

# **Landscape and Visual Impact Assessment**

## **Project Dragon, Land at Crown Wharf (Port Talbot)**

August 2023

**Turley**

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# 1. Introduction

- 1.1 This Landscape and Visual Impact Assessment (LVIA) for the proposed development of a sustainable aviation fuel facility at Crown Wharf, Port Talbot, hereinafter referred to as 'The Proposed Scheme', has been prepared by Turley Landscape and VIA on behalf of Lanza Tech. The description of development, for which planning permission is being sought is as follows:

*"Demolition of existing structures and erection of a Sustainable Aviation Fuel (SAF) production facility, including enclosed ground flare, storage tanks, installation of pipework and electrical, processing and utility equipment, administration, warehouse and laboratory buildings, new access, car parking and transport infrastructure including a truck loading area and associated works, hard and soft landscaping, areas for temporary construction laydown, and associated development."*

- 1.2 The LVIA has been undertaken to ascertain the likely effect of the Proposed Scheme on landscape and visual receptors and determine which effects are considered 'Significant'. The Significant effects that have been identified within this LVIA are documented within Chapter 8: Landscape and Visual of the Environmental Statement (ES) that has been submitted with the planning application.
- 1.3 The LVIA is set out in seven sections. Section two provides a summary of the methodology used for the assessment. The third, fourth and fifth sections discuss the baseline situation of the Application Site and the surrounding area in terms of 'landscape character context', 'landscape elements' and 'visual amenity'. The penultimate section provides a summary of the Proposed Scheme and an appraisal of effects of the Proposed Scheme on the identified baseline situation. Finally, a summary of the appraisal and conclusions is provided in section seven.
- 1.4 The LVIA is supported by a series of appendices, which include figures and photos, and can be found within and at the end of this document. A summary of the relevant national and local planning policy is also provided at **Appendix 1**. The LVIA should be read in conjunction with the information produced to support the planning application, on which this assessment is based. As follows:
- The Development Specification set out at Volume 1, Chapter 4: Development Specification of the ES which provides a description of the Proposed Scheme.
  - The spatial plans that support the planning application prepared by Inspire Architects and the accompanying information provided in the Building Schedule (Volume 1, Figures 4.1 to 4.14 of the ES).
  - The Illustrative Landscape Strategy prepared by EDP.
  - The External Lighting Layout Drawing prepared by Technip Energies.
  - The Accurate Visual Representations of the Proposed Scheme prepared by Ocean CGI provided at **Appendix 6**.

## 2. Assessment Methodology

- 2.1 The methodology and approach adopted in undertaking this appraisal uses structured, informed and reasoned professional judgement taking into account a combination of quantitative and qualitative factors.

### Site Location and Description

- 2.2 The Site is located within the ward of Neath Port Talbot Council authority area; to the south of the main town centre and to the west of Harbour Way.
- 2.3 For the purposes of this LVIA, the site as a whole which incorporates all land within the EIA Study Area Boundary<sup>1</sup> is referred to as the 'Site'. The individual parcels within the Site are referred to as follows:
- Primary parcel of land for the location of the proposed production facility (approximately 9.1 hectares), comprising bare land adjacent to Crown Wharf (Port Talbot) (referred to as the 'Production Development Zone [PDZ]');
  - Three discrete parcels of land located within the wider Port Talbot Docks, (approximately 7.44ha) (referred to as 'Temporary Construction Areas [TCA] 1, East and West');
  - Approximately 0.87km of the unnamed port road, running adjacent to the northern boundary of the PDZ (referred to as 'Unnamed Port Road Supporting Infrastructure'); and
  - An extent of the marine environment of Port Talbot Docks, located to the north of the PDZ and the unnamed port road (referred to as the 'Marine Unloading/Loading Facility').

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<sup>1</sup> The EIA Study Area boundary is larger than the planning boundary and therefore represents the full area considered within the LVIA.



**Figure 2.1:** Site Location indicated with a red outline, 2km study area indicated with dashed red line, EIA study boundary indicated with a green line, PDZ indicated with grey cross-hatch

## Study area

- 2.4 The study area for this LVIA includes both the Site and the surrounding wider context, as illustrated in **Figure 8.1 of Appendix 3** (and **Figure 2.1** above) (Study Area). This is considered an appropriate area of study in terms of the enclosure of the Site and the scale of the Proposed Scheme.
- 2.5 The extent of the study area was informed by the field study, review of available mapping data and the production of a computer generated Zone of Theoretical Visibility (ZTV), which identifies where in the surrounding landscape the Proposed Scheme is likely to be visible. This has been modelled using the latest light detection and ranging (LiDAR) data available and the heights of the proposed buildings and plant within the PDZ. The ZTV looks at a wider 5km study area. This is included at **Figure 8.7 at Appendix 3** to this report.
- 2.6 There will be more distant areas beyond the study area with some inter-visibility with the Site. However, it is considered that the effects on receptors beyond these areas would be so minor that detailed assessment is not warranted. This approach is supported by GLVIA3 which states that the scale of assessment should be appropriate and proportional to the nature of the proposed development. The study area for the

landscape and visual assessment was therefore identified as an area within 2km from the Site.

## Surveys

- 2.7 A preliminary desk study was undertaken to establish the physical components of the Site and its surroundings. Potential key visual receptors with views towards the Site from the surrounding area were also identified. Ordnance Survey (OS) maps and aerial photography were utilised to identify these features.
- 2.8 A field study to the local area was undertaken by a chartered landscape architect from Turley Landscape and VIA in September 2022, during which the visibility was moderate to good. The field study recorded the surrounding context's landscape features and identified the key visual receptors in the local area. It also involved travelling throughout the study area and producing a working photographic record. The baseline photography for the visualisations was captured in December 2022. No material changes to the baseline situation have occurred since this time.

## Methodology

- 2.9 The methodology and approach adopted in undertaking this assessment uses structured, informed and reasoned professional judgement taking into account a combination of quantitative and qualitative factors.
- 2.10 The appraisal is carried out in accordance with the Guidelines for Landscape and Visual Impact Assessment, Third Edition<sup>2</sup>; An Approach to Landscape Character Assessment<sup>3</sup>; the Landscape Character Assessment: Technical Information Note 08/2015<sup>4</sup>; and, Visual Representation of Development Proposals<sup>5</sup>. The methodology is set out in full at **Appendix 2**.

## Consultation

- 2.11 The identified location of representative viewpoints and visualisation types were discussed with the planning team at Neath Port Talbot County Borough Council (NPTCBC) on 04/08/2022 to agree the scope<sup>6</sup>. Following the Site visit further correspondence was undertaken by email, a response was received from the Council on 10/11/2022 confirming the location of viewpoints was acceptable.

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<sup>2</sup> The Landscape Institute and the Institute of Environmental Management and Assessment (Third Edition 2013) *Guidelines for Landscape and Visual Assessment*

<sup>3</sup> Christine Tudor, Natural England (2014) *An Approach to Landscape Character Assessment*

<sup>4</sup> Landscape Institute (2016) *LI Technical Information Note 08/2015*

<sup>5</sup> Landscape Institute (2019) *Visual Representation of Development Proposals, Technical Information Note 06/19*

<sup>6</sup> Note: At the time of consultation the scheme proposals included an 80m tall stack. This was subsequently reduced to 59m.

### 3. Landscape Character Context

- 3.1 A review has been undertaken of the published national and borough landscape character assessments and the associated character areas that the Site falls within. The Landscape Character Areas (LCA) that fall within and around the study area are illustrated in **Appendix 3, Figures 8.2 and 8.3**.
- 3.2 The key landscape character assessments of relevance to the Site were identified as:
- National level:
    - National Landscape Character Areas (NLCA);
    - National Marine Character Areas; and
    - LANDMAP Aspect Areas, as set up by Natural Resources Wales.
  - Borough level:
    - Neath Port Talbot LANDMAP Landscape Assessment (2004), by White Consultants.
    - Carmarthen Bay, Gower and Swansea Bay Local Seascape Character Assessment (2017), by White Consultants & Cardiff University.
- 3.3 Consideration has also been given to whether the Application Site's landscape elements reflect and contribute to the characteristics of the relevant areas.

#### National Landscape Character Assessments

##### National Landscape Character Areas

- 3.4 The National Landscape Character Areas, as set out by Natural Resources Wales, identify broad landscape areas throughout Wales. A description is given for each of the area's distinctive natural, cultural and perceptual characteristics. The Site sits fully within the National Landscape Character Area 38, Swansea Bay. The key characteristics of this area which relate to the Site and landscape setting are described as:

*"Narrow coastal plain – a long lowland area, of limited width in its middle section, between uplands and the sea, and opening out into wider lowland areas at either end.*

*Extensive soft coastline - sand dunes and sweeping sandy beaches and lagoons. Kenfig dunes /lagoon have important species including fen orchid and medicinal leech. Relict, prehistoric and later period landscapes, successively buried by windblown sand.*

*Setting of steeply rising hills – in the central section around Port Talbot, and belonging to South Wales Valleys to the north.*

*Urban areas - dominated by the city of Swansea and the coalescing towns of Llanelli, Neath and Port Talbot. Swansea, with its strong architectural heritage and cultural importance forms a regional focus. Housing and business planned in large estates.*

*Heavy industry – giant apparatus with large buildings and chimneys with steam issuing focussed at Port Talbot, with dominating visual and audible presence."*

### Marine Character Areas

3.5 As identified by Natural Resources Wales, the Marine Character Areas *‘highlight the key natural, cultural and perceptual influences that make the character of each seascape distinct and unique.’* These character areas provide the strategic spatial evidence on seascapes and have informed the Wales National Marine Plan. Each area profile includes a description of the key characteristics, including their natural, cultural and perceptual influences, as well as land – sea inter-visibility maps.

3.6 The wider Port Talbot area and the Site sit adjacent to MCA 26 Swansea Bay and Porthcawl, its key characteristics which relate to the setting of the Site are as follows:

*“Large south and south-easterly facing bay backed by a developed coastal plain with pockets of sparsely settled coastline, backed in part by steeply rising hills inland.*

*Varied coastline between development, including estuaries (of the rivers Tawe, Neath, Afan and Cynffig), sandy bays, dunes and low limestone cliffs and pavements.*

*A busy seascape, with major port-related development and the Port Talbot steelworks forming strange geometric apparatus; chimneys and smoke plumes dominating the landward skyline.”*

3.7 The Character Area statement also includes a detailed description of Port Talbot, identifying its importance as an industrial dock:

*“Further down the coast lies Port Talbot, established in the late 19th century to challenge the dominance of Swansea and Cardiff ports. The new port capitalised on the local production and export of coal, peaking at over three million tonnes in 1927. The original port was upgraded to a deep-water Tidal Harbour in 1970, serving the major steelworks developed in the 1950s (still one of the largest in Europe), as well as BP’s chemical plant at Baglan Bay (now a power station and business park). Recognised as a nationally strategic deep-water port, Port Talbot now handles around nine million tonnes of cargo, specialising in the imports of coking coal, minerals and ores as well as a wide variety of general materials. A number of outfall pipes, diffusers and dumping grounds relating to the surrounding industry and urban development are submerged beneath the bay.”*

### LANDMAP Character Assessment

3.8 LANDMAP is a national information system for Wales, produced by Natural Resources Wales (NRW) which allows for landscape data to be collated within a nationally consistent dataset. LANDMAP Guidance Note 1, Section 5.1 identifies the role and scope of LANDMAP as a tool:

*“LANDMAP is a whole landscape approach that covers all landscapes, designated and non-designated, it covers the natural, rural, peri-urban and urban areas, (excluding the Cities of Cardiff and Swansea), it includes inland waters and coastal areas to the low water mark. LANDMAP is an all-Wales GIS (Geographical Information System) based landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent data set. In Wales,*

*LANDMAP is the formally adopted methodology for landscape assessment and is advocated by Planning Policy Wales.”*

- 3.9 The LANDMAP Dataset has five spatial datasets which have been given an overall evaluation value by NRW. These give an indication of the landscape values associated with each of the LANDMAP aspect areas. The aspect areas are as follows:

*Geological Aspect Areas **Figure 8.2.1, drawing no.8.2.1***

*Landscape Habitats Aspect Areas **Figure 8.2.2, drawing no.8.2.2***

*Visual and Sensory Aspect Areas **Figure 8.2.3, drawing no.8.2.3***

*Historic Landscape Aspect Areas **Figure 8.2.4, drawing no.8.2.4***

*Cultural Landscape Aspect Areas **Figure 8.2.5, drawing no.8.2.5***

- 3.10 LANDMAP Landscape Values are as follows:

*Outstanding: nationally important*

*High: regional or county importance*

*Moderate: local importance*

*Low: Little or no importance*

- 3.11 The Visual and Sensory aspect areas (**Figure 2, drawing no.2.3**) are considered most relevant to this LVA and are recommended by Natural Resource Wales as a starting point for landscape character analysis in LVIA work<sup>7</sup>.
- 3.12 Relevant LANDMAP aspect areas located within the locality of the Site are included in **Table 3.1**.

**Table 3.1: LANDMAP Aspect Areas within the Site**

Code	Name	Overall Evaluation of Landscape Value provided in LANDMAP
<b>Geological Aspect Areas</b>		
NPTGL032	Margam	Low
<b>Landscape Habitats</b>		
NPTLH063	(Not Identified)	Moderate

<sup>7</sup> <https://naturalresourceswales.gov.uk/guidance-and-advice/business-sectors/planning-and-development/evidence-to-inform-development-planning/using-landmap-in-landscape-and-visual-impact-assessments-gn46/?lang=en>

Code	Name	Overall Evaluation of Landscape Value provided in LANDMAP
<b>Visual and Sensory Aspect Areas</b>		
NPTVS837	Margam Works	Low
<b>Historic Landscape Aspect Areas</b>		
NPTH1006	Port Talbot Industrial	Moderate
<b>Cultural Landscape Aspect Areas</b>		
NPTCLS091	Margam Works	n/a

- 3.13 The relevant LANDMAP Visual and Sensory aspect areas located within the 2km study area and overall evaluation are included within **Table 3.2**.

**Table 3.2: LANDMAP Visual and Sensory Aspect Areas within Study Area**

Code	Name	Overall Evaluation of Landscape Value provided in LANDMAP
<b>Visual and Sensory Aspect Areas</b>		
NPTVS587	Port Talbot / Sandfields / Margam	Low
NPTVS397	M4	Low
NPTVS697	Margam Sands / Aberavon Sands	High
NPTVS297	Swansea Bay	High
NPTVS187	Mynydd Dinas	High
NPTVS811	Margam Scarp	High
NPTVS916	Cwm Dyffryn	High
NPTVS897	Mynydd Bromil & Scarp tops	Moderate

## Borough Landscape Character Assessment

### Neath Port Talbot LANDMAP Landscape Assessment (December 2004)<sup>8</sup>

- 3.14 A more detailed landscape character assessment was carried out by NPTBC. This assessment was based on LANDMAP. The Landscape of Neath Port Talbot includes a variety of types of landscapes which are described throughout the document. The Character Areas relevant to the Study Area are illustrated in **Appendix 3, Figure 8.3**.
- 3.15 The Site sits within Character Area 50 – Port Talbot Docks & Margam Works. An excerpt from the character assessment can be found in **Appendix 4**, and is described as follows:

*“This entirely industrial and port area is situated on the coastal margin of the Margam Moors in the south of the County Borough. It lies between approx 10m AOD and 20m AOD on a geology of marine alluvium fringed by a storm gravel beach.”*

- 3.16 Key visual and sensory characteristics of this area include:

*Industrial area sited on coastal plain;*

*Dominance of steel works;*

*Development of smaller commercial units;*

*Docks constitute large expanse of water.*

- 3.17 The Site is considered to be representative of the described characteristics of Character Area 50 – Port Talbot Docks & Margam Works.
- 3.18 Within the wider Study Area, the following Character Areas are relevant for this assessment and have informed further analysis at a local level in **Section 4**:

Character Area 6 - Mynydd Bromil, Mynydd Emroch & Mynydd Dinas

Character Area 8 – Goytre Valley

Character Area 49 – Port Talbot, Sandfields, Baglan & Margam

Character Area 52 – Margam Sands/Aberavon Sands

### Carmarthen Bay, Gower and Swansea Bay Local Seascape Character Assessment (2017)

- 3.19 The study defines Seascape Character Areas (SCAs) within the structure of National Marine Character Areas (MCAs) established at the national level by the National Seascape Assessment for Wales.
- 3.20 The Site sits adjacent to SCA 9- Swansea Bay East, and is summarised within the Seascape Character Assessment as:

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<sup>8</sup> White Consultants. 2004. *Neath Port Talbot LANDMAP Landscape Assessment*.

*'The SCA forms the eastern part of a wide, sweeping shallow muddy sand bay with wide beaches exposed to the prevailing south westerly winds. The River Neath and River Afan enter the bay here. There are dunes either side of the Neath and Crymlyn Burrows is an SSSI. There is a dredged channel with training walls to the Neath and a deep dredged channel serving the tidal harbour at Port Talbot steelworks. The bay is used by commercial vessels, mainly to Port Talbot, and to an extent by leisure boats but less intensively than to the west. The enclosing hills in the hinterland are relatively unspoilt and form an important backcloth to the bay. The primary visual focii are the huge steelworks structures and cranes. Key views are from the popular Aberafan seafront and beach across the bay to the Mumbles.'*

## 4. Baseline Landscape Appraisal

### Landscape Designations

- 4.1 The Site is not located within any identified national, regional or local landscape protection designation. There are a number of landscape or heritage related designations in the surrounding area which are illustrated at **Figure 8.5** of **Appendix 3** and described in the following paragraphs.

### Special Landscape Areas (SLA's)

- 4.2 Policy EN2 of the Local Development Plan, Landscape and Seascape Supplementary Planning Guidance provides detail on Special Landscape Areas (SLAs). These areas are described as follows:

*"These are areas of high landscape quality, identified using criteria set out in the Countryside Council for Wales Guidance Note 1 (2008) (now superseded by NRW LANDMAP Guidance Note 1(15))."*

- 4.3 SLA4 Margam, is located on the eastern edge of the study area, c.1.1km to the east of the PDZ (at its closest point). The following features and characteristics are identified within the Supplementary Planning Guidance as follows:

*"Mynydd Margam is a broad, low lying plateau of NE dipping Productive Coal Formation mudstones and coals between South Wales Pennant Formation escarpment and E-W Millstone Grit ridge to the South, dissected by shallow, alluvium filled valleys of tributaries and the main Cynfig valley. It includes mine workings and the proposed deep mine.*

*Cultural features in the landscape include evidence of prehistoric and later agricultural practices, rural settlements and contemporary forestry activities.*

*It is an evolved landscape containing multi-period cultural expressions untrammelled by industrial exploitation - extensive archaeological evidence of land husbandry, now given over to forestry interspersed with some small farms and thus is a comparatively rare example of a surviving relict landscape.*

*The SLA, which contains Margam Park, with its exceptional examples of architecture; its history as a major Cistercian Abbey and the wider monastic landholdings, provides a combination of high grade historic visitor attraction and a variety of multi-period pleasure grounds. It contains cultural elements dating from pre-history through every period up to the 21st century.*

*Whilst the SLA contains areas of forested upland these are important to the overall historical context of the area and could be managed to enhance the landscape quality of the wider area.*

*The scenic quality of the area is enhanced by the historic buildings of the Park and the backdrop of scarp creating a sheltered setting which link visually and provide the integrity of the whole. The sense of place for the park is initially prompted with*

*boundary walls and entrance gates. The historic core and deer park make this area unique within the County."*

#### **Registered Landscapes of Outstanding and of Special Interest in Wales**

- 4.4 Margam Mountain, also located on the eastern edge of the study area, c.1.1km to the east of the PDZ, is registered as a Landscape of Outstanding and of Special Interest. Cadw, in partnership with the Countryside Council for Wales (CCW) and International Council on Monuments and Sites (ICOMOS UK) has compiled a Register of Landscape of Historic Interest in Wales, which identifies 58 landscape of outstanding or special historic interest (non-statutory).
- 4.5 Detailed characterisation studies have been compiled by four Welsh Archaeological Trusts, which are used by local government and developers to assess the impact of development proposals on the historic landscape.
- 4.6 The attributing characteristics of this landscape as follows:

*"Margam Mountain is a distinctive block of South Wales uplands on the south west fringe of the Glamorgan Blaenau, where they meet the Bro and overlook and visually dominate the narrow coastal plain near the modern port and industrial town of Port Talbot. From the coastal plain just above sea level, the flanks of the mountain rise steeply to a series of more gentle slopes and plateaux between 200m and 300m above OD, with local crests reaching over 300m above OD, the highest of which is Margaam Mountain itself, at 344111 above OD, in the centre of the area. The whole mountain is dissected and indented by several ravines and small wooded valleys or cwmoedd, each with a small stream rising in peat bogs near the crest."*

- 4.7 A full description of the designation is provided within **Appendix 5**.

#### **Registered historic parks and gardens**

- 4.8 To the north-east of the Site, the Talbot Memorial Park, Port Talbot is registered as Grade II under the Register of Historic Parks and Gardens Wales.

#### **Landscape Elements**

- 4.9 The following elements have been identified as contributing to the landscape character of the Site and its surrounding context. They also influence the inter-visibility between the Site and the study area.

#### **Land Use**

- 4.10 The Site comprises brownfield industrial land, which has slowly re-greened over a prolonged period of non-use, plus access road. A review of historic mapping described in the Archaeology and Heritage Assessment by EDP (submitted as a stand alone application report) states that historic on site process recorded in the PDZ included coal works, railway lines, copper works, metal refinery works/steel ceilings factory, wagon repair shop and associated warehouses, depots and factory buildings. All buildings within the PDZ were recorded to have been demolished by 2009. Existing warehouses, storage tanks and service yards as part of former industrial uses remain TCA East and warehouses have recently been demolished from TCA West.

- 4.11 The land use in immediate proximity to the Site includes Hanson Cement Works to the north, and the operational Port Talbot Steelworks owned by Tata Steel UK, to the south. Across Crown Wharf to the north, industrial uses prevail with associated vehicular, rail, and marine transport facilities.
- 4.12 Within the Study Area, the River Afan to the north, and the railway line to the east of the Site, mark a distinct change in land uses to predominantly residential areas, until development gets restricted by the steep nature of the mountain ranges to the east.

### **Topography**

- 4.13 There is little variation in topography within the Site, which is relatively flat at approximately 8 m above ordnance datum (AOD). Levels within the PDZ gently rise from 7.7m AOD in the north east corner of the area, to c.9m AOD along the southern boundary with a small mounded area being higher at around 9.6m AOD, towards the middle of the southern side of the PDZ.
- 4.14** Beyond the Site, the wider study area sits within a low lying coastal plain to the north of Margam Moors which is characterised as low-lying enclosed wetland pasture set on reclaimed salt marsh. To the east of the town, the landform rises steeply to three mountain peaks which create a ridge that runs in a north south orientation and forms the edge of the town on the eastern side. These comprise respectively of Mynydd Dinas (Peak 258 metres AOD), Mynydd Emroch (Peak 241 metres AOD) and Ergyd Isaf (Peak 255.9 metres AOD). Two rivers run between these landforms: River Afan and Nant Ffrwd Wyllt. Both rivers run to the north of the Site. The topography of the Study Area is illustrated in **Figure 8.6 of Appendix 3**.
- 4.15 Due to the surrounding topography, the town of Port Talbot, and the Site are largely screened from the wider landscape of South Wales.

### **Movement**

- 4.16 The Site sits within the ABP Port of Port Talbot accessed via a secure gatehouse so public is prevented.
- 4.17 The PDZ is currently accessible by road and sea. A private road - Pheonix Way wraps along the northern and eastern boundaries of the PDZ, with access via the West Gate entrance of Port Talbot Steelworks. To the east of the Site, Harbour Way (A4241) runs in a north-south direction connecting the town centre of Port Talbot to the M4. Part of Harbour Way runs adjacent to Temporary Construction Area 1 (TCA1).
- 4.18 The Llanwern Iron Ore Branch, an unused railway track, abuts the PDZ to the south, running in a west-easterly direction. To the east of the Site, the railway connecting Bridgend, Port Talbot and Swansea runs in a north-south orientation, parallel to the M4 which sits further to the east beyond the suburbs of Margam and Taibach.
- 4.19 Outside the steelworks compound, the closest public identified pedestrian and cycling routes<sup>9</sup>, are at Harbour Way Roundabout, immediately to the east of Port Talbot Docks as identified in **Figure 8.5 of Appendix 3**. There are no public rights of way (ProW)

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<sup>9</sup> Welsh Government. Active Travel Approved Routes.

crossing the Site. Within the wider study area, the closest footpath is the Wales Coastal Path, which includes routes 887 and Route 4 of the National Cycle Network (NCN).

#### **Built Form and Landmarks**

- 4.20 There are no buildings within the PDZ or TCA1, existing built form is limited to small areas of hardstanding, associated with the areas that were previously developed. At the time of the site visit there was no physical boundary delineating the Site from the wider industrial compound, however, a Heras metal fence was being erected around the PDZ and has since be completed. Small scale industrial buildings/porta cabins remain in TCA East.
- 4.21 Located immediately to the north of the PDZ, is the monolithic Hanson Cement Plant with metal cladding in cream colour. To the south and east, the steelworks have a dominant industrial character that is characterised by its built form which comprises of large scale warehouse and processing plants, conveyer belts, vent stacks, flares and silos. There are two very tall existing vent stacks in close proximity to the Site, these have an approximate height between 120m and 135m. These taller structures create prominent visual landmarks, visible and recognisable from the surrounding landscape and townscape of Port Talbot.



**Figure 4.1:** View from south west corner of the Site looking north-east showing the Hanson Cement Plant to the north (left) and the disused Ore branch railway track to the south (right).

- 4.22 Within the wider Study Area, the town of Port Talbot is low density with residential streets comprising typically two storey terraced and semi-detached houses, typical materials include brick, pebbledash, reconstituted stone, rendered facades and pitched tiled roofs. The Local Development Plan 2011-2026 Neath Port Talbot County Borough Council (NPTCBC LDP) describes how settlements developed around industry within the area:

*“The key characteristics of most of the County Borough's other towns and villages derives largely from the area's industrial heritage, from the mining and metal working of the early industrial revolution through to the large scale steel and petro-chemical industries of the 20th Century.”*

- 4.23 The LDP describes, in greater detail, the characteristics of the town centre of Port Talbot:

*“Port Talbot has a more modernist character having been substantially rebuilt in the mid 1970s with the construction of a new road system, the Aberafan shopping centre, the civic centre and associated developments.”*

- 4.24 Other built landmarks within the town include Eglwys St Theodore Church (Grade II\* Listed), Church of St Mary (Grade II Listed) and the Railway Station which was constructed in 2016. The natural landforms of the three mountain peaks also provide strong natural landmarks and contribute to the town’s sense of place.

#### **Materiality**

- 4.25 The palette of materials seen in the immediate surroundings of the Site includes large aluminium clad and brick processing plants, metal conveyors and piping, metal flares, concrete vent stacks and cooling towers and smaller ancillary buildings constructed of metal and brick.
- 4.26 The main materials within Port Talbot town are brick and pebble dash render owing to the majority of buildings being of 20<sup>th</sup> century construction. Development before this period was largely focused around the north of the town in the area of St Marys Church.

#### **Vegetation and Public Open Space**

- 4.27 Aside from a group Leyland cypress trees on the eastern boundary of the PDZ, the Site comprises mainly self-seeded trees and shrubs, including Japanese Knotweed which is classified as an invasive species in the UK, and controlled plant under the Wildlife and Countryside Act 1981. A detailed Tree Survey was conducted by The Environmental Dimension Partnership (EDP) in July 2022 (available in Arboricultural Baseline Report (inc. Tree Survey)), submitted as a stand alone application report). The survey identified 64 individual trees and 62 groups of trees; the group of Leyland cypress was categorised as B (moderate arboricultural quality and value), while the rest of the vegetation was categorised as C (low arboricultural quality and value) or U (considered unsuitable for retention).
- 4.28 Within the immediate surrounding area, and due to the functioning industrial use of the steelworks, open space is limited to peripheral ‘left-over’ areas between processing and stock-piling areas. These are largely unmanaged areas of semi-improved grassland and scrub. These areas have no public access. The scrub and grassland within the PDZ and the three TCAs contribute to a green edge to the Port Talbot Docks which is seen in some views from the wider area.

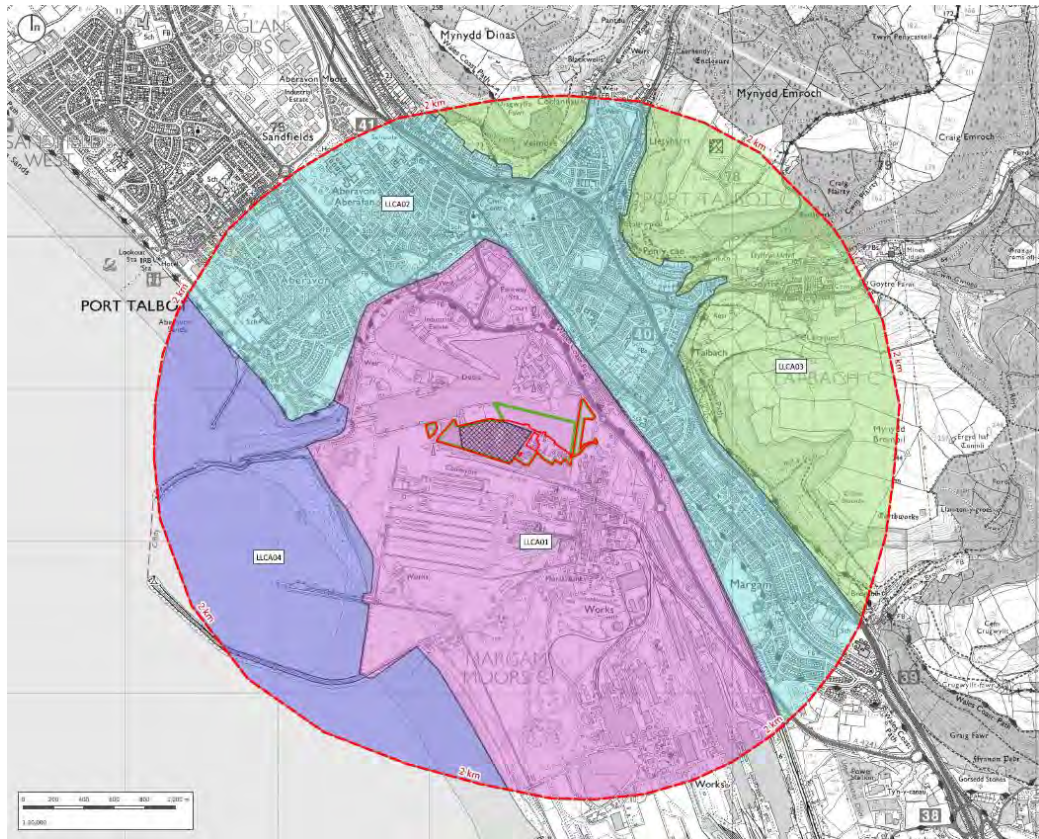


**Figure 4.2: Vegetation within the Site.** Category C small trees and shrubs on the left, Category B Leyland trees on the right.

- 4.29 To the east of the Site, beyond Harbour Way and the railway corridor, sit several open spaces within and adjacent to the suburb of Margam. This includes Groeswen Playing Fields, Tata Sports and Social Club and Talbot Memorial Park, identified as Registered Historic Parks and Gardens. Open spaces on the north-west side of the study area, include sports fields (Little Warren Playing Fields, Port Talbot Town FC) and Vivian Park, an urban Park with playing field and a War Memorial.

#### **Local Landscape Character**

- 4.30 The landscape character context of the Site at national and borough level is set out in **Section 3**. To identify landscape character receptors at a scale relevant to the Site and wider Study Area, further assessment has been undertaken at a local level to understand the more detailed key characteristics and local variations in character.
- 4.31 Within the study area, the key changes in landscape character relate to topography, the enclosure of the landscape, extent of built form, the influence of human activity and vegetation. Four Local Landscape Character Areas (LLCA) were identified (refer to **Figure 8.4** of **Appendix 3** (and **Figure 4.3** below) that reflect these local variations. These LLCAs follow the boundaries of those identified at Borough Level and the description of character has been informed where relevant by the published assessments and site visit. The key characteristics of each of these LLCAs are described below.



**Figure 4.3: Local Landscape Character Areas (LLCA)**

#### **LLCA1 – Industrial Foreshore**

- 4.32 The Site lies within this LLCA which is an area of low-lying land to the edge of the Swansea Bay shoreline. This area is predominantly occupied by industrial uses with the Port Talbot steelworks dominating large parts of this LLCA. To the north of the LLCA, lighter industrial estates are located within the area to the north of the dock and around the River Afan.
- 4.33 Access and movement within this area is principally focused around Harbour Way, a four lane road which runs along the eastern edge of the steelworks site compound. The road connects the town to the north with the M4 in the south. The road is landscaped, with areas of tree and shrub planting around main junctions, and mixed tree planting of whips planted in swathes along the extent of the road. Other soft landscape features in this area are limited to unmanaged areas around the edges of industrial sites and adjacent to the rivers.
- 4.34 Built form in this area is predominantly large in scale, with the majority of buildings being corrugated metal structures, owing to the industrial character of the area. The scale of buildings, road infrastructure and limited landscape features gives a feeling of exposure, vastness and a landscape which is not human in scale. The horizon line is regularly broken by large scale structures associated with the industrial uses of the area such as existing emission vent stacks, flares, and cooling towers. These structures are arranged in an irregular nature, owing to the historical expansion of the steelworks site, and practicality of operations on site. The Hanson Cement works, which is located

to the north west of the PDZ (outside of the Site) is a dominant structure in the landscape.

- 4.35 The area has a low sense of tranquillity due to regular movement of large vehicles associated with the industrial area and sounds and sights produced by the steelwork process. LLCA1 does not form part of a designated landscape. The area has a low scenic quality and overall comprises a degraded landscape. LLCA1 has been assessed as having a **low value**.



**Figure 4.4: Industrial Foreshore.**

#### **LLCA2 – Port Talbot Town**

- 4.36 The main residential area of Port Talbot sits to the north of the Site, with smaller suburbs of Margam and Taibach situated to its eastern edge. The town layout has developed in the lower areas of land associated with the coastal plain, with development being largely restricted by the steep nature of the mountain ranges to the east and Swansea Bay and industrial land to the west. The town is linear in character due to these physical constraints (both natural and man-made).
- 4.37 The town is made up of largely low-density residential areas, particularly within the Study Area. In the wider context, other land-uses include a retail centre at the Aberafan Shopping Centre, Baglan Industrial Park and Neath Port Talbot Hospital. The majority of residential areas in the Town consist of two storey terraced housing, particularly within the Margam and Taibach areas. There are a wider variety of house types in the areas of Pen-Y-Cae (to the base of Mynydd Emroch) and Aberavon (to the north west of the river Afan) including semi-detached and detached dwellings.
- 4.38 The M4 runs through this area, which partly runs in an elevated section over part of the town. This major motorway is particularly noticeable in areas to the east of the town, where it has a strong physical presence. The noise created by the motorway also

creates background noise which is noticeable in ranging levels from areas of the town, particularly within the eastern edge (Margam, Taibach and Pen-Y-Cae).

- 4.39 The large scale surrounding elements of the mountain range, industrial developments and M4 corridor are noticeable from a wide area of the town and create strong contrasts in scale. Built form within the town itself is more human in scale and typically of average architectural quality.
- 4.40 There are a number of statutory listed buildings and structures within LLCA2, including Talbot Memorial Park, a well preserved urban park with mature trees, identified as Grade II\* Listed on the Register of Landscape, Parks and Gardens of Special Historic Interest in Wales, the Grade II\* listed Church of St Theodore, the War Memorial, the Beulah Calvinistic Methodist Chapel and the Ebenezer Chapel. LLCA2 has been assessed as having an **ordinary value**, due to having some listed buildings, but generally little scenic quality with potential for substitution.



**Figure 4.5: Port Talbot town.**

#### **LLCA3 – Margam, Emroch & Dinas Mountains**

- 4.41 Margam, Emroch & Dinas Mountains are the three mountains which enclose the eastern urban extent of Port Talbot town. The character of these mountains is a stark contrast to the urban character of the town itself and industrial area, and the steep topography emphasises the sharp transition between urban and rural areas. Wind turbines on Margam Mountain are the only man-made structures visible on the mountain from Port Talbot.
- 4.42 The vegetation of the mountain includes large areas of native thicket including species such as bracken, bramble and broom; with some small trees dispersed around lower areas associated with field boundaries such as hawthorn, birch and hazel. Large areas

of grassland appear to be managed by pastoral grazing, with pockets of mature trees on the slopes.

- 4.43 A Section of the Wales Coast Path (WCP) runs along the western flank of the mountains, overlooking Port Talbot. From this PRoW, the industrial areas of Port Talbot have a strong presence on the LLCA's sense of open countryside, with the noise and visible workings of the steelmaking process reducing the sense of serenity and remoteness. The M4 motorway detracts from the sense of tranquillity experienced within the western extent of this open rural area.
- 4.44 Margam Mountain is designated as Special Landscape Area and as Registered Landscape of Outstanding and Special Interest, LLCA3 is considered to have **high value** due to its designations, notable recreational value and the moderate to high scenic quality of parts of the landscape within the Study Area.



**Figure 4.6: Margam Mountain**

#### **LLCA4 – Swansea Bay**

- 4.45 Swansea Bay is a wide muddy sand bay which forms part of the northern edge of the Bristol Channel. The bay is used by commercial vessels accessing Port Talbot, and some leisure boats. The character of the bay is wide in nature, with long open views between the urban areas of Port Talbot, Swansea and Mumbles.
- 4.46 Port Talbot is located to the east of the bay; from this side of the bay the large scale steelworks structures and cranes dominate the shore line. Wide beaches exposed to the prevailing south westerly winds form the main natural elements of this area. Wider views beyond the bay are limited by the scarp slopes to the east, which form a backdrop to this landscape character area and are an important physical element on the horizon.

- 4.47 Aside from the grade II listed Harbour Watch Tower, LLCA4 is not covered by any designation. LLCA4 is considered to have a **medium value** due to its notable recreational value and moderate scenic quality.



**Figure 4.7: Swansea Bay**

#### **Summary of Landscape Receptors**

- 4.48 The landscape comprises a number of resources or receptors; these are defined within GLVIA3 as the *‘constituent elements of the landscape, its specific aesthetic or perceptual qualities and the character of the landscape in different areas’*. These form the elements or ‘units’ which need to be considered when assessing the potential landscape effect of a proposed development or other change. The final stage of the baseline landscape appraisal was therefore to identify the key landscape receptors with potential to be affected by the redevelopment of the Site. The landscape receptors are outlined in **Table 4.1**

**Table 4.1: Landscape Receptors**

Landscape Receptor	Landscape Value
<b>LLCA1 – Industrial Foreshore</b>	Low
<b>LLCA2 – Port Talbot Town</b>	Ordinary
<b>LLCA3 – Margam, Emroch &amp; Dinas Mountains</b>	High
<b>LLCA4 – Swansea Bay</b>	Medium
<b>Vegetation on Site</b>	Low

## 5. Baseline Visual Amenity Appraisal

- 5.1 The visibility of the Site has been established through both a desktop analysis of the surrounding area and by confirming on Site the localised screening effect of the landform, vegetation and built form.
- 5.2 The visibility of the Site and potential visibility of the Proposed Scheme has been further assessed using aerial imagery and the ZTV generated in GIS provided in **Figure 8.7 of Appendix 3**. The ZTV mapping utilises LiDAR data with 1m and 2m grid resolution, incorporating available information on existing topography, built form and mature vegetation. The heights of the proposed buildings and plant within the PDZ as defined in Chapter 4 of the ES were utilised in the production of the ZTV. Because fixed height information for the TCAs and the Marine Unloading/Loading Facility are not known, these were not included in the ZTV. The heights of proposed structures modelled in the ZTV also take into account a proposed ground level across the PDZ at +8m AOD. The blue colour on the ZTV indicates where in the surrounding landscape the proposed structures within the PDZ would potentially be visible. The grey/white areas demonstrate parts of the landscape where the Proposed Scheme is likely to be obscured.
- 5.3 The ZTV was produced for an area within a 5km radius of the PDZ. There are likely to be some more distant viewpoints beyond this from which the Proposed Scheme would be visible, but it would appear as a very small feature in the background of the view, in the context of the industrial scale and character of Port Talbot's industrial foreshore. As such, visual impacts from this distance would not be significant or material to the decision-making process.
- 5.4 As demonstrated by the ZTV, the principal areas where the Site and any proposed development within the PDZ would be visible are the areas around Port Talbot Docks to the north; sections of the M4 and Harbour Way, particularly as the latter passes closer to the PDZ and TCA1; other streets with vistas orientated towards the PDZ (Afan Way, Darwin Road, Aberavon Rd, Talcennau Rd, Abbey Rd); and potential glimpsed views from areas of public open spaces within the study area. The ZTV also indicates that views would be possible from sections of the Wales Coastal Path Route 4.
- 5.5 During the Site visit it was confirmed that views from public open spaces (namely Talbot Memorial Park and Vivian Park) towards the Site were restricted by mature vegetation within the parks and the intervening built form. Potential glimpsed views would be possible from the playing fields, which in the case of Talbot Memorial Park are outside the statutory designation, and at Vivian Park are gated and not publicly accessible outside event days.

### Existing Visibility

- 5.6 The extent of visibility of the existing Site is limited by its topography, undeveloped state and the influence of surrounding mature vegetation and built form. Due to the lack of structures within the Site and distance from publicly accessible areas, there are limited existing views of land within the Site. The Hanson Cement works, which is

located to the north west of the PDZ (outside of the Site) is visible from the surrounding area, with a height of approximately 40m, it gives an indication of the potential visibility of future development within the PDZ.

- 5.7 The Site is visible from the north side of 'LLCA1- Industrial Foreshore,' due to the open character of this area. From 'LLCA2- Port Talbot Town', views towards the Site are obstructed by intervening built form and vegetation within the town, however, views of the existing cement works are possible from streets aligned toward the Site and its immediate surroundings, give an indication of the potential visibility of future development. Visibility of the Site from 'LLCA3 – Margam Mountain', is greater due to its elevated topography, allowing for open views of the Site from certain areas.

### Key visual receptors and representative views

- 5.8 Visual receptors are defined as individuals and/or defined groups of people who have the potential to be affected by development on the Site. These include users of public highways, public rights of way and public open space.
- 5.9 In most assessments, unless specifically requested by the Local Planning Authority, visual receptors are restricted to groups of people in publicly accessible places. Normally, views from private residential properties are not included as changes to private views are not a planning consideration<sup>10</sup> unless the development is likely to be so overbearing or dominating that they could result in unacceptable living conditions and therefore a change to their residential visual amenity. For this project this has not been specifically requested, and given the distance of the Site (and the Scheme within it) to the nearest residential properties, it is not expected that such changes could arise. The closest residential properties to the PDZ are located c. 900m at Darwin Road to the west, and c. 500m at Lower West End to the east of the PDZ. The temporary construction area is located closer to properties at Lower West End at distances of c.70m. Views from these properties are restricted by a close board timber fence running alongside Harbour Way and the lack of windows to the west facing elevations. The properties are also set on lower ground levels to Harbour Way. As a result, whilst the construction works would be visible for a temporary period, the impacts on views would be limited and would be read in context with the existing steel works.
- 5.10 Due to distance from the PDZ and the existing development within the intervening area, it is not anticipated that any proposed development would be overbearing or result in unacceptable effects on visual amenity. Consequently, the impacts on views experienced by private residents are not likely to be significant and will not be considered further in the ES. An analysis of the impacts on views experienced by residents on Lower West End is provided at Section 6 of this LVIA to document these changes to views.
- 5.11 Key visual receptors with existing views towards the Site have been identified and the existing views from these are summarised in **Table 5.1** below.

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<sup>10</sup> Aldred's Case in 1610 established in English law that views from private property cannot be protected.

**Table 5.1: Visual Receptors baseline assessment**

Receptor	Commentary
Road users on Harbour Way / A4241 <i>Representative Views (RVs) 1 &amp; 2</i>	<p>Harbour Way (A4241) runs in a north-south direction connecting the town centre of Port Talbot to the M4. The route is used by cars and to lesser extent by cyclists and pedestrians, gaining access to employment and commercial areas surrounding the Site. The northern part of the route has a dedicated path for cyclists and pedestrians as part of the Route 4 of the NCN, and the WCP which is considered as a separate receptor.</p> <p>Views from the road are open in character, framed by industrial uses to the west, and a wide grassed verge to the east, beyond which low rise residential buildings are visible. The Margam Mountains in the background in the east contribute to the scenic quality in parts and in places the open water of the dock area to the west contributes to the visual interest.</p> <p>As the road runs close to the Site, there are open views across the temporary construction area and the PDZ. The southern part of the road is more enclosed by existing built form and the Site is predominantly screened by the built form within the steelworks compound.</p> <p>The views experienced are not identified in planning policy. The experience of views and visual amenity is likely to be of moderate importance to road users.</p>
Users of the WCP, to the north and west of Port Talbot Docks. <i>RVs 1, 2, 3 &amp; 7</i>	<p>The WCP is a designated long-distance trail which follows or runs close to the coastline of Wales. As the path edges Port Talbot Docks, views towards the Site are possible. For a section, the path runs alongside Harbour Way. Views are open in character, framed by industrial uses to the west, and a wide grassed verge to the east, beyond which low rise residential buildings are visible. The Margam Mountains in the background of views contribute to the scenic quality in parts. As the path runs close to the Site, there are open views across the TCA1, TCA East and the PDZ.</p> <p>As the path runs along the northern edge of Port Talbot Docks, views are partially filtered by metal fencing, scrub and the Hanson Cement Works (RV1). The path then runs behind a small industrial estate which obscures views. Further to the west, views look across the River Avan and the Site is obscured</p>

Receptor	Commentary
	<p>by scrub on the river bank in the foreground and the Hanson Cement Works (RV3). Travelling further towards Mariner's Point (RV7), views encompass more of the Port Talbot Docks with the Margam Mountains a significant features to the background of views. Areas of scrub within the Site are glimpsed to the background of these views and structures within the wider Steel works and Hanson Cement Works are also prominent.</p> <p>Views and visual amenity are likely to be of high importance to people walking or cycling along the promoted path.</p>
<p>Users of the WCP, on Margam Mountain</p> <p><i>RV 6</i></p>	<p>The WCP is a designated long-distance trail which follows or runs close to the coastline of Wales. As the path passes through Port Talbot, it runs outside the industrial foreshore splitting into Route 4 of the NCN along Harbour Way, considered as a separate receptor (described above), and the Coast Path edging the Margam which is a Designated Special Landscape Area, providing panoramic views towards Swansea Bay. Views towards the Site are possible from the WCP on the south western edge of the mountains at Mynydd Emroch and Mynydd Brombil which provides vantage points for views over the Site to the west (RV6). Key features of the views include the Swansea Bay, glimpsed views of views of grade II listed Dyffryn Chapel and Port Talbot. The steelworks have a dominant presence in the views.</p> <p>Views and visual amenity are likely to be of high importance to people walking or cycling along the path.</p>
<p>Road users and pedestrians on Residential streets within Port Talbot and Margam</p> <p><i>RVs 4, 5, 8, 9 and 10</i></p>	<p>Views from built up areas within the Study Area tend to be flanked by two storeys terraced houses (RV5). The local community of Port Talbot experience glimpsed views of the Site from residential streets aligned towards it (RV9 and RV8), with increased visibility from higher ground (RV4). In elevated views from Cwmavon Road (RV10) large scale structures within the wider steelworks are seen behind the M4 overpass.</p> <p>The views are not identified in planning policy or associated with designated heritage assets although the coherence of built form and the Margam Mountains in the backdrop contributes to the visual amenity experienced by the receptor.</p>

- 5.12 Views experienced by visual receptors at sea (such as people in boats or recreational users of the sea) have been scoped out of this assessment due to the relatively low number of such visual receptors within the study area and the existing character of views which are dominated by the steelworks. Views from the sea have not been requested during pre-application discussions with NPTCBC.
- 5.13 Ten representative viewpoints (located in **Figure 8 of Appendix 3**) have been identified to represent the key visual receptors which could potentially be affected by the Proposed Scheme and demonstrate the visibility of the Site from the surrounding area. The representative viewpoints, including four views requested by officers at Neath and Port Talbot Council (*RVs 7, 8, 9 & 10*) during pre-application discussions, were agreed via consultation with the Local Authority. Confirmation of viewpoint location was received from the Council on 10/11/2022. The views are summarised below.

**RV 1 - Harbour Way on the roundabout to north of the proposed development.**

- 5.14 Representative of views experienced by road users and pedestrians/cyclists on this road which is also part of the WCP. It is also representative of views from within 'LLCA1- Industrial Foreshore'.

**RV 2 - Harbour Way on the roundabout to east of the proposed development.**

- 5.15 The view faces west towards the Site and is representative of views experienced by road users, pedestrians and cyclists on this road which is also part of the WCP. It is also representative of views from within 'LLCA1- Industrial Foreshore'.

**RV 3 – Wales Coastal Path 887 near the Newbridge Road Overbridge.**

- 5.16 Representative of views from 'LLCA2 - Port Talbot Town' and experienced by users of the WCP 887. It faces south east across the river to the dock area and beyond towards the Site.

**RV 4 - Broomhill at Pen-Y-Cae.**

- 5.17 Representative of views experienced by the local community, road users and pedestrians in the residential area in Pen-Y-Cae. It is also a representative view from 'LLCA2 - Port Talbot Town'.

**RV 5 – Abbey Road, Port Talbot.**

- 5.18 This view is located on Abbey Road, a main residential road which runs from the Pen—y-cae area to Talbot Road. This is a representative viewpoint of road users and pedestrians in this area. It is also a representative view from 'LLCA2 - Port Talbot Town'.

**RV 6 - View from Footpath near Margam, Mynydd Brombil**

- 5.19 This view is representative of users of the WCP Route 4 running through Margam, Mynydd Brombil. The viewpoint is also representative of view from within 'LLCA3- Margam Mountain'.

**RV 7 – View from Wales Coastal Path at junction with Mariner’s Point**

- 5.20 Representative of views from within ‘LLCA2 - Port Talbot Town’ and as experienced by users of the WCP 887. It faces south east across the river to the dock area and beyond towards the Site.

**RV 8 – View from Darwin Road, along the western edge of Little Warren Playing Fields.**

- 5.21 This view is located on Darwin Road, looking south east across Little Warren playing fields. The view is representative of the local community in the residential area in Aberavon. It is also a representative view from within ‘LLCA2 - Port Talbot Town’.

**RV 9 – View from Lake Road near junction with Burn’s Road.**

- 5.22 This is also a representative view experienced by the local community, road users and pedestrians in the residential area in Aberavon. It is also representative of views from within ‘LLCA2 - Port Talbot Town’.

**RV 10 – View from Cwmavon Road**

- 5.23 This view is located on Cwmavon Road and represents views experienced by road users and pedestrians approaching Port Talbot from the north east.

## 6. Landscape and Visual Assessment of Effects

### Approach to Assessment

- 6.1 The assessment of potential effects of the Proposed Scheme on landscape and visual receptors was undertaken in July 2023 following design freeze of the scheme for the application proposals. The assessment is based on the scheme information as set out in **Chapter 4 (Development Specification)** of the Environmental Statement.
- 6.2 As previously outlined, the methodology and approach in undertaking this impact assessment is summarised in **Appendix 2** and is based upon informed and reasoned professional judgement, taking into account a combination of quantitative and qualitative factors.
- 6.3 The effect of the Proposed Scheme is assessed by determining the sensitivity of, and predicting the magnitude of the change on, the previously identified landscape character and key visual receptors. The visual assessment does not attempt to predict the visual effects of seasonal changes throughout the year but identifies the ‘worst case’ position in terms of the greatest potential visibility of the development i.e. in winter when the trees would have lost their leaves.
- 6.4 The effects of the Proposed Scheme have been determined during the construction and operational stages.

### Overview of Proposed Scheme

- 6.5 The Proposed Scheme for the application submission is described for planning purposes as:
- “Demolition of existing structures and erection of a Sustainable Aviation Fuel (SAF) production facility, including enclosed ground flare, storage tanks, installation of pipework and electrical, processing and utility equipment, administration, warehouse and laboratory buildings, new access, car parking and transport infrastructure including a truck loading area and associated works, hard and soft landscaping, areas for temporary construction laydown, and associated development.”*
- 6.6 A summary of the key elements of the Proposed Scheme which are of relevance to this landscape and visual assessment is provided below:
- The implementation of the Proposed Scheme will require the clearance of all existing vegetation within the PDZ and the three TCAs and the removal of existing built form within TCA East.
  - The proposed ground level of the PDZ will be set at 8m AOD which will require cut and fill exercises. The singular development platform of 8m AOD across the PDZ will ensure the Proposed Scheme is mitigated against flood risk.
  - The proposed heights of structures contained within the PDZ will range up to approximately 46.3m. The tallest structure is Module E1 & E2. The built form

includes numerous structures for administrative operational facilities and processing equipment as described in **Chapter 4 (Development Specification)** of the Environmental Statement. This includes warehouse and workshop buildings, electrical substations, Compressor houses, pumps, water tanks, cooling towers, storage tanks and processing modules.

- The Proposed Scheme will include an enclosed ground flare to the western extent of the Site. The ground flare is made up of multiple 'burners' at ground level, surrounded by a circular enclosure. The enclosure surrounding the burners will extend up to 20 metres in height from the proposed ground level. Intense use of the flare is expected to be limited and not common practice. There will be instances where more intense or emergency flaring will be necessary, albeit these are expected to be infrequent and generally short-term.
- Proposed lighting would be contained within the PDZ. The primary internal road and associated service roads will be lit by 10m column mounted Light Emitting Diode (LED) luminaire. Lighting with the truck loading facility will comprise column mounted or bracket mounted LED flood lights. Similar lighting will also be used at the PDZ vehicular entrances. Lighting within the car parking area will comprise bracket mounted LED luminaires.
- The landscape proposals include green/brown biodiverse roofs to gatehouse 1, cycle shelter, admin building and two amenity shelters that would provide dining spaces for workers.
- Rain gardens are proposed within and to the edges of the PDZ including surrounding the proposed enclosed ground flare, at the site entrances and alongside the car park and administrative buildings.
- A Marine Unloading/Loading Facility is also proposed but the exact location and form of this are not currently known. This is not part of the planning application and will be covered by a Marine License which is to be submitted separately. For the purposes of this assessment the marine unloading/loading facility has been assumed to comprise a rectangular 'island' berth (approximately 20m by 30m), located approximately 30m out from Crown Wharf dock wall with loading arms up to 40m in height.

## **Construction Stage**

### **Primary and Tertiary Mitigation**

- 6.7 The following key aspects of the construction phase which have the potential to affect the previously identified landscape character areas, landscape receptors and visual receptors are:
- (i) Permanent removal of scrub and vegetation across the PDZ and TCAs including removal of invasive Japanese knotweed.
  - (ii) Earthworks including cut and fill exercises to create required plateau finished floor levels at 8m AOD to accommodate development.

- (iii) Temporary effect of the construction plant and traffic, which would include small site compounds; cranes for construction of the larger scale built form; formation of construction access to PDZ; and, installation of construction jetty and marine unloading/loading facility.
  - (iv) The progressive construction of the features present within the Proposed Scheme. This will include the pre-fabrication of structures within the three TCAs ahead of relocating them to the PDZ.
  - (v) Construction of new operational access junctions to PDZ and new operational jetty.
  - (vi) Implementation of proposed landscaping (including boundary features), lighting, internal and external finishing.
- 6.8 The following primary and tertiary mitigation which has been evaluated as part of the construction stage assessment are outlined below.
- 6.9 At the construction stage, potential landscape and visual effects arising from the construction operations would be mitigated through the use of site hoardings, management of construction traffic and control of working hours on the Site in accordance with the Construction Environment Management Plan (CEMP).

## **Assessment of Effects**

### ***Effects on landscape receptors during the Construction Stage***

- 6.10 This section sets out the assessment of the construction stage of the Proposed Scheme on the landscape receptors identified previously in the baseline condition section of this LVIA and follows the methodology set out in **Appendix 2**.
- 6.11 **Table 6.1** provides an assessment of the likely effects of the Proposed Scheme on the landscape receptors identified during the baseline study.

Table 6.1: Construction Stage – Assessment of effect on landscape receptors

Receptor	Value	Susceptibility to Change	Sensitivity	Commentary	Magnitude of change & Assessment of Effect	Is this Effect Significant?
LLCA1 – Industrial Foreshore	<b>Low</b> The area has a low sense of tranquillity due to regular movement of large vehicles associated with the industrial area and sounds and sights produced by the steelwork process. LLCA1 does not form part of a designated landscape. The area has a low scenic quality and overall comprises a degraded landscape. LLCA1 has been assessed as having a low value.	<b>Low</b> The landscape receptor has a close relationship to the type of development proposed and the characteristics of the receptor would not be significantly altered by the type of development proposed. The surrounding context of the steelworks incorporates structures of a similar form and scale to the type of development proposed and the existing features of the landscape are not considered highly sensitive to change.	<b>Low</b>	<p>During the construction stage, the Proposed Scheme would directly affect a localised part of the character area contained within Site. The changes would be experienced within an area that is influenced by existing road infrastructure and industrial uses.</p> <p>There would be a change in use of the Site from brownfield land that has been colonised with scrub, along with some former industrial areas to that of a construction site. These changes would be noticeable particularly in TCA 1 which extends further away from the existing steelworks. The Site would be cleared of all vegetation and existing built form (within TCA East) in order to accommodate the Proposed Scheme. However, the noise and activity associated with the construction works would be experienced in context with the surrounding steel works. Whilst the features of the Site would change, the changes would not be incongruous with the wider character area which is characterised by its existing industrial uses.</p>	The sensitivity of LLCA1 – Industrial Foreshore is considered to be <b>low</b> . The magnitude of change is considered to be <b>medium</b> . Therefore, there is likely to be a direct, permanent and temporary <sup>11</sup> , short term, <b>neutral</b> effect which is considered to be <b>minor</b> .	No
LLCA2 – Port Talbot Town	<b>Ordinary</b> There are a number of statutory listed buildings and structures within LLCA2, including Talbot Memorial Park, a well preserved urban park with mature trees, identified as Grade II* Listed on the Register of Landscape, Parks and Gardens of Special Historic Interest in Wales, the Grade II* listed Church of St Theodore, the War Memorial, the Beulah Calvinistic Methodist Chapel and the Ebenezer Chapel. LLCA2 has been assessed as having an ordinary value, due to having some listed buildings, but generally little scenic quality with potential for substitution.	<b>Medium</b> The existing steelworks forms part of the setting to this character area. However, the landscape receptor has little relationship to the type of development proposed. The regular scale and form of buildings within the character area would contrast with the scale of the type of development proposed. Landscape receptor is moderately sensitive and characteristics of the receptor would be altered by the type of development proposed.	<b>Medium-Low</b>	<p>The construction stage of the Proposed Scheme would not directly affect this LLCA. The additional noise and activity associated with the construction works would be experienced from the edges of LLCA2 and the construction works would be noticeable in some views experienced from within the character area. TCA 1 would extend the industrial area closer to the residential areas of townscape. However, the construction works would remain to the south western side of the A4241 and the railway line or would be to the southern side of the dock. As a result, the construction works would remain separated from the residential areas.</p> <p>Whilst there would be a change to areas of landscape within the setting of the town, the changes would be experienced in the context of the existing steelworks and would not be notably different from the existing context.</p>	The sensitivity of LLCA2 – Port Talbot Town is considered to be <b>medium-low</b> . The magnitude of change is considered to be <b>small</b> . Therefore, there is likely to be an indirect, temporary, short-term, <b>adverse</b> effect which is considered to be <b>minor</b> .	No
LLCA3 – Margam, Emroch & Dinas Mountains	<b>High</b> Margam Mountain is designated as Special Landscape Area and as Registered Landscape of Outstanding and Special Interest, LLCA3 is considered to have high value due to its designations,	<b>High</b> The landscape receptor has little to no relationship to the type of development proposed and would be difficult to replace if lost. The steep elevated topography of the character area and the existing landscape features would be	<b>High</b>	The construction stage of the Proposed Scheme would not directly affect this LLCA and changes would be limited to views <sup>12</sup> of construction works from the south western edges of the area. These changes would be experienced in the context of the existing steelworks and would result in little change to the overall character of the area. The distinctive characteristics of the landscape relating to topography, the vegetation covering the mountains and their recreation value would all be maintained.	The sensitivity of LLCA3 – Margam, Emroch & Dinas Mountains is considered to be <b>high</b> . The magnitude of change is considered to be <b>negligible</b> . Therefore, there is likely to be an indirect, temporary, short-term,	No

<sup>11</sup> Changes such as vegetation removal would be permanent, whereas the construction works would be of a temporary nature

<sup>12</sup> Effects in views and visual amenity are considered separately within the visual assessment

Receptor	Value	Susceptibility to Change	Sensitivity	Commentary	Magnitude of change & Assessment of Effect	Is this Effect Significant?
	notable recreational value and the moderate to high scenic quality of parts of the landscape within the Study Area.	fundamentally altered by the type of development proposed.			<b>neutral</b> effect which is considered to be <b>negligible</b> .	
LLCA4 – Swansea Bay	<b>Medium</b> Aside from the grade II listed Harbour Watch Tower, LLCA4 is not covered by any designation. LLCA4 is considered to have a medium value due to its notable recreational value and moderate scenic quality.	<b>Medium</b> The landscape receptor has some relationship to the type of development. The general characteristics of the landscape would not be significantly altered by the type of development proposed, however, the scenic quality and recreational value of the landscape would be weakened by the type of development proposed.	<b>Medium</b>	During the construction stage, the Proposed Scheme would not directly affect LLCA4. The construction works would introduce additional noise, structures and activity within the setting of the bay. This activity would be experienced in the context of the adjacent steelworks and port and would result in minimal change to the character of the area. The parts of the bay that have a high recreational value would not be noticeably affected by the construction works.	The sensitivity of LLCA4 – Swansea Bay is considered to be <b>medium</b> . The magnitude of change is considered to be <b>small</b> . Therefore, there is likely to be an indirect, temporary and short-term, <b>neutral</b> effect which is considered to be <b>minor</b> .	No
Vegetation on Site	<b>Low</b> The vegetation on Site is typically in poor condition. Aside from a group Leyland cypress trees on the eastern boundary of the PDZ, the Site comprises mainly self-seeded trees and shrubs, including Japanese Knotweed which is classified as an invasive species in the UK, and controlled plant under the Wildlife and Countryside Act 1981.	<b>Medium</b> The landscape receptor would be compromised by the type of development proposed. The vegetation has colonised the Site as a result of the brownfield land no longer being in use. Whilst there are opportunities to improve landscape features, the type of development proposed would allow for limited replacement.	<b>Medium-Low</b>	The existing self-seeded scrub and trees would be cleared to accommodate the construction works of the Proposed Scheme, including works to manage the existing Japanese knotweed on-site. The clearance of vegetation would result in a permanent reduction in greenery that currently encloses the port and provides containment to some of the industrial areas. This would reinforce the industrial nature of the landscape. For TCA1 and TCA West this effect would be temporary as it is proposed that these areas would be returned to bare earth allowing vegetation to slowly recolonise following the construction stage.  Within the PDZ the permanent removal of vegetation, which is an existing component of the landscape, would be fundamentally changed by the Proposed Scheme. However, the quality of this feature is low due to the presence of invasive species.	The sensitivity of the vegetation on Site is considered to be <b>medium-low</b> . The magnitude of change is considered to be <b>large</b> . Therefore, there is likely to be a direct, permanent, long-term, <b>adverse</b> effect which is considered to be <b>moderate</b> .	Yes

### **Effects on visual receptors during the Construction Stage**

- 6.12 The assessment of effects likely to arise from the Proposed Scheme during the construction phase comprised initially, an assessment of the likely extent of visibility of the Proposed Scheme and the visual receptors likely to be affected and secondly, an assessment of the impacts on the views experienced by the visual receptors. This assessment should be read in conjunction with the verified views prepared by specialist consultant Ocean CGI and contained within **Appendix 6**. The assessment follows the methodology set out in **Appendix 2**.
- 6.13 The assessment is based on 'peak construction' which is not attributed to a specific year, rather it considers at what point the worst-case effect could occur.

### **Assessment of Effects on Visual Receptors**

- 6.14 **Table 6.2** below provides an assessment of the likely effects of the Proposed Scheme on the visual receptors identified during the baseline study during the construction stage.
- 6.15 The visual receptors would experience a range of effects to visual amenity as a result of the Proposed Scheme. This range of effects is described in its entirety for the visual receptors. The RVs demonstrate a snapshot of this experience and have been used to inform the overall assessment. The changes to RVs are referred to within the analysis of changes to views experienced by the visual receptors as described in **Table 6.2**. To assist with the interpretation of the effects, the magnitude of change and assessment of effect on the RVs are also set out in **Table 6.2**.
- 6.16 The changes to views would include the appearance of hoarding, the removal of vegetation in some views and the gradual appearance of built form with associated cranes for larger buildings. Due to the pre-fabrication of structures within the three TCAs, the visual impacts of the Proposed Scheme would affect a greater extent of views than during the operation stage.

Table 6.2: Construction Stage – Assessment of effects on visual receptors

Receptor	Value	Susceptibility to Change	Sensitivity	Commentary	Magnitude of change & Assessment of Effect	Is this Effect Significant?
Road users on Harbour Way / A4241 RVs 1 & 2	<b>Ordinary</b>  Views not designated or protected at a local level, or associated with heritage assets. Whilst the industrial uses have a detractive influence on views, the wider views of the Margam Mountains contribute positively to the visual amenity experienced by the visual receptor.	<b>Medium</b>  Experience of views and visual amenity of moderate importance to road users.	<b>Medium-Low</b>	<p>The most noticeable changes to views would be experienced as Harbour Way runs adjacent to TCA 1 as demonstrated by <b>RV2</b>. The clearance of scrub and grassland from this area would be noticeable as would the appearance of plant, construction compounds and the emergence of proposed structures as they are prefabricated. This would result in some increased containment to views and would block some views of the wharf and views across the open water of the docks. Some positive features of views would be replaced with construction works, albeit experienced from a busy A road and in the context of the wider steelworks.</p> <p>As the road travels round the northern side of the docks, views of the construction works would decrease and would be partially obscured by existing industrial structures including the Hanson Cement works and the industrial area along Llewellyn’s Road. Fencing and scrub along the road would also reduce the visibility of the construction works as demonstrated by <b>RV1</b>. Whilst these changes would be noticeable, they would result in little change to the overall appearance and character of views due to the existing structures of a similar scale that are present in views.</p> <p>On approach to the Site from the south, the construction works within both the PDZ and the TCAs would be obscured by the Tata Steelworks until clearer views become possible at the Harbour Way roundabout. In these views, the works within TCA 1 would reduce a sense of openness to some views.</p> <p>The longer range views of the mountains would continue to contribute positively to visual amenity experienced by the visual receptor.</p>	<p>The sensitivity of road users on Harbour Way / A4241 is considered to be <b>medium-low</b>. The magnitude of change is considered to vary from <b>medium</b> (direct views across TCA 1) to <b>negligible</b> (views obscured by steelworks). Therefore, there is likely to be a direct, permanent and temporary, short-term, <b>adverse</b> effect which is considered to vary from <b>moderate-minor to negligible</b>.</p> <p>RV1: small / minor adverse</p> <p>RV2: medium / moderate-minor adverse</p>	No
Users of the WCP, to the north and west of Port Talbot Docks. RVs 1, 2, 3 & 7	<b>Medium</b>  Views not designated or protected at a local level. The WCP is a designated long distance trail that encompasses views of the coastline and the Margam Mountains which is a designated Special Landscape Area.	<b>High</b>  Experience of views and visual amenity likely to be of high importance to users of the long distance trail.	<b>Medium-High</b>	<p>The changes to views from the stretch of the path that runs parallel to Harbour Way would be the same as that experienced by road users, albeit experienced at a slower pace by pedestrians and cyclists than by road users with more attention likely to be given to views.</p> <p>The most noticeable changes to views would be experienced as Harbour Way runs adjacent to TCA 1 as demonstrated by <b>RV2</b>. The demolition of existing structures and clearance of scrub and grassland from this area would be noticeable as would the appearance of construction plant and barges, construction compounds and associated lighting and the emergence of proposed structures as they are pre-fabricated. This would result in some increased containment to views and would block some views across the open water of the docks. The existing vegetation on the Site (which is a positive features of some views) would be replaced with construction works and associated lighting, albeit experienced from a busy A road and in the context of the wider steelworks (which also has lighting).</p>	<p>The sensitivity of users of the WCP, to the north and west of Port Talbot Docks is considered to be <b>medium-high</b>. The magnitude of change is considered to vary from <b>medium</b> (direct views across TCA 1) to <b>negligible</b> (views across the harbour). Therefore, there is likely to be a direct, permanent and temporary, short-term, <b>adverse</b> effect which is considered to vary from <b>moderate to negligible</b>.</p> <p>RV1: small / minor adverse</p> <p>RV2: medium / moderate adverse</p> <p>RV3: negligible / negligible</p> <p>RV7: small / minor adverse</p>	<p>Yes</p> <p>In isolated (where users of the WCP pass adjacent to TCA1) users would experience moderate adverse effects which are considered to be significant. Adverse effects elsewhere are considered not significant.</p>

Receptor	Value	Susceptibility to Change	Sensitivity	Commentary	Magnitude of change & Assessment of Effect	Is this Effect Significant?
				<p>As the road travels round the northern side of docks, views of the construction works would decrease and would be partially obscured by existing industrial features including the Hanson Cement works and the industrial area along Llewellyn’s Road. Fencing and scrub along the road would also reduce the visibility of the construction works as demonstrated by <b>RV1</b>. Whilst these changes would be noticeable, they would result in little change to the overall appearance and character of views due to the existing structures in views.</p> <p>As the path extends away from Harbour Way and towards Mariners Point as demonstrated by <b>RV3</b>, structures associated with the construction stage of the Proposed Scheme would be visible beyond the River Afan. There would be a slight reduction in scrub and grassland glimpsed to the background of views and an increase in structures of an industrial appearance. The wider views towards the Margam Mountains in the background and River Afan in the foreground would be maintained.</p> <p>Travelling further round the bay, as demonstrated by <b>RV7</b>, clearer views would be possible of structures under construction within the PDZ. Works would be partially obscured by the Hanson Cement works. The glimpsed views of scrub and existing built form within the TCA West would also be removed. Although the industrial context to the background of views would increase, the features in the foreground and background that contribute to the scenic quality of views would be maintained.</p>		
Users of the WCP, on Margam Mountain <i>RV 6</i>	<b>Medium</b>  Views not designated or protected at a local level. The WCP is a designated long distance trail that encompasses views of the coastline and the Margam Mountains which is a designated Special Landscape Area.	<b>High</b>  Experience of views and visual amenity of high importance to users of public rights of way.	<b>Medium-High</b>	<p>Views from the stretches of the WCP that cross the mountains would continue to be influenced by scrub and trees along the route which would filter some views and the topography which provides containment to parts of the path as demonstrated by the ZTV (<b>Figure 8.7</b>). Where visible, the Proposed Scheme would extend the extent of industrial uses in views with some open areas changing from scrub to construction sites with associated lighting and demolition and construction activities as demonstrated by <b>RV6</b>. Long distance views towards the sea in the background would be maintained. The use of TCA 1 would increase the visibility of the Proposed Scheme during the construction stage. There would be an increase in views of construction activities (including associated lighting and barges) together with emerging built form, plant and cranes alongside Port Talbot Docks; some views of the docks would be obscured due to the construction works within the three TCAs.</p> <p>The changes to views would be experienced in the context of the large scale steelworks which have a dominant influence on the panoramic views (and already include substantial lighting). Key features of views would be maintained such as the extended views across Swansea Bay and the glimpsed views of Dyffryn Chapel.</p>	<p>The sensitivity of users of the WCP, on Margam Mountain is considered to be <b>medium-high</b>. The magnitude of change is considered to vary from <b>medium</b> (where construction works block views of Port Talbot Docks) to <b>negligible</b> (views obscured due to topography and vegetation). Therefore, there is likely to be a direct, temporary, short-term, <b>adverse</b> effect which is considered to vary from <b>moderate</b> to <b>negligible</b>.</p> <p>RV6: medium / moderate adverse</p>	<p>Yes</p> <p>In isolated locations (where views across the docks from the Margam Hills are obstructed by construction works) users would experience moderate adverse effects which are considered to be significant. Adverse effects elsewhere are considered not significant.</p>

Receptor	Value	Susceptibility to Change	Sensitivity	Commentary	Magnitude of change & Assessment of Effect	Is this Effect Significant?
Road users and pedestrians on Residential streets within Port Talbot and Margam <i>RVs 4, 5, 8, 9 and 10</i>	<b>Ordinary</b> The views are not identified in planning policy or associated with designated heritage assets although the coherence of built form and the Margam Mountains in the backdrop contributes to the visual amenity experienced by the receptor.	<b>Medium</b> Experience of views and visual amenity of moderate importance to road users and pedestrians travelling through the residential areas.	<b>Medium-Low</b>	<p>As demonstrated by the ZTV, from the majority of residential streets surrounding the Site, the Proposed Scheme would be obscured due to the presence of intervening built form and the orientation of the terraced streets. The views from Lake Road (<b>RV9</b>) and Darwin Road (<b>RV8</b>) demonstrate this containment where built form or structures in the foreground obscure views of the Proposed Scheme or result in changes to views being barely discernible. Whilst the use of TCA West would extend slightly closer to Darwin Street, intervening structures such as fences, scrub and existing built form, would mean the construction works would not be readily discernible in the views.</p> <p>The use of TCA 1 would increase the visibility of the Proposed Scheme during the construction period with views likely from parts of Lower West End, West End and Central Road. The changes to views would be experienced in the context of existing visible structures in the wider steelworks and the industrial area along Llewellyn’s Road. Glimpsed views of plant, construction machinery and structures being prefabricated would appear closer to these local residential streets. The railway line and Harbour Way would continue to provide a sense of separation from the Proposed Scheme in views.</p> <p>From occasional more elevated streets such as Pen-Y-Cae Road and Broomhill (<b>RV4</b>) breaks in built form would allow views of the construction works taking place alongside Port Talbot Docks. This would increase the presence of industrial structures in views and remove an area of scrubland. However, the overall character and appearance of views would be maintained and would continue to extend out to s/Rea which is considered a positive characteristic of the views. In elevated views from Cwmavon Road (<b>RV10</b>) the construction works would be seen behind the M4 overpass and alongside structures of a similar scale within the wider streelworks.</p> <p>From occasional streets orientated towards the Site to the north east, including short stretches of Oakwood Lane and Abbey Road (<b>RV5</b>), there would be glimpses of emerging structures, cranes and planting during the construction phase. Structures would appear to the background of views but would not be prominent and would be seen alongside existing structures of a similar scale within the wider steelworks.</p>	<p>The sensitivity of road users and pedestrians on residential streets within Port Talbot and Margam is <b>medium-low</b>. The magnitude of change is considered to vary from <b>medium</b> (streets close to TCA 1) to <b>negligible</b> (majority of streets where Proposed Scheme obscured). Therefore, there is likely to be a direct, temporary, short-term, <b>adverse</b> effect which is considered to vary from <b>moderate-minor</b> to <b>negligible</b>.</p> <p>RV4: small / minor adverse</p> <p>RV5: small / minor adverse</p> <p>RV8: negligible / negligible</p> <p>RV9: negligible / negligible</p> <p>RV10: small / minor adverse</p>	No
Residents of properties on Lower West End	<b>Low</b> The views are not identified in planning policy or associated with designated heritage assets. Views face directly onto Harbour Way with a raised	<b>High</b> Experience of views and visual amenity of high importance to local residents	<b>Medium</b>	During the construction phase, plant and built form being prefabricated in TCA1 is likely to be visible from the upstairs windows of properties on Lower West End. This would introduce structures of an industrial character to resident’s views at distances of c.90m away, albeit seen behind the Harbour Way carriageway and embankment. These changes would temporarily increase the containment of views. The changes to views would be experienced in the context of existing visible structures in the wider	The sensitivity of residents of properties on Lower West End is considered to be <b>medium</b> . The magnitude of change is considered to be <b>medium-small</b> . Therefore, there is likely to be a direct, temporary, short-term, <b>adverse</b> effect which is considered to be <b>moderate-minor</b> .	No

Receptor	Value	Susceptibility to Change	Sensitivity	Commentary	Magnitude of change & Assessment of Effect	Is this Effect Significant?
	embankment of scrub and concrete. Views are also likely to encompass structures within the steelworks and are not considered likely to contribute positively to visual amenity.			steelworks and industrial area along Llewellyn's Road and so would not noticeably change the character of views.		

## **Operational Stage**

- 6.17 The key aspects of the Proposed Scheme once complete and operational, which are likely to affect the landscape and visual receptors, have been identified as:
- (i) A change in the type and intensity of uses on Site with the introduction of a new industrial processing facility and associated activity, people and traffic. The Proposed Scheme will be operational 24 hours a day, 365 days a year.
  - (ii) Substantial increase in height and volume of built form on the Site with new structures ranging in height up to approximately 46.3m (Module E1 & E2) on top of an adjusted ground level of 8m AOD.
  - (iii) Introduction of a single enclosed ground flare to the western extent of the Site. The ground flare is made up of multiple 'burners' at ground level, surrounded by a circular enclosure of up to approximately 20m in height above proposed ground level of 8m AOD.
  - (iv) Introduction of a marine unloading/loading facility comprising a rectangular 'island' berth (approximately 20m by 30m), located approximately 30m out from Crown Wharf wall with loading arms up to approximately 40m in height.
  - (v) TCA East will be left as a cleared site and TCA West and TCA1 would be left as cleared land and allowed to recolonise naturally.
  - (vi) The presence of lighting associated with the primary internal road, associated service road, truck loading facility, car parks and marine unloading/loading facility as documented in the Preliminary Lighting Strategy.

## **Primary and Tertiary Mitigation**

- 6.18 As an industrial facility the Proposed Scheme has been designed and laid out to ensure compliance with relevant health and safety regulations and remove potential risks, including fire risk. As such, there are limited measures incorporated in the scheme to specifically address impacts on landscape and visual receptors. The following primary mitigation which has been evaluated as part of the operation stage assessment are outlined below.
- (i) The maximum height of structures within the Proposed Scheme are comparable to existing structures within the surrounding context including the Tata Steelworks and the Hanson Cement Works. At an early stage in the design process the proposed flare was changed from an open tall flare stack to a lower ground flare and was positioned set back away from key residential receptors.
  - (ii) Available landscaped spaces to the peripheries of the Proposed Scheme are multi-functional to provide SuDS features, have a biodiversity value/function and contribute to the landscape structure and amenity of the Site.
  - (iii) The main proposed habitat is flower-rich grassland and pioneer vegetation which will be established on nutrient-poor substrates, features that should be equivalent to habitats of biodiversity value in the wider dock. Proposed landscape features will include flower-

rich grassland/pioneer vegetation, modular biodiversity (bespoke gabion) walls, gravel substrate rain gardens, large rock features and biodiverse green/brown roof on the administrative building.

- (iv) Japanese knotweed will be subject to management control, via herbicide spraying, as part of site preparation works, and continue with ongoing herbicide spraying as part of a long-term management strategy for Japanese Knotweed.

#### **Assessment of Effects, Secondary Mitigation and Residual Effects**

##### ***Effects on landscape receptors during the Operational Stage***

- 6.19 This section sets out the assessment of the operational stage of the Proposed Scheme on the landscape receptors identified previously in the baseline condition section of this LVIA and follows the methodology set out in **Appendix 2**.
- 6.20 **Table 6.3** provides an assessment of the likely effects of the Proposed Scheme on the landscape receptors identified during the baseline study.

Table 6.3: Operational Stage – Assessment of effect on landscape receptors

Receptor	Value	Susceptibility to Change	Sensitivity	Commentary	Magnitude of change & Assessment of Effect	Is this Effect Significant?
LLCA1 – Industrial Foreshore	<b>Low</b>  The area has a low sense of tranquillity due to regular movement of large vehicles associated with the industrial area and sounds and sights produced by the steelwork process. LLCA1 does not form part of a designated landscape. The area has a low scenic quality and overall comprises a degraded landscape. LLCA1 has been assessed as having a low value.	<b>Low</b>  The landscape receptor has a close relationship to the type of development proposed and the characteristics of the receptor would not be significantly altered by the type of development proposed. The surrounding context of the steelworks provides incorporates structures of a similar form and scale to the type of development proposed and the existing features of the landscape are not considered highly sensitive to change.	<b>Low</b>	<p>During the operation stage, the Proposed Scheme would directly affect a localised part of the character area concentrated around the PDZ. The changes would be experienced within an area that is influenced by existing road infrastructure and industrial uses.</p> <p>There would be a change in land use from brownfield land that has been colonised with scrub to that of an industrial processing site. These changes would be noticeable during day and night with the addition of large scale structures and activity with associated noise and lighting within the Site. The uses would extend further across the character area, including the marine unloading/loading facility which would extend activity out from the Crown Wharf wall, into the water. Whilst the Proposed Scheme would have a noticeable presence in the landscape the changes would not be incongruous with the wider character area that is characterised by existing industrial uses.</p>	The sensitivity of LLCA1 – Industrial Foreshore is considered to be <b>low</b> . The magnitude of change is considered to be <b>medium</b> . Therefore, there is likely to be a direct, permanent, long-term, <b>neutral</b> effect which is considered to be <b>minor</b> .	No
LLCA2 – Port Talbot Town	<b>Ordinary</b>  There are a number of statutory listed buildings and structures within LLCA2, including Talbot Memorial Park, a well preserved urban park with mature trees, identified as Grade II* Listed on the Register of Landscape, Parks and Gardens of Special Historic Interest in Wales, the Grade II* listed Church of St Theodore, the War Memorial, the Beulah Calvinistic Methodist Chapel and the Ebenezer Chapel. LLCA2 has been assessed as having an ordinary value, due to having some listed buildings, but generally little scenic quality with potential for substitution.	<b>Medium</b>  The existing steelworks forms part of the setting to this character area. However, the landscape receptor has little relationship to the type of development proposed. The regular scale and form of buildings within the character area would contrast with the scale of the type of development proposed. Landscape receptor is moderately sensitive and characteristics of the receptor would be altered by the type of development proposed.	<b>Medium-Low</b>	The operational stage of the Proposed Scheme would not directly affect this LLCA. The additional noise, lighting and activity associated with the industrial processing facility would be experienced from the edges of LLCA2 and the structures and plant associated with the Proposed Scheme would be visible in some views experienced from within the character area but would not be prominent. The return of TCA1 to a cleared site post the construction phase would push activity further back from residential areas, although the Proposed Scheme would still form part of the surrounding context to the residential townscape. There would little awareness of change arising from the Proposed Scheme from extensive areas of the character area as demonstrated by the ZTV. Whilst there would be a change to areas of landscape within the setting of the town, the changes would be experienced in the context of the existing steelworks and would not be notably different from the existing context.	The sensitivity of LLCA2 – Port Talbot Town is considered to be <b>medium-low</b> . The magnitude of change is considered to be <b>small to negligible</b> . Therefore, there is likely to be an indirect, permanent, long-term, <b>adverse</b> effect which is considered to be <b>negligible to minor</b> .	No
LLCA3 – Margam, Emroch & Dinas Mountains	<b>High</b>  Margam Mountain is designated as Special Landscape Area and as Registered Landscape of Outstanding and Special Interest, LLCA3 is considered to have high value due to its designations, notable recreational value and the moderate to high scenic quality of	<b>High</b>  The landscape receptor has little to no relationship to the type of development proposed and would be difficult to replace if lost. The steep elevated topography of the character area and the existing landscape features would be fundamentally altered by the type of development proposed.	<b>High</b>	The operational stage of the Proposed Scheme would not directly affect this LLCA and changes would be limited to glimpsed views of plant, built form and lighting within the industrial processing facility from within parts of the character area. These changes would be experienced in the context of the existing steelworks and would result in little change to the overall character of the area.	The sensitivity of LLCA3 – Margam, Emroch & Dinas Mountains is considered to be <b>high</b> . The magnitude of change is considered to be <b>negligible</b> . Therefore, there is likely to be an indirect, permanent, long-term, <b>neutral</b> effect which is considered to be <b>negligible</b> .	No

Receptor	Value	Susceptibility to Change	Sensitivity	Commentary	Magnitude of change & Assessment of Effect	Is this Effect Significant?
	parts of the landscape within the Study Area.					
LLCA4 – Swansea Bay	<b>Medium</b>  Aside from the grade II listed Harbour Watch Tower, LLCA4 is not covered by any designation. LLCA4 is considered to have a medium value due to its notable recreational value and moderate scenic quality.	<b>Medium</b>  The landscape receptor has some relationship to the type of development. The general characteristics of the landscape would not be significantly altered by the type of development proposed, however, the scenic quality and recreational value of the landscape would be weakened by the type of development proposed.	<b>Medium</b>	During the operational stage, the Proposed Scheme would not directly affect LLCA4. The Proposed Scheme would introduce additional noise, structures, lighting and activity within the setting of the bay. Whilst the use of the marine unloading/loading facility and ships transporting ethanol feedstock and SAF product to and from the Site will pass through the character area, this change would be experienced in the context of the working Port Talbot Docks and would not noticeably change the character of the area. The additional activity within the PDZ would be experienced in the context of the adjacent steelworks and port and would result in minimal change to the character of the area. The parts of the bay that have a high recreational value would not be noticeably affected by the Proposed Scheme.	The sensitivity of LLCA4 – Swansea Bay is considered to be <b>medium</b> . The magnitude of change is considered to be <b>small</b> . Therefore, there is likely to be an indirect, permanent, long-term, <b>neutral</b> effect which is considered to be <b>minor</b> .	No
Vegetation on Site	<b>Low</b>  The vegetation on Site is typically in poor condition. Aside from a group Leyland cypress trees on the eastern boundary of the PDZ, the Site comprises mainly self-seeded trees and shrubs, including Japanese Knotweed which is classified as an invasive species in the UK, and controlled plant under the Wildlife and Countryside Act 1981.	<b>Medium</b>  The landscape receptor would be compromised by the type of development proposed. The vegetation has colonised the Site as a result of the brownfield land no longer being in use. Whilst there are opportunities to improve landscape features, the type of development proposed would allow for limited replacement.	<b>Medium-Low</b>	During the operational phase, TCA East will be left as a cleared site and TCA1 and TCA West would be left as cleared land and allowed to recolonise naturally. The majority of the PDZ would be occupied by hardstanding and built form. Soft landscaping would be incorporated to the peripheries of the PDZ surrounding the site entrance, flare and car park. The proposed rain gardens, self-seeding grassland and green/brown roofs would introduce new plant species and habitat into the Site that would have an amenity value that would make a small positive contribution to the experience for workers. The removal of invasive species would also be a positive ongoing change. As a whole, there would be little opportunity for vegetation within the Site given the nature of the industrial uses. There would be a noticeable reduction in the perceived greening to the edges of Port Talbot and Port Talbot Docks. Areas of scrub and trees would remain in the wider context.	The sensitivity of the vegetation on Site is considered to be <b>medium-low</b> . The magnitude of change for the PDZ and TCA East is considered to be <b>medium-large</b> . Therefore, there is likely to be a direct, permanent, long-term, <b>adverse</b> effect on the PDZ and TCA East which is considered to be <b>moderate</b> .  Following establishment of new planting, the magnitude of change for TCA West and TCA 1 would be small and over time a similar level of vegetation cover as the baseline conditions would be returned to. Therefore, in the long term, there would be a <b>Negligible</b> effect on TCA West and TCA1.	Yes  This effect for the PDZ and TCA East is considered to be significant and not significant for TCA1 and TCA West

### **Effects on visual receptors during the Operational Stage**

6.21 The assessment of effects likely to arise from the Proposed Scheme during the operational stage comprised initially, an assessment of the likely extent of visibility of the Proposed Scheme and the visual receptors likely to be affected and secondly, an assessment of the impacts on the views experienced by each of the visual receptors. This assessment should be read in conjunction with the verified views (Type 4 Visualisations) experienced from the representative viewpoints set out at **Appendix 6**. The assessment follows the methodology set out in **Appendix 2**. The viewpoint locations are set out at **Figure 8.8** and summer viewpoint photography is provided at **Figure 8.9**.

### ***Extent of Visibility of the Proposed Scheme***

6.22 The visibility of the Site would increase following the implementation of the Proposed Scheme. This is due to the presence of new built form within areas of currently open landscape. The extent of visibility is demonstrated by the computer generated ZTV provided at **Appendix 3, Figure 8.7**. This demonstrates a 'worst (maximum) case' scenario of where the development would be visible. It was created using the maximum heights and development extents of the proposed buildings and available LiDAR data which doesn't include all recent built development and the full extent of trees and hedgerows. It therefore indicates a greater extent of visibility than would be experienced in reality.

6.23 The area which is likely to experience the greatest level of change in views arising from the Proposed Scheme is that of the immediate context of the Site. Due to the industrial nature of the Site and surrounding context there are limited publicly accessible viewpoints with clear views of the Proposed Scheme. The steelworks to the south and southeast largely prevents views from the south and southeast. Views are possible from parts of Harbour Way, sections of the WCP across Port Talbot Docks and within the Margam Mountains and limited residential streets that are oriented towards the Site.

### ***Assessment of Effects on Visual Receptors***

6.24 **Table 6.4** below provides an assessment of the likely effects of the Proposed Scheme on the visual receptors identified during the baseline study. This draws on the visualisations provided at **Appendix 8.9**.

6.25 The visual receptors would experience a range of effects to visual amenity as a result of the Proposed Scheme. This range of effects is described in its entirety for the visual receptors. The Representative Views demonstrate a snapshot of this experience and have been used to inform the overall assessment.

Table 6.4: Operational Stage – Assessment of effects on visual receptors

Receptor	Value	Susceptibility to Change	Sensitivity	Commentary	Magnitude of change & Assessment of Effect	Is this Effect Significant?
Road users on Harbour Way / A4241 <i>Representative Views 1 &amp; 2</i>	<b>Ordinary</b> Views not designated or protected at a local level, or associated with heritage assets. Whilst the industrial uses have a detractive influence on views, the wider views of the Margam Mountains contribute positively to the visual amenity experienced by the visual receptor.	<b>Medium</b> Experience of views and visual amenity of moderate importance to road users.	<b>Medium-Low</b>	<p>During the operational phase, built form and lighting within the Proposed Scheme would be set away from Harbour Way at distances of over 400m. There would be clear views looking across TCA1 (which will be re-vegetated in the long terms, as vegetation is allowed to recolonise naturally), where large scale structures would be visible alongside Port Talbot Docks as demonstrated at <b>RV2, Appendix 8.6</b>. With TCA1 no longer in use, the clearance of structures in TCA East would also be noticeable removing some existing structures that are in a poor condition from views. The marine unloading/loading facility extending away from Crown Wharf (dock wall) would also be noticeable and ships transporting ethanol feedstock and SAF product to and from the Site would be visible at times (estimated to be approximately average of 2 two way movements a week). The Proposed Scheme would result in noticeable changes to the middle ground of views due to the presence of additional large scale structures and lighting. This would reinforce the industrial character of views (both in daytime and night time), seen in context with existing structures in the steelworks. The additional built form would replace the scrub and greenery that is currently seen alongside the water. The proposed structures would be similar in height to existing structures in the views, including the Hanson Cement Works. Module E1 and E2 would be noticeable on the skyline, although chimneys and structures in the wider Tata Steelworks would remain the most prominent structures on the skyline during day and night.</p> <p>As the road travels round the northern side of docks views of the Proposed Scheme would decrease and would be partially obscured by existing industrial features including the Hanson Cement works and the industrial area along Llewellyn’s Road. Fencing and scrub along the road would also reduce the visibility of the Proposed Scheme as demonstrated by <b>RV1, Appendix 8.6</b>. Whilst these changes would be visible, they would result in little change to the overall appearance and character of views due to the existing structures in views.</p> <p>On approach to the Site from the south, the proposed buildings within the PDZ would be obscured by the Tata Steelworks until clearer views become possible at the Harbour Way roundabout. In these views, the proposed structures would be set back behind the water which would retain a sense of openness to the foreground of views. Structures in the steelworks would remain prominent.</p> <p>The views of the mountains would continue to contribute positively to visual amenity experienced by road users on Harbour Way.</p>	<p>The sensitivity of road users on Harbour Way / A4241 is considered to be <b>medium-low</b>. The magnitude of change is considered to vary from <b>medium-small</b> (direct views across TCA 1) to <b>negligible</b> (views obscured by steelworks). Therefore, there is likely to be a direct, permanent, long-term, <b>adverse</b> effect which is considered to vary from <b>minor</b> to <b>negligible</b>.</p> <p>RV1: small-negligible / minor-negligible adverse</p> <p>RV2: medium-small / minor adverse</p>	No

Receptor	Value	Susceptibility to Change	Sensitivity	Commentary	Magnitude of change & Assessment of Effect	Is this Effect Significant?
Users of the WCP, to the north and west of Port Talbot Docks. <i>Representative Views 1, 2, 3 &amp; 7</i>	<b>Medium</b>  Views not designated or protected at a local level.  The WCP is a designated long distance trail that encompasses views of the coastline and the Margam Mountains which is a designated Special Landscape Area.	<b>High</b>  Experience of views and visual amenity likely to be of high importance to users of the long distance trail.	<b>Medium-High</b>	<p>During the operational stage, built form and lighting within the Proposed Scheme would be set away from Harbour Way at distances of over 400m. The changes to views from the stretch of the path that runs parallel to Harbour Way would include clear views looking across TCA1 (which would be re-vegetated, in the long terms, as vegetation is allowed to recolonise naturally); large scale structures would be visible alongside Port Talbot Docks as demonstrated at <b>RV2, Appendix 8.2</b>. With TCA1 no longer in use as a construction area, the clearance of structures in TCA East would also be noticeable removing some existing structures that are in a poor condition from views. The marine unloading/loading facility extending away from Crown Wharf (dock wall) would also be noticeable and ships transporting ethanol feedstock and SAF product to and from the Site would be visible at times (estimated to be approximately average of 2 two way movements a week). The Proposed Scheme would result in noticeable changes to the middle ground of views due to the presence of additional large-scale structures and lighting. This would reinforce the industrial character of views (both in daytime and night time), seen in context with existing structures in the steelworks. The additional built form would replace the scrub and greenery that is currently seen alongside the water in Port Talbot Docks. The proposed structures would be similar in height to existing structures in the views, including the Hanson Cement Works. Module E1 &amp; E2 and the stack associated with the HP Boiler Package would be noticeable on the skyline, although chimneys and structures in the wider Tata Steelworks would remain the most prominent structures on the skyline during day and night.</p> <p>On approach to the Site from the south, as the WCP emerges from the Central Road underpass to the railway line, the proposed buildings and other structures within the PDZ would be partially obscured by the Tata Steelworks. Clearer views would become possible on approach to the Harbour Way roundabout. In these views, the proposed structures would be set back behind the water which would retain a sense of openness to the foreground of views. Structures in the steelworks would remain prominent.</p> <p>As the path extends away from Harbour Way and towards Mariners Point as demonstrated by <b>RV3, Figure 8.8</b> structures associated with the Proposed Scheme would be visible beyond the River Afan. This would primarily be limited to views of the Module E1 &amp; E2 and the stack associated with the HP Boiler Package (and associated lighting) which would be seen amongst other similar structures (which also have associated lighting). There would be a slight reduction in scrub and grassland glimpsed to the background of some views and a slight increase in structures of an industrial appearance. The wider views towards the Margam Mountains would be maintained.</p>	<p>The sensitivity of road users of the WCP, to the north and west of Port Talbot Docks is considered to be <b>medium-high</b>. The magnitude of change is considered to vary from <b>medium-small</b> (direct views across TCA 1) to <b>negligible</b> (views across the harbour). Therefore, there is likely to be a direct, permanent, long-term, <b>adverse</b> effect which is considered to vary from <b>moderate</b> to <b>negligible</b>.</p> <p>RV1: small-negligible / minor adverse</p> <p>RV2: medium-small / moderate adverse</p> <p>RV3: negligible / negligible</p> <p>RV7: small / minor adverse</p>	<p>Yes</p> <p>In isolated locations (where users of the WCP pass adjacent to TCA1) users would experience moderate adverse effects which are considered to be significant. Adverse effects elsewhere are considered not significant</p>

Receptor	Value	Susceptibility to Change	Sensitivity	Commentary	Magnitude of change & Assessment of Effect	Is this Effect Significant?
				Travelling further round the bay, as demonstrated by <b>RV7, Figure 8.8</b> clearer views would be possible of structures within the PDZ. A series of storage tanks and Module E1 & E2 and the stack associated with the HP Boiler Package would be visible seen alongside the Hanson Cement Works and chimney within the Tata Steelworks. Although the industrial context to the background of views would increase (with a small increase in the amount of associated lighting), the features that contribute to the scenic quality of views would be maintained. The mountains would continue to form the backdrop of views with built form sitting well below these features on the skyline.		
Users of the WCP, on Margam Mountain <i>Representative View 6</i>	<b>Medium</b>  Views not designated or protected at a local level. The WCP is a designated long distance trail that encompasses views of the coastline and the Margam Mountains which is a designated Special Landscape Area.	<b>High</b>  Experience of views and visual amenity of high importance to users of public rights of way.	<b>Medium-High</b>	<p>Views from the stretches of the WCP that cross the mountains would continue to be influenced by scrub and trees along the route and the undulating topography which filter views provides containment to parts of the path as demonstrated by the ZTV (<b>Figure 8.7</b>). Where visible, the Proposed Scheme would extend the extent of industrial uses in views with some open areas changing from scrub to industrial sites (with a small increase in the amount of associated lighting) as demonstrated by <b>RV6, Appendix 8.2</b>. Storage tanks and Modules E1 &amp; E2 would be visible seen alongside Port Talbot Docks and the Hanson Cement Works. TCA 1 would return to a vegetated site and TCA East would also be open, following the demolition of existing buildings and the completion of construction works. Views of the Port Talbot Docks and out across Swansea Bay would be maintained.</p> <p>The changes to views would be experienced in the context of the large scale steelworks which would continue to have a dominant influence on the panoramic views.</p>	<p>The sensitivity of users of the WCP, on Margam Mountain is considered to be <b>medium-high</b>. The magnitude of change is considered to vary from <b>small</b> (where structures visible alongside wharf) to <b>negligible</b> (views obscured due to topography and vegetation). Therefore, there is likely to be a direct, long-term, <b>adverse</b> effect which is considered to vary from <b>minor</b> to <b>negligible</b>.</p> <p>RV6: small / minor adverse</p>	No
Road users and pedestrians on Residential streets within Port Talbot and Margam <i>Representative Views 4, 5, 8, 9 and 10</i>	<b>Ordinary</b>  The views are not identified in planning policy or associated with designated heritage assets although the coherence of built form and the Margam Mountains in the backdrop contributes to the visual amenity experienced by the receptor.	<b>Medium</b>  Experience of views and visual amenity of moderate importance to road users and pedestrians travelling through the residential areas.	<b>Medium-Low</b>	<p>As demonstrated by the ZTV, from the majority of residential streets surrounding the Site, the Proposed Scheme would be obscured due to the presence of intervening built form and the orientation of the terraced streets. The views Lake Road (<b>RV9, Appendix 8.6</b>) and Darwin Road (<b>RV8, Appendix 8.6</b>) demonstrate this containment where built form or structures in the foreground obscure views of the Proposed Scheme or result in changes to views being barely discernible. Whilst structures within the PDZ would be glimpsed from Darwin Road, intervening structures such as fences, scrub and existing built form, would mean the additional built form would not be readily discernible in the views.</p> <p>With TCA 1 returning to a cleared Site, the Proposed Scheme would become obscured in views from Lower West End, West End and the majority of Central Road as demonstrated by the ZTV at <b>Figure 8.7</b>. Harbour Way and the rows of terraces along the railway line would obscure views from residential areas to the northeast.</p> <p>From occasional more elevated streets such as Pen-Y-Cae Road and Broomhill (<b>RV4, Appendix 8.6</b>) breaks in built form would allow views of</p>	<p>The sensitivity of road users and pedestrians on residential streets within Port Talbot and Margam is considered to be <b>medium-low</b>. The magnitude of change is considered to vary from <b>small</b> (views from elevated streets orientated towards the Site) to <b>negligible</b> (majority of streets where Proposed Scheme obscured). Therefore, there is likely to be a direct, permanent long-term, <b>adverse</b> effect which is considered to vary from <b>minor</b> to <b>negligible</b>.</p> <p>RV4: small / minor adverse</p> <p>RV5: negligible / negligible</p> <p>RV8: negligible / negligible</p> <p>RV9: negligible / negligible</p> <p>RV10: small / minor adverse</p>	No

Receptor	Value	Susceptibility to Change	Sensitivity	Commentary	Magnitude of change & Assessment of Effect	Is this Effect Significant?
				<p>storage tanks and Modules E1 &amp; E2 within the PDZ alongside Port Talbot Docks. This would increase the presence of industrial structures in views in place of an area of scrubland. However, the overall character and appearance of views would be maintained and would continue to extend out to sea which is considered a positive characteristic of the views. In elevated views from Cwmavon Road (<b>RV10, Appendix 8.6</b>) the proposed structures would be seen behind the M4 overpass and alongside structures of a similar scale within the wider steelworks.</p> <p>From occasional streets orientated towards the Site to the north east, including short stretches of Oakwood Lane and Abbey Road (<b>RV5, Appendix 8.6</b>), there would be glimpses of proposed structures to the background of views. These would seen alongside existing structures of a similar scale within the wider steelworks and would not be readily discernible.</p>		
Residents of properties on Lower West End	<p><b>Low</b></p> <p>The views are not identified in planning policy or associated with designated heritage assets. Views face directly onto Harbour Way with a raised embankment of scrub and concrete. Views are also likely to encompass structures within the steelworks and are not considered likely to contribute positively to visual amenity.</p>	<p><b>High</b></p> <p>Experience of views and visual amenity of high importance to local residents</p>	<p><b>Medium</b></p>	<p>During the operational phase, structures within the PDZ would predominantly be obscured by Harbour Way. Limited glimpses of proposed structures would not be prominent in views and would be seen alongside existing structures within industrial areas.</p>	<p>The sensitivity of residents of properties on Lower West End is considered to be <b>medium</b>. The magnitude of change is considered to be <b>small</b>. Therefore, there is likely to be a direct, permanent, long-term <b>adverse</b> effect which is considered to be <b>minor</b>.</p>	No

## 7. Summary

- 7.1 The LVIA has been founded on a thorough study of the Site and its landscape setting. It has been undertaken by chartered landscape architects from Turley Landscape and VIA in accordance with current best practice and planning policy. The LVIA has been prepared to accompany and inform the ES Chapter on Landscape and Visual matters for the Proposed Scheme which is described as:

*“Demolition of existing structures and erection of a Sustainable Aviation Fuel (SAF) production facility, including enclosed ground flare, storage tanks, installation of pipework and electrical, processing and utility equipment, administration, warehouse and laboratory buildings, new access, car parking and transport infrastructure including a truck loading area and associated works, hard and soft landscaping, areas for temporary construction laydown, and associated development.”*

- 7.2 The Site consists of brownfield industrial land comprising a primary parcel of approximately 9.1 hectares, denominated as the PDZ, in addition to three discrete parcels of land within the wider Port Talbot Docks (approximately 7.44ha) of land located within the wider Port Talbot (referred to as TCA1, TCA East and TCA West); approximately 0.87km of the unnamed port road, running adjacent to the northern boundary of the PDZ; and, an extent of the marine environment of Port Talbot Docks, located to the north of the PDZ and the unnamed port road (referred to as the ‘Marine Unloading/Loading Facility’). Existing vegetation present within the Site includes a group Leyland cypress trees, self-seeded trees and shrubs, and Japanese Knotweed which is classified as an invasive species in the UK.
- 7.3 The Site is located within NPTCBC and planning policy for the area is set out in the Neath and Port Talbot CBC Local Development Plan (2011-2026) – Adopted January 2016. It is not covered by any landscape designations but is located relatively close to Special Landscape Area SLA4 (EN2/4) Margam and Registered Landscapes of Outstanding and of Special Interest in Wales – Margam Mountain HLW (WGI/MGI) which are located c.1.1km to the east of the PDZ.
- 7.4 The Site is identified in the Neath Port Talbot Landscape Assessment as falling within the Port Talbot Docks & Margam Works Character Area (Character area 50). The Site also has the following LANDMAP character assessment evaluations as set out by National Resources Wales (NRW):

Geological Aspect Areas – Low Overall Evaluation.

Landscape Habitats – Moderate Overall Evaluation.

Visual and Sensory Aspect Areas – Low Overall Evaluation.

Historic Landscape Aspect Areas – Moderate Overall Evaluation.

- 7.5 Within the study area, a more detailed assessment of landscape character was conducted at local level, building on the information provided in the published

characterisation studies with additional information captured during the site visit. Four LLCAs were identified, of which the Site is located within LLCA1 – Industrial Foreshore.

- 7.6 Views of the Site are limited by its undeveloped state, the distances between the Site and publicly accessible areas, and the influence of surrounding mature vegetation and built form. Views of the Site are more noticeable from roads and public rights of way around Crown Wharf due to the open character of the docks, as well as from the Margam Mountain, where elevated views across the industrial foreshore, which includes the Site, are unbroken and far reaching. Within the more built-up areas of Port Talbot, views towards the Site are more limited, due to the screening effect created by the dense areas of residential terraced housing. Views towards the Site from the town are limited to locations where the streets align with the Site Boundary. In such views, and views from other residential streets, it is common for structures in the steelworks and industrial areas around Port Talbot to be visible in the background of views.
- 7.7 Key visual receptors with views towards the Site include road users and pedestrians on Harbour Way; users of the WCP; and road users and pedestrians on residential streets within Port Talbot and Margam.
- 7.8 The Proposed Scheme would re-introduce development and result in vegetation clearance across the Site. The proposed structures would be of a similar scale and size to existing industrial structures within the wider steel works. The Proposed Scheme would result in some noticeable changes to views. However, the changes would reflect existing components in views and would not obscure or detract from the special qualities of views which relate to the Margam Mountains and wider open views across Swansea Bay. During the construction phase, there would be some more noticeable changes to views due to wider parts of the Site being used and the location of the TCAs which in part extend development closer to the residential context of the Site. During the operational phase, development would be concentrated within a small area and would be set behind the Port Talbot Docks with open water and wider areas of scrub maintaining a more open context to the foreground of views.
- 7.9 As an industrial facility, the Proposed Scheme has been designed and laid out to ensure compliance with relevant health and safety regulations and remove potential risks, including fire risk. As such, there are limited measures incorporated in the scheme to specifically address impacts on landscape and visual receptors. The impacts on landscape and visual receptors as a result of the Proposed Scheme have been described in this LVIA. A small number of effects have been considered significant, limited to close range views from the WCP public right of way and changes to the vegetation on Site. However, generally the changes to the Site are considered appropriate to its landscape context and would maintain views that contribute positively to the visual amenity experienced by visual receptors.
- 7.10 The following residual effects on landscape receptors arising from the Proposed Scheme during the construction stage have been identified:
- LLCA1 – Industrial Foreshore: **minor neutral**
  - LLCA2 – Port Talbot Town: **minor adverse**
  - LLCA3 - Margam, Emroch & Dinas Mountains: **negligible neutral**
  - LLCA4 – Swansea Bay: **minor neutral**

- Vegetation on Site: **moderate adverse**

7.11 The following residual effects on landscape receptors arising from the Proposed Scheme during the operational stage have been identified:

- LLCA1 – Industrial Foreshore: **minor neutral**
- LLCA2 – Port Talbot Town: **negligible to minor adverse**
- LLCA3 – Margam, Emroch & Dinas Mountains: **negligible neutral**
- LLCA4 – Swansea Bay: **minor neutral**
- Vegetation on Site: **moderate adverse**

7.12 The following residual effects on key visual receptors arising from the Proposed Scheme during the construction stage have been identified<sup>13</sup>.

- Road users on Harbour Way / A4241: **Varying from moderate-minor to negligible adverse**
- Users of the WCP, to the north and west of Port Talbot Docks: **Varying from moderate to negligible adverse**
- Users of the WCP, on Margam Mountain: **Varying from moderate to negligible adverse**
- Road users and pedestrians on Residential streets within Port Talbot and Margam: **Varying from moderate-minor to negligible adverse**
- Residents of properties on Lower West End: **moderate-minor adverse**

7.13 The following residual effects on key visual receptors arising from the Proposed Scheme during the operational stage have been identified.

- Road users on Harbour Way / A4241: **Varying from minor to negligible adverse**
- Users of the WCP, to the north and west of Port Talbot Docks: **Varying from moderate to negligible adverse**
- Users of the WCP, on Margam Mountain: **Varying from minor to negligible adverse**
- Road users and pedestrians on Residential streets within Port Talbot and Margam: **Varying from minor to negligible adverse**
- Residents of properties on Lower West End: **minor adverse**

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<sup>13</sup> Whether the effects have been identified as 'beneficial', 'neutral' or 'adverse' relates to the existing context and influence of built form within the view, and the extent to the Proposed Scheme would integrate with existing components in views.

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