

14.0 LANDSCAPE/TOWNSCAPE & VISUAL IMPACT ASSESSMENT

14.1 INTRODUCTION

This Landscape / Townscape and Visual impact Assessment report has been prepared in respect of a 110kV electrical substation at a site located in Profile Park, Dublin 22. Greener Ideas Limited is proposing to develop a 110kV AIS substation on lands adjacent to the permitted 102 MW dual fuel gas fired power plant (pl. ref. SD21A/0167) at a site located in the fully enclosed and secured, private Profile Park business park. This report describes the townscape/visual context of the proposed development and assesses the likely impacts of the scheme on the receiving environment, in terms of both townscape character and visual amenity.

Landscape/Townscape Impact Assessment (LIA) relates to assessing effects of a development on the Landscape/Townscape as a resource in its own right and is concerned with how the proposal will affect the elements that make up the Landscape/Townscape, the aesthetic and perceptual aspects of the Landscape/Townscape and its distinctive character.

Visual Impact Assessment (VIA) relates to assessing effects of a development on specific views and on the general visual amenity experienced by people. This deals with how the surroundings of individuals or groups of people may be specifically affected by changes in the content and character of views as a result of the change or loss of existing elements of the Landscape/Townscape and/or introduction of new elements. Visual impacts may occur from; Visual Obstruction (blocking of a view, be it full, partial or intermittent) or; Visual Intrusion (interruption of a view without blocking).

This LVIA uses methodology as prescribed in the following guidance documents:

- Environmental Protection Agency (EPA) publication 'Guidelines on the Information to be contained in Environmental Impact Statements (2022) and the accompanying Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (Draft 2015);
- Landscape/Townscape Institute and the Institute of Environmental Management and Assessment publication entitled Guidelines for Landscape/Townscape and Visual Impact Assessment (2013); and
- South Dublin County Council County Development Plan 2022-2028.

14.1.1 Statement of Authority

This Landscape/Townscape and Visual Assessment report was prepared by Macro Works Ltd of Cherrywood Business Park, Loughlinstown, Dublin 18; a consultancy firm specialising in Landscape and Visual Assessment and associated maps and graphics. Relevant experience includes a vast range of infrastructural, industrial and commercial projects since 1999, including numerous residential mixed-used development projects.

14.2 METHODOLOGY

Production of this Landscape/townscape and Visual Impact Assessment involved:

 A desktop study to establish an appropriate study area, relevant Landscape/Townscape and visual designations in the South Dublin County Development Plan as well as other sensitive visual receptors. This stage culminates in the selection of a set of potential viewpoints from which to study the effects of the proposal;



- Fieldwork to establish the Landscape/Townscape character of the receiving environment and to confirm and refine the set of viewpoints to be used for the visual assessment stage;
- Assessment of the significance of the Landscape/Townscape impact of the development as a function of Landscape/Townscape sensitivity weighed against the magnitude of the Landscape/Townscape impact; and
- Assessment of the significance of the visual impact of the development as a function of visual receptor sensitivity weighed against the magnitude of the visual impact. This aspect of the assessment is supported by photomontages prepared in respect of the selected viewpoints.

This document uses methodology as prescribed in the Institute of Environmental Management and Assessment (IEMA) and Landscape Institute (UK) 'Guidelines for Landscape and Visual Impact Assessment' (GLVIA-2013).

Although this is principally a 'townscape' assessment, it utilises the same outline methodology as would be employed for the more familiar Landscape and Visual Impact Assessment (LVIA) of developments in rural settings. The justification for this approach is provided below.

It is important to note that the Guidelines for Landscape and Visual Impact Assessment' (GLVIA-2013) follow the European Landscape Convention (ELC) definition of landscape: 'Landscape is an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors' (Council of Europe, 2000). Thus, GLVIA-2013 covers all landscapes from "high mountains and wild countryside to urban and fringe farmland (rural landscapes), marine and coastal landscapes (seascapes) and the landscapes of villages towns and cities (townscapes)" - whether protected or degraded.

In the case of this project, the study area is peri-urban in nature, but with a marginally more dominant urban setting or 'townscape.' This is defined in GLVIA-2013 (Section 2.7) as:

"'Townscape' refers to areas where the built environment is dominant. Villages, towns and cities often make important contributions as elements in wider-open landscapes but townscape means the landscape within the built-up area, including the buildings, the relationships between them, the different types of urban spaces, including green spaces, and the relationship between buildings and open spaces. There are important relationships with historic dimensions of landscape and townscape, since evidence of the way the villages, towns and cities change and develop over time contributes to their current form and character."

14.2.1 LANDSCAPE / TOWNSCAPE IMPACT ASSESSMENT CRITERIA

When assessing the potential impacts on the townscape resulting from a proposed development, the following criteria are considered:

- Landscape/townscape character, value and sensitivity;
- Magnitude of likely impacts;
- Significance of landscape effects.

The sensitivity of the townscape to change is the degree to which a particular setting can accommodate changes or new elements without unacceptable detrimental effects to its essential characteristics. Landscape/townscape Value and Sensitivity is classified using the following criteria set out in Table 14.1.



Table 14-1: Landscape/Townscape Value and Sensitivity

Sensitivity	Description
Very High	Areas where the townscape character exhibits a very low capacity for change in the form of development. Examples of which are high value townscapes, protected at an international or national level (e.g. World Heritage Site), where the principal management objectives are likely to be protection of the existing character.
High	Areas where the townscape character exhibits a low capacity for change in the form of development. Examples of which are high value townscapes, protected at a national or regional level, where the principal management objectives are likely to be considered conservation of the existing character.
Medium	Areas where the townscape character exhibits some capacity and scope for development. Examples of which are townscapes, which have a designation of protection at a county level or at non-designated local level where there is evidence of local value and use.
Low	Areas where the townscape character exhibits a higher capacity for change from development. Typically, this would include lower value, non-designated townscapes that may also have some elements or features of recognisable quality, where management objectives include, enhancement, repair and restoration.
Negligible	Areas of townscape character that include derelict sites and degradation where there would be a reasonable capacity to embrace change or the capacity to include the development proposals. Management objectives in such areas could be focused on change, creation of townscape improvements and/or restoration.



The magnitude of a predicted landscape/townscape impact is a product of the scale, extent or degree of change that is likely to be experienced as a result of the permitted power plant. The magnitude takes into account whether there is a direct physical impact resulting from the loss of landscape/townscape components and/or a change that extends beyond the immediate setting that may have an effect on the townscape character. Table 14-2 refers.

Table 14-2: Magnitude of Landscape/Townscape Impacts

Sensitivity	Description
Very High	Change that would be large in extent and scale with the loss of critically important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an overall change of the townscape in terms of character, value and quality.
High	Change that would be more limited in extent and scale with the loss of important townscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an overall change of the townscape in terms of character, value and quality.
Medium	Changes that are modest in extent and scale involving the loss of landscape characteristics or elements that may also involve the introduction of new uncharacteristic elements or features that would lead to changes in landscape character, and quality.
Low	Changes affecting small areas of landscape character and quality, together with the loss of some less characteristic landscape elements or the addition of new features or elements.
Negligible	Changes affecting small or very restricted areas of landscape character. This may include the limited loss of some elements or the addition of some new features or elements that are characteristic of the existing landscape or are hardly perceivable.
Positive	Changes that restore a degraded landscape or reinforce characteristic landscape elements.

The significance of a landscape/townscape impact is based on a balance between the sensitivity of the landscape receptor and the magnitude of the impact. The significance of landscape impacts is arrived at using the following graph set out in Table 14.3.



Table 14-3: Impact Significance Graph

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

Note: The significance matrix provides an indicative framework from which the significance of impact is derived. The significance judgement is ultimately determined by the assessor using professional judgement. Due to nuances within the constituent sensitivity and magnitude judgements, this may be up to one category higher or lower than indicated by the matrix. Judgements indicated in orange/mustard are considered to be 'significant impacts' in EIA terms.

14.2.2 Visual Impact Assessment Criteria

As with the landscape/townscape impact, the visual impact of the proposed development will be assessed as a function of sensitivity versus magnitude. In this instance the sensitivity of the visual receptor, weighed against the magnitude of the visual effect.

Sensitivity of Visual Receptors

Unlike landscape sensitivity, the sensitivity of visual receptors has an anthropocentric (human) basis. It considers factors such as the perceived quality and values associated with the view, the landscape/townscape context of the viewer, the likely activity they are engaged in and whether this heightens their awareness of the surrounding landscape. A list of the factors considered by the assessor in estimating the level of sensitivity for a particular visual receptor is outlined below to establish visual receptor sensitivity at each VRP:

Susceptibility of Receptors

In accordance with the Institute of Environmental Management and Assessment ("IEMA") Guidelines for Landscape and Visual Assessment (3rd edition 2013) visual receptors most susceptible to changes in views and visual amenity are:

"Residents at home;



- People, whether residents or visitors, who are engaged in outdoor recreation, including use
 of public rights of way, whose attention or interest is likely to be focused on the landscape
 and on particular views;
- Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience;
- Communities where views contribute to the landscape setting enjoyed by residents in the area;
- Travelers on road rail or other transport routes where such travel involves recognised scenic routes and awareness of views is likely to be heightened".
- Visual receptors that are less susceptible to changes in views and visual amenity include;
- "People engaged in outdoor sport or recreation, which does not involve or depend upon appreciation of views of the landscape;
- People at their place of work whose attention may be focused on their work or activity, not their surroundings and where the setting is not important to the quality of working life".

Recognised scenic value of the view (County Development Plan designations, guidebooks, touring maps, postcards etc.). These represent a consensus in terms of which scenic views and routes within an area are strongly valued by the population because in the case of County Developments Plans, for example, a public consultation process is required;

Views from within highly sensitive townscape areas. These are likely to be in the form of Architectural Conservation Areas, which are incorporated within the Development Plan and therefore subject to the public consultation process. Viewers within such areas are likely to be highly attuned to the townscape around them;

Primary views from residential receptors. Even within a dynamic city context views from residential properties are an important consideration in respect of residential amenity;

Intensity of use, popularity. This relates to the number of viewers likely to experience a view on a regular basis and whether this is significant at a national or regional scale;

Viewer connection with the townscape. This considers whether or not receptors are likely to be highly attuned to views of the townscape i.e., commuters hurriedly driving on busy roads versus tourists focused on the character and detail of the townscape;

Provision of vast, elevated panoramic views. This relates to the extent of the view on offer and the tendency for receptors to become more attuned to the surrounding landscape at locations that afford broad vistas;

Sense of remoteness and/or tranquility. Receptors taking in a remote and tranquil scene, which is likely to be fairly static, are likely to be more receptive to changes in the view than those taking in the view of a busy street scene, for example;

Degree of perceived naturalness. Where a view is valued for the sense of naturalness of the surrounding landscape it is likely to be highly sensitive to visual intrusion by distinctly manmade features;



Presence of striking or noteworthy features. A view might be strongly valued because it contains a distinctive and memorable landscape / townscape feature such as a cathedral or castle;

Historical, cultural and / or spiritual significance. Such attributes may be evident or sensed by receptors at certain viewing locations, which may attract visitors for the purposes of contemplation or reflection heightening the sense of their surroundings;

Rarity or uniqueness of the view. This might include the noteworthy representativeness of a certain townscape type and considers whether the receptor could take in similar views anywhere in the broader region or the country;

Integrity of the townscape character. This looks at the condition and intactness of the townscape in view and whether the townscape pattern is a regular one of few strongly related components or an irregular one containing a variety of disparate components;

Sense of place. This considers whether there is special sense of wholeness and harmony at the viewing location;

Sense of awe. This considers whether the view inspires an overwhelming sense of scale or the power of nature.

Those locations which are deemed to satisfy many of the above criteria are likely to be of higher sensitivity. No relative importance is inferred by the order of listing in Table 14.5. Overall sensitivity may be a result of a number of these factors or, alternatively, a strong association with one or two in particular.

14.2.3 IMPACT MAGNITUDE

The visual impact magnitude relates to the scale and nature of the visual change brought about by the proposal and this is reflected in the criteria contained in Table 14.4 below.

Table 14-4: Magnitude of Visual Impacts

Criteria	Description
Very High	The proposal alters a large proportion or critical part of the available vista and is without question the most distinctive element. A high degree of visual clutter or disharmony is also generated, strongly reducing the visual amenity of the scene.
High	The proposal alters a significant proportion or important part of the available vista and is one of the most noticeable elements. A considerable degree of visual clutter or disharmony is also likely to be generated, appreciably reducing the visual amenity of the scene.



Medium	The proposal represents a moderate alteration to the available vista, is a readily noticeable element and/or it may generate a degree of visual clutter or disharmony, thereby reducing the visual amenity of the scene.
Low	The proposal alters the available vista to a minor extent and may not be noticed by a casual observer and/or the proposal would not have a marked effect on the visual amenity of the scene.
Negligible	The proposal would be barely discernible within the available vista and/or it would not detract from, and may even enhance, the visual amenity of the scene.
Positive	Changes that enhance the available vista by reducing visual clutter or restoring degraded features.

14.2.4 VISUAL IMPACT SIGNIFICANCE

As stated above, the significance of visual impacts is a function of visual receptor sensitivity and visual impact magnitude. This relationship is expressed in the same significance matrix and applies the same EPA definitions of significance as used earlier in respect of townscape impacts (Table 14.4 refers).

14.2.5 QUALITY OF EFFECTS

In addition to assessing the significance of landscape/townscape effects and visual effects, EPA Guidance for EIAs requires that the quality of the effects is also determined. This could be negative/adverse, neutral, or positive/beneficial.

Whereas, the introduction of new built elements into countryside areas more often results in negative landscape and visual effects, in urban and peri-urban settings, development proposals are often replacing one built feature with another or developing 'brownfield' sites with specific zoning objectives. The consequence for the townscape character and visual amenity is often beneficial, or may be a combination of positive effects and negative effects for different receptors. In the context of this assessment, the judgment of the quality of the effects is made in combination with the significance judgement for both landscape/townscape impacts and visual impacts e.g., Moderate / Positive or Moderate / Negative. A description of the quality of Landscape/Townscape effects is outlined below:

- Positive: A positive effect would add to the Landscape/Townscape quality and character of the site and its wider surrounds.
- Neutral: A neutral effect would have a low or negligible impact on the Landscape/Townscape quality and considered part of normal Landscape/Townscape quality.
- Negative: A negative effect would involve the loss of Landscape/Townscape elements resulting in a reduction to the existing Landscape/Townscape quality.

Landscape/Townscape and Visual effects are also categorised in this report according to their duration, in line with EPA Guidance for EIAs:

Temporary – Lasting for one year or less;



- Short Term Lasting one to seven years;
- Medium Term Lasting seven to fifteen years;
- Long Term Lasting fifteen years to sixty years; and
- Permanent Lasting over sixty years.

14.2.6 EXTENT OF STUDY AREA

It is anticipated that the proposed development is not likely to give rise to significant landscape/townscape or visual impacts beyond approximately 1km. However, out of an abundance of caution, a 2km-radius study area is used in this instance, with a focus on those receptors within 1km of the site (see Figure 14-1 below).



Figure 14-1: Study Area

14.3 EXISTING ENVIRONMENT

The landscape/townscape baseline represents the existing context and is the scenario against which any changes to it, brought about by the proposed substation, will be assessed. A description of the landscape/townscape context of the proposed site and wider study area is provided below. Although this description forms part of the landscape/townscape baseline, many of the elements identified



also relate to visual receptors i.e., places from which viewers can potentially see the proposed substation. The visual resource will be described in greater detail in Section 14.8.

14.3.1 Landscape/Townscape Context

The terrain of the study area is generally flat with elevation declining very slightly toward the north, and very gradually inclining toward the south of the study area, near Casement Aerodrome. However, most of the study area is located between 65 and 85m AOD, with the site itself sitting at 74m AOD. Within the 2km radius study area, there is considerable diversity of land use, although one with a noticeable peri-urban industrial-commercial imprint. This is consistent with Profile Park's setting, where existing tenants and tenants of the surrounding business and enterprise parks include Google, Microsoft, Digital Realty Trust and Telecity. There is an existing network of electrical infrastructure to the immediate west of the proposed site, the closest of which is Barnakyle 110kV substation, located approximately 260m west of the proposed site, within Profile Park. Furthermore, the Castlebaggot 110/220kV substation, and two private substations - Cyrus One 110kV substation and a smaller 38kV substation, are located in Grange Castle Business Park South, adjacent to Profile Park. This network of electrical infrastructure serves the surrounding business parks and data centres and provide electrical transmission connectivity to the national electricity transmission grid system. The broader exception to this industrial-commercial imprint in the study area is Grange Castle Golf Club, located approximately 250m east of the proposed site, and Corkagh Park (i.e. a large, popular, public park), in the east of the study area; agricultural lands in the west of the study area and the Grand Canal corridor in the far north of the study area (i.e. more than 1.6km north of the site). The Irish military airbase that is Casement/Baldonnel Aerodrome is located within 500m south of the site. Directly north of Profile Park is the built-up Kilbarry Industrial Park (Figure 14-4 refers), while in the northeast quadrant there is a spread of low-density housing estates. As previously mentioned, to the immediate west of Profile Park is Grange Castle South Business Park (see Figure 14-5) with no 'through road' yet established between the two business parks. The development pattern within the study area is sporadic with little in the way of established building lines and frequent vacant and disused areas, interspersed with intensely utilised patches of landscape.

Several regional road routes pass through the study area, namely the R134, R136 and R120. These road routes act as arteries, connecting the built up industrial and residential areas within the study area, to national routes in the wider vicinity. The R136 passes through the east of the study area, in a north/south direction, connecting the N4 to the N7. The R134 aligns the northern border of Profile Park heading in an east/west direction, separating Grange Castle Business Park into distinct north and south portions. The R134 connects to the R120 as it passes through the western portion of the study area, linking Lucan to Newcastle. There is also a network of smaller local roads within the study area which serve to interconnect the larger transport routes.





Figure 14-2: Site context within Profile Park

While the study area was predominantly rural up until 15-20 years ago, it is now typical of peri-urban contexts across much of west/southwest Dublin; a highly developed realm with very limited aesthetic or naturalistic qualities. As a result of its peri-urban setting, the land use of the study area is highly modified and utilitarian, typically comprising of anthropogenic land uses entailing extensive residential developments, as well as industrial and commercial developments, major route corridors and overhead electrical cable infrastructure. This is also reflective of the site and its immediate vicinity, which is located to the eastern periphery of a 100 acre (40.5 Ha) fully enclosed, partially-developed private business park (i.e. Profile Park). As is consistent with its business park setting, there is a negligible degree of naturalistic, ecological or scenic value associated with the site and its surrounds. The proposed substation development will be located on greenfield lands to the immediate northwest of an existing, fully constructed, Digital Realty data centre, and to the immediate west of the permitted Gas Fired Peaking Power Plant (pl. ref. SD21A/0167).

In this instance, it should be noted that the lands to the immediate east of the site will soon be occupied by the aforementioned Gas Fired Peaking Power Plant. It should also be noted that, as its intended use is to receive electricity generated by the permitted power plant, it is unlikely that the proposed substation will be constructed in isolation to the permitted power plant. Therefore, the permitted power plant has been considered as the imminent baseline context (Figure 14-3 refers). The main facade of the building is that of a series of broad horizontal bands of alternating dark and



light tone blocks divided by narrow horizontal bangs of aluminium cladding. These narrow bands of aluminium cladding are used along the entire western end of the main building, as can be seen in Figure 14-3. The use of this high quality semi-reflective finish breaks up the perceived massing and length of the main building by using an alternate treatment to the eastern and central façade and; it provides the opportunity for reflectance of the sky and proposed landscaping treatment which is rich in tree planting. In addition, the perimeter of the power plant will be surrounded by a 3m paladin fence, which is primarily hidden behind the buffer of mitigation planting, as proposed (SD21A/0167).



Figure 14-3: Site context adjacent to permitted Gas Fired Peaking Power Plant Plant



Figure 14-4: Directly north of Profile Park is the built-up Kilbarry Industrial Park



Figure 14-5: Entrance to Grange Castle South Business Park to the west of the site



Figure 14-6: Grange Castle Golf Club in the east of the study area

14.4 PLANNING CONTEXT

The site lies solely within the jurisdiction of South Dublin County Council, and so its County Development Plan alone will be addressed in this section.

14.4.1 SOUTH COUNTY DUBLIN DEVELOPMENT PLAN (CDP) 2022-2028

The South Dublin County Development Plan 2022-2028 (SDCC CDP (2022-2028)) came into effect on 3rd August 2022, and "sets out the framework to guide future development with the focus placed on the places we live, the places we work, and how we interact and move between these places while protecting our environment."

The application site is situated within land designated as "EE - Employment and Enterprise" by the CDP's Land Use Zoning Map (see Figure 14-7 below), whose objective is 'to provide for enterprise and employment related uses'. The CDP also outlines the types of development deemed 'Permitted in Principle' and 'Open for Consideration' none of which includes electrical infrastructure.



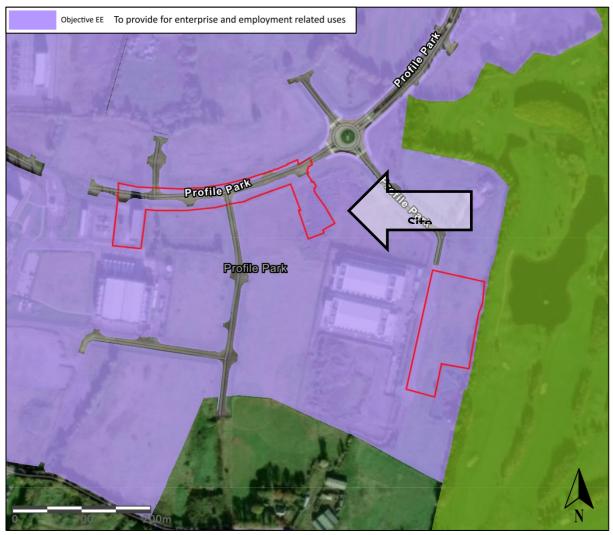


Figure 14-7: South Dublin Development Plan land use zoning in the location of the proposed development (indicative redline).

The Landscape Character Assessment (LCA) for SDCC is outlined in Appendix 9 of the SDCC CDP (2022-2028), defines 5 Landscape Character Areas in South Dublin, and further divides these into 10 distinct Landscape Character Types. The site is located within Landscape Character Area 2 - Newcastle Lowlands, classed as having 'Medium' sensitivity. Furthermore, the site is located within the 'Limestone Farmlands' Landscape Character Type, which is also classed as having 'Medium' sensitivity. The key characteristics of the Newcastle Lowlands Landscape Character Area that pertain to the study area entail:

- "Low-lying and gently undulating agricultural lands over limestone."
- Established communication corridors include the Grand canal and railway corridor traverse east to west and two aerodromes at Weston and Baldonnel.
- Agricultural land use primarily pasture and tillage.
- Increasing influence of urban activities closer to the motorways, national roads and regional roads.
- Long history of historic settlement and human activity with medieval landscape complex associated with Newcastle village and surrounds.
- Number of demesnes associated with former country houses and institutions including reuse of older country houses at sites such as Peamount and Baldonnel."



The Newcastle Lowlands Landscape Character Area is further described on Page 87 of the SDCC Appendix 9: Landscape Character Assessment (2022-2028) as follows:

"The Newcastle lowlands function as an important agricultural resource but vulnerable to urbanising pressures. In addition, its character as a rural landscape provides a distinct and important identity to this area of western Dublin. To conserve its sense of place requires measures protecting the integrity of the agricultural landscape by controls on urban expansion, ribbon development and other sources of erosion and fragmentation, and requires site planning guidance on the use of appropriate vernacular styles and treatments in new developments."

Relevant 'forces for change' in this landscape character area entail:

- "Increasing urban influences that impact on the rural landscape character
- Fragmentation of agriculture -related habitats through piecemeal development
- Rural housing pressures
- Loss of separation distance between established urban and rural character
- The relatively flat and open landscape is vulnerable to adverse visual and landscape impacts of development"

The LCA also notes (Page 67) that:

"Condition is quite variable across this LCA. The landscape closer to the urban fringe and major transport corridors tends to be more fragmented in character with hard engineering and new infrastructure (e.g. Hazelhatch train station) that have not benefitted from planting schemes that would assimilate them more sympathetically into the surrounding landscape. Within the generally flat landscape, vertical structures such as existing pylons can be seen across quite long distances."

Section 3.0 of the SDCC CDP pertains to 'Natural, Cultural and Built Heritage'. It is the Policy NCBH14: Landscapes (Page 111) to:

"Preserve and enhance the character of the County's landscapes, particularly areas that have been deemed to have a medium to high Landscape Value or medium to high Landscape Sensitivity and to ensure that landscape considerations are an important factor in the management of development."

The policy objectives relating to landscape within the South Dublin City Council CDP are outlined as follows:

NCBH14 Objective 1:

"To protect and enhance the unique landscape character of the County by ensuring that development retains, protects and, where necessary, enhances the appearance and character of the landscape, taking full cognisance of the Landscape Character Assessment of South Dublin County (2021)."

NCBH14 Objective 2:

"To ensure that development is assessed against Landscape Character, Landscape Values and Landscape Sensitivity as identified in the Landscape Character Assessment for South Dublin County (2021) in accordance with Government guidance on Landscape Character Assessment and the National Landscape Strategy (2015-2025)."



NCBH14 Objective 3:

"To ensure that development respects and reinforces the distinctiveness and uniqueness of the Landscape Character Types and retains important characteristics such as habitats, landform, vernacular heritage and settlement patterns."

NCBH14 Objective 4:

"To require a Landscape / Visual Impact Assessment to accompany all planning applications for significant proposals, located within or adjacent to sensitive landscapes and to provide mitigation measures to address any likely negative impacts."

NCBH14 Objective 5: "To protect skylines and ridgelines from development."

Please note that there are no designated Special Amenity Area Orders (SAAO) within the study area.

Views/Prospects of Recognised Scenic Value

Views of recognised scenic value are primarily indicated within Development Plans in the context of scenic views/routes designations, but they might also be indicated on touring maps, guide books, websites, road side rest stops or on post cards that represent the area. The SDCC CDP (2022-2028) contains designated scenic views and prospects. However, none of these are of relevance to the site.

14.5 VISUAL BASELINE

Only those parts of the receiving environment that potentially afford views of the proposed development are of concern to this section of the assessment. The proposed Profile Park 110kV substation will be built adjacent to the permitted power plant, thus will never be viewed in isolation. There is some potential for the proposed substation and permitted power plant to be viewed in combination from locally elevated or close proximity views, however in most instances the power plant and proposed substation will appear as a single, congruous development.

14.5.1 IDENTIFICATION OF VIEWSHED REFERENCE POINTS AS A BASIS FOR ASSESSMENT

Viewshed Reference Points (VRP's) are the locations used to study the likely visual impacts associated with the proposed development. It is not warranted to include each and every location that provides a view as this would make it extremely difficult to draw out the key impacts arising from the proposed development. Instead, the selected viewpoints are intended to reflect a range of different receptor types, distances and angles. The visual impact of a proposed development is assessed using up to 6 categories of receptor type as listed below:

- Key Views from features of national or international importance;
- Designated Scenic Routes and Views;
- Local Community views;
- Centres of Population;
- Major Routes;
- Amenity and heritage features.

The Viewshed Reference Points selected in this instance are set out in Table 14.5 and shown on Figure 14-8.





Figure 14-8: Viewpoint Selection Map

Table 14-5: Outline Description of Selected Viewshed Reference Points (VRPs)

VRP No.	Location	Direction of view
VP1	Profile Park, northeast of site boundary	S/SW
VP2	Profile Park, road west of the site	NE
VP3	Profile Park, east of the site	W/N W



VP4	R134 by Kilbarry Industrial Park	S
VP5	Entrance to Grange Castle Business Park South	SE
VP6	Entrance to Junior Genius crèche	NE
VP7	Lay-by adjacent to Baldonnel Aerodrome	N
VP8	Grange Castle Golf Club	W

14.6 MITIGATION AND MONITORING MEASURES

The main mitigation by avoidance measure employed in this instance is the siting of the proposed development in a robust, appropriately zoned business park that will avail of screening from existing and imminent built form and vegetation to minimise open visibility from within the study area. No other specific landscape and visual mitigation measures are deemed necessary in this instance.

14.7 ASSESSMENT OF SIGNIFICANT EFFECTS

14.7.1 LANDSCAPE / TOWNSCAPE EFFECTS

14.7.1.1 Landscape / Townscape Value and Sensitivity

In accordance with Section 5.5 of the GLVIA-2013, a townscape character assessment requires a particular understanding of, among other criteria, "the context or setting of the urban area and its relationship to the wider landscape." In a city that has evolved over millennia, the built infrastructure of the study area is a relatively recent addition. Having been primarily farmland up until at least the 1990s, most of the study is reflective of the peri-urban setting of west Dublin; a setting that has evolved rapidly and radically over the last quarter century.

While markers such as the Grand Canal and a small number heritage/period properties, such as that now housing the Junior Genius crèche, represent built legacies from the 18th and 19th Century, the study area has transformed extensively over the last half century. Consistent with such peri-urbanism, an overt, industrial-commercial imprint is dominant throughout the study area. As previously covered in Section 14.2.1, the site itself is a highly modified, utilitarian and anthropomorphic landscape whose integrity and landscape condition has been considerably degraded this century. This sense of industrial character is further reinforced in the immediate context of the site, given its location adjacent to the permitted Gas Fired Peaking Power Plant and just north of the existing Digital Realty data centre. In the wider vicinity, there is an existing network of electrical infrastructure to the immediate west of the proposed site, the closest of which is Barnakyle 110kV substation, located approximately 260m west of the proposed site, within Profile Park. Furthermore, the Castlebaggot 110/220kV substation, and two private substations - Cyrus One 110kV substation and a smaller 38kV substation, are located in Grange Castle Business Park South, adjacent to Profile Park. Consequently, the landscape sensitivity of this locale has been substantially devalued in recent years. Notwithstanding, there is also room for extensive residential developments as well as recreational outlets (e.g. public parks, private golf course – as previously covered in this LVIA) in the wider study area. In addition, the military



and transport infrastructure associated with Baldonnel Aerodrome occupies much of the southern half of the study area.

Nonetheless, this industrial / commercial sense of place also supports the urban economy of the local area and further afield. Thus, there is something of a productive value that is likely to be almost as important to local residents as the residential areas in which they live. But this is not a study area containing architectural conservation zones, or high-end/cutting-edge architectural developments. It is more a diverse urban neighbourhood, in which places of residence and places of work co-exist. Thus, townscape values are likely to be, overall, more utilitarian than scenic or amenity based.

As stated, the site and the study area are a highly modified, utilitarian and anthropomorphic landscape whose integrity and landscape condition has been considerably degraded this century; factors that are particularly discernible within 500m of the site. This is reflected by the location of the site on lands adjacent to the permitted Gas Fired Peaking Power Plant and just north/northwest of the existing Digital Realty data centre, which is zoned for 'Employment & Enterprise", whose principal zoning objective is, "To provide for enterprise and employment related uses," as previously covered in Section 14.2.1. More broadly across the study area, the landscape values and sensitivity are reflective of those related in the aforementioned Landscape Character Assessment of South County Dublin.

In summary, the site and its immediate environs within Profile Park are considered to have a **Low** landscape/townscape sensitivity. However, the presence of recreational spaces/parks, some heritage features and farmland in the wider study area indicate a **Medium-low** townscape sensitivity, beyond the business park setting.

14.7.1.2 <u>Do-nothing scenario</u>

The 'do-nothing' impact refers to the non-implementation of the proposed development. The primary effect of this would be that the potential impacts of the proposed development would not occur, while the site is likely to persist in the longer term due to its current 'EE – Employment and Enterprise' zoning. Thus, a **neutral** impact will persist on the existing Landscape/Townscape.

14.7.1.3 Magnitude of Landscape / Townscape Effects

Pre-Construction

Prior to the commencement of construction activities, the area for development will be fenced off. Mobilisation will include the putting in place of temporary staff facilities, plant and equipment, materials, and systems for construction. A temporary works compound will be erected on or in the vicinity of the site for the duration of the construction works and will include temporary site offices (i.e. portacabins), staff welfare facilities, car parking, and equipment laydown areas.

Construction Phase

During the construction stage of the proposed development, which is estimated to take up to 12 months, there will be construction-related activity within and around the site, including approach roads. This will include, but is not limited to:

- HGVs transporting materials to and from the site;
- Movement of earth-moving machinery on-site;
- Temporary storage of excavated materials and construction materials on-site;
- Security hoarding and site lighting.



It is worth noting that the site is already a much-modified, anthropomorphic site zoned for such development purposes. Construction stage impacts on landscape/townscape character will be 'short-term' (i.e. lasting 1-7 years), in accordance with the EPA definitions of impact duration. Furthermore, the context of this construction activity is within an industrial area where HGV movements are frequent and there will be no site access through residential streets/estates, limiting impacts associated with construction traffic.

There is likely to be very minor impacts on the character of the recreational land use areas to the east of the site (i.e. Grange Castle Golf Club), as the construction stage works will not likely be visible, inherently screened by existing vegetation along the adjoining boundary (i.e. between Profile Park and the Golf Club). Thus, much of the clutter and activity of construction stage works will be out of view and perceptually contained within a commercial-industrial context. In addition, such construction-stage activities are a relatively regular experience for Profile Park, whose multiple vacant sites are being gradually developed, and have been over the last decade. Consequently. The magnitude of landscape/townscape impact during the construction stage is deemed to be **Medium-low**.

In combination with the Low Landscape/Townscape sensitivity designation outlined above for the site and its immediate environs, the significance of construction stage impacts is deemed to be **Slight** within the immediate industrial context of the site and its surrounds of Profile Park. However, this will quickly reduce to **Imperceptible** in the wider study area, where construction activities will be barely discernible. The quality of the construction stage effects will be **Negative** and **Temporary** in duration.

Operational Phase

Following the completion of the proposed works, landscape/townscape impacts will relate entirely to the development's impact on the character of the receiving landscape/townscape and whether this is positive or negative.

The proposed substation will be set within a dedicated business park designed for compatible purposes, and will be adjacent to industrial buildings and structures of noticeably larger scale, but similar function. The existing network of electrical infrastructure to the immediate west of the proposed site, namely Barnakyle 110kV substation, Castlebaggot 110/220kV substation, and two private substations - Cyrus One 110kV substation and a smaller 38kV substation, are located in close proximity to the proposed site. As mentioned, Grange Castle Business Park South is located west of Profile Park, while directly north of Profile Park is the built-up Kilbarry Industrial Park. In terms of impact upon the landscape character of the wider study area, this is a locale characterised by a peri-urban industrial-commercial imprint. Upon completion of construction, the proposed development will merge into its surrounds, presenting as an ancillary extension of the larger and taller developments in this industrial-commercial locality, marking a very minor increase of built fabric within the study area. In addition, the prosed development will fill a vacant site that, at present, contributes little to the urban fabric of Profile Park or the wider study area and reads as an undeveloped site in this context rather than amenity open space. For these reasons, the magnitude of landscape/townscape impact during the operational stage is deemed to be Low.

In combination with the Low Landscape/Townscape sensitivity designation outlined above for the site and its immediate environs, the significance of operational stage impacts is deemed to be **Slight-imperceptible** within the immediate industrial context of the site and its surrounds of Profile Park. However, this will reduce to **Imperceptible** in the wider study area, where operational activity will be barely discernible. The quality of the construction stage effects will



be marginally adverse (i.e. **Neutral-Negative**) due to the wholly utilitarian nature of the substation and **Permanent** in duration.

Decommissioning Phase

The proposed substation is expected to be operational for at least 25 years. On cessation of activities, it is envisaged that the site will either be redeveloped or reverted to its prior land use.

Decommission stage works are likely to be similar to those outlined as part of the construction stage, but of a lesser duration. Thus the significance of decommissioning stage impacts is deemed to be **Slight** within the immediate industrial context of the site and its surrounds of Profile Park. However, this will quickly reduce to **Imperceptible** in the wider study area, where decommissioning activities will be barely discernible. The quality of the decommissioning stage effects will be **Neutral** and **Temporary** in duration.

14.8 VISUAL IMPACT ASSESSMENT

14.8.1 VISUAL RECEPTOR SENSITIVITY

In this instance the same viewpoints that were used for the recent / adjacent Gas Fired Peaking Power Plant have been used as they have been established to be appropriate through that planning process. All of the viewpoints are located within relatively close proximity to each other and the site. Consequently, the receptors being represented and their associated viewing scenarios are similar for several of them. However, these receptors fall into two broader categories: that of Profile Park and its immediate hinterland, and that of the visual context beyond Profile Park.

In the first instance (i.e. that of Profile Park and its immediate hinterland), these account for **VP1**, **VP2**, **VP3** and **VP4**, which are overwhelmingly industrial-commercial in setting and character, with a negligible degree of scenic amenity. Thus, their visual receptor sensitivity is deemed to be **Low**.

However, marginally out from this context VP5, VP6 and VP7 are along partially tree-lined roads, which retain some remnants of the rural/agricultural sphere to their immediate west and south. As an overview of these three receptors, a modest degree of visual amenity is attainable, albeit in a somewhat disjointed, peri-urban setting. Thus, their visual receptor sensitivity is deemed to be Medium-low.

Lastly, **VP8** is from Grange Castle Golf Club. While it's broader setting is also peri-urban, receptors (i.e. golfers) in this context will experience a marginally higher degree of visual sensitivity. Thus, the visual receptor sensitivity at this location is deemed to be **Medium**.

14.8.2 MAGNITUDE OF VISUAL EFFECT

The assessment of visual impacts at each of the selected viewpoints is aided by photomontages of the proposed development. Photomontages are a 'photo-real' depiction of the scheme within the view, utilising a rendered three-dimensional model of the development, which has been georeferenced to allow accurate placement and scale. For each viewpoint, the following images have been produced:

- Existing View
- Outline view
- Montage View upon completion and maturation of proposed mitigation planting



Photomontages in support of the visual assessment provided in the following pages are provided in Appendix 14-1.



VRP No.	EXISTING VIEW	VIEWPOINT SENSITIVITY	VISUAL IMPACT MAGNITUDE	SIGNIFICANCE/QUALITY/ DURATION OF IMPACT
VP1	Profile Park, northeast of site boundary The context of this view is from within a fully enclosed and secured, private business park in peri-urban West Dublin. In that regard, the only receptors likely to be present at this location are those working in the park as there is no through-way for traffic and no unauthorised members of the public are permitted within this private commercial/industrial setting. This view is afforded from a point along the main road within Profile Park. The view faces south/southwest and depicts the imminent baseline view of the permitted Gas Fired Peaking Power Plant. The view is immediately truncated by the fence and hedgerow planting surrounding the power plant. A brief glimpse of a section of roof is afforded by a narrow gap in the vegetation. To the right-hand side of the view, the Google data centre can be identified in the background.	Low	The proposed development will not be visible from here due to the aforementioned intervening vegetation surrounding the permitted Gas Fired Peaking Power Plant. Thus, the magnitude of visual impact is Negligible by default, with a Neutral quality of effect.	Imperceptible / Neutral / Permanent
VP2	Profile Park, road west of the site This northeast facing view is afforded from a cul de sac road within the fully enclosed and secured, private business park. The roadside here is marginally more elevated than the site itself, affording an open view out over a currently disused greenfield area. The view depicts the imminent baseline where the permitted power plant and	Low	The proposed development will be visible from this location but will not represent an incongruous increase or change in form or scale. It is seen to the fore and against an immediate backdrop of the permitted power plant, matching the tone and texture. Although the proposed substation has no aesthetic merit in its own right its modest buildings will serve as a scale transition up to the permitted substation and it also helps to further break up the scale massing of the power plant buildings. The external electrical infrastructure, which is slightly complex	Slight-imperceptible / Neutral-Negative / Permanent



VRP No.	EXISTING VIEW	VIEWPOINT SENSITIVITY	VISUAL IMPACT MAGNITUDE	SIGNIFICANCE/QUALITY/ DURATION OF IMPACT
	associated ancillary structures are a noticeable landscape feature. The power plant appears as a large industrial building with a facade of varying materials textures and tones. To the immediate south of the power plant, is the existing Digital Realty data centre, separated by a retaining wall and tall paladin fencing. Despite the somewhat open nature of the foreground, there is very little visual amenity provided in this scene, as the view is primarily contained by commercial-industrial structures.		and cluttered in appearance, gets visually absorbed against the backdrop of mitigation planting within the power plant site. For the reasons outlined above, the magnitude of visual impact is deemed to be Low , with a marginally adverse (Neutral-Negative) quality of effect.	
VP3	Profile Park, east of site This is another roadside view from within Profile Park, facing west/northwest. This view depicts the imminent baseline view of the permitted Gas Fired Peaking Power Plant. Similar to VP1, the view is primarily contained by the fence line and vegetation associated with the permitted power plant, behind which there is partial, intermittent visibility of the ancillary plant structures. There is also a brief view of the eastern face of the main two-storey commercial-industrial building with a three-tone symmetric matrix cladding pattern along its face.	Low	Viewed from this angle and location, there will be no visibility of the proposed development as a result of the intervening vegetation and the permitted Gas Fired Peaking Power Plant. On balance, the magnitude of visual impact is deemed Negligible by default, with a Neutral quality of effect.	Imperceptible / Neutral / Permanent



VRP No.	EXISTING VIEW	VIEWPOINT SENSITIVITY	VISUAL IMPACT MAGNITUDE	SIGNIFICANCE/QUALITY/ DURATION OF IMPACT
VP4	R134 by Kilbarry Industrial Park The context of this regional road (also known as 'New Nangor Road') is a former country road that now winds through numerous built-up industrial developments in peri-urban West Dublin. North of this road is Kilbarry Industrial Park, with Profile Park to its south, and a car yard to the southwest. Over a low roadside hedge, a flat large pastoral field is evident for over 200m. This field is part of Profile Park, and zoned for industrial/ commercial development. A mid-distant line of mature trees obscures some views in the direction of the site, but more than 350m away, the northern face of the permitted Gas Fired Peaking Power Plant can be seen. The main two-storey commercial-industrial building can be identified by it's three-tone symmetric matrix cladding pattern along its face, with the light-tone silhouettes of the high stacks visible on the skyline. In the backdrop, the rim of the distant Dublin hills, combined with the treelines in the foreground field, allow for a moderate degree of visual amenity. However, it is worth noting that this view is at an oblique angle to road users' line of sight.	Low	Located over 350m away, the proposed development will be visible from this location, but slightly obscured by intervening vegetation. Viewed alongside the permitted power plant, the proposed development will not be incongruous nor visually dominant in this commercial/industrial setting, but will read as a relatively compatible land use to the industrial development in the immediate surrounds. Furthermore, given the scale of the proposed substation when viewed in comparison to the power plant, it will not represent a noticeable change or increase in the intensity of built development within the view. When viewed at this distance, the proposed substation amalgamates to appear as one of a number of ancillary structures associated with the power plant. Overall, the proposed substation is not likely to catch the eye of the casual observer and will not be a noticeable addition when viewed in conjunction with the larger, surrounding commercial-industrial structures. Thus, the proposed substation will not unduly draw from the visual amenity of this roadside setting. On balance, the magnitude of visual impact is deemed Lownegligible, with a Neutral-Negative quality of effect.	Slight-imperceptible / Neutral-Negative / Permanent
VP5	Entrance to Grange Castle Business Park South	Medium-low	The proposed development will not be visible from this location due to screening afforded by the intervening built development of Grange Castle South Business Park.	Imperceptible / Neutral / Permanent



VRP No.	EXISTING VIEW	VIEWPOINT SENSITIVITY	VISUAL IMPACT MAGNITUDE	SIGNIFICANCE/QUALITY/ DURATION OF IMPACT
	This is a roadside view facing southeast, facing the entrance to Grange Castle South Business Park. In terms of context, this business park is located to the west of Profile Park, however there is no 'through road' yet established between the two business parks, however they can appear at broader distances as being one business park. In this view, the wide, high-spec entrance of the park is evident in the foreground, in terms of walls, piers, bollards, street lights etc. Within the park, to either side, mid-rise commercial/office-type buildings are apparent, blocking longer-distant views. In terms of built design, Grange Castle Business Park emphasises a business-orientated development focus, typical of IDA-supported business parks throughout the country.		The magnitude of visual impact is therefore deemed Negligible by default.	
VP6	Entrance to Junior Genius crèche By way of context, this view is located along a former country road that passes both Grange Castle South Business Park and Profile Park to the south/southwest. The view faces northeast and is primarily contained by tall roadside vegetation and trees. A brief view of Junior Genius crèche is afforded in the background, located away from the roadside and behind swathes of tall trees. Behind roadside brambles and bushes, a recolonizing/self-seeded earth stockpile	Medium-low	The proposed development will not be visible from this location due to screening afforded by the aforementioned roadside vegetation. Thus, the magnitude of visual impact is deemed Negligible by default.	Imperceptible / Neutral / Permanent



VRP No.	EXISTING VIEW	VIEWPOINT SENSITIVITY	VISUAL IMPACT MAGNITUDE	SIGNIFICANCE / QUALITY / DURATION OF IMPACT
	can just barely be discerned. Again, it is worth noting that while this is a roadside view, it is at an acute angle to road users' line of sight.			
VP7	Lay-by adjacent to Baldonnel Aerodrome This marginally elevated lay-by is on a former country road that passes both Grange Castle South Business Park and Profile Park to the south/southwest, while to the immediate south of this road is Casement Aerodrome (i.e. military airport). The view faces north, beyond a foreground of trafficdeterrent boulders, into a pastoral field beside which several aged farm sheds can be seen, to the south of Profile Park. Visible toward the background, at the centre of the view is the existing Digital Realty data centre behind which the Gas Fired Peaking Power Plant tall stacks can be discerned, punctuating the skyline.	Medium-low	Only the tips of the taller electrical infrastructure have the potential to be visible from this location, however they are barely discernible behind the aforementioned farm sheds. Thus, the magnitude of visual impact is deemed Negligible.	Imperceptible / Neutral / Permanent
VP8	Grange Castle Golf Club Grange Castle Golf Club lies adjacent to the eastern boundary of Profile Park. From within the course, the commercial/ industrial infrastructure of this peri-urban setting is frequently visible. In this instance the view faces west with the Digital Realty data centre and Gas Fired Peaking Power Plant discernible between intervening golf	Medium	The proposed development will not be visible from here due to the aforementioned intervening vegetation surrounding the golf course. Thus, the magnitude of visual impact is Negligible by default, with a Positive quality of effect.	Imperceptible / Neutral / Permanent



VRP No.	EXISTING VIEW	VIEWPOINT SENSITIVITY	VISUAL IMPACT MAGNITUDE	SIGNIFICANCE/QUALITY/ DURATION OF IMPACT
	course vegetation. However, views in the direction of Profile Park are not the main source of visual amenity at this location.			



14.9 OVERVIEW OF LANDSCAPE / TOWNSCAPE AND VISUAL EFFECTS

In the landscape setting, most of the study area reflects the peri-urban setting of west Dublin; a setting that has evolved rapidly and radically over the last quarter century. Consistent with such peri-urbanism, an overt, muscular industrial-commercial imprint is dominant within the study area, and has consequently reduced the hitherto landscape sensitivity of this locale. Thus, townscape values are, overall, more utilitarian than scenic or amenity based. The site itself is a highly modified, utilitarian and anthropomorphic landscape whose integrity and landscape condition has been considerably degraded in recent years. Accordingly, the site and Profile Park are considered to have a 'Low' landscape sensitivity. However, the presence of recreational spaces/routes, some heritage features and farmland in the wider study area indicate a 'Medium-low' townscape sensitivity, in the wider context.

In terms of landscape impacts, the magnitude of construction stage landscape/townscape impacts was deemed to be 'Medium-low' within the immediate industrial context of the site and its surrounds of Profile Park, and 'Low to Negligible within the context of the wider study area. When sensitivity and magnitude judgements are combined, it resulted in a significance of townscape impact between 'Slight' and 'Imperceptible' at all stages of site development for the site itself, its immediate surrounds within Profile Park and the wider study area. During the operational phase when construction related activity has ceased, the significance of landscape / townscape effects is deemed to reduce to 'Slight-imperceptible' for the site and its immediate surrounds and then 'Imperceptible' for the wider study area.

In terms of visual receptor sensitivity, depending on the context varying between the business park and its immediate vicinity, or surrounding road-based receptors, or the adjacent Grange Castle golf club, visual sensitivity ranged from 'Low' to 'Medium.'

Due to existing and / or imminent screening by the permitted Gas Fired Peaking Power Plant and its associated landscape mitigation planting, the proposed substation is only visible from VP2 and VP4 where it is seen as a modest ancillary development against the backdrop of the Power Plant. The visual impact significance at both of these viewpoints is deemed to be 'Slight-imperceptible' and of a 'Neutral-Negative' quality. At all of the other viewpoints, the significance of visual impact is deemed 'Imperceptible'.

14.10 OVERALL SIGNIFICANCE OF IMPACT

Overall, it is considered that the proposed substation development will not result in any significant townscape or visual impacts.