# SECTION 10 LANDSCAPE

### 10.1 INTRODUCTION

This Environmental Impact Statement (EIS) provides supporting information to accompany a Waste Licence Application (WLA) to the Environmental Protection Agency (EPA) by Behan's Land Restoration Ltd. for the continued operation and extension of its existing inert waste facility at Blackhall, Punchestown, Naas, Co. Kildare, including processing and recycling of inert construction materials (stone, concrete, ceramics etc.).

The site to which this Waste Licence Application refers is located entirely within the townland of Blackhall, Punchestown, Co. Kildare, approximately 5km south-east of Naas and 5km north-west of Blessington. The plan extent of the lands owned or leased by Behan's Land Restoration Ltd. is outlined in blue on a 1:10,560 scale map of the area, reproduced as Figure 10.1. The plan extent of the application site is also outlined in red on the same figure.

This section of the EIS describes, classifies and evaluates the existing landscape and visual resource, focusing on its sensitivity and ability to accommodate change. The existing / proposed restoration scheme was then applied to the baseline conditions to allow identification of potential impacts, prediction of their magnitude and assessment of their significance. Mitigation measures were then identified to eliminate and reduce, insofar as practical, potential environmental impacts.

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### **10.2 BASELINE ENVIRONMENTAL STUDY**

### 10.2.1 Outline of the Baseline Study

The initial data to assess the significant effect on the landscape was acquired through:

- Inspection and walkover of application sites sites
- Review of topographical survey data in respect of application site and its surrounds
- Photographic surveys of the site and its surrounds

This information was then evaluated and assessed:

- Considering the phasing and ayout of future restoration works at the application site.
- Using cross-sections through the existing site, overlain with the phased working scheme of the development.

### **10.2.2 Existing Environment – Land Use**

The application site and existing inert waste facility operated by John Behan are located within an undulating rural landscape. The predominant land use in the surrounding area is agricultural, principally pasture, with very limited tillage or forestry.

In the immediate vicinity of the application site however, mineral extraction activites constitute a locally significant land use. Although sand and gravel extraction activities have ceased at the application site, there are a few relatively large scale operations in the immediate vicinity. Cemex Ireland operates a gravel quarry and concrete batching facility on the other side of the county road to the application site while CPI operates a gravel quarry and washing facility at Newtown Great approximately 1km south-east of the application site. The location of these operations is indicated on Figure 10.1. A number of small to medium scale extraction operations are also located within 5km radius of the application site.

There are a number of isolated residences in the area immediately surrounding the existing facility, also shown on Figure 10.1. There is a residence immediately west of the application site, another at the north-west corner of the site, three around the north-east corner of the site and one to the south of the site.

### **10.2.3 Existing Environment – Topography**

The application site is located amongst undulating hills which rise and extend eastwards into neighbouring County Wicklow and which are essentially the western foothills of the Wicklow Mountain complex. As a result of previous extraction of sand and gravel at the site, it currently

constitutes a large, irregular closed depression or void locally within the landscape. Ground level across the site is generally 10m to 15m lower than that of the surrounding undisturbed land. Surrounding ground levels are typically in excess of 170mOD to the east of the site and below 160mOD to the west.

Given the undulating nature of the landscape surrounding the application site and the presence of moderately tall hedgerows, there are only limited long-distance views into the site. There are views into the site from local roads where breaks occur in the line of hedgerows around the site boundary.

### 10.2.4 Planning Considerations

Kildare County Development Plan (2005-2011) identifies Blackhall townland in which the application site is located and the surrounding area as part of the Landscape Character Area known as the East Kildare Uplands. Landscape designations in the Kildare County Development Plan are summarised in Figure 10.2.

The County Development Plan states that the elevated nature of the area in the northeast of the County means that 'it provides a defined skyline, with views over the central plains of Kildare and the neighbouring Wicklow Mountains, which further define the skyline and the visibility'. Amongst the critical landscape factors in the East Kildare Uplands identified by the County Development Plan, those of greatest relevance to the application site include

- Elevated vistas from local roads, westwards toward the Kildare lowlands and the Chair of • Kildare:
- Sloping land, which intensifies its visual prominence over a greater distances;
- Prominent rideglines in this area, nearly all ridgelines are secondary ridgelines when viewed against the Wicklow Mountains to the east (which, being higher, form primary M ridgelines)
- Undulating topography which is capable of shielding built forms from view and making them visually unobtrusive in the landscape
- Low vegetation which fails to break up vistas and facilitates long distance views

The policy on development in the East Kildare Uplands is set out in Section 18.3.1 of the County Development Plan and is reproduced below: ofcor

## UA 1

To ensure that development *mill* not have a disproportionate visual impact (due to excessive bulk, scale or inappropriate siting and will not significantly interfere or detract from scenic upland vistas, as identified in the Development Plan, when viewed from areas nearby scenic routes, viewpoints or settlements.

## UA 2

To ensure that developments on steep slopes (i.e. >10%) will not be conspicuous or have a disproportionate visual impact on the surrounding environment as seen from relevant scenic routes, viewpoints and settlements.

## UA 3

To facilitate developments that have a functional and locational natural resource requirement to be situated on steep or elevated sites (e.g. reservoir, telecommunication masts or wind energy structures) with reference to the appropriate County strategies currently in place, which ensure that any residual adverse visual impacts are minimised or mitigated.

### **UA 4**

To maintain the visual integrity of areas, which have retained a dominantly undisturbed upland character.

## UA 5

To have regard to the potential for screening vegetation when evaluating proposals for development within the uplands.

Table 18.8 of the County Development Plan presents an assessment of likely perception of landscape impacts which indicates that a quarry development in the Eastern Uplands has the potential to have a high impact on a sensitive landscape.

### 10.3 ASSESSMENT OF IMPACTS

A common human response to most extractive and related activities is that they reduce landscape quality. The extent to which this is considered a negative visual impact on the surrounding landscape is influenced by a number of factors including:

- The extent, scale and shape of the quarry development.
- The contrast in colour between the exposed quarry faces, if visible, and its surroundings.
- The accumulation of industrial type buildings that are out of scale and character with those normally found in the surrounding area.

A further consideration is not just its proximity to human habitations but also the number of people who pass through the area, for whatever reason, who may feel that the visual quality of the area has been degraded by the presence of a sand and gravel quarry and any associated processing activities.

In the case of the application site at Blackhall, while extraction of sand and gravel has ceased, the resultant void has only been partially backfilled and restored to agricultural use and there are significant areas of bare exposed soils across the site. In assessing the visual impacts arising from the proposed restoration scheme, the main requirement is to assess the following:

- The views and viewers affected (refer to Figure 10.1 and Plates 10.1 10.20).
- The distance of the view (refer to Figure 10.1).

The application site currently comprises four areas; the existing active restoration area, the construction and demolition waste processing area, the previous restored area and the partially restored area on the western side of the site.

- The existing operational area contains the site entrance, proposed weighbridge and office and wheelwash facilities, all at a ground level of approximately 148-155mOD (for a view of the site entrance, refer to Plate 10.1). There are security gates at the site entrance which restrict access into the site. At the current restoration area, ground levels vary from approximately 150mOD to 169mOD. The porth-eastern area which is currently being backfilled with inert material is screened by natural vegetation and is hidden from public view along the road and from nearby residences. Current views into the site are shown on Plates 10.2 to 10.18)
- The construction and demolition waste processing area contains the screening and crushing plant, waste skips and the waste inspection and quarantine area, all at a ground level of approximately 156mOD to 158mOD. This area is currently screened from view as it is located at a lower level inside the former quarry.
- The area substantially restored to agricultural use, at the south-eastern corner of the quarry, is currently used for grazing and has no visual impact on the surrounding landscape. This area will remain undisturbed and will continue to be used for agriculture and grazing purposes throughout the restoration works (Refer to Plates 10.1 to 10.3)
- The partially restored area on the western side of the site is currently grassed, with some surface water ponds. This area is partially screened by existing boundary vegetation. Final restoration of this area will be completed on a phased base.

The process involved in backfilling and restoring the quarry is in contrast to former extraction activities. Ultimately, continued backfilling of the site using inert imported materials will result in the entire site being returned to former ground level and restored to beneficial use as agricultural pasture. On completion of the restoration works, the site will blend into the surrounding landscape, eliminating any negative visual impact which currently arises. The long-term permanent enhancement of the local landscape arising from the site restoration will constitute a moderate positive impact.

The restoration works, and backfilling activities in particular, are is expected to have only limited temporary visual impact due to the natural screening afforded the site by the surrounding landscape elements, a combination of the undulating topography and existing hedgerows. The phasing of the restoration scheme will minimise the area being actively restored and open to public view at any time (refer to Sections 2 and Section 10.4). Only a limited extent of the restoration works, if any, will be open to public view, and where it is, this will be of an intermittent nature and as such will constitute a temporary, minor negative impact.

In accordance with the Environmental Protection Agency "Guidelines on Information to be Contained in an EIS" particular attention has been paid to potential views into the application site from the following locations;

- Designated tourism routes and viewpoints; .
- Other roads and residences, hotels and amenities and .
- Sites and monuments of archaeological, architectural or historical interest

The definition of the term "views" in the EPA Guidelines is taken to imply significant visibility.

#### **10.3.1** Designated Tourism Routes and Viewpoints

There will be no significant visibility of the existing or future landform from any of the viewpoints identified by the County Development Plan.

#### Direct Impacts

The restoration scheme will not have any significant impacts on designated scenic roads and viewpoints on account of its location; the intervening undulating topography; screening by hedgerows, the phasing of the works and the proposed mitigation measures. The scheme will not restrict or obscure any westward vistas along the adjoining local roads

#### Indirect Impacts

The restoration scheme will not have any significant indirect impacts on designated tourism routes and viewpoints.

### 10.3.2 Other Roads and Residences, Hotels and Amenities

The visual aspects of the restoration scheme are primarily concerned with views from the closest residences and roads within the area (refer to Figure 10.1). A photographic survey was undertaken which involved taking still digital photographs from a number of locations (including a number of residences), the locations of which are indicated on Figure 10.1. The photographs were taken at eye level (c. 1.5 metres above ground level) at the points indicated, towards the development. The views are shown on Plates 10.1-10.2000 FOIT

### Direct Impacts

Potential views from residences into the application site are and will be restricted to a small number of local dwellings. Many of these dwellings are fully or partially screened by a combination of the existing hedgerows (to be retained) and / or topography. The phasing of the restoration scheme and direction of backfilling has had regard to the need to minimise the impacts on views from nearby residences. Due to the separation distance and intervening topography, the impact on views from residences, if any, will constitute a minor to moderate negative impact for a limited duration during the restoration phase. In the longer term, the restoration of the site is likely to have a minor positive impact.

The application site is too distant and partially screened by intervening vegetation to be perceptible from the racecourse at Punchestown. Views toward the site will be drawn more toward the intervening extraction activities at a lower level around Walshestown Pit. During the restoration works, there will not be any temporary visual impact on views eastwards from the racecourse.

#### Indirect Impacts

The development will not have any significant indirect impacts on views from roads, residences, hotels and amenities.

#### 10.3.3. Sites and Monuments of Archaeological, Architectural or Historical Interest

The proposed restoration works will be visible from a number of archaeological sites in the immediate vicinity of the application site, most notably the ring fort along the north-western site boundary.

#### Direct Impacts

Throughout the restoration phase, plant, equipment and backfilled soil will be visible from the existing ringfort immediately beyond the north-western boundary, primarily because of its elevated position, proximity to the site and the absence of any screening by intervening vegetation of

topography. This impact constitutes a moderate negative impact of extended (although not permanent) duration. The impact of the scheme on other archaeological sites (including ruins of Blackhall Castle and Kilsaintlucan graveyard) will be minimal owing to intervening topography and/or vegetation.

#### Indirect Impacts

The development will not have any indirect impacts on identified sites and monuments of archaeological, architectural or historical interest.

#### 10.3.4 Interaction with other Impacts

Potential interactions with other impacts associated with visual intrusion (e.g. human beings or material assets) are discussed in the relevant sections of the EIS.

#### **10.4 MITIGATION MEASURES**

Measures taken to further minimise the potential visual impacts associated with the existing and proposed development can be classified as;

- Avoidance
- Mitigation

The primary measure taken to minimise visual impacts is through their avoidance. It is considered that the proposed phased working scheme and the positioning of the site infrastructure (principally the screening and processing plant), together with existing hedgerows along the site boundary and the surrounding topography, will ensure that the visual impact of the development is not significant.

The following landscape mitigation measures should be put in place to further eliminate and / or minimise any potential visual impact associated with the proposed restoration scheme:

- i) Retain all hedgerows along the site boundary and reinforce with additional planting where necessary.
- ii) Provide for off-site removal, recuse and/or recovery of all buildings, plant, infrastructure and paved surfaces on completion of restoration activities;
- iii) Ensure the final restored landform is graded at a shallow angle so as to merge in with the surrounding agricultural landscape.

These mitigation measures are in accordance with the recommendations provided in the DoEHLG (2004) publication 'Quarries and Ancillary Activities: Guidelines for Planning Authorities'.

Overall, it is considered that the potential for negative visual impacts arising from the restoration of the former sand and gravel quarry will generally be limited on account of

- the physical distance between the site and publicly accessible areas
- the existing undulating topography
- the phasing and direction of backfilling during the restoration works
- the postioning of temporary site infrastructure and
- the final restored profile of the site.

PLATES Manual Plates and other use.

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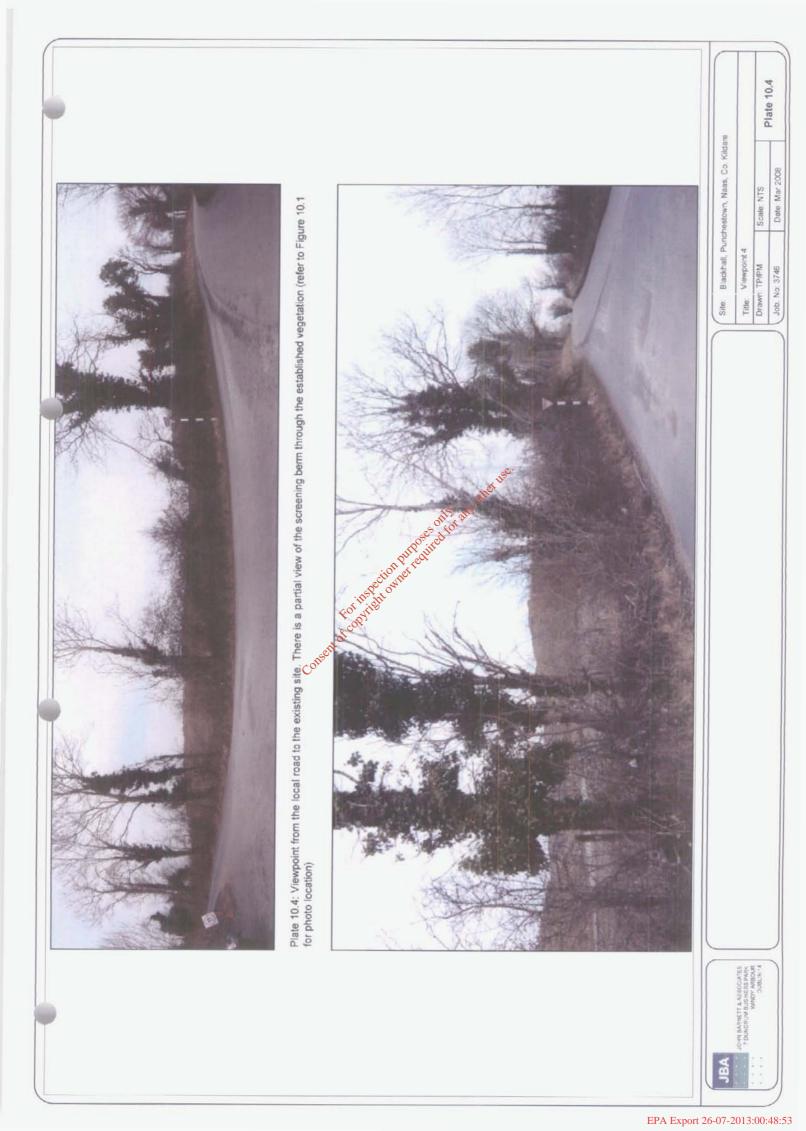


Plate 10.1: Viewpoint from the local road to the existing site entrance. There are distant views of the current restoration area, which is currently been reinstated and will be seeded and retored agricultural to grass land (refer to Figure 10.1 for photo location)

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WINDY ARBOUR DUBLIN 14	Drawn TP/PM	Scale NTS	Plate 10.1
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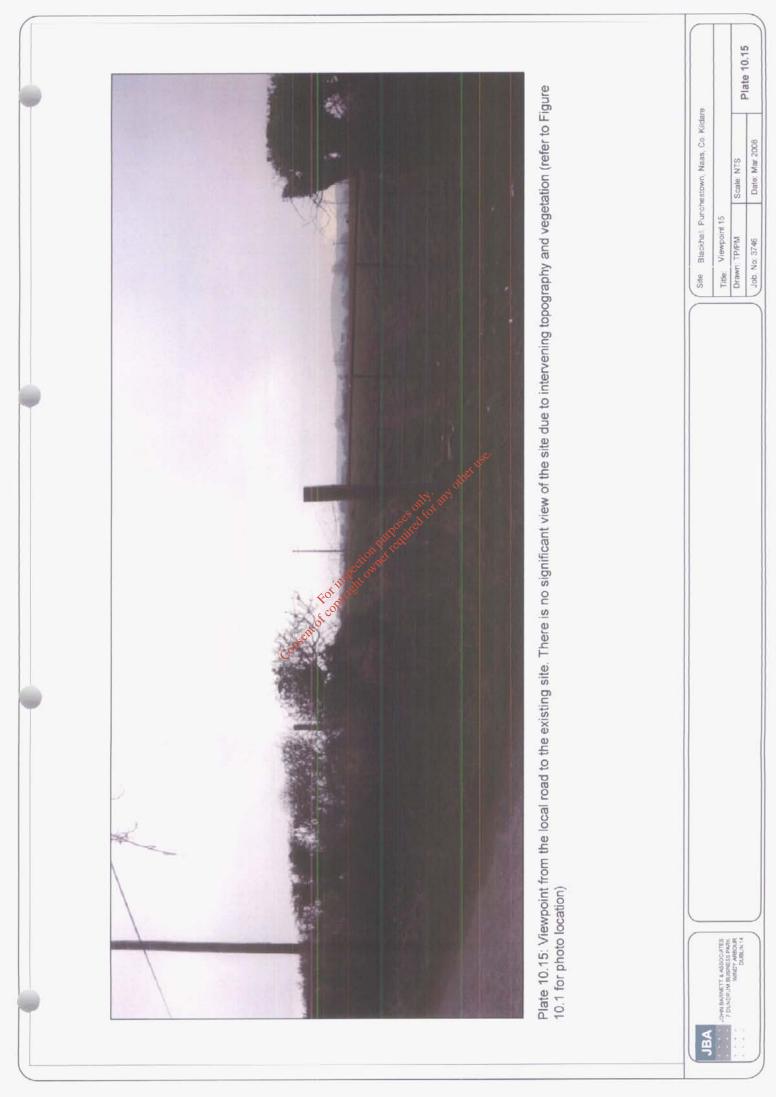






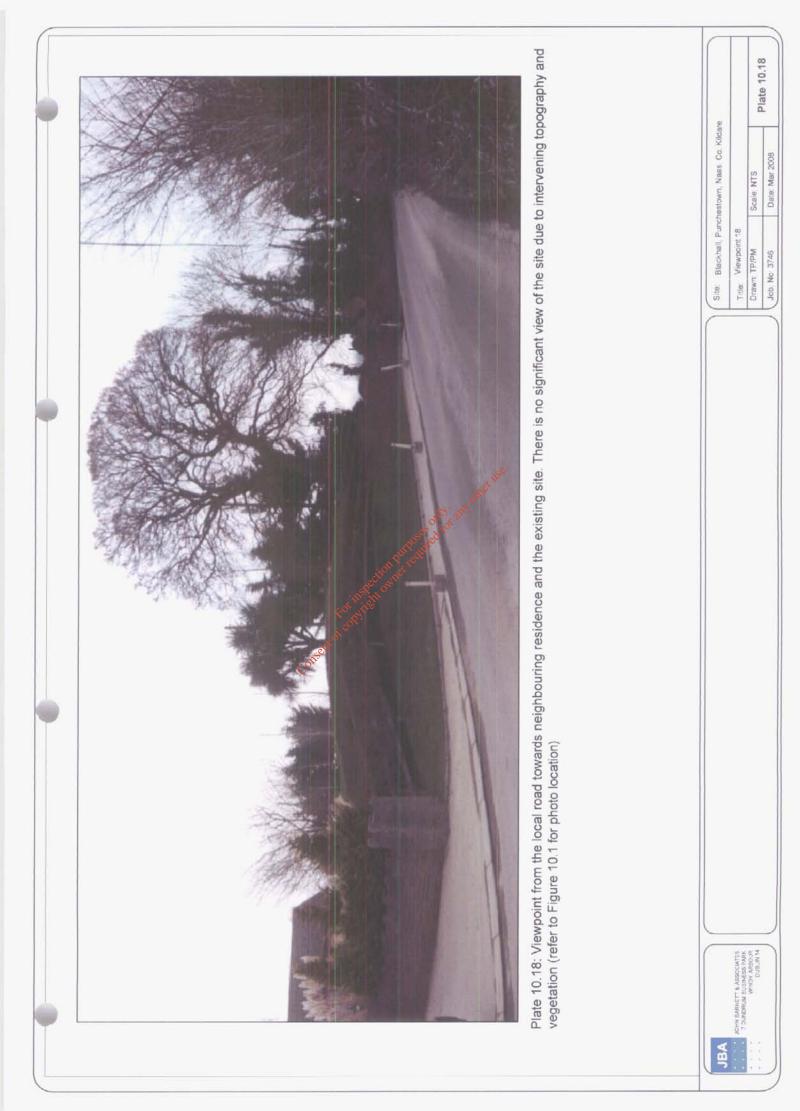


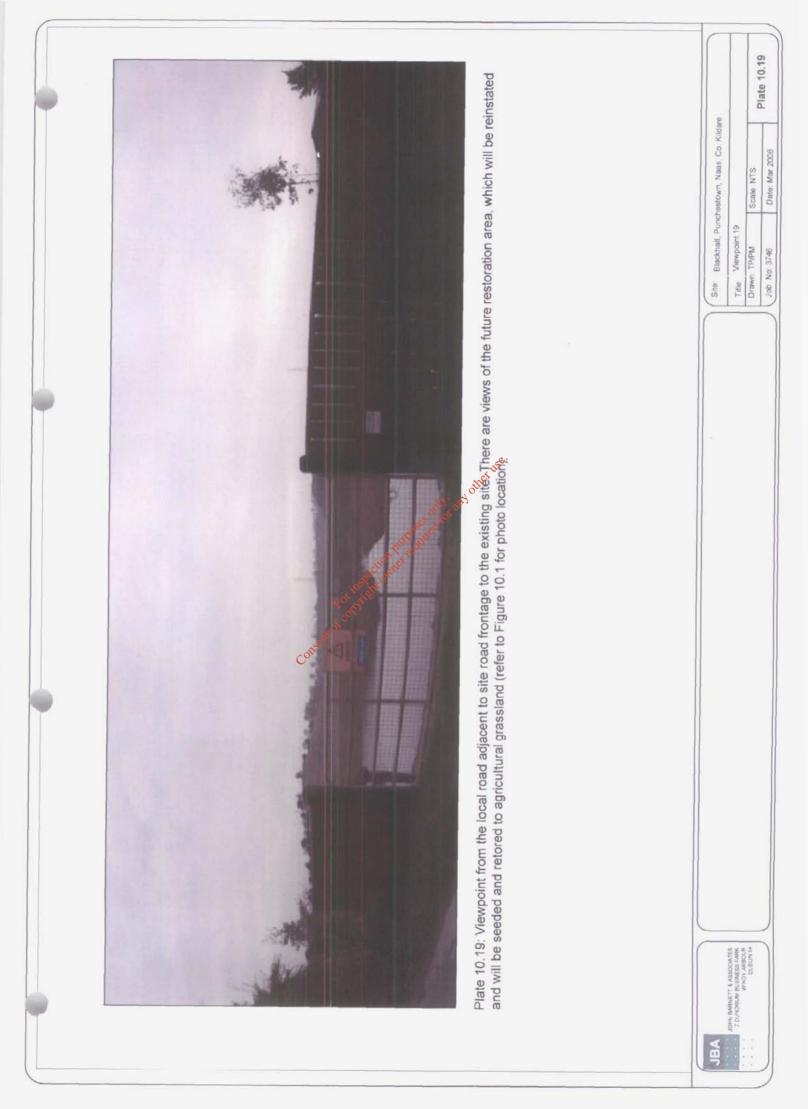


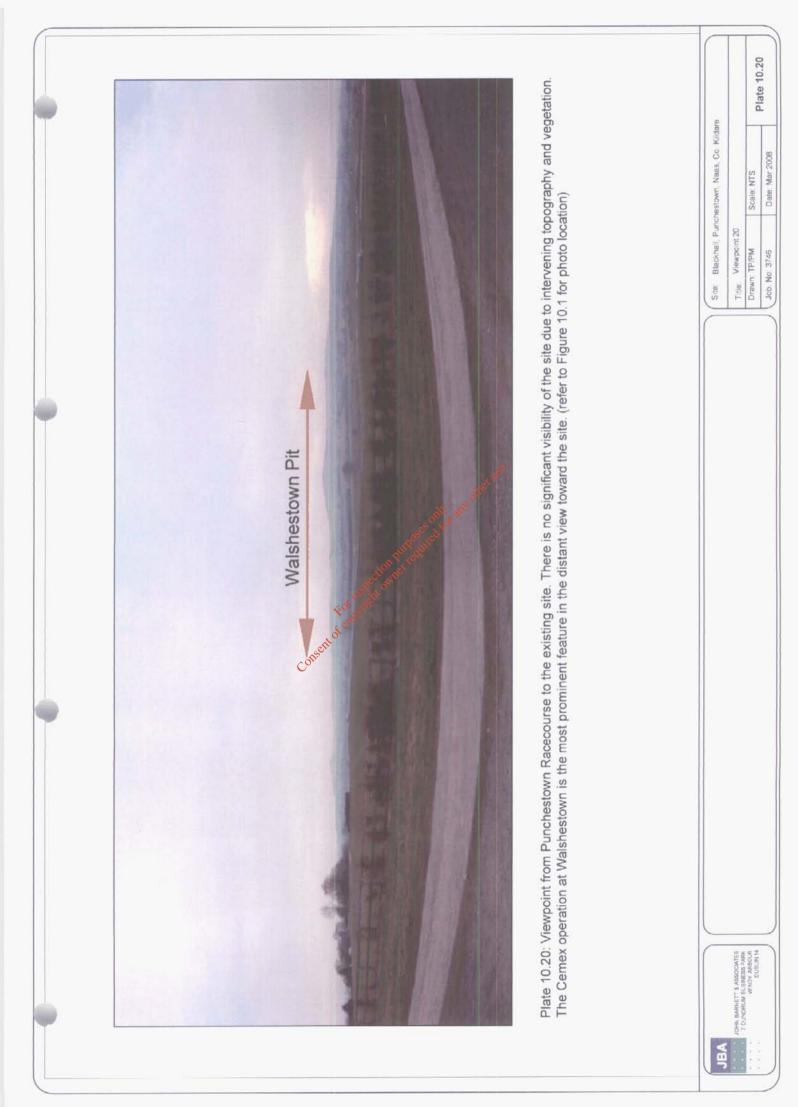




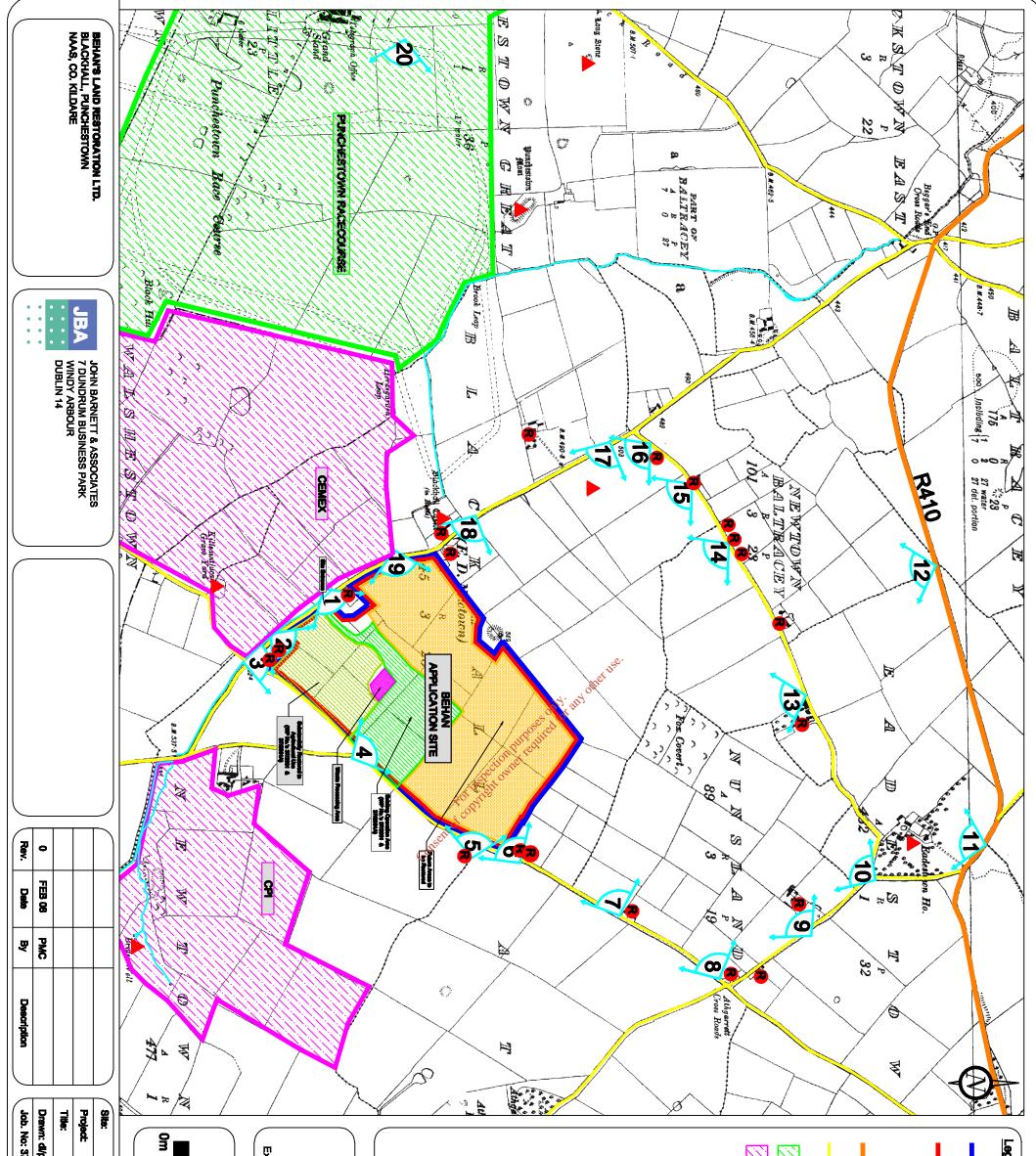




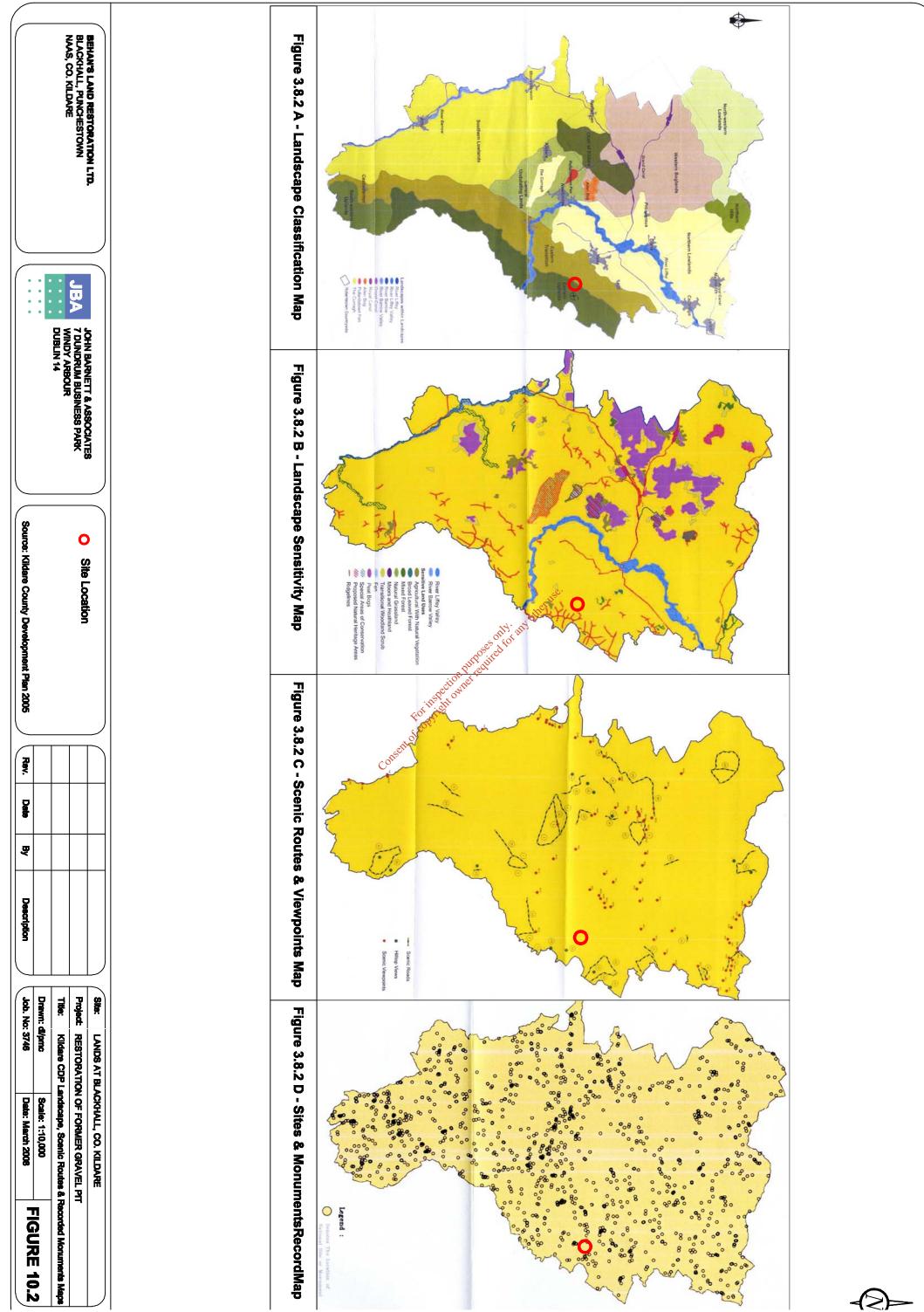




FIGURES of any other use.



RESTORATION OF FORMER GRAVEL PT Visual Assessment - Photographic Location c Scale: 1:10,000 B Date: February 2008 FIGURE 10.1	Visual Ast pmc
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200m 800m	
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Third Class Roads	
Regional Road (R410)	
Photographic Locations (Refer to Plates P10.1 - P10.20)	P
Waste Licence Area (c. 35.6ha)	
Applicant's Land Interest (c. 35.6ha)	
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APPENDIX 10.10 GLOSSARY OF IMPACTO TERMINOLOGY For inspection purper tentre TERMINOLOGY Consent of convict to the tentre of ten

Positive Impact	A change that improved the quality of the environment (for example, by increasing species diversity and the reproductive capacity of the ecosystem, by removing nuisances or improving amenities).
Neutral Impact	A change that does not affect the quality of the environment.
Negative Impact	A change that reduces the quality of the environment (for example, by lessening species diversity and the reproductive capacity of the ecosystem by damaging health, property or by causing nuisance.
Imperceptible Impact	An impact capable of measurement but without noticeable consequences.
Slight Impact	An impact that causes changes in the character of the environment that are not significant or profound.
Moderate Impact	An impact that causes an appreciable segment of the panorama to be affected or where there is intrusion into the foreground (partial or limited views).
Significant Impact	An impact that, by its magnitude, duration or intensity alters an important aspect of the environment.
Profound Impact	An impact that obliterates all previous characteristics.
Temporary Impact	Impact lasting for one year or less.
Short-term Impact	Impact lasting one to seven years
Medium-term Impact	Impact lasting seven to twenty years.
Long-term Impact	Impact lasting twenty to fifty years
Permanent Impact	Impact lasting over fifty years.
Impact Avoidance	When no change is caused.
Impact Reduction	Where the significance of adverse impacts is lessened.
Impact Remedy	When an adverse effect is eliminated.
Irreversible Impact	When the character, diversity or reproductive capacity of an environment is permanently lost.
Indeterminable Impact	When the full consequences of a change in the environment cannot be described.
Cumulative Impact	The addition of many small impacts to create one larger, more significant, impact.
Synergistic Impact	Where the resultant impact is of greater significance than the sum of its constituents.
"Worse case" Impact	The impacts arising from a development in the case where mitigation measures substantially fail.
"Do nothing" Impact	The environment as it would be in the future should no development of any kind be carried out.

### **GLOSSARY OF IMPACT TERMINOLOGY**