

# **Landscape and Visual Impact Assessment**

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

August 2023

# Appendix 1: Relevant Planning Policy and Guidance

## European Policy

### European Landscape Convention

The European Landscape Convention (ELC) provides a basis for closer co-operation on landscape issues across Europe and was signed and ratified in the UK. This recognition of landscape matters through the ELC has been set out to improve approaches to the planning, management and protection of landscapes throughout Europe.

The ELC defines landscape as “an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors” and it includes ‘townscape’, as well as all forms of rural landscape.

## National Policy

### [Planning Policy Wales, Edition 11 \(Welsh Government, February 2021\)](#)

Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs, listed in Annex 1). It translates the Welsh Governments commitment to sustainable development into the planning system so that it can play an appropriate role in moving towards sustainability.

Chapter 6, Distinctive and Natural Places, is the most relevant to landscape and visual issues relating to this Site.

Section 6.3.3 recognises the importance of the varied landscapes of Wales:

*All the landscapes of Wales are valued for their intrinsic contribution to a sense of place, and local authorities should protect and enhance their special characteristics, whilst paying due regard to the social, economic, environmental and cultural benefits they provide, and to their role in creating valued places. Considering landscape at the outset of formulating strategies and policies in development plans and when proposing development is key to sustaining and enhancing their special qualities, and delivering the maximum well-being benefits for present and future generations as well as helping to deliver an effective and integrated approach to natural resource management over the long term. Collaboration and engagement with adjacent planning authorities, Natural Resources Wales (NRW), Cadw and the third sector will be necessary to draw on a wide range of expertise and evidence. This means:*

*ensuring statutorily designated sites are properly protected and managed;*

*ensuring that the value of all landscapes for their distinctive character and special qualities is protected; and*

*ensuring the opportunities landscapes provide for tourism, outdoor recreation, local employment, renewable energy and physical and mental health and well-being*

*are taken into account and multiple well-being benefits for people and communities secured.*

*Where adverse effects on landscape character cannot be avoided, it will be necessary to refuse planning permission.*

Section 6.3.20 sets out the importance of the LANDMAP system as a resource for making landscape assessments:

*LANDMAP is an important information resource, methodology, and monitoring baseline for the landscapes of Wales, which can help inform planning for the sustainable management of natural resources in an area. LANDMAP describes and evaluates the physical, ecological, visual, cultural and historic aspects of the landscapes of Wales, and provides the basis of a consistent, quality assured national approach to landscape assessment. LANDMAP assessments can help to inform green infrastructure assessments, SPG on landscape, development management decisions, landscape character assessment, special landscape areas (SLAs), local distinctiveness, design, and landscape sensitivity studies.*

*Planning authorities should draw upon LANDMAP in the preparation of landscape plans and assessments needed to inform development plans, SPGs and the development management process. LANDMAP assessments should be published.*

Section 6.4 relates to Biodiversity and Ecological Networks within Wales. Paragraph 6.4.3 states:

*The planning system has a key role to play in helping to reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms are in place to both protect against loss and to secure enhancement. Addressing the consequences of climate change should be a central part of any measures to conserve biodiversity and the resilience of ecosystems...*

*...Development plan strategies, policies and development proposals must consider the need to:*

*support the conservation of biodiversity, in particular the conservation of wildlife and habitats;*

*ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;*

*ensure statutorily and non-statutorily designated sites are properly protected and managed;*

*safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and*

*secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks.*

**Technical Advice Note 12: Design (Welsh Government, March 2016)**

Technical Advice Note 12, provides guidance on landscape appraisals:

*“Appraisal of the landscape should focus on its quality in terms of geology and geomorphology, vegetation and habitats visual and sensory quality and historic and cultural quality. “LANDMAP” is one method of assessment which has the potential to provide a framework and information base from which good design and management can be developed. Similar assessments are available to measure the quality of the ‘seascape’. These identify what areas, characteristics and qualities are important to conserve at a time when our coastal areas face many pressures from new developments. Historic Landscape Characterisation provides a more detailed level of assessment for the historic environment, and studies have been carried out for all of the areas included in the Register of Landscapes of Historic Interest in Wales. Further detailed site appraisals may also provide information on local hydrology, microclimate, soils, plant communities and features, and all visual qualities including views and vistas.”*

**Future Wales, The National Plan 2040 (Welsh Government, February 2021)**

Future Wales – The National Plan sets the strategic framework to guide future development and policy interventions in Wales, beyond the scope of formal land use planning control up to 2040.

The Plan recognises that each area of Wales will need its own distinctive response to delivering the national vision. Accordingly the Plan looks at the specific needs of four regions within Wales with further sub-regions, of which the Site is located in the South West region and Neath Port Talbot sub-region.

*Housing, economic growth, digital and transport connectivity infrastructure should be co-ordinated and planned on the basis of the whole region. The management of natural resources, flooding and the protection and enhancement of areas of environmental and landscape importance should inform strategic decisions on locations for growth and new infrastructure. Decarbonising society and responding to the threats of the climate emergency should be central to all regional planning.*

## **Local Policy**

**Neath Port Talbot County Borough Council, Local Development Plan (2011-2026) – Adopted January 2016**

Under the Planning and Compulsory Purchase Act 2004, the council is required to prepare a Local Development Plan (LDP). The LDP guides the future development of the area, providing a clear vision for the Borough setting out where, when and how much new development can take place over the next 15 years (2011-2026).

Policy OB 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.”*

Within section 5.3.2 detail is given to the variety of important landscapes throughout the borough

*“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.”*

Section 5.3.12 states the importance of protection from larger industrial land uses:

*“It is anticipated that mineral and renewable energy developments are likely to be the predominant types of proposal that could have significant impacts. In the case of renewable energy developments, it will need to be demonstrated that component elements have been designed and sited to minimise visual intrusion and adverse effects on the landscape, while mineral developments will be expected to provide screening or bunding during the operational phase and a site restoration scheme which returns the landscape as far as practicable to its original form and appearance on completion of the works.”*

## **Appendix 2:   Landscape and Visual Impact Assessment (LVIA) Methodology**

## Assessment methodology

The methodology for landscape and visual assessment is based on current best practice as set out in:

- *Guidelines for Landscape and Visual Impact Assessment, 3rd edition, 2013 (Landscape Institute and Institute for Environmental Management and Assessment) (GLVIA3);*
- Christine Tudor, Natural England (2014) *An Approach to Landscape Character Assessment;*
- *Landscape Character Assessment, 2016 (Landscape Institute Technical Information Note 08/2015); and*
- *Visual Representation of Development Proposals, 2019 (Landscape Institute Technical Information Note 06/19).*

The Guidelines for Landscape and Visual Impact Assessment (GLVIA) states that this type of appraisal provides a tool for identifying and assessing the *'the effects of change resulting from development on both the landscape as an environmental resource in its own right and on people's views and visual amenity'* (Para. 1.1). It goes on to emphasise that the appraisal has two interlinked elements of: landscape, as a resource; and visual amenity, including views. The effects of both must be addressed in the assessment.

The definition of landscape in the European Landscape Convention, which the UK has signed and ratified, includes villages and towns and cities and the GLVIA states that 'Landscape' refers to areas where the built environment is dominant. It goes on to state that Landscape includes the buildings and the different types of urban spaces, and the relationship between the two.

### Study Area

The study area for the landscape and visual assessment comprises the area within which it is considered that there is potential for the Proposed Development to result in significant landscape or visual effects. It is likely that the Proposed Development would be visible from some points beyond this area but the effects of this would be so minor that detailed assessment is not warranted. (This approach is supported by GLVIA3 which states that the scale of assessment should be appropriate and proportional to the nature of the proposed development.)

The study area for the assessment includes both the Site and the surrounding wider context. The landscape character assessment considers the Site at a national, borough and then local level through the determination of local landscape character areas within a 2km radius from the Site boundary and the identification of landscape features. The visual assessment considers the existing and potential views within this defined study area.

An initial field study is undertaken which considers the enclosure of the Site by surrounding development, topography and mature vegetation and the parts of the landscape where the Proposed Development is likely to be visible within a radius of 2km from Site boundary. This is considered an appropriate area in terms of the enclosure of the Site and the proposed scale of the Proposed Development.

The extent of the Study Area is also informed by the production of a computer generated Zone of Theoretical Visibility (ZTV). The ZTV demonstrates the predicted extent of visibility of the Proposed Scheme within the surrounding landscape and illustrates that the primary areas of visibility within the study area. As described above, the effects of the Proposed Scheme in views experienced beyond three kilometres would be so minor that detailed assessment is not normally warranted.

## **Baseline Surveys**

### ***Desk Based Studies***

A preliminary desk study of Ordnance Survey (OS) maps and aerial photography is undertaken to establish the physical components of the Site and its surroundings (including land use, topography, built form, accessibility and vegetation) and identify potential landscape and visual receptors. Potential visual receptors, defined as the different groups of people who may experience views of the Proposed Development, within the surrounding area have also been identified. Aerial photography is used to supplement this information.

### ***Field Surveys***

A field study is undertaken by a chartered landscape architect from Turley Landscape and VIA. The field study records the Site and surrounding context's landscape features and confirms the visual receptors identified in the desk study. The field study involves travelling throughout the study area and producing a working photographic record of the area.

The field study establishes the key characteristics of the local landscape character including the associated elements, features and aesthetic and perceptual factors which contribute to the landscape. The approximate visibility of the Site is established by the walkover survey which considers the area within the study area from which the Site is currently visible and the key visual receptors within this area (i.e. groups of people within this area who experience (or may experience) views of the Site). A series of Representative Views experienced by these visual receptors is also identified.

### ***Consultation***

The scope and methodology of the assessment is agreed either independently with the LPA or as part of the Environmental Impact Assessment Scoping procedure. This includes identification of the landscape character receptors, visual receptors and representative views.

### **Baseline landscape appraisal methodology**

The baseline landscape appraisal includes a mixture of desk study and field work to identify and record the character of the landscape. The first stage involves a review of the landscape character context as set out in the current published landscape character studies relating to the study area at national, regional and local level. This is followed by an assessment of the key characteristics of the local landscape character and the identification of local landscape character areas. The key landscape receptors (landscape character areas, landscape features or landscape characteristics) with potential to be affected by the proposed development are then identified and a judgement is made on the sensitivity of each of these. This is based on an

assessment of the value of each receptor and its susceptibility to change<sup>14</sup>. This judgement is made based on the approach set out in GLVIA3 and as described below.

The value of each of the identified landscape receptor was assessed with reference to the following:

- *Any designations or policies (both national and local) which may be present; and,*
- *The presence or absence of other attributes which contribute to landscape value such as landscape condition, scenic quality, rarity, representativeness, conservation interests, recreation value, perceptual aspects or associations e.g. with writers, artists or historic events*

Judgements on value are made based on the criteria set out in **Table 1.1**.

**Table 1.1: Value of Landscape Receptors**

Value	Typical scale of importance / Rarity	Typical Examples
High	International, National, Regional	World Heritage Sites and/or key features of World Heritage Sites, National Parks or AONBs, Registered Landscapes of Outstanding and of Special Interest in Wales and/or key features of these, Scheduled Monuments, some Conservation Areas, and landscape areas with typically a significant number of Grade I/II* listed buildings, and/or Registered Historic Park and Gardens. No or limited potential for substitution.
Medium	Regional, Local	Landscape areas designated at local level e.g. Special Landscape Areas and other undesignated areas or features of notable scenic quality or recreational value with value perhaps expressed through non-official publications or demonstrable use. Limited potential for substitution.
Ordinary	Local	Landscape features or character areas which are not related to designated, or non-designated heritage assets, or a planning designation; and/or mentioned in guidebooks or on tourist maps; and/or referenced in art and literature; and/or is of little scenic or landscape importance. Considerable potential for substitution.
Low	Local	Landscape features or local character areas in poor condition or quality and/or identified for recovery.

<sup>14</sup> When the type and general nature of development proposed is not known at the time of the baseline assessment, the assessment of the sensitivity of receptors is not undertaken as part of the baseline assessment. In those instances, (as recommended by GLVIA3), the assessment of sensitivity is undertaken as part of the assessment of effects.

### **Baseline visual appraisal methodology**

The baseline visual appraisal established the area in which the Site, and emerging Proposed Scheme, may be visible; the different groups of people who may experience the views of the development (defined as visual receptors); and, the nature of these views. These factors interrelate, but for the purpose of the assessment are dealt with in that order.

The visibility of the Site was assessed by a walkover survey which established the area within the study area from which the Site is currently visible. The key visual receptors within this area were then identified (i.e. groups of people within this area who experience (or may experience) views of the Site).

In most assessments, unless specifically requested by the Local Planning Authority, visual receptors are restricted to groups of people in publicly accessible places. Normally, views from private residential properties are not included as changes to private views are not a planning consideration<sup>15</sup> unless the development is likely to be so overbearing or dominating that they could result in unacceptable living conditions and therefore a change to their residential visual amenity. For this project this has not been specifically requested, and given the distance of the Site (and the Scheme within it) to the nearest residential properties, it is not expected that such changes could arise. In most assessments, unless specifically requested by the local planning authority, visual receptors are restricted to groups of people in publicly accessible places. Normally, views from private residential properties are not included as changes to private views are not a planning consideration unless the development is likely to be so overbearing or dominating that they could result in unacceptable living conditions. Where this is possible, a separate residential visual amenity assessment is undertaken. In this case we will consider changes to views experienced by residential properties on Lower West End only.

Following identification of the key visual receptors, representative viewpoints were identified to reflect typical views from the key visual receptors. The number and location of representative viewpoints were agreed with Neath Port Talbot County Borough Council as part of pre-application correspondence. A description and evaluation of the identified views was then undertaken which took into account the following:

- *type and relative numbers of people, and their occupation or activity;*
- *location, nature and characteristics;*
- *nature, composition and characteristics of the views (including directions);*
- *elements which may interrupt, filter or otherwise influence the views; and*
- *seasonal changes in the view.*

### **Method of Assessing Significance**

#### **Assessment of Landscape Effects**

Landscape effects include:

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<sup>15</sup> Aldred's Case in 1610 established in English law that views from private property cannot be protected.

- *Changes to, and/or complete or partial loss of features, elements, characteristics or perceptual aspects that contribute to the character and distinctiveness of the Landscape/local Landscape area; and/or,*
- *Introduction of new elements or features that influence the character and distinctiveness of the Landscape/local Landscape area;*

The assessment of landscape effects considered the sensitivity of the landscape receptor and the magnitude of the predicted effect. Significance is then concluded as major, moderate, minor or negligible, with significant effects determined through professional judgement.

### ***Sensitivity of Landscape Receptors***

The sensitivity of landscape receptors relates to the value attached to that receptor (which was established as part of the baseline assessment) and the susceptibility of the receptor to the type of change or development proposed. GLVIA3 defines landscape susceptibility as *‘the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the Proposed Development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies’* (Para. 5.40).

Judgements on the susceptibility to change of each of the identified landscape receptors were made based on the scale set out in **Table 1.2**.

**Table 1.2: Susceptibility to change of landscape receptors**

Susceptibility to change	Description
High	Landscape receptor <sup>16</sup> would be unlikely to accommodate the type of development proposed without undue negative consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies. Landscape receptor has little or no relationship to the type of development proposed and/or would be difficult to replace or substitute if lost e.g. ancient woodland, veteran trees and historic parkland. Landscape receptor is highly sensitive and would be fundamentally altered by the type of development proposed.
Medium	Landscape receptor would be compromised by the type of development proposed and/or the achievement of landscape planning policies and strategies would be compromised. Landscape receptor has some relationship to the type of development proposed and/or could be partially replaced or substituted if lost. Landscape receptor is moderately sensitive and characteristics of the receptor would be altered by the type of development proposed. The general features or character of the receptor would remain but would be weakened by the type of development proposed.
Low	Landscape receptor would be likely to accommodate the type of development proposed without undue negative consequences for the maintenance of the baseline landscape character and/or the achievement of landscape planning policies and strategies. Landscape receptor has a close relationship to the type of development proposed and could be easily replaced or substituted if lost. Landscape receptor is of low sensitivity and characteristics of the receptor would not be significantly altered by the type of development proposed. The general landscape character is resilient to change.

A judgement on the overall sensitivity of each landscape receptor (ranging from high to negligible) was made based on the combined evaluation of susceptibility and value attached to the receptor together with informed professional judgement and guidance provided in GLVIA3. For example, a landscape receptor that has a high sensitivity is likely to have a high value and a high susceptibility to change, a landscape receptor that has a low sensitivity is likely to have a low value and a low susceptibility to change.

#### **Magnitude of Effect on Landscape Receptors**

The magnitude of landscape effect considered the size or scale of the effect, the geographical extent of the effect and the duration and reversibility of the effect. Judgements on the magnitude of landscape effect were broadly based on the descriptions of magnitude set out in **Table 1.3** below.

Consideration was also given to the type of effect in terms of whether it is adverse, beneficial or neutral. Often, effects will include a combination of both beneficial and adverse effects. However, a judgement is made on the nature of the overall effect which is based on the following terms:

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<sup>16</sup> Includes landscape character areas, landscape elements or features and particular aesthetic or perceptual aspects of the landscape.



- **Adverse:** overall harm to landscape character/feature
- **Beneficial:** overall improvement to landscape character/feature
- **Neutral :** no overall harm or improvement to landscape character/feature

**Table 1.3: Defining Magnitude of Effect – Landscape Receptors**

Magnitude of Effect	Definition
Large	Permanent loss of all or most of the key characteristics of a landscape receptor and/or addition of major new elements which would be dominant features with little or no relationship to the landscape receptor. Changes would substantially alter the character of a large area.
Medium	Permanent partial loss or change to some of the key characteristics of a landscape receptor and/or addition of new elements which would be prominent features. Changes would result in a large change to the character of a small area or a noticeable change to a larger area.
Small	Permanent limited/localised loss or change to common characteristics of a landscape receptor and/or addition of new elements which would be noticeable features but largely in keeping with the existing character. Changes would result in a small change to the character of a large area or a noticeable change to a small area. Also includes temporary and/or reversible changes of larger scale or extent.
Negligible	No, or barely discernible, change to landscape receptor

### Assessment of Visual Effects

Visual effects include:

- *Changes to, and/or complete or partial loss of features, elements, characteristics or perceptual aspects that contribute to the character and distinctiveness of the view; and/or;*
- *Introduction of new elements or features that influence the character and distinctiveness of the view.*

The assessment of visual effects considered the sensitivity of the visual receptor and the magnitude of the predicted effect. Significance is then concluded as major, moderate, minor or negligible, with significant effects determined through professional judgement.

### Sensitivity of Visual Receptors

The sensitivity of the visual receptor comprised a judgement on the value attached to the views and an assessment of the susceptibility of each receptor to the type of change proposed.

A judgement on the value attached to the views was made with reference to the following criteria and the definitions of value set out in **Table 1.4**.

- *Planning designations e.g. Designated Views or Protected Vistas identified in local or regional planning policy;*

- *Other designations relating to landscape features or heritage assets e.g. key views identified in conservation area appraisals or recorded in citations for listed buildings or registered parks and gardens; and,*
- *Indicators of the value attached to views by visitors e.g. views identified in guidebooks or on tourist maps, official viewpoints (often with sign boards and interpretive material) or views referenced in literature or art.*

**Table 1.4: Value attached to views**

Value	Typical scale of importance / Rarity	Typical Examples
High	International, National, Regional,	Designated views of international, national or regional importance e.g. views of noted importance to sites of international or national importance e.g. World Heritage Sites, National Parks, Scheduled Monuments, AONBs, Grade I/Grade II* listed buildings, and/or Registered Historic Park and Gardens or Registered Landscapes of Outstanding and of Special Interest in Wales.
Medium	Regional, Local	Views identified or protected at local level e.g. identified in local planning policy or guidance and views associated with heritage or landscape features of regional or local importance e.g. some local landscape designations, Conservation Areas and Grade II/II* listed buildings. May also include views which are undesignated but value perhaps expressed through non-official publications or its contribution to enjoyment of a designated or non-designated heritage asset.
Ordinary	Local	The view from the identified visual receptor is not related to designated, or non-designated, heritage assets, landscape features or a planning designation; and/or mentioned in guidebooks or on tourist maps; and/or referenced in art and literature; but contributes positively to the general visual amenity experienced by the receptor.
Low	Local	The view from the identified visual receptor is not related to designated, or non-designated, heritage assets, or a planning designation; and/or mentioned in guidebooks or on tourist maps; and/or referenced in art and literature; and/or is of little visual amenity importance and does not make a positive contribution to local visual amenity.

The assessment of susceptibility of visual receptors was based on the approach set out in para 6.32 of GLVIA3 which notes that:

- *'the susceptibility of different visual receptors to changes in views and visual amenity is mainly a function of:*

- *The occupation or activity of people experiencing the view at particular locations: and,*
- *The extent to which their attention or interest may therefore be focussed on the views and the visual amenity they experience at particular locations’.*

Judgements on the susceptibility of a visual receptor to change are broadly based on the descriptions of susceptibility set out in **Table 1.5** below.

**Table 1.5: Susceptibility to change of visual receptors**

Susceptibility	Description
High	Receptors for whom the view and visual amenity is of high importance to the experience or activity including: people engaged in outdoor recreation whose attention or interest is likely to be focused on the landscape and on particular views e.g. waymarked walks through the landscape; and visitors to heritage assets or other attractions where views of the surroundings are an important contributor to the experience.
Medium	Receptors for whom the view and visual amenity is of moderate importance to the experience or activity including: Travellers on most road or rail routes.
Low	Receptors for whom the view and visual amenity is of low importance to the experience or activity including: people engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape; and, people at their place of work whose attention may be focussed on their work, not on their surroundings, and where the setting is not important to the quality of working life.

A judgement on the overall sensitivity of each visual receptor (ranging from high to negligible) was made based on the combined evaluation of susceptibility and value attached to the receptor together with informed professional judgement and guidance provided in GLVIA3. For example, a visual receptor that has a high sensitivity is likely to have a high value and a high susceptibility to change, a visual receptor that has a low sensitivity is likely to have a low value and a low susceptibility to change.

### **Magnitude of Effect on Visual Receptors**

The magnitude of visual effect considered the size or scale of the effect, the geographical extent of the effect, and the duration and reversibility of the effect. Judgements on the magnitude of visual effect were broadly based on the descriptions of magnitude set out in **Table 1.6** below.

Consideration is also given to the type of effect in terms of whether it is adverse, beneficial or neutral. Often, effects will include a combination of both beneficial and adverse effects. However, a judgement is made on the nature of the overall effect which is based on the following terms:

- **Adverse:** *overall harm to the character/quality of the view and loss of visual amenity*
- **Beneficial:** *overall improvement to the character/quality of the view and improvement of visual amenity*

- **Neutral:** no overall harm or improvement to the view or visual amenity (likely to be the result of a combination of both adverse and beneficial effects or very small changes)

**Table 1.6: Defining Magnitude of Effect – Visual Receptors**

Magnitude of Effect	Definition
Large	Permanent loss of all or most of the key characteristics of a view and/or addition of major new elements which would be dominant features. Changes would substantially alter the character of the view.
Medium	Permanent partial loss or change to some of the key characteristics of the view and/or addition of new elements which would be prominent features. Changes would result in a large change to the character of a small part of the view or a noticeable change to a larger part of the view.
Small	Permanent limited/localised loss or change to a view and/or addition of new elements which would be noticeable features but largely in keeping with the existing character of the view. Changes would result in a small change to the character of a large part of the view or a noticeable change to a small part of the view. Also includes temporary and/or reversible changes of larger scale or extent within the view.
Negligible	No, or barely discernible, change to the view.

### ***Duration of Effect***

The assessment of landscape and visual effects will consider the likely significant effects during construction and operation.

The duration of the effect has been assessed as either 'short-term', 'medium-term' or 'long-term'. Short-term is considered to be up to 1 year, medium-term is considered to be between 1 and 10 years and long-term is considered to be greater than 10 years.

### **Significance of Effect**

The method for assessing the significance of landscape and visual effects will be based on the sensitivity of each receptor and the predicted magnitude of change for each receptor from the baseline conditions. This assessment of significance will be based on professional judgement and supported by the matrix set out in **Table 1.7** below which is a tool to assist with the process.

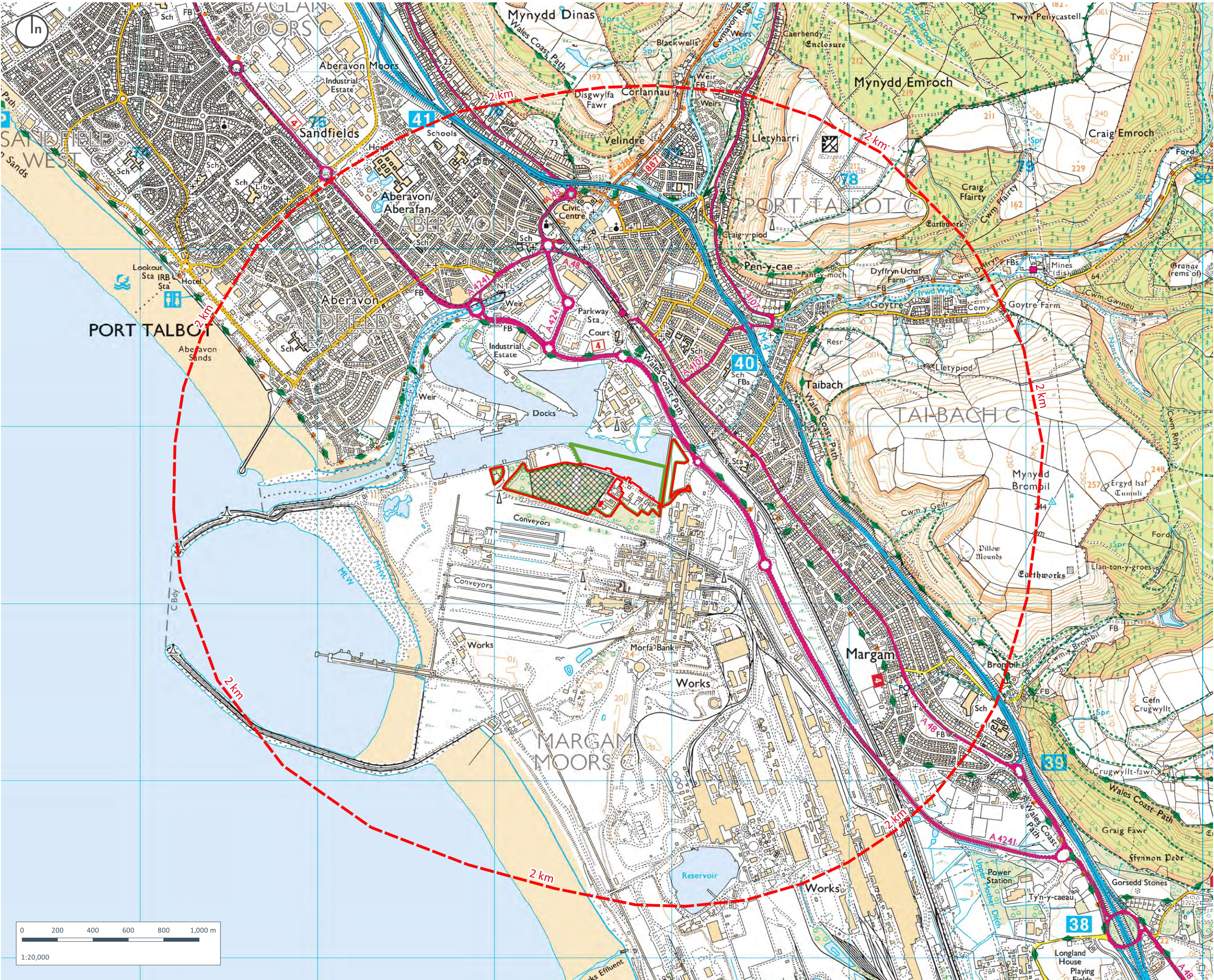
**Table 1.7: Matrix to support determining significance**

		Sensitivity (or value / importance)			
		High	Medium	Low	Negligible
Magnitude of Change	Large	Major	Moderate to Major	Minor to Moderate	Negligible
	Medium	Moderate to Major	Moderate	Minor	Negligible
	Small	Minor to Moderate	Minor	Negligible to Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

Whilst the matrix provides levels of effect, professional judgement will determine a definitive assessment of significance for each effect. Typically, significant effects on landscape and visual receptors will be moderate or above. Effects identified can be '*beneficial*', '*adverse*' or '*neutral*'.

## **Appendix 3:    Supporting Figures**





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- Application Boundary
- EIA Study Area Boundary
- Study Area
- Production Development Zone

CLIENT:  
Lanza Tech UK Limited

PROJECT:  
Project Dragon

DRAWING:  
Figure 8.1 - Site Location and Study Area

PROJECT NUMBER:  
LANT3006

DRAWING NUMBER:  
8.1

CHECKED BY:  
JE

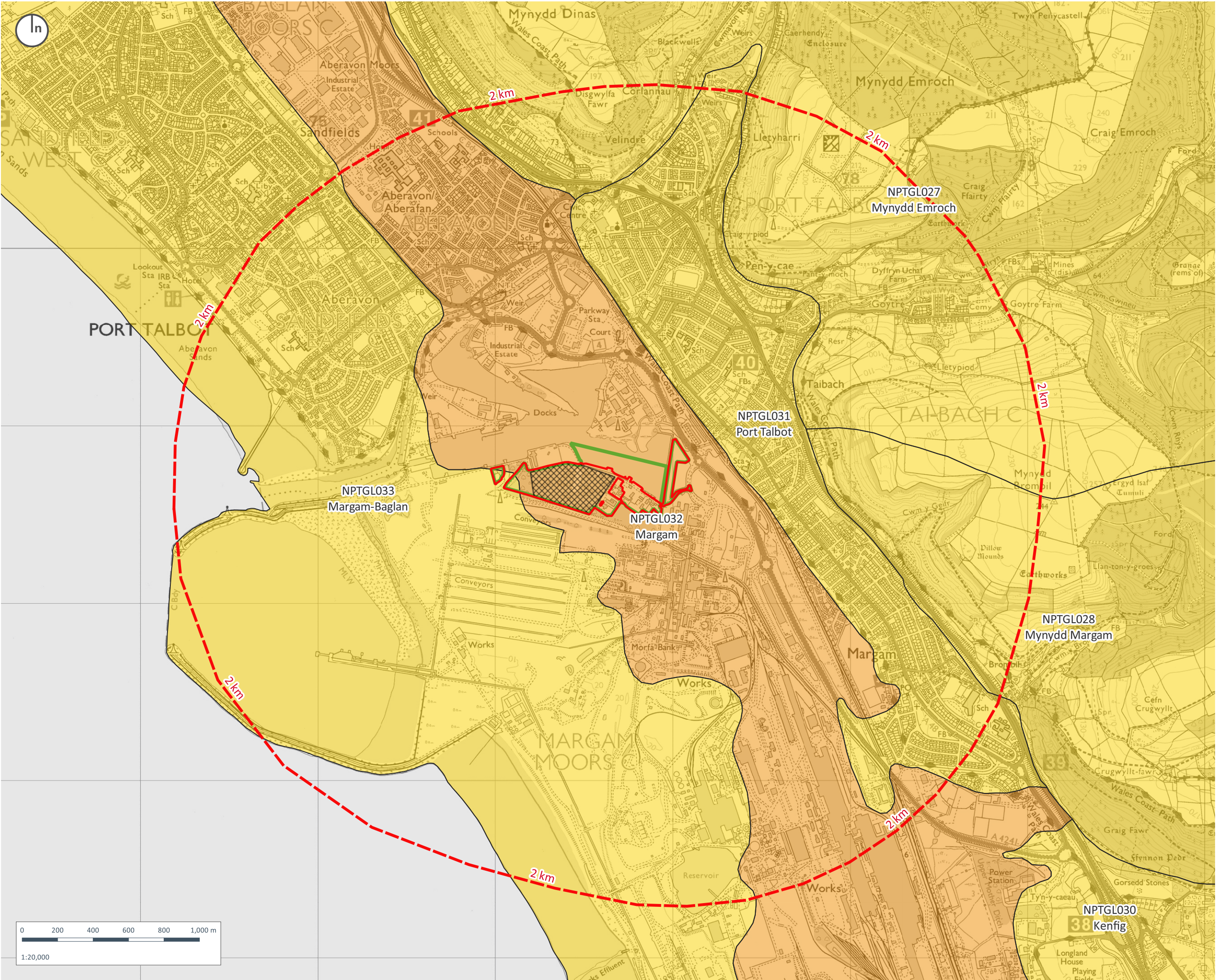
REVISION:  
1.0

STATUS:  
Draft

DATE:  
August 2023

SCALE:  
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- Application Boundary
- EIA Study Area Boundary
- Study Area
- Production Development Zone
- LANDMAP Geological Landscape
  - Moderate
  - Low

No 'High' or 'Outstanding' scores within Study Area

CLIENT:  
Lanza Tech UK Limited

PROJECT:  
Project Dragon

DRAWING:  
Figure 8.2.1 - LANDMAP Aspect Areas  
GEOLOGICAL LANDSCAPE

PROJECT NUMBER:  
LANT3006

DRAWING NUMBER:  
8.2.1

CHECKED BY:  
JE

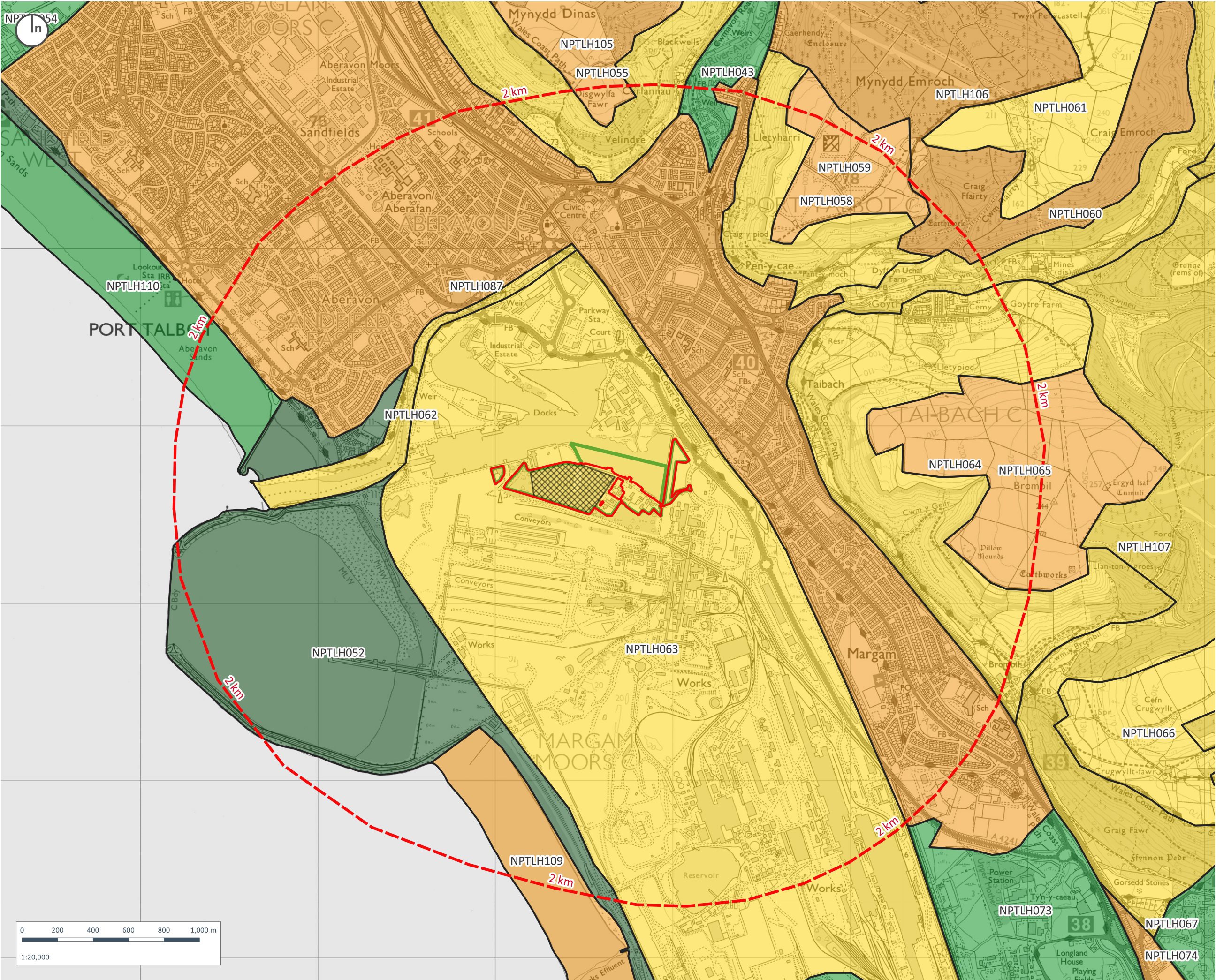
REVISION:  
1.0

STATUS:  
Draft

DATE:  
August 2023

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- Application Boundary
  - EIA Study Area Boundary
  - Study Area
  - Production Development Zone
- LANDMAP Landscape Habitats Aspect Areas  
Overall Evaluation Score
- Outstanding
  - High
  - Moderate
  - Low

CLIENT:  
Lanza Tech UK Limited

PROJECT:  
Project Dragon

DRAWING:  
Figure 8.2.2 - LANDMAP Aspect Areas  
LANDSCAPE HABITATS

PROJECT NUMBER:  
LANT3006

DRAWING NUMBER:  
8.2.2

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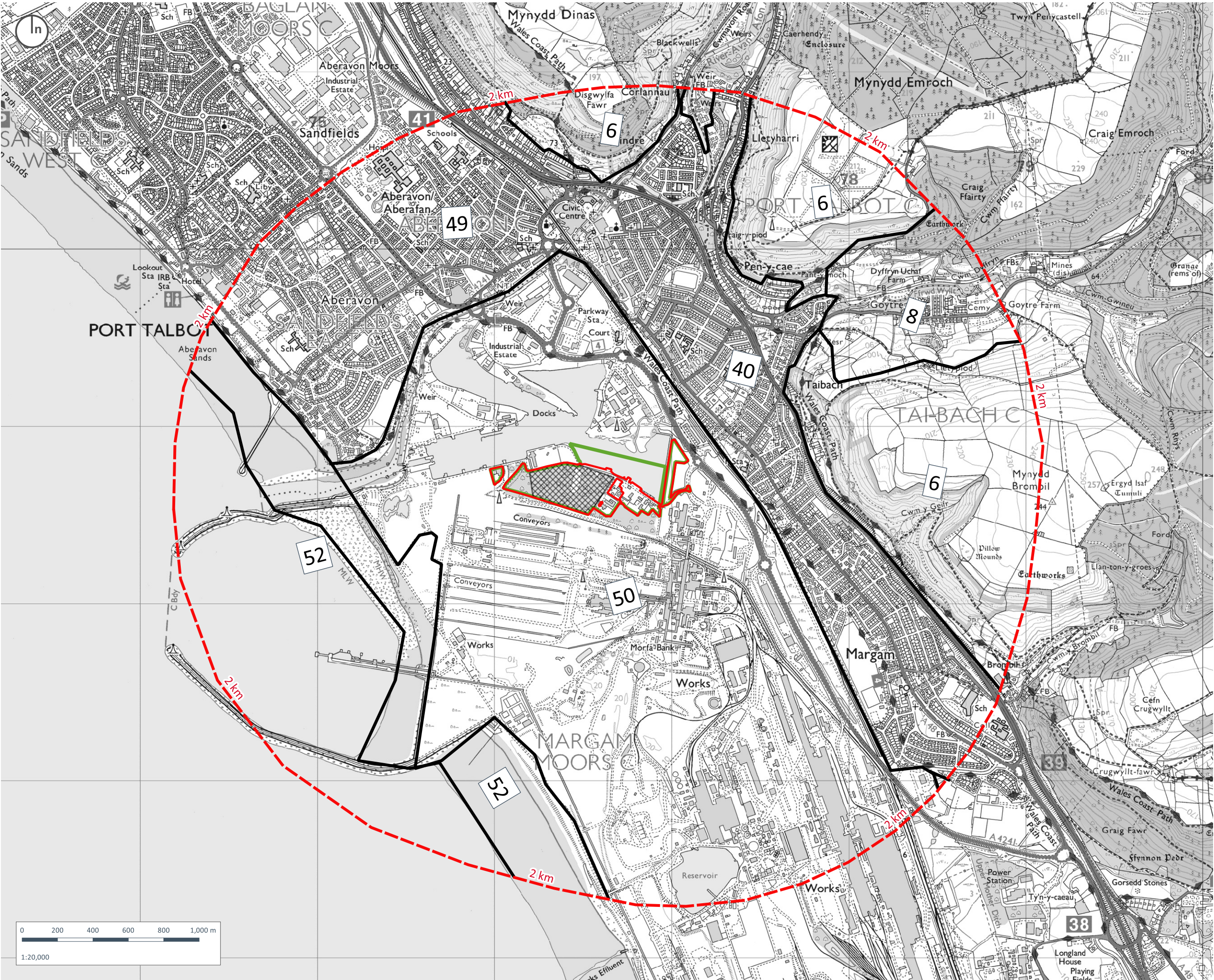
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- Application Boundary
- EIA Study Area Boundary
- Study Area
- Production Development Zone
- Borough Landscape Character Area

CLIENT:  
Lanza Tech UK Limited

PROJECT:  
Project Dragon

DRAWING:  
Figure 8.3 - Borough Landscape Character Areas

PROJECT NUMBER:  
LANT3006

DRAWING NUMBER:  
8.3

CHECKED BY:  
JE

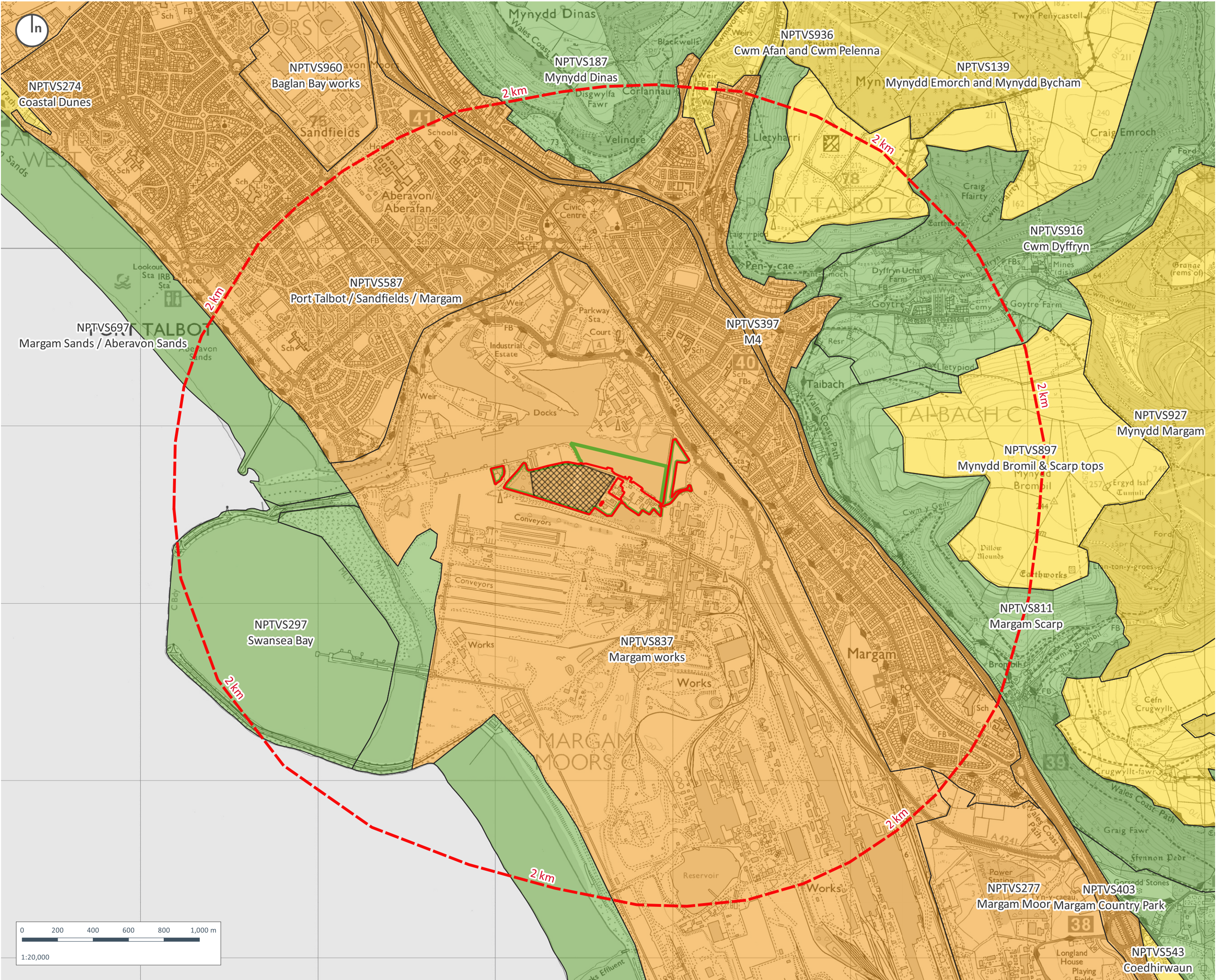
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- Application Boundary
  - EIA Study Area Boundary
  - Study Area
  - Production Development Zone
- LANDMAP Visual and Sensory Aspect Areas  
Overall Evaluation Score
- High
  - Moderate
  - Low
  - No 'Outstanding' score within Study Area

CLIENT:  
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PROJECT:  
Project Dragon

DRAWING:  
Figure 8.2.3 - LANDMAP Aspect Areas  
VISUAL AND SENSORY

PROJECT NUMBER:  
LANT3006

DRAWING NUMBER:  
8.2.3

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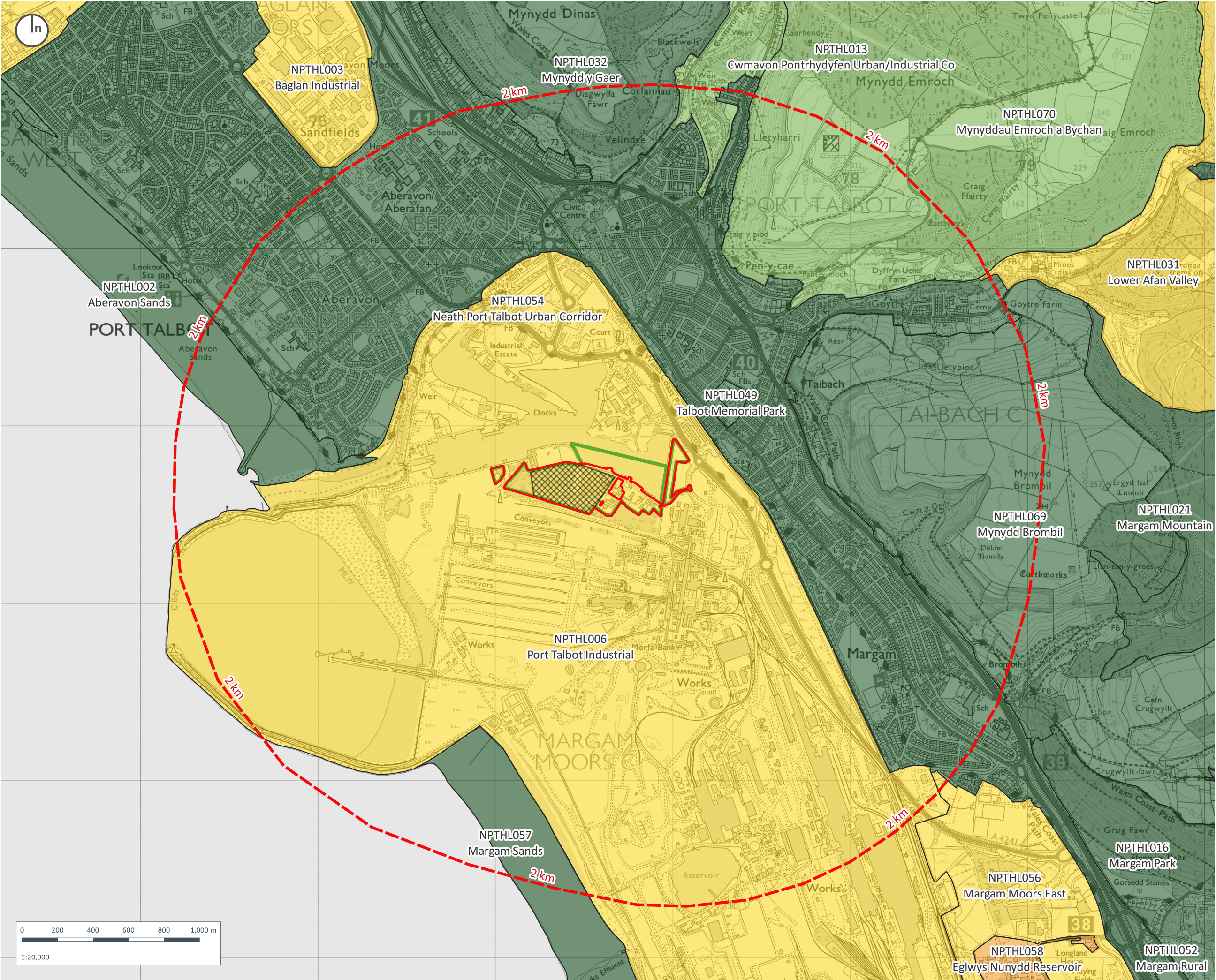
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- Application Boundary
  - EIA Study Area Boundary
  - Study Area
  - Production Development Zone
- LANDMAP Historic Landscape Aspect Areas  
Overall Evaluation Score
- Outstanding
  - High
  - Moderate
  - Low

CLIENT:  
Lanza Tech UK Limited

PROJECT:  
Project Dragon

DRAWING:  
Figure 8.2.4 - LANDMAP Aspect Areas  
HISTORIC LANDSCAPE

PROJECT NUMBER:  
LANT3006

DRAWING NUMBER:  
8.2.4

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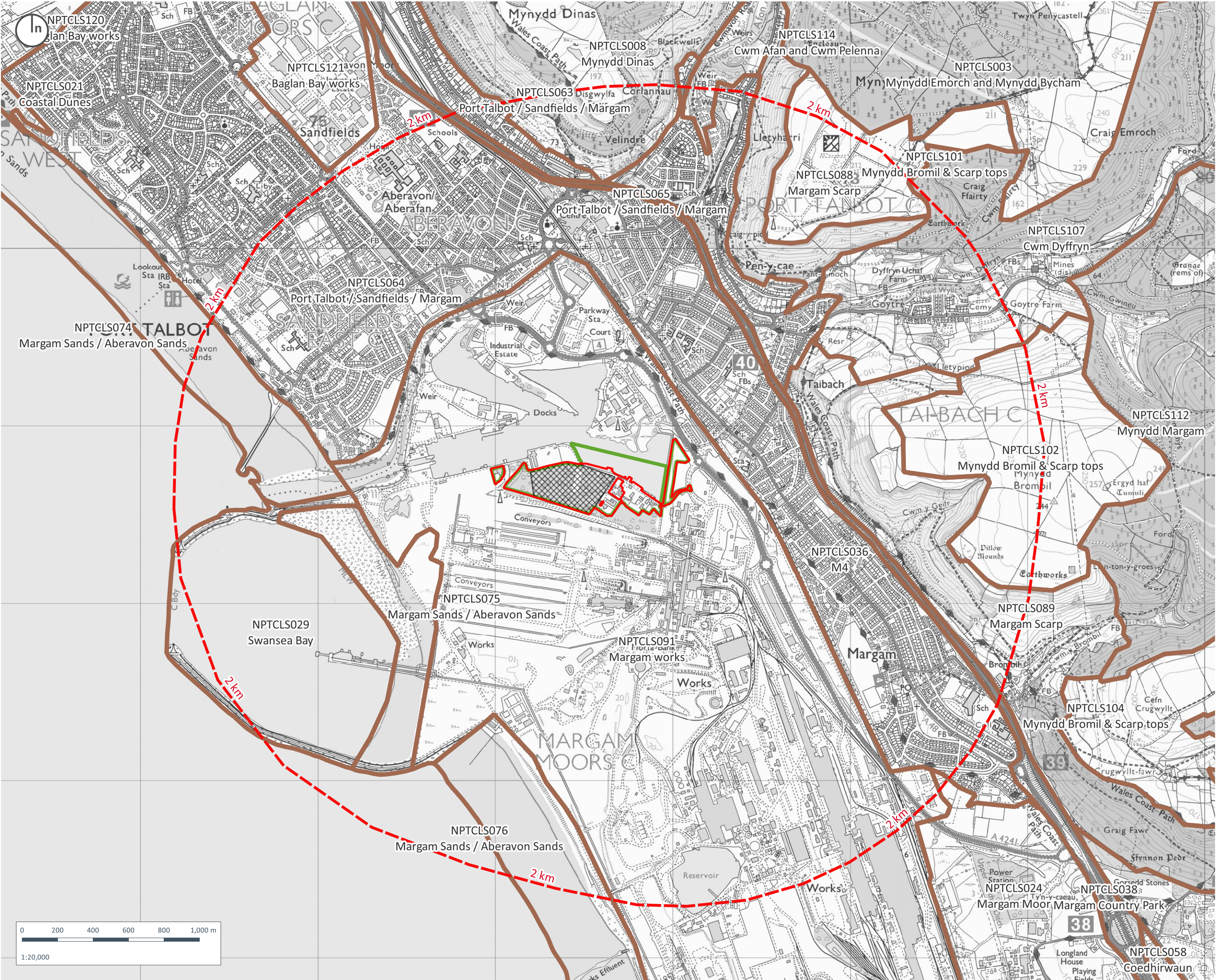
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- Application Boundary
- EIA Study Area Boundary
- Study Area
- Production Development Zone
- LANDMAP Cultural Landscape

CLIENT:

Lanza Tech UK Limited

PROJECT:

Project Dragon

DRAWING:

Figure 8.2.5 - LANDMAP Aspect Areas  
CULTURAL LANDSCAPE

PROJECT NUMBER:

LANT3006

DRAWING NUMBER:

8.2.5

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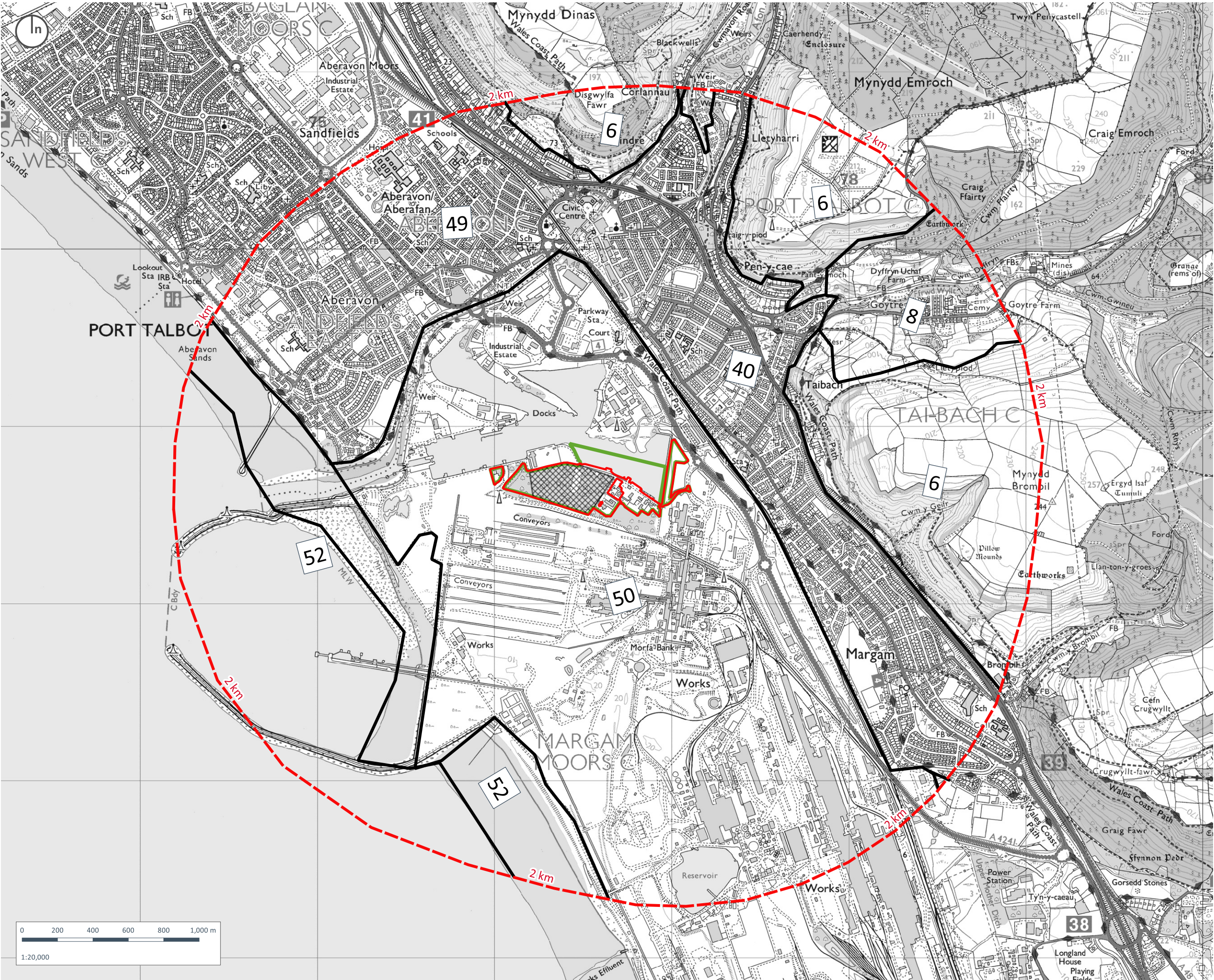
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- Application Boundary
- EIA Study Area Boundary
- Study Area
- Production Development Zone
- Borough Landscape Character Area

CLIENT:  
Lanza Tech UK Limited

PROJECT:  
Project Dragon

DRAWING:  
Figure 8.3 - Borough Landscape Character Areas

PROJECT NUMBER:  
LANT3006

DRAWING NUMBER:  
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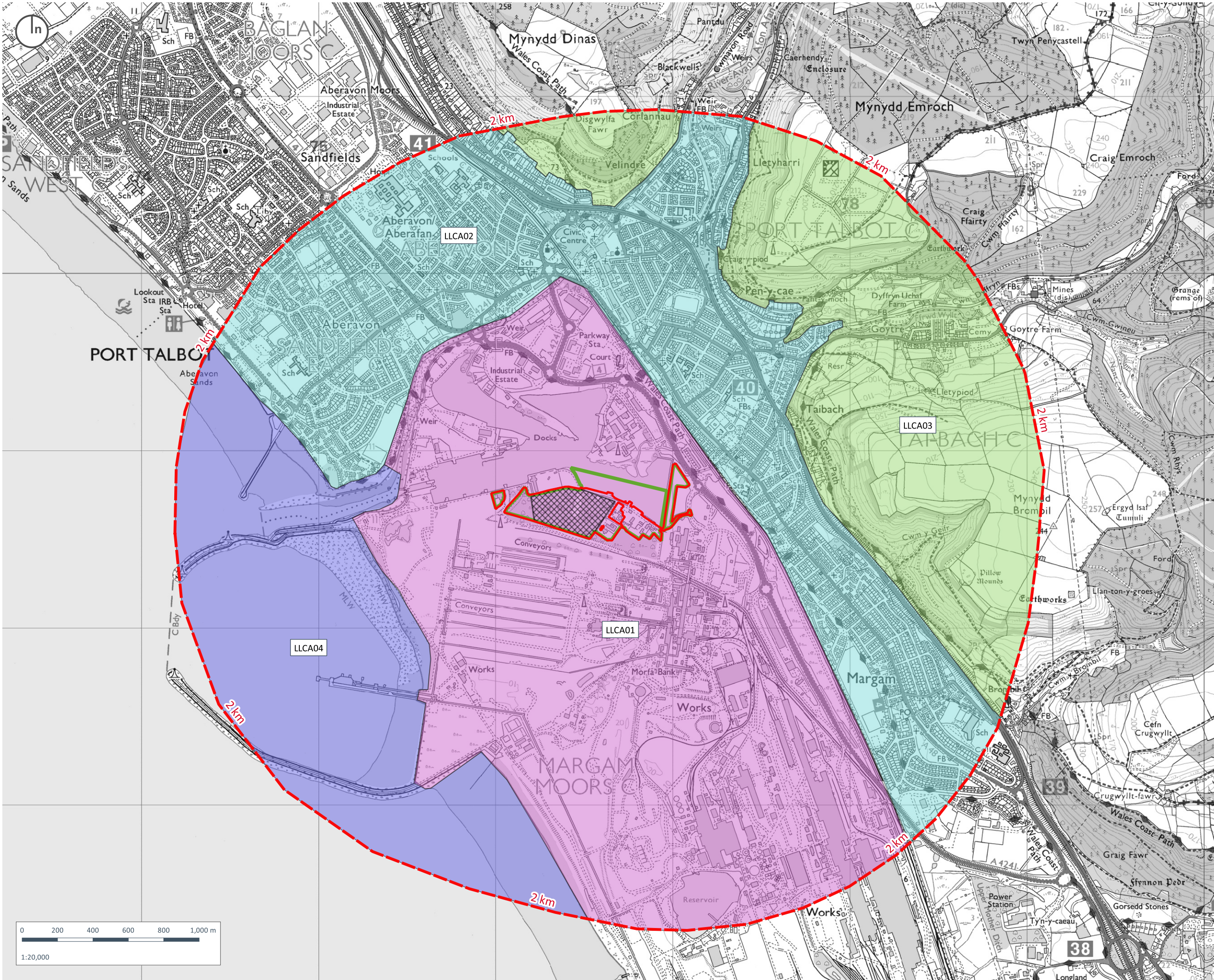
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- Application Boundary
- EIA Study Area Boundary
- Study Area
- Production Development Zone
- Local Landscape Character Areas (LLCA)
  - LLCA01: Industrial Foreshore
  - LLCA02: Port Talbot Town
  - LLCA03: Margam Mountain
  - LLCA04: Swansea Bay

CLIENT:  
Lanza Tech UK Limited

PROJECT:  
Project Dragon

DRAWING:  
Figure 8.4 - Local Landscape Character Areas

PROJECT NUMBER:  
LANT3006

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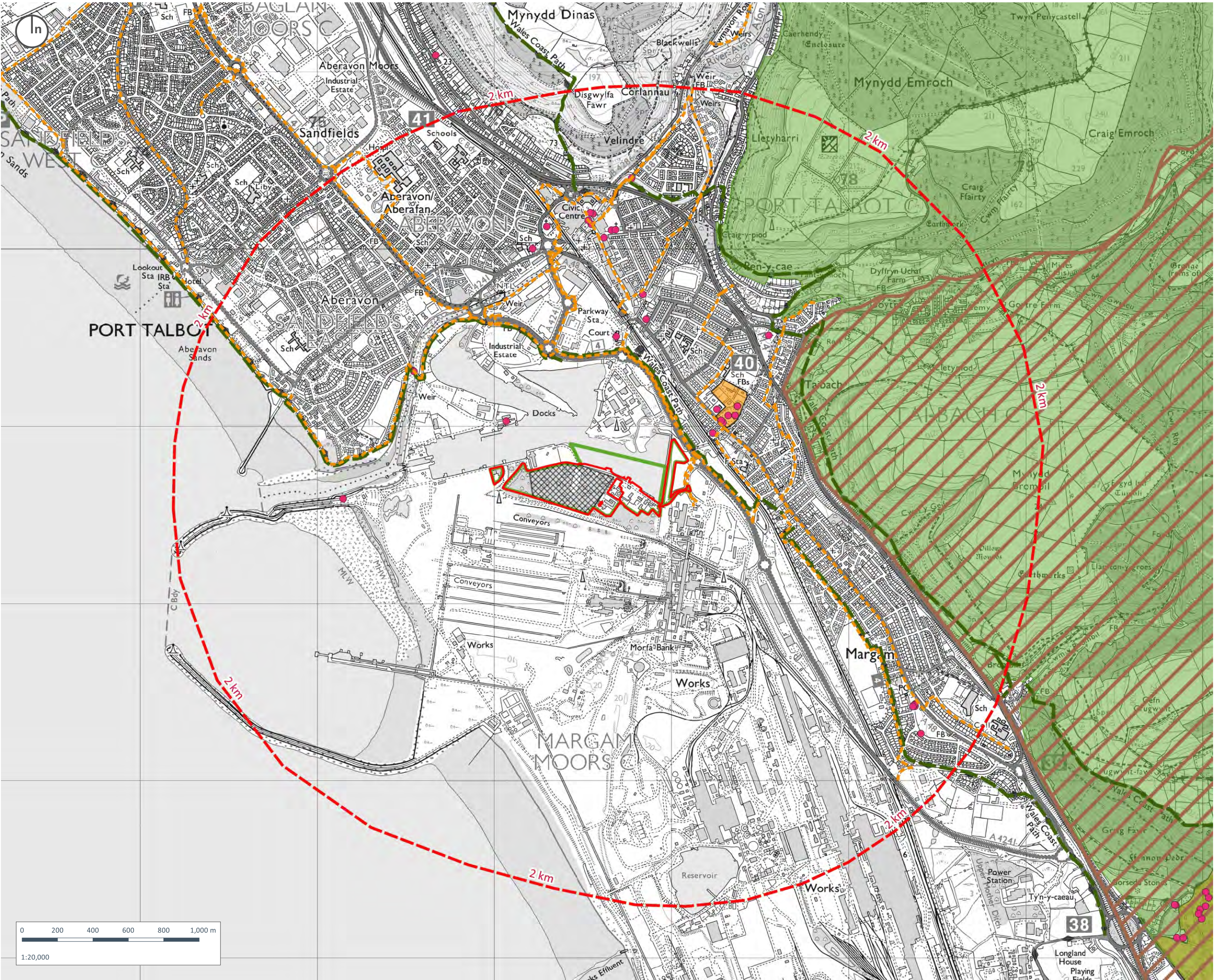
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- Application Boundary
- EIA Study Area Boundary
- Study Area
- Production Development Zone
- Special Landscape Areas: SLA4 Margam
- Registered Landscapes of Outstanding and of Special Interest in Wales: Margam Mountain
- Registered Historic Parks and Gardens: Talbot Memorial Park
- Listed buildings
- Active Travel Approve Routes
- Wales Coast Path

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PROJECT:  
Project Dragon

DRAWING:  
Figure 8.5 - Landscape / Townscape Designations

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LANT3006

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