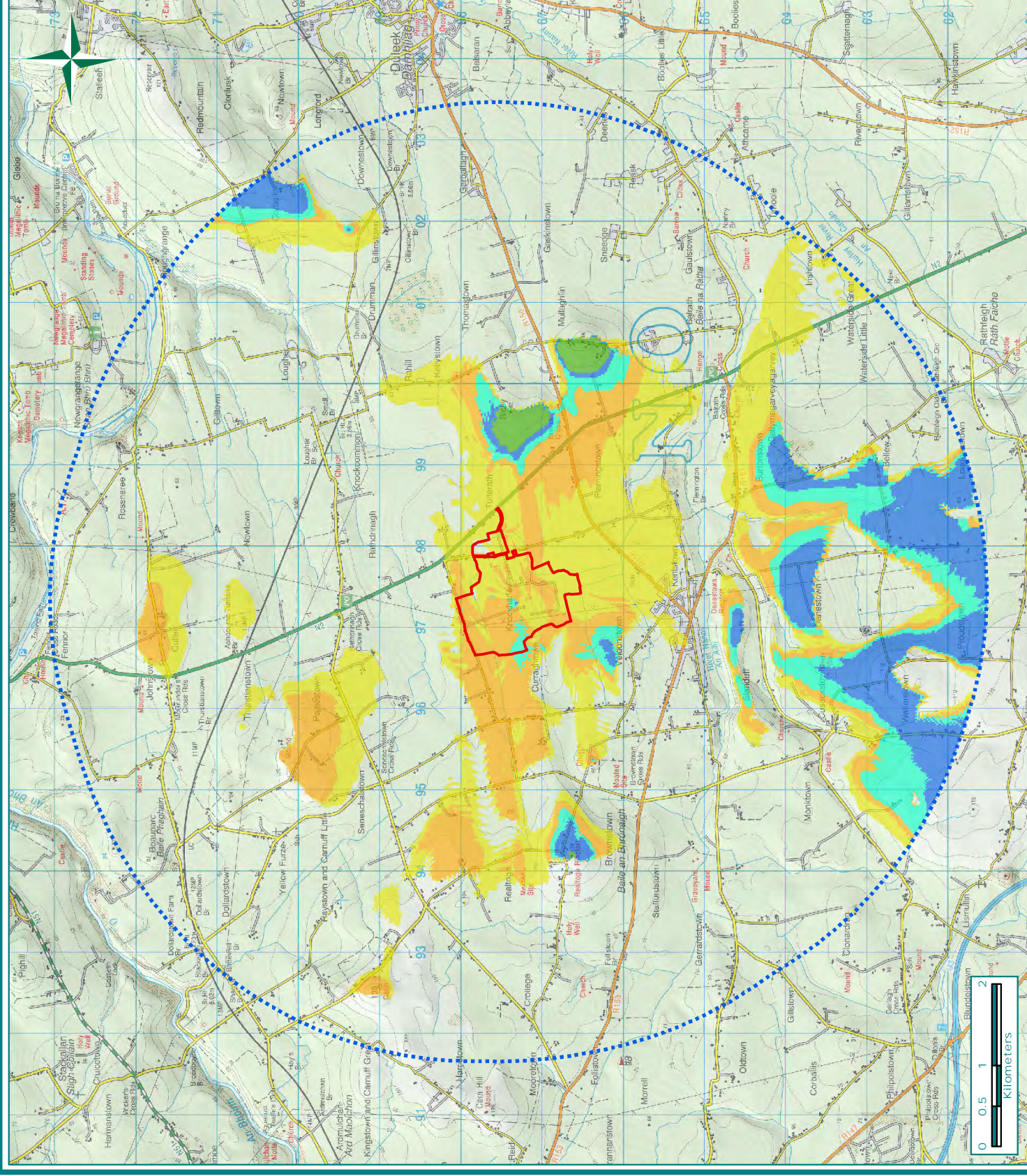
A

Scale

1:65,000 @ A4



Core House, Ballyduff Road, Cork, T12 D735, Ireland  
 T: +353-21-494138, F: +353-21-44464  
 Unit 16, PEZA, North Park Business Park, Dublin 11, D11 PXT0, Ireland  
 T: +353-1-6683900, F: +353-1-6683901  
 W: www.fehilytimoney.ie, E: info@ftco.ie





The following key points should be noted from the ZTV mapping (Figure 13.3):

- The study area is flat and comprises lowlands.
- Fairly comprehensive theoretical visibility occurs within the nearest 1 km of the proposed development within the lowland context of the central study area.
- The landfill site is indiscernible within the wider landscape.

### Visual Envelope

The visual envelope is the extent of potential visibility of the site to or from a specific area or feature. The visual envelope for the proposed development will be defined by views from:

- the local CR384 road to the east, south west, west and north of the development site
- the R150 regional road directly south of the development site

The approximate zone of visual influence derived from site visit assessment is in Figure 13.3.

### 13.3.3 Visual Receptors

#### 13.3.3.1 Centres of Population and Houses

The largest settlements within proximity to the study area are Drogheda at the eastern periphery of the study area and Navan approximately 10 km to the west of the site. These settlements both have populations in excess of 30,000. According to the ZTV map, views of the proposed development will not be afforded from Drogheda or Navan given the substantial screening afforded by the intervening terrain.

The largest settlement within the study area is Kentstown with a population of 1,179 persons. There is potential intervisibility of the site from Kentstown due to the low land topography, intervening vegetation and structures. In the immediate flat landscape which surrounds the proposed development dwellings tend to be located immediately adjacent to the dispersed road network. This is reflective of the fact that the landscape within the area surrounding the site has a low population density according to the 2016 census results.

#### 13.3.3.2 Transport Routes

The most heavily trafficked route within the study area is the N2 national primary road that runs from Dublin to the border of Northern Ireland at Moy Bridge near Aughnacloy, Co. Tyrone. The N2 directly abuts the planning boundary for the site to the east (because the planning boundary include a 900 m access road to the administration area) . The existing site entrance enjoys a direct vehicular access onto the N2 which is facilitated by a ghost island junction. There is a network of county roads in the vicinity of the site which provide access to the village of Kentstown approximately 1.5 km to the south of the site. The local road network includes the CR384 to the north, local country road to the east and R150 to the south.

#### 13.3.3.3 Amenity and Heritage Locations

This category of receptor is dominated by outdoor recreation features such as way-marked walking routes, lakes, canals and mountain tops. The study area however comprises lowlands. Within the study area there is a UNESCO World Heritage site, Brú na Bóinne, an important tourist attraction. The proposed development is located c.5.3 km from the Brú na Bóinne information centre. In 2013, 'The Boyne Valley Drive', a driving route encompassing 22 no. historic sites throughout County Meath and County Louth was launched in conjunction with Fáilte Ireland, Meath County Council and Louth County Council with a promotional programme aimed at the overseas market. The Boyne Valley is considered by Fáilte Ireland to be one of a number of priority destinations in Ireland. The Boyne Valley Drive presents several attractions and amenities to tourists and visitors. The Boyne Valley Drive traverses the Study Area for the purposes of this Chapter of the EIA.

13.3.3.4 View of Recognised Scenic Value

There are 8 no. protected views within 5 km of the proposed development location, classified as per Appendix 12 of the Meath County Development Plan 2013-2019. These protected views are identified in the table.

**Table 13-6: Protected Views within 5km of the proposed development location \***

View No.	Location	Direction	Description	Significance
34	N2 between Slane and Balrath at McGrunder's Cross Roads	North East	View of Boyne Valley with open view of Knowth and Newgrange. Mixed composition of working landscape. Slane visible on left (west). Roads, power lined and housing visible.	International
35	Country Road between Beupark and Painestown	North West	View to northwest across settled landscape with settlements and infrastructure (powerline, windfarm, roads visible). Many large woodland lots.	Regional
36	County road to north of Brownstown Cross Roads on R153 I	North West	View to north west across working landscape with visual agricultural structures.	Local
37	County road to north of Brownstown Cross Roads on R153 II	South East	View to south east across working landscape with visual agricultural structures.	Local
74	Boyne valley from Rosnaree House	East	Boyne valley from Rosnaree House	National
93a	Local Road L16002, 1.2km east of Fenner Cross Roads	North East	View towards the Core Area of the World Heritage Site.	Regional
93b	Local Road L16002, 0.7km west of Rosnaree	East	View towards the Core Area of the World Heritage Site.	Regional
93c	Local road L16002, 1.65km east of Fennor Cross Roads	East	View towards the Core Area of the World Heritage Site.	Regional

\* as per Appendix 12 of the CDP 2013 - 2019




The proposed development location is not within the visual envelope of any of these views, as shown in Figure 13.4.







Co. Meath

**Legend**

-  Site Boundary
-  5km Distance from Site Boundary
-  Views & Prospects

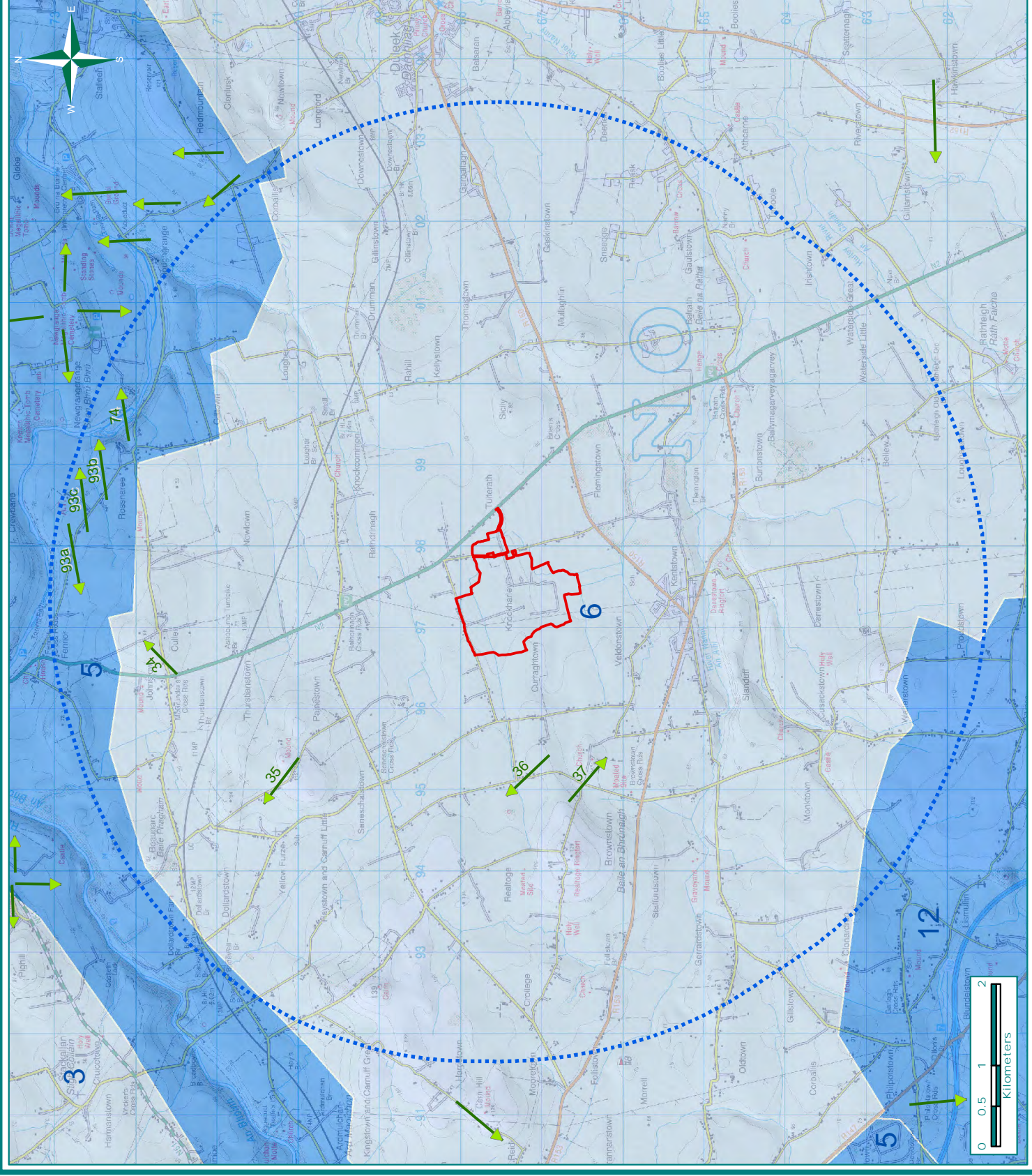
**Meath County Development Plan 2013 - 2019  
Landscape Character Assessment**

- Landscape Sensitivity**
-  High
  -  Moderate

Date	18/05/2018
Client Name	Knockharley Landfill Ltd.
Project Title	Proposed Development at Knockharley Landfill
Figure Title	Landscape Sensitivity and Views and Prospects
Figure No.	13.4
Rev.	A
Scale	1:65,000 @ A4

**FEHILY TIMONEY & COMPANY**  
 CONSULTANTS IN  
 ENGINEERING &  
 ENVIRONMENTAL  
 SCIENCES

Core House, Ballyduff Road, Cork, T12 D735, Ireland  
 T: +353-21-494138, F: +353-21-44464  
 Unit 16, PE Plaza, North Park Business Park, Dublin 11, D11 PXT0, Ireland  
 T: +353-1-6683900, F: +353-1-6683901  
 W: www.fehilytimoney.ie, E: info@ftco.ie





### 13.3.3.5 Identification of Viewshed Reference Points as a Basis for Assessment.

The results of the ZTV analysis provide a basis for the selection of Viewshed Reference Points (VRP's), which are the locations used to study the landscape and visual impact of the proposed development in detail. The assessment of visual impact involves identifying viewpoints within the visual envelope that are representative within the receiving environment. These viewpoints were selected based on physical inspection of the view. The selected viewpoints are surveyed to ascertain the condition of the existing view (characteristics, features, positive and negative qualities, etc.) and the associated sensitivity of the viewpoint (based on the extent and location type – residential, public road, amenity, etc.). With the aid of representative images, the degree of change to be experienced at that location is assessed.

## 13.4 Potential Impacts

### 13.4.1 Potential Impact of the Proposed Development

The following criteria outline the manner in which potential impacts on landscape character and visual impact can occur in the context of the proposed development:

- The design language associated with the proposed development;
- The scale and form of the development; and
- The form of the proposed boundary berms.

### 13.4.2 Potential Landscape Impacts

The proposed development will continue the emerging trend within Knockharley Landfill landholding – a landscape changing in character from former agricultural land to a large-scale waste management facility with associated light industrial and ancillary buildings. The existing landfill is located within the proposed development boundary. The proposed development will therefore appear within the landscape as a contiguous development.

However the proposed final landfill height will be higher than the existing landfill height, resulting in an increase in the overall height of the facility at this location. The main landscape impacts associated with the proposed development will be the removal of existing woodland boundary planting and the construction of soil berms along boundaries to the north of the site. Construction of screening berms along the western planning boundary is to a maximum of 11 m in height, on the eastern boundary, to a maximum height of 10 m and on the northern boundary, to a maximum height of 6 m, with a total berm footprint of c. 11.3 ha. The proposed development comprises a number of tall structures such as the landfill, the IBA facility, the leachate storage tanks, and the biological treatment facility. The landfill has a proposed height of 85 m AOD (25 m AGL) and the biological treatment facility external wall has a maximum height up to 14.12 m (70.8 m AOD) and a stack of 20 m (76.6 m AOD).

While these activities will bring a sense of change and disruption to parts of the site, the sequential restoration proposals will ensure that tree cover will prevail once again in the medium to long term providing a natural woodland backdrop in views from the local road network. The site has displayed a high success rate for woodland establishment to date and this provides a sound basis for the current proposed restoration plan.

The introduction of the relatively large scale industrial style buildings onto the site which could change the perception of the local rural setting is mitigated by the careful placement of the buildings such that they will be significantly screened in views from vantage points to the south and east of the site by a combination of existing vegetation cover and their placement at a low point on the site. The buildings will not therefore become a significant feature in views along from the local road network, from local residences to the east of the site or from Kentstown primary school to the south of the site.

Direct and permanent change will occur locally where the proposed development will be physically located. Bearing in mind the existing permitted development within site has already altered the landscape character of the site. The proposed development will not result in significant changes in the size, elevation or landscape character and will continue to alter the landscape character in a same degree as before.

The highest direct landscape effects will arise from changes to landform and existing vegetation on the site. The significance of change is considered to be Moderate.

The proposed development is located in a mainly flat landscape and therefore even relatively low vegetation can provide screening to receptors. Outside the development site, recognisable changes to the landscape character will be limited and localised due to the flat nature of the overall study area and significant intervening vegetation, which will prevent the full recognition of the scale of the changes to landform within the land holding. Moderate landscape effects are therefore extremely localised and beyond the site impacts are therefor considered to be slight.

### 13.4.3 Potential Visual Impacts

To determine the visual impact of the proposed development, a number of viewpoints were selected for detailed assessment. These viewpoints relate to the visual envelope of the site. The viewpoints are listed in Table 13.7 herein with an indication of their location and distance from the site.

Furthermore, a series of photomontages of the development have been prepared based on the visual envelope at these viewpoints. These photomontages are utilised as a visual aid when assessing the impact at these viewpoints and the general impact of the proposed facility is presented and described in terms of these photomontages in the following section.

All of the photographs were taken in GPS recorded locations. The proposed structures have been modelled in AutoCAD and 3D Studio MAX. The GPS camera position is used to place viewpoints which are then rendered. The image is transferred into Adobe Photoshop using known existing place markers.

**Table 13-7: Viewpoint Locations**

Viewpoint No.	Location	Viewpoint Type	Grid Reference	Approximate Distance from Site Boundary
1	Local Road to the South	Roadside	696616, 765891	870m
2	CR384 Roadside North West of Site	Roadside/Amenity	696520, 767809	70m/Adjacent
3	CR384 Roadside North East of Site	Roadside	697653, 768191	387m
4	CR384 Roadside East of Site	Roadside/Residential	697856, 767398	26m/Adjacent
5	Kentstown Primary School	School	697675, 765856	134m
6	CR384 Roadside North of Site	Roadside	697252, 768063	Adjacent
7	Local County Road Network West of Site	Roadside/Residential	695828, 767037	845m
8	Country Road Network West of the Site	Roadside	694186, 766913	2.4km
9	Country Road Immediately East of the Site	Roadside	697947, 767068	130m

The proposed development is located in a mainly flat landscape and therefore even relatively low vegetation can provide screening to receptors. The above outlined 9 no. photomontages from representative viewpoints have been prepared illustrating the nature of visibility of the proposed development at various distances, contexts and elevations. While most viewpoints have been informed by the ZTV and the identified surrounding area of identified visibility, some additional viewpoints have been prepared to address concerns raised through the public consultation process, as outlined in Chapter 5 of this EIAR.

Visibility from heritage receptors such as Brú Na Bóinne, the Hill of Tara, the Hill of Slane is considered to be nil because the distance from the proposed development is more than 5km and due to other developments in the line of sight. The site is not visible from high points identified in the ZTV at 5 km from the proposed site.





**Legend**

- Site Boundary
- Zone of Visual Influence (derived from site visit assessment)
- ➔ View Point Location

VP	Angle	X Co-ord	Y Co-ord
1	North-east	696616	765891
2	South-east	696620	767809
3	South-west	697653	768191
4	West	697856	767398
5	North	697675	765856
6	South	697252	768063
7	East	696828	767037
8	East	694186	766913
9	South-west	697947	767068

Date	29/05/2018
Client Name	Knockharley Landfill Ltd.
Project Title	Proposed Development at Knockharley Landfill
Figure Title	Photomontage Viewpoints
Figure No.	13.5
Rev.	A
Scale	1:33,970 @ A4

**FEHILY TIMONEY & COMPANY**  
 CONSULTANTS IN  
 ENGINEERING &  
 ENVIRONMENTAL  
 SCIENCES

Core House, Ballyduff Road, Cork, T12 D733, Ireland  
 T: +353-21-494135, F: +353-21-4444  
 Unit 16, JS Plaza, North Park Business Park, Dublin 11, D11 PXT0, Ireland  
 T: +353-1-6683900, F: +353-1-6683901  
 W: www.fehilytimoney.ie, E: info@ftco.ie





## Viewpoint 1

ITM 696616,765891

Direction of the view- North-East

The existing and proposed view from this location is shown in Figure VP1 overleaf.

### Description of View

Viewpoint 1 is from a location on a local road coming from Kentstown towards the north. This photomontage is representative of the views from the settlement of Kentstown and road users.

### Existing View

The view is taken from a location at 870 m from the site boundary, at a slightly lower elevation. A large field of pastures bounded by a vegetated treeline is visible. None of the existing facilities are discernible from this view due to the distance, topography and the screening of the existing treeline.

### Proposed View and Mitigation

The existing vegetation near the viewpoint is deemed to screen completely the proposed development and therefore, the existing rural character of the view will be kept intact. Mitigation will therefore not be required towards this location.

### VIA Result

The viewpoint sensitivity is considered to be High due to number of residents living in the settlement of Kentstown. The visual magnitude of the proposed development is Negligible because it is barely discernible from this view. Therefore, the significance of the visual impact from this location will be Slight and no adverse changes expected.



North East Section View Of Existing/Proposed Development



Existing View of Site

North East Section View Of Proposed Development



Photomontage View of Proposed Development

VIEWPOINT 1

Proposed Development at  
Knockharley Landfill

FEHILY TIMONEY & COMPANY

Core House, Pouladuff Rd, Cork, Ireland.

T: +353-21-4964133,

F: +353-21-4964464

J5 Plaza,

North Park Business Park,  
North Road, Dublin 11, Ireland.

T: +353-1-6583500,

F: +353-1-6583501

W: [www.fehilytimoney.ie](http://www.fehilytimoney.ie), E: [info@ftco.ie](mailto:info@ftco.ie)



Drawn: SK

Checked: CC

Approved: BG

Revision B - Issue for Planning

Previous Revisions

A

Date of Issue - March 2018

FIGURE VP 1

Filed : LW14/821/01/LW1482101-FigureVP1



## Viewpoint 2

ITM 696520,767809

Direction of the view- South-East

The existing and proposed view from this location is shown in Figure VP2 overleaf.

### Description of View

Viewpoint 2 is from an adjacent location in the local road CR384 northwest of the site. This photomontage is representative of the road receptors.

### Existing View

This is a close view towards the site, taken from the adjacent local road towards the south east. Two large containers and a football pitch are visible with the commercial forestry within the development site visible behind.

### Proposed View and Mitigation

The proposed development will not be visible from this view due to the topography and the existing vegetation of forest planting. Providing that the new planting areas remain the same as the current ones, additional mitigation will not be required towards this location.

### VIA Result

The viewpoint sensitivity is considered to be Low as there are no susceptible receptors and there are no features or recorded routes that recognise the value of the view. The visual magnitude of the proposed development is Negligible because it is barely discernible from this location. Therefore, the significance of the visual impact from this location will be Imperceptible.



South East Section View Of Existing/Proposed Development



Existing View of Site

South East Section View Of Proposed Development



Photomontage View of Proposed Development

**VIEWPOINT 2**

**Proposed Development at  
Knockharley Landfill**

**FEHILY TIMONEY & COMPANY**

Core House, Pouladuff Rd, Cork, Ireland.

T: +353-21-4964133,

F: +353-21-4964464

J5 Plaza,

North Park Business Park,  
North Road, Dublin 11, Ireland.

T: +353-1-6583500,

F: +353-1-6583501

W: [www.fehilytimoney.ie](http://www.fehilytimoney.ie), E: [info@ftco.ie](mailto:info@ftco.ie)



Drawn: SK

Checked: CC

Approved: BG

Revision B - Issue for Planning

Previous Revisions

A

Date of Issue - March 2018

**FIGURE VP 2**

Filed : LW14/821/01/LW1482101-FigureVP2





### Viewpoint 3

ITM 697653,768191

Direction of the view- South-West

The existing and proposed view from this location is shown in Figure VP3 overleaf.

#### Description of View

Viewpoint 3 is from a location in the local road CR384, 387 m northeast of the site. This photomontage is representative of the road receptors and residential receptors.

#### Existing View

This is a close view towards the site, taken from the adjacent local road towards the south west. The existing facilities are not visible from this perspective.

#### Proposed View and Mitigation

The proposed IBA facility and the permitted landfill will be visible from this view, as is shown in the photomontage. This view will be mitigated with the proposed screening berms with new replanting between VP3 and the permitted landfill (see planning drawing LW14-821-01-P-0000-003).

#### VIA Result

The viewpoint sensitivity is considered to be Low as there are no susceptible receptors and there are no features or recorded routes that recognise the value of the view. The visual magnitude of the proposed development is Low. Therefore, the visual significance from this viewpoint would be Slight-Imperceptible. With the proposed screening berms with new replanting, the visual significance will be Slight-Imperceptible.



South West Section View Of Existing/Proposed Development



Existing View of Site

South West Section View Of Proposed Development



Photomontage View of Proposed Development

**VIEWPOINT 3**

**Proposed Development at  
Knockharley Landfill**

**FEHILY TIMONEY & COMPANY**

Core House, Pouladuff Rd, Cork, Ireland.

T: +353-21-4964133,

F: +353-21-4964464

J5 Plaza,

North Park Business Park,  
North Road, Dublin 11, Ireland.

T: +353-1-6583500,

F: +353-1-6583501

W: [www.fehilytimoney.ie](http://www.fehilytimoney.ie), E: [info@ftco.ie](mailto:info@ftco.ie)



Drawn: SK

Checked: CC

Approved: BG

Revision B - Issue for Planning

Previous Revisions

A											
---	--	--	--	--	--	--	--	--	--	--	--

Date of Issue - March 2018

**FIGURE VP 3**

Filed : LW14/821/01/LW1482101-FigureVP3



South West Section View Of Existing/Proposed Development



Existing View Of Site

South West Section View Of Proposed Development



Photomontage View of Proposed Development With Mitigation

**VIEWPOINT 3 WITH MITIGATION**

**Proposed Development at  
Knockharley Landfill**

**FEHILY TIMONEY & COMPANY**

Core House, Pouladuff Rd, Cork, Ireland.

T: +353-21-4964133,

F: +353-21-4964464

J5 Plaza,

North Park Business Park,  
North Road, Dublin 11, Ireland.

T: +353-1-6583500,

F: +353-1-6583501

W: [www.fehilytimoney.ie](http://www.fehilytimoney.ie), E: [info@ftco.ie](mailto:info@ftco.ie)



Drawn: SK

Checked: CC

Approved: BG

Revision A - Issue for Planning

Previous Revisions

A

Date of Issue - March 2018

**FIGURE VP 3m**

Filed : LW14/821/01/LW1482101-FigureVP3



## Viewpoint 4

ITM 697856,767398  
Direction of the view- West

The existing and proposed view from this location is shown in Figure VP4 overleaf.

### Description of View

Viewpoint 4 is from a location adjacent to the eastern boundary of the site, in the local road CR384. This photomontage is representative of the road receptors and residents of this area.

### Existing View

This is a close view towards the site, taken from the adjacent local road towards the west. A residential building adjacent to the road is in foreground. The rest of the view is comprised by a rural setting. The existing facilities are not visible from this perspective due to vegetation screening. The landfill is fully capped at this viewpoint.

### Proposed View and Mitigation

The proposed development will not be visible from this view due to the existing vegetation as shown in the photomontage provided. Once fully grown, this planting will maintain the existing screening and will fully screen the development.

### VIA Result

The viewpoint sensitivity is considered to be Medium as there are a number of residents in the area. The visual magnitude of the proposed development is Negligible as the proposed will be barely visible in the available vista while the forested area is maintained as proposed. The visual significance from this viewpoint would be Imperceptible.





West Section View Of Existing/Proposed Development



Existing View of Site

West Section View Of Proposed Development



Photomontage View of Proposed Development

**VIEWPOINT 4**

**Proposed Development at  
Knockharley Landfill**

**FEHILY TIMONEY & COMPANY**

Core House, Pouladuff Rd, Cork, Ireland.

T: +353-21-4964133,

F: +353-21-4964464

J5 Plaza,

North Park Business Park,  
North Road, Dublin 11, Ireland.

T: +353-1-6583500,

F: +353-1-6583501

W: [www.fehilytimoney.ie](http://www.fehilytimoney.ie), E: [info@ftco.ie](mailto:info@ftco.ie)



Drawn: SK

Checked: CC

Approved: BG

Revision B - Issue for Planning

Previous Revisions

A

Date of Issue - March 2018

**FIGURE VP 4**

Filed : LW14/821/01/LW1482101-FigureVP4



## Viewpoint 5

ITM 697675,765856

Direction of the view- North

The existing and proposed view from this location is shown in Figure VP5 overleaf.

### Description of View

Viewpoint 5 is from the Kentstown Primary School, at 134 m south of the boundary of the proposed development. This photomontage is representative of the views from this school and for the residents of this area.

### Existing View

This is a view from the south of site, taken from the adjacent local road towards the west. A residential building adjacent to the road is in foreground. The rest of the view is comprised by a rural setting of field patterns and hedgerows. The existing landfill is visible in the background, however it is the portion of the landfill that is currently fully capped and restored to grassland.

### Proposed View and Mitigation

The proposed development will not be visible from this location, beyond the existing view of the landfill.

### VIA Result

The viewpoint sensitivity is considered to be High as there is a group of susceptible receptors (school users and residents). The visual magnitude of the proposed development is Negligible. The visual significance from this viewpoint would be Imperceptible.

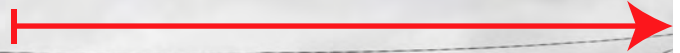


North Section View Of Existing/Proposed Development



Existing View of Site

North Section View Of Proposed Development



Photomontage View of Proposed Development

VIEWPOINT 5

Proposed Development at  
Knockharley Landfill

FEHILY TIMONEY & COMPANY

Core House, Pouladuff Rd, Cork, Ireland.

T: +353-21-4964133,

F: +353-21-4964464

J5 Plaza,

North Park Business Park,  
North Road, Dublin 11, Ireland.

T: +353-1-6583500,

F: +353-1-6583501

W: [www.fehilytimoney.ie](http://www.fehilytimoney.ie), E: [info@ftco.ie](mailto:info@ftco.ie)



Drawn: SK

Checked: CC

Approved: BG

Revision B - Issue for Planning

Previous Revisions

A

Date of Issue - March 2018

FIGURE VP 5

Filed : LW14/821/01/LW1482101-FigureVP5



## Viewpoint 6

ITM 697252,768063

Direction of the view- South

The existing and proposed view from this location is shown in Figure VP6 overleaf.

### Description of View

Viewpoint 6 is from a location adjacent to the northern boundary of the site, in the local road CR384. This photomontage is representative of the road receptors and residents.

### Existing View

This is a view from the north of site, taken from one of the gates of the site towards the south. The gate and fence of the existing facility is visible in the foreground and the landfill in the distance is screened by the vegetated row behind the fence.

### Proposed View and Mitigation

The landfill, IBA facility and berm would be visible from this location as they will rise the horizon of the view, but the existing vegetation and proposed compensatory planting will screen them.

### VIA Result

The viewpoint sensitivity is considered to be Low as there are no susceptible receptors and there are no features or recorded routes that recognise the value of the view. The visual magnitude of the proposed development is Low as the proposal will not have a marked effect in the available vista. The visual significance from this viewpoint would be Low. As the proposed forestry restoration planting develops, the landfill will be fully screened by the vegetation which blends into the wider rural setting of the view. Post-screening the visual significance will be Slight-Imperceptible





South Section View Of Existing/Proposed Development



Existing View of Site

South Section View Of Proposed Development



Photomontage View of Proposed Development

VIEWPOINT 6

Proposed Development at  
Knockharley Landfill

FEHILY TIMONEY & COMPANY

Core House, Pouladuff Rd, Cork, Ireland.

T: +353-21-4964133,

F: +353-21-4964464

J5 Plaza,

North Park Business Park,  
North Road, Dublin 11, Ireland.

T: +353-1-6583500,

F: +353-1-6583501

W: [www.fehilytimoney.ie](http://www.fehilytimoney.ie), E: [info@ftco.ie](mailto:info@ftco.ie)



Drawn: SK

Checked: CC

Approved: BG

Revision B - Issue for Planning

Previous Revisions

A

Date of Issue - March 2018

FIGURE VP 6

Filed : LW14/821/01/LW1482101-FigureVP6



South Section View Of Existing/Proposed Development



Existing View Of Site

South Section View Of Proposed Development



Photomontage View of Proposed Development With Mitigation

VIEWPOINT 6 WITH MITIGATION

Proposed Development at  
Knockharley Landfill

FEHILY TIMONEY & COMPANY

Core House, Pouladuff Rd, Cork, Ireland.

T: +353-21-4964133,

F: +353-21-4964464

J5 Plaza,

North Park Business Park,  
North Road, Dublin 11, Ireland.

T: +353-1-6583500,

F: +353-1-6583501

W: [www.fehilytimoney.ie](http://www.fehilytimoney.ie), E: [info@ftco.ie](mailto:info@ftco.ie)



Drawn: SK

Checked: CC

Approved: BG

Revision A - Issue for Planning

Previous Revisions

A

Date of Issue - March 2018

FIGURE VP 6m

Filed : LW14/821/01/LW1482101-FigureVP6



## Viewpoint 7

ITM 695828,767037  
Direction of the view- East

The existing and proposed view from this location is shown in Figure VP7 overleaf.

### Description of View

Viewpoint 7 is from a location on the local road from Kentstown towards the north. This photomontage is representative of the views from the settlement of Kentstown and road users.

### Existing View

The view is taken from location at 845 m west from the site boundary. The elevation of this location is similar to the proposed site and the view illustrate the flat topography of the neighbouring area. The view is comprised by a rural setting of agricultural fields and hedgerows. None of the existing facilities are discernible from this view due to the distance and the screening elements.

### Proposed View and Mitigation

The proposed development is visible from this view (construction of screening berms) but due to the distance, further mitigation is not deemed to be required. All proposed screening berms shall be replanted to replace that felled for the construction of the berms.

### VIA Result

The viewpoint sensitivity is considered to be High due to number of residents. The visual magnitude of the proposed development is Negligible because it is barely discernible from this view. Therefore, the significance of the visual impact from this location will be Imperceptible and no adverse changes expected if the forestry restoration is replanted as proposed.



East Section View Of Existing/Proposed Development



Existing View of Site

East Section View Of Proposed Development



Photomontage View of Proposed Development

**VIEWPOINT 7**

**Proposed Development at  
Knockharley Landfill**

**FEHILY TIMONEY & COMPANY**

Core House, Pouladuff Rd, Cork, Ireland.

T: +353-21-4964133,

F: +353-21-4964464

J5 Plaza,

North Park Business Park,  
North Road, Dublin 11, Ireland.

T: +353-1-6583500,

F: +353-1-6583501

W: [www.fehilytimoney.ie](http://www.fehilytimoney.ie), E: [info@ftco.ie](mailto:info@ftco.ie)



Drawn: SK

Checked: CC

Approved: BG

Revision B - Issue for Planning

Previous Revisions

A

Date of Issue - March 2018

**FIGURE VP 7**

Filed : LW14/821/01/LW1482101-FigureVP7





## Viewpoint 8

ITM 695828,767037

Direction of the view- East

The existing and proposed view from this location is shown in Figure VP8 overleaf.

### Description of View

Viewpoint 8 is from a location in a Country road 2.4 km west from the site boundary at an elevated location. This photomontage is representative of the views for the road users.

### Existing View

The view illustrates an agricultural field and surrounding hedgerows with a limited visibility to further distances due to the vegetation. None of the existing facilities are discernible from this view due to the distance and the screening elements that are close to the viewpoint location.

### Proposed View and Mitigation

The proposed development is not visible from this view and mitigation is not required. Felling of trees to facilitate construction of screening berms is proposed on this boundary. The berms will be replanted as commercial forestry.

### VIA Result

The viewpoint sensitivity is considered to be Low as the only visual receptors are road users of this Country road. The visual magnitude of the proposed development is Negligible because it is barely discernible from this view. Therefore, the significance of the visual impact from this location will be Imperceptible.



East Section View Of Existing/Proposed Development



Existing View of Site

East Section View Of Proposed Development



Photomontage View of Proposed Development

**VIEWPOINT 8**

**Proposed Development at  
Knockharley Landfill**

**FEHILY TIMONEY & COMPANY**

Core House, Pouladuff Rd, Cork, Ireland.

T: +353-21-4964133,

F: +353-21-4964464

J5 Plaza,

North Park Business Park,  
North Road, Dublin 11, Ireland.

T: +353-1-6583500,

F: +353-1-6583501

W: [www.fehilytimoney.ie](http://www.fehilytimoney.ie), E: [info@ftco.ie](mailto:info@ftco.ie)



Drawn: SK

Checked: CC

Approved: BG

Revision B - Issue for Planning

Previous Revisions

A

Date of Issue - March 2018

**FIGURE VP 8**

Filed : LW14/821/01/LW1482101-FigureVP8



## Viewpoint 9

ITM 697947,767068

Direction of the view- South-West

The existing and proposed view from this location is shown in Figure VP9 overleaf.

### Description of View

Viewpoint 9 is from a location in a Country road immediately east from the site boundary. This photomontage is representative of the views for the road users and residents in the vicinity.

### Existing View

The view illustrates an agricultural field and surrounding hedgerows with a limited visibility to further distances due to the vegetation. The visibility of the existing facilities is limited due to the distance and the screening elements but the existing restored landfill is just visible along the hedge/treeline and existing screening berm.

### Proposed View and Mitigation

The proposed development will add the biological treatment facility in the left hand side of the view and the higher parts of the building will be visible from this location. The rest of the development will remain as existing. Enhancement of the existing planting on top of the berm will contribute to fully screen the proposed biological treatment plant facility building.

### VIA Result

The viewpoint sensitivity is considered to be Low as the only visual receptors are road users of this Country road. The visual magnitude of the proposed development is Medium as the proposed building will introduce a moderate intrusion element in the available vista. Therefore, the significance of the visual impact from this location will be Slight. When the additional planting to an existing berm gets higher than the treatment plant, upper areas of the proposed facilities will be screened and the impact will be Imperceptible.





Existing View of Site



Photomontage View of Proposed Development

<b>VIEWPOINT 9</b>		<b>FEHILY TIMONEY &amp; COMPANY</b>	
Proposed Development at Knockharley Landfill		Core House, Pouladuff Rd, Cork, Ireland. T: +353-21-4964133, F: +353-21-4964464 J5 Plaza, North Park Business Park, North Road, Dublin 11, Ireland. T: +353-1-6583500, F: +353-1-6583501	
Drawn: SK	Checked: CC	Approved: BG	
Revision B - Issue for Planning		Previous Revisions	
Date of Issue - March 2018		A	
Filed : LW14/821/01/LW1482101-FigureVP9		<b>FIGURE VP 9</b>	
		W: <a href="http://www.fehilytimoney.ie">www.fehilytimoney.ie</a> , E: <a href="mailto:info@ftco.ie">info@ftco.ie</a>	









Existing View Of Site



Photomontage View of Proposed Development With Mitigation

**VIEWPOINT 9 WITH MITIGATION**

**Proposed Development at  
Knockharley Landfill**

**FEHILY TIMONEY & COMPANY**

Core House, Pouladuff Rd, Cork, Ireland.

T: +353-21-4964133,

F: +353-21-4964464

J5 Plaza,

North Park Business Park,  
North Road, Dublin 11, Ireland.

T: +353-1-6583500,

F: +353-1-6583501

W: [www.fehilytimoney.ie](http://www.fehilytimoney.ie), E: [info@ftco.ie](mailto:info@ftco.ie)



Drawn: SK

Checked: CC

Approved: BG

Revision A - Issue for Planning

Previous Revisions

A | | | | | | | | | | | | | | | | | | | | | |

Date of Issue - March 2018

**FIGURE VP 9m**

Filed : LW14/821/01/LW1482101-FigureVP9

W: [www.fehilytimoney.ie](http://www.fehilytimoney.ie), E: [info@ftco.ie](mailto:info@ftco.ie) & COMPANY



The summary of the visual significance post-mitigation at each of the viewpoints is shown in the table below.

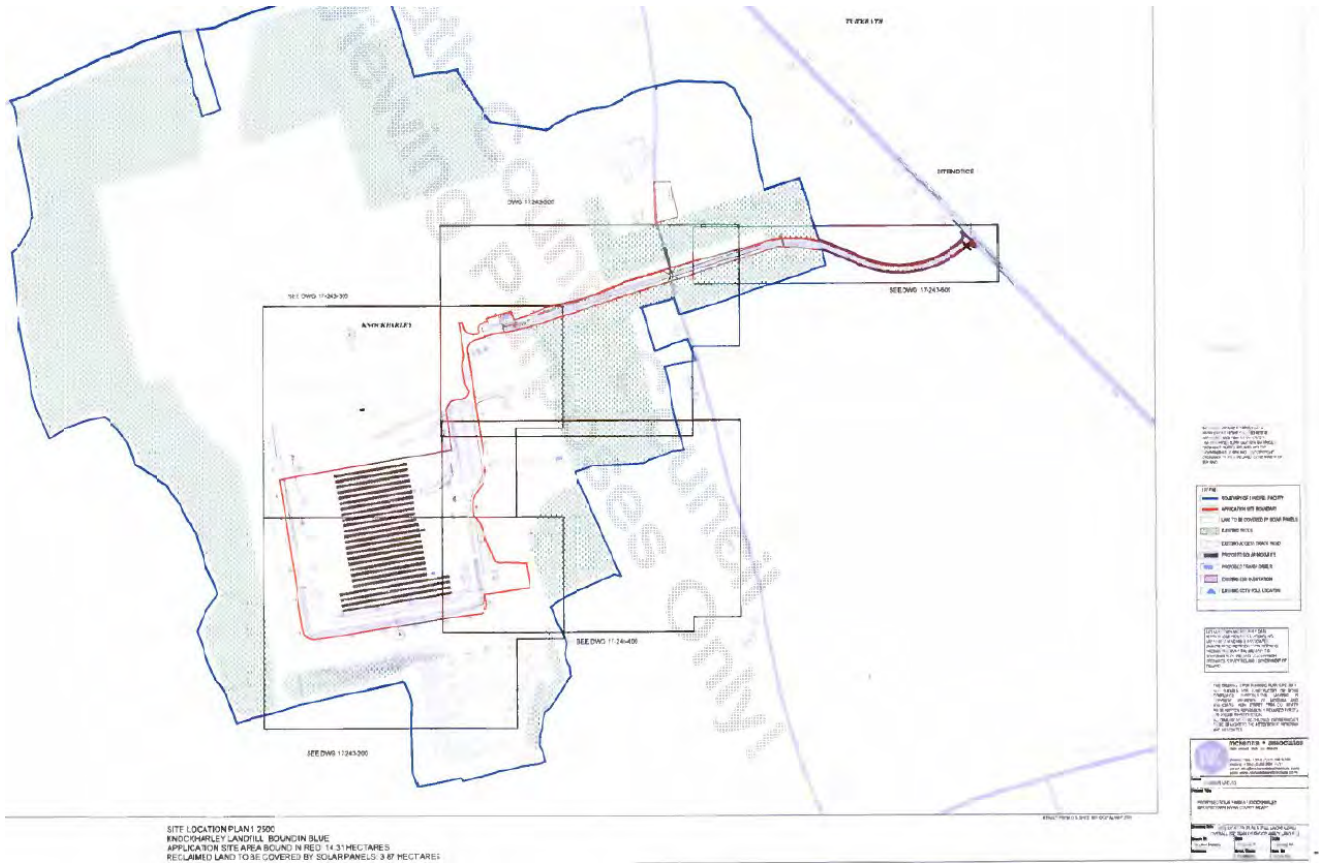
**Table 13-8: Visual Significance in the viewpoints**

Viewpoint No.	Visual Significance Post-mitigation
1	Imperceptible
2	Imperceptible
3	Slight-Imperceptible with proposed forestry restoration
4	Imperceptible
5	Imperceptible
6	Imperceptible with proposed forestry restoration
7	Imperceptible
8	Imperceptible
9	Imperceptible with proposed additional planting on an existing berm.



### 13.5 Cumulative Impact

A solar farm of 3MW of photovoltaic panels has been granted permission by Meath County Council over an area of 3.87Ha in the existing landfill (Plan. Ref. AA180145). The cumulative visual impact of the proposed development in conjunction with the solar farm is addressed here.



**Plate 1: Location of the permitted solar farm (Plan. Ref. AA180145).**

According to the LVIA from this planning application, 'the visual impact is limited by a small area of visual influence from the south-east and south'. The cumulative impact with the proposed development will affect the visual receptors at the south-east and south of the development. The mitigation proposed would screen the development and the solar farm in viewpoints VP9 but there is potential visibility of the panels from VP5. From this viewpoint, the cumulative visual significance of the proposed development in combination with the solar farm would be Slight-Imperceptible.

## 13.6 Mitigation Measures

### 13.6.1 Requirement for Mitigation

Given the rural location of the proposed development, it is considered that the structural elements of the proposed development i.e. 2 no. shed type structures are, in their form and nature and potential for visual impact, similar to large scale agricultural developments.

To this end, Chapter 11 “Development Management Standards and Guidelines” of the Meath CDP 2013 – 2019 states that:

*“The design, scale, siting and layout of agricultural buildings should respect, and where possible, enhance the rural environment. In visually sensitive areas, the Council will seek to group together and site buildings in an appropriate manner, and require the use of harmonious external materials to minimise obtrusion on the landscape. The use of dark coloured cladding, notably dark browns, greys, greens and reds are most suitable for farm buildings, and roof areas should be darker than walls.”*

The structural elements of the proposed development are considered to adhere to these requirements through employing mushroom coloured (RAL 1006020) cladding for the building construction.

### 13.6.2 Proposed Mitigation Measures

Avoidance and reduction mitigation measures integral to design of the development are the primary means of mitigation proposed. These measures include:

- The biological treatment facility is positioned in a naturally low area of the site to improve screening by the existing vegetation;
- Maintenance of existing screening berms and planting to the south.
- Replanting of forestry felled to facilitate construction of screening berms on the western and north eastern boundary
- Enhancement of the planting on top of the existing berm on the eastern boundary;
- The filled landfill cells 27 and 28 will provide screening for landfilling activities south of those cells;
- The filled IBA cell 29 will provide screening for IBA facility activities west of that point; and
- Careful selection of colour finishes for elevations of the proposed buildings in adherence with the Development Management Standards and Guidelines of the Meath CDP 2013 – 2019 will provide additional visual impact mitigation.

A landscape Plan has been prepared to show the forestry planting and the berms proposed in the site. This is shown in the Planning Drawing LW14-821-01-P-0050-012 in Volume 4 of this EIAR. Trees planted in the proposed berms will offer screening to the facilities that reach higher elevations and heights above the ground level.

The proposed mitigation measures will screen the views towards the following viewpoints: VP3, VP6, and VP9. The mitigated views has been assessed individually from each viewpoint at a time when landscaping is at maturity.

## 13.7 Residual Impacts after Mitigation

As the assessment of potential impacts undertaken in Section 13.4 considers impacts with the implementation of mitigation measures, impacts as identified therein are considered residual impacts.

## 13.8 Monitoring

The proposed woodland screen planting will involve a maintenance and management programme to ensure successful establishment and development.

The maintenance and management programme will include provision for weed control and the replacement of any plant failures on an annual basis for the first 3-5 years. In the longer term (15-20 years) the trees will be sequentially thinned to promote the development of a healthy and self-sustaining mature woodland.

## 13.9 Conclusion & Summary

### 13.9.1 Landscape Character

While the development proposal for the existing facility will incur some changes on the site, these will not significantly affect the character of the wider landscape setting given the inherent capacity of this 'Low Central Landscape' to absorb development of this nature. This is principally facilitated by the extent of mature hedgerow and woodland cover that prevails and the general absence of significant vantage points that facilitate views across the site and its environs.

More locally, the proposed changes will be more evident but the changes will not be significantly intrusive or significantly alter the character of the locality as perceived by local residents and users of the local road network including motorists, cyclists and pedestrians.

### 13.9.2 Visual Impact

At the macro level, views of the proposed development site are constrained by a combination of extensive existing hedgerow and woodland vegetation and the nature of the gently rolling topography in which there are relatively few vantage points. From those locations that do facilitate views towards the site, distance tends to have a significantly diminishing effect. In addition, the nature of the proposed landfill is such that it integrates well in the local environment aided by the sequential grass seeding and greening up of the finished profile as the filling operations progress.

In distant views the proposed biological treatment facility is well integrated by virtue of its low position on the site and the nature of the screening provided by the landfill cells themselves as well as the adjacent existing screen vegetation. In conjunction with the permitted solar farm, the highest visual impact would be Slight-Imperceptible from viewpoints 3 and 6.

## 13.10 References

Department of Environment and Local Government - Landscape and Landscape Assessment, Consultation Draft of Guidelines for Planning Authorities, June, 2000.

The Landscape Institute – Guidelines for Landscape and Visual Impact Assessment, 3<sup>rd</sup> Edition, 2013.

The Landscape Institute – Advice Note 01/11 – Photography & Photomontage in Landscape and Visual Impact Assessment, 2011.

Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report, EC, 2018

Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports EPA, 2017.

Meath County Development Plan 2013-2019