

LANDSCAPE AND VISUAL 10

CONTENTS

INTRODUCTION	10-1
Background	10-1
Scope of Work	10-1
Legislative Framework / Planning Policy	10-2
Consultations	10-3
Author	10-3
RECEIVING ENVIRONMENT	10-3
Baseline Study Methodology	10-3
Landscape Baseline	10-5
Visual Baseline	10-7
Difficulties Encountered	10-8
IMPACT ASSESSMENT	10-8
Evaluation Methodology	10-8
Extraction Stage Impacts	10-11
Restoration Stage Impacts	10-12
Impacts on Planning Objectives	10-15
Do-nothing Scenario	10-15
MITIGATION MEASURES	10-15
Extraction Stage	10-15
Restoration Stage	10-15
RESIDUAL IMPACT ASSESSMENT	10-16
Extraction Stage	10-16
Restoration Stage	10-16
REFERENCES	10-17

TABLES

Table 10.1 Landscape Sensitivity	10-4
Table 10.2 Visual Sensitivity in Relation to Land Use	10-4
Table 10.3 Landscape Sensitivity of the Site and Surrounding Area	10-6
Table 10.4 Viewpoint Sensitivity	10-8
Table 10.5 Definition of Levels of Magnitude	10-9
Table 10.6 Principles of Assessing Significance of Landscape and Visual Impact	10-10
Table 10.7 Definition of Significance Criteria for Landscape and Visual Impact	10-10
Table 10.8 Magnitude of Landscape Effects (Extraction Stage)	10-11
Table 10.9 Magnitude of Landscape Effects (Restoration Stage)	10-13
Table 10.10 Significance of Visual Impact	10-15

FIGURES

- Figure 10-1 Landscape Designations & Viewpoint Locations
- Figure 10-2 Viewpoints A, B and C
- Figure 10-3 Viewpoints D, E and F
- Figure 10-4 Viewpoints G, H and I



INTRODUCTION

Background

- 10.1 This section assesses the potential landscape and visual impacts arising from the proposed extension of the existing Huntstown Quarry, North Road, Finglas, Dublin 11.
- 10.2 The development site is located within the boundaries of the existing Huntstown quarry complex, approximately 500m north of the M50 and 500m west of the N2. The proposed development entails the continued use of the existing north, central and south quarries within the complex. This will involve the deepening of the existing 3 quarry voids, including small adjustments to their existing footprints. The development also proposes to commence extraction within the western quarry, the site for which has previously been stripped. Further details on the development site and a detailed description of the proposed development are contained in Section 2 of this EIS.
- 10.3 Landscape and visual effects are independent but related issues; landscape effects are changes in the landscape, its character and quality, while visual effects relate to the appearance of these changes and the resulting effect on visual amenity. Wherever possible, identified effects are quantified, however the nature of landscape and visual impact assessment requires interpretation by professional judgement. In order to provide a level of consistency to the assessment, the appraisal of sensitivity and the prediction of magnitude and assessment of significance of the residual landscape and visual effects have been based on pre-defined criteria, as described further preceding the relevant sections of this report.

Scope of Work

- 10.4 The landscape and visual impact assessment is structured in the following manner:
- *Introduction* – a brief description of the proposed development and the structure of this report, as well as an account of the relevant planning context (e.g. planning policies, designated landscapes, sites of nature conservation importance)
 - *Receiving Environment* – a description of the landscape and visual baseline, including the methodology for and assessment of landscape and viewpoint sensitivity
 - *Impact Assessment* – a description of the aspects of the proposed development which have a potential to cause a landscape and/or visual effect, including the methodology for and an assessment of the magnitude and significance of the landscape and visual effects for both the extraction and the restoration stage of the proposed development;
 - *Mitigation Measures* – a description of the measures which have been incorporated to mitigate any landscape and visual effects during the extraction and during the restoration stage; and
 - *Residual Impact Assessment* – a summary of the degree of landscape and visual impact that will occur after the proposed mitigation measures have taken effect.

- 10.5 The assessment is illustrated by a Landscape Designations Plan (including viewpoint locations) and 3 Viewpoint Sheets, refer to Figures 10-1 to 10-4 and is accompanied by a Landscape and Restoration Plan; refer to Figures 2-4 to 2-5.

Legislative Framework / Planning Policy

- 10.6 The Fingal Development Plan 2011-2017 is the statutory plan detailing the development objectives/policies of the authority. The plan includes objectives and policies, relevant to this assessment, with regard to land use zoning, the extractive industry and landscape character.

Land Use Zoning

- 10.7 The application site is for the most part, located within an area described under 'Zoning Objective RU' (RU = Rural) in the current development plan, which states: *'Protect and promote in a balanced way, the development of agriculture and rural-related enterprise, biodiversity, the rural landscape, and the built and cultural heritage'*, refer to Figure 2-7 in Chapter 2.
- 10.8 The vision for 'Zoning Objective RU' (Chapter 9 – Land Use Zoning) is described, as follows: *'This zoning objective seeks to protect and promote the value of the rural area of the County. This rural value is based on:*
- *Agricultural and rural economic resources*
 - *Visual remoteness from significant and distinctive urban influences,*
 - *A high level of natural features.*
- Agriculture and rural related resources will be employed for the benefit of the local and wider population. Building upon the rural value will require a balanced approach involving the protection and promotion of rural biodiversity, promotion of the integrity of the landscape, and enhancement of the built and cultural heritage.'* 'Extractive Industry – Extraction Quarrying' is listed as permitted in principle under this zoning objective.
- 10.9 Along the eastern and western site boundaries of the site and adjacent to the public road network, the land-use Zoning Objective 'HI – Provide for Heavy Industry' is in place whilst at the very southern tip of the site and immediately adjoining the southern site boundary the land-use Zoning Objective 'GE - Provide opportunities for general enterprise and employment' is in place, refer to Figure 2-7 in Chapter 2.
- 10.10 The site is surrounded by a number of other Zoning Objectives, including objectives in relation to general enterprise & employment, heavy industry, warehousing, and a green belt to the northeast of the development site.

Sites of Nature Conservation Importance

- 10.11 There are no sites of Nature Conservation Importance in the vicinity of the development site.

Extraction and Aggregates

- 10.12 Objective EE 35 (Chapter 2 – Enterprise & Employment; 2.5 Quarrying and Aggregate Extraction) of the current development plan sets out the following: *'Consider proposals for aggregate extraction only where the Council is satisfied through an environmental assessment that environmental quality*

and amenity will be protected and appropriate provisions for the restoration of the landscape and habitat is being made'.

Consultations

- 10.13 Following a review of published development plans and a site inspection, it was considered that there was no requirement for a separate formal consultation to be carried out with regard to landscape and visual impact of the proposed development.

Author

- 10.14 The assessment including site work and completion of drawings was carried out by Anne Merkle, a Landscape Architect with SLR Consulting Ireland and member of the Irish Landscape Institute (ILI), with over 8 years experience.

RECEIVING ENVIRONMENT

Baseline Study Methodology

- 10.15 The landscape and visual baseline study has involved a desktop study, field work, data processing and analysis. One element of this baseline study is the assessment of the Landscape and Viewpoint Sensitivity. This was carried out by professional interpretation of a combination of parameters, as described further, below.

Study Area

- 10.16 Following the desk top study, taking any designations and the land use zoning into consideration, the study area was defined an area of up to 2km surrounding the development site. However, please note that the site survey revealed that the visual envelope, i.e. the area from where the development site is visible, is much smaller than the study area.

Sources of Information

- 10.17 The desktop study and field work was supported inter alia by information available on the internet, digital as well as paper (Ordnance Survey) maps at different scales, available aerial photography and the Fingal Development Plan 2011-2017.

Field Monitoring / Inspection

- 10.18 A site survey was carried out on 26th January 2011 in overcast but clear weather conditions. The visibility assessment has concentrated on the publicly accessible areas such as the road and public footpath networks, residential and outdoor recreational areas.
- 10.19 All photographs were taken as part of the fieldwork in January 2011, using a digital SLR camera with a 50mm lens equivalent, which conforms to the Guidelines for Landscape and Visual Impact Assessment (op. cit.). This lens size is considered to most closely represent the view obtained by the human eye. It should be noted that photography is a tool to assist in the visualisation process and cannot be expected to replicate the actual view, which would be attained on the ground.

Landscape Sensitivity Methodology

10.20 The sensitivity of the landscape to change is reflected in the degree to which a landscape is able to accommodate change (due to a particular development) without adverse effects on its character. For the purpose of this report landscape sensitivity is defined as HIGH, MEDIUM, LOW or NEGLIGIBLE, based on professional interpretation of a combination of parameters, as shown in Table 10-1 below:

**Table 10-1
Landscape Sensitivity**

Parameters	Landscape Sensitivity - High-	Landscape Sensitivity - Medium-	Landscape Sensitivity - Low-	Landscape Sensitivity - Negligible-
Landscape designation	National (e.g. National Park)	Regional designation	No designation	No designation
Landscape scale	Small	Medium	Large	Vast
Landscape quality	Exceptional/high	Medium	Low	Low
Nature of views	Short distance	Medium distance	Long distance	Long distance

Viewpoint Sensitivity Methodology

10.21 Viewpoint sensitivity is defined as HIGH, MEDIUM, LOW or NEGLIGIBLE based on an interpretation of a combination of parameters, as follows:

- location and land use at the viewpoint;
- landscape character and quality at the viewpoint;
- landscape character and quality of the intervening landscape; and
- frequency of use.

10.22 Table 10-2 defines the visual sensitivity in relation to the land use at each viewpoint:

**Table 10-2
Visual Sensitivity in Relation to Land Use**

Sensitivity	Definition
High	Users of outdoor recreational facilities including strategic recreational footpaths, cycle routes or rights of way, whose attention may be focused on the landscape; important landscape features with physical, cultural or historic attributes; principal views from residential buildings, beauty spots or picnic areas.
Medium	Other footpaths; secondary views from residential properties, people travelling through the landscape on roads, trains or other transport routes.
Low	People engaged in outdoor sports or recreation (other than appreciation of the landscape), commercial buildings, and other locations where people's attention may be focused on their work or activity.
Negligible	Views from industrial areas.

Landscape Baseline

Existing Landscape Appraisals of the Application Site and its Surroundings

- 10.23 The current County Development Plan includes a landscape character assessment (chapter 5.4). This divides Fingal into 6 Landscape Character Types (LCT) and each LCT is given a value (exceptional to low) and rating for its sensitivity to change (high to low).
- 10.24 The Huntstown Quarry complex is fully located within the Low Lying Agriculture Character Type. This LCT is described as: *'an area characterised by a mix of pasture and arable farming on low lying land with few protected views or prospects. The area has an open character combined with large field patterns, few tree belts and low roadside hedges. ...'*
- 10.25 The Low Lying Character Type is *'categorised as having a modest value'* and low sensitivity. It is stated that *'These landscapes can absorb a certain amount of development once the scale and forms are kept simple and surrounded by adequate screen boundaries and appropriate landscaping to reduce impact on the rural character of the surrounding roads...'*
- 10.26 The listed 'Principles for Development' include:
- *'The skyline should be protected'*
 - *'Existing tree belts should be retained and managed and older stands of trees restocked. Roadside hedging should be retained and managed. Proposals necessitating the removal of extensive field and roadside hedgerows or trees should not be permitted. Strong planting schemes using native species, to integrate development into these open landscapes, will be required.'*...
 - *'Sites with natural boundaries should be chosen, rather than open parts of larger fields....'*
- 10.27 None of the Highly Sensitive Landscapes or Preserved Views identified as part of the Landscape Character Assessment are located in the immediate vicinity of the proposed development.

Outdoor Recreational Facilities within the Study Area

- 10.28 There are no outdoor recreational facilities, such as waymarked walking trails, in the vicinity of the development site.

Site Specific Landscape Appraisal and Sensitivity

- 10.29 The development site is located to the northwest of Finglas, across the M50. The Huntstown Quarry complex covers a large section of the area bound by the M50, North Road, Kilshane Road and Cappagh Road. It is made up from 4 separate quarry areas (north, western, central and south quarry), a large quarry processing area, storage areas, some ecological areas and office buildings. The Viridian Power Station, which is not owned by Roadstone Wood Ltd, is also located within the Huntstown complex.
- 10.30 Mature hedgerows mark almost all boundaries surrounding the development site as well as some of the boundaries within the quarry complex. In some

LANDSCAPE AND VISUAL 10

places, in particular along the boundaries with the Kilshane Road and Cappagh Road, dense screen planting blocks and screening berms block views into the site. Two ecological areas are located within the quarry complex, to the northwest and southwest of the central quarry. These will be protected and retained as part of the proposed development.

- 10.31 The landscape surrounding the site comprises a mix of small to medium sized agricultural fields bound by mature hedgerows, as well as numerous industrial estates and business parks. There are a number of isolated private properties along local roads surrounding the site, however any larger residential areas are located at a minimum distance of 2km, to the southeast across the M50 Motorway (in Finglas West) and to the southwest at Corduff.
- 10.32 The generally flat landscape around Huntstown does not include any unique or highly scenic features.
- 10.33 As described in Table 10-1 above, the sensitivity of the landscape to change is based on the combination of landscape designations, landscape scale, landscape quality and the nature of views. The sensitivity of the development site and the study area to the change associated with the proposed development is assessed in Table 10-3, below (refer to Figures 10-2 to 10-4 for photographs of the development site and surrounding area).

Table 10-3
Landscape Sensitivity of the Site and Surrounding Area

Parameter	Description	Sensitivity to Change
Landscape Designations	There are no designated areas in the immediate vicinity of the proposed development site.	LOW
Landscape Scale	The existing quarry complex and some of the surrounding fields are quite large, however, mature hedgerows, existing screen planting and existing buildings, combined with the flat topography, restrict the scale of the landscape somewhat.	MEDIUM
Landscape Quality	The quality of the landscape, due to the existence of the quarry and nearby business and industrial estates is low.	LOW
Nature of Views	The nature of views ranges from short to long distances, depending on the exact location and presence of roadside and intervening vegetation.	MEDIUM

Summary of Landscape Sensitivity

- 10.34 The Fingal Landscape Character Assessment states that the Low Lying Character Type, within which the site is located, is of low sensitivity. The site survey confirmed that the landscape immediately surrounding the development site is of low quality and it is not protected by any landscape designations. It is therefore considered that the site and area surrounding it is of LOW sensitivity to change.

Visual Baseline

General Visibility

- 10.35 Apart from a section of the site for the western quarry, the screening berms and boundary vegetation are the only parts of the development site visible in views from the roads surrounding the site. The site for the western quarry, which has been previously stripped but not yet quarried, can currently be glimpsed through a small section of the boundary railings along Cappagh Road. The existing voids of the north, central and south quarries cannot be seen from anywhere in the surrounding landscape, due to topography and intervening vegetation (refer to Viewpoints A-I on Figures 10-2 to 10-4).
- 10.36 Due to the flat topography of the general area in combination with the many mature hedgerows, as well as the large buildings within the neighbouring industrial estates/business parks, views within the study area are generally restricted to the nearest obstacle. The only slightly elevated vantage points within the study area are a number of flyovers, e.g. the N2 over North Road to the northeast of the development site and Cappagh Road over the M50 to the south. However, as illustrated by Viewpoints C, D and I, the existing quarry voids cannot be seen, even from these more elevated viewpoints.

Choice of Viewpoints

- 10.37 An initial study of the Ordnance Survey Ireland Discovery Maps (1:50,000) and available aerial photography was carried out to identify potential views. Viewpoint locations were selected for inclusion in the detailed assessment to include representative coverage in respect of the following parameters:
- types of receptor: to include settlements, roads, marked footpaths and cycle paths, marked viewpoints, picnic areas and beauty spots and outdoor passive recreational locations;
 - different distances from the development;
 - different directions from the proposed development with the aim of achieving a distribution from different compass points around the site; and
 - altitude.
- 10.38 Extensive field work was then undertaken to assess the potential views from these locations and identify and record any clear and open views towards the site. Further to that, areas from which the site is not visible were noted. In total, 9 viewpoints (VP A-I) were chosen to illustrate the general range of visibility across the study area. Please refer to Figures 10-1 to 10-4 at the end of this report for the exact location and a description of the view from each of the selected viewpoints.

Viewpoint Sensitivity

- 10.39 As described in sections 10.20 and 10.21 above, viewpoint sensitivity is based on an interpretation of a combination of parameters, including location, land use, landscape character and frequency of use. The sensitivity of each of the chosen viewpoints was assessed, as described in Table 10-4:

LANDSCAPE AND VISUAL 10

**Table 10-4
Viewpoint Sensitivity**

Viewpoint No.	Description of Relevant Parameters	Viewpoint Sensitivity
A	Viewed by road users and some residential properties (secondary views); low landscape quality (electricity masts/poles, different types of fencing), infrequently used road (cul de sac).	MEDIUM
B	Viewed by road users, some commercial and residential properties (secondary views); low landscape quality (electricity masts/poles, power station), infrequently used road (cul de sac).	MEDIUM
C	Viewed by road users, low landscape quality (existing power station, quarry plant, business parks), frequently used road.	LOW
D	Viewed by road users, low landscape quality (existing power station, quarry plant, business parks), frequently used road.	LOW
E	Viewed by road users, low landscape quality (cluttered streetscape, adjoining business parks), frequently used road.	LOW
F	Viewed by road users, low landscape quality (power lines, adjoining business parks), frequently used road.	LOW
G	Viewed by road users, low landscape quality (power lines, adjoining business parks), frequently used road.	LOW
H	Viewed by road users and some residential properties (secondary views), low landscape quality (power lines, adjoining business parks), frequently used road.	MEDIUM
I	Viewed by road users, low landscape quality (cluttered streetscape, adjoining business parks), frequently used road.	LOW

10.40 The viewpoint sensitivity throughout the study area ranges from low to medium. The majority of viewpoints experience low sensitivity, due to the overriding low landscape quality throughout the study area. Where residential properties are present in the vicinity of the viewpoints, the sensitivity was assessed as medium.

Difficulties Encountered

10.41 A field survey of the site and surrounding area was carried. Due to the small scale of the study area no difficulties were encountered.

IMPACT ASSESSMENT

Evaluation Methodology

10.42 One element of the evaluation of landscape and visual impact is the assessment of the magnitude of change to the landscape and on viewpoints. This magnitude combined with the landscape and visual sensitivity, as assessed earlier, form the base of the significance assessment, as described further below.

Magnitude of Change

- 10.43 The magnitude of landscape effects is described as SUBSTANTIAL, MODERATE, SLIGHT or NEGLIGIBLE. It depends upon the following factors:
- the scale or degree of change to the existing landscape resource;
 - the nature of the change caused by the proposed development (e.g. beneficial or adverse); and
 - the timescale of the proposed development.
- 10.44 The magnitude of visual change arising from the development at any particular viewpoint is also described as SUBSTANTIAL, MODERATE, SLIGHT or NEGLIGIBLE, based on the interpretation of a combination of largely quantifiable parameters, as follows:
- distance of the viewpoint from the proposed development;
 - duration of the predicted impact;
 - extent of the development in the view; i.e. the horizontal and vertical angle subtended by the development;
 - angle of view in relation to main receptor activity;
 - degree of contrast or integration of any new features or changes with the existing elements and characteristics in terms of form, scale and mass, line, height, colour and texture; and
 - the scale of change with respect to loss or addition to view. Also changes in the composition of the view and the proportion of change.
- 10.45 In order to differentiate between the different levels of magnitude, brief definitions of each level are provided in Table 10-5, below.

Table 10-5
Definition of Levels of Magnitude

Magnitude	Definition
Substantial	Total loss or major alteration of key elements/features/characteristics of the baseline conditions such that post development, landscape character or view composition attributes of the baseline will be fundamentally changed.
Moderate	Partial loss or alteration to one or more key elements/features/characteristics of the baseline conditions such that post development, landscape character or view composition attributes will be partially changed.
Slight	Minor loss or alteration to one or more key elements/features/characteristics of the baseline conditions. Change arising from the loss/alteration will be discernible, but the underlying landscape character or view composition attributes will be similar to the baseline.
Negligible	Very minor loss or alteration to one or more key elements/features/characteristics of the baseline conditions. Change will be barely distinguishable, approximating to 'no change'.

Significance of Effects

- 10.46 The significance of any identified landscape or visual impact has been assessed in terms of MAJOR, MODERATE, MINOR or NONE. These

LANDSCAPE AND VISUAL 10

categories have been based on combining viewpoint or landscape sensitivity and predicted magnitude of change, as shown by Table 10-6 below:

Table 10-6
Principles of Assessing Significance of Landscape and Visual Impacts

	Magnitude of Change - Substantial-	Magnitude of Change - Moderate-	Magnitude of Change - Slight-	Magnitude of Change - Negligible-
Landscape/Visual Sensitivity -High-	Major	Major/Moderate	Moderate	Moderate/Minor
Landscape/Visual Sensitivity -Medium-	Major/Moderate	Moderate	Moderate/Minor	Minor
Landscape/Visual Sensitivity -Low-	Moderate	Moderate/Minor	Minor	Minor/None
Landscape/Visual Sensitivity - Negligible -	Moderate/Minor	Minor	Minor/None	None

- 10.47 The above matrix is not used as a prescriptive tool and the methodology and analysis of potential effects at any particular location must allow for the exercise of professional judgement. Thus in some instances a particular parameter may be considered as having a determining effect on the analysis.
- 10.48 Table 10-7, below, provides a brief definition of the full range of significance criteria. It must be emphasised that both landscape and visual impacts can be either adverse or beneficial in nature. It is considered that Major to Major/Moderate Impacts are significant.

Table 10-7
Definition of Significance Criteria for Landscape and Visual Impact

Significance	Definition
None	The proposed scheme is appropriate in its context. It may be difficult to differentiate from its surroundings and would affect very few or no receptors.
Minor	The proposed scheme would cause a barely perceptible impact, and would affect few receptors.
Moderate	The proposed scheme would cause a noticeable difference to the landscape, and would affect several receptors.
Major	The proposed scheme would completely change the character and/or appearance of the landscape for a long period of time or permanently. It would affect many receptors.

Extraction Stage Impacts

Source of Effects

- 10.49 Landscape and Visual effects, during the extraction stage of the proposed development, arise/are likely to arise from factors including the following:
- Berm construction and planting works along the western boundary;
 - Changes of land use, due to extraction activity; and
 - Changes of land form, due to extraction activity.

Landscape Impacts

Magnitude of Change to Landscape

- 10.50 As described in sections 10.42 and 10.44 above, the magnitude of landscape effects is based on a number of factors. The changes affecting these landscape factors during the extraction stage of the proposed development and the resultant magnitude of change is described in Table 10-8 below.

Table 10-8
Magnitude of Landscape Effects (Extraction Stage)

Landscape Factor	Description
Scale of Change	The majority of the proposed extraction works will take place within the existing quarry footprints. Most of the areas to be added to these footprints are already stripped or used for storage. The scale of change to the existing landscape resource is therefore small.
Nature of Change	The overall nature of change is neutral, as the vast majority of the lands affected by the proposed development, have already been affected by the extraction activities.
Timescale	It is proposed to continue the extraction works for 35 years, as part of this application.
Overall magnitude of landscape change	SLIGHT

- 10.51 The small scale and neutral nature of change are the determining factors of the SLIGHT magnitude of landscape change. In line with Table 10.5 above, this slight magnitude represents a minor loss or alteration to one or more key elements/features/characteristics of the baseline conditions such that post development, landscape character attributes will be similar to the baseline.

Significance of Landscape Impact

- 10.52 The landscape sensitivity of the application site and surrounding area was assessed earlier as LOW. Combining this with the assessed SLIGHT magnitude of landscape change for the extraction stage of the proposed development, results in a **MINOR level of landscape impact** (refer to Table 10.6); i.e. a level of impact that is not considered to be significant.

Visual Impacts

Magnitude of Change to Viewpoints

- 10.53 As described in sections 10.43 and 10.44 above, the magnitude of visual change to a viewpoint is based on a number of factors, including the scale, degree and duration of change, as well as the distance from the viewpoint, the extent of the development in the view and the angle of view in relation to main receptor activity. The magnitude of change, during the extraction stage, to each of the chosen viewpoints used in this assessment, was assessed, as described in Table 10-10 at the end of this section.
- 10.54 All but one of the chosen viewpoints will experience no magnitude of change, as none of the proposed extraction works will be visible from any location outside the development site. Viewpoint F will experience a negligible magnitude of change, as berm construction and screen planting along the part of the western boundary, visible in this view, will be carried out.

Significance of Visual Impact

- 10.55 As illustrated in Table 10-6 above, the assessment of the significance of visual impact on a viewpoint is based on a combination of the viewpoint sensitivity and the magnitude of visual change to the viewpoint. The significance of the visual impact during the extraction stage on each of the selected viewpoints can be found in Table 10-10 below. The table also includes an indication of the area surrounding each viewpoint which would experience similar visual impacts.
- 10.56 All but one of the chosen viewpoints will experience no visual impact, as none of the proposed extraction works will be visible from any location outside the development site. Viewpoint F will experience minor/none visual impact, due to the negligible magnitude of change, during the berm construction and screen planting works.

Restoration Stage Impacts

Source of Effects

- 10.57 Landscape and Visual effects, during and following the restoration of the development site, arise/are likely to arise from factors including the following:
- Restoration of landform by infilling of the quarry voids with inert material; and
 - planting works (hedge planting on infilled areas).

Landscape Impacts

Magnitude of Change to Landscape

- 10.58 The changes affecting the relevant landscape factors during and following the restoration of the development site and the resultant magnitude of change is described in Table 10-9 below.

LANDSCAPE AND VISUAL 10

**Table 10-9
Magnitude of Landscape Effects (Restoration Stage)**

Landscape Factor	Description
Scale of Change	The proposed restoration works will take place within and immediately surrounding the final quarry footprints. The scale of change to the landscape resource will be medium, considering the size of these quarry voids.
Nature of Change	The overall nature of change will be positive, considering the change of land use from quarrying to beneficial agricultural and ecological after uses.
Timescale	The effect of the restoration works will be permanent following their completion.
Overall magnitude of landscape change	NEGLECTIBLE

10.59 The positive nature of change is the determining factor of the NEGLECTIBLE magnitude of landscape change. In line with Table 10.6 above, this negligible magnitude represents a very minor loss or alteration to one or more key elements/features/characteristics of the baseline conditions such that post development, the changes will be barely distinguishable.

Significance of Landscape Impact

10.60 The landscape sensitivity of the application site and surrounding area was assessed earlier as LOW. Combining this with the assessed NEGLECTIBLE magnitude of landscape change for the restoration stage of the proposed development, results in a **MINOR/NONE level of landscape impact** (refer to Table 10.6); i.e. a level of impact that is not considered to be significant. It should be noted that the restoration works will have a positive impact on the landscape.

Visual Impacts

Magnitude of Change to Viewpoints

10.61 The magnitude of change during the restoration stage, to each of the viewpoints used in this assessment is described in Table 10-10 below.

10.62 Please note that none of the chosen viewpoints will experience any magnitude of change, as none of the proposed restoration works will be visible from any location outside the development site.

Significance of Visual Impact

10.63 The significance of the visual impact during the restoration stage on each of the selected viewpoints can be found in Table 10-10 below.

10.64 Please note that none of the chosen viewpoints will experience any visual impact, as none of the proposed restoration works will be visible from any location outside the development site.

LANDSCAPE AND VISUAL 10

Table 10-10
Significance of Visual Impact

View-point No.	Sensitivity	Magnitude of Change (Extraction and Restoration Stage): Description of Relevant Factors	Significance of Impact (Extraction Stage)	Significance of Impact (Restoration Stage)	Areas Experiencing Similar Visual Impact
A	MEDIUM	NONE (Extraction & Restoration Stage): None of the proposed extraction or restoration works will be visible, resulting in no magnitude of change.	NONE	NONE	The development will not be visible from any locations to the southeast of the site.
B	MEDIUM	NONE (Extraction & Restoration Stage): Refer to Viewpoint A.	NONE	NONE	The development will not be visible from any locations to the east of the site.
C	LOW	NONE (Extraction & Restoration Stage): Refer to Viewpoint A.	NONE	NONE	The development will not be visible from any locations to the northeast of the site.
D	LOW	NONE (Extraction & Restoration Stage): Refer to Viewpoint A.	NONE	NONE	The development will not be visible from any locations to the north of the site.
E	LOW	NONE (Extraction & Restoration Stage): Refer to Viewpoint A.	NONE	NONE	The development will not be visible from any locations to the northwest of the site.
F	LOW	NEGLIGIBLE/NONE (Extraction/Restoration Stage): Screening berm construction and planting works temporarily visible at 90° angle to road; small scale of change, as partly screened by railings; berm/planting will integrate well with existing berms/planting. No changes during Restoration Stage.	MINOR/ NONE	NONE	The development will not be visible from any locations to the west of the site.
G	LOW	NONE (Extraction & Restoration Stage): Refer to Viewpoint A.	NONE	NONE	The development will not be visible from any locations to the southwest of the site.
H	MEDIUM	NONE (Extraction & Restoration Stage): Refer to Viewpoint A.	NONE	NONE	The development will not be visible from any locations to the south of the site.
I	LOW	NONE (Extraction & Restoration Stage): Refer to Viewpoint A.	NONE	NONE	The development will not be visible from any locations to the south of the site.

Impacts on Planning Objectives

Land Use Zoning

- 10.65 The proposed development will be in line with 'Zoning Objective RU', as set out in the current development plan. 'Extractive Industry – Extraction Quarrying' is one of the development types listed as 'permitted in principle' within this zoning objective.
- 10.66 At the time of preparation of the planning application and Environmental Impact Statement, the adopted development plan for the region was the Fingal CDP 2005 – 2011. The entire quarry site and Roadstone Wood landholding was located within the Zoning Objective RU' as indeed it was under the Draft Fingal CDP 2011-2017. Since the formal adoption of the Fingal CDP 2011-2017 on the 20th April 2011, a portion of the western side (c.2.5 ha) of the West Quarry now resides in Zoning Objective 'HI – Provide for Heavy Industry. The remainder of the quarry extraction areas and ancillary processing area are located within 'Zoning Objective RU'. None of the other zoning objectives in the vicinity of the application site will be affected by the proposed development.

Extraction and Aggregates

- 10.67 This assessment and the proposed restoration plan implement Objective EE 35 of the current Fingal Development Plan.

Do-nothing Scenario

- 10.68 If the proposed development was not carried out, the existing quarry voids would have to be restored, in line with the restoration proposals as set out as part of the existing planning permission. These restoration works would result in an almost identical end use of the development lands, with the only difference that the infill volume would be reduced.

MITIGATION MEASURES

Extraction Stage

- 10.69 The mitigation measures to be implemented during the extraction stage include additional screening berms and screen planting along parts of the western site boundary and the protection of any existing vegetation, outside the proposed quarry footprints.

Restoration Stage

- 10.70 The mitigation measures to be implemented during and following the restoration of the quarry sites will include the following:
- Infilling of the quarry voids to previous ground levels with inert material. This will avoid the creation of a large water body which would have a negative effect on nearby Dublin Airport.

- Restoration of the infilled quarry voids to a beneficial agricultural afteruse; and
- Planting of hedges, made up from native species, to re-create the hedgerow pattern, as it was present in this area prior to any quarrying activity.

RESIDUAL IMPACT ASSESSMENT

Extraction Stage

- 10.71 The vast majority of the proposed extraction works will take place within the existing footprints of the north, central and south quarry, as well as the western quarry footprint of the Huntstown complex, as indicated of Figure 2-1 in Chapter 2. The impact on the landscape will therefore be minor.
- 10.72 None of the extraction works will be visible from any location outside the development site. Only the construction of a screening berm and planting works along parts of the western boundary will temporarily be visible from a small number of viewpoints. However, these works will ensure that all extraction works will be permanently screened from public areas and the additional planting will have a positive effect on views from adjoining roads.

Restoration Stage

- 10.73 The proposed restoration of the north, central, western and south quarry by infilling with inert material and returning the site to a beneficial agricultural and ecological land use will have a positive impact on the landscape.
- 10.74 None of the restoration works will be visible from any location outside the development site and there will therefore be no visual impact on any views from the surrounding landscape.

REFERENCES

The Landscape Institute with the Institute of Environmental Management and Assessment (2002) Guidelines for Landscape and Visual Impact Assessment, Second Edition, Spon Press

The Landscape Technical Committee (February 2009) Advice Note 01/09 – Use of photography and photomontage in landscape and visual assessment, The Landscape Institute

CAAS Environmental Services Limited on behalf of the Environmental Protection Agency (EPA) (March 2002) Guidelines on the Information to be contained in Environmental Impact Statements, EPA Ireland

CAAS Environmental Services Limited on behalf of the Environmental Protection Agency (EPA) (September 2003) Advice Notes on Current Practice (in the preparation of Environmental Impact Statements), EPA Ireland

*For inspection purposes only.
Consent of copyright owner required for any other use.*

FIGURES

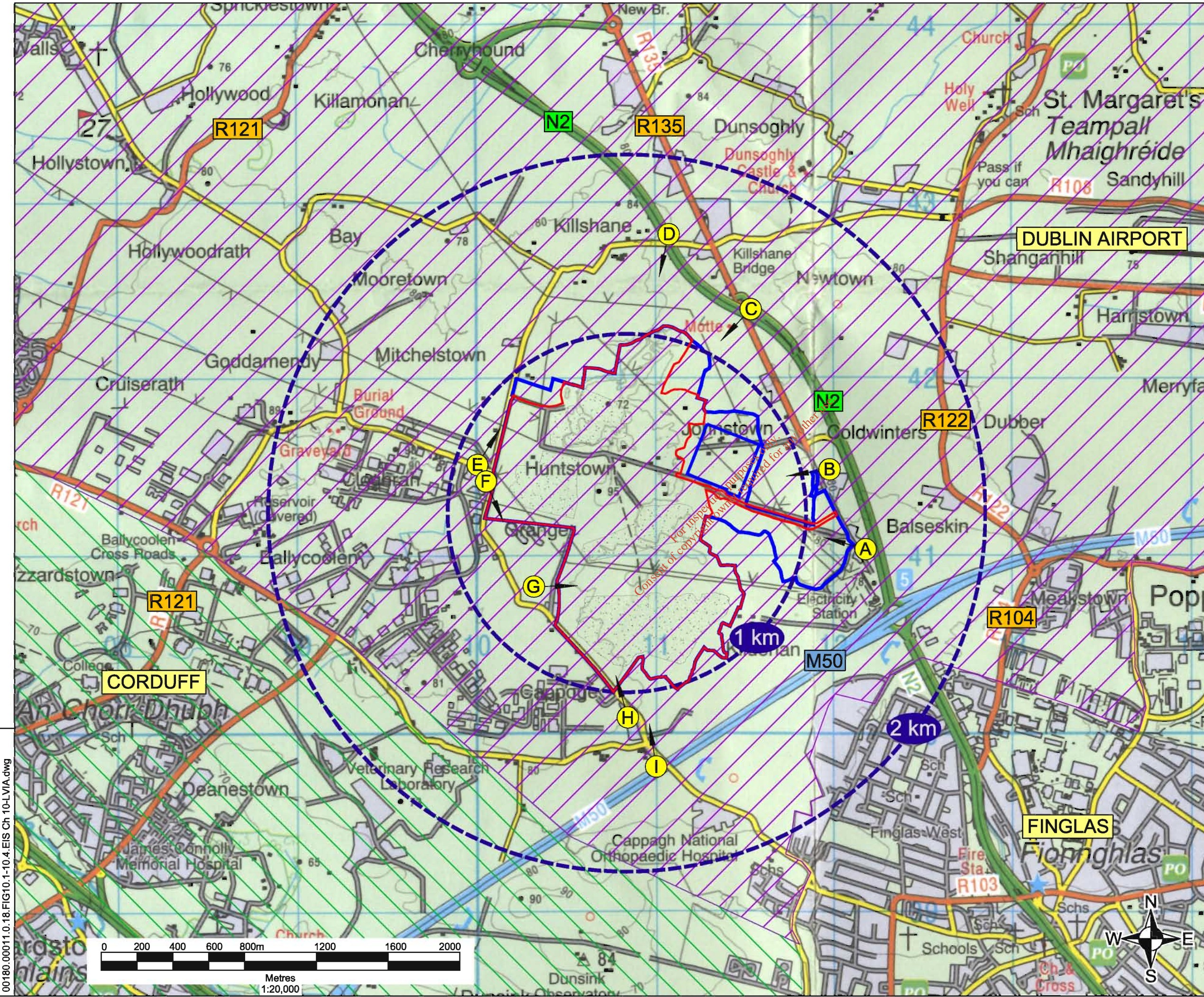
Figure 10.1 Landscape Designations & Viewpoint Locations

Figure 10.2 Viewpoints A, B and C

Figure 10.3 Viewpoints D, E and F

Figure 10.4 Viewpoints G, H and I

*For inspection purposes only.
Consent of copyright owner required for any other use.*



NOTES

- EXTRACT FROM 1:50,000 O.S DISCOVERY MAP NO. 50
- ORDNANCE SURVEY IRELAND LICENCE NO. SU 000711 (C) ORDNANCE SURVEY & GOVERNMENT OF IRELAND

LEGEND

- ROADSTONE WOOD LTD. LANDHOLDING (c. 211 ha)
- PLANNING APPLICATION AREA (c. 167.5 ha)
- EXTENT AND LOCATION OF EXISTING/PROPOSED QUARRY VOIDS
- VIEWPOINT LOCATIONS
- APPROXIMATE DISTANCE FROM CENTRE OF APPLICATION SITE

LANDSCAPE CHARACTER TYPES (LCTs):
(FINGAL DEVELOPMENT PLAN 2011-2017)

- LOW LYING AGRICULTURE LCT
- RIVER VALLEYS/CANAL LCT

DRAFT FOR REVIEW



SLR

SLR CONSULTING IRELAND
7 DUNDUM BUSINESS PARK
WINDY ARBOUR
DUBLIN 14
T: +353-1-2964667
F: +353-1-2964676
www.slrconsulting.com

ROADSTONE WOOD LTD.
ENVIRONMENTAL IMPACT STATEMENT
HUNTSTOWN QUARRY EXTENSION,
NORTH ROAD, FINGLAS, DUBLIN 11
**LANDSCAPE DESIGNATIONS &
VIEWPOINT LOCATIONS**

FIGURE 10-1

Scale 1:20,000 @ A3 Date JUNE 2011

00180.00011.0.18.FIG10.1-10.4.EIS Ch 10-LVIA.dwg



VIEWPOINT A: North Road (Outside the entrance to Kildonan House, approximately 200m south of the entrance to Huntstown Quarry)
 Grid Reference: **312143:241032** Distance from application site boundary: **200m** Direction of View: **Northwest** Residual Visual Impact: **NONE**
Description: The application site is fully screened in views from the southern part of North Road, by topography and vegetation. This will not change, due to the proposed further development of the south, central, western and north quarry within the Huntstown complex.



VIEWPOINT B: North Road (approximately 220m north of the entrance to Huntstown Quarry)
 Grid Reference: **311910:241482** Distance from application site boundary: **220m** Direction of View: **West** Residual Visual Impact: **NONE**
Description: The application site is fully screened in views from this part of North Road, by topography and vegetation. This will not change, due to the proposed further development of the south, central, western and north quarry within the Huntstown complex.



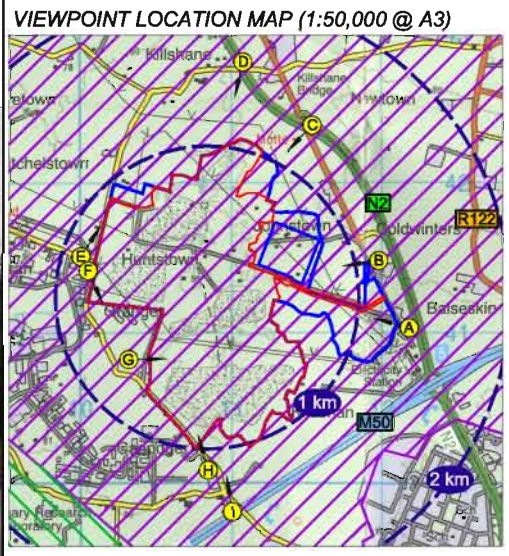
VIEWPOINT C: N2 (Flyover over the R135 - North Road)
 Grid Reference: **311503:242346** Distance from application site boundary: **330m** Direction of View: **Southwest** Residual Visual Impact: **NONE**
Description: The restored northern section of the existing north quarry is partly visible in this view from an elevated position. However, the currently worked part of the north quarry, as well as the central and south quarry and site for the western quarry are fully screened in this view and views from this area in general. This will not change, due to the proposed further development of the south, central, western and north quarry.

NOTES
 1. EXTRACT FROM 1:50,000 O.S DISCOVERY MAP NO. 50
 2. ORDNANCE SURVEY IRELAND LICENCE NO. SU 0000711 (C) ORDNANCE SURVEY & GOVERNMENT OF IRELAND

LEGEND

ROADSTONE WOOD LTD. LANDHOLDING (c. 201.8 ha)

PLANNING APPLICATION AREA (c. 166 ha)



DRAFT FOR REVIEW



SLR
 SLR CONSULTING IRELAND
 7 DUNDRUM BUSINESS PARK
 WINDY ARBOUR
 DUBLIN 14
 T: +353-1-2964867
 F: +353-1-2964878
 www.slrconsulting.com

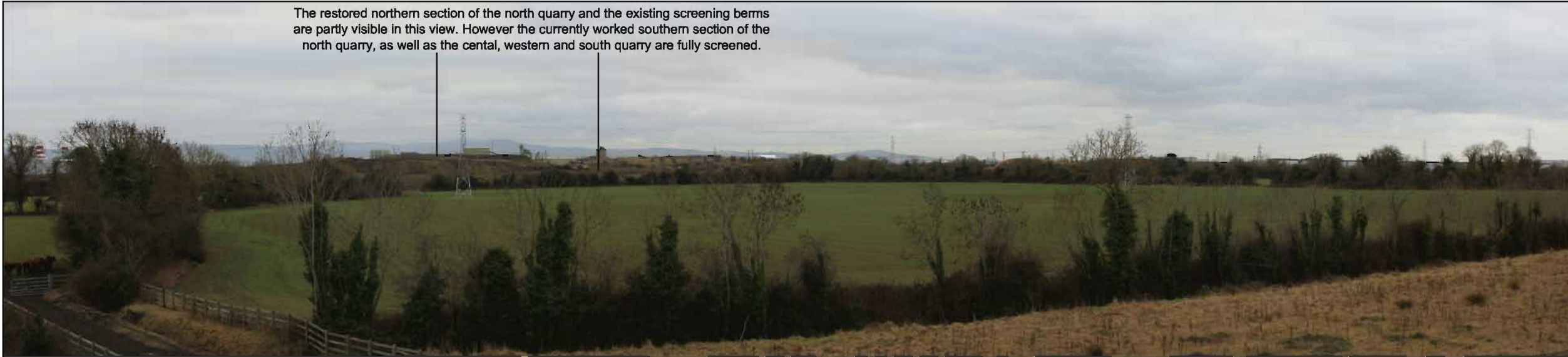
ROADSTONE WOOD LTD.
HUNTSTOWN QUARRY EXTENSION,
NORTH ROAD, FINGLAS, DUBLIN 11
VIEWPOINTS A, B & C

FIGURE 10-2

Scale: N/A Date: JUNE 2011

00180.00011.0.18.FIG10.1-10.4.EIS.Ch.10-L.VIA.dwg

The restored northern section of the north quarry and the existing screening berms are partly visible in this view. However the currently worked southern section of the north quarry, as well as the central, western and south quarry are fully screened.



VIEWPOINT D: Kilshane Road (Flyover over the N2)

Grid Reference: **311066:242754**

Distance from application site boundary: **450m**

Direction of View: **Southwest**

Residual Visual Impact: **NONE**

Description: As with Viewpoint C, the restored northern section of the existing north quarry is partly visible in this view from an elevated position. However, the currently worked part of the north quarry, as well as the central, western and south quarry areas are fully screened in this view and views from this area in general. This will not change, due to the proposed development.

Dense vegetation along Kilshane Road blocks views of the application site from this road



Even when not in leaf this boundary planting forms a dense screen, blocking views of the site for the western quarry

For inspection purposes only. Consent of copyright owner required for any other use.

VIEWPOINT E: Junction Kilshane Road & Cappagh Road

Grid Reference: **310068:241478**

Distance from application site boundary: **30m**

Direction of View: **Northeast**

Residual Visual Impact: **NONE**

Description: Dense mature vegetation all along Kilshane Road, to the west and north of the application site, fully screens views of the site. This will not change, due to the proposed further development of the south, central, western and north quarry.

The site for the western quarry is located in the field visible through these railings. A proposed berm and planting will screen any extraction works.



This planted screening berm screens views of the western quarry site and the remainder of the application site from Cappagh Road

VIEWPOINT F: Junction Kilshane & Cappagh Road

Grid Reference: **310086:241473**

Distance from application site boundary: **10m**

Direction of View: **Southeast**



Residual Visual Impact: **MINOR/NONE**

Description: While the site for the western quarry can be glimpsed through the railings in this view, the central, north and south quarry are screened in views from this area. It is proposed to construct a screening berm and carry out screen planting along this boundary, prior to any extraction works taking place. This will ensure that all proposed extraction works will be fully screened at all times.

NOTES

1. EXTRACT FROM 1:50,000 O.S DISCOVERY MAP NO. 50
2. ORDNANCE SURVEY IRELAND LICENCE NO. SU 0000711 (C) ORDNANCE SURVEY & GOVERNMENT OF IRELAND

LEGEND

-  ROADSTONE WOOD LTD. LANDHOLDING (c. 201.8 ha)
-  PLANNING APPLICATION AREA (c. 166 ha)

VIEWPOINT LOCATION MAP (1:50,000 @ A3)



DRAFT FOR REVIEW



SLR CONSULTING IRELAND
7 DUNDRUM BUSINESS PARK
WINDY ARBOUR
DUBLIN 14
T: +353-1-2964867
F: +353-1-2964878
www.slrconsulting.com

ROADSTONE WOOD LTD.
HUNTSTOWN QUARRY EXTENSION,
NORTH ROAD, FINGLAS, DUBLIN 11
VIEWPOINTS D, E & F

FIGURE 10-3

Scale: N/A Date: JUNE 2011

00180.00011.0.18.FIG10.1-10.4.EIS Ch 10-L VIA.dwg



VIEWPOINT G: Millennium Business Park (Southern end of the Business Park)
 Grid Reference: **310327:240784** Distance from application site boundary: **130m** Direction of View: **East** Residual Visual Impact: **NONE**
 Description: Screening berms/topography and intervening vegetation block all views of the south quarry (as well as the central, western and north quarry) from locations within Millennium Business Park. This will not change, due to the proposed further development of the south, central, western and north quarry.



VIEWPOINT H: Cappagh Road (Outside Cappoge Cottages)
 Grid Reference: **310904:240084** Distance from application site boundary: **200m** Direction of View: **Northwest** Residual Visual Impact: **NONE**
 Description: As with viewpoint G, screening berms/topography and intervening vegetation block all views of the south quarry (as well as the central, western and north quarry) from this part of Cappagh Road. This will not change, due to the proposed development. Views from Cappoge Cottages are very similar to this.

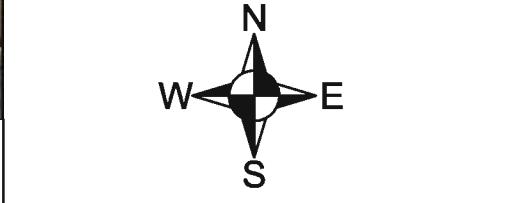


VIEWPOINT I: Junction Cappagh Road & Ballycoolin Road (Immediately north of the M50 flyover)
 Grid Reference: **311001:239874** Distance from application site boundary: **400m** Direction of View: **North** Residual Visual Impact: **NONE**
 Description: Again, screening berms/topography and intervening vegetation block all views of the south quarry (as well as the central, western and north quarry) even from this slightly elevated viewpoint just north of the M50 flyover. This will not change, due to the proposed further development of the south, central, western and north quarry.

NOTES
 1. EXTRACT FROM 1:50,000 O.S DISCOVERY MAP NO. 50
 2. ORDNANCE SURVEY IRELAND LICENCE NO. SU 0000711 (C) ORDNANCE SURVEY & GOVERNMENT OF IRELAND

LEGEND

- ROADSTONE WOOD LTD. LANDHOLDING (c. 201.8 ha)
- PLANNING APPLICATION AREA (c. 166 ha)



DRAFT FOR REVIEW



SLR
 SLR CONSULTING IRELAND
 7 DUNDRUM BUSINESS PARK
 WINDY ARBOUR
 DUBLIN 14
 T: +353-1-2964867
 F: +353-1-2964878
 www.slrconsulting.com

ROADSTONE WOOD LTD.
HUNTSTOWN QUARRY EXTENSION,
NORTH ROAD, FINGLAS, DUBLIN 11
VIEWPOINTS G, H & I

FIGURE 10-4

Scale: N/A Date: JUNE 2011

00180.00011.0.18.FIG10.1-10.4.EIS Ch 10-L VIA.dwg