SECTION A – MATTERS FOR DECISION

Planning Applications Recommended For Approval

APPLICATION NO: P2023/0858		**DATE: 13-11-2023**
PROPOSAL:	Demolition of existing structures and erection of a Sustainable Aviation Fuel (SAF) production facility, including the production of green hydrogen and sustainable diesel, 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.	
LOCATION:	Crown Wharf, Port Talbot Docks, Port Talbot, SA13 1RA	
APPLICANT:	Lanzatech Ltd	
TYPE:	Major Development, EIA Development.	
WARD:	Margam and Taibach	

BACKGROUND

This application is a major development proposal accompanied by an Environmental Statement and is reported to the Planning Committee for this reason.

SITE AND CONTEXT

The Site is located within Port Talbot in the Associated British Ports operational docks area and adjoins the Tata Steel industrial area. The site context is shown in Figures 1 and 2.

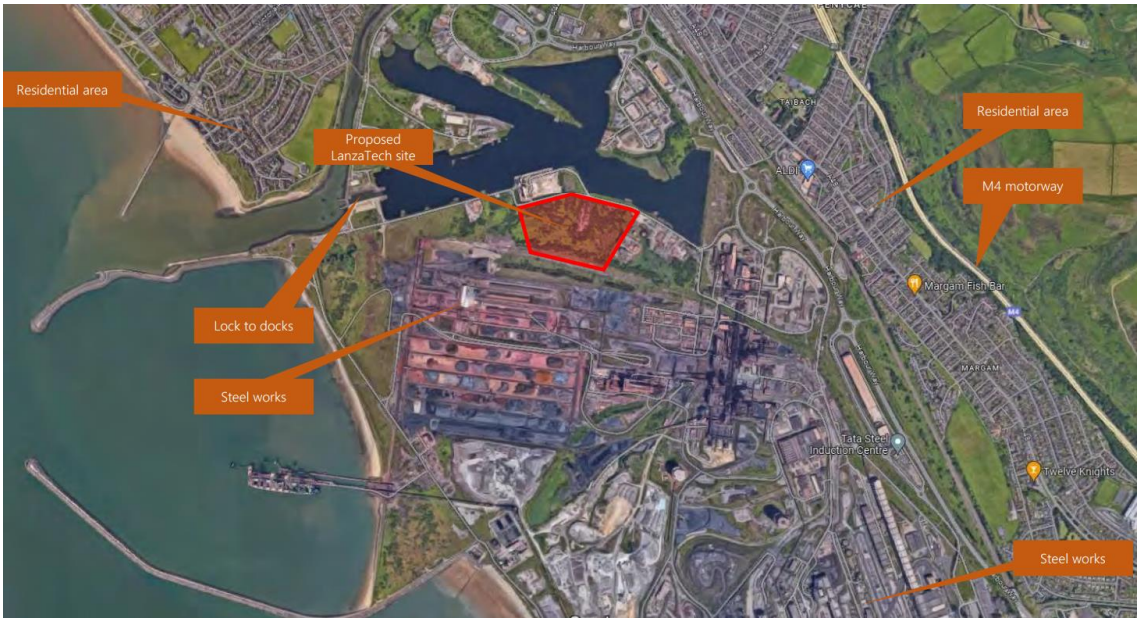

Figure 1: Site location and surroundings, with proximity to road, rail and sea access. The site is within the Celtic Freeport Area.

Figure 2: Aerial view of Port Talbot showing the site of development.

Given the extent of the Site, it has been split into a number of parcels (linked to their proposed function), as follows (as shown in figure 3):

• Primary parcel of land for the location of the proposed production facility (approximately 9.1ha), 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'). TCA West is separated into two parcels.
• Approximately 0.87km of Phoenix Way (port road), running adjacent to the northern boundary of the PDZ; and

• An extent of marine environment of Port Talbot Docks, located to the north of the PDZ and Phoenix Way.

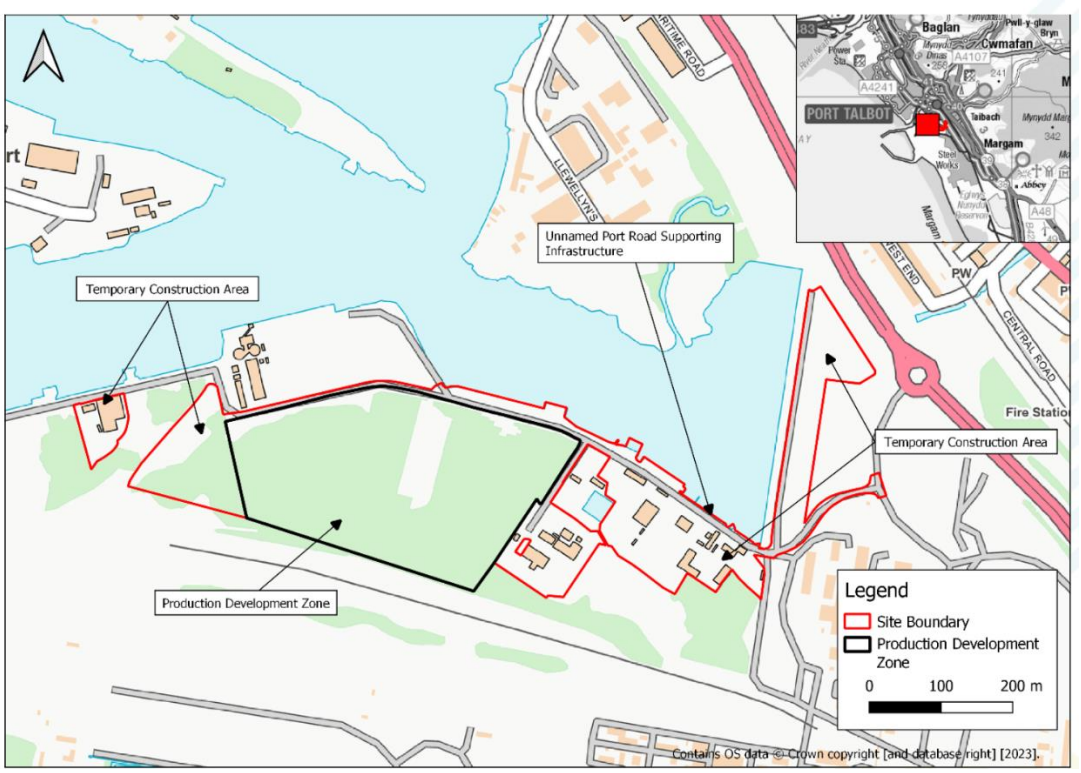

Figure 3: Application plan showing the location of Temporary Construction Areas and the Production Development Zone.

The above terms are used throughout the applicant's Environmental Statement (ES) and other documents and are adopted for the purposes of this committee report.

The PDZ is currently unused and vacant land which has been colonised by vegetation. At TCA East there are a number of buildings and structures associated with historic and on-going industrial/commercial activities. The applicant notes that a number of these structures are in a poor / unusable condition and vacant. Whilst others support on-going commercial activities / tenants, including a crane hire firm, a welding services company, a scaffolding company and oil tankage facilities. It is understood that these companies are in the process of re-locating locally. TCA 1 and TCA West comprise vacant land colonised by vegetation.

Both the PDZ and TCA1 were 'created' as part of the development of Port Talbot Docks in the early 20th Century, with the focus of utilisation as a working dock and has been subject to previous development. The supporting information to the application identifies that the site has a long history of industrial uses and by 1940, the entire site is recorded to have been infilled, with multiple buildings and infrastructure (including railway sidings, tanks, settling tanks, travelling cranes, overhead pipes, chimneys, reservoirs, conveyors, hoppers and Margam Wharf) of the wider Margam (Iron and Steel) Works site. Margam Wharf is shown to be present along the western site boundary. All buildings on the PDZ and TCA1 appeared to have been

demolished as of 2009. TCA West and TCA East also featured significant industrial development.

Crown Wharf, which defines an extent of dock wall of Port Talbot Docks, is located to the north-east of the PDZ. Phoenix Wharf, another extent of dock wall, is located immediate north of the PDZ. In the surrounding area there are further industrial facilities to the south, residential dwellings in Port Talbot to the east and agricultural land beyond that, residential dwellings to the north west, and Swansea Bay to the west.

As part of the application supporting information a topographical survey of the PDZ was completed, this shows higher ground towards the southern boundary, with ground elevations ranging mostly between 8-9m Above Ordnance Datum (AOD), with a maximum of 9.64m AOD in the south-western portion. Along the northern boundary of the PDZ levels are lower, ranging between 7-8m AOD with a low of 8.86m AOD at the central northern boundary of the PDZ, closest to Phoenix Way.

The applicant notes that based on NRW LiDAR information that TCA 1 is relatively flat with levels ranging from 7.3-8.1m AOD at their maximum extents. Levels within TCA East and TCA West range from 7.7 – 8.4m AOD and 7.5 – 8.3m AOD respectively. LiDAR data also shows that ground levels for TCA East and TCA West naturally drain towards the dock road system and the Port Talbot Docks.

As outlined above the PDZ is contained in the docks area owned by Associated British Ports (ABP). Port Talbot Docks is an existing and working docks. The applicant's planning statement indicates that the docks handle around 6.6 million tonnes of cargo every year and over £760 million of trade. In addition, the Port Talbot Docks does support recreational uses, including fishing, sailing and rowing as part of the Port Talbot Sea Cadets (North Wharf), as well as other water sports through the Port Talbot YMCA Water sports facility (North Wharf). Afan Boat Club are located on the River Afan, near to Port Talbot Docks, with associated slipway and moorings. Beyond the docks are the extensive areas of Port Talbot Town Centre, with the Harbourside strategic regeneration area (as defined in the Local Development Plan in policy SRA2). To the north of the TCA East are areas of residential development separated by Harbour Way. Across Port Talbot docks to the North are existing industrial and dock related development and beyond this the extensive residential development of Sandfields.

As Local Planning Authority the jurisdiction of the Authority extends to the Mean low water which is the 'seaward' extent of the Town and Country Planning Act 1990 regime. Planning permission is not required for the marine aspects of the Crown Wharf Works, as these sit below the mean low water mark and mean high water spring tide. Mean high water is the limit of the area covered by marine licensing. The applicant's agent has indicated that a Marine Licence will be applied for, for these works. These works would form part of a single project for EIA purposes and the Marine Licence is regulated by separate EIA regulations.

DESCRIPTION OF DEVELOPMENT

A detailed 35 page specification for the development is provided within the Environmental Statement Chapter 4. Additionally the design aspects of the proposal are explained in detail within the supporting Design and Access Statement and also the supporting Planning Statement.

This section of the report is a summary of the main aspects of the development proposed.

The proposal is for the 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.

- **The Alcohol to Jet Fuel process**

The application proposal will deliver a SAF production facility, transforming sustainably sourced ethanol into SAF and sustainable diesel, using the applicant's propriety technology. The applicant states that they will use ethanol that complies with the requirements of the proposed UK SAF Mandate 5, which is currently being finalised. This requires that ethanol is made from sustainably produced wastes or residues (biomass or Recycled Carbon Fuels) or low carbon electricity (renewable or nuclear). The SAF supplied must also meet strict sustainability requirements. The applicant states that the proposed development has been developed to meet these requirements.

The applicant states that the proposed development will be fed by ethanol from industrial waste gases at other sites at which the applicant has established its gas fermentation technology around the world. Alternatively, the applicant states they may purchase sustainably sourced ethanol on the open market, such as ethanol made from waste starch. The applicant notes that the Green House Gas (GHG) emissions associated with the production and transport of the ethanol have been taken into account in the Life Carbon Assessment (LCA) assessment of the carbon intensity of the SAF produced.

The applicant outlines the process as shown in figures 4 and 5 and table 1 below.

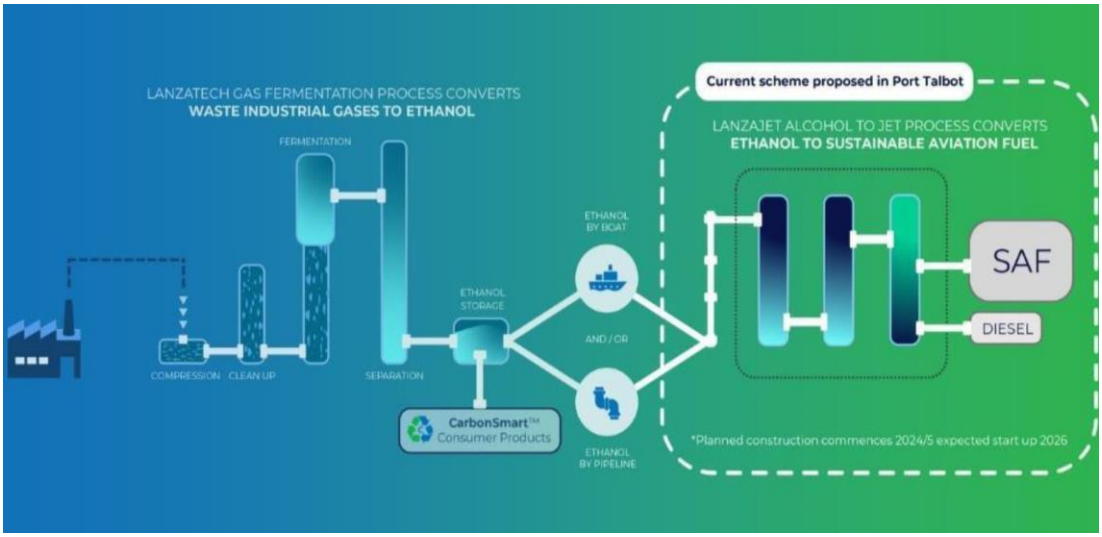

Figure 4: Alcohol to Jet Fuel wider Process. (from applicants planning statement)

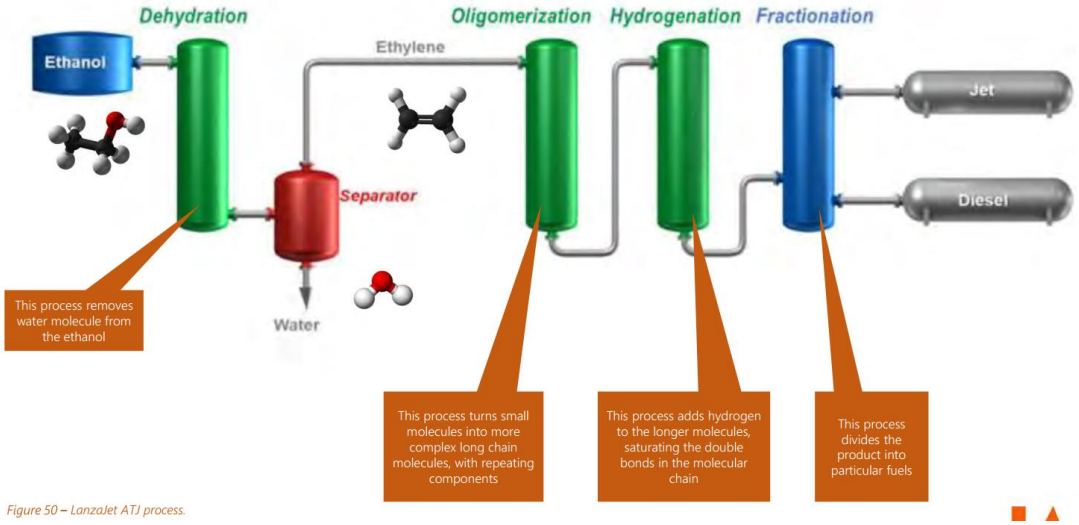

Figure 5: Alcohol to Jet Fuel Process. (from applicants design and access statement)

Stage of Process	Summary
Step 1 – Sustainability sourced ethanol	Sustainably sourced ethanol is routed to the site by ship and transferred via pipe to ethanol storage tanks within the site.
Step 2 – Splitting to produce water and ethylene	The ethanol is transferred via pipe from the tanks to the process modules along the site's southern boundary, where it goes through a process of dehydration and splitting to create ethylene and water.
Step 3 – Oligomerisation	Ethylene molecules are combined into long chains. This process takes place within the process modules at the south of the site.
Step 4 – Hydrogenation	This process saturates the oligomerised molecules with hydrogen. This process takes

Stage of Process	Summary
	place within the process modules at the south of the site.
Step 5 – Fractionation	The resulting product goes through a process of fractionation. This separates grades of fuel using temperature (different boiling points). This step also takes place within the process modules.
Step 6 – Output of SAF and sustainable diesel	The outputs are transferred via pipe and stored on-site in the respective SAF storage tanks and sustainable diesel storage tanks as identified on the proposed layout plan. SAF will then be piped to a wharf loading facility and distributed via ship. Sustainable diesel will be piped to the truck loading area and loaded onto tankers for distribution via road.

Table 1: Stepwise alcohol to jet fuel process. (from applicant's planning statement)

Some of the main process inputs and outputs are as follows:

Inputs:

• Ethanol – 100,000 – 160,000 litres per annum (this is the primary feedstock and will be brought in by ship)

• Raw Water – 700,000 – 800,000 m^3 per annum (extracted from Port Talbot Docks)

• Other inputs to the process include electricity, mains gas, nitrogen, caustic, sulphuric acid, product additives, water treatment chemicals, and catalysts / resins / absorbents.

Outputs:

• Sustainable Aviation Fuels – 79,100 tonnes per annum (this is the main product to be generated by the development and will be stored on site in four storage tanks and transported from site by ship)

• Renewable Diesel – 8,800 tonnes per annum (this is another product produced in the applicants process and will be stored on site in three tanks and shipped from site by road tanker)

• Treated Effluent Water – 320,000 m^3 per annum (Concentrate generated from stages within the process, such as reverse osmosis of combined raw water and recycled treated process water, which is then discharged to Port Talbot Dock, via a new discharge point)

• Other outputs include on site effluent treatment which results in a variety of solids, liquids and gases. Flue gas will be discharged and there will be a flare

on site. The applicant notes that the composition of the gas will vary and it will be monitored for emissions of CO, NOx, SOx and particulate matter (PM) and will be subject to an Environmental permit. The site will also produce Spent catalysts, resins & absorbents. Spent catalyst is decontaminated prior to transport by road and where practical the applicant states that the supplier will be responsible for onward processing.

The application states that the facility will produce approximately 90% sustainable aviation fuel and 10% sustainable diesel that would be sold as a sustainable road fuel. The proportion of SAF versus sustainable diesel is flexible and can change up to a 'maximum' sustainable diesel scenario of 25% sustainable aviation fuel and 75% sustainable diesel.

- **Demolition**

Demolition will be required to accommodate the TCAs proposed. These are low level industrial buildings which are masonry, concrete and steel with around 4,526sqm of floorspace.

- **Proposed Development**

As outlined above there are three primary areas:

• Production Development Zone (PDZ): The PDZ comprises all permanent buildings, structures, plant and equipment associated with the proposed development.
• Proposed Access: Phoenix Way will provide the access points to the site.
• Temporary Construction Areas: Surrounding land to be utilised as temporary laydown.

Production Development Zone (PDZ)

The PDZ is broadly split into three areas (see Figures 4 and 5), these are identified as follows:

• Administration Area.
• Industrial Process Area, including the Enclosed Ground Flare.
• Truck Loading Area

Figure 4: Plan showing the areas within the PDZ - Yellow – industrial process area; Green – Lorry loading area; Blue – Administrative area. (from applicant's planning statement)

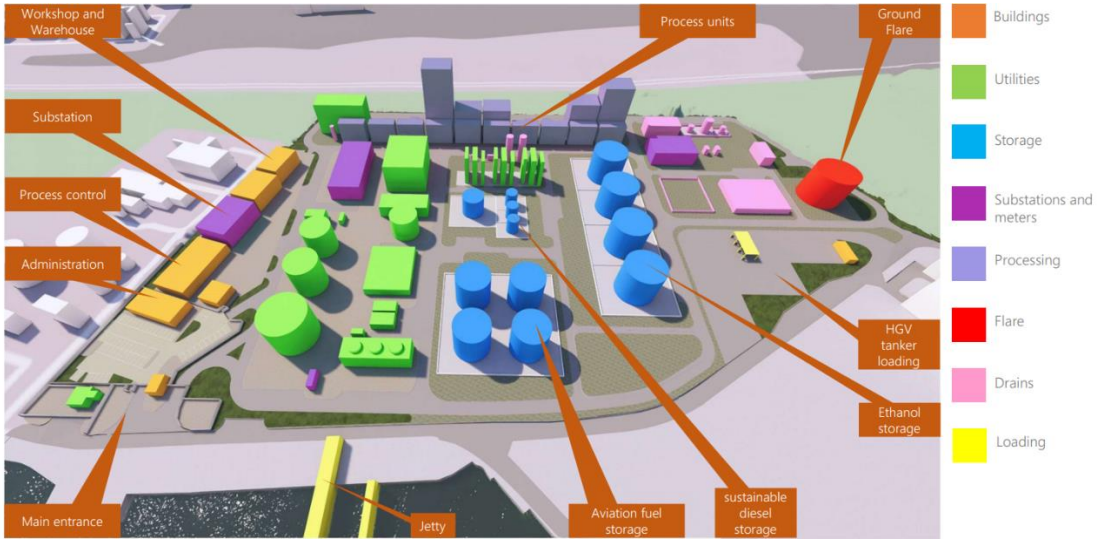

Figure 5: Diagrammatic representation of site layout (from design and access statement)

The administration area is situated at the main entrance to the site. It comprises development along the eastern boundary of the PDZ and includes:

• Gatehouse 1 – 35 sqm (GIA). The gatehouse will control entry into the administration building and car park and into the industrial process area.
• Administration building – 342 sqm (GIA). This is the primary building for use by employees and visitors. This is segregated from the wider industrial process area and further buildings to the south for operational and safety reasons.
• Amenity shelters – covered outside space for employees.
• Cycle stand – comprising eight bicycle parking spaces and two motorcycle spaces. This will accommodate sustainable transport choices and potential future improvements to surrounding port infrastructure.
• Car parking – 57 parking spaces, including disabled parking spaces. 25% of the spaces proposed will accommodate active electric vehicle (EV) charging

points (14 spaces). This level of parking will accommodate staff parking during each shift change over and parking for any visitors or maintenance staff who may be present onsite.
• Electrical switchroom.
• Area of landscaping/biodiversity provision.

Further buildings accessed through the industrial entrance and separated from the main admin building and car parking area by a proposed 2.4m high palisade fence, comprising:

• The process control room – 700 sqm (GIA). This is a dedicated control centre for the industrial process.
• Laboratory – 84 sqm (GIA). This will monitor the quality of feedstock materials, partially processed materials and finished products.
• Workshop – 337 sqm (GIA). This will be used for the repair and maintenance of items in the industrial process.
• Warehouse – 399 sqm (GIA). This will be used for the storage of spare parts and consumables for the industrial process.
• Electrical substation – 15m in height and connecting to the wider industrial process area and substation.

The proposed building heights across the administration area range from 10 to 15 metres. Several buildings will be single storey.

The industrial process area comprises the primary equipment associated with the Alcohol To Jet fuel (ATJ) process. The processing, storage and utility zones are located centrally within the PDZ and will include all the processing/production plant, associated structures and pipework, and the storage of inputs and outputs. This includes tanks for the storage of ethanol, sustainable aviation fuel and sustainable diesel. Two buildings (compressor houses 1 and 2) are situated adjacent to the process modules in the southern extent of the site. The tallest structure (extending to approximately 50m in height) comprises Module E1 and E2 set within the process modules along the southern boundary of the PDZ. The remainder of the proposed development within the industrial process area will extend to a maximum height of 40m. The storage tanks throughout the industrial process area range in function and height from 5 to 20m. The smallest structures include pumps and engineering packages at 3m in height. The application indicates that there will be piled foundations for this part of the development.

An enclosed ground flare is proposed. The supporting information outlines how this is a required safety feature for the facility. During normal operations, the flare will only burn a minimal number of ‘pilot’ gases to support the safe operation of the facility.

The ground flare will be situated in the western extent of the PDZ and within the industrial process area. The enclosed ground flare will extend up to 20m in height from the proposed ground level (i.e., in line with other equipment located within the industrial process area).

During an interruption to the process (such as a power cut), the flare will need to be used to recover the facility and safely shut it down. The flare will also need to be used to start up the plant. The supporting information to the application sets out that the applicant will seek to minimise both the amount and duration of any flaring event. Intensive use of the flare is expected to be limited and not common practice.

The truck loading area is situated along the north western boundary of the PDZ. This will include a gate house parking bays, a layby waiting area, entrance, loading facilities, landscaping and weighbridge.

- **PDZ-wide Development Proposals**

Detailed drainage proposals are provided. The drainage proposals are reflective of the sites potential contamination risk. Drainage will be managed through a clean water and contaminated drain. The clean water drain will drain through a SuDs system from areas where there are low and medium hazard. The contaminated drain will drain high hazard areas comprising storage and processing areas at the site. The contaminated water is transferred to an onsite effluent treatment plant and re-used on site in the process.

The SuDS system will comprise rain gardens, trapezoidal ditches (gravel-based swales) and permeable paving. Biodiversity and amenity benefits are limited due to the industrial nature of the site and the consideration of health and safety and the COMAH Regulations. A separate SAB's consent will be required for the drainage works (see Table 2 for all associated consents and permits). Foul flows will be accommodated in the public combined system which drains to the Afan New Works Wastewater Treatment Works.

The application is supported by a comprehensive Green Infrastructure and Landscape Strategy and Arboricultural survey assessment. The main proposed habitat created for the proposed development is flower-rich grassland and pioneer vegetation. This will be established on nutrient-poor substrate features that should be equivalent to habitats of biodiversity value in the wider dock. The applicant has also negotiated the provision of off-site biodiversity mitigation which is discussed further in the relevant section of the report.

The site will require levelling to accommodate the proposed development. Existing topography across the PDZ ranges from 6.86m to 9.64m AOD. In response to current and future flood levels, the applicant proposes to undertake a proportionate balance of cut and fill to allow for a good working substrate and minimising earthwork movements off- site, a flat working surface of circa 8.1m AOD is proposed across the site.

Perimeter and internal fencing will comprise: Perimeter fencing: 2.4m steel palisade fence with security topping; Internal fencing between administration building and industrial processes: 2.4m; steel spiked palisade fencing (without security topping); and Specific areas within the industrial processing area (such as substations): 2.4m chain-link fencing.

The application is supported by an exterior lighting strategy. The applicant outlines that the lighting strategy reflects the operational industrial nature of the site. The proposed lighting strategy includes the following: Pole mounted streetlights (8m mounting height); Pole mounted floodlights (10m mounting height); Bracket mounted floodlights (6m mounting height); Pendant mounted highway lighting (5.5m and 8.5m mounting height); and Handrail pole mounted linear lighting (3m mounting height).

The lighting proposed in the operational areas is a combination of normal and emergency lighting. The normal lighting will be controlled by a timer and photo electric cell, so that the lights can only come on during set hours and only if it is dark enough for artificial lighting to be required. These lights will only come on (if required) between 11pm and 6am.

Emergency lighting comprises 30% of the lighting required for the operation of the site and is backed-up by an emergency diesel generator. It is proposed that it is made available for 24 hours a day (if it is dark enough for artificial lighting to be required).

Streetlights and carpark lighting are to be controlled by a timer and photo electric cell. Lights can only come on during set hours and only if it is dark enough for artificial lighting to be required for safe movement around the PDZ. A manual override switch integral to the distribution board will also be incorporated to control the exterior lighting in the event of an emergency. High-level platform, module and tank lighting will have the capability of being dimmed and manually switched off when not required.

The applicant outlines that the material palette for the industrial process area will be operationally led and reflective of the surrounding area. This will include metal, galvanised steel and aluminium. Materials include insulated panels (used mainly on functional buildings), with grey bricks used on administration buildings. Feature colours are used sparingly. The storage tanks will be white, the racking and stairs will be galvanised steel. Some health and safety features such as hand rails will be yellow. Buildings are a mixture of textured insulated panels / built up insulated cladding systems. The administrative building includes feature stonework.

Figure 6: Visualisation of entrance to site with administrative building, car parking and production area behind.

Proposed Access

The site will be accessed from Phoenix Way the private road at the north of the application site. Three new vehicular access points are proposed. Two access points are located at the northeast of the site and lie adjacent to Phoenix Way. The main site entrance will be used for the administrative area (to be used by staff and visitors). The industrial entrance will be used to access the process area. Both access points will be controlled by a gatehouse for security.

Vehicles collecting and exporting products from the site will enter and exit the site from a new access point at the truck loading area. This is located at the northwest of the site. Internal site roads are proposed across the Industrial Process Area to allow the transportation of materials and the daily operation of the site. This will also ensure that all modules and equipment can be accessed for maintenance purposes. All roads will be one-way with external lighting.

There is an additional emergency access point in the northwestern corner of the site. This will only be used in emergency situations.

Ethanol and SAF will be transferred to and from the PDZ respectively via pipe rack from the wharf/unloading and loading facility, to be located within the adjacent dock area owned by ABP. The relevant marine elements of these works (which fall outside of this planning application) will be subject to a separate marine licence. This will enable the transportation of ethanol and SAF via pipe to the dock and on to a ship.

Temporary Construction Areas

The scale of development at the site requires additional land in proximity to the PDZ for use as temporary construction areas. As the proposal is for an EIA development the temporary construction areas form part of the application submission. They are identified as three separate areas of land TCA 1, TCA East and TCA West.

The application states that the full extent of use necessary for the TCAs has not been fully identified and will be when the contractor is appointed. The TCAs are to be used in the following ways: An area to house the main principal contractor compound and associated amenities/welfare facilities; Car parking; Material delivery, drop off and storage; Potential pre-fabrication; and Satellite compounds, if required.

The applicant has suggested construction working hours of 07:00 to 19:00, Monday to Friday and 07:00 to 13:00 on Saturdays. They have also identified that it is likely that some construction activities will be required to operate for 24 hours at certain times. Construction is estimated to last for two and a half years. They intend to commence in 2024 with completion in 2026.

The details submitted highlight impacts upon residential receptors from 24 hour working. The application suggests that working during these periods would be at a lower intensity but is modelled as showing noise impacts higher than would be acceptable at nearby residential receptors. Suitably worded conditions can be used to control hours of operation at the site, as discussed below.

The application supporting information notes that where appropriate, temporary drainage requirements for the TCAs will be provided and will be addressed through the separate SAB process. The TCAs which comprise existing hardstanding which will retain and use the existing drainage systems serving these areas. TCA1 (North) will utilise the slope of the area to drain to proposed ditches with drainage pumps to manage any runoff or build-up of materials associated with temporary construction. The application states that they intend to provide full details of associated construction lighting and temporary enclosures in a detailed CEMP, which will be developed from the Framework CEMP (which forms part of this application submission).

The Framework CEMP sets out the Site and Surrounding Context, Proposed Development and Key Construction Considerations and Challenges; Roles, Responsibilities and Communications; Construction Programme and Methodology; Framework CEMP Strategies; and Implementation, Monitoring and Updating

Operating Hours and Staffing
The site will operate 24 hours a day, seven days a week. The application supporting information states that when operating the development would generate approximately 85 FTE jobs. Staff will work in shifts, as detailed below, and supported by six remote support staff:
• Day Support Staff: Nine staff working 08:00-17:00.
• 12 staff working 00:00-08:00.
• 41 staff working 08:00-16:00.
• 17 staff working 16:00-00:00

Utilities and off-site Infrastructure
The applicant has stated that they are in discussions with Dwr Cymru Welsh Water and that they have confirmed capacity for foul drainage and potable

water. They also state that National Grid has confirmed capacity and that they are in on going discussions regarding a new grid connection agreement to the Pyle substation. National Grid will secure any consents required for this connection outside the application boundary. Similarly the applicant states that they are in discussion with Wales and West Utilities regarding provision of a gas connection to the site.

Associated Consents, Permits and Licensing

Reflecting the nature of the proposal additional consents, permits and licenses (beyond the planning process) will be required to support the operation of the scheme. The application provides the following table (Table 2) to aid understanding of the required additional consents.

Permit / Consent / License / Other Approval	**Description**	**Determining Authority**
Environmental Permit	An environmental permit is required for the main production activity, in accordance with the Environmental Permitting Regulations (England and Wales) 2016 (as amended).	NRW
Greenhouse Gas Emissions Permit	The scheme will exceed relevant thresholds and will require a Greenhouse Gas Permit to operate under the UK Emissions Trading Scheme.	NRW
Water Abstraction License	Required for the volume of water expected to be abstracted from docks.	NRW
Hazardous Substances Consent	Required for the handling of hazardous substances and exceedance of controlled quantities in the Planning (Hazardous Substances) (Wales) Regulations 2015.	NPTC in consultation with the Health and Safety Executive (HSE) and NRW
Control of Major Accident Hazards (COMAH)	Required due to the handling of hazardous substances exceeding	HSE and NRW

Permit / Consent / License / Other Approval	Description	Determining Authority
	the Upper Tier COMAH threshold.	
Marine Licence	A marine licence will capture all marine works associated with the wharf loading/unloading facility, in accordance with legal advice.	NRW in consultation with NPTC as statutory consultee
Sustainable Drainage Approval Body (SAB)	In accordance with Schedule 3 of the Flood and Water Management Act 2010, the proposed development requires SAB approval.	Authority: NPTC

Table 2: List of associated consents and permits.

NEGOTIATIONS:

The Authority has undertaken extensive pre-application discussions with the applicant and their representatives. Specialist officers have fed into the scope of the environmental statement and the overall design and layout of the development that has come forward for determination.

Since submission the application has not been amended.

Additional clarification has been provided in a number of areas at the request of consultees:

1. Clarification note on air quality
2. Clarification note on noise
3. Updated Water Framework Directive Assessment

A green infrastructure assessment was submitted reflecting the new policy context provided by the updated Planning Policy Wales (Edition 12) discussed further below. Information on habitat management of the off site ecological mitigation has also been received for use in an accompanying S106 agreement.

PLANNING HISTORY

This is an extensive site which has a history of planning applications related to dockside and industrial uses. However, there are no applications that would be significantly material to this proposal. Prior to submitting this application the applicant submitted a request for an EIA scoping opinion (P2023/0436) for this development, this application was withdrawn prior to the submission of this application.

CONSULTATIONS

Consultee	Response
Natural Resources Wales	Concerns that can be addressed through conditions securing a detailed lighting plan; construction environmental management plan; and to secure contaminated land remediation. No objections subject to these conditions.
South Wales Trunk Roads	No response (see WG Transport Directorate below)
Swansea Council	Does not appear to raise any issues potentially impacting upon Swansea's administrative area and therefore no objections are raised to the proposed development.
NPT EHO (noise + air quality)	Noise Consultant – ES reviewed and following clarification, conclusions agreed with. Air Quality Consultant – ES reviewed and following clarification, conclusions agreed with.
NPT CLO	Ground Investigation reviewed and its recommendations that further investigations are undertaken are accepted and conditions recommended to secure this, remediation and verification. (recommended additional works are targeted ground investigation to provide additional site specific data; and Additional investigation testing within the northern site area)
NPT Drainage	SAB required
NPT Economic Development	Support the proposal (as detailed in the socio-economic section of the report below)
NPT Ecologist	No objections
NPT Forward Planning	No response to date
NPT Highways	No objection subject to condition
NPT Sustainable Transport	Request for developer contribution to active travel to the Newbridge Project (188,960.65)
NPT Tree Officer	No objection
SWP	Advice on security
Fire Authority	No comments or objections.
Wales & West Utilities	Plan provided of infrastructure (medium pressure gas main along Phoenix Way to north of site).
Cadw	No objection
WG Transport Directorate	Welsh Government as highways authority responsible for the M4 advise they do not issue a direction.

Consultee	Response
Dwr Cymru Welsh Water	No objection subject to condition (provision of potable water supply scheme)
Swansea Bay Port Health Authority	No comments to date
Network Rail	No objection – advise an asset protection agreement is required.
HSE	No objection

REPRESENTATIONS

Application Publicity
The application was publicised as a major development and as a development accompanied by an Environmental Statement as defined under the Town and Country Planning (General Development Management) (Wales) Procedure Order 2012 and The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017. The application publicity gave 30 days to respond to the proposal.

The application publicity was as follows: Placing six site notices in various locations near to the site. Nearby properties were consulted by post and an advert was placed in the South Wales Evening Post.

Following publicity the following representations were received:

One letter was received that expressed objections, as summarised below:

- Concern regarding additional atmospheric pollution in an area which already suffers from pollution.
- Query whether the ethanol feedstock will need to be transported by train and the risk of explosions and the sustainability of moving the fuel.
- Concern the process will involve benzene a highly flammable carcinogen.
- Concern about transporting the fuel produced and the risk to the local population.
- Concern that the job creation figures are inflated.
- The risk of the development should not be outweighed by the provision of additional jobs.

Letters of support were received from the following: Associated British Ports; Davies Crane Hire; JES Group; the Head of Net Zero & Sustainability at Wales and West Utilities; the Chief Executive of Net-Zero Industries Wales; Port of Milford Haven (Celtic Freeport Partner) and Stephen Kinnock MP. The letters of support referred to the green credentials of the development and also the job creation and economic benefit of the development.

Pre-Application Consultation (PAC)

The application was supported by the submission of the necessary Pre-application Consultation (PAC) Report. The report states that the Pre-application Consultation exercise was carried out in accordance with the requirements of the Town and Country Planning (Development Management Procedure)(Wales) Order 2016 (as amended) for the mandatory pre-application consultation process for a minimum of 28 days prior to the submission of a major planning application. The report states that the relevant information was made available online and substantial efforts were made to publicise the application. This included distributing postcards to 9,234 addresses, undertaking two social media campaigns (the first campaign reached 14,955 people and the second 12,333 people). Hosting an online webinar and three in-person drop-in consultation events, where Project information was made available. Attending two existing community events and distributing posters advertising the pre-application consultation. Notices required statutorily were placed around the site and a copy provided.

The PAC report provides a full review of the feedback received during the pre-application consultation process and the applicant's response to the feedback. A number of key areas of interest were identified: Interest in jobs and opportunities for local businesses through the construction phase; Support for the need for the Project; Questions around the impacts of the Project; and Questions around SAF storage and safety.

The PAC report has been reviewed and is considered to be sufficient to meet the statutory requirements.

PLANNING POLICY CONTEXT

National Legislation, Planning Policy and Guidance

The Well-being of Future Generations Act (Wales) 2015 (WFGA 2015)

The WFGA 2015 places a duty on the Council to take reasonable steps in exercising its functions to meet its sustainable development (or wellbeing) objectives. This report has been prepared in consideration of the Council's duty and the "sustainable development principle", as set out in the 2015 Act. In reaching the recommendation set out below, the Council has sought to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.

Future Wales and Planning Policy Wales (Edition 12, 2024)

Planning Policy Wales (Edition 12) was revised in February 2024 to include a revised chapter 6 Distinctive and Natural Places. This followed a previous comprehensive revision and restructuring in 20021 which coincided with publication of, and to take into account the policies, themes and approaches set out in, Future Wales - the National Plan 2040 and to deliver the vision for Wales that is set out therein.

Future Wales now forms part of the Development Plan for all parts of Wales, comprising a strategy for addressing key national priorities through the planning system, including sustaining and developing a vibrant economy, achieving decarbonisation and climate-resilience, developing strong ecosystems and improving the health and well-being of our communities. All Development Management decisions, strategic and local development plans, planning appeals and all other work directed by the development plan need to accord with Future Wales. The following policies within Future Wales 2040 are considered significantly material to the determination of this application:

Policy 1 Where Wales will grow.
Policy 2 Shaping Urban Growth and Regeneration – Strategic Placemaking.
Policy 8 Flooding.
Policy 9 Resilient Ecological Networks and Green Infrastructure.
Policy 19 Strategic Policies for Regional Planning.
Policy 28 National Growth Area – Swansea Bay and Llanelli

Outcome 11 of Future Wales states that "decarbonisation commitments and renewable energy targets will be treated as opportunities to build a more resilient and equitable low carbon economy". Future W aims to ensure that the planning system will help Wales "lead the way in promoting and delivering a competitive, sustainable decarbonised society".

The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales, as required by the Planning (Wales) Act 2015 and the Well-being of Future Generations (Wales) Act 2015.

PPW11 takes the seven *Well-being Goals* and the five *Ways of Working* as overarching themes and embodies a placemaking approach throughout, with the aim of delivering *Active and Social Places*, *Productive and Enterprising Places* and *Distinctive and Natural Places.* It also identifies the planning system as one of the main tools to create sustainable places, and that placemaking principles are a tool to achieving this through both plan making and the decision making process.

The following sections of PPW is of particular relevance in the assessment of this planning application:

• Paras 3.3 to 3.17 (Good Design Making Better Spaces)
• Paras 3.19 and 3.23 (Promoting Healthier Places)
• Paras 3.49 to 3.52 (Accessibility)
• Paras 3.55 and 3.56 (Previously Developed Land)
• Paras 4.1.9 to 4.1.18 (Sustainable Transport)
• Paras 4.1.36 to 4.1.39 (Public Transport)
• Paras 4.1.49 to 4.1.54 (Car Parking)
• Paras 4.1.55 and 4.1.56 (Transport Assessments)
• Paras 5.8.1 to 5.8.3 (Sustainable Buildings)

• Paras 5.11.1 to 5.11.3 (Making Best Use of Material Resources and Promoting the Circular Economy)
• Para 5.12.1 (Design Choices to Prevent Waste)
• Para 5.12.6 (Design in Locally Sourced, Alternative or Recycled Materials)
• Para 6.2.1 to 6.2.3 (Green Infrastructure)
• Para 6.2.5 to 6.2.10 (Green Infrastructure Assessments)
• Para 6.2.11 to 6.2.14 (Integrating Green Infrastructure and Development)
• Para 6.3.12 to 6.3.17 (Characteristics of Local Landscapes)
• Para 6.4.11 to 6.4.17 (Step-wise approach)
• Para 6.4.31 (Protection for Non-statutory Designations)
• Para 6.4.35 (Protected Species)
• Paras 6.6.8, 6.6.17 to 6.6.20, 6.6.24, 6.6.25 and 6.6.27 (Water and Flood Risk)
• Paras 6.7.6 and 6.7.8 (Framework for Addressing Air quality and Soundscape)
• Paras 6.9.16 to 6.9.21 (Land Contamination)

Technical Advice Notes

PPW is supported by a series of more detailed Technical Advice Notes (TANs), of which the following are of relevance: -

- TAN 5: nature conservation and planning (30 September 2009)
- TAN 11: noise (31 October 1997)
- TAN 12: design (31 March 2016)
- TAN 14: coastal planning (24 November 2021)
- TAN 15: development and flood risk (20 July 2004)
- TAN 18: transport (31 March 2007)
- TAN 23: economic development (28 February 2014)
- TAN 24: the historic environment (30 May 2017)

Welsh National Marine Plan

https://gov.wales/sites/default/files/publications/2019-11/welsh-national-marine-plan-document_0.pdf

This Plan extends up to the level of mean high water spring tides and the waters of every estuary, river or channel, so far as the tide flows at mean high water spring tide. In comparison, land-use planning boundaries generally extend to mean low water spring tides. This Plan therefore overlaps physically with terrestrial plans, helping to facilitate integration between land and sea planning and management.

Vision and objectives - The vision for the Welsh inshore and offshore marine plan regions is: Welsh seas are clean, healthy, safe, productive and biologically diverse:

• Through an ecosystem approach, natural resources are sustainably managed and our seas are healthy and resilient, supporting a sustainable and thriving economy;

• Through access to, understanding of and enjoyment of the marine environment and maritime cultural heritage, health and well-being are improving;

• Through Blue Growth more jobs and wealth are being created and are helping coastal communities become more resilient, prosperous and equitable with a vibrant culture; and

• Through the responsible deployment of low carbon technologies, the Welsh marine area is making a strong contribution to energy security and climate change emissions targets.

Developments are categorised into bands depending on the risk of the development to the marine environment. The following policies are considered to be material to this proposal:

GEN_01: Planning policy There is a presumption in favour of the sustainable development of the plan area in order to contribute to Wales' well-being goals.
GEN_02: Planning policy Relevant public authorities should take a proportionate, risk-based approach to application of relevant marine planning policies in decision making.
ECON_01: Supporting economically sustainable activities
ECON_02: Supporting coexistence
SOC General Policy – Ensuring a Strong, Healthy and Just Society
ENV General Policy – Living within Environmental Limits
GOV General Policy – Promoting Good Governance
SCI General Policy – Using Sound Science Responsibly
Sector Policy – Ports and Shipping
Sector Policy – Tourism and Recreation

Local Planning Policy and Guidance

Overview

The development plan for the purposes of section 38(6) of the Planning and Compulsory Purchase Act 2004 is the Neath Port Talbot Local Development Plan 2011 - 2026 (Adopted January 2016) (hereafter LDP). When considering the grant of planning permission the plan should be considered as a whole, within the LDP the following policies are of particular relevance.

Strategic Policies

- **Policy SP1** Climate Change
- **Policy SP2** Health
- **Policy SP3** Sustainable communities
- **Policy SP4** Infrastructure
- **Policy SP5** Development in the Coastal Corridor Strategy Area
- **Policy SP11** Employment Growth
- **Policy SP15** Biodiversity and Geodiversity
- **Policy SP16** Environmental Protection
- **Policy SP19** Waste Management

- **Policy SP20** Transport Network
- **Policy SP21** Built Environment and Historic Heritage

Topic Based Policies

- **Policy SC1** Settlement limits
- **Policy I1** Infrastructure Requirements
- **Policy SRA2** Harbourside Strategic Regeneration Area
- **Policy OS1** Open Space Provision
- **Policy EC1** Employment Allocations
- **Policy EC3** Employment Area Uses
- **Policy EC4** Protection of Existing Employment Uses
- **Policy EN6** Important Biodiversity and Geodiversity Sites
- **Policy EN7** Important Natural Features
- **Policy EN8** Pollution and Land Stability
- **Policy EN9** Developments in the Central Port Talbot Area
- **Policy RE2** Renewable and Low Carbon Energy in New Development
- **Policy W3** Waste Management in New Development
- **Policy TR2** Design and Access of New Development
- **Policy TR3** Safeguarding of Disused Railway Infrastructure
- **Policy TR4** Safeguarding Freight Facilities
- **Policy BE1** Design
- **Policy BE2** Buildings of Local Importance

Supplementary Planning Guidance

- Planning Obligations (October 2016)
- Parking Standards (October 2016)
- Pollution (October 2016)
- Open Space & Greenspace (July 2017)
- Renewable and Low Carbon Energy (July 2017)
- Design (July 2017)
- Landscape & Seascape (May 2018)
- Biodiversity and Geodiversity (May 2018)
- The Historic Environment (April 2019) (incl. Schedule of Buildings of Local Importance and SPG: Schedule of Designated Canal Structures)

EIA and HRA Screening

The proposed development falls in either Schedule 1.6a – Integrated chemical installations for the production of basic organic chemicals or alternatively Schedule 2.6a – Chemical industry, treatment of intermediate products and production of chemicals as defined by The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017.

The application is accompanied by an Environmental Statement. As the application is accompanied by an Environmental Statement, under regulation

25 of the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017, when determining an application the Authority must:

(a) examine the environmental information;
(b) reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account the examination referred to in sub-paragraph (a) and, where appropriate, their own supplementary examination;
(c) integrate that conclusion into the decision as to whether planning permission or subsequent consent is to be granted; and
(d) if planning permission or subsequent consent is to be granted, consider whether it is appropriate to impose monitoring measures.

Officers of the Authority, informed by consultees and specialist consultants have considered the ES and consider that is sufficient to meet the requirements above.

The potential impact of the development on any SPA, SAC, CSAC or Ramsar sites is considered in detail in the Environmental Statement and the supporting assessments. These determined that there was no likely significant effect on a European Protected Site and this opinion is accepted by the Authority. This issue is considered in more detail in the relevant section below.

Issues

Having regard to the above, the main issues to consider in this application relate to the principle of development; together with the impacts upon the socio-economics; the impact upon the landscape and visual amenity; the impacts upon the heritage and archaeological assets; the impact upon residential amenity; the impact of noise and vibration; the impact on air quality; the impact of light pollution; the impact upon parking and access requirements and their impact upon highways and pedestrian safety; the impact upon land, hydrology, drainage and flood risk; the impact upon biodiversity and health and safety risk to human health and the impact upon waste management.

Principle of Development

As outlined above, the site of development is within the existing Port Talbot Docks area. It is brownfield land with a long history of industrial use. Planning policy strongly supports the re use of vacant and under utilised brownfield land. The site is situated in an area where there are existing industrial uses such as the Tata Port Talbot Steelworks to the south, the Hanson Cement plant to the north and industrial uses seen through the wider Port Talbot docks.

Future Wales supports growing the economy in a sustainable manner, creating and sustaining communities and making best use of resources. The proposal is considered to be reasonably in accordance with these policies. This view is taken as the proposal will introduce an industrial development which will promote economic activity and sustainable growth. The aim of the proposal is to deliver on the Government's support for more sustainable fuel supplies. The application sets out that when operational the proposal will employ 85 FTE jobs.

The proposal will also make use of land that is brownfield, underutilised and in need of re-development.

The application site is identified within a wider area of land to which Policy TR4 of the Neath Port Talbot Local Development Plan (hereafter the LDP), applies. Policy TR4 envisages the development of the land for the transportation of freight. It is outside the Settlement Limit of Port Talbot as defined by Policy SC1 of the LDP and associated Proposals Maps. The site of development has not come forward for freight / port related development as the LDP envisioned. This proposal will utilise the existing harbour for the transportation of feedstock and products. The proposal will involve improvement to the wharf and will support the continued use of Port Talbot as a working harbour. It is considered that the proposal as set out clearly supports the continued use of the harbour. There would be considerable areas of land remaining which could be used for the freight use envisaged in the policy, some of these areas would have improved utility following development with the TCAs being retained for use by ABP following development. It is noted that ABP have written in support of the proposal and are the land owner of the TCAs and the site as a whole. Harbour features would be improved at Crown Wharf or would remain available, the proposal does not impact on railway sidings or similar. Continuing to safeguard this land in its current form will it is considered not support the sustainable regeneration of the site and wider docks. Industrial uses complementary to the harbour location, which are deliverable and viable in this location such as this proposal, would continue to support the use of the dock and harbour assets.

The submitted Environmental Statement (ES) examines the alternatives to the proposed development. This was a multi stage process and includes a 'Do nothing' scenario. The ES states that there are a number of different sites that have been considered by the applicant for the development. This includes consideration of alternative development design (including size and scale); the justification for the current proposal is based on the need to meet engineering and health and safety requirements which are outlined in the ES. The do nothing scenario is also considered, it is noted the site would continue to change such as due to the continued growth of existing vegetation on site (including Japanese Knotweed). Alternative sites are also considered in detail with two sites identified with a site to the west of the proposed site within Port Talbot Docks considered and a site to the South of Margam Steelworks also identified. These two alternatives are considered against likely significant effects and the current proposal justified; noting that there is no particular reason to choose a site over another. The applicant has pursued this site predominantly based on commercial, viability and buildability (such as the presence of infrastructure to support long term operation, and application of policy considerations to environmental constraints) considerations. Alternative technologies are also considered and the ES outlines that the proposal will be required through environmental permitting to utilise best available technology.

The proposed development is in reasonable compliance with the existing policy allocation and supports the delivery of a new employment use which will utilise existing dock infrastructure. In principle the development of this site as proposed is in reasonable accordance with policies of the LDP.

Socio-economic impacts of development

It is accepted that the proposals will make a positive contribution to sustainable economic growth and job creation in Neath Port Talbot. The proposal is considered to be in line with the vision set out in the Authority's Decarbonisation and Renewable Energy Strategy (DARE) (May 2020). The proposal will contribute towards economic, social, health and environmental benefits of decarbonisation. It will also further Wales' progress towards a low-carbon economy and provides an opportunity for Port Talbot to be at the forefront of this.

The Authority's Economic Development section supports the proposal and notes the following regarding the development:

*"**Inward Investment:***
Lanzatech are an innovation company working in the areas of carbon recycling and reduction, turning carbon pollution into a resource, used for industry applications across various sectors. They are bringing forward a new approach and is said to be revolutionizing the way we think about carbon. Turning carbon into a "resource, not a liability."

Being able to secure a world leading innovation and substantial inward investment into the NPT area, is testimony of the strength of the NPT area, based on the strength of its industrial base and history, its connectivity and accessibility, and the wide range of development activities and opportunities that are progressing, one example being Freeport. This investment would reflect on the strengths of NPT and provide exposure to the global stage of what NPT area can achieve and its approach to net zero. Attracting industry investment, development of innovation around carbon reduction, while potentially providing a range of social and economic related benefits and impacts.

This would also be the development and evolution of a new industry for Wales and the UK, coming forward from the NPT area, and such an investment is likely to also result in, and have potential of, attracting more companies and investment into the area. With potential supply chain opportunities for local companies and services. NPT being chosen for the Lanzatech investment and location will be a strong sign of how the area, is evolving and looking for diversification of industry and attracting new innovations and investment.

Having a ground-breaking commercial scale Alcohol-to-Jet facility that would supply around 1% of the UK's jet fuel needs. The facility is expected to convert sustainable ethanol, via the LanzaJet Alcohol-to-Jet Process™, into sustainable aviation fuel which reduces the climate impact of flying by more than 70%. Aviation being one of the most difficult sectors to decarbonise and, to accelerate the project, LanzaTech has received £25 million of support from the Department for Transport's Advanced Fuels Fund.

Net zero
This development would strongly align to the new roadmap for net zero aviation by Sustainable Aviation. The report identifies sustainable aviation fuels as the key immediate opportunity to reduce aviation's greenhouse gas emissions and as playing a major role in reaching net-zero aviation by 2050. To try to limit the effects of climate change, the UK and Welsh governments have set legally-binding targets to achieve net-zero emissions by 2050. The aviation industry is one of the toughest sectors in

which to reduce emissions. In order to tackle this, the Government will require the use of sustainable aviation fuel from 2025. The fossil fuels used today to make aviation fuels can be replaced by recycling waste carbon, such as from industrial sites, to make a sustainable aviation fuel. The use of sustainable aviation fuel will reduce the climate impact of greenhouse gas emissions by more than 70% when compared with conventional fossil jet fuel. Sustainable aviation fuel also contains much lower levels of aromatic compounds than fossil jet fuel producing a much cleaner burn and causing far fewer soot particles and contrails that also heat the atmosphere. Sustainable aviation fuel can be used today without changes to existing aircraft engines (in blends of up to 50% alongside standard jet fuel), making it an immediate solution for the aviation industry.

Building on the area's industrial strength, this facility will enable Neath Port Talbot to play a leading role in creating carbon reduction industries and high skilled jobs that are critical to delivering the UK's net zero economy and tackling the climate emergency. It will also align and supports the aims of NPT CBC – economic growth, job creation, net zero carbon reductions of our industrial base, new innovations developed in NPT and attracting investment into the area, and diversify our economy and industrial base.

Economic Impacts

- *Result in significant jobs and GVA to the area*
- *Potential of further employment in the supply chain across various areas and via suitable local contractors:*
- *For example manufacturing and services to support the operational activity of the plant during the construction phase of the plant i.e. plant hire, related services etc water management, waste treatment and ship loading/unloading.*
- *Additional investment into further carbon reduction new innovations which would result similar benefits noted in points above*
- *Potential to support the decarbonisation of the steel industry going forward*

Alignment with:

- *UK Government key industrial and net zero strategies , polices and aims*
- *Welsh Government key industrial and net zero strategies , polices and aims*
- *NPT CBC aims and policy - economic growth, job creation, net zero carbon reductions of our industrial base, new innovations developed in NPT and attracting investment into the area, and diversify our economy and industrial base.*
- *South Wales Industrial Cluster,*

Ongoing links with Economic Development activity:

This project will also need to link into the following Economic Development Activity

- *Clean Growth Hub phase 2 – mapping and scoping*
- *Supply chain development activity via the NPT Manufacturing forum*
- *Provide information and have continued engagement*
- *Provide profile of manufacturing supply chain opportunities for the local area*
- *Links to schools development activity*
- *Apprentices and skills developments*

This project is a key strategic project for NPT, that will secure investment into the area, create highly skilled and semi skilled well paid jobs, support the growth of the local

economy, potential of local supply chain opportunities and attract more related companies into the area and deliver on net zero targets for NPT, Wales and UK as a whole."

It is accepted that the proposal will deliver economic benefits to Port Talbot and the wider region. The application is supported by a detailed assessment of the economic impact that the application proposal can deliver (within Chapter 9 of the ES). The anticipated total capital expenditure in the construction of the proposed development is up to £400 million. The applicant identifies the following benefits in summary within their Planning Statement:

"• Total capital expenditure for the construction of the proposed development is in the order of hundreds of millions of pounds.
• The creation of 85 new permanent (on-site) FTE jobs.
• The proposed development has the potential to support up to 130 FTE jobs in the supply chain.
• Use of local contractors where feasible, as well as use of local firms involved in activities such as water treatment, waste management, chemical management and ship loading/unloading, wherever possible. This makes use of specialist skills, of which there are a greater proportion in the area due to its industrial context."

The proposal will generate indirect benefits for the local economy. The application identifies that Gross Value Added for the project is calculated to be in the order of tens of millions of pounds per year over the operating life of the facility (minimum 20 years). It will generate considerable expenditure on construction materials, goods and other services which will be purchased from a wide range of suppliers. The applicant states that local firms will be used where possible. This expenditure will be beneficial to the economy as it passes through the supply chain.

The ES assessment finds that a total of 405 net additional FTE positions could be generated each year across the wider impact area during the construction stage, inclusive of 220 jobs in the local impact area, these are summarised in Table 9.6 of the ES, as reproduced below (table 3). There is a detailed assessment in the ES which defines the local impact area as the Authority's administrative area and the wider impact area is defined as Wales.

Employment Generated	**Local Impact Area**	**Wider Impact Area (Inclusive of Local Impact Area)**
Person-years of employment	1,125	
Construction period (years)	2.5	
Gross FTE Employment	450	
Direct Net Additional FTE Employment	175	270
Indirect / Induced Net Additional FTE Employment	45	135
Total Net Additional FTE Employment	**220**	**405**

Table 3: Construction stage employment (ES Table 9.6)

The proposal also estimates the operational stage employment, this estimates that the operational stage employment will be as summarised in ES Table 9.7 reproduced below (Table 4):

Employment Generated	**Local Impact Area**	**Wider Impact Area (Inclusive of Local Impact Area)**
Gross FTE Employment	85	
Direct Net Additional FTE Employment	35	50
Indirect / Induced Net Additional FTE Employment	65	100
Total Net Additional FTE Employment	**100**	**150**

Table 4: Operational stage employment (ES Table 9.7)

TCA1 North is located on land that is identified as Existing Employment Land (Policy EC2/11 (Tata Steelworks)). It is accepted that the temporary construction areas are temporary and would not have a long term effect on the allocation and the establishing of an employment use in the future. The application does involve the removal of existing occupants who currently occupy land / buildings to be used as a temporary construction area. The applicant states that ABP as landowner are in discussions with the current occupiers and facilitating their relocation (within Port Talbot). The applicant has developing a social value strategy for the development and is engaging with occupants of the existing buildings to be demolished in TCA East. The Authority has not received objections from the occupiers and has received letters of support from some of the current occupiers (JES Group and Davies Crane Hire), who do not raise any concerns about the proposal. The proposal will facilitate development that provides significant investment in the County Borough and an increased level of direct and indirect employment opportunities and this is reasonably in accordance with Policy EC4.

The supporting planning statement states that a wider Social Value Strategy forms part of LanzaTech's commitment to investment in the area and has been developed in discussions with key stakeholders. It further states the application proposal provides an opportunity to provide high-skilled and well-paid employment opportunities in Port Talbot and to support upskilling and training amongst the local population.

The information provided in support of the economic benefits of the proposal are such that it will provide a minor beneficial effect and not significant socio-economic impact during construction and a moderate beneficial effect which is significant during operation. These beneficial effects are in line with the economic objectives of the LDP and National Planning Policy and Guidance and should be accorded weight during the determination of the application.

Landscape and visual impact

LDP objective 15 states the importance of conserving the boroughs important landscapes:
"Conserve Neath Port Talbot's important landscapes, countryside, undeveloped coast, important wildlife, habitats and geodiversity sites, ensuring that developments throughout the County Borough respect all landscapes and minimise adverse impacts."

Section 5.3.2 goes on to state:
"Neath Port Talbot has a variety of distinctive and contrasting landscapes and seascapes. The Neath Port Talbot LANDMAP landscape assessment evaluates approximately half of the County Borough area as 'high' or 'outstanding' for its geological landscapes, much of the visual and sensory aspect layer is evaluated as 'moderate' or of local importance with 'high' values applied to plateau and coastal areas, there are 'high' and 'outstanding' values for landscape habitats and the majority of the County Borough is 'high' or 'outstanding' in terms of its cultural aspect layer."

Policy BE1 requires that development complements and enhances the character and appearance of the site; respects the context of the site and its place within the local landscape; utilises materials appropriate to its surroundings; and incorporates appropriate landscaping. Detailed design guidance relevant to visual amenity is provided in the Authority's Supplementary Planning Guidance: Design (July 2017).

The application is supported by a Landscape and Visual Impact Assessment (LVIA). This is set out in Chapter 8 of the ES and in appendices.

Considering the baseline landscape, the site is not within any designated landscape. The LVIA identifies special landscapes areas (as defined in policy EN2) and notes that the Margam Mountain SLA is 1.1km to the east of the PDZ. Margam Mountain Registered Landscapes of Outstanding and of Special Interest in Wales is also 1.1km to the east. Talbot Memorial Park is located to the North East and is Grade II under the Register of Historic Parks and Gardens Wales.

In terms of the baseline landscape it is located within the docks area in close proximity to established industrial and maritime uses – the Hanson Cement works a large monolithic cream clad building and TATA steelworks being the most prominent features in close proximity. The site is vegetated and overgrown, there is a group Leyland cypress trees on the eastern boundary of the PDZ, the rest of the site comprises mainly self-seeded trees and shrubs, including Japanese Knotweed. Historically uses 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 in the PDZ were demolished by 2009. There are warehouses, storage tanks and service yards in TCA East and a warehouse on TCA west that has recently been demolished. The site is relatively flat and forms part of the coastal plain where Port Talbot is located. To the east of the site across Port Talbot the land

rises up to a series of hills. There is no public access to the site. Pheonix Way is a private road to the north of the site and is accessed by the ABP West Gate onto Harbour Way (A4241). The Llanwern Iron Ore Branch, is a disused railway track that abuts the PDZ to the south. The closest area with public access is the Harbour Way roundabout to the east of the Port Talbot Docks.

In terms of local landscape character. The LVIA takes into account the published landscape character areas and also the Landmap landscape character areas and following fieldwork identified Local Landscape Character Areas (LLCAs), which were used to assess the landscape impacts of the development. The site is contained in character area LLCA1 Industrial Foreshore. 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 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. The application also identifies and describes other local landscape areas which may be impacted: LLCA2 – Port Talbot Town; LLCA3 - Margam, Emroch & Dinas Mountains; and LLCA4 – Swansea Bay. It identifies that LLCA 3 is of high value. These assessments are largely accepted.

The LVIA also contains a Baseline Visual Amenity Assessment, this assessment is supported by a Zone of Theoretical Visibility (ZTV), where areas of land where the development would potentially be visible are identified. The ZTV was produced for an area within a 5km radius of the PDZ. The LVIA accepts 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 small feature in the background of the view, in the context of the industrial scale and character of Port Talbot's industrial foreshore. It is agreed that visual impacts from this distance would not be significant to the decision-making process. 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. The LVIA notes that the Hanson Cement Works is close to the site and is around 40m and gives a good indication of the height and scale of development within the PDZ

Ten representative viewpoints have been identified and these are used to represent a set of visual receptors: road users on Harbour Way / A4241 (VPs 1 & 2); users of the Wales Coast Path (WCP) north and west of Port Talbot Docks (VPs 1, 2, 3 and 7); users of the WCP on Margam Mountain (VP 6); Road users

and pedestrians on Residential streets within Port Talbot and Margam (VPs 4, 5, 8, 9 and 10).

The LVIA identifies the effects of the proposal in detail including: the clearance of all vegetation at the site and site levelling; the proposed enclosed ground flare; the new structures on the PDZ up to 50m in height; the inclusion of normal and emergency lighting; the proposed landscaping and drainage features; the marine unloading / loading facility as well as the construction effects. Mitigation such as site hoardings and details that are to be agreed in a CEMP are identified.

In respect to Landscape Character 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

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

The following residual effects on key visual receptors arising from the Proposed Scheme during the construction stage have been identified:
• 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

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

Some extracts from the applicants LVIA and the supporting computer generated visualisations are provided below. In total there are ten viewpoints towards the site that form part of the LVIA assessment, Figures 7-9 provide a subset of these views, in each of the figures the existing and proposed view is provided.

Figure 7a: Viewpoint 7 Wales Coastal Path / Mariner's Point existing view towards site from west.

Figure 7b: Viewpoint 7 Wales Coastal Path / Mariner's Point proposed view towards site from west.

Figure 8a: Viewpoint 2 from Harbour Way east of roundabout and east of site existing view.

Figure 8b: Viewpoint 2 from Harbour Way east of roundabout and east of site proposed view.

Figure 9a: Viewpoint 6 from east of site on footpath near Margam, Mynydd Brombil existing view.

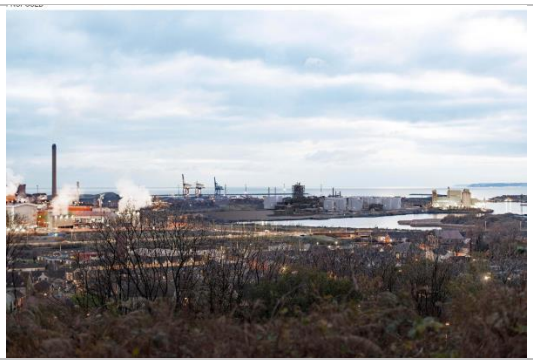

Figure 9b: Viewpoint 6 from east of site on footpath near Margam, Mynydd Brombil proposed view

The adverse effects identified in the LVIA are agreed with and it is noted that there are significant landscape effects from the loss of vegetation at the site during and following construction. Also during operation to users of the Wales Coast Path to the north and west of Port Talbot Docks will have significant adverse impacts. While they are identified as significant, effects such as the removal of vegetation would be required in respect to any re-development of this site within the docks area. The extent of impacts on the users of the Wales Coast Path are also of limited duration on relatively short sections. Users of the Wales Coast Path at Margam Mountain will also have views obscured of the dock area during construction which was considered a significant effect, although it is acknowledged that this is reduced following construction as the TCAs would no longer be being used. Nonetheless there remain residual detrimental effects that will need to be considered in the planning balance when determining the application.

Placemaking, design and built environment

Policy SP21 seeks to ensure high quality design standards in all development proposals and to protect arterial gateways from intrusive inappropriate development. Policy BE1 requires that development complements and enhances the character and appearance of the site; respects the context of the site and its place within the local landscape; utilises materials appropriate to its surroundings; and incorporates appropriate landscaping. Detailed design guidance relevant to visual amenity is provided in the Authority's Supplementary Planning Guidance: Design (July 2017).

The application is supported by a Design and Access Statement (D&AS) which has been prepared by the project architects. This outlines the functional nature of the development and how the scale, layout, appearance and landscaping of the proposal respond directly to the industrial processes and health and safety considerations of the development. The development is designed to allow for the effective and safe functioning of the facility. The D&AS responds to the requirements of TAN12 and Planning Policy Wales and provides details of how the design took into account: the different stages in the SAF production; the sites accessibility; modelling of fire hazards and risk; engineering and operational efficiency; safe movement and operation at the site; amenity by locating the larger structures to the south of the site further away from receptors; reducing equipment heights; and consideration of amenity issues such as noise generation.

The design and access statement outlines that materials will be a dull and muted matte colours on larger equipment consistent with the surrounding materials. The proposed tanks are to be generally a PPC / PVF type finish in white colour, the racking and flare will have a galvanised steel appearance. Other buildings will have textured insulated panels, the administrative building will utilise a brown roof and other buildings will use metal cladding. The proposal is viewed to be well considered with the applicant taking significant steps to ensure that what is proposed is to a high design standard, within the limitations of what is possible within a scheme of this nature. The site is set in a dock side

area and is not accessible to the public and the functional nature of the design is generally considered to be a typical of and appropriate to its context.

Overall the proposal is viewed to be in accordance with LDP policy SP21 and BE1 and to be in accordance with Future Wales, Planning Policy Wales and Technical Advice Note 12: Design.

Impact upon the historic environment

Policy SP21 seeks to protect the heritage of the County Borough by safeguarding features of historic and cultural importance.

The impact on cultural heritage assets was scoped out of the Environmental Impact Assessment. The application was supported by a standalone archaeology and heritage assessment prepared by specialist heritage consultants.

This assessment concluded that the proposed development would have no direct impact on designated historic assets (such as listed buildings and scheduled monuments), because there are no designated historic assets located within the site and the site's boundary does not take in or include any part of such an asset.

The assessment similarly concluded it would not result in a loss of significance from any one of the designated heritage assets located within the site's wider surroundings. This conclusion was reached on the basis that, the site may form part of the wider setting of heritage assets it would typically be a relatively small and peripheral aspect to their settings. It would be a change to the general surroundings of some of the designated assets distributed outside the site's boundaries, this would not bear upon their significance and cause a loss of heritage significance and therefore 'harm'. This view was supported by Cadw who accepted the conclusion that the proposal would not significantly impact on the wider setting of the single nearby scheduled ancient monument and would have no impact on the Talbot Memorial Park.

In terms of 'non-designated' historic assets, the assessment does not identify any indirect effects to the Registered Landscape of Special Historic Interest. Whilst negligible changes to its setting are anticipated in terms of the distant views of the site looking outwards, the views outwards are already defined by the existing industrial development at Port Talbot and so as a result it is assessed that these negligible changes would not result in a loss of significance from the Landscape of Special Historic Interest. No harm would result from the proposals completion.

In addition, it is assessed that the implementation of the proposed scheme for the site would have no more than a 'minor adverse' impact on buried archaeological remains at the construction stage and no further impacts in this respect are anticipated as being likely to occur subsequently during the development's operational stage.

This assessment is made on the basis that there is generally no more than a 'low' potential for the proposed development to encounter and impact upon the conservation of significant archaeological sites, features and/or remains. Any horizons or deposits of earlier than postmedieval date, which might be of more than low significance, are expected to be deeply buried beneath deposits of modern made ground. Such deposits would therefore only potentially be encountered by the deepest elements of the proposed development, such as piled foundations. Any shallower horizons and deposits are very likely to derive from post-medieval and later activity at the site and be of no more than low or local significance, even though their conservation is more likely to be impacted by the implementation of the proposals.

The assessment suggests that an appropriate and proportionate mitigation would comprise the completion of a watching brief during the open cut excavation for construction, or a programme of archaeological trial trenching, to identify and record any archaeological features, deposits or remains of interest that would be either destroyed or damaged by the implementation of the works. This would be agreed in advance with the local authority's archaeological advisors at Glamorgan Gwent Archaeological Trust (GGAT) and then detailed in a Written Scheme of Investigation (or WSI) submitted to and approved by GGAT as a condition of planning permission being granted for the development. This view is supported in the response by GGAT. While the above justifies the applicants approach, it should also be noted that the site is constrained for any pre-determination archaeological assessment due to the extensive areas of Japanese Knotweed.

The application is supported by appropriately detailed information on the likely historic environment of the development. As outlined above the impact on the historic environment has been considered thoroughly and appropriate mitigation has been identified which can be secured through an appropriately worded planning condition. In view of this the proposal will have an acceptable historic environment impact and is in accordance with LDP policy SP21 in this respect.

Impact on Residential Amenity

Policy BE1(4) requires that development does not have a significant adverse effect on the amenity of local residents. The Authority has Supplementary Planning Guidance (adopted July 2017) on Design which provides specific advice on how to consider residential amenity impacts in determining planning applications.

The closest residential properties to the site are Upper / Lower West End. Table 5 shows the distance of the operational site from sensitive receptors. Upper / Lower West End are also close to TCA 1 and are separated from this part of the site by Harbour Way.

Receptor Description	Approx. Distance to nearest operational site boundary (m)
Dwellings at Mariners Point	890

Dwellings at Darwin Rd / Newbridge Road	900
Dwellings on Isaac's Place / Borough St	1090
Dwellings on Green Park St	1050
Dwellings on Water St / Blanco's Hotel	1150
Flats above shops on Station Road	990
Dwellings on Talbot Road	745
Dwellings on Lower West End	575
Dwellings on St Albans Terrace	810
Dwellings on Duke St	1000
Port Talbot Magistrates Court	790

Table 5: approximate distance from receptor to PDZ (Table 12.4 from ES)

In relation to the proposed development's more direct impacts through overlooking, overshadowing or overbearing, it is considered that due to the size, siting and design of the proposed development that there would be no adverse impacts upon the residential amenity of the occupiers of the nearest neighbouring properties.

The potential impacts of the proposed development upon the residential amenity of the occupiers of the nearby properties through noise, vibration and air quality will be assessed within the following sections of this report.

As outlined the proposal in terms of its direct impact on residential amenity would be acceptable and in accordance with policy BE1.

Noise and Vibration.

Policy SP16(1) seeks to protect the environment by ensuring that development does not have any significant adverse impact on pollution. Policy EN8 seeks to prevent proposals which would be likely to have an unacceptable adverse effect on health, biodiversity and/or local amenity or would expose people to unacceptable risk due to reduced noise pollution.

Chapter 12 of the ES contains comprehensive information on noise and vibration impacts likely to arise from the development. It is supported by base line noise assessments and also operational and construction noise impact assessments. These have been prepared by a specialist acoustic consultant. The applicant has also provided clarification on the noise impact of the development on the determination of the application. The ES sets out the national and local legislative, policy and guidance considerations that were relevant during the EIA and discusses significant effects.

In relation to construction noise the assessment considers the guidance within BS5228 – Code of Practice for Noise and Vibration Control on Construction and Open Sites. The applicants have modelled scenarios of anticipated noise levels and the modelling shows that the proposal can meet relevant standard weekday and Saturday working hours. The modelling also indicates that only against a worst-case 1-hour noise scenario are there exceedances of 5db at two receptors if works are undertaken outside these hours. The supporting

assessment notes that it is anticipated that weekend or evening working would be at a reduced rate and would not fall in the works anticipated in the worst case scenario. This argument is accepted, however the limitations on working that would be required to lower noise to an acceptable level outside of the standard working hours have not been identified. It is considered that details would need to be provided of any activities and their likely noise and disturbance impact before the Authority could agree to extended hours. This requirement will be incorporated into a condition.

The documents sets out the method of determining the significance of construction noise based on the change in ambient noise levels as well as the recommendations for basic methods of vibration control relating to construction. The documents also sets out the thresholds of significant effects at dwellings for both noise and transient vibration values. The requirement to meet these limitations can be incorporated into a planning condition.

The applicants have submitted a draft Construction Environmental Management Plan (CEMP) which would seek to minimise the impacts of the construction phase of the proposed development upon the immediate and wider surrounding area. In addition to this, conditions are recommended for imposition which would seek a Piling Method Statement prior to the start of any piling works on site and restrict the hours of construction works. The Piling Method Statement is also requested to be imposed by NRW, although this is in respect to their remit for protecting controlled waters.

The ES considers the impacts associated within the Operational Phase of development. The applicant has provided detail on their modelling of the development including how information for ships operating at the site was derived and details of source plant noise data. The scenarios for operational noise consider 24 hour operation and intermittent noise sources – this includes modelling the testing of diesel generators and flaring. Detailed information on the noise modelling is provided in the impact assessment and is for the following scenarios: Normal Operation; Normal Operations with Ship Movement (Day $L_{Aeq,1hr}$); Normal Operations with Ship Movement (Night $L_{Aeq,15mins}$); Ship Off-Loading; Start-up Flare; Emergency Flare; and Generator Testing. 11 Sound Sensitive Receptor Locations were used in the modelling – 575m – 1150m from the site and listed in table 5 above.

There are inherent mitigation measures in the design of the proposal. These include using an enclosed ground flare, enclosing compressor plant within compressor houses and enclosing high noise pumps.

The ES based on the noise modelling does not identify any significant effects from the operational noise of the proposed development. The modelling demonstrates that predicted noise levels will fall well below existing background levels within the designated quiet areas. The ES sets levels of noise from the development that are acceptable and it is considered that a condition to manage noise complaints should be imposed on any permission. Taking into account the modelling it is considered that no unacceptable impacts will occur and the proposal is in accordance with LDP Policy EN10.

The emergency flaring scenario will result in exceedance of noise limits at the closest receptors, this represents an exceptional circumstance that is anticipated to occur on average once in every 10 years. Flaring noise levels would also drop inline with start-up flaring after around 30 minutes. It is considered reasonable to allow for higher limits to be permissible during an infrequent, emergency scenario.

In designated quiet areas, to which policy EN 10 applies, the modelling shows that the development when operating would not exceed current background levels.

The ship off-loading process associated with the transfer of ethanol may take up to 18 hours. Where pump off-loading will run into the night, this has the potential to cause an adverse impact at two receptors SSR3 (Isaac's Place) and SSR7 (105 Talbot Road). This would only occur once every 7-14 days. While noting this adverse effect it is noted that this aligns with LDP objectives and policy allocations to encourage port activity and freight movement in this area. The noise assessment notes that this would represent typical activity in a port area, where materials are being transferred.

The noise and vibration information has been reviewed by a specialist consultant on behalf of the authority and following clarification of a number of points by the applicant they have concluded that the conclusions of the ES are robust. NRW has provided comments on Chapter 12 of the ES and the assessment of noise, they do note that they may request further assessment as part of a future Environmental Permit application. They do not object to the application and the applicant's agent has been made aware of their comments.

Overall construction and operational noise levels are generally in accordance with acceptable limits and reflective of the surrounding industrial and port operations. On-site mitigation including enclosures and design changes have occurred to support this. Sources of exceedances relate to less frequent or emergency scenarios. The proposed development is viewed to be in reasonable accordance with policies EN8 and EN10 in the LDP, as well as TAN 11 (Noise), however the areas where there is exceedance should be given weight in considering if the development is acceptable on balance.

Air Quality

Policy SP16(1) seeks to protect the environment by ensuring that development does not have any significant adverse impact on air quality. Policy EN8 seeks to prevent proposals which would be likely to have an unacceptable adverse effect on health, biodiversity and/or local amenity or would expose people to unacceptable risk due to air pollution.

Air quality modelling has been provided for the development by a specialist consultant and an assessment of impact forms part of the ES (Chapter 11 and Appendices 11.1-11.8). Revised Chapters of the ES were submitted to the Authority which reflected feedback from a consultant appointed by the Authority to review this aspect of the proposal which provided further clarification.

The modelling undertaken provides an assessment of the study area which is justified within the ES. Human receptors and ecological receptors are identified. The human receptors used in the assessment are to the north of the site within Sandfields and then into the air quality monitoring area to the east of the site. In relation to ecological receptors four SINCs and two ancient woodlands within 2km of the Site. In addition, three SACs have been identified within 10km of the Site. An explanation is given of how the impact of traffic in construction and operation has been assessed is given and it is noted that effected receptors from the M4 and Harbour Way are identified. Emission sources are identified modelling for air quality, these include on site boilers in different modes of operation; flare operation; firewater pumps and diesel generators. Nearby receptors are shown in figure 10 below.

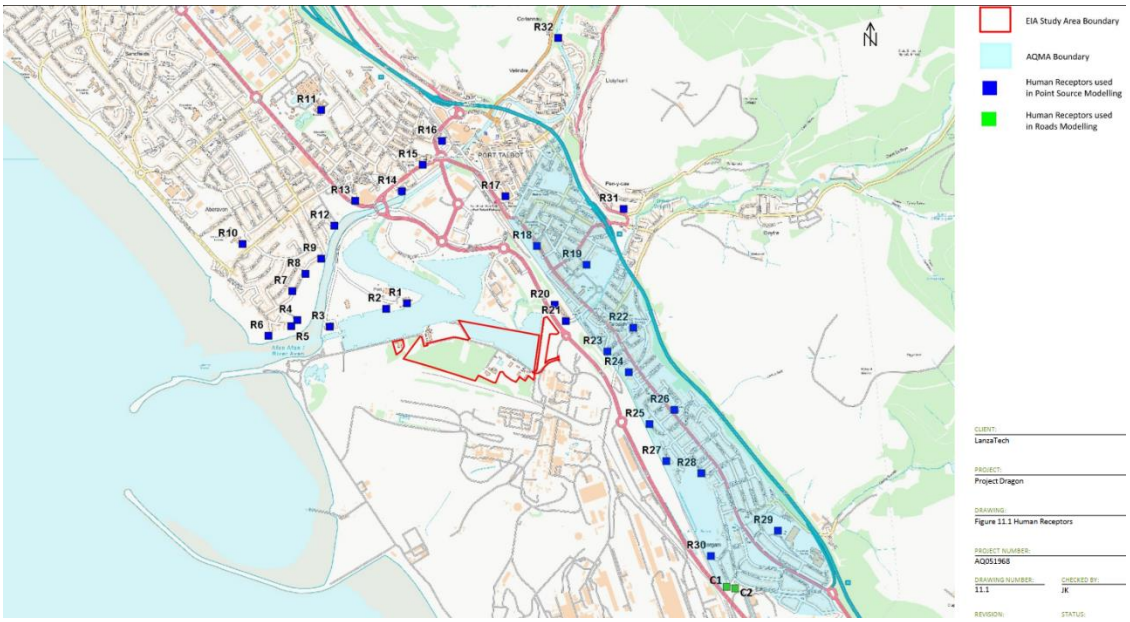

Figure 10: Air quality human health receptors. Blue squares are for point source modelling; green squares are for road traffic modelling; the light blue area is the Air Quality Management Area; and the red line site boundary. (Figure 1.1 in the ES)

The ES within Table 11.18 identifies the following residual effects and assesses whether they are significant, this table is reproduced below as (Table 6).

Effect	Receptor	Residual effect	Is this significant?
Construction stage: Change to local air quality in terms of human health and ecology due to transport emissions including vehicle and shipping emissions	Residential, community and educational facilities	Negligible	No
Change to local air quality in terms of human health and ecology due to on-site emissions associated with general operation (SC1, SC2a, SC2b and SC2c) which represent the general day to day operation of the Site including testing regime for emergency generators and fire pumps	Nearest sensitive human receptors (residential, educational, health facilities) located to the east, northeast, west, north, northwest and west	Negligible	No
	On-site receptors (i.e. workers)	Minor	No
	Ecological Receptors – Kenfig Special Area of Conservation (SAC), Crymlyn Bog SAC Cefn Cribwr SAC, SSSI, SINCS, AW, NNR and LNR	Negligible	No
Change to local air quality in terms of human health and ecology due to transport emissions including vehicle and shipping emissions	Nearest sensitive human receptors (residential, educational, health facilities) located adjacent to Harbour Road	Negligible	No

	Ecological Receptors – Kenfig SAC/SSSI	Negligible	No

Table 6: Air quality residual effects and significance.

The air quality modelling does show exceedance of nitrogen critical loads at the Kenfig SSSI (outside the Kenfig SAC). This is based on a scenario called SC1 which is the long term operational scenario and includes HP Boiler (normal operation; normal operation liquid firing; operation during start up); Flare operation during start up; Flare operation during shut down; use of fire water pumps and diesel generators. It also includes operational traffic generated by the development. In this scenario there is exceedance in a narrow strip of the SSSI that is closest to the M4, this strip of land was assessed by the applicant's ecologist who identified that there was no habitats likely to be effected by the modelled exceedance and therefore no detrimental impact to the SSSI. This was reviewed by the NPT Ecologist who supports this view. Notwithstanding on site workers other impacts to air quality are considered to be negligible.

In respect to the construction and demolition the applicant is proposing to follow best practice mitigation to manage dust. These practices and measures will be agreed in a finalised Construction Environmental Management Plan secured by a planning condition.

An odour briefing note has been prepared by the applicant and this confirms that the design of the plant will limit fugitive emissions. It outlines that no odours are expected from the gas or liquids used on site.

The Authority has commissioned a specialist consultant to review the air quality assessment submitted by the applicant. They requested that additional modelling and verification was undertaken. Following this they were able to confirm that the conclusions of the ES are robust and can reasonably be used by the Authority in determining the application. NRW has provided comments on the modelling and the applicant has provided clarification. NRW in their final response do not offer an objection to the proposal, but they do note that it is likely that additional modelling will be required to show the acceptability of the proposal in order for it to receive an Environmental Permit.

To summarise the proposal is supported by information to show that it would not give rise to any significant effects due to construction traffic, to fine particles (PM10) within the air quality management area; will have no significant impacts on human receptors; will have no significant effects on the local ecology; and will not lead to any breaches of any pollution standards for local properties.

It is therefore considered that based on the submitted information within the Environmental Statement and supporting information, that the proposed development complies with policies SP16 and EN8 of the LDP, as well as the Pollution SPG (October 2016).

Lighting

Policy SP16(1) seeks to protect the environment by ensuring that development does not have any significant adverse impact on pollution levels. Policy EN8 seeks to prevent proposals which would be likely to have an unacceptable adverse effect on health, biodiversity and/or local amenity or would expose people to unacceptable risk due to light pollution.

The application is accompanied by a Lighting Assessment and Strategy that has been prepared by a specialist consultancy.

The lighting assessment outlines that exterior lighting is required at the site to allow for safe access and use of the area by employees and visitors. The submitted drawings include the proposed external lighting to illuminate roads, paths, car parks and truck loading areas and task lighting for external areas associated with the modules and compressor houses. The assessment uses specialist light modelling software to derive conclusions on the impact of lighting at the site.

This showed that the lighting design strategy largely contains light within the confines of the site and within the docks area. Pole lighting provides illumination to the designated areas predominantly without over-lighting, and equipment will create a distribution that drops below 1 lux within 45m from pole locations. The assessment notes that the lower aiming angle in the assessment area, and their distance from nearby trees/wooded areas, aids in minimising light reaching adjacent trees.

The assessment concludes that no effects relating to light spill or glare upon residential receptors are anticipated. Low level indirect sky glow may be anticipated, but this is planned to be sufficiently mitigated using standard, easily applied measures, including luminaire shielding, careful consideration of luminaire positioning and orientation (aiming the fixtures downwards with a concerted intention to only illuminate areas that require light), by avoiding over-lighting for the task, and by smart use of lighting controls (dimming and switching off) when particular areas are not in use.

The applicant's planning statement notes that no impacts to ecology are directly attributable to the new lighting conditions at the site. It further notes that results demonstrate that are no significant effects anticipated on ecological receptors outside the site boundary and no specific mitigation is therefore required.

NRW has advised that they consider the proposed lighting at construction and operational phases will not have significant adverse impacts on bats or otters. In respect to bats the application identifies that there is a They agree with the mitigation proposed in the Lighting Assessment and Strategy and are satisfied that an acceptable detailed lighting plan can be secured by planning condition.

In terms of lighting impact the proposed development, subject to agreement of a detailed lighting plan, accords with Policy EN8 of the LDP, as well as the Pollution SPG (October 2016)

Traffic and Transport

LDP policy SP20 is a strategic policy which includes criteria seeking to: restrict development which would have an unacceptable impact on highway safety; requires appropriate parking provision; and requires safe and efficient access and promotion of sustainable transport. LDP policy TR2 identifies that proposals will only be permitted where: there is no adverse impact on highway safety or unacceptable levels of traffic generation; there are appropriate levels of parking and cycling facilities provided. The development has to be accessible by a range of travel means, including public transport and safe cycle and pedestrian routes. The LDP is supported by a Parking Standards SPG (October 2016), which gives guidance on the level of parking required from new development. PPW 12 states that "It is Welsh Government policy to require the use of a sustainable transport hierarchy in relation to new development, which prioritises walking, cycling and public transport ahead of the private motor vehicles".

A Transport Assessment (TA) has been prepared in support of the application.

The site is located on land to the south of Port Talbot docks and west of the A4241 Harbour Way around 1.4km south of Port Talbot Town Centre. The site is currently accessed off a section of Phoenix Way, which fronts the northern site boundary and connects to the A4241 Harbour Way via North Road. The section of North Road between the A4241 Harbour Way / North Road roundabout and Phoenix Way is subject to a 30mph speed limit while Phoenix Way itself is subject to a 20mph speed limit. Access off North Road onto Phoenix Way is controlled via a security gate which benefits from two entry lanes. Phoenix way narrows to the west of the security gate and it is not sufficient to allow two HGVs to pass and give way arrangements are in place. Phoenix Way is well used by HGVs serving the existing industrial uses in the vicinity of the site.

It is considered that the site is accessible by sustainable transport modes. Pheonix Way connects to the wider active travel network in Port Talbot. Access to the site on foot and by cycle is of a good standard and there are multiple transport connections within close proximity providing access to a range of local destinations. It is noted that due to health and safety requirements that internally within the ABP docks area pedestrians / cyclists are not permitted. The applicant has suggested that an EV shuttle from the entrance gate to the construction site would allow for construction workers to utilise alternatives to the private car in working at the site.

The proposed access arrangements will be by the creation of three new access points onto Pheonix Way. This access route accommodates numerous large HGVs serving industrial uses such as ABP, Tata and Hanson Cement. The Local Highways Authority has not raised any objections to the proposed access arrangements.

The trip generation in relation to construction has been assessed in the Transport Assessment (TA). This states that the contractor has confirmed that

approximately 102 daily HGV movements (204 two-way daily HGV movements) are anticipated to be generated during the peak months of construction. The TA considers 120 daily HGV movements (240 two-way daily HGV movements) in order to allow for a robust assessment. In construction HGV movements would be needed for site preparation works including removal of soil and import of clean fill material, site establishment, delivery of equipment, delivery of material, removal of waste. HGVs will be arriving throughout the day (estimates up to 52 and 24 two-way HGV movements could be expected in the AM and PM peak hours respectively). The contractor estimates 450 staff will be required on-site. The applicant states that in order to limit the traffic impacts during the construction phase and to promote sustainable travel, the applicant / contractor has confirmed that car sharing and travel via minibus will be heavily encouraged

The routes are predicted to operate within their capacity with the proposed additional traffic. However, existing capacity issues have been identified during peak hours of traffic in some areas. The impacts of the additional construction traffic was not determined to materially effect these capacity issues and no mitigation measures are required given the temporary nature of the impacts.

The applicant has confirmed the following in relation to tanker / HGV movements when operational:
• Approximately 7 fuel tankers per week are expected, which may increase to 50 tankers per week depending on the operating mode, although this level of fuel export by truck would last no longer than 2 months.
• The intent will be to utilize by-products within the plant as much as feasible. However, there may be reasons by-products need to go out as waste via truck, either on flatbed trucks with tote tanks or tanker truck. Between 0-4 HGV movements per week will be associated with the export of by-products.
• During normal operation there are utility and process chemicals that will be needed to keep the facility operating properly. Some utility chemicals will be managed by the plant, others will be contracted out for chemical treatment and be shipped to the site under the guidance of the contracted organisation. Between 6-12 HGV movements per week will be associated with the delivery of chemicals.
• There will also be requirements for routine delivery of equipment, spare parts, and other materials to support the continued operation, as well as shipment of materials out for servicing. Each of these could be on lighter delivery trucks or flatbed trucks with 1-2 trucks per day expected.

The Transport Assessment goes on to say that having regard to the above and assuming all imports / exports take place Monday-Friday, the proposed development will generate between approximately 4-15 tanker / HGV movements per day (8-30 two-way tanker / HGV movements per day) in relation to road imports / exports. The processing facility will be operational 24 hours per day, however, assuming the imports / exports all take place in the 12-hour period of 07:00-19:00, then the proposed development will only result in circa 1-3 additional two-way HGV movements in both the AM and PM highway peak hours.

In terms of staff, there will be a total of 85 staff including 6 remote technical support staff, as detailed earlier. Based on the proposed shift patterns detailed earlier, the applicant expects circa 50 staff to be on site at any one time during the day, although up to 62 staff could potentially be on site at any one time during shift change over periods. In addition to the normal operating team, there will be up to 5 additional contractors on site primarily during the day to support with routine maintenance and servicing of equipment. When considering the staff shift patterns detailed earlier and assuming all staff travel in private cars, circa 50 staff are anticipated to arrive between 07:00 and 08:00, with no other arrivals and only 12 departures in the AM peak period, between 08:00 and 09:00. There are not anticipated to be any arrivals in the PM peak period, although circa 41 departures are expected between 16:00 and 17:00 and 9 departures are expected between 17:00 and 18:00.

In the event of disruption to shipping supply chain, ethanol and SAF will be transported by trucks. The TA states that this would be for a 24 hour period which would occur with normal production rates for a maximum of two days, with 26 HGV movements per day anticipated (52 two-way HGV movements per day). If disruption occurs for more than two days the TA states that the production would ramp down to 50% for a maximum duration of two weeks, with 13 HGV movements per day anticipated (26 two-way HGV movements), during operations shut down. It is accepted that this traffic increase is not considered significant, particularly given that shipping disruption is unlikely and will only be temporary.

The trip generation from the development when operational is considered to not materially impact the highway network and this position has been agreed with the local highways authority and reflects the capacity of the highway network serving the site, which are major roads such as the A4241 Harbour Way and the M4.

The proposal includes 57 car parking spaces which is sufficient to accommodate the operation of the site including shift changeover, accessibility requirements and visitors to the site. The application also includes motorcycle parking and safe cycle storage within the parking area close to the administrative building. The applicant is also proposing 25% of spaces to be electric vehicle charging points.

The proposed development will utilise the marine loading/unloading facility to import ethanol feedstock and export SAF produced on-site, using ship tankers. The applicant states that the shipping will be operated by third parties or by the ethanol feedstock supplier and will be outside their direct control. This use of alternatives to road transport (e.g. rail or sea) is encouraged by Policy SP1 (Climate Change) of the LDP.

The Local Highways Authority has reviewed the information submitted and has no objections to the proposed development subject to planning conditions. The conditions suggested cover the submission of a construction method statement; the setting out of and provision of parking including EV charging spaces; internal directional signage for the site (which would be included as an

informative); submission of a travel plan; and securing visibility splays. Similarly Welsh Government as the highways authority for the M4 have offered no objection or comment to the proposal.

The Authority's active travel officer has requested a contribution to the provision of active travel infrastructure in the locality. This contribution would be to the Newbridge Active Travel project, for which the Authority is expecting to receive UK Government part funding for or other active travel projects in Port Talbot. The Authority has agreed with the applicant a contribution of £188,960.65. To active travel which will need to be secured through an appropriately worded planning agreement under section 106 of the Town and Country Planning Act 1990 (as amended). The applicant has agreed to the principle of this and at the time of this report a draft agreement has been produced.

Overall the proposal is accessible to a range of transport means and is also served by large capacity major roads. It contains appropriate levels of parking in accordance with the Authority's standards. There are no objections to the application from the local highways authority and it is considered that the proposal is reasonably in accordance with Policies SP20 and TR2.

Hydrology and Drainage

This is an industrial development and water at the site will be managed to reflect this. Drainage at the site will be split in to two streams: a clean water drain utilising SuDS, which will discharge into the adjoining dock; and a contaminated drain flowing to an on site effluent treatment plant (for areas of highway hazard).

The SuDS system will utilise rain gardens, gravel-based swales and permeable paving. The industrial nature of the development and the need to consider health and safety and the COMAH regulations, has limited the extent of biodiversity and amenity benefits of SuDS. These benefits are maximised in the administrative area where there is more scope for vegetation and biodiversity benefit.

The application was referred to officers of the Authority's drainage service, who have responsibilities covering SAB approval, land drainage and the Authority's role as lead local flood authority.

In their response they have indicated that the development will require separate approval under the sustainable drainage regulations. The Sustainable Drainage Approval Body (SAB) has not indicated in their response to the Local Planning Authority that the scheme is not capable of meeting the statutory standards (Surface water runoff destination; Surface water runoff hydraulic control; Water Quality; Amenity; Biodiversity; Design of drainage for construction, operation and maintenance). In light of this response it is considered that the appropriate disposal of surface water can be left through the SAB approval process.

The applicants note that they do not intend to seek adoption of the drainage system by the SAB and will seek to self manage it. They also note that the drainage proposals are contained in the site of development and do not impact

on third parties.

The application supporting information indicates that foul flows will be diverted to the main sewer. The proposal has been referred to Dwr Cymru Welsh Water (DCWW). They have offered no objection in principle, subject to a standard condition, to the foul flow discharging to the public sewer. They also consider that the proposal can be connected to a potable water supply.

The applicant intends to abstract water from the adjoining dock water body at a rate of 150m3/hr. NRW has commented on water abstraction in their response noting that there are constraints on this in Port Talbot Docks. They note that there are deficits in periods of low river flows, which leads to back pumping of water from the sea which has implications for industrial processes using the water. They note that this has led to ABP replacing the dock lock gates and the refurbishment of the Greenpark Weir. The applicant has been made aware of these comments and the NRW recommendation to discuss water abstraction issues with the Afan Water Management Group. Abstraction will be subject to separate consent for an abstraction licence which is dealt with by NRW and this system of control is considered adequate to ensure that abstraction is acceptable.

The application will also be subject to a marine licence. NRW has commented on this and noted that they remain concerned about the applicant's Water Framework Directive assessment. While noting their continuing concerns they advise that these concerns will be addressed under the marine licence and the Environmental Permitting Regulation (EPR) water discharge permit rather than the planning application.

The application demonstrates that the proposed development meets the principles and requirements set out in TAN15 and the aims of Planning Policy Wales, as well as LDP Policy SP1 (Climate Change).

Flood Risk

The application site is located within Zone B and Zone C2 of the Development Advice Maps (DAMs) to TAN 15. The proposed PDZ is located in Zone B, Phoenix Way and supporting infrastructure and temporary construction areas are located in Zone B and Zone C2. The Flood Map for Planning (FMfP) is used in the draft TAN15. A small part of the PDZ is located in Flood Zone 2 (between a 0.1% and 1% chance of flooding in any given year) of the FMfP. The remainder of the PDZ is located in Flood Zone 1 (less than a 0.1% chance of flooding in any given year). The Phoenix Way Supporting Infrastructure is located in Flood Zone 1 with a small part of this area located in Flood Zones 2 and 3. The Temporary Construction Area to the eastern extent of the red line boundary is located in Flood Zones 2 and 3. The remaining Temporary Construction Areas are located in Flood Zone 1. The developer was advised by NRW that as part of the site was in Flood Zone 3 the application must be supported by a Flood Consequences Assessment (FCA). As such an FCA has been provided and is written by an appropriate specialist consultant. The policy requirements for considering flooding issues in national policy are also reflected

in the objectives of the LDP.

The FCA notes that the PDZ is located in Zone B and that a justification is not required. The Temporary Construction Areas are within Zone C2 and flood zones of the FMfP, these areas would be used for a temporary period and would not involve the construction of permanent structures. The FCA indicates that this part of the development as a temporary construction area would not amount to new development as defined in Section 6 of TAN15. For completeness the FCA considers the proposal against the policy requirements in TAN 15 and summarises the compliance with policy in the following table (FCA table 3-2):

TAN15 Justification Criteria	**Comments**	**Achieved**
Its location is necessary to assist a local authority regeneration initiative or strategy, or contribute to key employment objectives, necessary to sustain an existing settlement or region.	The proposed development will assist with the relevant policies listed in the Local Development Plan as well as supporting the overall vision of the LDP.	✓
The site meets the definition of previously developed land (i.e., it is not a Greenfield site) and concurs with the aims of Planning Policy Wales (i.e., the presumption in favour of sustainable development).	The site is located on previously developed brownfield land. (ref. Section 2.1). The site therefore concurs with the aims of Planning Policy Wales.	✓
A Flood Consequence Assessment has been produced to demonstrate that the potential consequences of a flood event up to the extreme flood event (1 in 1000 chance of occurring in any year) have been considered and meet the [Acceptability Criteria] … in order to be considered acceptable.	The flood consequences have been assessed and are detailed further in Sections 4 and 5 of the FCA (outlined in Committee report below).	✓

Table 7: Assessment of scheme against TAN15 acceptability criteria (FCA table 3-2)

The FCA confirms the following:

• The site is at little or no risk of flooding from reservoir failure.
• The site is at low risk of groundwater and surface water flooding. The dominant flood risk to the site is tidal and fluvial.
• During the pre-development scenario, the land within the PDZ is predicted to be flood free during the tidal 0.5% AEP plus climate change and fluvial 1% AEP plus climate change and 0.1% AEP design events.
• Ground levels should be raised to at least 7.5mAOD, a level above the 0.1% AEP design event.
• The PDZ is predicted to remain flood free during the 0.1% plus climate change tidal flood event as a result of ground raising works.

The ground levels across the PDZ will be raised to a minimum ground level of 7.5m AOD. Most areas of the site already exceed this level. The proposed cut and fill balance is set at 8m AOD. No changes in level to Phoenix Way or the TCAs are proposed. The FCA also concludes that there will be no third- party impacts resulting from ground raising.

The application was referred to NRW who advised: “We have no objection to the proposed development from a flood risk perspective, as the FCA demonstrates that the main area of development (Production Development Zone) will be flood free during the 0.1% fluvial and 0.1%+cc tidal scenarios and therefore compliant with TAN15, with the exception of a very small area of flooding on an existing access road adjacent to the Dock, please note that access and egress is a matter for your Authority.” The FCA states that in the 1% plus climate change fluvial flood event and the 0.5% plus climate change tidal flood event, safe access/egress from the site is maintained. In the most extreme and exceptional 0.1% AEP plus climate change tidal flood event, flooding is shallow and will not affect access to and from the site. As such the proposal is considered to maintain adequate escape and evacuation routes under all conditions.

It is concluded that the proposed development satisfies the Justification Test requirements within the Flood Consequences Assessment, including managing flood risk in line with the acceptability criteria. The proposed development meets the principles and requirements set out in TAN15 and the aims of Planning Policy Wales, as well as LDP Policy SP1 (Climate Change).

De-risking

Planning Policy Wales (2024) sets out that the planning system should guide development to reduce the risk from natural or human made hazards affecting the land surface or subsurface. Risks to development may arise from matters such as land stability due to former mine workings or land contamination. Strategic Policy SP16 sets the context for consideration of environmental protection and requires protection and where feasible improvement of the environment. Policy EN8 sets out that development that would expose people to unacceptable risk due to contamination or land instability will not be permitted.

The site is identified as being in The Coal Authority (TCA) development low risk area. Within these areas there remains some risk of undocumented works and the standing advice of the TCA will apply, it is noted that no evidence has been found of such workings in the applicant’s ground investigations.

The site is identified as being potentially contaminated, which reflects its long history of industrial use. A specialist consultant working on behalf of the applicants has undertaken site investigation works prior to submitting the application, the approach to ground investigations were discussed and agreed with the Authority’s officers responsible for land contamination. This included agreeing details such as trail pit and borehole locations. The application supporting information includes: a Desk Study of the PDZ; Exploratory Ground Investigation Report of the PDZ; Geo-environmental Assessment Report of the

PDZ; Geotechnical Assessment Report pf the PDZ; Desk Study of the TCA; Ground Investigation Report of the TCA. A Stage 2 Detailed Unexploded Ordnance (UXO) Risk Assessment has also been prepared by a further specialist consultancy.

These assessments did note that there was a low to moderate risk of there being potential for significant pollutant linkages (to both human health and controlled waters receptors). The potential on-site sources of contamination include made ground/unspecified deposited material of unknown chemical composition and potentially contaminative current and historical land uses.

There are also off site sources due to current and historical industrial processes that have been undertaken in proximity to the site. Some Contaminants of Potential Concern (CoPCs) have been identified within the accessible areas of the site. The proposed hardstanding and proposed structures will mitigate the pollutant pathways. Where soft landscaping is proposed (which is limited given the industrial nature of the use), a suitable cover system may be required within these areas if made ground remains after site levelling.

The level of risk for contaminant migration is considered low for the CoPC identified within sampled groundwater. This is due to the anticipated low mobility of the contaminants and the presence of hardstanding across the site which will limit the potential for infiltration.

Due to the presence of general made ground gas and asbestos, the applicant sets out that good brownfield site working practices will be adopted by construction workers to mitigate potential risks.

Geo-technical and geo-environmental assessments have been conducted, in line with recommendations. The final submission has also been reviewed by NRW and the NPT Pollution Prevention Officers, they have agreed with recommendations within the report that the following additional work is undertaken and secured by planning conditions:

- Additional gas and groundwater monitoring of the installed boreholes to refine the above assessments and fully characterise the ground gas regime, as well as to confirm any remedial measures required.
- Targeted ground investigation and soil sampling to confirm the depth and extend of the identified hydrocarbon contamination.
- Undertake a Stage 2: Remediation Options Appraisal and Stage 3: Remediation and verification works, including development of a Remediation Strategy, Verification of the identified remediation works.

The site was bombed in the second world war and the majority of the site is at risk of the presence of unexploded ordnance. The applicant has completed and submitted an unexploded ordnance risk assessment that defines the likely risk and advises the following mitigations during development:

- UXO Safety Awareness Briefings, prior to all intrusive works commencing.
- Non-Intrusive Magnetometer Probe Survey Open excavations on

greenfield land within the Moderate Risk zone.
- Intrusive Magnetometer Probe Survey of all pile positions within the Moderate Risk zone.
- EOD Engineer - On Site Supervision Watching brief of all open excavations and magnetometer survey of all borehole locations within the Moderate Risk zone.

It is considered that subject to undertaking the works in accordance with the suggested UXO mitigation that the risk of developing the site will be reduced to as low as realistically possible. This should form part of the management of construction detailed within the CEMP to be agreed.

It is considered that subject to the conditions suggested by consultees that the risks of the development can be effectively mitigated. Therefore, the proposal is determined to be in accordance with Policies SP16 and EN8 of the Local Development Plan.

Ecology and tree impact

Policy SP 15 Biodiversity and Geodiversity sets out how important habitats, species and sites of geological interest will be conserved and enhanced. Policies EN6 and EN7 require any impacts on biodiversity/ natural features to be appropriately assessed and, where applicable, mitigated. Chapter 6 Distinctive and Natural Places of PPW was updated on the 18 October 2023 shortly before the submission of this application. The updated PPW contained a policy requirement that all planning applications must be supported by a Green Infrastructure Statement (GIS). During the consideration of this application a GIS was submitted that supplemented the existing information on biodiversity and ecology which was contained in the Environmental Statement (In particular Chapter 7 Terrestrial Ecology; Chapter 11 Air Quality; and Chapter 13 Marine Ecology).

The application was accompanied by the following surveys and assessments:
- Ecological Impact Assessment, and accompanying appendices comprising reports/survey data.
- Green Infrastructure Landscape Plan
- Arboricultural Baseline Note
- Outline Drainage Strategy
- Environmental Statement, prepared by the applicants agent, and the relevant appendices comprising reports/survey data, prepared by third-party consultants

The GIS sets out the limitations that the operational requirements of the development place on developing ecological mitigation on site. The site is part of an operational port that will be developed as part of the Celtic Freeport initiative, they have negotiated with the land owner the development site but this is restricted in extent to the land that the applicant requires operationally. They also note that within this site there are significant restrictions placed on the development of vegetation and habitats, this is due to the Control of Major Accident Hazards (COMAH) Regulations. The GIS states that Design constraints include the avoidance of any planting/green areas within zones of

raised thermal radiation around the facility operating/processing areas. The location of individual habitat areas has therefore been constrained to permitted areas of vegetation/habitats. Furthermore, the size of habitats has also been limited so that they do not have the potential to contribute to the spread of fire in case of any incident at the facility. The proposed development takes a multi functional approach with green infrastructure being part of SuDS drainage features where possible.

Within the PDZ regenerative willow scrub that is under 20 years old is the most extensive habitat type. There are areas of mixed species scrub and bramble associated with the margins of the grey willow with gorse dominates areas on the eastern side of the PDZ, where the substrate is dryer. There are two small areas of coastal grassland and nearby dune slack vegetation are evident in the central areas of the PDZ. Strips of naturally regenerated grassland of varying structure and species are evident in the eastern and western areas of the PDZ, with central and southern glade areas with patchy long grass and sprawling dewberry. Three seasonally flooded areas support open strands of common reed bounded by regenerating scrub willows. An area of recolonising bare ground and hardstanding lies in the centre of the PDZ, which is repeated on other hardstanding areas associated with former industrial works on site. The PDZ includes a range of species of lower plans, almost entirely limited to the areas of sparsely vegetated ground and open grassland on sandy substrates.

TCA1 is a flat expanse of unsealed made ground materials include crushed concrete and waste steel slag. The area comprises a habitat mosaic of sparse ephemeral vegetation, including indicator species of grassland and postindustrial habitats. The area includes colonies of Oxtongue Broomrape, a nationally rare and legally protected plant (Schedule 8 Wildlife and Countryside Act 1981). There are areas of diverse lower plants in the TCA. The site has extensive stands of long-established Japanese Knot Weed, which covers approximately 40% of the PDZ. The largest expanses are located in the southwestern area of the PDZ.

In respect to protected species bat transect and / or remote recording identified four species of bat at the site. Common pipistrelle night time passes were the most frequently encountered species. The site has very low levels of bat activity. The survey did identify one building where there was transient activity by a pipistrelle bat and due to this it is likely that a European Protected Species derogation licence will be required to allow for its demolition. The applicant's ecological report noted that foraging activity was recorded in and around Building B1 during surveys in August and September a large open sided building in the south-western part of TCA East. The report goes onto outline that bats would be excluded under the supervision of the named ecologist (or their accredited agent) on the WG bat licence during the active season. Alternatively, where exclusion is impractical, the roost feature would be subject to soft demolition directly supervised by the named ecologist on the WG bat licence. Overall due to the nature of the bat use this is a low risk case and works are not likely to be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in its natural range, provided the recommendations are implemented.

The applicant's baseline surveys identified that the site has negligible or low importance for: otters (local importance in the open dock only), badgers (negligible), common lizard (local but County importance in the context of the wider port), grass snake (local/district), slow worm (local), great crested newts (negligible) and invertebrates (local).

Appropriate measures to minimise risk to protected species during construction can be incorporated into a finalised CEMP. NRW has advised that a CEMP should be provided to ensure that there are protection measures for bats and otters during construction.

The applicant has provided details of how they will address the presence of the Oxtongue Broomrape and works that disturb or remove this plant will require a licence from NRW. A temporary Oxtongue Broomrape Protection Area will be established within a TCA and will allow for the relocation of selected areas of substrate into this area. The application will also remove colonising butterfly bush, willow and birch. Wall Cotoneaster will also be removed. NRW has advised that "The activity is low risk for the Favourable Conservation Status of the species at Port Talbot. The mitigation and method statement is proportionate, appropriate and addresses the impacts." In light of their advice it is considered that the impact to this species is acceptable.

In respect to breeding bird nesting habitat and winter bird assemblages the site was considered to be of local importance with some areas of bramble, gorse and woody hawthorn scrub potentially supporting birds.

The application is supported by a tree survey of the site. Thirteen trees at the site were identified and categorised as category B, and of moderate quality. Where practicable these trees should be protected. The default position, when designing any new development is to seek to retain all trees insofar as is practicable, regardless of category grading. However, in this instance, the applicant has evidenced that due to trees acting as a source of fuel or ignition for fires that trees could not be retained at the site. Mitigation of tree loss is in this case justified to be addressed off site.

The proposed development will deliver a net benefit for biodiversity through the combination of:
• On-site mitigation and enhancement measures including the provision of small multi-functional landscaped spaces on the boundary of the application site.
• Habitat restoration and enhancement outcomes at the chosen off-site biodiversity compensation site in Jersey Marine.

The onsite mitigation is shown in figure 11 below, which is an illustrative drawing showing the proposed ecological compensation on site.

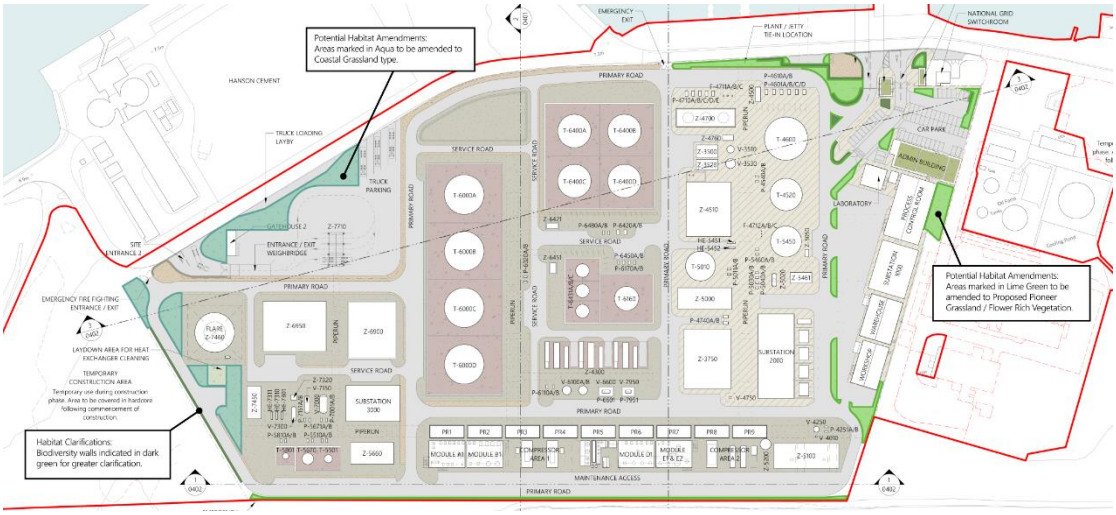

Figure 11: Illustrative plan from GIS showing the on site ecological compensation. Green areas are pioneer grassland / flower rich vegetation. Aqua areas are coastal grassland. Dark Green are to be biodiversity colonised gabion walls.

In respect to the offsite compensation the applicants outline that ABP is promoting proposals for the Future Ports: Port Talbot Programme (FPT), which encompasses land including the Proposed Scheme. ABP has purchased a landholding at Earlswood, Jersey Marine in July 2023 to provide off-site compensation for future Celtic Freeport developments to secure Net Biodiversity Benefit (NBB).

The GIS outlines that the applicant has agreed that parts of the ABP owned compensation site will be utilised to provide off-site compensation for residual effects associated with the this development. The proposed off-site compensation (habitat creation, enhancement and restoration) to address the residual biodiversity effects of this development and provide an overall enhancement include:

• Restoration of plantation on ancient woodland to compensate for the loss of low-value self-sown willow scrub.
• Creation of mixed species scrubby woodland edge and partial replacement of bramble with mixed species scrub to compensate for the loss of mixed species scrub and gorse.
• Retention of smaller areas of bramble thicket as a component of more structurally diverse woodland edge as compensation for loss of bramble.
• Enhancement of grassland previously subject to agricultural improvement to restore high value grassland habitats that have degraded or been lost as compensate for the residual effects from the loss of naturally regenerating grassland.
• Restoration of open mosaic habitat through removal of young self-sown birch trees
• Restoration of degraded saltmarsh (alongside Red Jacket Pill) in a habitat that has been heavily damaged by grazing animals, as compensation for the loss of seasonally flooded habitats (dune slack vegetation and common reed).

• The localised areas of dune slack and reedbed that have developed in the PDZ on ground that is subject to prolonged seasonal flooding require specific hydrological conditions. There are no options to create equivalent dune slack or reedbed habitats, subject to prolonged periods of winter flooding, in the off-site compensation site. Consequently, it is proposed that compensation targets poor condition saltmarsh vegetation (an alternative coastal S7 habitat) present alongside the existing man-made intertidal channels.
• Two large scrapes will be created in a low-lying neutral grassland adjacent to saltmarsh habitat. These will be designed to be seasonally wet and should support an assemblage of wetland plants different from the main grassland habitat.

Chapter 13 of the ES considers Marine Ecology. This considers the effects of the development during construction and operation of the development on sediment quality and water quality. Table 13.15 of the ES provides a summary of residual and significant marine ecology effects. This table is reproduced as Table 8 below.

Effect	**Receptor**	**Residual Effect**	**Significant**
Construction Stage			
Remobilisation of sediments causing increased suspended solids concentration in the water column	Sediment Quality	Negligible	No
	Water Quality	Minor Adverse	No
Remobilisation of sediments causing potential resuspension of contaminated sediments into the water column	Sediment Quality	Minor Adverse	No
	Water Quality	Minor Adverse	No
Accidental release of pollutants and sewage waste and into the water column from vessels during transit and construction operations	Sediment Quality	Minor Adverse	No
	Water Quality	Minor Adverse	No
Accidental release of litter and debris into the water column from vessels during transit and construction operations	Sediment Quality	Minor Adverse	No
	Water Quality	Minor Adverse	No
Disturbance through underwater noise and vibration			
	Fish with a swim bladder-inner ear connection used in hearing	Minor Adverse	No
	Fish with a swim bladder-inner ear connection used in hearing	Minor Adverse	No
Operational Stage			

Water abstraction affecting water flow and volume within the water body	Sediment Quality	Negligible	No
	Water Quality	Minor Adverse	No
Removal of biofouling from the subsea structures and leeching of antifouling, anticorrosive agents from coated infrastructure	Sediment Quality	Negligible	No
	Water Quality	Negligible	No
Accidental release of pollutants and sewage waste and into the water column from vessels during transit and operations	Sediment Quality	Minor Adverse	No
	Water Quality	Minor Adverse	No
Accidental release of litter and debris into the water column from vessels during transit	Sediment Quality	Minor Adverse	No
	Water Quality	Minor Adverse	No
Increased salinity caused by Dock's gates more frequent usage due to increased vessel traffic	Sediment Quality	Negligible	No
	Water Quality	Minor Adverse	No
Entrapment of fish during abstraction of water	All fish species	Minor Adverse	No

Table 8: Marine Environment Residual effects and their significance.

Mitigation for the marine impact of the development is outlined in the ES chapter. The steel lock gates at the entrance of Port Talbot Docks will be closed during any piling activities within the environment associated with the construction of the Proposed Scheme, to isolate underwater noise and vibration associated with the Proposed Scheme from the mouth of the river Afan and the subsequent marine environment. The closure of the Docks will also help to confine any dispersion of potentially contaminated sediments and contain the sediment plume within the waters of the Proposed Scheme area. A detailed Construction Environmental Management Plan (CEMP) will outline measures for pollution prevention, biosecurity assessment and waste management during construction, including the use of low-toxicity paints for submerged infrastructure (e.g. piles). All project vessels are required to follow the International Convention for the Prevention of Pollution from Ships (MARPOL). When operational intake screen mesh grade of 1 mm will be included in the design of water intakes used for abstraction activities during the operational stage, in line with NRW guidance on prevention of entrainment during water abstraction activities. It is noted that there is a separate system of control for water abstraction and this will be regulated by NRW through an abstraction licence. Similarly there will be a marine licence which will regulate works for the provision of the wharf within the dock environment and its marine ecology impact.

The application and supporting information has been reviewed by the NPT ecologist and NRW and they do not object to the application subject to securing mitigation.

It is noted that various other impacts on biodiversity such as air quality and lighting are addressed in the relevant sections of this report and are considered acceptable.

In respect to the applications ecological impacts, the proposal is considered to be in accordance with Policies SP 15, EN6 and EN7. It is also viewed to be in accordance with Future Wales and Planning Policy Wales.

Major Accident Hazard

Chapter 6 of the ES addresses Major Accident and / or Disasters.

During the scoping of the assessment a number of potential major accident hazards were considered but were viewed not be likely to result in a significant impact. These included major road traffic accidents during construction or operation; Pollution events / migration of contamination from site to controlled waterbody during construction; extreme flood events; pollution occurring during ship transportation and natural disasters (such as earthquakes and hurricanes). These were considered sufficiently unlikely for various reasons such as the probability of the incident or through primary and tertiary mitigation. The following were considered as likely significant and assessed in the ES:

Likely Significant Effect	**Receptors**	**Applicable Development Stage**
Operational plant/infrastructure failure (i.e. structure/building collapse, human error, explosion, non-descriptive accident)	Future on-site users and members of public	Operation
Fire event occurring during ship transportation of input/output material	Members of public	Operation
Fire event occurring on-site and impacting operational activities on-site, as well as consequential chain reaction events	Future on-site users and members of public	Operation

Table 9: Major accident hazard likely significant effects

The applicant also considered the potential interaction between this development and the operation of the neighbouring Tata steelworks site and the more distant British Oxygen Company site. They provide details of the health and safety mitigations that will be used to address the above major accident risks.

Extensive primary and tertiary mitigation is outlined in the ES dealing with the accident risks. For example to mitigate on site fires the design includes spacing of plant to contain fires, automatic and manual controls to isolate or shut down plant and equipment where necessary, as well as ensuring potential ignition sources are removed from areas of flammable materials. Furthermore, these

measures will be supplemented by the operational management practices specific to fire events.

The mitigation for operational plant / infrastructure failure is inherent in the design and engineering of the scheme. The ES sets out under that through the front end engineering design stage how all potential risks inherent to the design and layout of the Proposed Scheme have been considered and either resolved or managed so as to reduce risk to as low as reasonably practicable. This has taken into account to all inputs and outputs of the chemical processes of the plant in operation, and the primary process, as well as all ancillary infrastructure needs (i.e., utilities). Detailed information on mitigating fire risk is included in a supporting RIBA Stage 3 Fire Strategy Report which provides details of the proposed sites fire safety systems, means of warning and escape and details of fire spread.

The operation of ships is outside the direct control of the applicant and site operator the transportation of flammable materials (i.e. such as the ethanol and SAF) is controlled and regulated by the UN Model Regulations, The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009, The International Convention for the Safety of Life at Sea, 1974 (SOLAS), The International Carriage of Dangerous Goods by Inland Navigation (ADN), amongst other legislation and regulation. All such legislation and regulation places responsibility on the relevant transporters of flammable materials.

The applicant will require consent from the HSE in line with the COMAH Regulations. This will ensure that the proposed development when operational will take all necessary measures to prevent major accidents involving dangerous substances and limit the consequences to people and the environment of any major accidents which occur. The applicant will be obliged to produce a COMAH Safety Report. This report will be supported by a Quantified Risk Assessment (QRA). The applicant's ES states that the QRA indicates that all personnel within the process area would be in the 'tolerable' risk region, with the on-site building locations within the 'acceptable' range. The toxic risk across the facility was noted to be negligible. The overall societal risk is in the 'tolerable' risk region. The applicant has provided some initial information on their modelling of major accident hazard risk areas that would be defined through the formal COMAH process, the risks are largely within the application site or immediately adjoining uses and well contained within the ABP dock area.

The applicant has in detail considered the impacts of the proposal on major accident hazard and disasters. The ES sets out how this has been considered and the mitigation inherent in the scheme. The applicant has stated that they will be preparing and submitting a COMAH application following the planning stage. As such it is considered that the applicant has shown a proper consideration of major accident hazard and risk and shown that the risks of the development are likely to be acceptable, the detail of this and acceptability of the scheme in this respect will be considered by the COMAH regulation.

Human Health.

Human health matters are considered throughout the ES in relevant chapters. They are drawn together in ES table 2.1 which summarises Human Health Effects and where matters have been scoped into the ES.

The areas where human health are scoped in are major accident hazard, noise and vibration and air quality. In respect to major accident hazard the following are scoped into the assessment: the impact of Operational plant/infrastructure failure (i.e. structure/building collapse, human error, explosion, nondescriptive accident); Fire event occurring on-site and impacting operational activities on-site, as well as consequential chain reaction events; and Fire event occurring during ship transportation of input/output material. In respect to air quality the following were scoped in: changes to local air quality in terms of human health due to on-site emissions associated with heating plant (gas fired boilers) which represent the general day to day operation of the Site including testing regime for emergency generators and fire pumps. Change to local air quality in terms of human health due to on-site emissions associated with emergency flare and emergency shutdown flare. Change to local air quality in terms of human health due to transport emissions. In relation to noise and vibration the following were considered: Generation of noise from construction activities and construction traffic on-site; Generation of noise from construction traffic off-site; and Generation of noise from plant during operation.

Other aspects of the development such as the impact of ground contamination, transport, flood risk, lighting, climate change, socio-economics and noise and vibration with potential impacts on human health are considered in the table 2 and how they are effectively mitigated.

As noted the potentially significant effects that relate to human health are considered in detail in the relevant chapters of the ES and in the relevant sections of this report. The supporting information demonstrates a development with an acceptable human health impact.

Waste Management.

A Waste Management Plan (WMP) has been prepared by a specialist consultant. This is supported by the Framework CEMP and the Environmental Management Plan in the ES.

In relation to construction waste, Table 1 in the WMP sets out the main waste types generated during the construction period include soil material, concrete material, and steel. It sets out that all waste materials will be segregated, classified into the appropriate non-hazardous and hazardous categories/codes, collected separately at the point of origin, labelled, and stored appropriately to ensure safe containment and transportation (by a registered waste carrier) for their final re-use, recycling, or disposal. The WMP sets out that the developer will follow the waste hierarchy, where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

In relation to operational waste, the waste management plan provides details of the installation waste management type and storage. Hazardous waste arising from the industrial process includes organic waste containing hazardous substances (30 tonnes/year); aqueous liquid waste containing hazardous substances (500 tonnes/year); spent catalysts resins & absorbants (60 tonnes a year). The process will also give rise to non hazardous sludge from on-site effluent treatment (8000 tonnes/year). Relatively small amounts of other waste such as glass, plastics, metals, laboratory waste and equipment will also be generated. Specific waste compounds and storage areas are designated on the site layout plan.

Recycling and recovery at the proposed facility will include the following:
• Off-spec intermediates and fuels re-used in the oligomerisation and hydrogenation processes.
• Commercial mixed waste recovered and recycled as far as possible by appointed waste carrier supplier (e.g., paper/cardboard, glass, metal, and plastic).

The Waste Management Plan establishes that:
• Disposal of waste will follow the conditions of the NRW environmental permit. This includes record keeping, monitoring and control obligations.
• Hazardous waste disposal will follow the Hazardous Waste Regulations, including additional labelling, record keeping, monitoring and control obligations.
• Only licensed waste carriers will supply waste collection, transfer, and disposal of waste from the Installation.
• The appointed site staff will be provided with training on the management of all wastes for disposal.

It is considered that the application and supporting detail demonstrate that the development can operate without unacceptable negative environmental impacts arising from waste. The proposed development is reasonably in accordance with Policy W3 of the LDP.

Climate Change and Sustainability

Chapter 10 of the ES sets out the policy context to this application in relation to climate change clearly and as follows:

Welsh Policy:

• The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 requires consideration of the impact of the Proposed Scheme on climate change, and also the vulnerability of the Proposed Scheme itself to climate change;

• Planning Policy Wales, Edition 12 (2024) recognises the role that planning has to play in making development resilient to climate change, decarbonising society and developing a circular economy for the benefit of the built and natural environment and to contribute to the achievement of the well-being goals;

• The Environment (Wales) Act 2016 requires the Welsh Government to reduce Green House Gas emissions in Wales to net zero for the year 2050 and implement a system of interim emissions targets and carbon budgets. Under Section 39 of the Act, Welsh Ministers must prepare and publish a report for each budgetary period setting out their policies and proposals for meeting the carbon budget for that period;

• Prosperity for All: A Low Carbon Wales (2019) sets the foundations for Wales to transition to a low carbon nation in order to bring opportunities around clean growth for business, as well as wider benefits for people and the environment;

• Net Zero Wales Carbon Budget 2 (2021-25) (2021) represents the next phase in Wales' decarbonisation journey with a new net zero target alongside various policies, proposals and commitments for action across the economy. This report notes that aviation policy is not devolved, and that UK Government must bring forward proposals to drive fuel efficiency, the development of new zero emission aircraft and accelerating the supply and uptake of sustainable aviation fuels (SAF);

• Future Wales, the National Plan 2040 (2021)9 sets out strategy for addressing key national priorities through the planning system including achieving decarbonisation and climate-resilience; and

• The creation of a new body Net Zero Industry Wales was announced in March 2022 by the Welsh Minister for the Economy during a visit to Port Talbot Steelworks. It aims to accelerate the decarbonisation of Welsh businesses and industry and support the exploration of new economic growth opportunities by becoming a world-leader in low carbon manufacturing

UK Policy

• UK Government's Net Zero Strategy: Build Back Greener (October 2021) lays out a commitment for the UK to become a leader in zero-emission flight, kick-starting commercialisation of UK sustainable aviation fuels (SAF) to enable the delivery of 10% SAF by 2030;

• UK Government's Jet Zero Consultation (July 2021) further set out the key role that Sustainable Aviation Fuel (SAF) can play in decarbonising aviation whilst also representing an industrial leadership opportunity for the UK, generating between £0.7–£1.6bn Gross Value Added (GVA) per year and creating between 5,000 and 11,000 green jobs;

• The Department for Transport launched the Advanced Fuels Fund in July 2022 to support these aims and UK Government's subsequent commitment to have at least 5 commercial scale SAF plants under construction in the UK by 2025 through the allocation of up to £165 million in competitive grant funding. LanzaTech UK Ltd was10.6 awarded £24.9 million in December 2022 through the Advanced Fuels Fund for the Proposed Scheme;

• The Renewable Transport Fuel Obligation (RTFO) supports UK Government policy on decarbonising transport by encouraging the production and use of renewable fuels that do not damage the environment; and

• The Carbon Budget Delivery Plan informs Parliament and the public on the Government's proposals and policies to enable carbon budgets to be met. It includes projected GHG emissions savings across UK carbon budgets for a range of Government decarbonisation proposals and policies, including Proposal 145 for the International Aviation & Shipping Sector (IAS) "Increasing the Take Up of Sustainable Aviation Fuels".

Local Policy
• The LDP sets out a range of key issues including 'KI 1' relating to the need to address both the causes and consequences of climate change. Corresponding overarching objective 'OB 1' and Policy 'SP 1 Climate Change' relate to the need to reduce GHG emissions and adapt to climate change through consideration of its effects in the design and location of new development.

A comprehensive assessment of the effects relating to climate change are set out in Chapter 8 of the ES. The applicant has also prepared a Sustainability and Energy Statement in support of the planning application.

During the scoping of the EIA issues such as increased risk of flooding; heat stress during construction; and extreme weather were scoped out of the assessment. Water availability for site buildings and processes was considered not significant, this was due to the use of water from the adjoining dock and potable water efficiency measures. Summertime overheating in buildings will be adequately addressed through building design. Changes in seasonal weather including temperature and rainfall were considered to be not significant for the on site vegetation.

Net Green House Gas (GHG) emissions was considered a likely significant effect and fully considered in the ES, this is a complex assessment that shows a moderate net GHG effect for the global climate system which is moderate beneficial and a significant effect. The ES provides the following summary of the assessment:

"10.106 The sensitivity of the global climate system is considered to be high. The magnitude of net GHG effect (saving) is considered to be large (i.e. >10%) in relation to the contribution to Government forecast GHG savings from SAF update for the UK Fourth Carbon Budget, irrespective of ethanol feedstock route.

10.107 The magnitude of net GHG effect (saving) is considered to be medium (i.e. >5% to 10%) in relation to the contribution to Government GHG savings projections from SAF uptake during the Fifth Carbon Budget irrespective of ethanol feedstock route, and also medium for the Sixth Carbon Budget in the waste starch ethanol feedstock route.

10.108 The magnitude of net GHG effect (saving) is considered to be negligible (i.e. <1%) in relation to all UK carbon budgets irrespective of ethanol feedstock route.

10.109 Government's GHG reduction projections from SAF uptake are considered the most appropriate context to aid the determination of significance given these projections are relevant to the Proposed Scheme in terms of both decarbonisation sector (i.e. aviation) and technology (i.e. SAF production) and as part of the Government's strategy for UK Net Zero to be achieved.

10.110 The Proposed Scheme provides a large (i.e. >10%) contribution to these Government projections during the current (fourth) carbon budget, however only for a single year (2027, the first full year of operation). On balance, therefore it is the moderate (i.e. >5% to 10%) contribution to Government projected GHG savings from SAF uptake over the whole next (fifth) carbon budget that is deemed most appropriate to support the evaluation of significance.

10.111 In addition to this contribution of the Proposed Scheme towards Government GHG savings projections from SAF uptake, the Committee on Climate Change report The Sixth Carbon Budget: Aviation (2020)24 includes a key policy recommendation to support the near-term construction of commercial SAF production facilities in the UK.

10.112 On this basis the Proposed Scheme is concluded to make an appropriate and early contribution to the UK net zero trajectory for this issue.

10.113 For context it is also noted that:

10.113.1 for NPT: The magnitude of net GHG effect (saving) is considered to be large (i.e. >10%) in relation to NPT's baseline emissions, future carbon budgets proposed for NPT

10.113.2for Wales: The magnitude of net GHG effect (saving) is considered to be small (i.e. >1% to 5) in relation to Wales carbon budgets irrespective of ethanol feedstock route, and also in terms of contribution to Government GHG savings from SAF uptake in the Sixth Carbon Budget in the steel mill off gas ethanol feedstock route.

10.114 Therefore, there is likely to be a direct, permanent, long-term beneficial effect which is considered to be moderate."

The applicant states that they have been successful in an application to the Department for Transport's (DfT's) Advanced Fuels Fund (AFF). As part of this they have undertaken an AFF Life Cycle Assessment (LCA). The AFF LCA is a commercially sensitive document and has not been provided to the Authority in full, however it has been undertaken in accordance with the DfT AFF guidance and is used as the basis for the GHG assessment in the ES. The AFF LCA evaluates upstream GHG emissions associated with ethanol feedstock production and transport, emission from on-site processes to create the SAF (e.g. mains electricity and gas consumption), downstream emissions from the transport of the SAF to aircraft, and GHG saving thresholds necessary to designate the product as SAF, in line with the AFF guidance set out by the DfT.

The design of the proposed development also addresses climate change and sustainability. The administrative building has Solar PV panels shown to be installed on its rooftop. Air Source Heat Pumps are stated to be incorporated through an all electric energy strategy to provide space heating and cooling to the office areas of the proposed units. Provision is made for 25% electric vehicle

(EV) charging parking spaces. The applicant has also provided details of reduced energy usage through high levels of insulation and air tightness.

The applicant within the planning statement states that the proposal will play a crucial role producing an expected 100 million litres of SAF annually, contributing to the UK Government's sustainable aviation fuel 2030 target. And that promoting the use of SAF is critical in the aviation sector's efforts to mitigate climate change and reduce its environmental impact to achieve net zero emissions in aviation.

The assessment provided is accepted and the proposal is considered to have GHG emission benefits that must be considered and given weight in decision making. The proposals are in accordance with and support the principles set out in, LDP Policies SP1 (Climate Change), SP18 (Renewable and Low Carbon Energy) and RE2 (Renewable and Low Carbon Energy in New Development).

Cumulative Impacts.

The Environmental Impact Assessment Regulations requires all proposed EIA developments to consider not only the direct and indirect impacts of the proposal, but to also consider these impacts in combination or cumulatively with other schemes or projects that are in the public domain. The applicants assessment considered all such projects and identified four projects for assessment:

P2021/1255 - Land West Of Junction 38 Of The M4 Port Talbot Margam SA13 2NU - Full planning application of the development of a metal processing facility totalling 28,500sq.m of floorspace comprising a powder processing plant (17,377sq.m), warehouse and store (5,428 sq.m) office building (1,442 sq.m), amenity building (776 sq.m), laboratory (200 sq.m), services building (470 sq.m), substation (107 sq.m), phase 2 (2,700 sq.m), CCTV, storage tanks and plant, parking, servicing and roads and associated works. Approved (EIA development).

P2022/0470 Land At Baglan Way, Port Talbot - Erection of an industrial unit (use class B2) (GIA 25,545sqm) with associated works including sustainable drainage, car parking, cycle storage and landscaping. Approved (Not EIA development).

P2018/1036 Land Adjacent To The Existing Sinter Plant Port, Talbot Steelworks Margam Port Talbot SA13 2NG - Demolition of existing structures accommodating the secondary dust extraction system for the sinter plant and installation of a replacement secondary system, including a bag filter system comprising a 6 storey structure, pipework and ducting, chimney stack (55m tall), electrical equipment, hard and soft landscaping and associated development. Construction ongoing (Not EIA).

DNS/3264571 Land at Bryn and Penhydd forest, located between Port Talbot and Maesteg - Fferm wynt o hyd at 18 tyrbin gyda storio ynni batri a seilwaith

ategol / A wind farm of up to 18 turbines with battery energy storage and ancillary infrastructure. Pre-application (PAC) submission (EIA development).

The utilities infrastructure for the project has not been finalised and the assessment of cumulative effects considers assumptions about the electricity grid connection and gas connection. The proposal will require a new 33kV power cable to a proposed on site National Grid Switchroom from the substation located in Pyle. The proposed routing of the cables is all within the boundaries of highways including the A48, streets within Margam, passing under the railway lines at Central Road, then under Harbour Way, on to North Road and then on to Phoenix Way. These works would involve trenching and reinstatement and are likely to require lane closures. A new pressure-reduction station (PRS) is required to be installed at the existing Wales and West Utilities (WWU) compound off Cefn Gwrgan Road and will be located within their land ownership at the location, connecting to the current infrastructure. It is understood this PRS would be 'skid' mounted and therefore occupy a relatively small area at the compound. Intermediate pressure mains supply pipe would then be installed between the compound and PRS, to the Proposed Scheme, approximately a 5km distance. The detail of this has not been finalised by WWU, but is likely to require trenching laying of supply pipe and reinstatement of the highway surface. Such works are likely to result in temporary lane closure.

Impacts on air quality, terrestrial ecology, noise and vibration, socio economics and human health, landscape and visual, major accidents and hazards and marine ecology.

The applicant considers in combination effects as follows:

"14.131 The assessment of in-combination effects considered 4 Approved Projects on a technical topic by topic basis (i.e. Technical Chapters 6 – 13).

14.132 The assessment of in-combination effects across topics has concluded that there is the potential for in-combination effects in relation to major accidents and disasters; landscape and visual; air quality and noise but the conclusions do not change from the project level, for which in-combination visual effects to users of the Wales Coast Path are the only significant in-combination effect (adverse).

14.133 For socio-economics, there is also the potential for in-combination effects, specifically in relation to employment generation but the conclusions do change from the project level as they are now considered significant and beneficial during construction, where they were not previously considered significant and during operation, they remain significant, albeit the level of beneficial effect is greater.

14.134 For climate change and specifically GHG emissions, the consideration of in-combination contributions is holistically considered at the project level. There is an in-combination effect and this is considered to be moderate beneficial and significant.

14.135 A summary of the evaluation of in-combination effects is provided within Table 14.6, which outlines:
• Assessing the in-combination effect was not relevant – denoted by N/A;
• No in-combination effect was identified – denoted by ×;
• In-combination effects were identified but determined to be no greater level of effect or significance than that reported for the Proposed Scheme in isolation – denoted by =; and
• In-combination effects were identified and determined to be a level of effect or significance greater than the Proposed Scheme in isolation – denoted by >.

14.136 Where an in-combination effect is identified and is considered to be significant, this has been highlighted in bold and shaded."

Technical Topic	**Approved Project 1**	**Approved Project 2**	**Approved Project 3**	**Approved Project 4**
Major Accidents and/or Disasters	X	N/A	=	N/A
Terrestrial Ecology	=	=	=	=
Landscape and visual	=	=	=	>
Socio-Economics and Human Health	>	>	>	>
Air Quality	=	N/A	=	N/A
Noise and Vibration	N/A	N/A	=	N/A
Marine Ecology	X	X	X	X

Table 10: Summary of In-Combination Effects (ES Table 14.6)

The application has considered the in combination effects of the development and identified them in respect to their likely significant effects, the impact of the development in combination should be taken into account when determining the application.

Section 106 Planning Obligations.

Local Development Plan Policy SP 4 (Infrastructure) states that "Developments will be expected to make efficient use of existing infrastructure and where required make adequate provision for new infrastructure, ensuring that there are no detrimental effects on the area and community. Where necessary, Planning Obligations will be sought to ensure that the effects of developments are fully addressed in order to make the development acceptable".

Policy I1 (Infrastructure Requirements) then states that "In addition to infrastructure improvements necessary to make a development acceptable in health, safety and amenity terms, additional works or funding may be required to ensure that, where appropriate, the impact of new development is mitigated. These requirements will include consideration of and appropriate provision for: Affordable housing; Open space and recreation facilities; Welsh language infrastructure (in language Sensitive Areas); Community facilities including community hubs; Biodiversity, environmental and conservation interests; Improving access to facilities and services including the provision of walking

and cycling routes; Historic and built environment and public realm improvements; Community and public transport; Education and training.

The Community Infrastructure Levy Regulations 2010 came into force on 6th April 2010 in England and Wales. They introduced limitations on the use of planning obligations (Reg. 122 refers). As of 6th April 2010, a planning obligation may only legally constitute a reason for granting planning permission if it is:

(a) necessary to make the development acceptable in planning terms;
(b) directly related to the development; and
(c) fairly and reasonably related in scale and kind to the development.

In this case, the proposal relates to a planning application for the development of a sustainable aviation fuel production facility and as such there is no requirement for planning obligation contributions towards the provision of affordable housing, public open space, education and there are no identified public highways works that have been identified as necessary.

As identified in the relevant sections of this report the application will require a contribution to active travel provision in the local area of £188,960.65 and the off site mitigation will require a section 106 agreement to secure. The principle of this has been agreed with the applicants agent and a draft agreement has been produced.

Other Matters

As identified earlier in this report, an objection was received in response to the publicity exercise. The issues raised in this objection have been addressed elsewhere in the report.

Summary of effects

The ES contains a summary of effects which is provided below in tables 11 and 12 for construction and operation of the development.

Likely Significant Effect	Receptor	Residual Effect
Chapter 6: Major Accidents and / or Disasters		
None scoped in for assessment		
Chapter 7: Terrestrial Ecology		
Habitat loss Section 7 Habitats and equivalent	Naturally regenerated grassland (PDZ, TCA West, TCA East) Coastal grassland and dune slack vegetation (PDZ) Open Mosaic Habitat (TCA1)	Minor beneficial

Likely Significant Effect	Receptor	Residual Effect
Loss of Other on-site Habitats (PDZ, TCA West, TCA East, TCA1, Crown Wharf dockside)	Willow scrub (grey willow) Scrub, bramble, and bracken Seasonally flooded ground	Minor beneficial
Partial loss of colony of Schedule 8 plant species	Oxtongue broomrape	Minor adverse
Degradation of habitats as a result of the spread of Japanese knotweed or other Schedule 9 plant species	On-site and off-site habitats	Negligible
Permanent loss of roost / foraging habitat, temporary disturbance of bat foraging habitat and flightlines	Bats	Minor adverse
Loss of nesting sites and foraging areas indirect disturbance as a result of construction noise, vibration and lighting	Breeding birds	Minor adverse
Habitat loss / displacement from terrestrial habitats	Overwintering birds (terrestrial habitats)	Minor adverse
Disturbance from site construction activities including piling	Overwintering birds (terrestrial habitats)	Minor adverse
Habitat loss and displacement of reptiles	Reptile populations (common lizard, slow worm and grass snake)	Negligible beneficial
Permanent habitat loss and indirect effects (construction lighting)	Invertebrate populations	Minor adverse
Chapter 8: Landscape and visual		
Changes to the character and amenity of views	Users of the Wales Coast Path to the north and west of Crown Wharf (as demonstrated by RVs 1, 2, 3, & 7)	Varies from **moderate adverse** to negligible
	Users of the Wales Coast Path on Margam Mountain (as demonstrated by RV6)	Varies from **moderate adverse** to negligible
Changes to landscape components within the Site	Vegetation on site	**Moderate adverse**
Chapter 9: Socio-Economics and Human Health		
Employment generated in the construction stage	Local labour force Vulnerable Groups	Minor beneficial
Chapter 10: Climate Change		
Net GHG effect reported in operational table		
Chapter 11: Air Quality		
Change to local air quality in terms of human health and ecology due to transport emissions including vehicle and shipping emissions.	Residential, community and educational facilities	Negligible

Likely Significant Effect	Receptor	Residual Effect
Chapter 12: Noise and Vibration		
Generation of noise from construction activities and on-site construction traffic (daytime and Saturday)	SSRs 1-114 and Talbot Memorial Park and Vivian Park	Negligible Adverse
Generation of noise from construction activities and on-site construction traffic evenings and weekends (excl. Sat 0700-1300hrs)	SSRs 1-6, 8, 10 & 11	Negligible adverse
	SSRs 7 & 9	Moderate adverse
Generation of noise from construction traffic off-site	SSRs 1-11 and Talbot Memorial Park	Negligible adverse
Chapter 13: Marine Ecology		
Remobilisation of sediments causing increased suspended solids concentration in the water column	Sediment Quality	Negligible
	Water Quality	Minor adverse
Remobilisation of sediments causing potential resuspension of contaminated sediments into the water column	Sediment Quality	Minor adverse
	Water Quality	Minor adverse
Accidental release of pollutants and sewage waste and into the water column from vessels during transit and construction operations	Sediment Quality	Minor adverse
	Water Quality	Minor adverse
Accidental release of litter and debris into the water column from vessels during transit and construction operations	Sediment Quality	Minor adverse
	Water Quality	Minor adverse
Disturbance through underwater noise and vibration	Sediment Quality	Minor adverse
	Water Quality	Minor adverse

Table 11: Summary of Residual and Significant Effects During Construction (ES Table 15.2)

Likely Significant Effect	Receptor	Residual Effect
Chapter 6: Major Accidents and / or Disasters		
Operational plant/infrastructure failure (i.e. structure/building collapse, human error, explosion, nondescriptive accident)	Future on-site users and members of public	Minor adverse
Fire event occurring during ship transportation of input/output material	Members of the public	Negligible up to Minor adverse
Fire event occurring on-site and impacting operational activities on site, as well as consequential chain reaction events	Future on-site users and members of public	Minor adverse

Likely Significant Effect	Receptor	Residual Effect
Chapter 7: Terrestrial Ecology		
Disturbance as a result of operational noise, artificial lighting and general site operations	Bats	Negligible
Disturbance to breeding birds as a result of operational noise, artificial lighting and general site activities; (Operation)	Breeding birds	Negligible up to Minor adverse
Disturbance as a result of operational noise, artificial lighting and general site operations	Overwintering birds	Minor adverse
Operational lighting effects on populations	Invertebrates	Negligible adverse
Chapter 8: Landscape and visual		
Changes to the character and amenity of views	Users of the Wales Coast Path to the north and west of Crown Wharf (as demonstrated by RVs 1, 2, 3, & 7)	Varies from moderate adverse to negligible
Changes to landscape components within the Site	Vegetation on site	Moderate adverse
Chapter 9: Socio-Economics and Human Health		
Employment generated in the operational stage	Local labour force Vulnerable Groups	**Moderate beneficial**
Chapter 10: Climate Change		
Net GHG Effect	Global Climate System	**Moderate beneficial**
Chapter 11: Air Quality		
Change to local air quality in terms of human health and ecology due to onsite emissions associated with heating plant (gas fired boiler) which will be used as the main source of energy on the Site	Nearest sensitive human receptors (residential, educational, health facilities) located to the east, northeast, west, north, northwest and west	Negligible
	On-site receptors (i.e. workers)	Negligible
	Ecological Receptors – Kenfig Special Area of Conservation (SAC), Crymlyn Bog SAC and Cefn Cribwr SAC.	Negligible
Change to local air quality in terms of human health and ecology due to onsite emissions associated with flare and emergency point sources (i.e. emergency diesel engines and fire water pump)	Nearest sensitive human receptors (residential, educational, health facilities) located to the east, northeast, west, north, northwest and west	Negligible
	On-site receptors (i.e. workers)	Negligible

Likely Significant Effect	Receptor	Residual Effect
	Ecological Receptors – Kenfig Special Area of Conservation (SAC), Crymlyn Bog SAC and Cefn Cribwr SAC	Negligible
Change to local air quality in terms of human health and ecology due to transport emissions including vehicle and shipping emissions	Nearest sensitive human receptors (residential, educational, health facilities) located adjacent to Harbour Road	Negligible
	Ecological Receptors – Kenfig SAC/SSSI	Negligible
Chapter 12: Noise and Vibration		
Generation of Noise from Plant during Operation	SSRs 1, 2, 4, 5, 6 & 9	Minor adverse
	SSRs 3 & 7	Moderate adverse
	SSRs 8, 10 & 11 and Talbot Memorial Park and Vivian Park	Negligible adverse
Chapter 13: Marine Ecology		
Water abstraction affecting water flow and volume within the water body	Sediment Quality	Negligible
	Water Quality	Minor adverse
Removal of biofouling from the subsea structures and leeching of antifouling, anticorrosive agents from coated infrastructure	Sediment Quality	Negligible
	Water Quality	Minor adverse
Accidental release of pollutants and sewage waste and into the water column from vessels during transit.	Sediment Quality	Minor adverse
	Water Quality	Minor adverse
Accidental release of litter and debris into the water column from vessels during transit and construction operations	Sediment Quality	Minor adverse
	Water Quality	Minor adverse
Increased salinity caused by Dock's gates more frequent usage due to increased vessel traffic	Sediment Quality	Negligible
	Water Quality	Minor adverse
Entrapment of fish during abstraction of water	All fish species	Minor adverse

Table 12: Summary of Residual and Significant Effects During Operation (ES Table 15.2)

CONCLUSION AND PLANNING BALANCE

In the assessment of the proposed planning application the Local Planning Authority has had all due regard for the information submitted in support of the application, including the Environmental Statement. Further, it has given consideration to all available information in relation to other plans, proposals

and other Environmental Statements. Similarly, it has considered information provided by all statutory and non-statutory consultees as well as all comments submitted by members of the public. The Local Planning Authority has used this information to come to a reasonable conclusion in relation to the impacts associated with the proposed development.

There are no significant residual adverse environmental effects to terrestrial ecology; air quality; noise and vibration; marine ecology; and major accident hazards. There are residual adverse effects after mitigation in these areas which are outlined in detail in the report above and summarised in tables … while not significant environmental effects there remain residual adverse effects which must be given weight in decision making. There are also elements of the development that are considered in the report that do not form part of the ES such as traffic and transport, land contamination and flood risk. All of these issues are considered in the report above, where subject to mitigation and conditions the development is acceptable.

There remain significant adverse landscape and visual effects. These occur both during construction and when the site is operational. The effects are to users of the Wales Coast Path on Margam Mountain and to the north and west of Crown Wharf. There would also be the loss of vegetation at the site which would change landscape components. While these effects are significant it is considered that they are localised in extent or in the case of the loss of on site vegetation, likely to extent with any re-development of the site which is allocated for freight use in the LDP.

There are significant beneficial socio-economic effects from the employment generated in the operational stage of development. There are not significant but beneficial effects in some areas of ecology and in terms of socio economic effects during construction. There is also a significant net Green House Gas effect which is beneficial (this is from the development as a whole). The proposal will make an important contribution towards UK Government requirements to use sustainable aviation fuel from 2025, and which requires 10% of the jet fuel used in the UK aviation industry to be SAF by 2030. It is also in line with local and national policy ambitions to promote sustainable growth and development which supports the local economy, skills, and community. The proposal will sustainably regenerate an underutilised site with industrial and employment uses. The proposal demonstrates that it will create 85 FTE jobs on-site in the operational phase, and further employment generation in the supply chain. It will utilise the existing harbour for the transportation of materials and products, promoting use of this existing facility in line with Celtic Freeport and wider ABP Future Ports Programme ambitions.

In determining this application weight must be given to the various material considerations outlined in the report and determination of where the planning balance lies between the positive and negative effects of the development. It is considered that the proposal represents an appropriate form of development where the adverse impacts of the development identified are outweighed by the benefits of the development in terms of the socio-economic benefits and in terms of green house gas emmissions. Accordingly, the proposed development

is in accordance with Policies SP1, SP2, SP3, SP4, SP5, SP10, SP11, SP15, SP16, SP18, SP19 , SP20, SC1, I1, OS1, EC1/2+, EC3, TO4/1, EN6, EN7, EN8, RE1, RE2, W1/1b, W3, TR2, and BE1 of the Neath Port Talbot Local Development Plan.

The decision to recommend planning permission has been taken in accordance with Section 38 of The Planning and Compulsory Purchase Act 2004, which requires that, in determining a planning application the determination must be in accordance with the Development Plan unless material considerations indicate otherwise. The Development Plan comprises Future Wales - the National Plan 2040 and the Neath Port Talbot Local Development Plan (2011–2026) adopted January 2016. The recommendation complies with Future Wales - the National Plan 2040, policies 1, 2, 8, 9 and 12 and the Council's well-being objectives and the sustainable development principle in accordance with the requirements of the Well-being of Future Generations (Wales) Act 2015.

RECOMMENDATION

Approve subject to an agreement under section 106 of the Town and Country Planning Act 1990. This agreement is to:

- Secure off site ecological mitigation on an agreed mitigation site in Jersey Marine, which is in the ownership of Associated British Ports.

- Secure provision of a contribution of £188,960.65 to active travel, this is to be used for the development of the Newbridge active travel project or on other active travel projects.

Time Limit Conditions

1 The development shall begin no later than five years from the date of this decision.

Reason:
To comply with the requirements of Section 91 of the Town and Country Planning Act 1990.

List of Approved Plans

2 The development shall be carried out in accordance with the following approved plans and documents:

2143.01-IA-ZZ-ST-DR-A-0100 Rev P9 Site Location Plan
2143.01-IA-ZZ-ST-DR-A-0101 Rev P8 Site Location Plan - Ownership Boundaries
2143.01-IA-ZZ-ST-DR-A-0210 Rev P14 Proposed Site Key Plan
2143.01-IA-ZZ-ST-DR-A-0211 Rev P13 Proposed Site Plan (Area 1)

2143.01-IA-ZZ-ST-DR-A-0212 Rev P15 Proposed Site Plan (Area 2)
2143.01-IA-ZZ-ST-DR-A-0213 Rev P13 Proposed Site Plan (Area 3)
2143.01-IA-ZZ-ST-DR-A-0214 Rev P15 Proposed Site Plan (Area 4)
2143.01-IA-ZZ-ST-DR-A-0215 Rev P18 Proposed PDZ Layout & Equipment List
2143.01-IA-ZZ-ST-DR-A-0216 Rev P8 Proposed PDZ Layout - External Surface Finishes
2143.01-IA-ZZ-ST-DR-A-0217 Rev P10 Proposed Site Plan - PDZ & Temp. Construction Areas
2143.01-IA-ZZ-ST-DR-A-0220 Rev P13 Proposed Site Key Plan - EIA Boundary Shown
2143.01-IA-ZZ-ST-DR-A-0227 Rev P9 Site Location Plan - EIA Boundary Shown
2143.01-IA-ZZ-ST-DR-A-0240 Rev P6 Proposed Site Fencing Layout
2143.01-IA-ZZ-ZZ-DR-A-0401 Rev P11 Proposed Site Sections - Sheet 1 of 2
2143.01-IA-ZZ-ZZ-DR-A-0402 Rev P11 Proposed Site Sections - Sheet 2 of 2
2143.01-IA-ZZ-ZZ-DR-A-0500 Rev P6 Proposed Zone 1 Plant Elevations - Enclosed Ground Flare
2143.01-IA-ZZ-ZZ-DR-A-0501 Rev P7 Proposed Zone 2 Plant Elevations - Collection Basin
2143.01-IA-ZZ-ZZ-DR-A-0502 Rev P7 Proposed Zone 3 Plant Elevations - Substation 3000
2143.01-IA-ZZ-ZZ-DR-A-0503 Rev P6 Proposed Zone 4 Plant Elevations - Tanker Loading
2143.01-IA-ZZ-ZZ-DR-A-0505 Rev P6 Proposed Zone 5 Plant Elevations - Ethanol Tanks
2143.01-IA-ZZ-ZZ-DR-A-0506 Rev P8 Proposed Zone 6 Plant Elevations - Process Modules
2143.01-IA-ZZ-ZZ-DR-A-0507 Rev P6 Proposed Zone 7 Plant Elevations - Sustainable Aviation Fuel Tanks
2143.01-IA-ZZ-ZZ-DR-A-0508 Rev P6 Proposed Zone 8 Plant Elevations
2143.01-IA-ZZ-ZZ-DR-A-0509 Rev P6 Proposed Zone 9 Plant Elevations - Hydrogen Generation
2143.01-IA-ZZ-ZZ-DR-A-0510 Rev P8 Proposed Zone 10 Plant Elevations
2143.01-IA-ZZ-ZZ-DR-A-0511 Rev P6 Proposed Zone 11 Plant Elevations - Metering & Water Tanks
2143.01-IA-ZZ-ZZ-DR-A-0512 Rev P6 Proposed Zone 12 Plant Elevations - Water Package & Tank
2143.01-IA-ZZ-ZZ-DR-A-0513 Rev P6 Proposed Zone 13 Plant Elevations
2143.01-IA-ZZ-ZZ-DR-A-0514 Rev P6 Proposed Zone 14 Plant Elevations - Substation 2000 & Liquid Nitrogen Storage
2143.01-IA-01-ZZ-DR-A-0300 Rev P7 Proposed Process-Control Building Plans
2143.01-IA-01-ZZ-DR-A-0301 Rev P7 Proposed Process-Control Building Elevations

2143.01-IA-02-ZZ-DR-A-0300 Rev P8 Proposed Laboratory Plans and Elevations
2143.01-IA-03-ZZ-DR-A-0300 Rev P8 Proposed Gatehouse 1 Plans and Elevations
2143.01-IA-04-ZZ-DR-A-0300 Rev P7 Proposed Gatehouse 2 Plans and Elevations
2143.01-IA-05-ZZ-DR-A-0300 Rev P9 Proposed Workshop Plans and Elevations
2143.01-IA-06-ZZ-DR-A-0300 Rev P8 Proposed Warehouse Store Plans
2143.01-IA-06-ZZ-DR-A-0301 Rev P1 Proposed Warehouse Store Elevations
2143.01-IA-09-ZZ-DR-A-0300 Rev P8 Proposed Admin Building Plans and Elevations
2143.01-IA-10-ZZ-DR-A-0300 Rev P3 Proposed Amenity Shelter 1 Plans and Elevations
2143.01-IA-11-ZZ-DR-A-0300 Rev P3 Proposed Amenity Shelter 2 Plans and Elevations
2143.01-IA-12-ZZ-DR-A-0300 Rev P3 Proposed Cycle Store Plans and Elevations
2143.01-IA-XX-XX-RP-A-0910 Rev P9 Design and Access Statement
Planning Statement by Turleys
Design and Access Statement by Inspire Architects
Sustainability and Energy Statement by Turley Sustainability
Transport Assessment (including Transport Implementation Strategy and access plans) by SCP
Flood Consequence Assessment by JBA
Outline Drainage Strategy by JBA
Green Infrastructure and Landscape Strategy by EDP
Ecological Impact Assessment by RPS
Arboricultural Baseline Note by EDP
Archaeology and Heritage Assessment by EDP
PDZ Ground Investigation Report (Phase 1) by TEC Consulting
Margam Wharf Ground Investigation Report (Phase 1) by TEC Consulting
PDZ Desk Study by TEC Consulting
Margam Wharf Desk Study by TEC Consulting
Geotechnical Report by TEC Consulting
Geoenvironmental Report by TEC Consulting
Detailed UXO Risk Assessment by Brimstone
Preliminary Waste Management Plan by Stopford
Economic and Social Value Statement by Turley Economics
Lighting Assessment and Strategy by AECOM
Fire Strategy Report by Part B
Odour Note by LanzaTech
Framework Construction Environmental Management Plan (FCEMP) by LanzaTech
Green Infrastructure Statement by Turley
Environmental Statement by Turley

Reason:
In the interests of clarity.

Pre-commencement

3 Before beginning any development at the site, you must do the following:-

a) Notify the Local Planning Authority in writing that you intend to commence development by submitting a Formal Notice under Article 24B of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 (DMPWO) in the form set out in Schedule 5A (a newly inserted Schedule) of the DMPWO (or in a form substantially to the like effect); and

b) Display a Site Notice (as required by Section 71ZB of the 1990 Act) in the form set out in Schedule 5B (a newly inserted Schedule) of the DMPWO (or in a form substantially to the like effect), such Notice to be firmly affixed and displayed in a prominent place, be legible and easily visible, and be printed on durable material. Such Notice must thereafter be displayed at all times when development is being carried out.

Reason:
To comply with procedural requirements in accordance with Article 24B of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 (DMPWO) and Section 71ZB of the Town and Country Planning Act 1990.

NOTE: Templates of the required Notice and Site Notice are available to download at www.npt.gov.uk/planning

4 Prior to commencement of development and notwithstanding the approved Framework Construction Environmental Management Plan (FCEMP) a Construction Environmental Management Plan (CEMP) shall be submitted to and approved in writing by the Local Planning Authority. The submitted CEMP shall include the following information:

i. Construction methods: identify the extent and phasing of development; the construction materials or techniques to be used; the process for storage and management of plant and materials used in constructing the development.
ii. General Site Management: the construction programme including timetable; the approach to site clearance; the erection and maintenance of security hoarding including decorative displays and facilities for public viewing; description of complaint investigation procedures.
iii. Resources Management: details of fuel and chemical storage and containment, details of waste generation and its management, details of water consumption, wastewater, and energy use.

iv. Lighting: Details of external construction lighting.
v. Control of Nuisances: Identification of the significant construction and demolition noise & vibration sources; physical and operational management controls necessary to mitigate noise & vibration emissions; dust & odour control measures and measures to control light spill.
vi. Traffic Management: details of site deliveries; details for the loading and unloading of plant and materials; details of wheel wash facilities; details for the parking of vehicles of site operatives and visitors. The submission of a Construction Traffic Management and Routing Plan.
vii. Hours of working on site: including specified hours for deliveries; restrictions to be applied during construction and demolition works (including timing, duration and frequency of works).
viii. Responsible Persons: details of the persons and bodies responsible for activities associated with the CEMP and emergency contact details.
ix. Reasonable Avoidance Measures (RAMs) for protection of protected species (to include otters and bats).
x. Measures to mitigate the risk of Unexploded Ordnance (UXO), to reflect the suggested mitigation in the supporting detailed UXO Risk Assessment by Brimstone.
xi. Biosecurity measures to manage any risk associated with any remaining Japanese Knotweed present on the site during the construction of the development.

The approved CEMP shall be implemented throughout the construction phases of the development.

Reason:
In the interests of biodiversity and the amenity of the area as a whole and to ensure the development complies with Policies EN7, TR2 and BE1 of the Neath Port Talbot Local Development Plan (2011-2026).

5 Prior to the commencement of development, a Construction Traffic Management Plan shall be submitted to and approved in writing by the Local Planning Authority. The submitted scheme shall include a Routing Plan and Construction Workers Travel Plan. All construction works shall be undertaken in accordance with the approved plan.

Reason:
In the interest of highway and pedestrian safety and to ensure the development complies with Policy TR2 of the Neath Port Talbot Local Development Plan (2011-2026).

6 No development shall take place, other than site clearance until a scheme to enable the provision of gigabit capable broadband infrastructure from the site boundary to the dwellings/buildings hereby permitted has been submitted to and agreed in writing by the local

planning authority. Development shall be carried out in accordance with the approved details.

Reason:
To support the roll-out of digital communications infrastructure across Wales in accordance with Policy 13 of Future Wales.

7 No development shall commence until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the Local Planning Authority.

Reason:
To identify and record any features of archaeological interest discovered during the works, in order to mitigate the impact of the works on the archaeological resource, as required by Planning Policy Wales and Policy SP21 of the Neath Port Talbot Local Development Plan (2011-2026).

8 No development shall commence on site until an assessment of the nature and extent of contamination affecting the application site area has been submitted to and approved in writing by the Local Planning Authority. This assessment must be carried out by or under the direction of a suitably qualified competent person in accordance with BS10175 (2011) 'Investigation of Potentially Contaminated Sites Code of Practice' and shall assess any contamination on the site, whether or not it originates on the site. The report of the findings shall include:

(i) a desk top study to identify all previous uses at the site and potential contaminants associated with those uses and the impacts from those contaminants on land and controlled waters. The desk study shall establish a 'conceptual site model' (CSM) which identifies and assesses all identified potential source, pathway, and receptor linkages;
(ii) an intrusive investigation to assess the extent, scale and nature of contamination which may be present, if identified as required by the desk top study;
(iii) an assessment of the potential risks to:
- human health,
- groundwater and surface waters
- adjoining land,
- property (existing or proposed) including buildings, crops, livestock, pets, woodland and service lines and pipes,- ecological systems,
- archaeological sites and ancient monuments; and
- any other receptors identified at (i)
(iv) an appraisal of remedial options, and justification for the preferred remedial option(s).

Reason:

To ensure that information provided for the assessment of the risks from land contamination to the future users of the land, neighbouring land, controlled waters, property and ecological systems is sufficient to enable a proper assessment, and to ensure compliance with Policies SP16 and EN8 of the Neath Port Talbot Local Development Plan (2011-2026).

9 No development shall commence on site until a remediation scheme to bring the site to a condition suitable for the intended use by removing any unacceptable risks to human health, buildings, other property and the natural and historic environment shall be prepared and submitted to and approved in writing with the Local Planning Authority. The scheme shall include all works to be undertaken, proposed remediation objectives, remediation criteria and site management procedures. The measures proposed within the remediation scheme shall be implemented in accordance with an agreed programme of works.

Reason:
To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors, and to ensure compliance with Policies SP16 and EN8 of the Neath Port Talbot Local Development Plan (2011-2026).

10 Prior to the commencement of development, a written on-Site Habitat Management Plan (HMP) for the PDZ (PDZ as defined on drawing: 2143.01-IA-ZZ-ST-DR-A-0217 Rev P10 Proposed Site Plan - PDZ & Temp. Construction Areas) reflecting the ecological mitigation and enhancement measures included in the Green Infrastructure Statement dated March 2024 shall be submitted to and approved in writing by the planning authority. All approved mitigation and enhancement and planting in the HMP to be carried out in accordance with the HMP by the end of the first planting season following operation of the development.

Reason
To ensure all the ecological aspects and mitigation set out within Environmental Statement are adhered to and to accord with Policy EN7 of the Neath Port Talbot Local Development Plan (2011-2026).

Action Conditions

11 Prior to the first beneficial use of the hereby approved development, a verification report demonstrating completion of works set out in the approved remediation strategy and the effectiveness of the remediation works carried out in accordance with condition 9 shall be submitted to and approved in writing by the Local Planning Authority. The report shall include results of sampling and monitoring carried out in accordance with

the approved verification plan to demonstrate that the site remediation criteria have been met. It shall also include a long-term monitoring and maintenance plan for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action, as identified in the verification plan, if required. The long-term monitoring and maintenance plan shall be carried out in accordance with the approved details.

Reason:
To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other off site receptors, and to ensure compliance with Policies SP16 and EN8 of the Neath Port Talbot Local Development Plan (2011-2026).

12 Prior to the first beneficial use of the development, a long-term monitoring plan for land contamination shall be submitted and approved in writing by the Local Planning Authority. The long-term monitoring plan should include:
• Details of the methods and triggers for action to be undertaken
• Timescales for the long-term monitoring and curtailment mechanisms e.g., a scheme of monitoring for 3 years unless the monitoring reports indicate that subsequent monitoring is or is not required
• Timescales for submission of monitoring reports to the Local Planning Authority e.g., annually
• Details of any necessary contingency and remedial actions and timescales for actions
• Details confirming that the contingency and remedial actions have been carried out
The monitoring plan shall be carried out in accordance with the approved details, within the agreed timescales.

Reason:
To ensure necessary monitoring measures are approved to manage any potential adverse impacts as a result of development on water quality and to ensure compliance with Policies SP16 and EN8 of the Neath Port Talbot Local Development Plan (2011-2026).

13 In the event that contamination is found at any time when carrying out the approved development that was not previously identified, work on site shall cease immediately and shall be reported in writing to the Local Planning Authority. A Desk Study, Site Investigation, Risk Assessment and where necessary a Remediation Strategy must be undertaken in accordance with the following document:- Land Contamination: A Guide for Developers (WLGA, WAG & EAW, July 2006). This document shall be submitted to and agreed in writing with the Local Planning Authority. Prior to occupation of the development, a verification report which

demonstrates the effectiveness of the agreed remediation, shall be submitted to and agreed in writing with the Local Planning Authority.

Reason:
To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other off site receptors, and to ensure compliance with Policies SP16 and EN8 of the Neath Port Talbot Local Development Plan (2011-2026).

14 Prior to the first beneficial use of the hereby approved development and notwithstanding the submitted Framework Waste Management Plan, a Waste Management Strategy (including a scheme detailing a refuse and recycling strategy) shall be submitted to and approved in writing by the Local Planning Authority. The approved details shall be fully implemented throughout the operation of the approved development.

Reason:
To ensure the appropriate disposal of any waste arising from the development in terms of protection of the environment and to ensure the sustainability principles are adopted during development and complies with Policy W3 of the Neath Port Talbot Local Development Plan (2011-2026).

15 Prior to any demolition works being undertaken on site, a Demolition Method Statement (DMS) shall be submitted to and approved in writing by the Local Planning Authority. All demolition works shall be undertaken in accordance with the approved DMS.

Reason:
To ensure that demolition works are undertaken appropriately without unacceptable risks to the environment, workers, neighbours and other off site receptors, and to ensure compliance with Policies SP16 and EN8 of the Neath Port Talbot Local Development Plan (2011-2026).

16 No piling operations or any other foundation designs using penetrative methods shall commence on site until full details of a Piling Method Statement has been submitted to and approved in writing by the Local Planning Authority. The submitted Pilling Method Statement shall identify all possible methods of piling, before identifying the proposed method together with identifying why this method is preferred. All piling works shall be carried out in accordance with the approved Piling Method Statement.

Reason:
In the interest of, the environment, and the amenity of residents, and to ensure accordance with Policies BE1, EN8 and TR2 of the adopted Neath Port Talbot Local Development Plan (2011-2026).

17 Prior to the installation of any external lighting (excluding all temporary construction lighting), full details of all external lighting on the site (aligning with the principles set out in the approved Environmental Statement and Lighting Assessment and Strategy) shall be submitted to and approved in writing by the Local Planning Authority. The submitted details shall include the lighting unit specifications, details of any required mitigation and the predicted lux levels. All external lighting shall then be installed in accordance with the approved details and retained as such thereafter.

Reason:
In the interest of residential amenity and to prevent any unacceptable light spillage, and to ensure compliance with Policies SP16, EN8 and BE1 of the Neath Port Talbot Local Development Plan (2011-2026).

18 Prior to the first beneficial use of the hereby approved development, a Travel Plan for all relevant modes of transport shall be submitted to and approved in writing by the planning authority. This will include:

i. Details of the appointment of a Travel Plan Coordinator.
ii. Details of means to encourage staff to use more sustainable means of transport and reduce the demand on private transport.
iii. A detailed schedule of proposed works
iv. A detailed monitoring scheme/schedule, which shall include regular reviews covering the initial five-year period, together with details covering submission and approval of subsequent updated Framework Operational Transportation Management Plan every five years for the duration of the operation of the development, which shall seek to address any issues that have failed to reduce the use of the car and meet the agreed targets set in the Framework Operational Transportation Management Plan.

All those measures identified within the approved Travel Plan as being required prior to implementation prior to first beneficial use shall be implemented. All remaining works shall be implemented in accordance with the agreed programme of works.

Reason:
In the interest of, the environment, and to support active travel, and to ensure accordance with Policy TR2 of the adopted Neath Port Talbot Local Development Plan (2011-2026).

19 Notwithstanding the submitted details, prior to the first beneficial use of the hereby approved development a Landscaping Scheme of the PDZ (PDZ as defined on drawing: 2143.01-IA-ZZ-ST-DR-A-0217 Rev P10 Proposed Site Plan - PDZ & Temp. Construction Areas), in line with the Green Infrastructure Statement dated March 2024, shall be submitted to and approved in writing by the Local Planning Authority. The submitted scheme shall include a full schedule of works and shall be fully implemented in accordance with the approved details.

Reason:
In the interests of maintaining a suitable scheme of landscaping to protect the visual amenity of the area, to maintain the special qualities of the landscape and habitats through the protection, creation and enhancement of links between sites and their protection for amenity, landscape and biodiversity value, and to ensure the development complies with Policies SP15 and BE1 of the Neath Port Talbot Local Development Plan (2011-2026).

20 The approved Landscaping Scheme shall be carried out in the first planting season following completion and full commissioning of the development, and any trees or plants which within a period of five years are removed or become seriously damaged, dead or diseased shall be replaced in the next planting season with others of similar size and the same species.

Reason:
In the interests of maintaining a suitable scheme of landscaping to protect the visual amenity of the area, to maintain the special qualities of the landscape and habitats through the protection, creation and enhancement of links between sites and their protection for amenity, landscape and biodiversity value, and to ensure the development complies with Policies SP15 and BE1 of the Neath Port Talbot Local Development Plan (2011-2026).

21 A CCTV scheme shall be submitted to and approved in writing by the Local Planning Authority, prior to its first installation. Any CCTV units erected on site shall be in accordance with the approved scheme and shall be retained as such thereafter.

Reason:
To ensure this detail is acceptable in the interests of amenity in accordance with Policy BE1 of the Neath Port Talbot Local Development Plan (2011-2026).

22 In the event that any protected species is identified during the construction process, works must stop immediately and the Local Planning Authority must be notified.

Reason:
In the interests of biodiversity and to ensure the development complies with Policies EN7 and BE1 of the Neath Port Talbot Local Development Plan (2011-2026).

Regulatory Conditions

23 The HGV parking/loading area and staff/visitor car parks shall be constructed in accordance with drawing Proposed Site Key Plan

(2143.01-IA-ZZ-ST-DR-A-0210 - Rev P14) and clearly marked out on site prior to the first beneficial use of the hereby approved development and shall be retained as such thereafter. A minimum of 10% of the total number of car parking spaces for the development shall be provided with EV charging points as shown in the submitted documents and drawings and shall be retained as such thereafter.

Reason:
In the interest of highway and pedestrian safety, to ensure that the development is served by sufficient parking and to ensure compliance with Policy TR2 of the Neath Port Talbot Local Development Plan (2011-2026).

24 Nothing over 600 mm shall be erected or allowed to grow within the vision splay areas of the proposed new vehicular accesses as detailed on the submitted plans drawing number(s) SCP/220352/D03 Rev F and SCP/220352/D02 Rev F, and shall maintained as such thereafter.

Reason:
In the interest of highway and pedestrian safety, to ensure that the development is served by sufficient parking and to ensure compliance with Policy TR2 of the Neath Port Talbot Local Development Plan (2011-2026).

25 The development shall be carried out in substantial accordance with the principles and mitigation measures as set out within the Environmental Statement (2023) accompanying the application. Including the mitigation detailed within the Environmental Statement's Environmental Management Plan.

Reason:
The proposed development is the subject of an Environmental Impact Assessment and due regard must be had to the principle impacts of the development in the preparation of detailed design and the operation of the site. Any material alteration to the proposal may have an impact which has not been assessed by the process. And to accord with Policies of the Neath Port Talbot Local Development Plan (2011-2026).

26 For the duration of the construction operations associated with the hereby approved development, the level of noise emitted shall not exceed the criteria set out in Section 5 of the Construction Noise Assessment in Appendix 12.3 of the Environmental Statement at nearest residential receptors.

Reason:
To protect the amenity of nearby residential properties and wider locality and to accord with Policy EN8 of the Neath Port Talbot Local Development Plan (2011-2026).

27 The rating level of noise arising from operation of the development hereby given planning permission shall be in accordance with British Standard 4142:2014+A1:2019 at any residential receptor.

Reason:
To protect the amenity of nearby residential properties and wider locality and to accord with Policy EN8 of the Neath Port Talbot Local Development Plan (2011-2026).

28 On receipt of a justified complaint to the Local Planning Authority the Local Planning Authority may request in writing that the applicant obtain an assessment of the noise arising from the operations on the site. The noise assessment shall be undertaken by a competent and suitably qualified acoustic consultant, who shall be a Member of the Association of Noise Consultants (ANC) or the Institute of Acoustics (IOA).

Prior to undertaking the noise assessment and within 14 days of receipt of the written request from the Local Planning Authority following receipt of a complaint, the consultant shall contact the Local Planning Authority and shall agree a methodology and most appropriate standards which shall include timeframes for the completion of the noise assessment.

Following the noise assessment, a copy of the report shall be submitted to and approved by the Local Planning Authority along with evidence that the control measures recommended within the report are implemented and maintained thereafter.

Reason:
To protect the amenity of nearby residential properties and wider locality and to accord with Policy EN8 of the Neath Port Talbot Local Development Plan (2011-2026).

29 No demolition or construction shall be carried out outside the hours of 08:00 to 19:00, Monday to Friday and 08:00 to 13:00 on Saturdays. Demolition or construction shall not be carried out at any time on Sundays, Bank or Public Holidays. Prior to undertaking any construction works outside these defined working hours, an extended hours construction environmental management plan (detailing how the proposed works will be restricted to lower intensity to comply with noise and vibration limits in the Environmental Statement and required by Condition 26) shall be submitted to and agreed in writing by the Local Planning Authority. Any working outside these hours shall be undertaken in full accordance with the approved extended hours construction environmental management plan.

Reason:
To protect the amenity of nearby residential properties and wider locality and to accord with Policy EN8 of the Neath Port Talbot Local Development Plan (2011-2026).

30 Operational vehicle trip generation shall be in accordance with the details provided in paragraphs 7.21 – 7.36 of the supporting Transport Assessment by SCP dated November 2023 (document reference CT/220352/TA/04).

Reason:
In the interests of highway safety and the freeflow of traffic and to ensure acceptable levels of pollution. In accordance with Policies TR2 EN8 of the Neath Port Talbot Local Development Plan (2011-2026).