3FMProject

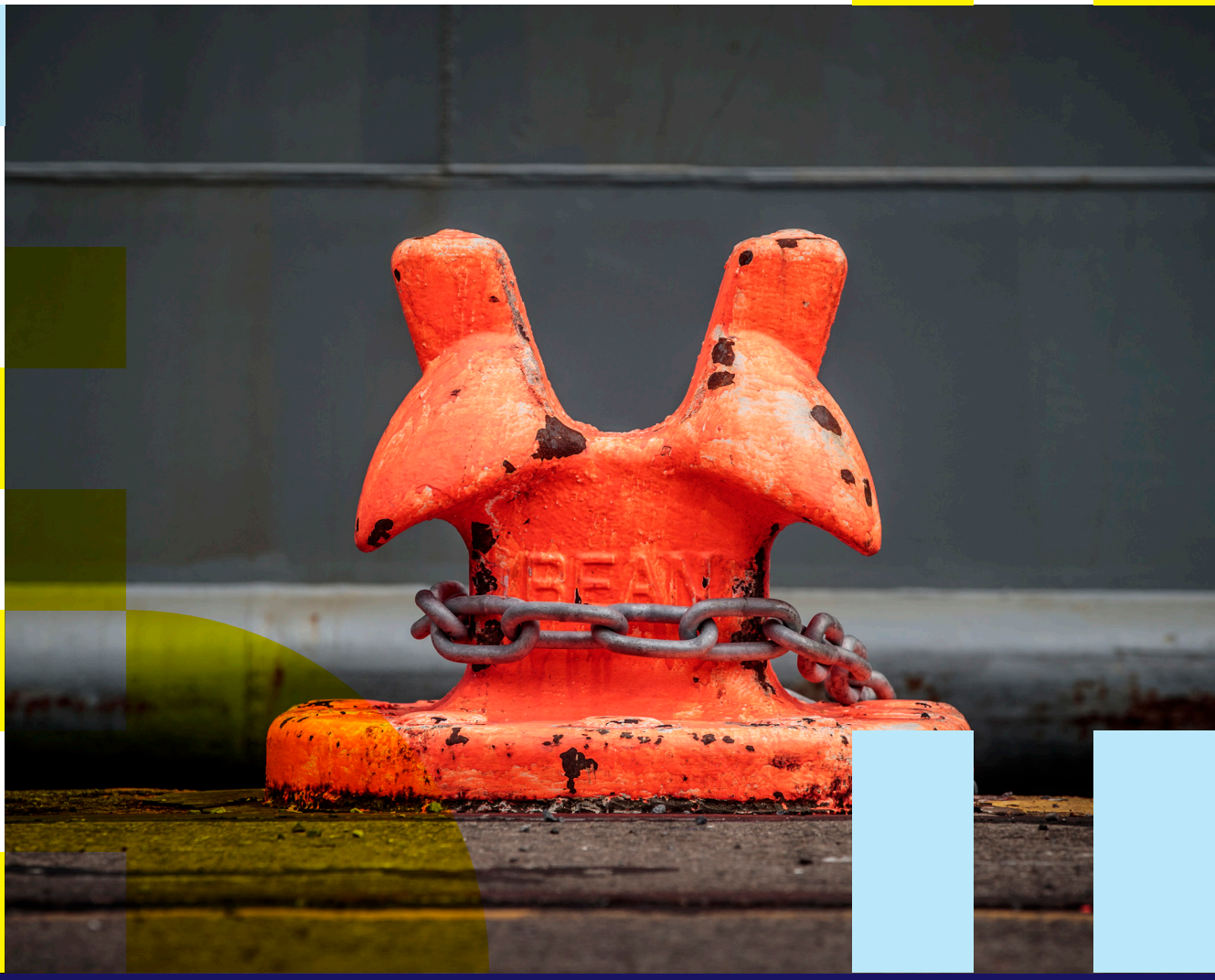
Bringing
Dublin Port
To 2040

Environmental Impact Assessment Report

Chapter 17

Landscape and Visual

Volume 2 Part 5



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Third & Final
Masterplan
Project

17 LANDSCAPE & VISUAL

17.1 Introduction

This chapter of the EIAR considers the potential landscape and visual impacts of the 3FM Project and is comprised of a Landscape and Visual Impact Assessment (LVIA) of the 3FM Project.

This assessment sought to:

a. *Establish the baseline conditions -*

The assessment recorded and analysed the existing character, quality and sensitivity of the landscape and visual resource in the South Port Estate. This included the following elements of the landscape, amongst others:

- Landform;
- Land cover including the vegetation, the slopes, drainage, etc;
- Landscape character;
- Current landscape designations and planning policies; and
- Site visibility, comprising short, medium and long-distance views.

b. *Analyse Baseline conditions*

- Comment on the scale, character, condition and the importance of the baseline landscape, its sensitivity to change and the enhancement potential where possible.
- A visual analysis (illustrated by photographic material) describing characteristics which may be of relevance to the impact of the design and to the method of mitigation.

c. *Description of the 3FM Project*

d. *Identify the Potential Impacts of the 3FM Project on the Landscape and Visual Resource -*

Identify the landscape and visual impacts of the development at different stages of its life cycle, including:

- Direct & indirect landscape impacts of the development on the landscape of the site and the surrounding area; and
- Visual impacts including: the extent of potential visibility; the view and viewers affected; the degree of visual intrusion; the distance of views; and resultant impacts upon the character and quality of views.

e. *Assess the significance of the landscape and visual impacts in terms of the sensitivity of the landscape and visual resource, including the nature and magnitude of the impact.*

f. *Detail measures proposed to mitigate significant landscape and visual impacts and assess the effectiveness of these mitigation measures.*

g. *Assess the ability of the landscape and visual resource to absorb the residual impacts of the 3FM Project.*

17.2 Assessment Methodology

17.2.1 General Approach

The methodology for the LVIA has been derived from the Environmental Protection Agency (EPA) (2022) Guidelines on the information to be contained in Environmental Impact Assessment Reports, and the UK Guidelines for Landscape and Visual Impact Assessment, Third Edition (The Landscape Institute and Institute of Environmental Management & Assessment, 2013) (GLVIA3). Where judgements in respect of visual impact have been made in this Chapter, we have endeavoured to ensure that they are explicit and substantiated as recommended by the EPA Guidelines.

The landscape has been appraised to allow it to be accurately described and classified into landscape character areas that in turn enable the classification of landscape quality. The capacity of the landscape to accept change of the type proposed is assessed by determining the sensitivity of each landscape character area. Overall key landscape components are normally landform, vegetation and historical and cultural components. Landform relates to topography, drainage characteristics and geology. Historical and cultural components include historic landscapes, listed buildings, conservation areas and historic designed landscapes. Vegetation plays an important role in how the landscape and visual resources of an area are viewed and is an integral component of a landscape character.

Assessment has been undertaken through analysis of:

- Up-to-date digital copies of OSI Discovery Series raster and OSI vector maps;
- Aerial photography;
- Dublin City Development Plan 2022 - 2028;
- Photomontages from selected viewpoints; and
- Detailed drawings of the 3FM Project including lighting proposals as described in Chapter 5: Project Description of the EIAR.

Site visits were undertaken to assess the location of the 3FM Project, in order to establish the existing visual resource and to identify sensitive receptors, i.e., residential properties, scenic viewpoints. Site visits were also used to establish whether it is likely that there will be landscape and visual impacts associated with the 3FM Project.

The 3FM Project is then applied to this landscape and visual baseline and potential impacts identified and evaluated.

17.2.2 Assessment Criteria

The methodology for the identification of potential impacts is set out in section 17.2.3 for Landscape Impacts and Section 17.2.6 for Visual Impacts.

The objective of the assessment process is to identify and evaluate the likely significant effects arising from the 3FM Project. Significance is a function of the:

- Sensitivity of the affected landscape and visual receptors; and
- Scale or magnitude of impact that they will experience.

These definitions recognise that landscapes vary in their capacity to accommodate different forms of development according to the nature of the receiving landscape and the type of change being proposed.

Significance is not graded in bands, and a degree of informed judgement is required. Even with the application of pre-defined criteria, interpretation may differ between individuals, but this allows the process of reaching these conclusions to be transparent.

17.2.3 Landscape Impact Assessment

The LVIA firstly assesses how the 3FM Project would impact directly on any landscape features and resources. This category of effect relates to specific landscape elements and features (e.g. woods, trees, walls, hedgerows, watercourses) within the site that are components of the landscape that may be physically affected by the proposal. Physical effects are restricted to the area within the application boundary and are the direct effects on the fabric of the site, such as the removal or addition of trees and alteration to ground cover and levels.

The LVIA then considers impacts on landscape character at two levels. Firstly, consideration is given to how the landscape character is affected by the removal or alteration of existing features and the introduction of new features. This is considered to be a direct impact on landscape character. Secondly, the indirect impacts of the 3FM Project on the wider landscape are considered. The assessment of impacts on the wider landscape is discussed using the character of the surrounding areas, as identified in the relevant regional or county landscape character assessments and further refined by this LVIA. It is acknowledged that there is an overlap between perception of change to landscape character and visual amenity, but it should be remembered that landscape character in its own right is generally derived from the combination and pattern of landscape elements within the view.

The significance of effects on landscape features and character is determined by cross-referencing the sensitivity of the feature or landscape character with the magnitude of impact.

Consideration of the sensitivity of the landscape resource against the magnitude of impact caused by the 3FM Project is fundamental to landscape and visual assessment and these two criteria are defined in more detail below.

17.2.4 Landscape Sensitivity

The determination of the sensitivity of the landscape receptor is based upon an evaluation of the elements or characteristics of the landscape likely to be affected. The evaluation reflects such factors as its quality, value, contribution to landscape character and the degree to which the particular element or characteristic can be replaced or substituted.

GLVIA 3 at paragraph 5.39 states that "*landscape receptors need to be assessed firstly in terms of their sensitivity, combining judgments of their susceptibility to the type of change or development proposed and the value attached to the landscape.*"

Susceptibility is defined by GLVIA 3 at paragraph 5.40 as *"the ability of the landscape receptor (whether it be the overall character or quality/ condition of a particular landscape type or area, or an individual element and/ or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without due consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies*."

The value of a landscape receptor is determined with reference to the presence of relevant landscape designations, such as Areas of Outstanding Natural Beauty (AONB) and their level of importance. For the purpose of this assessment, landscape value is categorised as:

- Very High: Areas of landscape acknowledged through designation such as Areas of Outstanding Natural Beauty (AONB) or other landscape based sensitive areas. These are of landscape significance within the wider region or nationally;
- High: Areas that have a very strong positive character with valued and consistent distinctive features that gives the landscape unity, richness, and harmony. These are of landscape significance within the district;
- Medium: Areas that exhibit positive character, but which may have evidence of alteration/degradation or erosion of features resulting in a less distinctive landscape. These may be of some local landscape significance with some positive recognisable structure; and
- Low: Areas that are generally negative in character, degraded and in poor condition. No distinctive positive characteristics and with little or no structure. Scope for positive enhancement.

As previously discussed, landscape sensitivity is influenced by a number of factors including susceptibility to change, value and condition. In order to assist with bringing these factors together judgements regarding susceptibility and value have been used which define the landscape resource as being either, negligible, low, medium, high or very high. Table 17.1 defines the criteria that have guided the judgement as to the overall sensitivity of the landscape resource.

Assessments of susceptibility and value of a particular landscape resource may be different and professional judgement will always be used to conclude on the judgement of sensitivity. For example, value may be high, and susceptibility may be low, and a professional judgement will be made to determine whether sensitivity is high, low or in between, supported by a narrative explanation.

Table 17.1 Landscape Sensitivity

Definition		Sensitivity
Landscape resource susceptibility	**Landscape resource value**	
Exceptional landscape quality, no or limited potential for substitution. Key elements / features well known to the wider public. Little or no tolerance to change	Nationally / internationally designated/ valued landscape, or key elements or features of national/ internationally designated landscapes. Little or no tolerance to change.	Very High
Strong/ distinctive landscape character; absence of landscape detractors.	Regionally/ nationally designated/ valued countryside and landscape features.	High

Definition		Sensitivity
Landscape resource susceptibility	**Landscape resource value**	
Low tolerance to change.	Low tolerance to change.	
Some distinctive landscape characteristics; few landscape detractors. Medium tolerance to change.	Locally' regionally designated/ valued countryside and landscape features. Medium tolerance to change.	Medium
Absence of distinctive landscape characteristics; presence of landscape detractors. High tolerance to change	Undesignated countryside and landscape features. High tolerance to change.	Low
Absence of positive landscape characteristics. Significant presence of landscape detractors. High tolerance to change	Undesignated countryside and landscape features. High tolerance to change.	Negligible

17.2.5 Magnitude of Landscape Impacts

The effect on landscape receptors and the overall judgement of the magnitude of landscape effect is based on combining judgements on "*size or scale, the geographic extent of the area influenced, and its duration and reversibility"* (GLVIA3, paragraph 5.48).

Direct resource changes on the landscape character in the study area are brought about by the introduction of the 3FM Project and its impact on the key landscape characteristics.

The categories and criteria used and that reflect guidance in GLVIA3 are given in Table 17.2 below:

Table 17.2 Magnitude of Landscape Impact

Definition	Magnitude
Total loss or addition or/ very substantial loss or addition of key elements / features / patterns of the baseline, i.e., pre-development landscape and/ or introduction of dominant, uncharacteristic elements with the attributes of the receiving landscape.	Large
Partial loss or addition of or moderate alteration to one or more key elements / features / patterns of the baseline, i.e., pre-development landscape and / or introduction of elements that may be prominent but may not necessarily be substantially uncharacteristic with the attributes of the receiving landscape.	Medium
Minor loss or addition of or alteration to one or more key elements / features / patterns of the baseline, i.e., pre-development landscape and or introduction of elements that may not be uncharacteristic with the surrounding landscape.	Small

Very minor loss or addition of or alteration to one or more key elements / features / patterns of the baseline, i.e., pre-development landscape and/or introduction of elements that are not uncharacteristic with the surrounding landscape approximating to a 'no-change' situation.	Negligible
No loss, alteration or addition to the receiving landscape resource.	No change

17.2.6 Visual Impact Assessment

As outlined in GLVIA 3 paragraph 6.1) "*an assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity."* The assessment of the effects of the 3FM Project on views is an assessment of how the introduction of the 3FM Project will affect views within the study area. The assessment of visual effects therefore considered:

- Direct impacts of the 3FM Project upon views of the landscape through intrusion or obstruction;
- The reaction of viewers who may be affected, e. g. residents, walkers, road users; and
- The overall impact on visual amenity.

Viewpoints have been selected to meet the following criteria**:**

- The viewpoints were selected by RPS based on the experience gained from the ABR and MP2 Projects, in addition to feedback from Dublin City Council in their May 2023 submission which specified particular viewpoints of interest including a request (DCC City Architects) for viewpoints from Samuel Beckett Bridge and York Road/Pigeon House Road towards proposed SPAR;
- A balance of viewpoints from where main direction of view is towards the 3FM Project;
- A range of views of the 3FM Project covering the extent of the study area Zone of Theoretical Visibility (ZTV). Selected viewpoints have all been located within the study area associated with the 3FM Project;
- A proportion representing areas known to be available to the community where people may frequently congregate; and
- Locations of interest, e.g., settlements; amenity or recreation areas.

The selected viewpoint locations are presented in **Appendix 17.1**. A series of photomontages for all viewpoints have been provided in **Appendix 17.2**.

For visual receptors, judgements of susceptibility and value are closely interlinked. For example, the most valued views are likely to be those which people go and visit because of the available view. The value attributed to visual receptors also relates to the value of the view – for example a National Trail is nationally valued for its access, not necessarily for its views.

Paragraph 6.32 of the GLVIA refers to the susceptibility of different visual receptors to changes in views and states that susceptibility is mainly a function of "*the occupation or activity of different people experiencing the*

view at particular locations" and "*the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations*."

Other factors affecting visual sensitivity include:

- The location and context of the viewpoint;
- The expectations and occupation or activity of the receptor; and
- The importance of the view.

Judgements on the overall visual sensitivity/susceptibility are provided in Table 17.3 below and overall sensitivity of the visual resource is based on combining judgements on the sensitivity of the human receptor (for example resident, commuter, tourist, walker, recreationist or worker, and the numbers of viewers affected) and judgements on the visual resource value (for example views experienced from residential properties, workplace, leisure venue, local beauty spot, scenic viewpoint, commuter route, tourist route or walkers' route).

Table 17.3: Visual Resource Sensitivity

Definition		Sensitivity
Visual resource Susceptibility	**Visual resource value**	
Views of remarkable scenic quality, of and within internationally designated Landscapes or key features or elements of nationally designated landscapes that are well known to the wider public. Little or no tolerance to change.	Observers, drawn to a particular view, including those who have travelled to experience the views. Little or no tolerance to change	Very High
Views from residential property. Public rights of way, National Trails, Long distance walking routes and nationally designated countryside/ landscape features with public access. Low tolerance to change.	Observers enjoying the countryside from their homes or pursuing quiet outdoor recreation are more sensitive to visual change. Little tolerance to change	High
Views from local roads and routes crossing designated countryside / landscape features and 'access land' as well as promoted paths. Medium Tolerance to change.	Observers enjoying the countryside from vehicles on quiet/ promoted routes are moderately sensitive to visual change. Medium tolerance to change	Medium
Views from workplaces, main roads and undesignated countryside / landscape features. High tolerance to change.	Observers in vehicles or people involved in frequent or infrequent repeated activities are less sensitive to visual change. High tolerance to change	Low
Views from within and of undesignated landscapes with significant presence of landscape detractors. High tolerance to change.	Observers in vehicles or people involved in frequent or frequently repeated activities are less sensitive to visual change. High tolerance to change	Negligible

17.2.7 Photographs, Photomontages and Zone of Theoretical Visibility (ZTV)

All site photography and photomontages have been completed in accordance the Landscape Institute technical Guidance Note (TGN) 06/19 Photography and Photomontages in LVIA. As the site survey for the 3FM Project was limited to the footprint and immediate surrounds of the site, it was necessary to acquire additional elevation data from the OSI to include all viewpoint locations selected for photomontage. Enhanced digital terrain model (DTM) was chosen for this purpose. A digital terrain model was prepared for the entire visual study area with a simplified 3D model of the 3FM Project for use in the field.

The photographer was equipped with a professional level SLR camera (Canon 5D Mark II). Specifically, to meet the requirements of best practice, this houses a full frame sensor and is fitted with a 50mm lens. A specialised panoramic head was fitted to the camera tripod for those viewpoints adjacent to the site. This enables the capture of multiple photographs in a linear sequence for the preparation of a panoramic image. Such imagery is required to include sufficient landscape context to depict the entire 3FM Project at close quarters. A mapping grade GPS (Trimble GeoXH) was used to record the precise coordinate position of the camera at each viewpoint. This offers corrected accuracy typically in the range of +/- 30cm in the x,y plane. In addition, the photographer had all necessary information per viewpoint to capture the correct photographic detail – viewpoint map, photographic reference, Google Earth with a KMZ model of the 3FM Project (laptop), interactive topographic model of the 3FM Project and surrounding terrain (laptop). All photography was captured at a focal length of 50mm in RAW format for post-processing. The camera was consistently set up at 1.7m above ground level at each viewpoint location. The photography was captured in the clearest possible weather in the available time frame. This saw a mixture of broken cloud with sunny spells.

A completed 3D model of the 3FM Project was created. A full specification of finishes, textures and colours was provided in addition to reference photography and previous high-quality renders. The photomontage team utilised all of the above to prepare a finished textured 3D model of the final design in 3D Studio Max.

The information captured at each viewpoint location was used to simulate a replica camera view in the 3D environment: Easting (from GPS); Northing (from GPS); Elevation (calculated from the Enhanced DTM data from OSI; GPS does not offer an accurate z-value reading); Angle of View (specific to focal length and camera sensor size); Direction of View (from GPS coordinate info); Date (from photography meta-data); Time of Day (from photography meta-data); Weather Conditions (from photography and recorded on site).

Draft renders were output and integrated into the photography for review. This was an iterative process involving tweaks to textures and lighting. Upon sign-off a full set of final calibrated renders were prepared ready for integration into the photography. The final renders were integrated into the photography with masking aided by detailed street maps and Google Earth photography. The final set of renders were formatted at A3 (dimensions 36cm x 24cm) for a recommended viewing distance of 50cm and are provided in **Appendix 17.2** of this EIAR.

The ZTV illustrates the extents from which a feature would theoretically be visible and defines the study area. The ZTV maps do not take account of the orientation of a viewer, such as the direction of travel and there is no allowance for attenuation of visibility with distance, weather, or light. A further assumption of the ZTVs is that

climatic visibility is 100% (i.e. visibility is not impeded by moisture or pollution in the air). Climatic conditions inevitably reduce visibility with increasing distance from the 3FM Project.

These limitations mean that the ZTV maps tend to overestimate the extent of the influence on the landscape and visibility of the 3FM Project and they should be considered only as a tool to assist in assessing the theoretical visibility of developments and not a measure of the visual impact. Nevertheless, ZTVs are a useful tool in representing the worst-case scenario when predicting the likely visibility of a development. They are particularly useful as a basis for selecting viewpoints where there may be significant impacts for which further assessment is required.

The ZTV for the 3FM Project is presented in **Appendix 17.1**.

17.2.8 Magnitude of Visual Impacts

The magnitude of impact on the visual resource results from the scale of change in the view, with respect to the loss or addition of features in the view, and changes in the view composition. Important factors to be considered include: proportion of the view occupied by the proposal, distance and duration of the view. Other vertical features in the landscape and the backdrop to the 3FM Project will all influence resource change. Magnitude of visual impact, in line with guidance provided in GLVIA3, is defined in Table 17.4 below.

Table 17.4 Magnitude of Visual Impact

Definition	Magnitude
Complete or very substantial change in view dominant involving complete or very substantial obstruction of existing view or complete change in character and composition of baseline, e.g., through removal of key elements.	Large
Moderate change in view: which may involve partial obstruction of existing view or partial change in character and composition of baseline, i.e., pre-development view through the introduction of new elements or removal of existing elements. Change may be prominent but would not substantially alter scale and character of the surroundings and the wider setting. Composition of the view would alter. View character may be partially changed through the introduction of features which, though uncharacteristic, may not necessarily be visually discordant.	Medium
Minor change in baseline, i.e., pre-development view - change would be distinguishable from the surroundings whilst composition and character would be similar to the pre change circumstances.	Small
Very slight change in baseline, i.e., pre-development view - change barely distinguishable from the surroundings. Composition and character of view substantially unaltered.	Negligible
No alteration to the existing view.	No change

17.2.9 Significance of Effects

The purpose of this LVIA is to determine, in a transparent way, the likely significant landscape and visual effects of the proposal. It is accepted that, due to the nature and scale of the 3FM Project, the proposal could potentially give rise to some notable visual and landscape effects.

GLVIA3 identifies that *"The Regulations require that a final judgment is made about whether or not each effect is likely to be significant. There are no hard and fast rules about what effects should be deemed 'significant' but LVIAs should always distinguish clearly between what are considered to be significant and non-significant effects*."

Significance can only be defined in relation to each particular development and its specific location. The relationship between receptors and effects is not typically a linear one. It is for each LVIA to determine how judgements about receptors and effects should be combined to derive significance and to explain how this conclusion has been arrived at.

As a general guide, the following are likely to be considered effects of the greatest significance:

- Major loss or irreversible negative effects, over an extensive area, on elements and/or aesthetic and perceptual aspects that are key to the character of nationally valued landscapes; or
- Irreversible negative effects on people who are particularly sensitive to changes in view, on recognised and important viewpoints or scenic routes, large-scale change which introduces non-characteristic, discordant or intrusive elements into the view.

The identification of significant effects would not necessarily mean that the effect is unacceptable in planning terms. What is important is that the likely effects on the landscape and visibility are transparently assessed and understood in order that the determining authority can bring a balanced, well-informed judgement to bear when making the planning decision.

The significance of effects on landscape, views and visual amenity are evaluated according to a six-point scale: Substantial, Major, Moderate, Minor, And Negligible or None as presented in Table 17.5 below, which contains a description of the significance of effect criteria.

Table 17.5: Significance of Effect Criteria

Significance of Effect	Landscape Resource	Visual Resource
None	Where the project would not alter the Landscape character of the area.	Where the project would retain existing views.
Negligible	Where proposed changes would have an indiscernible effect on the character of an area.	Where proposed changes would have a barely noticeable effect on views/visual amenity.
Minor	Where proposed changes would be at slight variance with the character of an area.	Where proposed changes to views, although discernible, would only be at slight variance with the existing view.
Moderate	Where proposed changes would be noticeably out of scale or at odds with the character of an area.	Where proposed changes to views would be noticeably out of scale or at odds with the existing view.
Major	Where proposed changes would be uncharacteristic and/or would significantly	Where proposed changes would be uncharacteristic and/or would significantly

Significance of Effect	Landscape Resource	Visual Resource
	alter a valued aspect of (or a high quality) Landscape.	alter a valued view or a view of high scenic quality.
Substantial	Where proposed changes would be uncharacteristic and/or would significantly alter a Landscape of exceptional Landscape quality (e.g., internationally designated Landscapes), or key elements known to the wider public of nationally designated landscapes (where there is no or limited potential for substitution nationally).	Where proposed changes would be uncharacteristic and/or would significantly alter a view of remarkable scenic quality, within internationally designated landscapes or key features or elements of nationally designated landscapes that are well known to the wider public.

For those effects indicated as being Moderate to Major the assessor will exercise professional judgement in determining if the effect is considered significant.

For the purposes of this assessment those effects indicated as being of Substantial, Major to Substantial are considered significant as highlighted in Table 17.6 in line with guidance provided in GLVIA3 (para 6.43). Effects of 'Moderate' and lesser significance have been identified in the assessment but are not considered significant upon the character and quality of the landscape and on views although they remain worthy of consideration throughout the decision-making process.

Table 17.6 Significance of Effects Matrix

Magnitude of Impact	Sensitivity				
	Negligible	***Low***	***Medium***	***High***	***Very High***
No Change	None	None	None	None	None
Negligible	Negligible	Negligible to Minor	Negligible to Minor	Minor	Minor
Small	Negligible to Minor	Negligible to Minor	Minor	Minor to Moderate	Moderate to Major
Medium	Negligible to Minor	Minor	Moderate	Moderate to Major	Major to Substantial
Large	Minor	Minor to Moderate	Moderate to Major	Major to Substantial	Substantial

Change can be adverse or beneficial. A conclusion that an effect is 'significant' should not be taken to imply that the proposal is unacceptable. Significance of effect needs to be considered with regard to the scale over which it is experienced.

17.2.10 Cumulative Landscape & Visual Effects

The methodology for assessment of cumulative impacts has been derived from Guidelines for Landscape and Visual Impact Assessment, Third Edition (The Landscape Institute and Institute of Environmental Management & Assessment, 2013) (GLVIA3).

The purpose of the Cumulative Landscape and Visual Impact Assessment (CLVIA) is to consider the landscape and visual impacts of the proposed development when viewed in context with other similar development.

Cumulative effects consist of direct effects on the physical character of the site containing the development, and indirect, perceived effects on the character of areas from which the developments would be visible. GLVIA3 identifies effects as follows:

- Cumulative effects as *"the additional changes caused by a proposed development in conjunction with other similar developments or as the combined effect of a set of developments, taken together"* (SNH, 2012:4);
- Cumulative landscape effects as effects that *"can impact on either the physical fabric or character of the landscape, or any special value attached to it"* (SNH, 2012:10);
- Cumulative visual effects as effects that can be caused by combined visibility, which *"occurs when the observer is able to see two or more developments from one viewpoint'* and/or sequential effects which *'occur when the observer has to move to another viewpoint to see different developments."* (SNH, 2012:11).

The significance of any identified cumulative landscape and visual effect has been assessed as per the main TVIA methodology. These categories have been based on the same combination of receptor sensitivity and predicted magnitude of impact in order to identify the residual significance of effects.

17.2.11 Landscape & Visual Assessment Definitions

A list of definitions for the terms used within this assessment as derived from GLVIA3 is set out below:

- **Landscape Capacity:** The capacity of a particular type of landscape to absorb change without unacceptable adverse effects on its character;
- **Landscape Character Area:** Distinct types of landscape which are generic in character in that they may occur in different parts of the country, but wherever they are they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern. Landscape character area (LCA) names are generic, for example 'upland hills', 'river valley' and 'urban landscape';
- **Landscape Fabric:** Is the physical pattern of elements and features such as vegetation, landform and land use that combine to create landscape character. The effects of a development on landscape fabric are those that alter the physical pattern of elements. These effects are restricted to the landscape within which the proposal is located as it is within this area that the physical pattern will alter, for instance through loss of vegetation, re-contouring or changes to land use;

- **Landscape Quality (or Condition):** Is based on judgements about the physical state of the landscape, and about its intactness, from visual, functional, and ecological perspectives. It also reflects the state of repair of individual features and elements which make up the character in any one place;
- **Landscape Resource:** The combination of elements that contribute to landscape context, character and value;
- **Landscape Value:** The importance attached to a landscape (often as a basis for designation or recognition) that expresses national or local consensus, because of its quality, cultural associations, scenic or aesthetic characteristics;
- **Sensitivity:** Vulnerability of a sensitive receptor to change;
- **Sensitive Receptor:** Physical or natural resource, special interest or viewer group or observer that will experience an impact;
- **Magnitude:** Size, extent and duration of an impact;
- **Visual Amenity:** The value of a particular area or view in terms of what is seen;
- **Visual Character:** When a viewer experiences the visual environment, it is not observed as one aspect at a time, but rather as an integrated whole. The viewer's visual understanding of an area is based on the visual character of visible features and aspects and the relationships between them. The visual character is descriptive and not evaluative;
- **Visual Effect:** Is a change to an existing view as a result of development or the loss of particular landscape elements or features already present in the view;
- **Visual Resources:** The visual resources of the landscape are the stimuli upon which actual visual experience is based. They are a combination of visual character and visual quality;
- **Visual Quality:** Although the interpretation of viewers' experience can have preferential and subjective components, there is generally clear public agreement that the visual resources of certain landscapes have high visual quality. The visual quality of a landscape will reflect the physical state of individual features or elements. Due to the subjective value of the evaluation there is no comprehensive official process for identifying visual quality. The visual quality of this evaluation has been carried out by one Chartered Landscape Architect and verified by another; and
- **Zone of Theoretical Visibility (ZTV):** This represents the area over which a development could theoretically be seen. The ZTV usually presents a 'bare ground' scenario – i.e. a landscape without screening structures or vegetation.

17.3 Receiving Environment

17.3.1 Scale and Character

From a landscape and visual perspective, the relevant elements of the 3FM Project are located in the South Port area within the existing Dublin Port Estate. The project area surrounded by tall buildings and structures in

a busy and active harbour context that is in a constant state of flux on a 24-hour basis with ships and HGV traffic coming and going on a very regular basis. The 3FM Project is located on the southern side of the River Liffey and covers an area of approximately 27.9ha in the Dublin Port Estate.

Located within the context of the site of the 3FM Project are the most notable visual features in the vicinity - the twin stacks of the Poolbeg power station, which are both 210m tall. The twin stacks are recognised landmarks in the Dublin City landscape and the gateway to Dublin Port. The coastal location of the 3FM Project site results in potentially extensive views north and south across Dublin Bay due to the flat nature of the coastline in this part of Dublin Bay. To the northwest, west and southwest lies the urban context of Dublin City that significantly limits potential landscape and visual influence of the 3FM Project site in these directions.

At Howth (Howth Head is a National Special Amenity Area) to the northeast and Dalkey/Killiney to the southeast the rocky coastline rises with cliffs and hills that offer long distance panoramic views across Dublin Bay and towards Dublin Port and the 3FM Project.

There are several oil jetties in operation within the North Estate of Dublin Port on the other side of the River Liffey which are not within the boundary of the 3FM Project. Numerous large oil tanks are visually prominent on lands adjacent to these northern oil jetties. Similarly, there are two jetties in the South Estate within the boundary of the 3FM Project that also have associated adjacent storage tanks, although these are not as extensive as in the North Estate.

Lo-Lo container facilities are located in the North and South Estates. Primary handling equipment used to unload and load containers from ships include rail mounted gantry cranes and dock mobile cranes. Containers are moved between the stacks and the quay side cranes by special heavy-duty truck and trailer combinations or by reach stackers. Secondary handling equipment, usually gantry cranes, are used to store containers in back areas in large stacks. Rubber-tyred gantries (RTG's) and rail mounted gantries are used. The tall equipment used at the Lo-Lo container facilities including gantry cranes and RTG's are all part of the existing visual environment to the eastern side of Dublin city.

In addition to the Lo-Lo container facilities there are also berths within the North Estate with ramps for Ro-Ro freight and passengers. Some services are freight only; others carry a combination of freight and passengers. Accompanied freight units drive off the vessel and leave the port immediately. Unaccompanied freight requires large areas of parking.

The Alexander Basin Redevelopment (ABR) Project is currently at construction stage and almost complete. The ABR Project includes the infilling of Basin 52/53 and also the construction of a new riverside berth at the entrance to Basin 52/53 (Berth 52).

The MP2 Project has commenced and consists of works at Berth 50A; Berth 52; Berth 53; Oil Berth 03/04 at the Eastern Oil Jetty; dredging of a manoeuvring area; and the construction of a Unified Ferry Terminal at the eastern end of the port.

Large cruise ships are a regular feature of the study area berthed in the North Estate. When berthed, cruise ships are a positive feature and attraction to passers-by.

Dublin Port is bounded to the north and east by the Tolka estuary. The Tolka estuary is used for recreational purposes mostly by small sailing craft based at Clontarf.

There is also a small leisure boating area within the 3FM Project boundary that contrasts in scale to the larger vessels to the north and east.

The South Estate (located on the Poolbeg Peninsula) is host to a number of utility providers, including the Uisce Éireann (formerly Irish Water) Ringsend wastewater treatment plant, ESB's Poolbeg power station, Synergen's generating station and the Encyclis (formerly Covanta) Waste to Energy plant. These utilities result in the presence of large and tall infrastructure features that are prominent across the adjacent urban landscape and coastline.

The Great South Wall beyond the Poolbeg power station is used by the local community for walking and recreation purposes with Poolbeg Lighthouse a landmark along the coast.

North Bull Island (a National Special Amenity Area) and Irishtown Nature Park are similarly used by the local community and wider community for walking, recreational and nature conservation activities. Extensive walkways extend along the southern boundary of the port area and link with a path network that extends along Beach Road and Strand Road at Sandymount

Beyond the port, residential landscape extends to the sea at Sandymount and Merrion to the south and Clontarf and Raheny to the north. The industrial harbour and residential areas are broken up by significant areas of public open space, which provide formal and informal recreation for the local community and visitors alike such as Fairview Park and St Anne's Park to the north and Sandymount Promenade to the south. The coastline is followed by an extensive footpath and cycle path systems that are popular with the local community for informal recreation and provide links to further open spaces along the eastern parts of Dublin City. The footpaths extend as far as Poolbeg Lighthouse on the Peninsula that permit extensive seascape views to the public along the coast.

In early 2022 planning consent was issued for the construction of 570 new homes and a total of 63,160sq m of mixed residential and commercial development on the site of the former Irish Glass Bottle factory site located immediately southwest of the 3FM Project. This project includes numerous tall buildings and structures, open space and a pathway network that will ultimately link with the site of the 3FM Project.

Dublin City has a generally flat topography and medium and long-distance views within the built fabric of the city are extremely limited. The majority of views that are available are from the banks of the River Liffey. Such views are channelled along the river in a west – east axis and defined by adjacent tall buildings on the north and south quays at the riverside.

Having assessed the host landscape and in the absence of a detailed Dublin City landscape character assessment, a series of local landscape character areas (LCA) have been defined and described as part of the LVIA completed for the 3FM Project, using the methodology set out section 17.2 above, in the following terms:

Urban residential landscape: Residential development, consisting of single and two storey buildings, is the predominant landscape feature in the surrounding study area. Dollymount, Clontarf and Fairview lie to the north of the 3FM Project. To the west and southwest lie Ringsend and Irishtown. Further to the south are located

areas that include Sandymount, Merrion and Booterstown. Occasionally larger buildings such as schools, office blocks and churches breakup the dominance of the residential landscape. The visual quality of the landscape is low due to frequent infrastructure elements. This landscape character area has a low sensitivity to change.

Harbour-based industrial landscape: Dublin Port is a significant landmark on the eastern side of Dublin city. Industrial and commercial activity within the port area is extensive on both the northern and southern side of the River Liffey. Cargo ships and passenger ferries depart and arrive on a regular basis each day. The port area also links to major transport routes between north and south Dublin via the Tom Clarke Bridge and Dublin Tunnel. Poolbeg power station twin stacks dominate the industrial landscape locally and are notable features across a wide part of Dublin city. Other vertical elements are also frequent and include stacks, cranes and associated lifting facilities as well as ships at berth. The visual quality of this landscape is low due to the presence of extensive infrastructure. This landscape character area has a low sensitivity to change.

Urban parkland landscape: A number of large public open spaces are located in the study area. Coastal promenades and walkways are located to the north at Clontarf and south at Sandymount. These coastal walkways are popular with visitors and the local community and provide panoramic views of Dublin Bay. Bull Island is located to the northeast of the 3FM Project site and consists of a flat duneland habitat. The island contains two golf courses (St. Anne's and Royal Dublin). The strand on the island is popular in summer months. Large formal gardens are also frequent such as Fairview Park and St. Anne's Park. Both parks contain mature parkland landscapes and recreational facilities. Irishtown Nature Park is on the southeast corner of the 3FM Project. Further recreational facilities are also provided at Ringsend Park and Sean Moore Park. The visual quality of the urban parkland landscapes is high, and they provide a valued resource to the local community. This landscape has a high sensitivity to change.

The location of the defined LCA is presented in **Appendix 17.1.**

17.3.2 Visual Context

The ZTV as illustrated in **Appendix 17.1** indicates that potentially extensive views of towards the 3FM Project are available due the coastal location with higher lands to the northeast at Howth and southeast at Dalkey/Killiney. As set out in section 17.2.7 due to limitations to ZTV maps they tend to overestimate the influence on the landscape and visibility of proposed development and should be considered only as a tool to assist in assessing the theoretical visibility of a development and not a definitive measure of the visual impact. The ZTV indicates that views from the northeast extend to Howth and Sutton Strand. The existing twin stacks at Poolbeg and tall port infrastructure are visible in long distance glimpse views from as far as the M50 between the M1 junction and the M3 junction. Intermittent views only are available from the M50 for a very short section, and it is difficult to discern detail from such distances (approximately 10 km). West of the 3FM Project the built components of Dublin city severely restrict views beyond the nearest quays. Broadly, the views are limited to Custom House Quay in the direction of the city centre. Individual tall buildings within the city centre will potentially have views of the 3FM Project. The coastal road from Sutton to Ringsend and from Sandymount to Dún Laoghaire will have potential intermittent views towards the 3FM Project (R105; R131; R118; N31). Long distance views from the south extend as far as Killiney and the Dublin Mountains. Views within the ZTV are described in detail in Viewpoints 1 – 13 in section 17.4.2 below supported by photomontages in **Appendix 17.2**.

17.3.3 Planning Policy

This subject site is located within Dublin Port, the main port on Ireland's eastern seaboard. It is located on either side of the River Liffey in Dublin City. In terms of the extant Development Plan framework, the Dublin City Development Plan 2022-2028 provides the applicable planning policy framework within which the potential landscape and visual impacts of the 3FM Project must be assessed.

Dublin City Development Plan (DCDP) 2022-2028

Chapter 1 of the DCDP is entitled Strategic Context and Vision and outlines the Council's 30-year vision for the City going forward, which is for Dublin to be an "*established international reputation as one of Europe's most sustainable, dynamic, and resourceful city regions. Dublin, through the shared vision of its citizens and civic leaders, will be a beautiful, compact city, with a distinct character, a vibrant culture, and a diverse, smart, green, innovation-based economy.*"

From a strategic perspective the DCDP outlines, in Chapter 4, the City Council's policy approach and objectives in relation to the shape and structure of the City. The approach to the Dublin Docklands and the Port (section 4.5.1) is as follows:

> "*Dublin Port will have a significant role to play in the future development and growth of the city and it is considered prudent to plan the structure of this part of the city, including the proposed public transport network, to fully integrate with the developing new city structure and character, while having regard to the Dublin Port Company Masterplan 2012–2040.*
>
> *The challenge is to ensure that the character of the Docklands is retained and is enhanced, and that good connectivity between the city centre and the Docklands is achieved such that this area is successfully integrated and connected with the city centre. In this regard, significant achievements have been made in recent years, not only in the scale of commercial and apartment development, but also in creating a strong sense of place in this new urban quarter."*

As such the following policy is applicable: -

- SC7: To support and recognise the important national and regional role of Dublin Port in the economic life of the city and region and to facilitate port activities and development, having regard to the Dublin Port Masterplan 2012–2040.

Zoning Z7

In accordance with the DCDP 2022-2028, the subject lands are zoned under Zone Z7 to "*provide for the protection and creation of industrial uses and facilitate opportunities for employment creation including Port related Activities"* as indicated on Map F of the Plan. Section 14.7.7 of the Plan is entitled "*Employment (Heavy) - Zone Z7*" and specifically provides the policy and objectives of Dublin City Council in relation to this land use zoning. Under zoning Z7, the:

> *"Majority of these lands are located in the Port area. The primary uses in these areas are those that can result in a standard of amenity that would not be acceptable in other areas. Activities include industry, other than light industry, manufacturing repairs, open storage, waste material treatment, and*

transport operation services. These areas require a measure of protection from other non-compatible uses as this can result in conflict and limit the expansion or adaption of the primary use in the area."

Landscape

Chapter 10 of the Plan is entitled "*Green Infrastructure and Recreation*". Figure 10-1 of the Plan illustrates the strategic green network throughout Dublin within which policies include those aimed at implementing a green infrastructure strategy, creating sustainable connectivity between green areas, and providing for recreational and amenity needs of the population. The site of the 3FM Project, although located in proximity to some of these areas, does not overlap with any of these green areas. In relation to "*Rivers and Canals*", the following policies are identified:

- GI29: To protect, maintain, and enhance the watercourses and their river corridors in the city and to ensure that development does not cover or encroach upon rivers and their banks. To maintain natural riverbanks and restore them as part of any new development. The creation and/or enhancement of river corridors will be required and river restoration opportunities where possible will be supported to help improve water quality, and ecology, provide natural flood relief as well as providing amenity and leisure benefits.
- GI31: To support the improvement of the ecological status of all rivers / waterbodies within the administrative area of Dublin City Council and those rivers identified in accordance with the River Basin Management Plan 2018 – 2021.
- GI36: To develop sustainable estuarine and coastal recreational and tourism amenities which enhance appreciation of coastal natural assets in a manner that ensures that any adverse environmental effects are avoided, remediated, or mitigated.

Among the "Objectives", those identified in respect of Rivers and Canals are:

- GIO6: To support the development of the following metropolitan greenways and local cycleways / walkways:
    - Royal Canal and the Grand Canal (including the inner Grand/Royal canal loop linking the two canals via the Phoenix Park).
    - Rivers Liffey (Dublin Galway Euro route) Dodder (Ringsend to Dublin Mountains).
    - Coastal corridor.
    - Local routes and extension of existing routes including along the Rivers Tolka, Santry, Poddle, Camac and Mayne.
- GI034: To liaise with relevant State agencies responsible for the city's waterways, including Waterways Ireland, Inland Fisheries Ireland, the Environmental Protection Agency the Office of Public Works (OPW), the Local Authority Waters Programme (LAWPRO) and Dublin Port Company.
- GI036: To promote and support the sustainable use, including access, of the city's beaches and the coast for amenity and recreational uses while protecting habitats from unsustainable recreational pressures.

- GIO37: To ensure all bathing areas, including Dollymount and Sandymount, are maintained to a high standard and to protect and improve water quality and bathing facilities at designated and other monitored waters in order to bring them to designated bathing waters as far as is possible and/or 'Blue Flag' standard.

A "*Key View and Prospect*" is annotated within Figure 4-1 of the CDP that shows a range of city centre views designated and located towards the west of Dublin Port. The views are beyond the site of the 3FM Project to the west and also focused on the city and away from the proposed 3FM Project.

There are several landscape-related specific objectives at sites located in proximity to the 3FM Project. The Great South Wall and Pigeon House Harbour area are located within an Architectural Conservation Area. The Great South Wall is also listed as a Protected Structure (RPS 6798) situated on the eastern side of the 3FM Project. Poolbeg Lighthouse, is also listed as a Protected Structure (RPS 7553), at the eastern end of the Great South Wall and outside the 3FM Project application boundary.

17.4 Likelihood of Landscape and Visual Impacts

17.4.1.1 Landscape Character Area Impacts

As identified in the baseline assessment above - Section 17.3.1 – this assessment has divided the extended host landscape into series of local landscape character areas of which the 3FM Project is located directly within the Harbour Based Industrial landscape (see **Appendix 17.1** – Landscape Character Areas).

Harbour-Based Industrial landscape: The 3FM Project is located directly within a Harbour-Based Industrial Landscape. This landscape is in a constant state of change as cranes, ships and cargo are moving around the Dublin Port area on a continuous basis. The 3FM Project is completely consistent with the key features of the existing landscape character in this area. The limited demolition of buildings will not be noticeable in the wider scale of this landscape.

The structures associated with the 3FM Project include the Southern Port Access Route (SPAR) which comprises a new 178m lifting bridge across the Liffey and a 1,450m long road, North Port Road upgrades and upgraded footway, a new Ro-Ro Terminals, a new Container Terminal (with 650m of new berths), Lo-Lo container yard, provision of a 2.5 acre site to accommodate utilities servicing proposed residential developments in the Poolbeg West SDZ, and a Maritime Village at the existing Berth 4. Despite most of these developments being noticeable elements of the 3FM Project, they are fully read in the context of same existing features at the site and its urban surroundings with medium change in landscape character.

The visual quality of this existing landscape is low. This landscape character area has a low sensitivity to change. The magnitude of change in landscape resource is medium. The predicted significance of landscape effect is minor adverse and not significant.

Adjacent landscapes will have no direct landscape effects and when read from these adjacent landscapes the 3FM Project will be difficult to discern from the existing infrastructure and facilities in the harbour-based industrial landscape and being read in this context will have no significant indirect effects.

17.4.1.2 Planning Policy Impacts

Impacts on relevant planning policy designations contained within the Dublin City Development Plan – as referred to above in Section 17.3.2 – are assessed below.

Dublin City Development Plan 2022 – 2028

This site is located within Dublin Port - where the Dublin City Development Plan 2022-2028 provides the extant development plan framework. A review and assessment have taken place of the Plan to establish the relevant landscape related designations. There are no protected views or prospects in proximity to proposal. The nearest protected views and prospects (shown on Figure 4 of the Plan) are located along the quays but are directed towards the city centre and are from locations where it will not be possible to view the 3FM Project.

There are several landscape-related specific objectives for sites located in proximity to the 3FM Project. The Great South Wall and Pigeon House Harbour area is located within an Architectural Conservation Area (ACA). The 3FM Project will not result in any direct impacts on either area identified as an ACA. The Great South Wall and the Pigeon House Harbour are both integral components of the harbour-related industrial landscape of the South Port Estate in their own right and their origins relate fully to this landscape character and context that is in a constant state of flux. The proposed new Container Terminal at Area N will be well screened in views from Pigeon House Harbour but directly visible from the Great South Wall (see Viewpoint 11 below. Minor effects are predicted for the Pigeon House Harbour ACA while Minor to Moderate effects are predicted for the Great South Wall ACA from a landscape perspective. Any changes to the context of the two ACAs will be read with the existing extensive the harbour-related industrial landscape that surrounds both sites.

Overall, when landscape related planning policy designations are assessed, there will be no significant effects.

17.4.1.3 Zone of Theoretical Visibility (ZTV)

The ZTV as illustrated in **Appendix 17.1** indicates that potentially extensive views of the 3FM are available due to the coastal location of the 3FM Project within Dublin Bay. Potential views from the north-east extend to Howth and Sutton Strand. The existing twin stacks at Poolbeg and taller port infrastructure are visible in long distance glimpse views from as far as the M50 between the M1 junction and the N3 junction. Intermittent views only are available from the M50, and it is difficult to discern detail from such distances (approximately 10km). West of the 3FM Project the built components of Dublin City severely restrict views beyond the quays. Individual tall buildings within the city centre will potentially have views towards the 3FM Project site. The coastal road from Sutton to Ringsend and from Sandymount to Dun Laoghaire will have potential intermittent views of the 3FM Project (R105; R131; R118; N31). Potential long-distance views from the south extend as far as Killiney and the Dublin Mountains. Views within the ZTV are described in detail in Viewpoints 1 – 13 in Section 17.4.2 below supported by photomontages in **Appendix 17.2**.

The ZTV should be considered only as a tool to assist in assessing the theoretical visibility of the 3FM Project and selection of viewpoints, but it is not a measure of the visual impact itself. The actual visual impact of the 3FM Project is assessed in greater detail in the following sections.

17.4.1.4 Visual Impacts on Residential Properties

An assessment has been undertaken within the ZTV to determine the magnitude of visual impact of the 3FM Project on potential views from sensitive visual receptors including residential properties to identify any potential significant effects.

There is significant potential visibility of the 3FM Project from residential properties to the north and south of the proposed 3FM Project. The nearest properties are located at Ringsend on the R131, York Road and Pigeon House Road to the southwest. Poolbeg Quay Apartments are the tallest buildings at this location and extend to five stories in height, offering views across port infrastructure on the southern side of the River Liffey towards the 3FM Project together with views of the North Port as well. Where properties have an aspect to the north all such properties in the Ringsend area have a view that includes the existing Dublin Port and the busy East Link Toll Plaza. With the exception of the Poolbeg Quay Apartments, the residential properties are predominantly single and two storey type dwellings. In views north (when available) from all such properties the existing harbour and its activities are prominent including the existing container terminal. However, under the proposed 3FM Project, the container terminal will be relocated (Area K) and the proposed Maritime Village will be the main component of the view for these properties rather than the container terminal. The Maritime Village development proposes high quality buildings and external public realm and will have less of a detrimental impact upon the view. The predicted significance of visual impact for the residential properties at Ringsend will be moderate adverse.

Further south along Sandymount promenade there are residential properties with direct views towards the proposed 3FM Project along Beach Road and Strand Road but any views of the majority of the 3FM Project will be well screened by intervening buildings at the existing port and by topography and vegetation at the port southern boundary. Although high mast lighting will be partly visible in the view it will be barely noticeable and read with existing lights. Containers stacked six high at Area K as well as cranes and gantries at Area K, Area L and Area N will be partly visible through vegetation but again read against the backdrop and foreground of existing buildings and infrastructure with little change in visual resource. The new Port Park will be located within this view but not directly visible due the retention of the existing planted bund and new planting associated with the Coastal Park along the site's southern boundary. The predicted magnitude of change in visual resource is small. The predicted significance of visual impact will be minor to moderate adverse and not significant.

There is very limited potential visibility of the 3FM Project from the areas of residential development that are located along the coast road north of the 3FM Project at Clontarf; Dollymount; Sutton and Howth adjacent to the R834 and R807 roads. The predominant house type is two storeys in these areas. For houses that front on to Strand Road and have potential glimpse views towards the 3FM Project, the existing port facilities are distant in all views and the 3FM Project will be difficult to discern from existing facilities, which includes gantries, high mast lighting and ships. The adjacent tall industrial infrastructure such as the Poolbeg power station chimney stacks and the Encyclis Waste to Energy Plant will remain much more prominent in views from these properties. Overall, in potential views from residential properties to the north of the 3FM Project will be difficult to discern from the existing activities and features at Dublin Port. The predicted change in visual resource will be low and the predicted significance of visual impact for these residential properties will be minor adverse.

17.4.2 Viewpoint Assessment

A series of representative viewpoints have been selected from locations throughout the study area and subjected to specific assessment below. The locations of all viewpoints are presented in **Appendix 17.1**. Photomontages for Viewpoints 1 to 13 are included in **Appendix 17.2** of this EIAR and should be read with the following text.

17.4.2.1 Viewpoint 1 – Strand Road Howth

Viewer sensitivity: this view is from a local road that is predominantly used by the local community and walkers. The viewer sensitivity is high.

Existing visual resource: the existing view is available from a coast road that is slightly elevated above the nearby shoreline at Howth. The view is open, panoramic and direct towards Dublin Port. The existing port facilities are located in this view direction to the southwest from Howth but are a distant feature in views and read as part of the wider cityscape visible from this view. More prominent and notable landmarks include the Poolbeg Power Station and stacks, the former Pigeon House Power Plant, the Encyclis Waste to Energy (WtE) Plan and stacks with plume, the ESB Power Plant and stack with plume, the Aviva Stadium, the Exo Building, and Capital Dock/office buildings on Sir John Rogerson's Quay. Ships at berth in Dublin Port are partly discernible along with tall ship to shore cranes and gantries breaking the skyline.

Predicted view: the 3FM Project will be located directly within this view direction. It will not be easily discernible due to the long distance of the view and the presence of the existing port facilities within the existing visual resource set out above. The lower level components of the 3FM Project will be well screened by existing port facilities on the northern side of the river. Taller components will be difficult to discern from existing tall structures and cityscape beyond. Area N will be located within the view and read in front of the NORA Oil Storage Terminal and Poolbeg Power Station that will reduce its prominence. Ships berthed at the new quayside at Area N will also be visible, but ships are a constant and transient feature of the port. Cranes and containers at Area L and N will be located within the view but will be distant and read with the background of other port development. High mast lighting within the 3FM Project will be read distantly with similar existing lights with no noticeable change in the night-time visual resource.

Magnitude of change: the magnitude of change in visual resource is negligible.

Significance of Visual Impact: the predicted significance of visual impact will be minor adverse and not significant.

17.4.2.2 Viewpoint 2 – Sutton Strand

Viewer sensitivity: this view is from a local road and open space that is predominantly used by the local community and occasional tourists. The viewer sensitivity is high.

Existing visual resource: the existing view is available from the roadside looking across an area of open space at the coast. There is a lack of any screening, and the view is open, direct and panoramic. The existing port facility is a distant feature, and it is hard to make out much detail of its component parts. The Dublin Mountains form the backdrop to the view to the left. The existing Poolbeg power station and chimney stacks and Encyclis

WtE Plant are the most prominent structures in the view. Ships coming and going from the port are regular noticeable visual features. Bull Island is visible to the right of the view with further cityscape visible beyond.

Predicted view: the 3FM Project will be directly located within this view direction but well screened by existing port buildings and structures in distant views only. At this long distance it will be very difficult to discern any aspect of the proposed 3FM Project from the existing port operations apart from ships coming and going but ships are already a transient feature of the port. Area N being the most easterly element of the 3FM Project will be located within the view direction to the left, but all aspects will be extremely difficult to discern due to the distance of the view and existing context that includes significant landmark structures at NORA Poolbeg Oil Terminal and Poolbeg power station. Cranes and containers at Area L and N will be located within the view but will be distant and read with the background of other port development. Ships berthed at Area N will be temporary features being read with ships coming and going from the port across day and night. Similarly, proposed high mast lights will be located within the view direction but difficult to discern from existing high mast lighting at the port and cityscape lights beyond.

Magnitude of change: the magnitude of change in visual resource is negligible.

Significance of Visual Impact: the predicted significance of visual impact will be minor adverse and not significant.

17.4.2.3 Viewpoint 3 – Bull Island Beach

Viewer sensitivity: this view is from the beach at Bull Island and is predominantly used by the local community and tourists. The viewer sensitivity is high.

Existing visual resource: the existing view is available from within the Bull Island site and along the beach and across dune vegetation towards the existing port area. The Poolbeg Power Station and stacks as well as the Encyclis WtE Plant and stacks with plume are clearly visible in the view. It is just possible to discern taller aspects of the existing port operations with the upper parts of ship to shore cranes and gantries just visible above the dunes. Lower level views to the port are well screened by the dunes in the foreground and the North Bull Wall in the background. The Dublin Mountains form the background to the view.

Predicted view: the 3FM Project will be located within the view direction from this location but all new features will be well screened and very difficult to discern from the existing port operations. The upper parts of proposed high mast lights, cranes and gantries will be visible but read with existing tall cranes, gantries and lights located in the view with negligible change in visual resource. Ships berthed at Area N will be partially visible but distant and read with ships coming and going from the port already.

Magnitude of change: the magnitude of change in visual resource is negligible.

Significance of Visual Impact: the predicted significance of visual impact will be minor adverse and not significant.

17.4.2.4 Viewpoint 4 – Bull Wall

Viewer sensitivity: this view is from the Bull Wall which is predominantly used by the local community and occasional tourist for walking. The viewer sensitivity is high.

Existing visual resource: the existing view is available from Bull Wall that extends into Dublin Bay and due to the lack of any screening allows extensive and panoramic views across Dublin Bay towards the existing port area. It is possible to discern individual cranes and structures at the existing port against the skyline but they are read as one massive harbour related industrial site. The existing Poolbeg power station and chimney stacks and Encyclis WtE Plant and stacks with plume are the most prominent structures in the view. Ships berthed and coming and going from the port are also noticeable visual features. Views to the Dublin Mountains are available in the background.

Predicted view: the 3FM Project will be directly located within the view but will be difficult to discern from the existing port features. All the proposed features to the right in the view will be read as part of the existing port with little noticeable change in visual resource being well screened. Area N and its associated quayside will extend to the centre left of the view but will be read against the background of the southern harbour shoreline and in the context of the NORA Poolbeg Oil Terminal and Power Station. Ships berthed at Area N will be directly visible but transitory and read with ships coming and going from the port at this location. Proposed high mast lights and gantries will be read with existing cranes and lights. Cranes and containers at Area L will be located within the view but will be read with the background of other port development and difficult to discern.

Magnitude of change: the magnitude of change in visual resource is small.

Significance of Visual Impact: the predicted significance of visual impact will be minor to moderate adverse and not significant.

17.4.2.5 Viewpoint 5– Clontarf Slipway

Viewer sensitivity: this view is from an area of open space at the coast road at Clontarf where a footpath and slipway are located. The view is predominantly available to the local community and occasional tourist. The viewer sensitivity is high.

Existing visual resource: the existing view is available from a low lying coastal footpath and slipway beside Clontarf Road that offers panoramic views across the shoreline along the coast and beyond. The existing chimney stacks at Poolbeg power station as well as the Encyclis WtE Plant and stacks with plume are all notable landmarks in the view. The northern part of the existing port facilities is located within the view particularly the taller elements such as cranes, high mast lights and gantries that occasional break the skyline. Large storage tanks are prominent in the view to the right. The lower portions of the taller structures and remaining port facilities are read against the background of the Dublin Mountains.

Predicted view: the 3FM Project will be located in this view direction but will be well screened by intervening buildings and vegetation on the northern side of Dublin Port and all taller components proposed will be read with existing features and difficult to discern. The upper portions of ships berthed at Area N will be partly visible but read with ships coming and going daily at the entrance to the port. Cranes and containers at Area L are partly visible but read in the context of the existing port development. At night-time proposed tall mast lights will be read with existing similar lights in the foreground and a backdrop of illuminated cityscape with no noticeable change.

Magnitude of change: the magnitude of change in visual resource is negligible.

Significance of Visual Impact: the predicted significance of visual impact will be minor adverse and not significant.

17.4.2.6 Viewpoint 6 – Alfie Byrne Road

Viewer sensitivity: this view is from Alfie Byrne Road, which is predominantly used by the local community and commuters. The viewer sensitivity is medium.

Existing visual resource: the existing view from Clontarf extends across the inner Dublin Bay towards the existing port area. The Poolbeg power station chimney stacks as well as the stacks at the Encyclis WtE Plant are all notable landmarks. The Great South Wall lighthouse is visible to the left of the view. Existing vegetation and buildings in the foreground at Eastpoint Business Park to the right prevent views to a large part of the existing port area. It is possible to discern the upper portions only of a number of individual cranes and structures at the port. Views to the Dublin Mountains are directly available but broken by the port infrastructure and industry in the foreground. Vegetation along the northern limits of the port further adds to the screening effect.

Predicted view: the 3FM Project will be directly located within the view direction but very well screened with only the upper parts of cranes and gantries potentially visible depending on their position and use but difficult to discern amongst the existing port features. The upper portions of proposed high mast lights will also be partially visible but at night-time read along with existing high mast lights with no noticeable change in visual resource.

Magnitude of change: the magnitude of change in visual resource is negligible.

Significance of Visual Impact: the predicted significance of visual impact will be minor adverse and not significant.

17.4.2.7 Viewpoint 7 – Samuel Beckett Bridge

Viewer sensitivity: this view is from Samuel Beckett Bridge that is predominantly used by the local commuters, pedestrians, and cyclists. The viewer sensitivity is medium.

Existing visual resource: the existing view from the bridge is constrained by built form on the northern and southern side of the River Liffey that creates a vista directed to Dublin Port and Dublin Bay in views to the east. The modern city development in the foreground dominates the character of the view and the existing port plays a small and restricted part only. The permanently berthed vessel MC Cill Airne in the centre left of the view and the Tom Clarke Bridge both partly screen views to the port area. Tall ship-to-shore cranes at the existing container terminal and ships at berth on the south side of the port are visible but difficult to discern at this distance. The chimney stacks of the Poolbeg power station and the Encyclis WtE Plant are visible to the rear.

Predicted view: the 3FM Project will be directly located within this view direction but will be difficult to discern from the existing port features described above. All the features of the 3FM Project will either be well screened or will be read as part of the existing port with little noticeable change in visual resource. The proposed SPAR opening bridge and control tower will be located within this view direction but will be well screened from view by a combination of the berthed MV Cill Airne and Tom Clarke Bridge. Both the SPAR bridge and the Tom Clarke Bridge would be open at the same time when required to permit access upstream or downstream and as such the SPAR bridge when open would be read with the opened Tom Clarke Bridge offsetting potential visual effects. In any regards at this distance, it would not be prominent in the view and read with the background of tall

structures and ships at berth. The existing container terminal will be relocated to the east further away from the viewer and will be replaced by the proposed Maritime Village that will see the construction of high quality buildings and landscaping with slight beneficial visual impact. The relocated Marina Berths will not significantly alter the existing view. Cranes at Areas L and N will be visible on the distant skyline along with ships berthed at the quayside but read with existing port infrastructure and buildings on the southern side of the port.

Magnitude of change: the magnitude of change in visual resource is small.

Significance of Visual Impact: the predicted significance of visual impact will be minor adverse and not significant.

17.4.2.8 Viewpoint 8a – Pigeon House Road

Viewer sensitivity: this view is westwards from Pigeon House Road adjacent to the East Link Toll area on the R131 that is predominantly used by commuters but is also available to residential properties. The viewer sensitivity is medium.

Existing visual resource: the existing view is available westwards from the roadside in front of single storey residential properties. From this location, views are focused west along the River Liffey by built form adjacent to the river channel, with the immediate urban form preventing views of the wider townscape of Dublin. The 17 storey Exo Building adjacent to the 3 Arena, visible within the centre of the view, forms a strong visual draw as are port vessels berthed at the northside of the river. There is a clear distinction between traditional and modernistic built form along the North Quay which is evidenced by changes in materials and changes in building height.

The Tom Clarke Bridge (East Link Toll Bridge) with busy traffic providing constant movement is visible to the centre left of the view. The Tom Clarke Bridge is a lifting bridge with the central span opening to allow occasional access for larger vessels upstream.

The R131 is a very busy road that has high levels of traffic movement throughout the day and night with all vehicles prominent in the foreground of the view.

Predicted view: the 3FM Project will be directly located within this view. The SPAR will be a new feature in the foreground extending the visible road network in the view. Traffic on the SPAR will be read with traffic on the existing R131. The SPAR Bridge will be a new feature read in front of and at a similar level to the Tom Clarke Bridge with little change in the visual resource. The SPAR Bridge like the Tom Clarke Bridge will be a lifting bridge that is opened to allow larger vessels to gain access upstream. The lifting of both bridges is a very temporary feature when it occurs, and the default appearance of the bridges is in the lowered position. The port infrastructure and operations on the northern side of the river along with traffic on the R131 and the built form along the North Quay will remain the dominant visible features in this view.

Magnitude of change: the magnitude of change in visual resource is medium.

Significance of Visual Impact: the predicted significance of visual impact will be moderate adverse and not significant.

17.4.2.9 Viewpoint 8b – Pigeon House Road

Viewer sensitivity: this view is eastwards from Pigeon House Road adjacent to the East Link Toll area on the R131 that is predominantly used by commuters but is also available to residential properties. The viewer sensitivity is medium.

Existing visual resource: the existing view is available from the roadside in front of single storey residential properties and directly towards the existing port. Ships coming and going from the port are a continual and moving feature of this view. The view is predominantly enclosed by the port with several tall buildings, stacks, cranes, high mast lighting and gantries breaking the skyline. Small leisure craft are moored in the foreground and at Poolbeg Yacht and Boat Club. Further to the right the existing container terminal is visible via the ship to shore cranes but is well screened by large sheds at the Poolbeg Yacht and Boat Club with berthed vessels only partly visible.

The R131 is a very busy road that has high levels of traffic movement throughout the day and night with all vehicles prominent in the foreground of the view.

Predicted view: the 3FM Project will be directly located within this view. The SPAR will be a new feature in the foreground extending the visible road network in the view. Traffic on the SPAR will be read with traffic on the existing R131. The existing berths at the Poolbeg Yacht and boat Club will be relocated to the left of the view with little change in the visual resource. The port infrastructure and operations on the northern side of the river along with traffic on the R131 will remain the dominant visible features in this view. The relocation of the container terminal to Area N will remove visibility of the existing ship to shore cranes with a slight beneficial impact.

Magnitude of change: the magnitude of change in visual resource is medium.

Significance of Visual Impact: the predicted significance of visual impact will be moderate adverse and not significant.

Viewpoint 9 – Beach Road

Viewer sensitivity: this view is the R801 Beach Road adjacent to Sean Moore Park that is predominantly used by the local community and occasional tourist for access to the shore and coastal walkways. The viewer sensitivity is high.

Existing visual resource: the existing view is available from a roadside path that offers views across the shoreline towards large scale infrastructure on the southern side of the port. The existing chimney stacks at Poolbeg Power Plant are a notable landmark in the view to the right. The Encyclis WtE Plant and stacks with plume and the ESB Power Plant and stack are also notable landmarks. Port infrastructure is also visible in the form of tall ship to shore cranes while a glimpse view of ships berthed at quayside is just possible. The majority of the lower-level existing port facilities are well screened by structures in combination with topography and vegetation located on the southern edge of the Dublin Port lands. However, a glimpse view is available through to a very small portion of containers that are stacked four high on lands operated by Rushfleet Ltd in the centre of the view and also at the existing container terminal to the left of the view where tall cranes are also visible.

Predicted view: the 3FM Project will be located in this view direction but will be well screened by intervening buildings at the existing port and by topography and vegetation at the port's southern boundary. Although high mast lighting will be partly visible in the view it will be barely noticeable and read with existing lights. Containers stacked six high at Area K and cranes Area K and Area L and N at will be partly visible through vegetation but read the context of the foreground of existing buildings and infrastructure will mean little change in visual resource. The relocated Area K will not substantially alter the existing visual resource. The new Port Park will be located within this view direction but screened by retention of the existing planted berm and proposed planting as part of Coastal Park that extends along the port's southern boundary.

Magnitude of change: the magnitude of change in visual resource is small.

Significance of Visual Impact: the predicted significance of visual impact will be minor to moderate adverse and not significant.

17.4.2.10 Viewpoint 10 – Sandymount Strand

Viewer sensitivity: this view is from a local park that is predominantly used by the local community and occasional tourist. The viewer sensitivity is high.

Existing visual resource: the existing view is available from a path within the park at Sandymount Strand that offers views across the shoreline towards the coast and beyond. The existing stacks at Poolbeg are a notable landmark in the view along with the prominent Encyclis WtE Plant and ESB Power Station. The majority of the lower-level existing port facilities are well screened but visibility of the taller elements such as cranes, high mast lights and gantries is possible to the rear of existing buildings and topography and vegetation that extends along the southern most extent of the port. The existing container terminal is more noticeable to the left of the view. The uppermost portions only of ships at berth are just discernible between infrastructure.

Predicted view: the 3FM Project will be directly located in this view direction but will largely be well screened by intervening buildings and infrastructure and topography and vegetation at the existing port. Although high mast lighting will be partly visible in the view it will be barely noticeable and read with existing lights. Containers stacked six high at Area K will be partly visible through vegetation and existing infrastructure but read against the backdrop and foreground of existing buildings and infrastructure with little change in visual resource. It is proposed to provide additional landscape planting as an integral part of the 3FM Project on the existing berm on the southern side of Area O as part of a Coastal Park that will enhance the southern boundary of the port. No containers will be visible at Area O. The relocated Area K will not substantially alter the existing visual resource with a larger portion screened by the large existing fuel storage tanks. Cranes at Area L and N are distant and read with existing cranes and tall buildings. The new Port Park will be located within this view but screened by retention of the existing planted berm that extends along the port's southern boundary that will be supplemented by additional planting.

Magnitude of change: the magnitude of change in visual resource is small.

Significance of Visual Impact: the predicted significance of visual impact will be minor to moderate adverse and not significant.

17.4.2.11 Viewpoint 11 – Great South Wall

Viewer sensitivity: this view is from Great South Wall Quay that is predominantly used by the local community, and visitors/tourists. The viewer sensitivity is high.

Existing visual resource: the existing view available from the pathway on the Great South Wall is coastal and harbour industrial related in character. There are distance views out towards Bull Island and Howth to the right of the view. It is possible to observe long lengths of the existing quayside on the northern side of the Liffey with existing ships at berth as well as taller cranes and gantries in the port visible. The existing Poolbeg power station with its twin chimney stacks dominates the local landscape. Also visually prominent is the NORA Poolbeg Oil Terminal tanks while the former Pigeon House Power Plant is visible to the rear of the existing revetment and jetties. Also, beyond the jetties is located the existing container terminal with stacked containers well screened but cranes, gantries and ships at berth are visible. Ships are visible coming and going from the port.

Predicted view: the 3FM Project will be directly located within this view and will be noticeable. All visible elements of the 3FM Project will be read in the context of the existing port facilities that are prominent in the existing view. The new quay at Area N will be directly visible in the foreground on a piled structure at a level similar to the existing jetties. Area N will be used as a container terminal with tall ship to shore cranes, gantries and containers stacked six high. In combination with berthed ships the proposals for Area N will be dominant in the view but read in the context of an existing busy port. Ships berthed will be directly visible but transitory in nature and read with other vessels coming and going from the busy port. The cranes and containers at Area L will be screened by existing buildings and will not result in a noticeable change in the visual resource from this distance.

Magnitude of change: the magnitude of change in visual resource is large.

Significance of Visual Impact: the predicted significance of visual impact will be major to substantial, assessed as not significant due to the fact that the proposals at Area N are read in the context of the extensive existing port and other tall structures in the immediate foreground.

17.4.2.12 Viewpoint 12 – Blackrock

Viewer sensitivity: this view is from a coast road and footpath at Blackrock that is predominantly used by the local community and occasional tourist. The viewer sensitivity is high.

Existing visual resource: the existing view is available from an elevated footpath that offers panoramic views across the shoreline towards the coast and beyond. The existing chimney stacks at Poolbeg are a notable landmark in the view along with the Encyclis WfE Plant. The majority of the lower-level existing port facilities are well screened but visibility of the taller elements such as cranes, high mast lights and gantries is possible to the rear of existing buildings and topography albeit at a long distance and difficult to discern.

Predicted view: the 3FM Project will be located in this view direction but will be well screened by intervening buildings in the foreground on the south side of the existing port. There will be no noticeable change in visual resource as a result at this distance.

Magnitude of change: the magnitude of change in visual resource is no change.

Significance of Visual Impact: the predicted significance of visual impact will be none.

17.4.2.13 Viewpoint 13 – Pigeon House Harbour

Viewer sensitivity: this view is from a hard stand area beside the Pigeon House Harbour and Pigeon House Hotel. While the area currently has limited visitors, Dublin City Council does plan to redevelop the area. It is anticipated that the area would be used by the local community and visitors/tourists. The viewer sensitivity is high.

Existing visual resource: the existing view is available towards the River Liffey that is well screened by an existing stone wall. The former Pigeon House Power Station provides further enclosure and dominates the view. The Pigeon House Hotel is located to the right of the view. Although not shown in the photograph the Poolbeg power station chimney stacks dominate this view being located immediately behind the Pigeon House Hotel. The context of the view is a harbour related industrial landscape of which the Pigeon House Harbour is an integral component.

Predicted view: the 3FM Project will be fully screened from view at this location. While the Dublin City Council plans for redevelopment of this area are not known at the time of assessment it is assumed that the stone wall in the foreground as an historic feature will be retained. The nearest component of the 3FM Project to this viewpoint is Area N that is located to the rear of the former Pigeon House Power Plant and therefore not visible. The proposed works to provide a new turning circle will also not be visible. Ships coming and going from berths within the 3FM Project will be read with existing ships coming and going.

Magnitude of change: the magnitude of change in visual resource is negligible.

Significance of Visual Impact: the predicted significance of visual impact will be minor adverse and not significant.

17.4.3 Lighting Impacts

The operational phase of the 3FM Project will require the use of outdoor night-time lighting. Permanent lighting will be used in port operations during night-time hours and for security at the 3FM Project facilities. The street lighting within the 3FM Project has been designed in accordance with CIE 140 and EN 13201-2015. As described in EIAR Chapter 3 it is proposed to utilise the existing and consented lighting where possible with additional High Mast Lighting (HML) and street lighting where required to provide required luminance and uniformity. The locations of HML poles and proposed street lighting for the 3FM Project is indicated within the project drawings.

The use of downward directional lighting will reduce the sky glow effect. However, the addition of lighting to existing night views of the port area will nevertheless result in an increase in sky glow on the night-time views from areas around the port although this will be barely perceptible in the context of the level of sky glow in the eastern side of Dublin City. New lights along with illuminated ships will also have the effect of drawing attention to the new 3FM Project facilities at night. Such lights will be read against the background of significant existing

lights in the Dublin Port area and the wider night-time cityscape and the significance of effect is predicted to be negligible adverse for night-time views where such views are available.

17.4.4 Construction Phase Impacts

During the construction phase potential impacts on landscape and visual aspects include:

i. Site preparation/enabling works and operations;
ii. Site infrastructure and access;
iii. Vehicular and plant movements; and
iv. Dust emissions

A detailed description of the construction stage programme and phasing of works is provided in Chapter 5 of the EIAR. Landscape and visual impacts during the construction phase will be of short term in nature. A worst case scenario has been assumed for the assessment of construction phase impacts that consists of all works being constructed at once.

When considering the potential visibility of construction period works and as set out in section 17.2.7 due to limitations of ZTV maps they tend to overestimate the extent of influence on the landscape and visibility of the 3FM Project. This should be considered only as a tool to assist in assessing the theoretical visibility of a development and not a measure of the visual impact. Works will be visible from within the ZTV during construction period to a varied extent that will be related to the construction activity at any given time but very limited in extent due to the built up character of this part of Dublin City and Dublin Port. Trucks and construction vehicles coming and going via the port access roads will be similar in nature to existing city wide and port related traffic with low levels of visual resource change.

Ground level construction activities at the site of the 3FM Project will be well screened from views from surrounding areas throughout the construction phase due to adjacent port facilities and built form in the harbour related industrial landscape. Busy port-related activities will continue during the construction phase further detracting from the construction phase activities.

Ground level construction activities for the development for Area N will be more noticeable in views from the Great South Wall but not extensively so and will be limited to a local level by the nature and character of the harbour related landscape on the south and north side of the River Liffey that has a generally low-lying topography in a busy port context that will decrease the prominence of any site works.

An assessment of the significance of the impact of the 3FM Project works during construction on the landscape character area described above has been completed and summarised below. The works are located directly within the Harbour Based Industrial Landscape Character Area.

The landscape character area at the site of the construction stage works of the 3FM Project is concentrated located on low-lying parts of the landscape at the mouth of the River Liffey and Dublin Bay. This is a generally robust frequently changing landscape. The current port activities are a prominent part of this landscape. The existing site has the appearance of constant movement provided by ships, cranes, containers, HGV's etc over a 24 hour period.

The Harbour Based Industrial Landscape Character Area has a low sensitivity to change. When potential landscape impacts are assessed during the construction stage there will be negligible adverse effect due to the low landscape resource change that will result.

In visual terms an assessment was completed within the ZTV to determine the magnitude of visual impact of the 3FM Project on potential views from sensitive visual receptors including residential properties during the construction stage.

There will be limited potential for visibility of the 3FM Project from residential properties during the construction stage. The nearest properties are located at Ringsend to the southwest of the construction works. Longer distance views towards the construction works will be available from the north at Clontarf as far as Howth and south to Sandymount and in such views the existing port and its activities are noticeable. The introduction of the construction stage activities will have limited change in visibility from these residential areas and be read as part of the on-going existing port activities. Construction traffic will travel through the area but will be a component of the existing heavy traffic in these areas with which it will blend with negligible visual impact. No significant visual impacts are predicted for construction traffic as such traffic is a key feature of this road network already. Overall, no significant visual impacts are predicted for residential properties during the construction stage.

In conclusion, due to distance and the broad scale of the landscape within which the works are located, the change in landscape and visual resource will be negligible and, therefore, the significance of landscape and visual effects during the construction stage will be minor adverse. There are limited residential dwellings in close proximity to the construction works and no significant visual effects are predicted at the construction stage as a result.

17.4.5 Cumulative Impacts

The full list of projects set out in EIAR Chapter 20, with which the 3FM Project may possibly have cumulative effects have been considered to identify the likely cumulative landscape and visual effects, if any.

17.4.5.1 ABR Project and MP2 Project

The in-port projects listed in EIAR Chapter 20 are considered cumulatively with the 3FM Project and are located within an extensive harbour area that is continually in a state of flux which will offset potential cumulative landscape and visual impacts. The in-port projects are located within a robust maritime industrial landscape and will be read in this context along with the 3FM Project. There is limited opportunity to noticeably view the 3FM Project in-combination with other in-port projects with the exception of views from the East Link Toll area.

The ABR Project is located closer to the city centre than the 3FM Project and will be more noticeable in local views from the East Link Toll area. The 3FM Project is hard to discern from existing port facilities at the area around the East Link Toll and no significant cumulative landscape or visual effects are predicted as a result.

The MP2 Project is located in closer proximity to the 3FM Project. In all of the cumulative viewpoints it will be difficult to read the MP2 Project in-combination with the 3FM Project facilities due to the character of the maritime industrial activities in which they are both read. When potential cumulative landscape and visual impacts are considered for MP2 Project and the 3FM Project no significant effects are predicted.

17.4.5.2 Irish Glass Bottle Factory site

In early 2022 planning consent was issued for the construction of 570 new homes and a total of 63,160sq m of mixed residential and commercial development on the site of the former Irish Glass Bottle factory site located immediately southwest of the 3FM Project. This project includes numerous tall buildings and structures, open space and a pathway network that will ultimately link with the site of the 3FM Project. The redevelopment of this derelict factory site will see a high quality built environment created that will be read as an extension to the adjacent urban built form to the west. Linkages to path networks around and through the Dublin Port area are planned that will complement the 3FM Project. The proposed residential and mixed use development is a large scale development that is proportionate in scale to the existing scale of development on the South Estate that will prevent cumulative landscape and visual impacts and no significant cumulative effects are predicted.

17.4.5.3 Codling Wind Park Sub-Station

As part of the Codling Wind Park it is proposed to construct a sub-station on a site located immediately west of the existing Pigeon House Harbour and between Area L and Area N of the 3FM Project. This proposed sub-station project will include a number of tall buildings and structures that will be new features in the landscape with potential to be read with the 3FM Project. The proposed location for the Codling Wind Park Sub-Station has existing tall buildings located to the east, south and west that will make visibility very difficult in these directions. Very long-distance views may be available from the northwest at Howth but the details of the new sub-station site will be very difficult to discern from such long distance. This existing context for the site of proposed sub-station will also result in there being very limited potential for it to be read with the 3FM Project in views from the surrounding landscape. Both proposed developments will be read with, and are also consistent with, the existing harbour industrial landscape character. Overall, these factors will limit potential cumulative landscape and visual impacts to Negligible to minor and no significant cumulative effects are predicted.

For all remaining projects in the area surrounding the port area, including Dublin City Councils proposed bridge west of Tom Clarke Bridge, due to the separation distance between the 3FM Project and the identified projects outside the port area, in combination with the low-lying nature of the topography in the landscape surrounding the Liffey and also in conjunction with extensive urban built form, it is extremely difficult to read the 3FM Project with any adjacent projects as the 3FM Project is read as part of the wider Dublin Port landscape that is a feature of the eastern side of Dublin city already. When potential cumulative landscape and visual impacts are considered for the listed projects outside the port area with the 3FM Project, no significant effects are predicted.

Overall, when potential construction and operational stage cumulative landscape and visual effects are considered for the 3FM Project in combination with permitted and planned projects they will not result in any significant cumulative landscape and visual effects due to a combination of separation distance, intervening development and the nature and setting of the proposals. Construction stage activities involve an increase in construction traffic for all cumulative projects. HGV traffic is frequent feature of this marine industrial landscape, and the existing Dublin city road network consists of very busy roads with low potential for significant cumulative visual impacts as a result. The operational stage activities as part of the 3FM Project are sufficiently separated from any permitted or planned projects in the area surrounding the port to avoid potential cumulative effects while permitted or planned developments within the port area or so similar in character that they are difficult to discern from the existing busy port context.

17.5 Significance of Landscape & Visual Effects

The potential effects on landscape character have been assessed in Section 17.4.1.1 above and the significance of effects can be summarised as follows:

Table 17.7 Significance of Landscape Character Effects

Landscape Character Area	*Predicted Significance of Effect (Without Mitigation)*
Harbour Based Industrial landscape	Minor adverse and not significant

The potential landscape and visual effects on planning policy designations landscape character have been assessed in Section 17.4.1.2 above and the significance of effects can be summarised as follows:

Table 17.8 Significance of Landscape & Visual Effects on Planning Policy Designations

Planning Policy or Designation	*Predicted Significance of Effect (Without Mitigation)*
Dublin City Development Plan 2022 - 2028	
Views and Prospects	No change
Great South Wall Architectural Conservation Area	Minor adverse and not significant
Pigeon House Harbour Architectural Conservation Area	Minor to moderate adverse and not significant

The potential visual impact on residential properties has been assessed in Section 17.4.1.4 above and the significance of effects can be summarised as follows:

Table 17.9 Significance of Visual Effects on Residential Properties

Property Locations	*Predicted Significance of Effect (Without Mitigation)*
Properties at Ringsend with a view	Moderate adverse and not significant
Properties at Sandymount with a view	Minor to moderate adverse and not significant
Properties at Clontarf with a view	Minor adverse and not significant
Properties at Dollymount with a view	Minor adverse and not significant
Properties at Sutton with a view	Minor adverse and not significant
Properties at Howth with a view	Minor adverse and not significant

The potential visual impact from a series of viewpoints from within the ZTV has been assessed in Section 17.4.2 above and the significance of effects can be summarised as follows:

Table 17.10 Summary of Viewpoint Assessment

Viewpoint No.	*Viewpoint Name*	*Predicted Significance of Effect (Without Mitigation)*
1	Strand Road Howth	Minor adverse and not significant
2	Sutton Strand	Minor adverse and not significant
3	Bull Island Beach	Minor adverse and not significant
4	Bull Wall	Minor to moderate adverse and not significant
5	Clontarf Slipway	Minor adverse and not significant
6	Alfie Byrne Road	Minor adverse and not significant
7	Samuel Beckett Bridge	Minor adverse and not significant
8a & 8b	Pigeon House Road	Moderate adverse and not significant
9	Beach Road	Minor to moderate adverse and not significant
10	Sandymount Strand	Minor to moderate adverse and not significant
11	Great South Wall	Major to substantial adverse and not significant
12	Blackrock	No change
13	Pigeon House Harbour	Minor adverse and not significant

17.6 Remedial & Mitigation Measures

Landscape mitigation measures are those taken to help remedy, reduce or compensate for significant landscape and visual impacts created by the development. As set out in the text above there have been no significant landscape or visual impacts predicted for the 3FM Project. There is therefore no requirement for specific landscape mitigation measures to address significant impacts.

The design evolution of the 3FM Project has been undertaken to enable incorporation of the following built-in design measures:

- Integration of constructed elements with existing elements such as existing roads and buildings;
- Appropriate colour of fencing and structures to reflect existing the port character; and
- Directional lighting.

The existing port facilities and the openness of the harbour, and the size and the nature of the development in many ways mitigate the potential landscape and visual impact of the 3FM Project offsetting potential views. In

views from across Dublin Bay towards the 3FM Project the proposals will appear to blend with existing port facilities.

It is proposed to provide additional landscape planting as an integral part of the 3FM Project on the existing berm on the southern side of Area O that will provide visual enhancement and screening in views from the direction of Sandymount.

No specific monitoring of mitigation measures is therefore proposed beyond standard maintenance and management of soft landscape works to ensure healthy plant establishment.

17.7 Residual Effects

This section of the chapter assesses the impact of the 3FM Project on the landscape character and visual receptors (previously identified in section 17.5 above), after the mitigation (described above in section 17.6) has been implemented. No significant landscape or visual impacts have been predicted for either the construction or operation stage of the 3FM Project.

Within the wider landscape the proposal will continue to blend with the existing port facilities around the site with no significant residual landscape character impacts predicted. With regards to visual impact on sensitive receptors impact on existing views will be offset by the existing visual context of the harbour landscape and also blend with the busy port activity that will continue at the port following completion of the works.

The residual landscape impact on landscape character and the significance of effects can be summarised as follows:

Table 17.11 Significance of Residual Landscape Character Effects

Landscape Character Area	*Predicted Significance of Effect (Without Mitigation)*	Predicted Significance of Effect (With Mitigation)
Harbour Based Industrial landscape	Minor adverse and not significant	Minor adverse and not significant

The residual landscape & visual effects on Planning Policy Designations and the significance of effects can be summarised as follows:

Table 17.12 Significance of Residual Landscape & Visual Effects on Planning Policy Designations

Planning Policy or Designation	Predicted Significance of Effect (Without Mitigation)	*Predicted Significance of Effect (With Mitigation)*
Dublin City Development Plan 2022 - 2028		
Views and Prospects	No change	No change
Great South Wall Architectural Conservation Area	Minor adverse and not significant	Great South Wall Architectural Conservation Area
Pigeon House Harbour Architectural Conservation Area	Minor to moderate adverse and not significant	Pigeon House Harbour Architectural Conservation Area

The residual visual impact on residential properties and the significance of effects can be summarised as follows:

Table 17.13 Significance of Residual Visual Effects on Residential Properties

Property Locations	*Predicted Significance of Effect (Without Mitigation)*	Predicted Significance of Effect (With Mitigation)
Properties at Ringsend with a view	Moderate adverse and not significant	Moderate adverse and not significant
Properties at Sandymount with a view	Minor to moderate adverse and not significant	Minor to moderate adverse and not significant
Properties at Clontarf with a view	Minor adverse and not significant	Minor adverse and not significant
Properties at Dollymount with a view	Minor adverse and not significant	Minor adverse and not significant
Properties at Sutton with a view	Minor adverse and not significant	Minor adverse and not significant
Properties at Howth with a view	Minor adverse and not significant	Minor adverse and not significant

The residual visual impact from at a series of viewpoints from within the ZTV and the significance of effects can be summarised as follows:

Table 17.14 Summary of Residual Viewpoint Effects

Viewpoint No.	*Viewpoint Name*	*Predicted Significance of Effect (Without Mitigation)*	Predicted Significance of Effect (With Mitigation)
1	Strand Road Howth	Minor adverse and not significant	Minor adverse and not significant
2	Sutton Strand	Minor adverse and not significant	Minor adverse and not significant
3	Bull Island Beach	Minor adverse and not significant	Minor adverse and not significant
4	Bull Wall	Minor to moderate adverse and not significant	Minor to moderate adverse and not significant
5	Clontarf Slipway	Minor adverse and not significant	Minor adverse and not significant
6	Alfie Byrne Road	Minor adverse and not significant	Minor adverse and not significant
7	Samuel Beckett Bridge	Minor adverse and not significant	Minor adverse and not significant
8a & 8b	Pigeon House Road	Moderate adverse and not significant	Moderate adverse and not significant

Viewpoint No.	*Viewpoint Name*	*Predicted Significance of Effect (Without Mitigation)*	Predicted Significance of Effect (With Mitigation)
9	Beach Road	Minor to moderate adverse and not significant	Minor to moderate adverse and not significant
10	Sandymount Strand	Minor to moderate adverse and not significant	Minor to moderate adverse and not significant
11	Great South Wall	Major to substantial adverse and not significant	Major to substantial adverse and not significant
12	Blackrock	No change	No change
13	Pigeon House Harbour	Minor to moderate adverse and not significant	Minor to moderate adverse and not significant

17.8 Conclusion

A Landscape and Visual Impact Assessment (LVIA) of the 3FM Project at Dublin Port during both the construction and operational stages has been completed.

The 3FM Project is located within a landscape character area identified as Harbour-Based Industrial Landscape. This landscape character area has been identified as having a low sensitivity to change. The magnitude of landscape resource change will be medium, and the significance of landscape impact will be minor adverse and not significant. The 3FM Project consists of proposals that reflect the existing character of its surroundings resulting in low change in landscape resource.

The Zone of Theoretical Visibility (ZTV) has been established for the 3FM Project to allow any potential areas of significant visual impact to be identified. Actual visual impacts from within the ZTV have been predicted by site survey and assessment during the construction and operational phase on potential views from sensitive visual receptors including residential properties.

There are large areas of Dublin and the adjacent settled coastline that will not have views of the 3FM Project due to intervening buildings and vegetation and it is only in close proximity to the site and at the coastline that there will be potential direct views from locations that include Ringsend to the southwest, Sandymount to the south and the Clontarf to Howth coast road to the north. The existing port facilities including ships and cranes and traffic are all features of the existing views from such locations, and it will be difficult to discern the new features from existing features from within the wider ZTV. For residential properties with potential views in the direction of the 3FM Project at Ringsend to the southwest, Sandymount to the south and the Clontarf to Howth coast road to the north the predicted significance of visual effect will vary from moderate to minor adverse and not significant.

A total of 13 viewpoints have been assessed and no viewpoints have been predicted to have significant visual impacts.

No significant cumulative landscape and visual effects have been predicted. Construction stage activities involve an increase in construction traffic for all cumulative projects. HGV traffic is frequent feature of this marine

industrial landscape, and the existing Dublin city road network consists of very busy roads with low potential for significant cumulative visual impacts as a result. The operational stage activities as part of the 3FM Project are sufficiently separated from any permitted or planned projects in the area surrounding the port to avoid potential cumulative effects while permitted or planned developments within the port area or so similar in character that they are difficult to discern from the existing busy port context.

As no significant landscape or visual impacts have been predicted there is no requirement for specific landscape mitigation or monitoring measures.

In conclusion the broader landscape character area and visual context around Dublin Port area has the capacity to absorb a development of this scale.