APPENDIX B

LANDSCAPE

RPS

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APPENDICES

1.0 LANDSCAPE & VISUAL IMPACT ASSESSMENT

1.1 Introduction

This report considers and assesses the potential landscape and visual impact/effect of the proposed landfill development in Fingal on the landscape and visual resources of the area. The landscape and visual assessment seeks to:

- Identify current landscape designations and planning policies affecting the sites and their surroundings;
- Assess the existing landscape character of the site and its surroundings;
- Assess the landscape and visual impact/effect of the proposed development including a discussion of potential impacts, a prediction of impacts and significance of impacts;
- Detail measures proposed to mitigate significant detrimental visual impacts and assess their effectiveness;
- Set out the conclusions of the assessment.

1.2 Methodology

The methods used in this assessment are derived from the 'Guidelines for Landscape and Visual Impact Assessment' (GLVIA) by The Landscape Institute and Institute of Environmental Management and Assessment (2002) and the DOE Landscape and Landscape Assessment Guidelines (June 2000). The guidelines recommend baseline studies to describe, classify and evaluate the existing landscape and visual resource focusing on its sensitivity and ability to accommodate change of the type associated with landfill developments of the type proposed. The guidelines are not intended as a prescriptive set of rules but rather offer best practice methods and techniques of LVIA. The existing landscape and visual context of the study area is established through a process of desktop study, site survey work and photographic surveys. The proposal is then applied to the baseline conditions to allow the identification of potential impacts, prediction of their magnitude and assessment of their significance. To assist in the assessment of impacts a series of photomontages have been prepared at critical locations identified through consultation with the local community and Fingal County Council Planning Department. Following prediction of all significant landscape and visual impacts mitigation can then be identified to avoid, reduce and remedy as far as possible potential landscape and visual impacts.

Landscape Assessment Criteria

The study area has been divided into distinct homogenous landscape character areas. Each landscape character area has been assessed in terms of quality, value and sensitivity to change of the type proposed by this development. In this section the key criteria used for the landscape assessment are described.

Landscape sensitivity to the type of development proposed is defined as follows:

High	High visual quality landscape with highly valued or unique characteristics susceptible to relatively small changes;
Medium	Medium visual quality landscape with moderately valued characteristics reasonably tolerant of changes;
Low	Low visual quality landscape with common characteristics capable of absorbing substantial change.

Magnitude of Landscape Resource Change: Direct resource changes on the landscape character of the study area is brought about by the introduction of the proposal and its effects on the key landscape characteristics. The following categories and criteria have been used:

Category	Criteria
High	Total loss or alteration to key elements of the landscape character, which result in fundamental and/or permanent long-term change.
Medium	Partial or noticeable loss of elements of the landscape character and/or medium-term change.
Low	Minor alteration to elements of the landscape character and/or short-term/ temporary change.

Significance of Landscape Impact: The level of significance of effect on landscape is a product of landscape sensitivity and the magnitude of alteration in landscape resource as illustrated in the table below.

Where landscape sensitivity has been predicted as high and the magnitude of change as High or Medium the resultant impact will be significant in terms of assessment. Where the magnitude of landscape resource change is predicted as High and the landscape sensitivity predicted as high or medium the resultant impact will be significant in terms of assessment.

Table 1.1 Significance of landscape impact

Magnitude of landscape resource change	Landscape Sensitivity		
	Low	**Medium**	**High**
No change	No change	No change	No change
Low	Slight	Slight / moderate	Moderate
Medium	Slight / moderate	Moderate	Moderate / substantial
High	Moderate	Moderate / substantial	Substantial

Landscape Assessment Definitions

Landscape Resource
The combination of elements that contribute to landscape context, character and value.

Landscape Value
The relative value or importance attached to a landscape that expresses national or local consensus because of intrinsic characteristics.

Landscape Character
The distinct and homogenous pattern that occurs in the landscape reflecting geology, landform, soils, vegetation and man's impact.

Visual Assessment Criteria

The following describes the key criteria used in the visual assessment.

Viewer Sensitivity: Viewer sensitivity is a combination of the sensitivity of the human receptor (ie resident; commuter, tourist; walker; recreationist, or worker) and viewpoint type or location (ie house, workplace, leisure venue, local beauty spot, scenic viewpoint, commuter route, tourist route or walkers' route).

Category	Typical criteria
High sensitivity	eg users of an outdoor recreation feature which focuses on the landscape; valued views enjoyed by the community; tourist visitors to scenic viewpoint.
Medium sensitivity	eg users of outdoor sport or recreation which does not offer or focus attention on landscape; tourist travellers.
Low sensitivity	eg regular commuters, people at place of work (excluding outdoor recreation).

Magnitude of Visual Resource Change: the magnitude of change in visual resource or amenity results from the scale of change in the view with respect to the loss or addition of features in the view and changes in the view composition, including proportion of the view occupied by the proposed development. Distance and duration of view must be considered. Other vertical features in the landscape and the backdrop to the development will all influence resource change.

Category	Criteria
High	Where changes to the view significantly alter (negative or beneficial) the overall scene or cause some alteration to the view for a significant length of time.
Medium	Where some changes occur (negative or beneficial) in the view, but not for a substantial part of the view or for a substantial length of time.
Low	Where only a minor alteration to the view occurs (negative or beneficial) not for a significant length of time.
No change	No discernible deterioration or improvement in the existing view.

Significance of Visual Impact: Significance of visual impact can only be defined on a project by project basis. The principal criteria for determining significance are magnitude and sensitivity of the receptor. A higher level of significance is generally attached to large scale or substantial effects on sensitive receptors.

Where visual sensitivity has been predicted as high or medium, and the magnitude of change as High, the resultant impact will be significant. Where the magnitude of change has been predicted as High or Medium and the visual sensitivity has been predicted as High then the resultant impact will be significant in terms of assessment.

The following table illustrates significance of visual impact as a correlation between viewer sensitivity and visual resource change magnitude.

Table 1.2 Significance of Visual Impact

Magnitude of Visual resource change	Visual Sensitivity		
	Low	**Medium**	**High**
No change	No change	No change	No change
Low	Slight	Slight / moderate	Moderate
Medium	Slight / moderate	Moderate	Moderate / substantial
High	Moderate	Moderate / substantial	Substantial

Visual Assessment Definitions

Visual Quality

Although the interpretation of viewers' experience can have preferential and subjective components, there is generally clear public agreement that the visual resources of certain landscapes have high visual quality. The visual quality of a landscape will reflect the physical state of the repair of individual features or elements.

Visual Resources

The visual resources of the landscape are the stimuli upon which actual visual experience is based. They are a combination of visual character and visual quality.

Visual Character

When a viewer experiences the visual environment, it is not observed as one aspect at a time, but rather as an integrated whole. The viewer's visual understanding of an area is based on the visual character of elements and aspects and the relationships between them. The visual character is, therefore, descriptive and not evaluative.

Zone of Visual Influence (ZVI)

The visual assessment is assisted by the production of a ZVI. The ZVI is the area within which views of the development can be obtained. The extent of the ZVI is largely determined by the topography of the area.

The ZVI is refined by field studies to indicate where relevant forestry, woodlands, hedges or other local features obscure visibility from the main roads, local viewpoints/landmarks and/or significant settlements and it is through such field studies that prediction of landscape and visual impacts take place. A series of viewpoints and photomontages have been provided to illustrate the views within the ZVI. The ZVI for the proposal is illustrated in Figure 1.1.

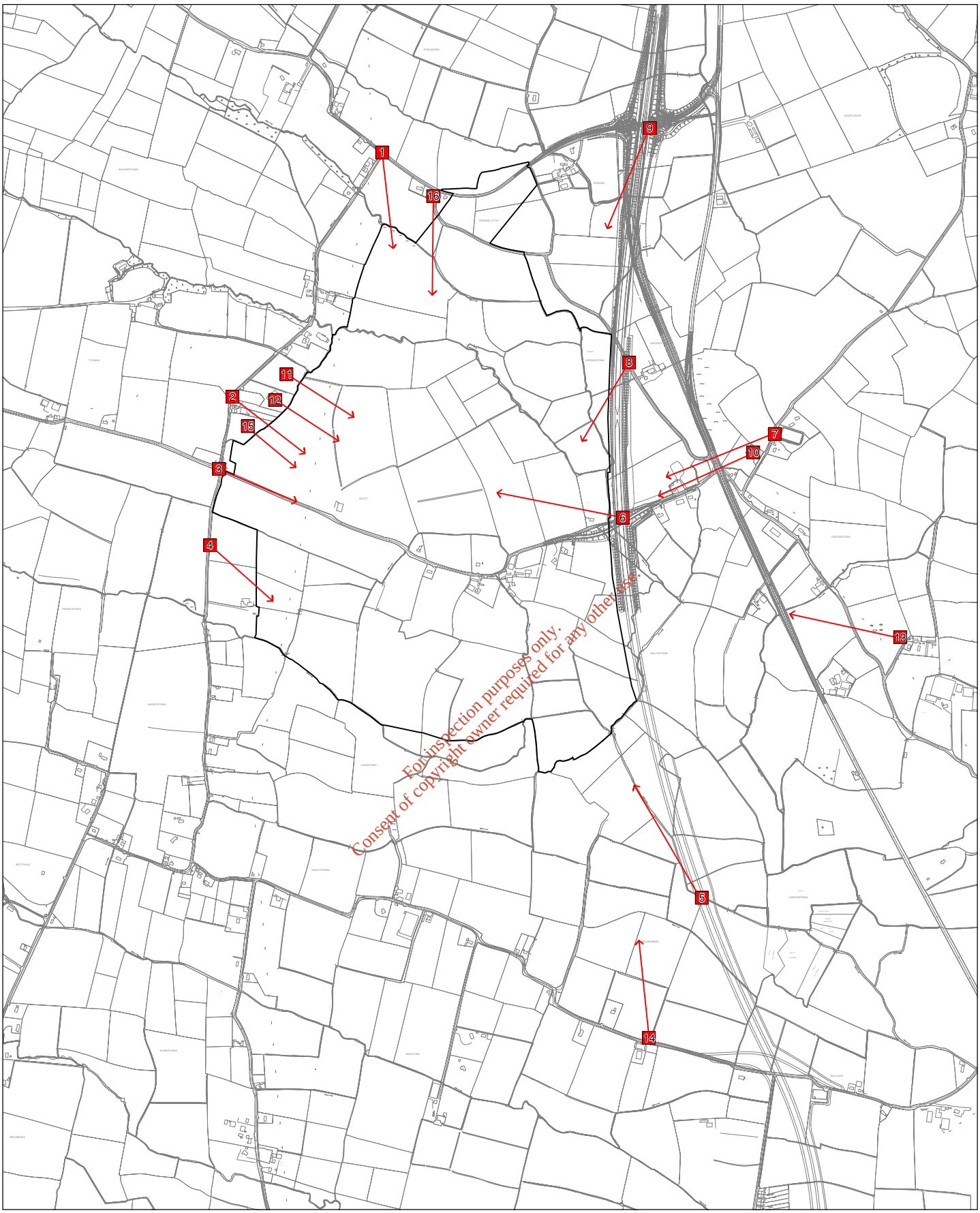
Photographic Survey & Photomontages

Viewpoints are generally chosen at locations from which the development will be visible. Detailed consultation with both the local community and the Planning Department of Fingal County Council resulted in the selection of the viewpoints illustrated in Figure 1.2. The viewpoints have been chosen to give a representative sample of views of the proposed landfill within the landscape to illustrate impact on local residential properties and on protected views.

Photographs from each viewpoint location are then taken covering a predetermined arc of view. The extent of the arc covered depends on what the photomontage is intended to show. For instance, if the photograph is intended to show the landscape setting, an arc of view of

90-180º might be taken. A smaller arc of view of 40-60º, on the other hand, would be used to represent a single view rather than a panorama view, as this is approximately the viewing angle of the human eye. This viewing angle of the human eye is the angle without panning. All photographs are taken with a slow speed film (c. 100 ASA), a camera aperture of 50 mm and a professional tripod for true horizontal alignment. A record is taken of the light conditions and visibility conditions, the camera height above ground, time of day, viewpoint coordinates recorded to the nearest meter and the bearing of each photograph.

Sixteen representative viewpoints have been selected around the site. The viewpoints reflect typical views obtained of the site, reflecting variations caused by the parameters of distance and direction of view. The viewpoint locations are illustrated in Figure 1.2 Viewpoints 1 – 16. The photomontages are illustrated in Appendix 1.



Project: Fingal Landfill

Figure 1.2

Title: Viewpoint Locations

Scale: 1cm = 60 m @ A1

Key

Viewpoint

Direction of View

Landfill Boundary

Fingal County Council

RPS Planning & Environment

1.3 Receiving Environment

The proposed site is located immediately west of the M1 motorway between Nags Head and The Five Roads. A County Road (Nevitt Road) that extends between the R108 and the remaining R132 in an east to west direction crosses the middle part of the site. The proposed site is located on the gentle east facing side slopes of Knockbrack Hill which rise to 176 m OD. Knockbrack and its associated rounded hills (Nags Head 151m OD) dominate the surrounding lowlands of North Fingal and are significant visual components of this landscape. Agricultural use has a large proportion of arable activity within large field systems. Field boundaries are defined by low well-maintained hedgerows and trees that provide enclosure and restrict views. Elevated views across the site are available to the Dublin Bay and Mountains. Below the Nevitt Road the side slopes give way to level lowland which contains a gently undulating almost flat landscape crossed by the M1. Housing is largely confined to the County Roads that criss-cross the surrounding landscape. Views are available from the remaining R132, the M1 and the County Roads that surround the site.

The landscape character of the study area can be described by use of two distinctive landscape character areas as illustrated in Figure 1.3 and described below.

- Elevated agricultural hills
- Lowland agricultural landscape

***Elevated Agricultural Hills**:* The western part of the study area consists of the gentle side slopes of the Knockbrack Hill. Knockbrack Hill has two summits the second being Nags Head. The summits are landmarks in the surrounding landscape best illustrated by the Nags Head hill top that has a tall mast visible from long distances. A less extensive hill is found east of the M1 above Hedgestown. The hills form a distinctive unit above the surrounding lowlands. The hills have been rounded by glacial action and a patchwork effect is created by strong hedgerows and pastoral fields. Extensive views north, south and east are available from this landscape. Large field systems with low hedgerows and few trees provide little enclosure. Arable farming is frequent. Housing is scattered throughout but not as frequent as on the lowlands. The elevated agricultural hills landscape character area has high sensitivity to change of the type proposed.

***Lowland Agricultural Landscape**:* East of Nags Head and Tooman the study area consists of a more level lowland dominated by pastoral agriculture. The strong hedgerows combine with the level landscape to provide more enclosure than the side slopes above. This enclosure significantly restricts views across this landscape area. Views across this landscape character area are only available from infrequent prominent elevated positions at M1 overbridges and at locations on the existing R132. Housing is frequent and a prominent roadside feature. The lowland agricultural landscape character area has a low sensitivity to change of the type proposed.

1.3.2 Relevant Planning Context

The relevant Development Plan for the site is the Fingal County Development Plan 2005 - 2011.

The relevant landscape and visual designations are summarised in the following text.

Habitats and Landscape features of importance for Biodiversity: The Development Plan lists trees, woodlands and hedgerows that the Council will consider for protection and preservation due to their special amenity value. There are no woodlands, trees or hedgerows listed for protection or preservation within or adjacent to the proposed site. (Policy HP44 - HP47).

To Preserve Views: It is an objective of the Council to preserve views or prospects of special amenity. A view is protected along the County Road that crosses to the west of Nevitt (Toomans Road). A further view from Nevitt Road is also protected.

High Amenity Zone (Zone HA) and Areas of Sensitive Landscape: The Development Plan has identified a number of areas of high amenity zoning (Zone HA) that consist of landscapes of special value or sensitivity. One Zone HA is identified within 1 km of the proposal. Upland areas covering Knockbrack are designated high amenity zones and lie approximately 1 km from the western boundary of the site. Therefore, the proposed site does not lie within any high amenity zone. (Policy HP34 - HP38).

Special Amenity Areas and Landscape Conservation Areas: The landscape surrounding High Amenity Zones has been designated as Sensitive Landscapes. Generally, these areas have been designated to protect them from inappropriate development and to, where possible reinforce their character, distinctiveness and sense of place (Policy HP35). One area of Sensitive Landscape surrounds Knockbrack and Nags Head hills and also crosses the western side of the proposed site. A further area of sensitive landscape surrounds the hill east of Hedgestown.

1.4 Impact Assessment

1.4.1 Direct Landscape Character Impacts

Construction and Operational Phases

The proposed landfill development will result in the following physical elements likely to affect the landscape character at both construction and operational stages:

- Construction of access and site entrances;
- Creation of temporary construction areas;
- Storage of overburden;
- Ground remodelling;
- Erection of new built elements and associated lighting;
- Movement of vehicles.

Modern landfill sites are managed to strict standards and no fires are permitted that were a feature of poorly run or illegal landfills. Further, bird control methods have developed in recent years such as the use of birds of prey resulting in no significant visual bird activity over a landfill. This assessment has assumed that the site will be managed to the appropriate level.

The proposed landfill development lies completely within the Lowland Agricultural Landscape Character Area. The landfill will result in changes to the existing site topography resulting in the creation of new bunds/earth mounds and increased site topography levels. It is proposed to have two primary phases to the development, Stage 1 and Stage 2. During Stage 1 the site infrastructure will be constructed including roads and waste handling facilities. Further, the earth mounds to the sites western and eastern boundaries will be constructed and Landfill operations will begin at the sites southern boundary and extend northwards across Nevitt Road in Stage 2. The new roads constructed in Stage 1 are in relatively close proximity to existing roads and therefore follow existing landscape patterns. The new roads will, therefore, result in low levels of change in landscape resource. The landfill will have reached a height of approximately 70 m OD on completion of Stage 1. The construction and operational phases for Stage 1 will alter the overall landscape character to a high level resulting in the loss of existing field patterns and loss of arable and pastoral characters south of the Nevitt Road. Modified landforms will be created.

During Stage 1 the overall change in landscape resource is predicted to be high. The lowland agricultural landscape has been identified as having a low sensitivity to change.

The Stage 1 predicted impact on the landscape character of lowland agricultural landscape is moderate negative.

During Stage 2 the landfill will continue to rise and extend northwards to lands across Nevitt Road. Further earth bunds will be created and planted on the sites western boundary. Stage 1 landscape screen planting will have matured when Stage 2 is reached helping to blend the earth mounds and development with its surroundings. However, the landfill will continue to an influence in the lowland agricultural landscape and the change in landscape resource will remain high.

During Stage 2 the overall change in landscape resource is predicted to be high. The lowland agricultural landscape has been identified as having a low sensitivity to change.

The Stage 2 predicted impact on the landscape character of lowland agricultural landscape is moderate negative.

1.4.2 Zone of Visual Influence (ZVI)

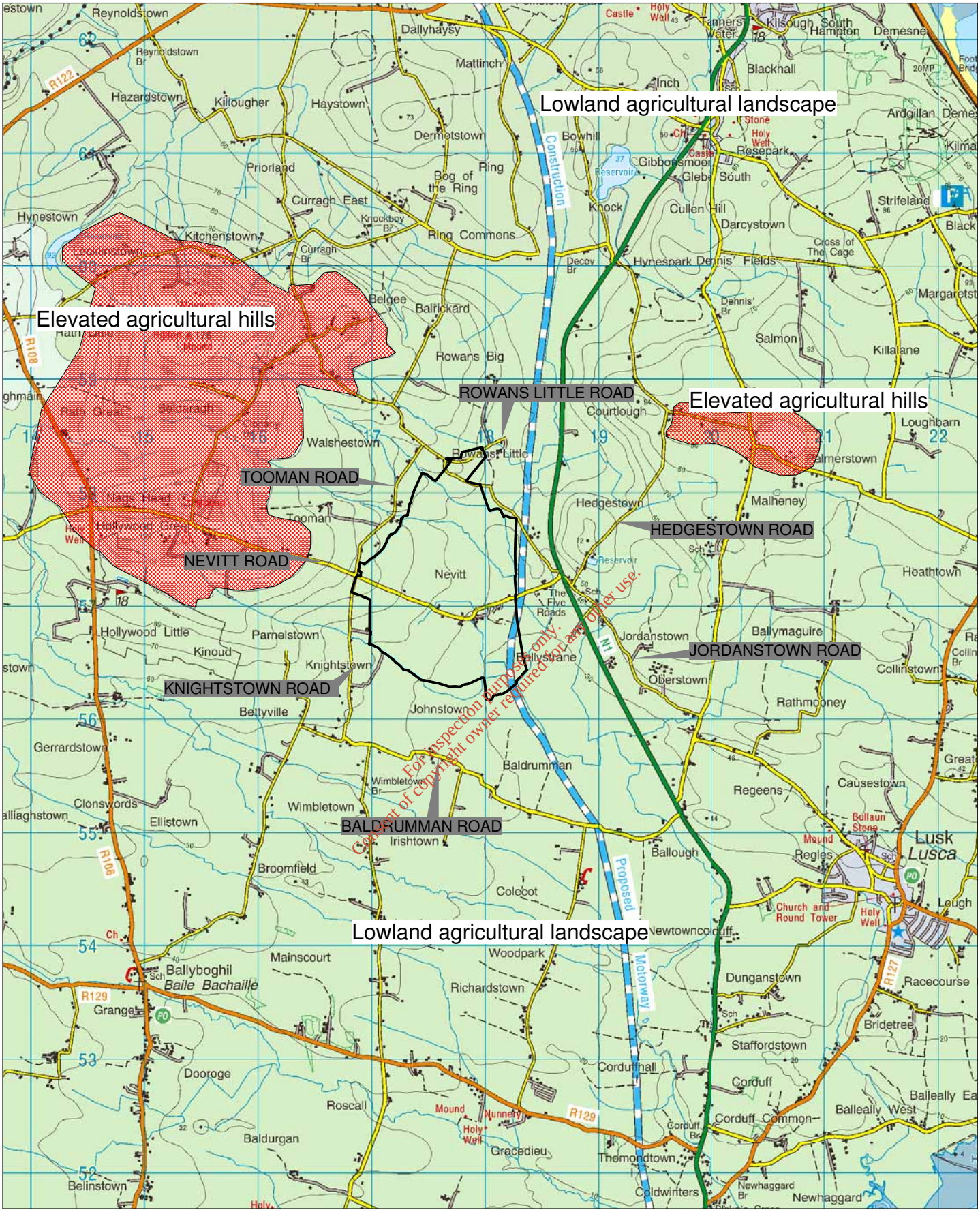
The ZVI for the proposed development is illustrated in Figure 1.1. Due to the proximity of the Knockbrack and Nags Head hills the ZVI extends only to approximately 1km in the north west, west and south west. A ridgeline at Palmerstown that extends from Courtlough to Lusk restricts views to the east. A small gap in the topography through which the M1 travels at the Bog of the Ring permits partial long distance views in the direction of Balbriggan. To the south and south east ground level views are restricted to within 2-3 km due to the level nature of the topography and intervening strong hedgerows. However, long distance views to Lambay Island, Ireland's Eye, Howth and the Dublin Mountains are available resulting in views beyond the southern intermediate ZVI. Due to distance of such views it will not be possible to discern detail of the proposals when viewed back from such locations and no visual impacts will occur. The impact on views out to these locations and protected views is discussed below.

The ZVI is defined largely by topography and locations without a view of the proposals will be included within the boundary indicated in Figure 1.1. For this reason detailed assessment has taken place within the ZVI using field survey, photographic survey and photomontages to determine predicted impacts on sensitive receptors. The resulting assessments are discussed in the following sections in detail.

1.4.3 Residential Impacts

Construction and Operational Phases

The visual impacts of the proposal on residential properties have been established through detailed fieldwork and photographic survey. Table 1.3 below sets out the numbers of properties that will experience a visual impact from the proposed landfill scheme and summarises visual resource changes. The locations of all properties surveyed are illustrated in Figure 1.4 and Table 1.3 should be read with this Figure. Specific Landscape Mitigation (SLM) has been identified in Section 1.5 and illustrated in Figure 1.6 to address the significant impacts established.



Project: Fingal Landfill

Figure 1.3

Title: Landscape Character Areas

Scale: 1cm = 0.3km @ A3

Key

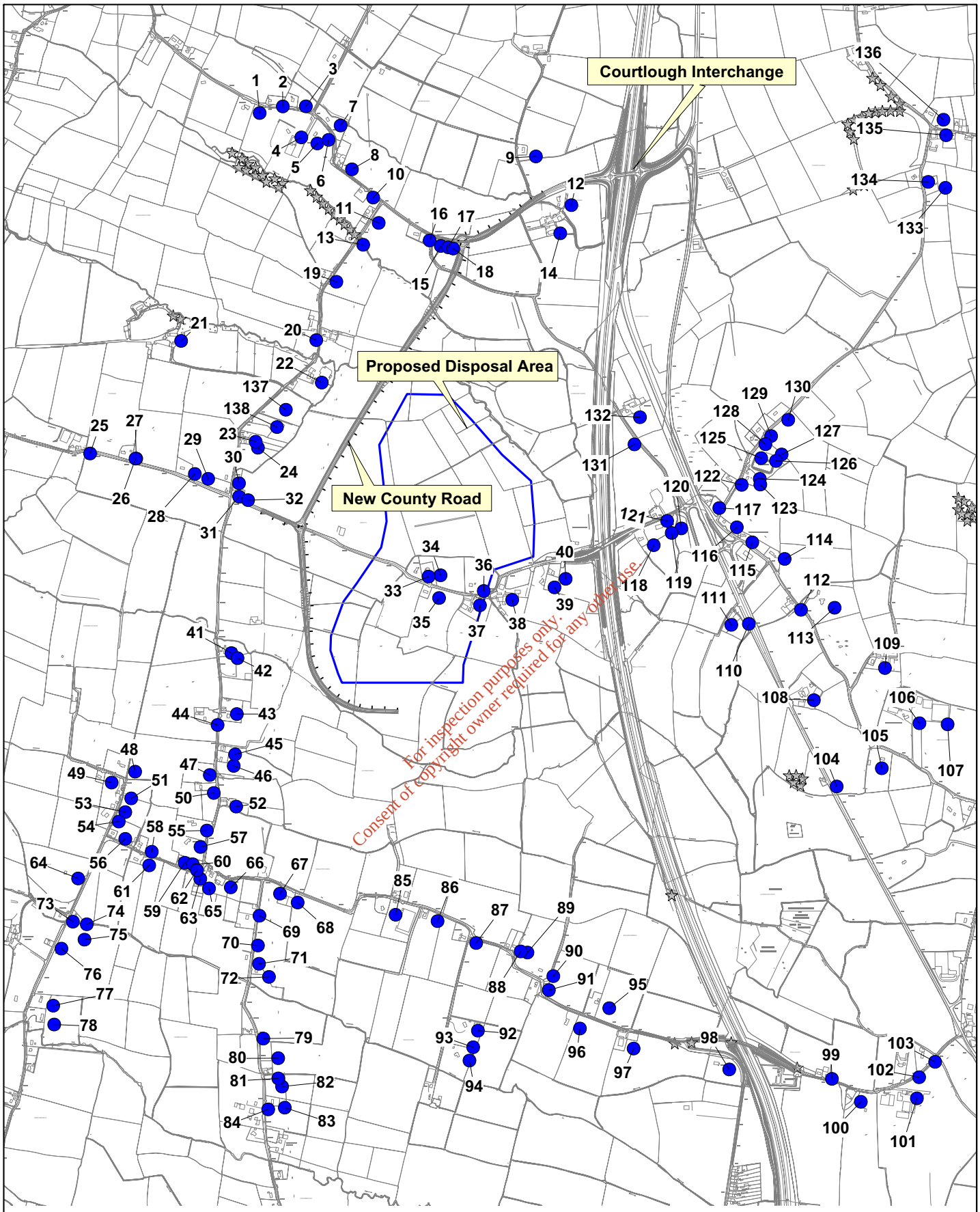
Landfill Boundary

Lowland agricultural landscape

Elevated agricultural hills

Fingal County Council

RPS Planning & Environment



Project	*Fingal Landfill Project*	Figure	1.4
Title	**Visual Impact on Residential Properties**		

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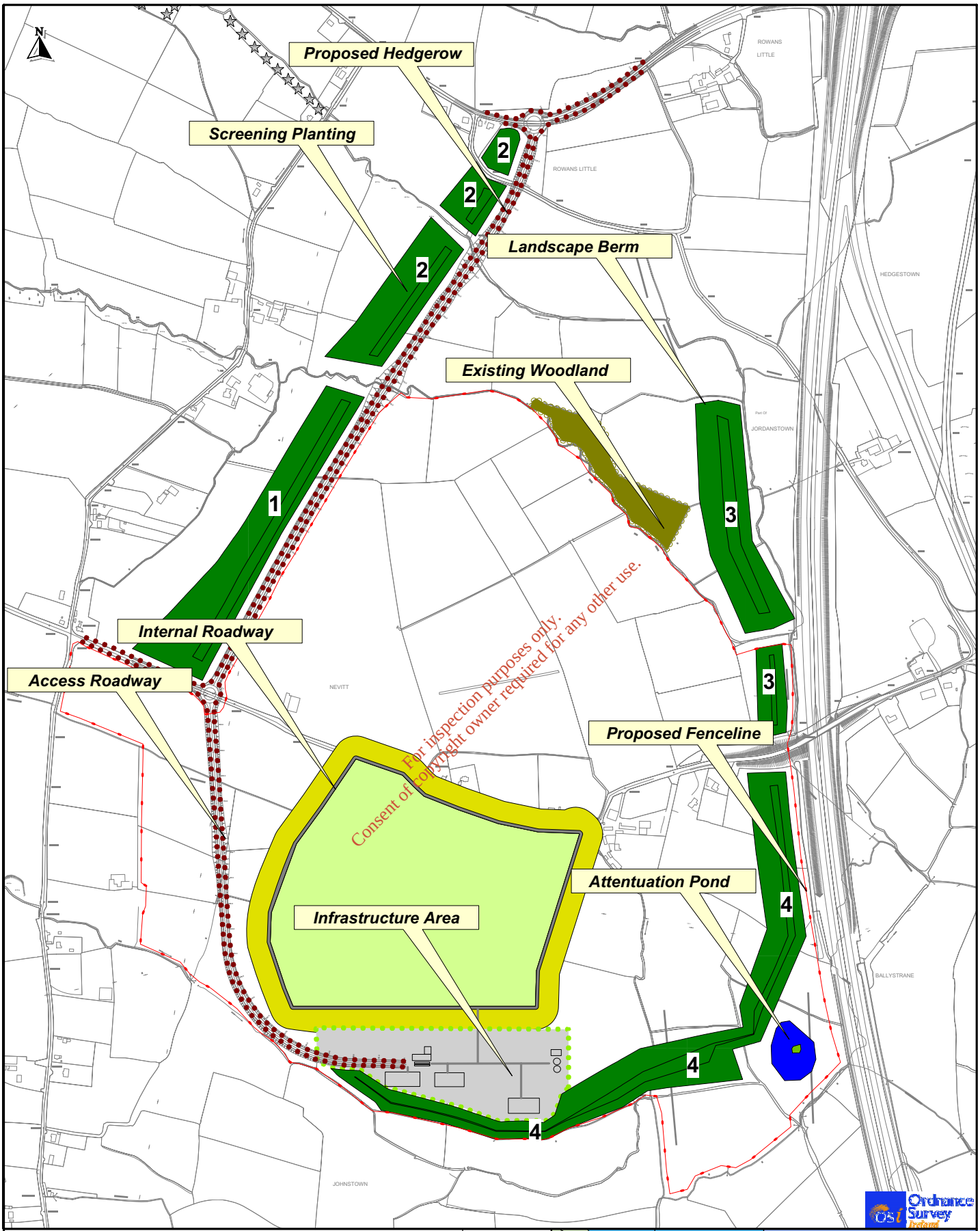

Project	*Fingal Landfill Project*	Figure 1.5	
Title	**Stage 1 Berming**		

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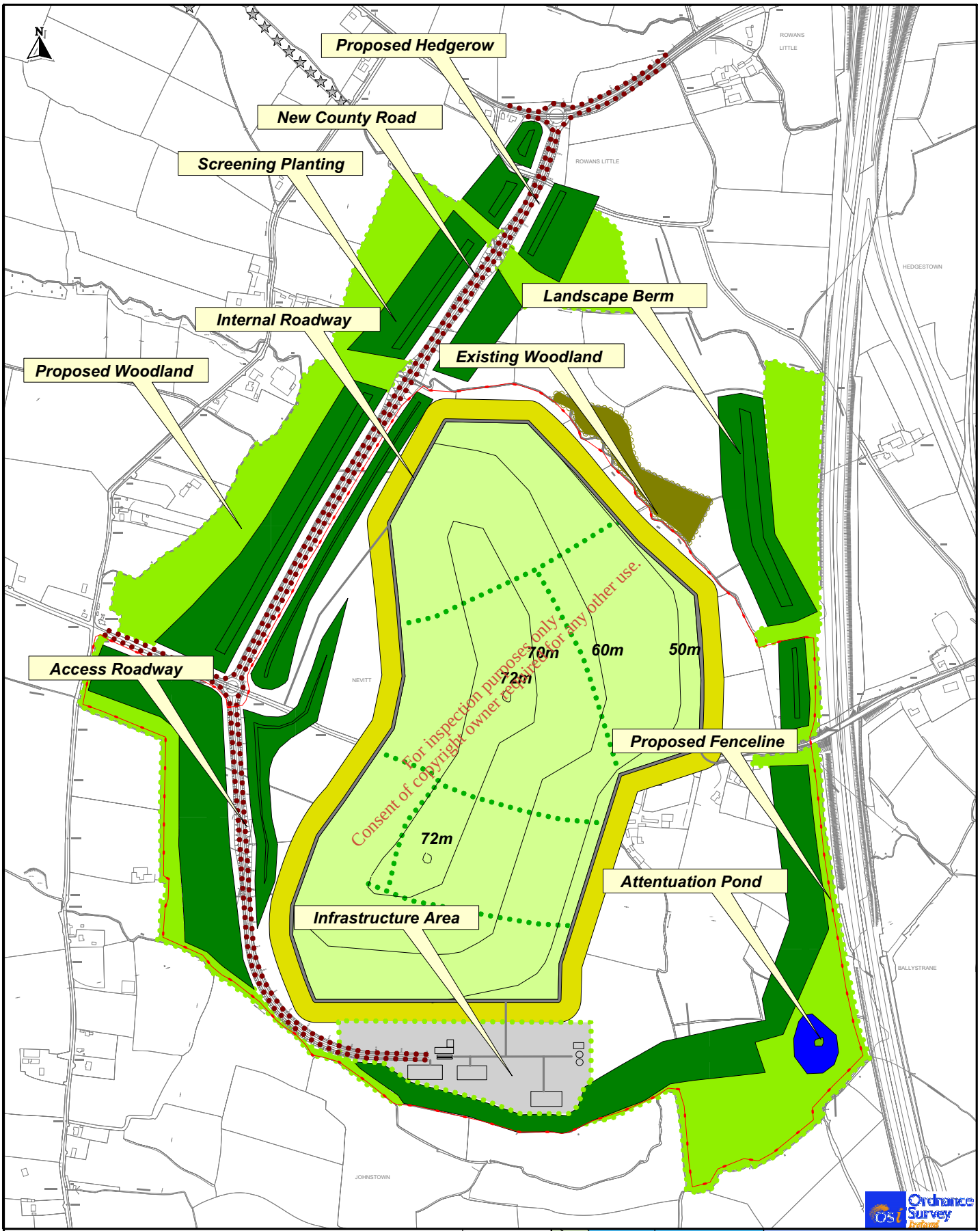

Project	*Fingal Landfill Project*	Figure 1.6	
Title	**Proposed Devlopment**		

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Table 1.3 Residential Visual Impact Table

	Components of Existing View	Components of Proposed View	Visual Impact (without mitigation)		Residual Impact (with mitigation)	
			Stage 1	Stage 2	Stage 1	Stage 2
1	Rear View of Existing garden vegetation & fields	Rear View of Existing garden vegetation & fields	No Change	No Change	No Change	No Change
2	Existing garden, fields & road	Existing garden vegetation & road	No Change	No Change	No Change	No Change
3	Existing garden, fields & road	Existing garden, fields & road	No Change	No Change	No Change	No Change
4	Rear view of existing garden vegetation & fields	Rear view of existing garden vegetation & fields	No Change	No Change	No Change	No Change
5	Rear view of existing garden vegetation & fields	Rear view of existing garden vegetation & fields	No Change	No Change	No Change	No Change
6	Rear view of existing garden vegetation & fields	Rear view of existing garden vegetation & fields	No Change	No Change	No Change	No Change
7	Existing garden vegetation & buildings	Existing garden vegetation & buildings	No Change	No Change	No Change	No Change
8	Rear view of existing garden vegetation, fields & road	Rear view of existing garden vegetation, fields & road	No Change	No Change	No Change	No Change
9	Rear view of existing garden vegetation, fields & road	Rear view of existing garden vegetation, fields & road	No Change	No Change	No Change	No Change
10	Rear view of existing garden vegetation, woodland, fields & road	Rear view of existing garden vegetation, woodland, fields & road	No Change	No Change	No Change	No Change
11	Existing garden vegetation, woodland, fields & road	Existing garden vegetation, woodland, fields & road. Partial winter-time view	Slight Adverse	Slight Adverse	Slight Adverse	No Change
12	Rear view of existing garden vegetation & fields	Rear view of existing garden vegetation & fields	No Change	No Change	No Change	No Change
13	Existing garden, fields & road	Existing garden, fields, road. Glimpse view to berms in winter	Moderate Adverse	Slight Adverse	Slight Adverse	Slight Adverse
14	Rear view of existing garden vegetation &	Rear view of existing garden vegetation &	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse

	Components of Existing View	Components of Proposed View	Visual Impact (without mitigation)		Residual Impact (with mitigation)	
			Stage 1	Stage 2	Stage 1	Stage 2
	fields	fields approximately 300 m from the proposal and only has a winter glimpse view partially obscured by vegetation				
15	Rear view of existing garden vegetation, fields with distant views of the Dublin Mountains	Rear view of existing garden vegetation. Views of stage 1 limited by landscape berms and partially obscured by vegetation. Views of stage 2 partially obscured by vegetation and the landscape berms. Distant views of the Dublin Mountains remain (**Refer to Appendix 1** Viewpoint 16)	Substantial Adverse	Substantial Adverse	Moderate Adverse	Moderate Adverse
16	Rear view of existing garden vegetation	Rear view of existing garden vegetation. Partial winter view of berms	Slight Adverse	Slight Adverse	Slight Adverse	No change
17	Rear view of existing garden vegetation	Rear view of existing garden vegetation. Partial winter view of berms	Slight Adverse	Slight Adverse	Slight Adverse	No change
18	Rear view of existing garden vegetation with distant views to Dublin Mountains	Rear view of existing garden vegetation. Views of stage 1 limited by landscape berms and partially obscured by vegetation. Views of stage 2 partially obscured by vegetation and the landscape berms. Distant views of the Dublin Mountains and Irelands Eye remain (**Refer to Appendix 1** Viewpoint 16)	Substantial Adverse	Substantial Adverse	Moderate Adverse	Moderate Adverse
19	Existing garden, fields & road	Existing garden, fields, road. Glimpse view of & landscape	Moderate Adverse	Moderate Adverse	Slight Adverse	Slight Adverse

	Components of Existing View	Components of Proposed View	Visual Impact (without mitigation)		Residual Impact (with mitigation)	
			Stage 1	Stage 2	Stage 1	Stage 2
		berms through vegetation				
20	Existing garden vegetation, woodland, fields & road	Existing garden vegetation, woodland, fields & road	No change	No change	No change	No change
21	Existing garden vegetation & buildings	Existing garden vegetation & buildings	No change	No change	No change	No change
22	Existing garden vegetation & buildings	Existing garden vegetation & buildings. Direct view of landscape berms	Substantial Adverse	Substantial Adverse	Moderate Adverse	Moderate Adverse
23	Existing view across fields. Distant view to Lambay Island, Howth	View of landscape berms in Stage 1. View across garden and fields maintained. Distant views to coastline remain (**Refer to Appendix 1** Viewpoint 11)	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
24	Existing view across fields. Distant view to Lambay Island, Howth	View of landscape berms in Stage 1. View across garden and fields maintained. Distant views to coastline remain (**Refer to Appendix 1** Viewpoint 12)	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
25	Existing road and garden vegetation	Existing road and garden vegetation	No change	No change	No change	No change
26	Existing road and garden vegetation	Existing road and garden vegetation	No change	No change	No change	No change
27	Existing road, garden vegetation and fields	Existing road, garden vegetation, and glimpse view of Stage 1 of the proposal with landscape planting	Moderate Adverse	Moderate Adverse	Moderate Adverse	Slight Adverse
28	Existing road, garden vegetation and fields	Existing road, garden vegetation, and glimpse view of stage 1 of the proposal with landscape planting	Moderate Adverse	Moderate Adverse	Moderate Adverse	Slight Adverse
29	Existing road, garden vegetation and fields	Existing road, garden vegetation, and glimpse view of Stage 1 of the proposal with landscape planting	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse

	Components of Existing View	Components of Proposed View	Visual Impact (without mitigation)		Residual Impact (with mitigation)	
			Stage 1	Stage 2	Stage 1	Stage 2
30	Rear view of existing garden vegetation and fields	Rear view of existing garden vegetation and fields. View of both stages of the proposal and associated landscape planting	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
31	Rear view of existing garden vegetation and fields	Rear view of existing garden vegetation and fields. View of both stages of the proposal and associated landscape planting	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
32	Existing road, garden vegetation and fields	Direct view of Stage 1 and Stage 2	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
33	Within landtake	Within landtake	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
34	Within landtake	Within landtake	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
35	Within landtake	Within landtake	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
36	Within landtake	Within landtake	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
37	Within landtake	Within landtake	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
38	Within landtake	Within landtake	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
39	Within landtake	Within landtake	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
40	Within landtake	Within landtake	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
41	Rear view of existing garden vegetation, fields and Lambay Island	Rear view of existing garden vegetation, fields and Lambay Island. Views of proposed infrastructure area and proposed landscape planting	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
42	Rear view of existing garden vegetation, fields and Lambay Island	Rear view of existing garden vegetation, fields and Lambay Island. Views of proposed	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse

	Components of Existing View	Components of Proposed View	Visual Impact (without mitigation)		Residual Impact (with mitigation)	
			Stage 1	Stage 2	Stage 1	Stage 2
		infrastructure area and proposed landscape planting				
43	Rear view of existing garden vegetation and fields	Rear view of existing garden vegetation and field. Glimpse view of landscape berm	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
44	Existing road and garden vegetation	Existing road and garden vegetation. Glimpse view of landscape berm	Moderate Adverse	Moderate Adverse	Moderate Adverse	Moderate Adverse
45	Rear view of existing garden vegetation and fields	Rear view of existing garden vegetation and field. Glimpse view of landscape berm	Moderate Adverse	Moderate Adverse	Moderate Adverse	Moderate Adverse
46	Rear view of existing garden vegetation and fields	Rear view of existing garden vegetation and field. Glimpse view of landscape berm	Moderate Adverse	Moderate Adverse	Moderate Adverse	Moderate Adverse
47	Existing road and garden vegetation	Existing road and garden vegetation. Glimpse view of landscape berm	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
48		Existing road and garden vegetation	No Change	No Change	No Change	No Change
49	Existing road and garden vegetation	Existing road and garden vegetation	No Change	No Change	No Change	No Change
50	Existing road and garden vegetation	Existing road and garden vegetation	No Change	No Change	No Change	No Change
51	Existing garden vegetation and fields	Existing garden vegetation and field	No Change	No Change	No Change	No Change
52	Rear view of existing garden vegetation and fields	Rear view of existing garden vegetation and field. Glimpse view in winter to Stage 1	Moderate Adverse	Moderate Adverse	Slight Adverse	Slight Adverse
53	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
54	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
55	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change

	Components of Existing View	Components of Proposed View	Visual Impact (without mitigation)		Residual Impact (with mitigation)	
			Stage 1	Stage 2	Stage 1	Stage 2
56	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
57	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
58	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
59	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
60	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
61	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
62	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
63	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
64	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
65	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
66	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields. Glimpse view of Stage 1 in winter	Slight Adverse	Slight Adverse	Slight Adverse	No Change
67	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields. Glimpse view of Stage 1 in winter	Slight Adverse	Slight Adverse	Slight Adverse	No Change
68	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields. Glimpse view of Stage 1 in winter	Slight Adverse	Slight Adverse	Slight Adverse	No Change
69	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
70	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
71	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
72	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
73	Existing road, garden	Existing road, garden	No Change	No Change	No Change	No Change

	Components of Existing View	Components of Proposed View	Visual Impact (without mitigation)		Residual Impact (with mitigation)	
			Stage 1	Stage 2	Stage 1	Stage 2
	vegetation and fields	vegetation and fields				
74	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
75	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
76	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
77	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
78	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
79	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
80	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
81	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
82	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
83	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
84	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
85	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields. Glimpse view of Stage 1 in winter (See Viewpoint 14)	Slight Adverse	Slight Adverse	Slight Adverse	No Change
86	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields. Glimpse view of Stage 1 in winter.	Slight Adverse	Slight Adverse	Slight Adverse	No Change
87	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields. Glimpse view of Stage 1 in winter	Slight Adverse	Slight Adverse	Slight Adverse	No Change
88	Existing garden vegetation and fields	Existing garden vegetation and fields. Glimpse view of Stage 1 in winter	Slight Adverse	Slight Adverse	Slight Adverse	No Change
89	Existing garden vegetation and fields	Existing garden vegetation and fields. Glimpse view of	Slight Adverse	Slight Adverse	Slight Adverse	No Change

	Components of Existing View	Components of Proposed View	Visual Impact (without mitigation)		Residual Impact (with mitigation)	
			Stage 1	Stage 2	Stage 1	Stage 2
		Stage 1 in winter.				
90	Existing garden vegetation and fields	Existing garden vegetation and fields. Glimpse view of Stage 1 in winter	Slight Adverse	Slight Adverse	Slight Adverse	No Change
91	Existing road and buildings	Existing road and buildings	Slight Adverse	Slight Adverse	Slight Adverse	No Change
92	Existing garden vegetation and fields	Existing garden vegetation and fields	No Change	No Change	No Change	No Change
93	Existing garden vegetation and fields	Existing garden vegetation and fields	No Change	No Change	No Change	No Change
94	Existing garden vegetation and fields	Existing garden vegetation and fields	No Change	No Change	No Change	No Change
95	Existing garden vegetation and fields	Existing garden vegetation and fields. Glimpse view of Stage 1 in winter (**Refer to Appendix 1** Viewpoint 14)	Slight Adverse	Slight Adverse	Slight Adverse	No Change
96	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields. Glimpse view of Stage 1 in winter. (**Refer to Appendix 1** Viewpoint 14)	Slight Adverse	Slight Adverse	Slight Adverse	No Change
97	Existing road, garden vegetation and fields	Existing road, garden vegetation and fields. Glimpse view of Stage 1 in winter (**Refer to Appendix 1** Viewpoint 14)	Slight Adverse	Slight Adverse	Slight Adverse	No Change
98	Existing road embankment	Existing road embankment	No Change	No Change	No Change	No Change
99	Rear view of existing motorway embankment, garden vegetation and fields	Rear view of existing motorway embankment, garden vegetation and fields	No Change	No Change	No Change	No Change
100	Existing road and garden vegetation	Existing road and garden vegetation	No Change	No Change	No Change	No Change
101	Existing road and garden vegetation	Existing road and garden vegetation	No Change	No Change	No Change	No Change
102	Rear view of existing motorway	Rear view of existing motorway	No Change	No Change	No Change	No Change

	Components of Existing View	Components of Proposed View	Visual Impact (without mitigation)		Residual Impact (with mitigation)	
			Stage 1	Stage 2	Stage 1	Stage 2
	embankment	embankment				
103	Rear view of existing motorway embankment and fields	Rear view of existing motorway embankment and fields	No Change	No Change	No Change	No Change
104	Rear view of existing R132 road and motorway embankment, garden vegetation and fields	Rear view of existing R132 road and motorway embankment, garden vegetation and fields. Partial view of Stage 1 & 2	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
105	View of existing R132 road and motorway embankment, garden vegetation and fields	View of existing R132 road and motorway embankment, garden vegetation and fields	No Change	No Change	No Change	No Change
106	View of existing R132 road and motorway embankment	View of existing R132 road and motorway embankment	No Change	No Change	No Change	No Change
107	View of existing R132 road and motorway embankment	View of existing R132 road and motorway embankment	No Change	No Change	No Change	No Change
108	View of existing R132 road and motorway embankment and to Knockbrack Hill	Rear view of existing R132 road and motorway embankment. Partial view of Stage 1 & 2. View to hills remain	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
109	View of existing R132 road and motorway embankment and to Knockbrack Hill	Rear view of existing R132 road and motorway embankment. Partial view of Stage 1 & 2. View to hills remain (**Refer to Appendix 1** Viewpoint 13)	Moderate Adverse	Substantial Adverse	Moderate Adverse	Moderate Adverse
110	Rear view of existing R132, motorway embankment and fields with distant views of the hillside	Rear view of existing R132, motorway embankment and fields with distant views of both stages of the proposal	Moderate Adverse	Moderate Adverse	Moderate Adverse	Slight Adverse
111	Rear view of existing R132, motorway embankment and fields with distant views of the hillside	Rear view of existing R132, motorway embankment and fields with distant views of both stages of the proposal	Moderate Adverse	Moderate Adverse	Moderate Adverse	Slight Adverse
112	Rear view of existing R132, motorway	Rear view of existing R132, motorway	Slight	Slight	Slight	Slight

	Components of Existing View	Components of Proposed View	Visual Impact (without mitigation)		Residual Impact (with mitigation)	
			Stage 1	Stage 2	Stage 1	Stage 2
	embankment and fields with distant views of the hillside	embankment and fields with distant views of the hillside remain. Partial view of both stages	Adverse	Adverse	Adverse	Adverse
113	View of existing R132, motorway embankment and fields with distant views of the hillside	View of existing R132, motorway embankment and fields with distant views of both stages of the proposal	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
114	View of existing R132, motorway embankment, garden vegetation and fields with distant views of the hillside	View of existing R132, motorway embankment, garden vegetation and fields with distant views of both stages of the proposal	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
115	View of existing R132, motorway embankment, garden vegetation and fields with distant views of the hillside	View of existing R132, motorway embankment, garden vegetation and fields with distant views of both stages of the proposal	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
116	View of existing R132, motorway embankment, garden vegetation and fields with distant views of the hillside	View of existing R132, motorway embankment, garden vegetation and fields with distant views of both stages of the proposal	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
117	View of existing R132, motorway embankment, garden vegetation and fields with distant views of the hillside	View of existing R132, motorway embankment, garden vegetation and fields	No Change	No Change	No Change	No Change
118	View of existing motorway embankment	View of existing motorway embankment. Partial view of both stages	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
119	View of existing motorway embankment with distant views of the hillside	View of existing motorway embankment with distant views of the hillside	No Change	No Change	No Change	No Change
120	View of existing motorway	View of existing motorway	No Change	No Change	No Change	No Change

	Components of Existing View	Components of Proposed View	Visual Impact (without mitigation)		Residual Impact (with mitigation)	
			Stage 1	Stage 2	Stage 1	Stage 2
	embankment with distant views of the hillside.	embankment with distant views of the hillside				
121	Side view of existing motorway embankment with distant views of the hillside.	Side view of existing motorway embankment with distant views of the hillside. Partial view of Stages 1 & 2	Moderate Adverse	Moderate Adverse	Moderate Adverse	Moderate Adverse
122	Side view of existing motorway embankment with distant views of the hillside.	Side view of existing motorway embankment with distant views of the hillside. Partial view of Stages 1 & 2 (**Refer to Appendix 1** Viewpoint 10)	Moderate Adverse	Substantial Adverse	Moderate Adverse	Substantial Adverse
123	Existing road and garden vegetation.	Existing road and garden vegetation. Partial views of both stages	Substantial Adverse	Substantial Adverse	Substantial Adverse	Moderate Adverse
124	Existing road and garden vegetation.	Existing road and garden vegetation	No Change	No Change	No Change	No Change
125	Existing road, garden vegetation and fields.	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
126	Existing road, garden vegetation and fields.	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
127	Existing road, garden vegetation and fields.	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
128	Existing road, garden vegetation and fields.	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
129	Existing road, garden vegetation and fields.	Existing road, garden vegetation and fields.	No Change	No Change	No Change	No Change
130	Existing road, garden vegetation and fields.	Existing road, garden vegetation and fields	No Change	No Change	No Change	No Change
131	View of existing motorway embankment	View of existing motorway embankment. View of Stage 1 and 2 berms	Slight Adverse	Substantial Adverse	Slight Adverse	Moderate Adverse
132	View of existing motorway embankment	View of existing motorway embankment. View of Stage 1 and 2 berms	Slight Adverse	Substantial Adverse	Slight Adverse	Moderate Adverse

	Components of Existing View	Components of Proposed View	Visual Impact (without mitigation)		Residual Impact (with mitigation)	
			Stage 1	Stage 2	Stage 1	Stage 2
133	Existing road, garden vegetation and fields with distant views of the hillside	Existing road, garden vegetation and fields with distant views of the hillside and both stages of the proposal	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
134	Existing road, garden vegetation and fields with distant views of the hillside	Existing road, garden vegetation and fields with distant views of the hillside and both stages of the proposal	Slight Adverse	Slight Adverse	Slight Adverse	Slight Adverse
135	Existing garden vegetation and fields	Existing garden vegetation and fields	No Change	No Change	No Change	No Change
136	Existing garden vegetation and fields	Existing garden vegetation and fields	No Change	No Change	No Change	No Change
137	Rear view of existing garden vegetation, fields with distant views of Dublin coastline	Rear view of existing garden vegetation, landscape berms with distant views of Dublin coastline remain (**Refer to Appendix 1** Viewpoint 11)	Substantial Adverse	Moderate Adverse	Substantial Adverse	Slight Adverse
138	Rear view of existing garden vegetation, fields with distant views of Dublin coastline	Rear view of existing garden vegetation, landscape berms with distant views of Lambay Island and Howth remain (**Refer to Appendix 1** Viewpoint 12)	Substantial Adverse	Moderate Adverse	Substantial Adverse	Slight Adverse

1.4.4 Views from National Primary Roads/Motorway

Construction and Operational Phases

The extent and location of roads with intervisibility of the proposal are illustrated in Figure 1.3.

The M1 Motorway passes along the proposed sites immediate eastern boundary. It is proposed to construct earth bunds along this boundary that will result in no views of the landfill from close proximity as it develops behind the bunds. The earth bunds will be created during Stage 1. Longer distance views will be available of Stage 1 at locations on the M1 after the over bridge at Ballough when travelling north. The viewer sensitivity is low for vehicle travellers on the M1. The overall predicted change in visual resource during Stage 1 is medium. The predicted visual impact on views from the M1 at Stage 1 is Slight/Moderate.

During Stage 2 the visibility of the landfill will increase when viewed from the southern sections of the M1 but there will be no change in visual resource at close proximity, as the bunds will continue to screen the development. The viewer sensitivity is low for vehicle travellers on the M1. The overall predicted change in visual resource during Stage 2 is medium. The predicted visual impact on views from the M1 at Stage 2 is Slight/Moderate.

The nearest Regional road to the site is the R132 Belfast – Dublin Road which is located at its nearest within 500 m to the east at The Five Roads area. Due to the proximity of buildings and roadside vegetation generally only brief glimpse of the proposed development will be available from the R132. A short section at Ballough has no hedgerows and more widespread views are available across the M1 towards the site and Knockbrack hill beyond. This view is at a distance of 2 km south east of the site. The viewer sensitivity is low for vehicle travellers on the R132. The overall predicted change in visual resource during Stage 1 is low. The predicted visual impact on views from the R132 at Stage 1 is Slight.

During Stage 2 the landfill will increase in size to the north of the site but no significant change in visual resource will occur from Stage 1. The viewer sensitivity is low for vehicle travellers on the R132. The overall predicted change in visual resource during Stage 2 is low. The predicted visual impact on views from the R132 at Stage 1 is Slight.

1.4.5 Views from Regional Roads

Construction and Operational Phases

The R108 lies approximately 2 km west of the proposed site. This road is lined with strong hedgerows and scattered residential properties that significantly restrict views out. Due to the local topography and existing development only a brief glimpse view will be available in the direction of the proposals. No change in visual resource will occur in either Stage 1 or Stage 2 with regards to views from the R109.

The R129 is located approximately 3 km south of the proposed site. A glimpse view north is available at the M1 over bridge but due to distance and short duration of the view there will be low change in visual resource. The viewer sensitivity is low for vehicle travellers on the R129. The overall predicted change in visual resource during Stage 1 and 2 is low. The predicted visual impact on views from the R129 at Stage 1 and 2 is Slight.

1.4.6 Minor Roads

Construction and Operational Phases

A limited number of small county roads and lanes are located within the vicinity of the proposed development. The Nevitt Road crosses the proposed site and will have a high magnitude of change. Part of the Nevitt Road will be removed during Phase 2. The viewer sensitivity is medium. The predicted visual impact from the Nevitt Road for both stages is substantial/moderate.

The Tooman Road lies on the site's western side and elevated glimpse views are available across both stages. The magnitude of change is medium. The viewer sensitivity is medium. The predicted visual impact is moderate.

Rowans Little Road lies to the north of the proposed site and a new roundabout will be constructed as part of the scheme. Limited views on the proposal are available apart from these roadworks. The change in visual resource is low. The viewer sensitivity is medium. The predicted visual impact is moderate/slight.

Knighstown Road is located west of the proposed site. Glimpse views of Stage 1 only will be available. The magnitude of change in visual resource is medium. The viewer sensitivity is medium. The visual impact is moderate.

Hedgestown Road is located east of the site and rises to an elevated height over the surrounding landscape. The change in visual resource is medium. The viewer sensitivity is medium. The predicted visual impact is moderate.

Ballydrumman Road is located to the south of the site. Glimpse views of Stage 1 only will be available in winter-time. The change in visual resource is low. The viewer sensitivity is medium. The predicted visual impact is slight/moderate.

1.4.7 Views from Long Distance Footpaths

There are no designated or protected long distance footpaths within the study area. The predicted visual impact on views from the long distance footpaths, is no change.

1.4.8 Planning Designations

A review of the relevant landscape designations within the Fingal Development Plan has taken place and assessment established that there are several relevant zonings that may be impacted by the proposals.

Habitats and Landscape features of importance for Biodiversity: There are no trees to be protected located in the study area and, therefore, no such trees will be directly effected by the proposals.

To Preserve Views: As can be seen illustrated in viewpoints 2, 3, 11, 12 and 15, although the Stage 1 and Stage 2 works are visible to varying degrees the views to the coastline, including Lambay Island and Howth, are maintained. This view is only available from a location in close proximity to Nevitt Crossroads. Due to high hedgerows and buildings elsewhere on Toomans Road views to the east are very restricted. The magnitude of change in visual resource is medium. The viewer sensitivity is medium. The predicted visual impact is moderate.

High Amenity Zone (Zone HA): The proposed site does not lie within an area designated as Zone HA. There will be no impact on any areas of Zone HA as a result of the proposal.

Special Amenity Areas and Landscape Conservation Areas: The proposed site is partially located within a sensitive landscape. The sensitive landscapes are designated to protect the Zone HA. Careful consideration of the extent of the proposals on the development's western side has taken place to reduce/avoid impacts on the sensitive landscape. Low-lying areas zoned as sensitive land were appraised as part of this proposal and found not to play an important role in the Zone HA with no visual linkage between the two. These areas were established as not sensitive due to the fact that there is no visual linkage to the Zone HA lands because of topography and vegetation. With careful mitigation development can take place within these less sensitive areas without detrimental impact on the Zone HA lands above. Although a small patch of sensitive landscape will be lost the magnitude of change is low. The predicted impact on sensitive landscapes is slight.

1.4.9 Photomontages (Refer to Appendix 1)

Viewpoints and Photomontages

Viewpoint 1: Rowans Little/Tooman Crossroads (GR 317453, 258424). View direction 201°.

Type and Sensitivity of receptor: The Crossroads are predominantly used by local commuter traffic, i.e. regular local road users. This road is unlikely to have significant volumes of tourist or day-tripper traffic. The viewer sensitivity is low.

Existing view: The existing view components include roadside vegetation and lowland agricultural landscape with distant views of the Dublin coastline.

Predicted view Stage 1: Narrow view of landfill limited by landscape berms and partially obscured by vegetation. Distant views of the Dublin coastline remain.

Predicted view Stage 2: More prevalent view of landfill although views partially obscured by existing vegetation and the landscape berms. Views of lowland agricultural landscape reduced, distant views of the Dublin coastline remain.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is medium.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is high due to the prominence of the view.

Significance of visual impact Stage 1: The predicted significance of visual impact is moderate/slight.

Significance of visual impact Stage 2: The predicted significance of visual impact is moderate.

***Viewpoint 2: Tooman Road (GR 316892, 257450).* View direction 118°.**

Type and Sensitivity of receptor: This view is obtained from a roadside on the Tooman Road. This view will be available to vehicle drivers using this route travelling north and south. The route is likely to be used by local commuters, i.e. regular local road users. The viewer sensitivity is low.

Existing view: The existing view components include roadside vegetation and lowland agricultural landscape with distant views of the Lambay Island and Irelands Eye.

Predicted view Stage 1: Narrow view of landfill limited by landscape berms and partially obscured by vegetation. Distant views of the Lambay Island and Irelands Eye remain.

Predicted view Stage 2: More prevalent view of landfill although views partially obscured by existing vegetation and the landscape berms. Views of lowland agricultural landscape reduced. Distant views of the Dublin Mountains and Dublin coastline remain.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is high.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is high due to the prominence of the view.

Significance of visual impact Stage 1: The predicted significance of visual impact is moderate.

Significance of visual impact Stage 2: The predicted significance of visual impact is moderate.

Viewpoint 3: Nevitt Crossroads (GR 316850, 257274). View direction 137°.

Type and Sensitivity of receptor: The Nevitt Crossroads will be predominantly used by local commuter traffic, i.e. regular local road users. This road is unlikely to have significant volumes of tourist or day-tripper traffic. The viewer sensitivity is low.

Existing view: The existing view components include the existing Nevitt Road, roadside vegetation, housing and lowland agricultural landscape with distant views of the Dublin coastline.

Predicted view Stage 1: Apparent view of landfill and access road. Considerable reduction in view to lowland agricultural landscape. Distant views of the Dublin coastline remain.

Predicted view Stage 2: More extensive view of landfill and access road. Although views are partially filtered by the landscape berms. Views of lowland agricultural landscape reduced. Distant views of the Dublin coastline remain.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is high due to the prominence of the view.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is high due to the prominence of the view.

Significance of visual impact Stage 1: The predicted significance of visual impact is moderate.

Significance of visual impact Stage 2: The predicted significance of visual impact is moderate.

Viewpoint 4: Knighstown Road (GR 316817, 256996). View direction 145°.

Type and Sensitivity of receptor: This view is available from the Knightstown. The view will be available to vehicle users travelling north only and will include local commuter traffic, i.e. regular local road users. This road is unlikely to have significant volumes of tourist or day-tripper traffic. The viewer sensitivity is low.

Existing view: The existing view components include roadside vegetation, agricultural buildings and lowland agricultural landscape with distant views of the Dublin coastline.

Predicted view Stage 1: Apparent view of landfill and access road. Reduction in view to lowland agricultural landscape. Distant views of the Dublin coastline remain.

Predicted view Stage 2: View of Landscape berms and landfill access road. Views of lowland agricultural landscape reduced, distant views of the Dublin coastline remain.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is medium.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is high due to the prominence of the view.

Significance of visual impact Stage 1: The predicted significance of visual impact is moderate/slight.

Significance of visual impact Stage 2: The predicted significance of visual impact is moderate.

***Viewpoint 5: M1 south of the Nevitt Bridge. (GR 318606, 355670).* View direction 307°.**

Type and Sensitivity of receptor: This view is available from the M1. The view will be available to vehicle users travelling north only and will include commuters, day-trippers and tourists. The viewer sensitivity is low.

Existing view: The existing view components include roadside vegetation and lowland agricultural landscape with distant views of the elevated agricultural hills.

Predicted view Stage 1: Distant view of landfill, access road and infrastructure, partially limited by landscape berms and vegetation. Views of lowland agricultural landscape with distant views of the elevated agricultural hills remain.

Predicted view Stage 2: Distant view of landfill, access road and infrastructure, partially limited by landscape berms and vegetation. Views of lowland agricultural landscape remain while distant views of the elevated agricultural hills are reduced.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is low.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is medium.

Significance of visual impact Stage 1: The predicted significance of visual impact is slight.

Significance of visual impact Stage 2: The predicted significance of visual impact is moderate/slight.

***Viewpoint 6: Nevitt Road Motorway Bridge. (GR 318324, 257092).* View direction 258°.**

Type and Sensitivity of receptor: Due to the road being closed at this point, this view will only be available to pedestrians/walkers and to vehicles requiring local access. The viewer sensitivity is low.

Existing view: The existing view components include motorway embankment, roadside vegetation and lowland agricultural landscape with distant views of the elevated agricultural hills

Predicted view Stage 1: Prominent view of landfill and infrastructure partially limited by existing hedgerows. Views of lowland agricultural landscape with distant views of the elevated agricultural hills remain.

Predicted view Stage 2: Prominent view of landfill and infrastructure, partially limited by landscape berms. Views of lowland agricultural landscape remain while distant views of the elevated agricultural hills are reduced.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is medium.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is high due to the prominence of the view.

Significance of visual impact Stage 1: The predicted significance of visual impact is moderate.

Significance of visual impact Stage 2: The predicted significance of visual impact is substantial/moderate.

Viewpoint 7: Hedgestown Road (GR318839, 257317) View direction 247°

Type and Sensitivity of receptor: This view will be available to vehicle users and pedestrians/walkers including local commuters. The viewer sensitivity is medium.

Existing view: The existing view components include the R132 and its associated roadside vegetation, housing and lowland agricultural landscape with distant views of the elevated agricultural hills.

Predicted view Stage 1: Distant view of landfill and infrastructure, partially limited by landscape berms and vegetation. Views of lowland agricultural landscape with distant views of the elevated agricultural hills remain.

Predicted view Stage 2: Distant view of landfill, access road and infrastructure, partially limited by landscape berms and vegetation. Views of lowland agricultural landscape remain while distant views of the elevated agricultural hills are significantly reduced.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is medium/high due to the prominence of the view.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is high due to the prominence of the view.

Significance of visual impact Stage 1: The predicted significance of visual impact is moderate/substantial.

Significance of visual impact Stage 2: The predicted significance of visual impact is substantial.

Viewpoint 8: M1 north of Nevitt Bridge (GR318606, 255670) View direction 220°

Type and Sensitivity of receptor: This view is available from the M1 when travelling south only. The view is available to commuters, day-trippers and tourists. The viewer sensitivity is low.

Existing view: The existing view components include roadway, vehicles, roadside vegetation, lowland agricultural landscape. There is no focus on hills within this view.

Predicted view Stage 1: The earth berm will be visible upon construction along the site's eastern boundary. No activities behind the berm will be visible.

Predicted view Stage 2: There will be no change in the view from Stage 1 to Stage 2. The planted berm screens all Stage 2 activities.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is medium.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is no change.

Significance of visual impact Stage 1: The predicted significance of visual impact is slight/moderate.

Significance of visual impact Stage 2: No change.

Viewpoint 9: Courtlough Interchange (GR318426, 258519) View direction 193°

Type and Sensitivity of receptor: This view is available when travelling west on the Courtlough Interchange Bridge. The view will be available to local commuters. The viewer sensitivity is low.

Existing view: The existing view is available through railings across the M1 motorway. Existing roadside planting and hedgerows are visible.

Predicted view Stage 1: Due to the proximity of hedgerows and trees the mound and berms will be limited in view to winter time only.
Predicted view Stage 2: Due to vegetation there will be no change in view between Stage 1 and Stage 2.

Magnitude of change Stage 1: The limited visibility of Stage 1 mound will result in a low change in visual resource.

Magnitude of change Stage 2: There will be no change in visual resource at Stage 2.

Significance of visual impact Stage 1: The predicted significance of visual impact is slight.

Significance of visual impact Stage 2: The predicted significance of visual impact is no change.

Viewpoint 10: Hedgestown Road (GR318819, 257337) View direction 240°

Type and Sensitivity of receptor: This view is available from the front of property on Hedgestown Road and will be available to the occupier only. The viewer sensitivity is medium.

Existing view: The existing view is elevated and in a westwards direction across the R132 and M1 towards Nags Head.

Predicted view Stage 1: During Stage 1 the constructed berms and mound will be directly visible. The view to Nags Head hill will remain.

Predicted view Stage 2: During Stage 2 the continued extension of the mound is directly visible.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is medium.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is high.

Significance of visual impact Stage 1: The predicted significance of visual impact is moderate.

Significance of visual impact Stage 2: The predicted significance of visual impact is moderate/substantial.

Viewpoint 11: Property on Tooman Road (GR317066, 257618) View direction 156°

Type and Sensitivity of receptor: This view is available from the rear of property on Tooman Road. The viewer sensitivity is medium.

Existing view: The existing view components include existing garden vegetation, fields and distant views to Lambay Island and the coastline.

Predicted view Stage 1: During Stage 1 the landscape berms will be constructed in the foreground preventing views of the activities located to the east of the berm. The view to the coastline will remain.

Predicted view Stage 2: Due to the proximity of the landscape berm constructed during Stage 1 the activities during Stage 2 will not be visible.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is high.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is no change.

Significance of visual impact Stage 1: The predicted significance of visual impact is substantial/moderate.

Significance of visual impact Stage 2: The predicted significance of visual impact is no change.

Viewpoint 12: Property on Tooman Road (GR317036, 257521) View direction 136°

Type and Sensitivity of receptor: This view is available from the rear of property on Tooman Road. The viewer sensitivity is medium.

Existing view: The existing view consists of garden vegetation, agricultural fields and long distance views to Lambay Island and the coastline.

Predicted view Stage 1: During Stage 1 the landscape berms will be constructed along the site's western boundary and will be clearly visible in the foreground, preventing views of the Stage 1 mound. The view to the coastline will remain.

Predicted view Stage 2: Due to the location and height of the landscape berm constructed in Stage 1, it will not be possible to view any activities during Stage 2.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is high.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is no change.

Significance of visual impact Stage 1: The predicted significance of visual impact is substantial/moderate.

Significance of visual impact Stage 2: The predicted significance of visual impact is no change.

Viewpoint 13: Property on Jordanstown Road (GR319339, 256662) View direction 285°

Type and Sensitivity of receptor: This view is available from a property adjacent to Jordanstown Road. The viewer sensitivity is medium.

Existing view: The existing view is across the R132 and M1 towards Nags Head Hill and Knockbrack Hill. Existing trees in the foreground partially obscure mid distance views.

Predicted view Stage 1: The construction of landscape berms and landfill mound will be visible partially in winter months in the mid distance. Views to the Nags Head Hill and Knockbrack Hill will remain.

Predicted view Stage 2: The continued construction of the landfill mound will be visible to the rear of the landscape mounds. The view to the Nags Head Hill is slightly reduced but the upper portion of the hill remains visible as does Knockbrack Hill.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is medium.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is high.

Significance of visual impact Stage 1: The predicted significance of visual impact is moderate.

Significance of visual impact Stage 2: The predicted significance of visual impact is substantial/moderate.

Viewpoint 14: Roadside view from Baldrumman Road (GR317036, 255201) View direction 325°

Type and Sensitivity of receptor: This view is available from a field adjacent to Baldrumman Road

Existing view: The existing view consists of agricultural fields, hedgerows and trees. Partial views are available through trees to Nags Head Hill.

Predicted view Stage 1: The landscape berms will be screened behind hedgerows and trees. The construction of the landfill mound will be visible, glimpsed between trees partially in winter.

Predicted view Stage 2: The continued extension of the landfill mound will be partially visible through trees partially in winter.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is medium.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is medium.

Significance of visual impact Stage 1: The predicted significance of visual impact is moderate.

Significance of visual impact Stage 2: The predicted significance of visual impact is moderate.

Viewpoint 15: Property on Tooman Road (GR316960, 257432) View direction 160°

Type and Sensitivity of receptor: This view is available to the occupier of the property on Tooman Road only. The viewer sensitivity is medium.

Existing view: The existing view components include of the view are open agricultural fields and long distance views to Lambay Island and coastline.

Predicted view Stage 1: The construction of the landscape berm on the site's western boundary will only be visible in the foreground. The berm will, however, prevent

views of the landfill mound and other Stage 1 activities. The view to Lambay Island and coastline will remain.

Predicted view Stage 2: Due to the location and height of the landscape berm there will be very little of the Stage 2 mound visible. This level can be easily mitigated by planting.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is high.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is low.

Significance of visual impact Stage 1: The predicted significance of visual impact is substantial/moderate.

Significance of visual impact Stage 2: The predicted significance of visual impact is slight/moderate.

Viewpoint 16: Property on Rowans Little Road (GR317636, 258271) View direction 210°

Type and Sensitivity of receptor: This view is available to the occupiers of the property only. The viewer sensitivity is medium.

Existing view: The existing view consists of hedgerows and trees and undulating agricultural landscape.

Predicted view Stage 1: The construction of the landscape berms will be partially visible through existing trees and hedgerows. The landfill mound will be visible in the centre of the view.

Predicted view Stage 2: The landfill mound constructed during Stage 2 will be visible reducing views to agricultural fields.

Magnitude of change Stage 1: The predicted magnitude of change in visual resource is high.

Magnitude of change Stage 2: The predicted magnitude of change in visual resource is high.

Significance of visual impact Stage 1: The predicted significance of visual impact is substantial/moderate.

Significance of visual impact Stage 2: The predicted significance of visual impact is substantial/moderate.

1.5 Mitigation

It is proposed to carry out landscape planting to reduce the level of visual impact caused by the proposed development and to assist in blending the development with its surroundings.

A detailed landscape planting scheme is proposed to be carried out during Stage 1 and Stage 2. The proposed hedge planting is illustrated in Figure 1.6. Screen planting will be used on landscape berms, with woodland between the berms and site boundary, assisting in blending the development with its surroundings.

All trees and hedgerows on site to be retained shall be protected in accordance with BS 5837: 2004 “Trees in Relation to Construction”. All trees and hedgerows to be retained shall be protected with 1200mm high chestnut pale fencing to BS 1722 Part 4. Fencing shall be erected before construction works commence. In particular all trees to be retained on the sites boundary shall be well protected to minimise visual intrusion. Trees to be retained are marked on Figure 1.6.

A landscape management plan shall be prepared to insure the healthy establishment of all trees and shrubs within the proposed development and the replacement of any dead or dying plants after the first year's growth.

It is proposed to provide two new amenity viewpoints as mitigation for significant impacts predicted in Section 1.4.9 of this report.

1.6 Conclusions

The landscape and visual assessment has established the existing landscape and visual resources likely to be effected by the proposed landfill development. The site is located within a gently undulating agricultural landscape. Overall, the predicted impact on the landscape character of this landscape is moderate negative.

The proposed site is located on the western side of the M1. There are scattered residential properties with potential views of the proposed landfill development.

Table 1.3 summaries the visual impact on all properties within the ZVI with a potential view of the development. A number of properties will have significant visual impacts.

When views from the M1 and R132 are assessed there are no predicted significant visual impacts.

When views from Regional Roads are assessed there are no predicted significant visual impacts.

When views from County Roads are assessed significant visual impacts will occur on the Nevitt Road.

When Planning Designations are assessed there will be no significant landscape or visual impacts predicted.

A series of sixteen viewpoints have been selected to generate photomontages of the proposals allowing accurate assessment of visual impacts. A total of eight viewpoints will have significant visual impacts.

Detailed mitigation measures to avoid, reduce and remedy where possible the significant visual impacts have been prepared and outlined in Figure 1.6. The residual impacts (following establishment of landscape planting) on visual impacts are summarised in Table 1.3 showing a reduction in significant visual impacts.

APPENDICES

Appendix 1 : Photomontages