

# **Wylfa Newydd Project**

## **8.24.3 Site Selection Reports – Volume 3 – Off-Site Power Station Facilities**

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## 1 Introduction

### 1.1 The Wylfa Newydd Project

- 1.1.1 Horizon Nuclear Power Wylfa Ltd (Horizon) is applying to the Secretary of State for a Development Consent Order (DCO) under the Planning Act 2008 [RD1], to construct, operate and maintain a new nuclear power station on land west of Cemaes on Anglesey. The Wylfa Newydd Project comprises the construction, operation and decommissioning of the Wylfa Newydd DCO Project.
- 1.1.2 The Wylfa Newydd DCO Project is defined as those parts of the project which are to be consented by the DCO, comprising: the Power Station; other on-site development; Marine Works; the Off-Site Power Station Facilities; and the Associated Development. Please refer to Environmental Statement Volume A Chapter A2 (Application Reference Number: 6.1.2) for a more detailed description of the Wylfa Newydd Project.

### 1.2 Purpose of this report

- 1.2.1 The purpose of this report is to outline Horizon's reasoned approach to site selection for the Off-Site Power Station Facilities. It consolidates and updates all site selection work carried out to support the Wylfa Newydd DCO Project, takes account of the views from consultees on the approach to site selection and provides final conclusions regarding site selection.
- 1.2.2 Importantly, this report should be read in conjunction with Site Selection Report (SSR) Volume 1 (Application Reference Number: 8.24.1). SSR Volume 1 introduces the site selection process undertaken for the Wylfa Newydd DCO Project, explains the structure of the SSR, the planning policy context for site selection, the history of site selection, and the key factors that have determined the approach adopted by Horizon.

### 1.3 Off-Site Power Station Facilities

- 1.3.1 The Wylfa Newydd Off-Site Power Station Facilities comprise an Alternative Emergency Control Centre (AECC), an Environmental Survey Laboratory (ESL) and a Mobile Emergency Equipment Garage (MEEG).
- 1.3.2 The AECC would provide back-up command and communications facilities that would be used to remotely manage an incident at the Power Station in the extremely unlikely event the primary facilities on the Power Station Site were untenable or if there was no access to the Power Station Site. The ESL will be used for environmental monitoring and would contain radiation monitoring equipment to conduct radiological surveys in the local area. The MEEG would enable Horizon to store a number of specialist vehicles at a location close to, but separate from, the Power Station Site, allowing them to be rapidly deployed if needed to support an incident.
- 1.3.3 Please refer to section 2 for a more detailed description of the Off-Site Power Station Facilities, including the need for them.

1.3.4 The OSPFs are a requirement of a Nuclear Site Licence and therefore Horizon must provide adequate facilities to respond to an emergency prior to bringing fuel to the Power Station Site. The sites would be physically separate from, but local to, the Power Station Site in order to provide resilience against severe events with very low probabilities such as severe flooding or seismic events. For further detail in respect of the Off-Site Power Station Facilities, please refer to section 2 of this report.

## **1.4 Structure of this report**

1.4.1 The remainder of this report is structured as follows:

- Section 2 – provides a description of the proposed Off-Site Power Station Facilities (the MEEG, AECC and ESL);
- Section 3 – sets out how the methodology was developed and consulted upon, and provides a detailed description of each stage of the methodology;
- Section 4 to 7 – set out the staged application of the methodology and conclusions reached regarding site selection for the Off-Site Power Station Facilities; and
- Section 8 – provides a summary and conclusion.

1.4.2 The report also includes numerous tables and figures to aid in presenting the site selection process and conclusions reached.

## 2 Off-Site Power Station Facilities

### 2.1 Introduction

2.1.1 This section provides a brief description of the Off-Site Power Station Facilities. Please refer to the Planning Statement (Application Reference Number: 8.1) for a more detailed description of the facilities.

2.1.2 As the requirements for the Wylfa Newydd Project have developed, the need for Off-Site Power Station Facilities has also become better understood through on-going discussions with the Office for Nuclear Regulation (ONR) and following Horizon's technical assessment of accident scenarios and consequences.

### 2.2 Need for the Off-Site Power Station Facilities

2.2.1 In accordance with UK regulatory requirements, Horizon is developing plans for operational and emergency preparedness. It will be a requirement of the Nuclear Site Licence issued by the ONR that Horizon has adequate facilities to respond to an emergency prior to bringing fuel to the Power Station Site. This plan will include a phased approach to emergency response, identifying actions to be taken at the Power Station Site, in the local communities, across the region and then across the UK.

2.2.2 As part of its emergency planning arrangements, Horizon needs to develop integral facilities that will be physically separate from, but local to, the Power Station Site (the Off-Site Power Station Facilities). The Off-Site Power Station Facilities are required in order to provide resilience against extreme events with very low probabilities, such as, for example, severe flooding, earthquake(s) or an integral part of Horizon's emergency arrangements at the Power Station. The facilities therefore form a significant part of the safety case for the Power Station.

2.2.3 The positioning of the Off-Site Power Station Facilities must meet certain locational criteria which are based on Horizon's interpretation of the currently available technical data for UK ABWR [RD2] and are outlined below:

- located at a point immediately adjacent to and which provide straightforward access to the main road network (A5025, A55, A5);
- located outside the prevailing wind zone of the Power Station;
- located in a zone of low seismic activity; and
- located in a radius between 1.5 kilometre (km) and 7.5km from the Power Station Site.

2.2.4 The site selection process for the facilities is clearly very important, as they must be resilient in extreme events and able to operate in an emergency scenario. Please refer to section 3 of this report for more detail in respect of assessment criteria relating to safety and emergency preparedness.

## **2.3 Alternative Emergency Control Centre**

- 2.3.1 The AECC would provide back-up command and communications facilities used remotely to manage an incident at the Power Station in the extremely unlikely event the primary facilities on the Power Station Site are untenable or if there was no access to the Power Station Site.
- 2.3.2 During normal operation of the Power Station, it is expected that the AECC would be in use only once per year for an annual incident exercise. This would normally be carried out during working hours, however in some instances a full out-of-hours exercise may be required.
- 2.3.3 In the event of an incident the AECC would be operational 24 hours a day.

## **2.4 Environmental Survey Laboratory**

- 2.4.1 The ESL would be used for environmental monitoring during an emergency and would contain radiation monitoring equipment to conduct radiological surveys in the local area.
- 2.4.2 The ESL would be used for sampling. There would be an operational workforce of three staff at the ESL on a regular basis working normal day time hours only. In an incident, the ESL would be operational 24 hours per day.

## **2.5 Mobile Emergency Equipment Garage**

- 2.5.1 The MEEG would enable Horizon to store a number of specialist vehicles at a location close to, but separate from, the Power Station Site, allowing them to be rapidly deployed if needed to support an incident. The MEEG could also be used as a marshalling point for support arriving on Anglesey before onward dispatch to the Power Station Site in an emergency situation.
- 2.5.2 The MEEG would have an operational workforce of up to four staff and 12 drivers during training (which would happen during normal working hours approximately once a year). During an incident, the staff would be working 24 hours per day, seven days per week. During periodic vehicle checks, typically once every six months, a similar number of staff would also be required on-site. The facility would not be staffed at other times.

## 3 Methodology

### 3.1 Introduction

3.1.1 This section explains each stage of the methodology in turn, including how it has been influenced by consultation and project optimisation. Further detail in terms of how the site selection process has been influenced by consultation and project optimisation, including detail regarding what each involved, is provided in SSR Volume 1 (Application Reference Number: 8.24.1).

3.1.2 Before outlining the methodology followed by Horizon in selecting the proposed site for the Off-Site Power Station Facilities, it should firstly be emphasised that Wylfa Newydd is a major nuclear project, involving significant interdependencies which are largely outside of Horizon's control given the need to adhere to UK regulatory requirements and ensure that adequate emergency facilities are available in order to meet the conditions of the Nuclear Site Licence.

3.1.3 Safety and emergency preparedness are therefore fundamental guiding principles when dealing with the Off-Site Power Station Facilities. Ensuring that the stringent requirements are met has formed a key requirement of the site selection process, whilst also having regard to other material planning considerations.

### 3.2 Description of the methodology

3.2.1 The methodology is split into five stages, as follows:

- Stage 1: Long-list;
- Stage 2: Key environmental constraints;
- Stage 3: Operational pre-requisites; and
- Stage 4: Detailed assessment.

3.2.2 The methodology is influenced by both national and local planning policy, including the Overarching National Policy Statement (NPS) for Energy (NPS EN-1) (2011) [RD3], the NPS for Nuclear Power Generation (NPS EN-6) (2011) [RD4], Planning Policy Wales (2016) [RD5], and Policy PS9 of the Anglesey and Gwynedd Joint Local Development Plan (JLDP) (2017) [RD6].

3.2.3 Planning policy (national and local) has been taken into account in developing the detailed assessments applied at Stages 3 and 4 of the methodology. However, it has been necessary to balance the planning policy with other requirements of the Wylfa Newydd DCO Project, including the operational pre-requisites for Off-Site Power Station Facilities (Stage 3a) that are derived from the requirement to operate in an emergency scenario.

3.2.4 The operational pre-requisites for Off-Site Power Station Facilities include criteria relating to the following:

- prevailing wind zone;

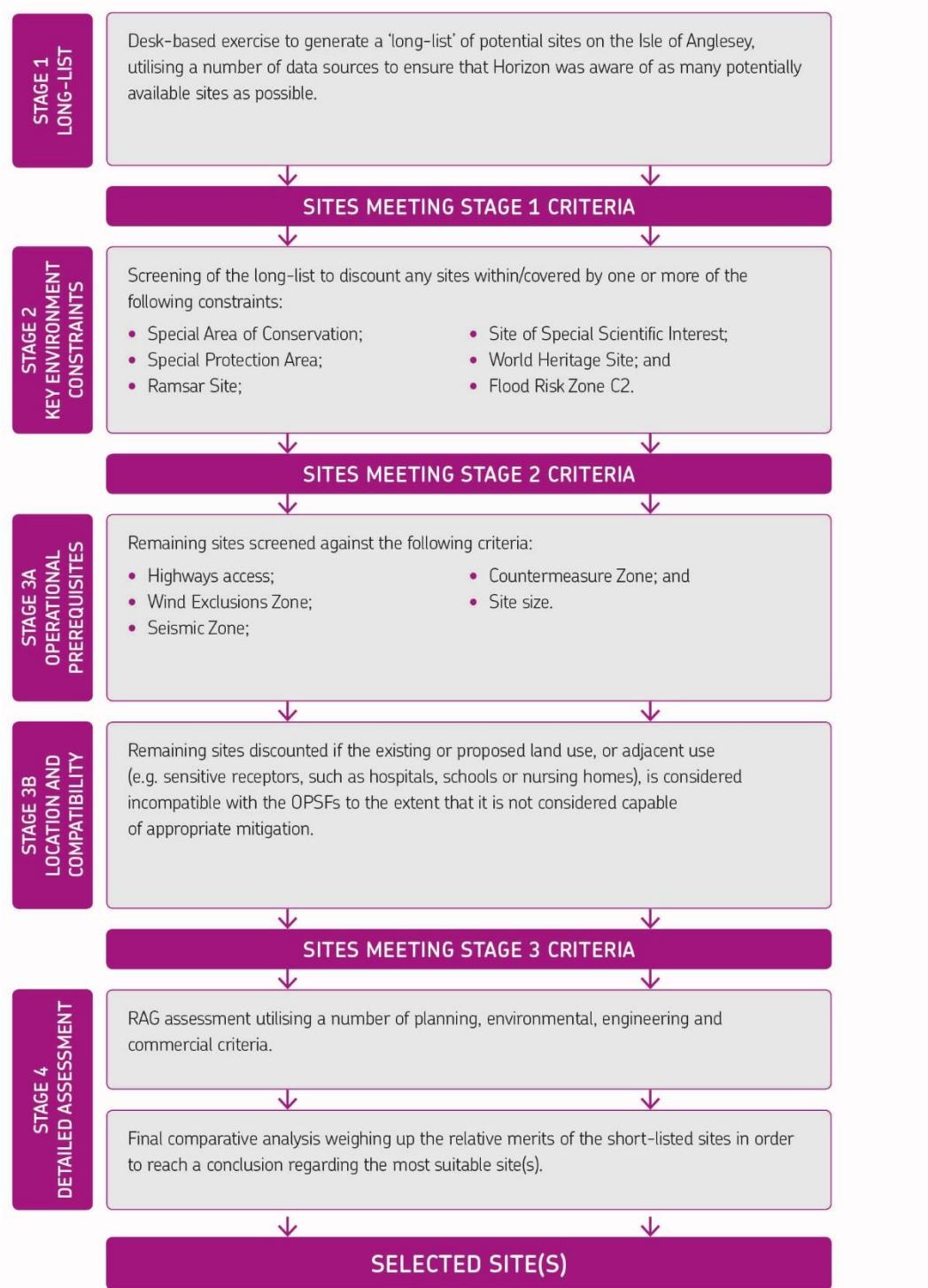
- seismic zone;
- countermeasure zone; and
- avoiding locating emergency facilities within high risk flood zones.

3.2.5 The constraints taken into account and operational pre-requisites are mapped in figure Off-Site Power Station Facilities ‘Stage 2 – Key Environmental Constraints’ at appendix 4-2 and figure Off-Site Power Station Facilities ‘Stage 3a – Operational Pre-Requisites’ at appendix 4-3.

3.2.6 The rationale for the operational pre-requisites and how they fit into the site selection methodology alongside other material considerations is explained later in this section. Compliance with the Off-Site Power Station Facilities specific operational pre-requisites seeks to ensure that requirements relating to safety and emergency preparedness are met.

3.2.7 The flow diagram on the following page summarises each stage of the methodology. The remainder of this section, after the flow diagram, explains each stage of the methodology in more detail.

**Figure 3-1 Site selection methodology**



### ***Stage 1 – long-list***

3.2.8 Stage 1 comprised a desk-based exercise to generate a ‘long-list’ of potential sites on the Isle of Anglesey to accommodate the facilities. The process utilised a number of data sources to ensure that Horizon was aware of as many potentially available sites as possible. Please refer to SSR Volume 1 for more detail (Application Reference Number: 8.24.1).

### ***Stage 2 – key environmental constraints***

3.2.9 Stage 2 comprised initial screening of the long-list to discount any sites within/covered by one or more of the following constraints:

**Table 3-1 Stage 2 - key environmental constraints**

Key environmental constraints:
<ul style="list-style-type: none"><li>• Special Area of Conservation (SAC);</li><li>• Special Protection Area (SPA);</li><li>• Ramsar Site;</li><li>• Site of Special Scientific Interest (SSSI);</li><li>• World Heritage Site; and</li><li>• Flood Risk Zone C2.</li></ul>

3.2.10 The remaining sites progressed to Stage 3a. The results of the Stage 2 assessment are set out in section 4 of this report.

### ***Rationale for the key environmental constraints***

3.2.11 SAC, SPA and Ramsar sites are nature conservation sites of international importance. SSSIs are nature conservation sites of national importance. World Heritage Sites are cultural heritage sites of international importance.

3.2.12 Flood Risk Zone C2 is defined in Planning Policy Wales Technical Advice Note 15 Development and Flood Risk (2004) (TAN 15) [RD7] as the zone with the highest risk of flooding. The zone covers areas of the floodplain without significant flood defence infrastructure. TAN 15 states that ‘Emergency Services’ should not be considered in this zone. The Emergency Services category (see figure 2 in TAN 15) describes facilities which need to be operational and accessible at all times, such as the Off-Site Power Station Facilities.

3.2.13 It follows that the key environmental constraints should be avoided where possible. This approach accords with guidance in Planning Policy Wales (2016), Policy PS5 and Policy PS6 of the JLDP, and NPS EN-1.

### ***Stage 3a – operational pre-requisites***

3.2.14 Stage 3a of the assessment determines whether the remaining sites (following Stage 2) meet Horizon's operational pre-requisites for Off-Site Power Station Facilities, as follows:

**Table 3-2 Stage 3a - Operational pre-requisites**

Criteria	Assessment
Highways access	Facilities should be immediately adjacent to a main connecting road. 100m buffer applied to A55, A5 and A5025. Sites located outside the buffer are discounted.
Wind Exclusions Zone	Facilities should be located outside the prevailing wind zone of the Power Station. The prevailing wind zone comprises the Wind Exclusion Zone. Sites within the Wind Exclusion Zone are discounted.
Seismic zone	Facilities should be located in the zone of the least seismic activity. Sites outside of zone of least seismic activity are discounted.
Countermeasure Zone	All sites must be outside of the assumed 1.5km countermeasure zone. In addition, AECC/ESL sites must be within 7.5km of the reactor. The MEEG has no outer radius and the 7.5km limit does not apply. All sites within the 1.5km countermeasure zone are discounted. Sites in excess of 7.5km from the reactor are discounted for the AECC/ESL only.
Site size	The following size thresholds apply: <ul style="list-style-type: none"> <li>• &lt;0.5 hectares (ha) – insufficient size and not suitable;</li> <li>• 0.5-1.0ha – suitable for a AECC and ESL site only;</li> <li>• &gt;1.0ha – suitable for a AECC and ESL site or a MEEG site; and</li> <li>• &gt;1.5ha – suitable for all Off-Site Power Station Facilities to be combined on a single site (Combined Site).</li> </ul>

3.2.15 The remaining sites progressed to Stage 3b. The results of the Stage 3a assessment are set out in section 4 of this report.

### Rationale for the operational pre-requisites

#### *Highway access*

3.2.16 All facilities need to be close to a main connecting road to ensure a timely response in an emergency event. This is why a 100m buffer has been applied to the A55, A5, and A5025; outside of which sites are discounted.

#### *Wind Exclusion Zone*

3.2.17 The facilities should be in a location(s) that are outside the prevailing wind zone of the Power Station, in order to reduce the potential for airborne hazards in the unlikely event of a release from the Power Station. Historical

wind directional data has therefore been utilised to determine the area where the prevailing wind direction is upwind of the Power Station. The land inside of this area falls within the Wind Exclusion Zone where Off-Site Power Station Facilities should not be located.

### ***Seismic zone***

3.2.18 Seismic protection is a key consideration in the site selection process for the Off-Site Power Station Facilities, as the facilities would need to operate in the event of an earthquake. In order to ensure that seismic risks are minimised as far as reasonably practicable, it has been determined that the facilities should be located in the zone of the least seismic activity. A mapping exercise of such constraints has therefore been undertaken, thereby reducing the risk as far as possible.

### ***Countermeasure Zone***

3.2.19 In January 2014, the ONR published revised principles for determining emergency planning zones around nuclear licensed sites in the UK. These principles mean that the ONR will look beyond the technical assessment of hazards on a site and also consider local practical and geographical issues in the operation of the off-site plan area.

3.2.20 The ONR does not set the Off-Site Emergency Planning Zone until a site approaches the arrival of nuclear fuel. Horizon has therefore applied the ONR determinations for the Sizewell and Sellafield projects, along with the aforementioned revised principles, to guide the site selection process. Further work will be carried out to test the assumptions, and this will also form part of the determination of the Radiation Emergency Preparedness and Public Information Regulations Off-Site Emergency Planning Area.

3.2.21 Using these principles, Horizon has adopted an area of 1.5km as the default public information and countermeasure zone for the Power Station Site. Off-Site Power Station Facilities therefore need to be outside this area to ensure they can be fully operational without restrictions during a radiation emergency; a key safety and emergency preparedness requirement.

3.2.22 In addition to the above, prospective AECC/ESL sites have been allocated a maximum distance limit from the Power Station Site, in order to ensure that additional responders can arrive at the AECC during an emergency within appropriate timescales.

3.2.23 At Stage Two Pre-Application Consultation (PAC2) in 2016, the initial assumed guideline distance for AECC/ESL sites was no more than 5km from the Power Station Site. However, upon further review and discussion with the ONR, Horizon is confident that such facilities can be located up to 7.5km from the Power Station Site, which would continue to meet the necessary requirements. Please refer to the Consultation Report (Application Reference Number: 5.1) for more detail in respect of PAC2.

### ***Site size***

3.2.24 The iterative design process undertaken by Horizon in consultation with the ONR (which included a detailed understanding of the specific operational requirements of each facility) has identified minimum areas of land required to accommodate each of the facilities. This is based on building sizes, laydown areas, parking requirements etc.

3.2.25 The following has been determined utilising this information:

- the AECC and ESL could be co-located on a site of 0.5ha or more;
- the MEEG would require a site of at least 1ha;
- all the Off-Site Power Station Facilities could be co-located on a 'Combined Site' of 1.5 ha or more.

3.2.26 It is Horizon's preference to co-locate the AECC and ESL on a single site, on the basis that the facilities benefit associated operational requirements and they would complement one another in an emergency situation. Furthermore, the area required for the facilities is small in comparison to the MEEG and co-location provides an opportunity to reduce the number of development sites. The site criteria, therefore, includes a minimum size for a combined AECC and ESL site only. It does not include a minimum size for the AECC and ESL as separate sites.

3.2.27 As part of the site selection and project optimisation process following PAC2, Horizon also considered the potential to combine the AECC, ESL and MEEG on a single site. This would have the benefit of further reducing the number of development sites and having complimentary facilities in a single location. The site size criteria, therefore, includes a minimum size for a Combined Site also.

### ***Stage 3b – compatibility***

3.2.28 Stage 3b of the assessment considered the compatibility of the remaining sites, as follows:

**Table 3-3 Stage 3b - compatibility**

Criterion	Assessment
Compatibility	Sites are discounted if the existing or proposed land use, or adjacent use (e.g. sensitive receptors, such as hospitals, schools or nursing homes), is considered incompatible with the Off-Site Power Station Facilities to the extent that it is not considered capable of appropriate mitigation.

3.2.29 The remaining sites were 'short-listed' and progressed to Stage 4. The results of the Stage 3b assessment are set out in section 5 of this report.

### **Rationale for the compatibility criterion**

3.2.30 The rationale for the compatibility criterion is based on relevant planning policy, as follows:

- Paragraph 7.6.3 of Planning Policy Wales (2016) states that regard should be had to the compatibility with existing and proposed uses; and
- Policy CYF3 of the adopted JLDP states that the scale of development should be appropriate to the existing uses on and adjacent to the site.

3.2.31 Professional judgement has been applied in accordance with relevant planning policy to discount sites deemed incompatible.

#### ***Stage 4 – Detailed assessment***

3.2.32 Stage 4 comprises a detailed assessment of the short-listed sites following the Stage 3b assessment. It comprises two parts:

- Red/amber/green (RAG) criteria based assessment; and
- Final comparative analysis.

#### **RAG assessment**

3.2.33 The RAG assessment utilises a criteria based red/amber/green system (green – best / amber – middle / red – worst). The system is comparable to the type of system utilised by local planning authorities when assessing prospective sites for inclusion in local development plans. The Anglesey and Gwynedd Joint Planning Policy Unit ('the JPPU') utilised a comparable approach when developing the JLDP.

3.2.34 The application of this type of objective, criteria based approach seeks to address comments made by some consultees regarding what were perceived as more arbitrary/qualitative considerations in the previous PAC2 site selection methodology.

3.2.35 The assessment is based on a number of planning and environmental criteria. The starting point was the list of 'generic impacts' set out in NPS EN-1 and NPS EN-6. This was followed by a review of policy criteria in Planning Policy Wales, the various TANs, and local planning policy and guidance. However, notwithstanding the consideration given to local planning policy, NPS EN-1 confirms that in the event of a conflict between local policy, or any other documents, and a designated NPS, the NPS prevails for the purposes of decision making in relation to a DCO application.

3.2.36 The assessment includes consideration of commercial matters, most notably the availability of land for lease/purchase and general commercial viability considerations. This is in accordance with the guidance at paragraph 4.4.3 of NPS EN-1. It should be noted that whilst such commercial matters may not comprise overriding reasons for choosing a preferred site in all circumstances; where sites perform similarly in relation to other planning and environmental considerations, commercial factors were taken into account in the final choice of site.

3.2.37 Table 3-4 on the following page sets out the various criteria applied by the RAG assessment and includes a 'Rationale / explanation' setting out the

reasoning behind each criterion and how ratings are applied, including reference to relevant planning policy and consultation feedback. The assessment tables in section 6 of this report include comments, where necessary, to explain why the RAG ratings for each site have been awarded.

### **Final comparative analysis**

- 3.2.38 It is acknowledged that the criteria applied by the RAG assessment cannot necessarily be attributed equal weight in assessing each site, as certain factors may be more important in the assessment of one site than another.
- 3.2.39 A final comparative analysis (qualitative) is therefore provided after the RAG assessment in section 6 of this report. The relative merits of each site are considered in order to reach conclusions regarding the most suitable site(s). This includes analysis of the RAG ratings; however with the acknowledgement that less red ratings, for instance, does not necessarily mean that a site is preferable to a site with more red ratings.
- 3.2.40 A wholly quantitative scoring system has not been applied on the basis that this type of assessment is not considered appropriate for balancing the complex factors involved in selecting sites for the Wylfa Newydd DCO Project. The adopted approach allows the relative merits of each site to be fairly considered.

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**Table 3-4 Stage 4 - RAG assessment**

<b>Criteria</b>		<b>RAG rating</b>	<b>Rationale / explanation</b>
1	Previously developed	<ul style="list-style-type: none"> <li>• All/majority of the site is previously developed land (<b>green</b>)</li> <li>• Part of the site is previously developed land (<b>amber</b>)</li> <li>• None/minority of the site is previously developed land (<b>red</b>)</li> </ul>	<p>There is a general presumption in planning policy in favour of the use of previously developed land over greenfield land, Including in Planning Policy Wales.</p> <p><b>Rating:</b> as set out in the RAG rating column.</p>
2	Flood risk	<ul style="list-style-type: none"> <li>• Low risk (A) (<b>green</b>)</li> <li>• Medium risk (B) (<b>amber</b>)</li> <li>• High risk (C) (<b>red</b>)</li> </ul>	<p>TAN 15 sets out a precautionary framework for the consideration of flood risk as part of land use planning. The aim of the framework is to direct development away from areas of higher flood risk and onto areas of lower risk.</p> <p>The framework is governed the Development Advice Map (DAM) produced by Natural Resources Wales containing three zones (A, B and C (with subdivision into C1 and C2)). Zone A is the lowest risk and Zone C is the highest risk. TAN 15 states that the precautionary framework should be used for both forward planning and development control purposes.</p> <p>NPS EN-1 references TAN 15, stating that development should not be consented in Zone B unless the sequential test requirements have been met and it should not be consented in Zone C unless the Exception Test requirements have been met.</p> <p><b>Rating:</b> the criterion rating is based on the flood zones set out in TAN 15 and as referenced by EN-1. The rating of the site is determined using the DAM. TAN 15 states that the development advice maps (Wales and England) are based on the best available information considered sufficient to determine when flood risk issues need to be taken into account in planning future development. Therefore, Zone A is considered low risk (green), Zone B is</p>

Criteria		RAG rating	Rationale / explanation
			considered medium risk (amber) and Zone C is considered high risk (red).
3	Living conditions	<ul style="list-style-type: none"> <li>Unlikely to result in a significant adverse effect (green)</li> <li>Potential to result in significant adverse effect (amber)</li> <li>Likely significant adverse effect (red)</li> </ul>	<p>NPS EN-1 and EN-6 acknowledge that the construction/demolition, operation and decommissioning of energy infrastructure has the potential to affect living conditions through emissions (noise, light, steam etc.) and other activities.</p> <p><b>Rating:</b> based on a distance of over 100m from residential use for unlikely to result in a significant adverse effect, within 100m for a potential significant adverse effect, and adjacent for a likely significant adverse effect (without mitigation).</p>
4	Access	<ul style="list-style-type: none"> <li>No known constraints (green)</li> <li>Minor constraints (amber)</li> <li>Major constraints (red)</li> </ul>	<p>Paragraph 3.15.2 of EN-6 states that applications should demonstrate that the proposed development would not have an unacceptable adverse impact on significant infrastructure, including roads.</p> <p>Policy TRA4 of the JLDP states that proposals that would cause unacceptable harm to the safe and efficient operation of the highway will be refused. The supporting text to the policy goes on to state that vehicular access to site should be safe and should not unreasonably restrict the flow of traffic on the adjoining highway network.</p> <p><b>Rating:</b> professional judgement is utilised to apply a rating, including consideration of local roads (for instance, are they residential?), safety and the point of access into the site.</p>
5	Ground conditions	<ul style="list-style-type: none"> <li>Negligible contamination or instability likely (green)</li> <li>Minor contamination or instability likely (amber)</li> <li>Major contamination or instability likely (red)</li> </ul>	<p>Paragraph 13.5.1 of Planning Policy Wales states that the planning system should guide development to lessen the risk from natural or human-made hazards, including risk from land contamination. The aim is to ensure that development is suitable and that the physical constraints on the land are taken into account. Paragraph 13.7.1 goes on to state that planning decisions need to take into account the potential hazard that contamination (e.g. resulting from a former/current industrial use) presents to the development itself, its occupants and the local environment.</p> <p>Sites subject to the potential for significant contamination or instability are</p>

Criteria	RAG rating	Rationale / explanation
		<p>clearly less suitable than sites not subject to this constraint.</p> <p><b>Rating:</b> Green – greenfield land (no contamination likely); Amber – previously developed and previous use not considered likely to have resulted in contamination; and Red – previously developed and previous use considered likely to have resulted in contamination.</p>
6	National landscape designations <ul style="list-style-type: none"> <li>• Not within the designation and not adjacent (green)</li> <li>• Adjacent (amber)</li> <li>• Within designation (red)</li> </ul>	<p>To take account of the Isle of Anglesey Area of Outstanding Natural Beauty (AONB). Planning Policy Wales states that development in AONBs should not take place except in exceptional circumstances and there is no potential to locate development elsewhere or meet requirements in some other way. NPS EN-1 and EN-6 also include comparable guidance.</p> <p><b>Rating:</b> the site is rated lower if it is covered by or closer to the AONB.</p>
7	Local environmental designations <ul style="list-style-type: none"> <li>• Not within the designation and not adjacent (green)</li> <li>• Adjacent (amber)</li> <li>• Within designation (red)</li> </ul>	<p>Paragraph 5.3.18 of NPS EN-1 states that development should aim to avoid significant harm to conservation interests through mitigation and consideration of reasonable alternatives. NPS EN-6 also acknowledges this requirement. Strategic Policy PS19 and PS16 of the JLDP seek to protect and improve the quality of the natural environment, its landscapes and biodiversity assets.</p> <p><b>Rating:</b> the site is rated lower if it is covered by or closer to the designated asset.</p>
8	National or international environmental designations (not including landscape) <ul style="list-style-type: none"> <li>• Not within the designation and not adjacent (green)</li> <li>• Adjacent (amber)</li> <li>• Within designation (red)</li> </ul>	<p>Paragraph 5.3.18 of NPS EN-1 states that development should aim to avoid significant harm to conservation interests through consideration of reasonable alternatives. NPS EN-6 also acknowledges this requirement. Strategic Policy PS5 and Policy AMG2 of the JLDP seek to protect and improve the quality of the natural environment, its landscapes and biodiversity assets, including through the designation of locally protected areas.</p> <p><b>Rating:</b> the site is rated lower if it is covered by or closer to the designated asset.</p>

Criteria		RAG rating	Rationale / explanation
9	Designated heritage assets	<ul style="list-style-type: none"> <li>Not affected (green)</li> <li>Setting affected (amber)</li> <li>Directly affected (red)</li> </ul>	<p>Section 5.8 of NPS EN-1 acknowledges that the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment. Strategic Policy PS5 and PS17 in the adopted JLDP seek to preserve and enhance the quality of the built and historic environment assets (including their setting).</p> <p><b>Rating:</b> the site is rated lower if it is covered by or closer to the designated asset.</p>
10	Mineral safeguarding	<ul style="list-style-type: none"> <li>Not within safeguarded area (green)</li> <li>Partially within safeguarded area (amber)</li> <li>Wholly within safeguarded area (red)</li> </ul>	<p>Paragraph 5.10.9 of NPS EN-1 requires applicants to safeguard any mineral resources on the proposed site as far as possible; taking into account the long-term potential of the land use after any future decommissioning has taken place.</p> <p>Policy MWYN 1 of the JLDP states that Mineral Safeguarding Areas have been identified and are shown on the Proposals Map to ensure that known mineral resources are safeguarded for the future. The policy goes on to state that proposals for non-mineral development will only be granted within Mineral Safeguarding Areas where, amongst other things, there is an overriding need for the proposed development.</p> <p>Development should therefore seek to avoid safeguarded areas where possible; although it should be acknowledged that the need for the Wylfa Newydd Project is established.</p> <p><b>Rating:</b> based on the ability of the site to avoid the Mineral Safeguarding Areas set out in the adopted JLDP Proposals Map. Sites that avoid the safeguarded areas are green; partial coverage is amber; and full coverage is red.</p>
11	Agricultural land quality	<ul style="list-style-type: none"> <li>Grade 4 or 5 (green)</li> <li>Grade 3 (amber)</li> <li>Grade 1 or 2 (red)</li> </ul>	<p>Strategic Policy PS6 of the adopted JLDP states that best and most versatile land should be safeguarded.</p> <p><b>Rating:</b> as set out in the RAG rating column.</p>
12	Visual impact	<ul style="list-style-type: none"> <li>Negligible/minor visual</li> </ul>	Section 5.9 of EN-1 states that adverse landscape and visual effects may be

Criteria	RAG rating	Rationale / explanation
	<p>impact likely (green)</p> <ul style="list-style-type: none"> <li>Moderate impact likely (amber)</li> <li>Major impact likely (red)</li> </ul>	<p>minimised through appropriate siting of infrastructure.</p> <p>Strategic Policy PS9 of the JLDP states that development should avoid and minimise visual impact where possible.</p> <p><b>Rating:</b> professional judgement is utilised to apply a rating, including the sensitivity of the site and whether or not it is open/enclosed/benefits from pre-existing screening. The ratings are as set out in the 'RAG rating' column.</p>
13 Does the shape of the site constrain development	<ul style="list-style-type: none"> <li>No – ample space for all development (green)</li> <li>Possible – irregular shape but reasonable available space (Amber)</li> <li>Yes – irregular shape and close to site size criterion limit (red)</li> </ul>	<p>Paragraph 4.4.3 of EN-1 states that proposals that are not physically able to accommodate the proposed development should be excluded. For instance, it may be difficult to accommodate development on an irregular shaped site, particularly in circumstances where the size of the site is close to the minimum size required for the type of development proposed.</p> <p><b>Rating:</b> sites with an irregular shape that might constrain development are ranked amber, whilst sites with a size close (within 0.2ha) to the size criterion are red. Sites are marked green if there is ample space for development regardless of shape.</p>
14 Consultation feedback	<ul style="list-style-type: none"> <li>Largely positive (green)</li> <li>Balanced feedback or no feedback received (amber)</li> <li>Largely negative (red)</li> </ul>	<p>Consultation feedback in relation to the site is taken into consideration. The criterion seeks to summarise feedback received at all stages of consultation and apply a rating. Where there has been no/limited feedback, the site is rated amber (note: this is taken into consideration in the qualitative assessment and the site is not marked down relative to a site rated green, in order to maintain fairness).</p> <p><b>Rating:</b> as set out in the RAG rating column.</p>
15 Would the site adversely impact Welsh language and culture?	<ul style="list-style-type: none"> <li>Unlikely to result in a significant adverse effect (green)</li> <li>Potential to result in significant adverse effect (amber)</li> </ul>	<p>Strategic Policy PS1 of the JLDP seeks to avoid developments that due to their size/scale/location would cause significant harm to the character and language balance of a community.</p> <p><b>Rating:</b> judged having regard to the proximity of the local community/settlements. A site that is further away is rated higher (green) and sites further away are rather red. However, differing views were expressed in consultation regarding the benefits of being located adjacent to</p>

Criteria		RAG rating	Rationale / explanation
		<ul style="list-style-type: none"> <li>Likely significant adverse effect (red)</li> </ul>	or further away from communities in terms of Welsh language and culture. This criterion was therefore generally non-determinative, with sites rating amber (neutral).
16	Availability	<ul style="list-style-type: none"> <li>Available – held by developer/ willing owner/ public sector/on the market (green)</li> <li>Unknown (amber)</li> <li>Unavailable – complex/multiple ownership or subject to ransom strip (red)</li> </ul>	<p>Paragraph 4.4.3 of NPS EN-1 states that sites and potential alternatives should be considered where there is a realistic prospect of delivering the infrastructure capacity. This might include whether or not a site, when compared to an alternative, is deemed to be reasonably available. Sites which are not deemed to be reasonably available are less able/unable to deliver the same infrastructure capacity.</p> <p><b>Rating:</b> information on site availability, where known to Horizon, is applied to determine a rating. The ratings are as set out in the RAG rating column.</p>
17	Commercial viability	<ul style="list-style-type: none"> <li>Good viability(green)</li> <li>Moderate viability (amber)</li> <li>Poor viability(red)</li> </ul>	<p>Paragraph 4.4.3 of EN-1 states, amongst other things, that where the necessary development could not proceed, for example because the proposal/site is not commercially viable, it can be excluded on the grounds that they are not important or relevant.</p> <p>Note: 'viability' is considered as commercial only and does not take into account engineering or other external factors considered by the other categories in the RAG assessment.</p> <p><b>Rating:</b> information on commercial viability, where known to Horizon, is applied to determine a rating. The ratings are as set out in the RAG rating column.</p>

## 4 Stage 1 to 3a assessment

### 4.1 Introduction

4.1.1 This section sets out the results of the Stage 1-3a assessment.

### 4.2 Assessment

#### ***Stage 1 – long-list***

4.2.2 The Stage 1 assessment generated a long-list of 539 sites.

4.2.3 The location of the sites is illustrated in figure Off-Site Power Station Facilities -1 'Stage 1 – Long-List Sites' at appendix 4-1.

#### ***Stage 2 – key environmental constraints***

4.2.4 **512 sites** remained following application of the key environmental constraints.

4.2.5 The location of the remaining sites is illustrated in figure Off-Site Power Station Facilities -2 'Stage 2 – Key Environmental Constraints' at appendix 4-2.

#### ***Stage 3a – operational pre-requisites***

4.2.6 Prior to applying the operational pre-requisites, any duplicate sites were combined to create a single site. In this context, 'duplicate' means any sites sharing common boundaries or where a smaller site fell within the boundary of a larger one. The duplication was as a result of the wide sourcing of sites at Stage 1, including where similar/the same sites were submitted to the JPPU by different parties.

4.2.7 Table 4-1 below sets out the 12 sites that remained following application of the following Stage 3a criteria:

- Highways access;
- Wind Exclusions Zone;
- Seismic zone; and
- Countermeasure Zone.

**Table 4-1 Stage 3a - operational pre-requisites (part 1)**

Reference	Site name
J31	A5025 Site - Cefn Coch
J22	A5025 Site - Between Llanrhyddlad And Tregele
J3	A5025 Site - Garage At Llanrhyddlad
J7	A5025 Site - Bus Garage At Llanfaethlu
J24	A5025 Site - Llanfaethlu

Reference	Site name
SP198	Land adj Bryn Glas
SP199	Land adj Bryn Glas
J21	A5025 Estate
J23	A5025 Estate
J25	A5025 Estate
J6b	A5025 Site
SCH01	Cylch y Garn Primary School, Llanrhuddlad

4.2.8 The Stage 3a (part 1) assessment is illustrated in figure Off-Site Power Station Facilities -3 'Stage 3a – Operational Pre-Requisites' at appendix 4-3.

4.2.9 Table 4-2 below sets out the assessment of each of the remaining 12 sites against the site size criterion. **Five sites** remained following application of the site size criterion.

**Table 4-2 Stage 3a - operational pre-requisites (part 2)**

Horizon Ref.	Site Name	Site Size (ha)	>0.5-1.0ha AECC and ESL only	>1.0ha MEEG or AECC and ESL	>1.5ha Combined Site	Suitable for?
J31	A5025 Site - Cefn Coch	0.63				AECC and ESL only
J22	A5025 Site - Between Llanrhuddlad And Tregele	0.51				AECC and ESL only
J3	A5025 Site - Garage At Llanrhuddlad	1.2				AECC and ESL or MEEG
J7	A5025 Site - Bus Garage At Llanfaethlu	2				Suitable for all
J24	A5025 Site - Llanfaethlu	1.05				AECC and ESL or MEEG
SP198	Land adj Bryn Glas	0.23				Less than 0.5ha
SP199	Land adj Bryn Glas	0.49				Less than 0.5ha
J21	A5025 Estate	0.3				Less than 0.5ha
J23	A5025 Estate	0.3				Less than 0.5ha
J25	A5025	0.4				Less than

Horizon Ref.	Site Name	Site Size (ha)	>0.5-1.0ha AECC and ESL only	>1.0ha MEEG or AECC and ESL	>1.5ha Combined Site	Suitable for?
	Estate					0.5ha
J6b	A5025 Site	0.43				Less than 0.5ha
SCH01	Cylch y Garn Primary School, Llanrhuddlad	0.33				Less than 0.5ha

## 5 Stage 3b assessment

### 5.1 Introduction

5.1.1 This section sets out the results of the Stage 3b compatibility assessment.

### 5.2 Assessment

5.2.1 The assessment of each of the remaining Off-Site Power Station Facilities sites against the Stage 3b compatibility criterion is set out in table 5-1. No sites were screened out on the basis of compatibility.

5.2.2 The location of the short-listed sites (those not screening out by Stage 3) is illustrated in figure Off-Site Power Station Facilities -4 ‘Stage 4 – Short-Listed Sites’ at appendix 5-1. The boundary (red line) of each short-listed site is illustrated in the plans at appendix 5-2 and 5-3.

**Table 5-1 Stage 3b - compatibility**

Horizon Ref.	Site Name	Site Size (ha)	Comments	Compatibility	Progressed to Stage 4?
J31	A5025 Site - Cefn Coch	0.63	The site is considered compatible.		Yes
J22	A5025 Site - Between Llanrhuddlad And Tregele	0.51	The site is considered compatible.		Yes
J3	A5025 Site - Garage At Llanrhuddlad	1.2	The site is considered compatible.		Yes
J7	A5025 Site - Bus Garage At Llanfaethlu	2	The site is considered compatible.		Yes
J24	A5025 Site - Llanfaethlu	1.05	The site is considered compatible.		Yes

## 6 Stage 4 detailed assessment

### 6.1 Introduction

6.1.1 This section sets out the detailed assessment of the ‘short-listed’ sites following the Stage 3 assessment. The Stage 4 assessment is based on a number of planning and environmental criteria.

### 6.2 Short-listed sites

6.2.1 Table 6-1 below provides a brief description of each of the short-listed sites.

**Table 6-1 Stage 4 - short-listed sites**

J31	A5025 SITE - CEFN COCH
<p>The site comprises approximately 0.63ha of land located to the west of the existing A5025 between Llanrhyddlad and Tregele. It is located approximately 4.8km from the Power Station Site. The size of the site means that it can only be considered for the AEGG and ESL.</p> <p>The site comprises agricultural land, with existing hedgerows and stone wall boundaries together with a small watercourse to its southern boundary. It is surrounded by agricultural land with scattered residential properties beyond. Other site features include electrical and telegraph wires which pass overhead. The site is currently accessed from an unnamed road to the north which links Llanfairynghornwy and Llanfechell.</p> <p>The land within this immediate area is subject to additional proposals to facilitate the construction of the Power Station, which relate to the proposed off-line improvements to the A5025 that involves straightening the road. This would split the site from adjacent fields, such that it would form an island between both the new road and the existing A5025.</p> <p>The site was previously proposed as a preferred site for PAC2. This included an acknowledgement that the site would be taken forward for further consultation and assessment (as set out in this report), in order to make a final decision on site selection.</p>	
J22	A5025 SITE - BETWEEN LLANRHYDDLAD AND TREGELE
<p>The site comprises approximately 0.51ha of land to the west of the existing A5025 between Llanrhyddlad and Tregele; located immediately to the south of site J31. It is located approximately 5km from the Power Station Site. The size of the site means that it can only be considered for the AEGG and ESL.</p> <p>The site comprises agricultural land, with existing hedgerows and stone wall boundaries together with a small watercourse to its northern and eastern boundaries. The site is surrounded by agricultural land together with a residential property known as Tyn Felin located immediately adjacent to the south of the site.</p> <p>At present there is no dedicated access to the site other than through Tyn Felin, the access for which is located immediately south of the site.</p> <p>The land within this immediate area is subject to additional proposals to facilitate the construction of the Power Station, which relate to the proposed off-line improvements to the A5025 that involves straightening the road. This would split the site from adjacent fields, such that it would form an island between both the new road and the existing A5025.</p>	

<b>J3</b>	<b>A5025 SITE - GARAGE AT LLANRHYDDLAD</b>
<p>The site comprises approximately 1.2ha of land located to the east of the existing A5025 between Llanfaethlu and Llanrhuddlad. It is located approximately 5.6km from the Power Station Site.</p> <p>The site comprises a commercial garage, a dwelling and agricultural field. The front part of the site is hard standing with a building and external storage area (old vehicles and equipment). The area behind the site is semi-improved or improved fields with hedgerow and wall boundary features similar to the surrounding area. The buildings are located on the north-western side of the site, immediately adjacent to the A5025.</p> <p>The overall area is predominantly sparsely populated and surrounded by agricultural land together with one dwelling to the south west of the site and two dwellings to the north east of the site (all on the A5025).</p>	
<b>J7</b>	<b>A5025 SITE - BUS GARAGE AT LLANFAETHLU</b>
<p>The site comprises approximately 2ha of land located to the east of the existing A5025 at Llanfaethlu. It is approximately 6.7km from the Power Station Site.</p> <p>The site comprises existing commercial garages and workshops together with associated hard standing which are used as a bus depot and associated motor maintenance facilities in conjunction with the running of the business.</p> <p>The site is predominately hard standing with the exception of the two large industrial style buildings and sits within an area that is at a lower elevation than the surrounding area. In terms of screening, the site benefits from scattered planting to its northern boundary together with bunding (mounds) around the eastern and southern sides of the site boundaries.</p> <p>The site is bordered by agricultural land to the east and residential development to either side along the A5025 frontage. A primary school is located approximately 120m to the south-west of the site on the western side of the existing A5025.</p> <p>The site was previously proposed as a preferred site for PAC2. This included an acknowledgement that the site would be taken forward for further consultation and assessment (as set out in this report), in order to make a final decision on site selection.</p>	
<b>J24</b>	<b>A5025 SITE – LLANFAETHLU</b>
<p>The site comprises 1.05ha of land located to the east of the existing A5025 at Llanfaethlu. It is located approximately 6.9km (radius) from the Power Station Site.</p> <p>The site comprises part of an agricultural field, set back from the A5025 and is bounded by agricultural land to the east and south. To the north of the site is ribbon residential development on the A5025 frontage before reaching site J7. At present there is no dedicated vehicular access to the site.</p> <p>The land within this immediate area is subject to additional proposals to facilitate the construction of the Power Station, which relate to the proposed off-line improvement to the A5025 that involves alterations to key sections of the network.</p>	

## 6.3 RAG assessment

6.3.1 The assessment of each short-listed site is set out (in full) in the tables at appendix 6-1 to 6-5. Table 6-2 on the following page summarises the RAG assessment of each site, including RAG ratings and a brief commentary.

Table 6-2 Stage 4 - RAG assessment (summary)

Site	RAG Assessment Summary																	
	1. Previously developed	2. Flood risk	3. Living conditions	4. Access	5. Ground conditions	6. National landscape	7. Local environmental	8. National environmental	9. Heritage assets	10. Mineral safeguarding	11. Agricultural land	12. Visual impact	13. Shape	14. Consultation	15. Welsh language	16. Availability	17. Viability	Commentary
J31 A5025 Cefn Coch	Red	Green	Green	Green	Green	Green	Green	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Red	Yellow	Green	Yellow	Greenfield site. No environmental or landscape designations that would restrict its use/development. No immediate residential properties and direct unimpeded access from the A5025 Site is not within Horizon ownership. In terms of consultation feedback, IACC has previously questioned the rationale for locating the AECC and ESL at the site, rather than using a previously developed site. There were mixed views from the general public regarding use of the site.
J22 Land between Llanrhuddlad and Tregele	Red	Red	Red	Green	Green	Green	Yellow	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Greenfield site. No environmental or landscape designations that would restrict its use/development The proposed development would be sited in close proximity to a residential property, which could be affected by construction and operational activities. In terms of consultation feedback, there were mixed views about the site from the general public. Highways access to the site is impeded as a result of the existing road alignment along the A5025. The site is known to be available on reasonable commercial terms.
J3 Garage at Llanrhuddlad	Yellow	Green	Red	Yellow	Green	Green	Green	Green	Green	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Predominantly greenfield with a small garage on site. No environmental or landscape designations that would restrict its use/development. The site is situated in close proximity to residential properties, which would need to be considered in terms of potential impacts. Direct unimpeded access from the A5025. Site is not within Horizon ownership.
J7 Bus Garage at Llanfaethlu	Yellow	Green	Red	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Yellow	Green	Yellow	Green	Yellow	Yellow	Predominantly previously developed site. No environmental or landscape designations that would restrict its use/development. Potential for protected species and ecological features. The site is situated in close proximity to residential properties, which would need to be considered in terms of potential impacts. A primary school is located approximately 120m to the south-west of the site on the western side of the existing A5025. Direct unimpeded access from the A5025. In terms of consultation feedback, IACC has previously expressed support for development of the MEEG at the site. Some members of the general public also expressed support for the site. The site is known to be available on reasonable commercial terms.
J24 A5025 site Llanfaethlu	Red	Green	Red	Green	Green	Green	Yellow	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Greenfield site. No environmental or landscape designations that would restrict its use/development. The site is situated in close proximity to residential properties, which would need to be considered in terms of potential impacts Direct unimpeded access from the proposed re-alignment of the A5025. Site is not within Horizon ownership.

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## 6.4 Final comparative analysis

6.4.1 The final comparative assessment is divided into the following sub-sections:

- AECC and ESL – considers J22 and J31 only, as these sites are less than 1ha in size and are therefore of sufficient size to accommodate the AECC and ESL only;
- AECC and ESL or MEEG – considers J3, J7 and J24, as these sites are all in excess of 1ha and are therefore of sufficient size to accommodate the AECC and ESL or MEEG; and
- Combined Site – considers J7 only, as this is the only site in excess of 1.5ha and therefore of sufficient size of operate as a Combined Site (co-locating the AECC, ESL and MEEG).

6.4.2 The assessment has been divided in this manner to reflect that the sites are of differing sizes and are able to accommodate differing levels of infrastructure. This is in accordance with the Stage 3a size criterion.

### ***AECC and ESL***

6.4.3 J31 has nine green rating, six amber and two red. J22 has nine green ratings, seven amber and one red. The sites are therefore fairly equal when considering RAG ratings; although J22 fares slightly better on the basis of having one less red rating.

6.4.4 There are material considerations that support the use of site J31. These include a preferable alignment in terms of highways access and the location of the site further away from the residential properties. However, J31 has a red rating for its greenfield status, for which it received negative feedback from IACC at PAC2 (a further red rating). It is also approximately 300 m from a SSSI. The Welsh Government also raised concerns at PAC2 regarding the loss of Best and Most Versatile (BMV) agricultural land if this site were to be developed. There would also be potential visual impacts with views into and out of the AONB.

6.4.5 Site J22 is also a greenfield site. It is not subject to any environmental or landscape designations that would restrict its use/development, although it is 300m from a SSSI. It is sited in close proximity to a residential property, which could be affected by construction and operational activities; although it is considered that through appropriate design and management, any adverse impact could be mitigated. The highway access to the site is suboptimal, given existing road alignment along the A5025. In terms of consultation, concern was raised by consultees at PAC2 with regards to the visual impact.

### ***AECC and ESL or MEEG***

6.4.6 J3 has nine green ratings, seven amber and one red. J7 has 11 green ratings, five amber and one red. J24 has nine green ratings, six amber and two red. J7 therefore rates the best out of all the short-listed sites when

considering RAG ratings. It benefits from more green ratings and less red rating than any other site, and is the only site that benefits from being predominantly previously developed. J3 and J24 are comparable in terms of their RAG ratings; although J3 fares comparatively better than J24 on the basis that it has one less red rating (due to being partially previously developed).

- 6.4.7 Site J3 contains an existing commercial garage; however this element of previously developed land only constitutes a small part of the predominantly greenfield site. The site has direct access to the A5025, which weighs in its favour. However, the site is constrained by ground conditions, potential impact on residential properties (although impacts could be mitigated through appropriate design and management), and proximity to the AONB. Unlike J31 and J22, however, the site is not located in close proximity to a SSSI.
- 6.4.8 Site J7 is the only short-listed that is predominantly previously developed land. It comprises commercial garages and workshops with associated hardstanding. Significant weight has been attached to the previously developed status; particularly in light of feedback received from key stakeholders at PAC2 (raising concerns about the alternative, greenfield sites). There is direct unimpeded access from the A5025. However, as is the case with all other sites, there are potential impacts in terms of views into and out of the AONB. As with J3, the site is not situated in close proximity to a SSSI. Due to its use as a garage, it is considered that minor remediation may be required, although this is not viewed as prohibitive. The site is located in close proximity to residential properties and a primary school is located approximately 120m to the south-west of the site on the western side of the existing A5025; however, it is considered that any potential impacts could be mitigated through appropriate design and management.
- 6.4.9 Further assessment work carried out by Horizon has determined that (i) part of J7 lies within low, medium and high surface water (pluvial) flood risk zones; and (ii) there is potentially a greater risk of fluvial flooding, albeit still low, than is suggested by the DAM. It should be noted, however, that the pluvial flood risk zones do not fall within Zones A-C for the purposes of TAN 15. Furthermore, that the DAM indicates that the site is situated within the lowest risk zone when considering fluvial flooding (Zone A).
- 6.4.10 Notwithstanding the above, the status of J7 as predominantly previously developed weighs significantly in its favour and it is considered that the flood risk can be mitigated through design. The Flood Consequences Assessment carried out in relation to the site concludes that the inclusion of a swale and drainage features to capture and manage surface water flows through the site ensures that there would be no risk of flooding to the Off-Site Power Station Facilities from any source and that there would be minor benefits downstream. Please refer to ES Volume E – Power Station Off-site Facilities: AEE, ESL and MEEG App E8.01 – Flood Consequences Assessment (Application Reference Number: 6.5.16) for further detail.

6.4.11 Site J24 is an undeveloped greenfield site with limited surface water flood risk; however, aside from this, it is broadly comparable to J7 in terms of other planning and environmental issues.

### **Combined Site**

6.4.12 As explained previously in this report, due to a review of its requirements following on from PAC2, Horizon was able to consider the potential for combining the Off-Site Power Station Facilities on a single Combined Site. This would have the benefit of reducing the number of development sites required for the Wylfa Newydd DCO Project, in addition to the operational advantages gained by locating all staff and facilities in one location.

6.4.13 J3, J22, J24 and J31 are not large enough to be considered as a Combined Site. J7 (at approximately 2ha) is the only site large enough to be considered. The assessment of J7 under ‘AECC/ESL or MEEG’ is applicable to its consideration as a Combined Site. J7 rates comparatively well; in that is benefits from 12 green ratings and no red ratings. Importantly, it should also be considered that it is the only site that is predominantly previously developed.

## **6.5 Conclusion**

6.5.1 Horizon considers that locating the AECC, ESL and MEEG on a Combined Site at J7 Llanfaethlu is the most appropriate and suitable solution. J7 is a previously developed site and this is afforded significant weight, particularly in light of the alternative sites which are entirely/predominantly greenfield. The consolidation of all Off-Site Power Station Facilities on a Combined Site would reduce the overall land take and makes better use of available land. There was also general support for J7 during consultation and concern regarding the alternative greenfield sites.

6.5.2 At PAC2, it was not clear that J7 was available for the AECC/ESL in addition to the MEEG because the initial assumed countermeasure zone for AECC and ESL sites was no more than 5km from the Power Station Site. However, upon further review and discussion with ONR, Horizon is confident that such facilities can be located up to 7.5km from the Power Station Site. Therefore, the assumed countermeasure zone was increased to 7.5km and site J7 became potentially available as a combined site for Off-Site Power Station Facilities. The Stage Two Pre-Application Consultation (PAC3) feedback largely accepted that it makes operational sense to house all of the OSPFs on a Combined Site; although there were concerns regarding potential impact on nearby residential properties.

6.5.3 Horizon has carried out detailed flood risk modelling for the site to understand further the potential for pluvial and fluvial flooding. This modelling has provided the evidence required to demonstrate that flood risk can be managed. A mitigation solution designed for both pluvial and fluvial risk has subsequently been developed to demonstrate that flood risk can be managed, in order that the risk from flooding is considered acceptable. Please refer to the Flood Consequence Assessment submitted with the DCO

application for more detail (ES Volume E – Power Station Off-site Facilities: AEE, ESL and MEEG App E8.01 – Flood Consequences Assessment) (Application Reference Number: 6.5.16).

- 6.5.4 Horizon has also considered commercial matters in addition to operational, planning and environmental considerations. Most notably, the availability of land for lease or purchase and commercial viability. Horizon has agreed terms with the landowner of J7 and its development as a Combined Site can be accommodated.
- 6.5.5 On balance, having regard to the above considerations, J7 has been selected for use as a Combined Site. It rates the most highly when considering the RAG assessment and the comparative assessment has demonstrated that it is the most suitable site and a Combined Site is the best solution.

## 7 Summary and conclusion

7.1.1 It is concluded that Horizon will accommodate the AECC/ESL and MEEG on a Combined Site at J7 Llanfaethlu. The site has been selected for the following reasons:

- J7 is the only short-listed (predominantly) previously developed site, comprising commercial garages and workshops with associated hardstanding. Significant weight has been attached to this point, particularly in light of feedback received from key stakeholders at PAC2 raising concerns about alternative greenfield sites;
- J7 has direct access from the A5025;
- the consolidation of all Off-Site Power Station Facilities onto one site would reduce the number of development sites and makes better use of the available land. It would also reduce the more widespread highways and social impacts potentially created by separate Off-Site Power Station Facilities sites; and
- although part of the site lies within a low, medium and high surface water flood risk zones (pluvial) and a higher risk fluvial zone that the DAM suggests, it is considered that this can be mitigated through design.

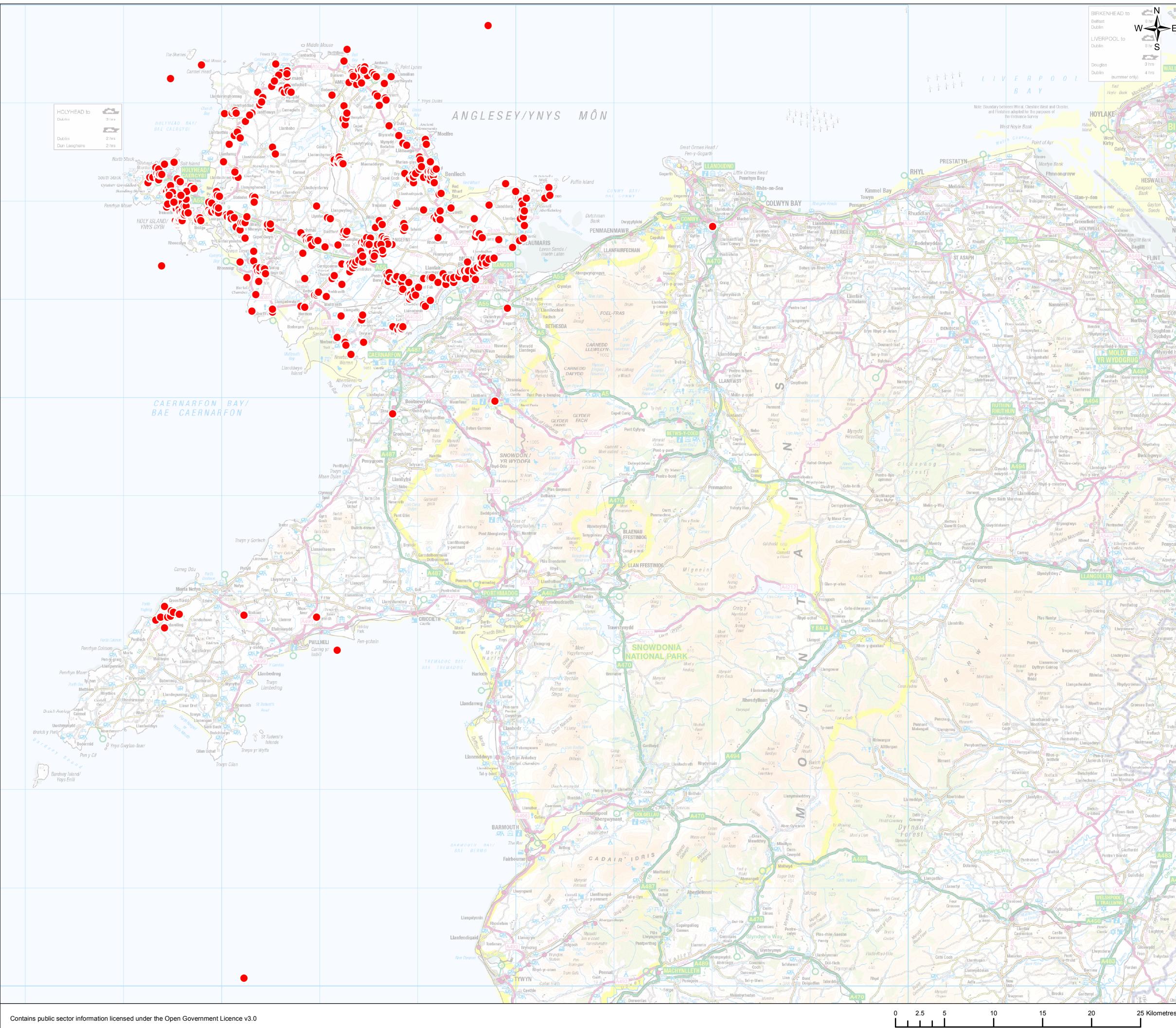
## 8 References

ID	Reference
RD1	The Planning Act 2008. 2008. [Online]. [Accessed: 22 January 2018]. Available from: <a href="https://www.legislation.gov.uk/ukpga/2008/29/contents">https://www.legislation.gov.uk/ukpga/2008/29/contents</a> .
RD2	Office for Nuclear Regulation. 2017. <i>UK Advanced Boiling Water Reactor (UK ABWR)</i> . [Online]. [Accessed: 22 January 2018]. Available from: <a href="http://www.onr.org.uk/new-reactors/uk-abwr/index.htm">http://www.onr.org.uk/new-reactors/uk-abwr/index.htm</a> .
RD3	Department of Energy and Climate Change. 2011. <i>Overarching National Policy Statement for Energy (EN-1)</i> . [Online]. [Accessed: 22 January 2018]. Available from: <a href="https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure">https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure</a> .
RD4	Department of Energy and Climate Change. 2011. <i>The National Policy Statement (NPS) for Nuclear Power Generation (EN-6)</i> . [Online]. [Accessed: 22 January 2018]. Available from: <a href="https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure">https://www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure</a> .
RD5	Welsh Government. 2016. <i>Planning Policy Wales Edition 9, November 2016</i> . [Online]. [Accessed: 22 January 2018]. Available from: <a href="http://gov.wales/topics/planning/policy/ppw/?lang=en">http://gov.wales/topics/planning/policy/ppw/?lang=en</a> .
RD6	Isle of Anglesey County Council, Gwynedd Council. 2017. <i>Anglesey and Gwynedd Joint Local Development Plan 2017</i> . [Online]. [Accessed: 22 January 2018]. Available from: <a href="http://www.anglesey.gov.uk/planning-and-waste/planning-policy/joint-local-development-plan-anglesey-and-gwynedd/">http://www.anglesey.gov.uk/planning-and-waste/planning-policy/joint-local-development-plan-anglesey-and-gwynedd/</a> .
RD7	Welsh Government. 2004. <i>Technical Advice Note (TAN) 15: Development and Flood Risk (2004)</i> . [Online]. [Accessed: 22 January 2018]. Available from: <a href="http://gov.wales/topics/planning/policy/tans/tan15/?lang=en">http://gov.wales/topics/planning/policy/tans/tan15/?lang=en</a> .

**Appendix 4-1    Figure Off-Site Power Station  
Facilities -1 ‘Stage 1 - Long-List  
Sites’**

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**FIGURE OPSF-1**



Rev.	NOV 17	Initial Issue	AD	JBG	SL	SM					
Client		Purpose of revision									
Project		WYLFA NEWYDD PROJECT SITE SELECTION									
Drawing Title											
STAGE 1 - LONG-LIST SITES											
Scale @ A3	1:375,000	DO NOT SCALE									
Jacobs No.	60PO8077										
Client No.											
Drawing No.	60PO8077_DCO_SS_OPSF_01										

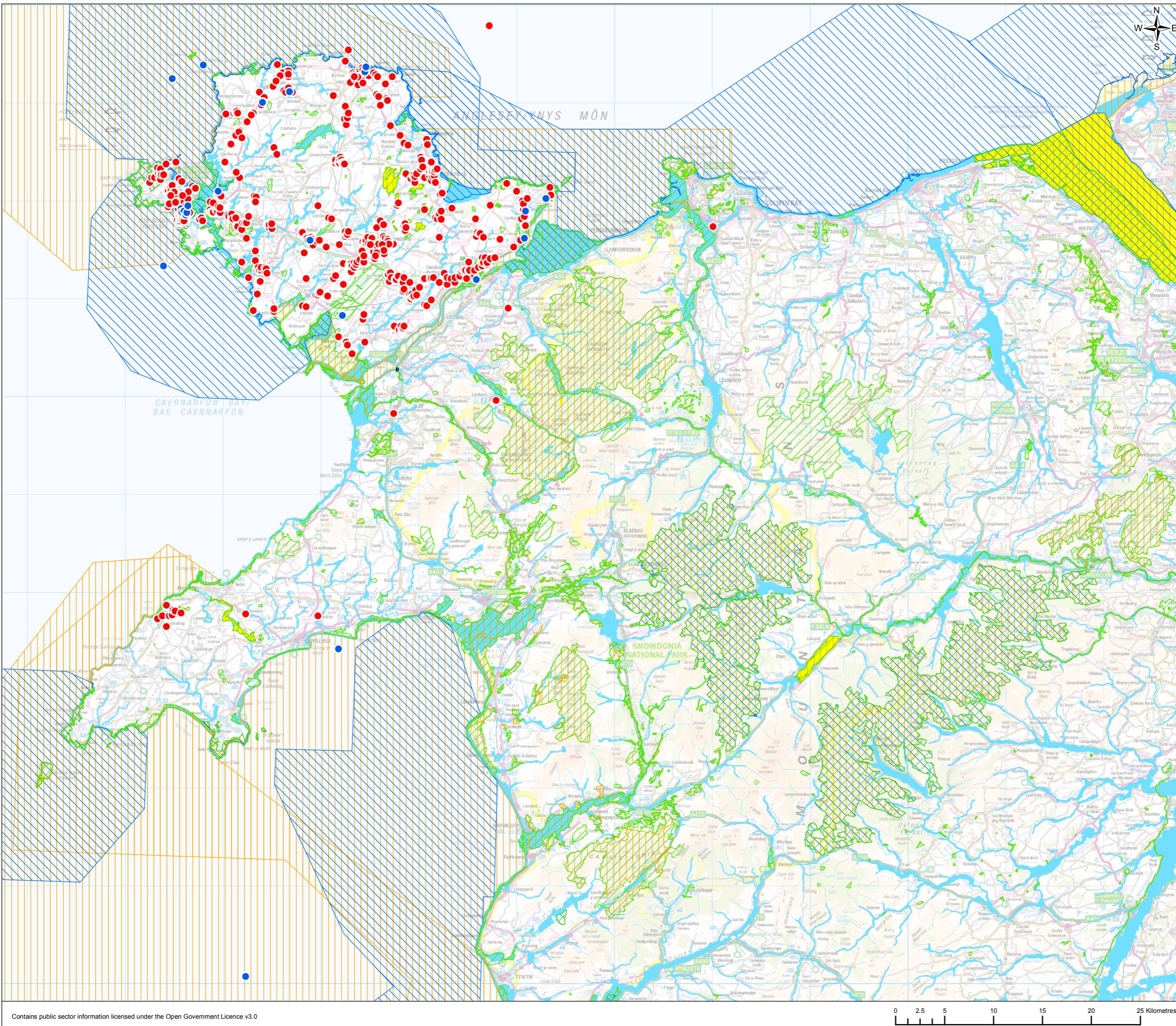
This drawing is not to be used in whole or in part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.

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**Appendix 4-2    Figure Off-Site Power Station  
Facilities -2 ‘Stage 2 – Key  
Environmental Constraints’**

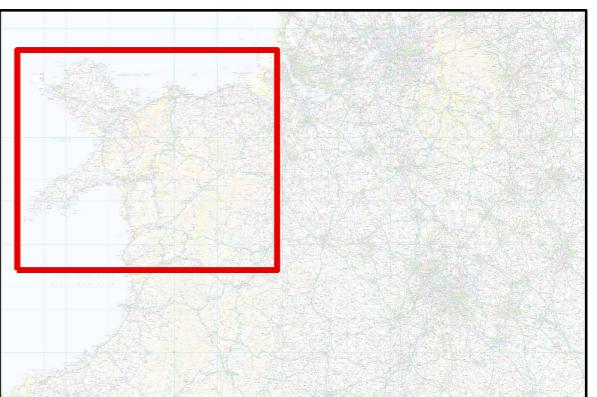
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**FIGURE OPSF-2**



**Legend**

- Identified site
- Site no longer suitable
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- Ramsar
- TAN15 Flood Zone C2
- World Heritage Site



0	NOV 17	Initial Issue	AD	JBG	SL	SM
Rev.	Date	Purpose of revision	Drawn	Check'd	Rev'd	App'r'd
Client						
<b>HORIZON</b> NUCLEAR POWER						
Project						
WYLFA NEWYDD PROJECT SITE SELECTION						
Drawing Title						
STAGE 2 – KEY ENVIRONMENTAL CONSTRAINTS						
Scale @ A3	1:375,000	DO NOT SCALE				
Jacobs No.	60PO8077					
Client No.						
Drawing No.	60PO8077_DCO_SS_OPSF_02					

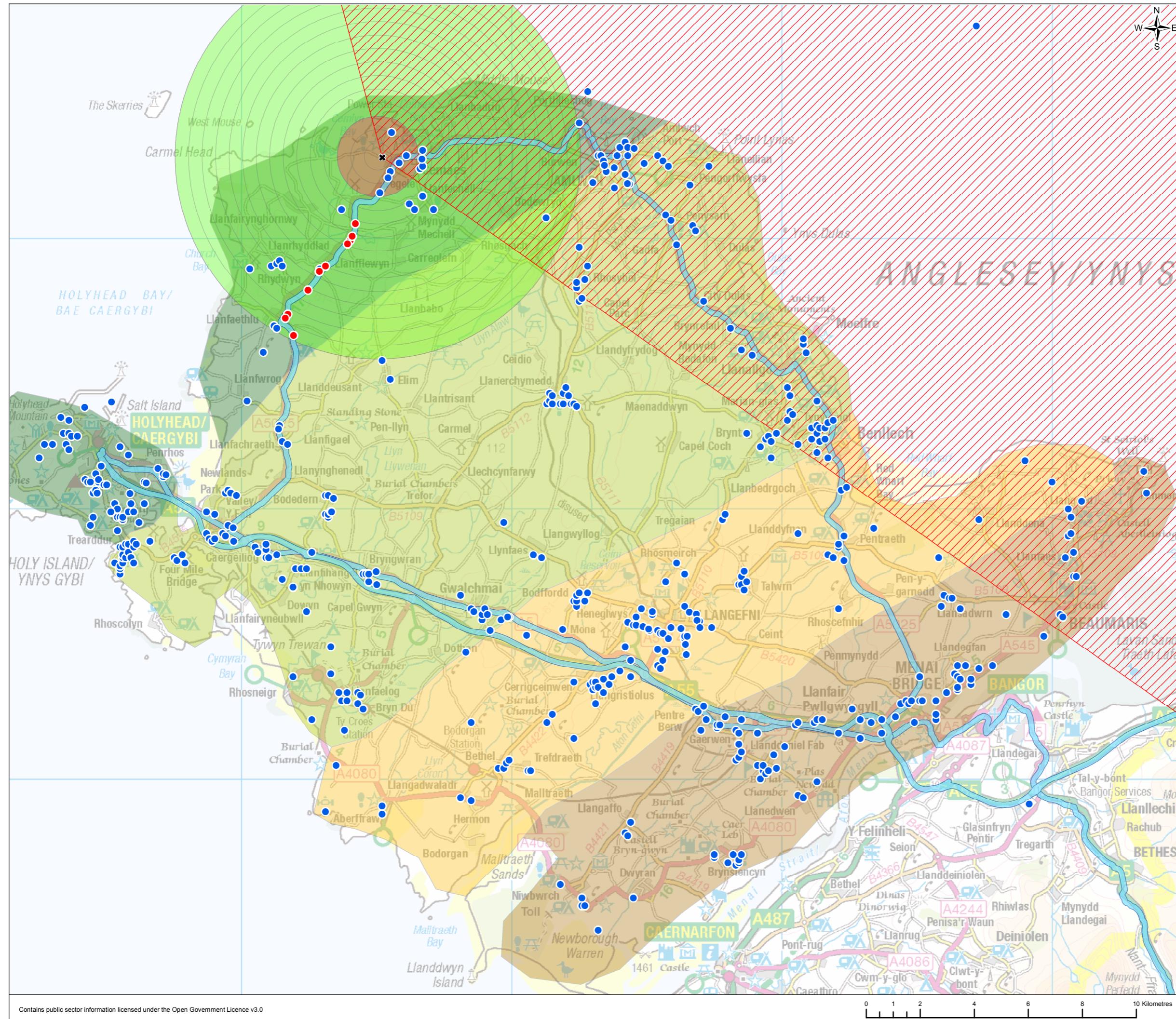
This drawing is not to be used in whole or in part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.

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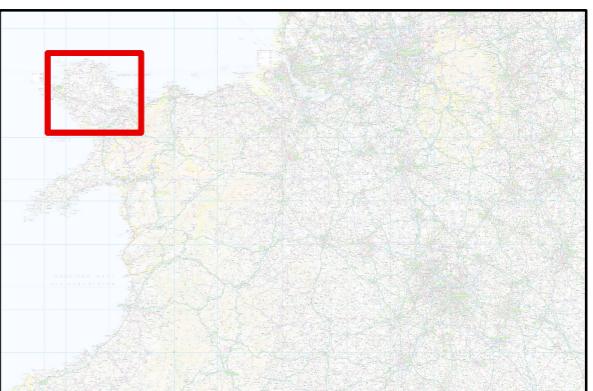
**Appendix 4-3    Figure OPS Off-Site Power Station  
Facilities F-3 ‘Stage 3a – Operational  
Pre-Requisites’**

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FIGURE OPSF-3



Legend	
●	Identified site
●	Site no longer suitable
✖	Wind Exclusion Zone Southern Point
▨	Wind Exclusion Zone
■	A5025, A55 and A5 100m Buffer
■	0 - 1.5km Zone
■	1.5 - 7.5km Zone
Seismic Zone Category	
■	PGS (g) 0.02 - 0.04
■	PGS (g) 0.04 - 0.06
■	PGS (g) 0.06 - 0.08
■	PGS (g) 0.08 - 0.10



0	NOV 17	Initial Issue	AD	JBG	SL	SM
Rev.	Date	Purpose of revision	Drawn	Check'd	Rev'd	App'd
Client						
HORIZON						
NUCLEAR POWER						
Project						
WYLFA NEWYDD PROJECT SITE SELECTION						
Drawing Title						
STAGE 3A – OPERATIONAL PRE-REQUISITES						
Scale @ A3	1:135,000	DO NOT SCALE				
Jacobs No.	60PO8077					
Client No.						
Drawing No.	60PO8077_DCO_SS_OPSF_03					

This drawing is not to be used in whole or in part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.

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## **Appendix 5-1**

### **Figure Off-Site Power Station Facilities -4 ‘Stage 4 – Short-Listed Sites’**

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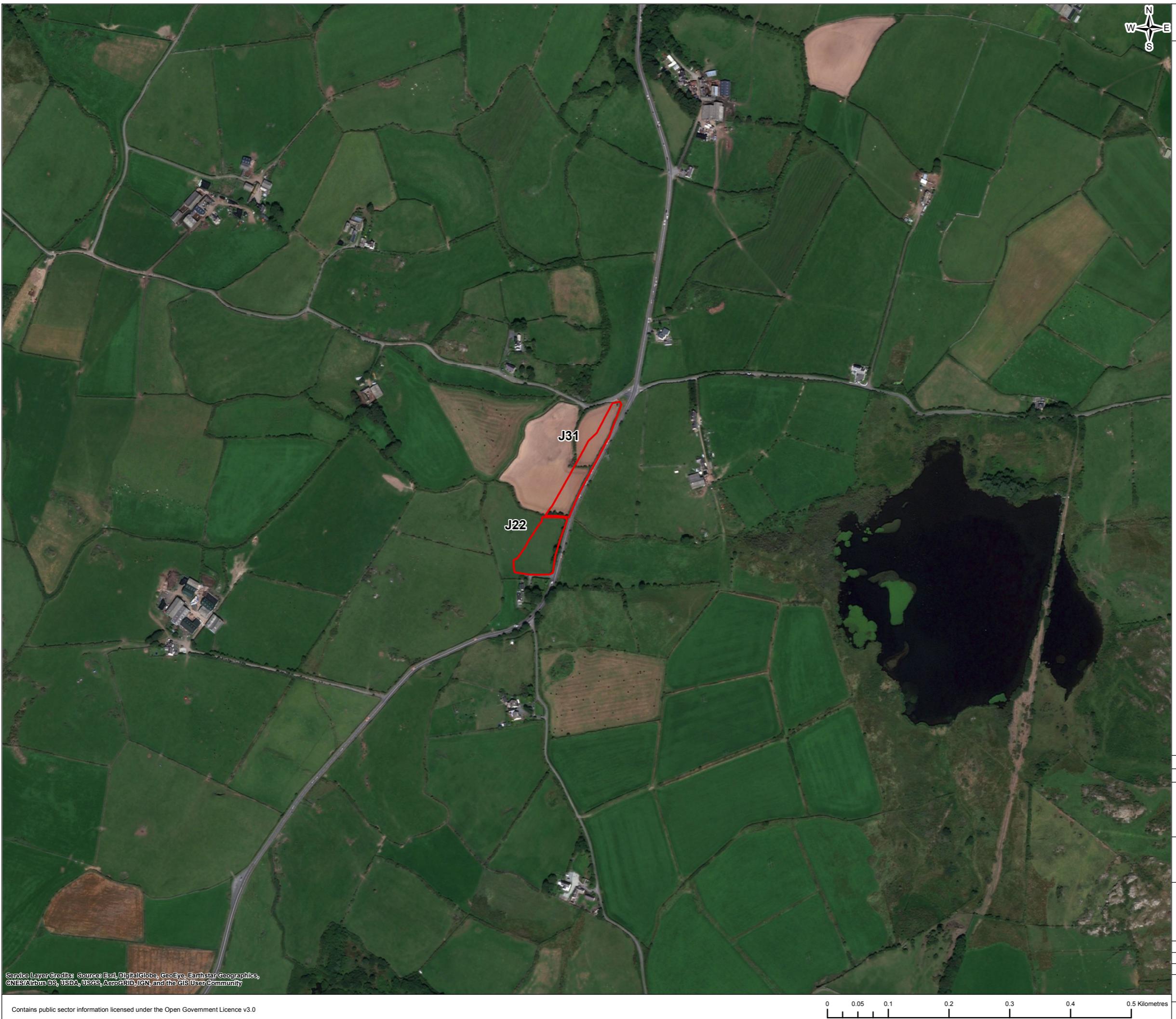
## FIGURE OPSF-4

Nov 17	Initial Issue	AD	JBG	SL	SM
Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'
Client					
Project					
Drawing Title					
STAGE 4 – SHORT-LISTED SITES					
Scale @ A3	1:35,000	DO NOT SCALE			
Job No.	60PO8077				
Client No.					
Drawing No.	60PO8077_DCO_SS_OPSF_04				
This drawing is not to be used in whole or in part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.					

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**Appendix 5-2      Figure OPSF-A1 ‘Shortlisted Sites  
J22 and J31’**

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**FIGURE OPSF-A1****Legend** Site Boundary**Note:**

The boundaries shown here are for the purposes of identifying the sites assessed during the site selection process only. There may therefore be inconsistencies with other DCO drawings and they should not be used for any other purpose.



0	JAN 18	Initial Issue	AD	JBG	SL	SM
Rev.	Date	Purpose of revision	Drawn	Check'd	Rev'd	App'r'd
Client						
Project						
WYLFA NEWYDD PROJECT SITE SELECTION						
Drawing Title						
OFF-SITE POWER STATION FACILITY SHORTLISTED SITES J22 AND J31						
Scale @ A3	1:6,000	DO NOT SCALE				
Jacobs No.	60PO8077					
Client No.						
Drawing No.	60PO8077_DCO_SS_OPSF_A01					
This drawing is not to be used in whole or in part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.						

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**Appendix 5-3      Figure OPSF-A2 ‘Shortlisted Sites  
J3, J7 and J24’**

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## FIGURE OPSF-A2



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## **Appendix 6-1 Stage 4: J31 A5025 Cefn Coch**

Criteria	RAG rating	Assessment	Comments
1 Previously Developed	<ul style="list-style-type: none"> <li>• All/majority of the site is previously developed land (<b>green</b>)</li> <li>• Part of the site is previously developed land (<b>amber</b>).</li> <li>• None/minority of the site is previously developed land (<b>red</b>)</li> </ul>		The site is greenfield land.
2 Flood risk	<ul style="list-style-type: none"> <li>• Low risk (A) (<b>green</b>)</li> <li>• Medium risk (B) (<b>amber</b>)</li> <li>• High risk (C) (<b>red</b>)</li> </ul>		Flood Zone A (Low Risk).
3 Living Conditions	<ul style="list-style-type: none"> <li>• Unlikely to result in a significant adverse effect (<b>green</b>)</li> <li>• Potential to result in significant adverse effect (<b>amber</b>)</li> <li>• Likely significant adverse effect (<b>red</b>)</li> </ul>		The site is generally remote.
4 Access	<ul style="list-style-type: none"> <li>• No known constraints (<b>green</b>)</li> <li>• Minor constraints (<b>amber</b>)</li> <li>• Major constraints (<b>red</b>)</li> </ul>		<p>The existing A5025 runs immediately to the east of the site.</p> <p>As part of the wider Project the proposed off line highway improvements would run immediately to the west of the site, creating a central island of land in which the site sits.</p> <p>Consequently access to the site would need to be from the existing A5025.</p>
5 Ground conditions	<ul style="list-style-type: none"> <li>• Negligible contamination or instability likely (<b>green</b>)</li> </ul>		Due to the sites greenfield nature it is unlikely any notable remediation will be required.

### J31 A5025 Cefn Coch

Criteria	RAG rating	Assessment	Comments
	<ul style="list-style-type: none"> <li>Minor contamination or instability likely (amber)</li> <li>Major contamination or instability likely (red)</li> </ul>		
6 National landscape designations	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (green)</li> <li>Adjacent (amber)</li> <li>Within designation (red)</li> </ul>		Potential views into and out of the AONB. However, there are no specific landscape designations affecting the site.
7 Local environmental designations	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (green)</li> <li>Adjacent (amber)</li> <li>Within designation (red)</li> </ul>		None within or adjacent to the site.
8 National or international environmental designations (not including landscape)	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (green)</li> <li>Adjacent (amber)</li> <li>Within designation (red)</li> </ul>		Undeveloped agricultural land. No specific environmental designations. Llyn Llygeirian SSSI located 300m east of site
9 Designated heritage assets	<ul style="list-style-type: none"> <li>Not affected (green)</li> <li>Setting affected (amber)</li> <li>Directly affected (red)</li> </ul>		Cefn Coch Grade II listed building located 500m to the north of the site, though due to areas topography this is unlikely to be affected.
10 Mineral safeguarding	<ul style="list-style-type: none"> <li>Not within safeguarded area (green)</li> </ul>		No sites identified within the Gwynedd and Anglesey Joint Local Development Plan

Criteria	RAG rating	Assessment	Comments
	<ul style="list-style-type: none"> <li>Partially within safeguarded area (amber)</li> <li>Wholly within safeguarded area (red)</li> </ul>		
11 Agricultural Land Classification	<ul style="list-style-type: none"> <li>Grade 4 or 5 (green)</li> <li>Grade 3 (amber)</li> <li>Grade 1 or 2 (red)</li> </ul>		The site is classified as Grade 3.
12 Visual impact	<ul style="list-style-type: none"> <li>Negligible/minor visual impact likely (green)</li> <li>Moderate impact likely (amber)</li> <li>Major impact likely (red)</li> </ul>		<p>The site slopes from north to south and sits within an open countryside location.</p> <p>The nearest properties to the south and north-east would overlook the development from a raised elevation.</p> <p>Potential views into and out of the AONB. However, there are no specific landscape designations affecting the site.</p>
13 Does the shape of the site constrain development?	<ul style="list-style-type: none"> <li>No – ample space for all development (green)</li> <li>Possible – irregular shape but reasonable available space (Amber)</li> <li>Yes – irregular shape and close to site size criterion limit (red)</li> </ul>		<p>The site is narrow and therefore has limited opportunities to arrange any potential development.</p>
14 Consultation feedback	<ul style="list-style-type: none"> <li>Largely positive (green)</li> <li>Balanced feedback or no feedback received (amber)</li> </ul>		<p>IACC questioned the rationale for locating the AECC/ESL on the greenfield site at J31, rather than a previously developed site.</p> <p>There were mixed views about J31 and the potential alternative site at Llanrhuddlad from members of the public, with the most frequent concern relating to the potential</p>

Criteria	RAG rating	Assessment	Comments
15 Would the site adversely impact Welsh language and culture?	<ul style="list-style-type: none"> <li>Largely negative (red)</li> </ul>		<p>negative visual impact on the surrounding area and the Island as a whole.</p> <p>The site is not situated within a settlement and there would be suitable facilities available on-site.</p>
16 Is the site available?	<ul style="list-style-type: none"> <li>Unlikely to result in a significant adverse effect (green)</li> <li>Potential to result in significant adverse effect (amber)</li> <li>Likely significant adverse effect (red)</li> </ul>		<p>The site is known to be available on reasonable commercial terms.</p>
17 Commercial viability	<ul style="list-style-type: none"> <li>Good viability(green)</li> <li>Moderate viability (amber)</li> <li>Poor viability(red)</li> </ul>		<p>Not known.</p>

## **Appendix 6-2    Stage 4: J22 Land between Llanrhyddlad and Tregele**

## J22 Land between Llanrhuddlad and Tregell

Criteria	RAG rating	Assessment	Comments
1 Previously Developed	<ul style="list-style-type: none"> <li>All/majority of the site is previously developed land (<b>green</b>)</li> <li>Part of the site is previously developed land (<b>amber</b>).</li> <li>None/minority of the site is previously developed land (<b>red</b>)</li> </ul>		The site is greenfield land.
2 Flood risk	<ul style="list-style-type: none"> <li>Low risk (A) (<b>green</b>)</li> <li>Medium risk (B) (<b>amber</b>)</li> <li>High risk (C) (<b>red</b>)</li> </ul>		Flood Zone A (Low Risk)
3 Living Conditions	<ul style="list-style-type: none"> <li>Unlikely to result in a significant adverse effect (<b>green</b>)</li> <li>Potential to result in significant adverse effect (<b>amber</b>)</li> <li>Likely significant adverse effect (<b>red</b>)</li> </ul>		<p>The site is generally remote. However, there is a residential property situated in close proximity to the south. Given the proximity of the property, traffic movements and construction activities need to be taken into account. However, it is considered that these impacts would be capable of mitigation through the design and siting of the facilities.</p>
4 Access	<ul style="list-style-type: none"> <li>No known constraints (<b>green</b>)</li> <li>Minor constraints (<b>amber</b>)</li> <li>Major constraints (<b>red</b>)</li> </ul>		<p>The existing A5025 runs immediately to the east of the site. As part of the wider Project the proposed off line highway improvements would run immediately to the west of the site, creating a central island of land in which the site sits. Consequently access to the site would need to be from the existing A5025. This raises some concern in terms of the existing highway alignment given the proximity of a bend immediately to the south of the site, which would give rise to potential highway safety concerns.</p>

## J22 Land between Llanrhuddlad and Tregell

Criteria	RAG rating	Assessment	Comments
5 Ground conditions	<ul style="list-style-type: none"> <li>Negligible contamination or instability likely (green)</li> <li>Minor contamination or instability likely (amber)</li> <li>Major contamination or instability likely (red)</li> </ul>		Due to the sites greenfield nature it is unlikely any notable remediation will be required.
6 National landscape designations	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (green)</li> <li>Adjacent (amber)</li> <li>Within designation (red)</li> </ul>		Potential views into and out of the AONB. However, there are no specific landscape designations affecting the site.
7 Local environmental designations	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (green)</li> <li>Adjacent (amber)</li> <li>Within designation (red)</li> </ul>		None within or adjacent to the site.
8 National or international environmental designations (not including landscape)	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (green)</li> <li>Adjacent (amber)</li> <li>Within designation (red)</li> </ul>		Undeveloped agricultural land. No specific environmental designations. Llyn Llygeirian SSSI located approximately 300m east of site
9 Designated heritage assets	<ul style="list-style-type: none"> <li>Not affected (green)</li> <li>Setting affected (amber)</li> </ul>		Cefn Coch Grade II listed building located approximately 750m to the north of the site, though due to areas topography this is unlikely to be affected.

## J22 Land between Llanrhuddlad and Tregel

Criteria	RAG rating	Assessment	Comments
10 Mineral safeguarding	<ul style="list-style-type: none"> <li>Directly affected (<b>red</b>)</li> <li>Not within safeguarded area (<b>green</b>)</li> <li>Partially within safeguarded area (<b>amber</b>)</li> <li>Wholly within safeguarded area (<b>red</b>)</li> </ul>	No sites identified within the Gwynedd and Anglesey Joint Local Development Plan	
11 Agricultural Land Classification	<ul style="list-style-type: none"> <li>Grade 4 or 5 (<b>green</b>)</li> <li>Grade 3 (<b>amber</b>)</li> <li>Grade 1 or 2 (<b>red</b>)</li> </ul>	The site is classified as Grade 4.	
12 Visual impact	<ul style="list-style-type: none"> <li>Negligible/minor visual impact likely (<b>green</b>)</li> <li>Moderate impact likely (<b>amber</b>)</li> <li>Major impact likely (<b>red</b>)</li> </ul>	<p>The site is generally flat and located in the open countryside. Development would be in close proximity to the property to the south. The property to the north-east would overlook the development from a raised elevation.</p> <p>Potential views into and out of the AONB. However, there are no specific landscape designations affecting the site.</p>	
13 Does the shape of the site constrain development?	<ul style="list-style-type: none"> <li>No – ample space for all development (<b>green</b>)</li> <li>Possible – irregular shape but reasonable available space (<b>Amber</b>)</li> <li>Yes – irregular shape and close to site size criterion limit (<b>red</b>)</li> </ul>	The site is narrow and therefore has limited opportunities to arrange any potential development.	
14 Consultation feedback	<ul style="list-style-type: none"> <li>Largely positive (<b>green</b>)</li> </ul>	There were mixed views about the proposals at Llanrhuddlad from members of the public, with the most frequent concern	

## J22 Land between Llanrhuddlad and Tregell

Criteria	RAG rating	Assessment	Comments
	<ul style="list-style-type: none"> <li>Balanced feedback or no feedback received (amber)</li> <li>Largely negative (red)</li> </ul>		relating to the potential negative visual impact on the surrounding area and the Island as a whole.
15 Would the site adversely impact Welsh language and culture?	<ul style="list-style-type: none"> <li>Unlikely to result in a significant adverse effect (green)</li> <li>Potential to result in significant adverse effect (amber)</li> <li>Likely significant adverse effect (red)</li> </ul>		The site is not situated within a settlement and there would be suitable facilities available on-site.
16 Is the site available?	<ul style="list-style-type: none"> <li>Available – held by developer/ willing owner/ public sector/on the market (green)</li> <li>Unknown (amber)</li> <li>Unavailable – complex/multiple ownership or subject to ransom strip (red)</li> </ul>		The sites availability is unknown.
17 Commercial viability	<ul style="list-style-type: none"> <li>Good viability(green)</li> <li>Moderate viability (amber)</li> <li>Poor viability(red)</li> </ul>		Not known.

## **Appendix 6-3   Stage 4: J3 Garage at Llanrhyddlad**

### J3 Garage at Llanrhuddlad

Criteria	RAG rating	Assessment	Comments
1 Previously Developed	<ul style="list-style-type: none"> <li>• All/majority of the site is previously developed land (green)</li> <li>• Part of the site is previously developed land (yellow).</li> <li>• None/minority of the site is previously developed land (red).</li> </ul>		The site has a small portion of previously developed land in the form of a commercial garage; however the majority of the site is greenfield land.
2 Flood risk	<ul style="list-style-type: none"> <li>• Low risk (A) (green)</li> <li>• Medium risk (B) (yellow)</li> <li>• High risk (C) (red)</li> </ul>		Flood Zone A (Low Risk).
3 Living Conditions	<ul style="list-style-type: none"> <li>• Unlikely to result in a significant adverse effect (green)</li> <li>• Potential to result in significant adverse effect (yellow)</li> <li>• Likely significant adverse effect (red)</li> </ul>		The site is generally remote. However, there is a residential property situated in close proximity to the northern, western and southern boundaries of the site. Given the proximity of the property, traffic movements and construction activities need to be taken into account. However, it is considered that these impacts would be capable of mitigation through the design and siting of the facilities.
4 Access	<ul style="list-style-type: none"> <li>• No known constraints (green)</li> <li>• Minor constraints (yellow)</li> <li>• Major constraints (red)</li> </ul>		The existing A5025 runs immediately to the west of the site, where an existing vehicular access from the site is available.
5 Ground conditions	<ul style="list-style-type: none"> <li>• Negligible contamination or instability likely (green)</li> </ul>		Due to existing use as a garage on part of the site contamination is expected and minor remediation is likely.

### J3 Garage at Llanrhuddlad

Criteria	RAG rating	Assessment	Comments
	<ul style="list-style-type: none"> <li>Minor contamination or instability likely (<b>amber</b>)</li> <li>Major contamination or instability likely (<b>red</b>)</li> </ul>		
6 National landscape designations	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (<b>green</b>)</li> <li>Adjacent (<b>amber</b>)</li> <li>Within designation (<b>red</b>)</li> </ul>		<p>Primarily undeveloped agricultural land together with existing commercial use.</p> <p>AONB within 800m to the west of the site, but extends to the north also.</p>
7 Local environmental designations	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (<b>green</b>)</li> <li>Adjacent (<b>amber</b>)</li> <li>Within designation (<b>red</b>)</li> </ul>		<p>Largely undeveloped agricultural land. No specific environmental designations.</p>
8 National or international environmental designations (not including landscape)	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (<b>green</b>)</li> <li>Adjacent (<b>amber</b>)</li> <li>Within designation (<b>red</b>)</li> </ul>		<p>None within or adjacent to the site.</p>
9 Designated heritage assets	<ul style="list-style-type: none"> <li>Not affected (<b>green</b>)</li> <li>Setting affected (<b>amber</b>)</li> <li>Directly affected (<b>red</b>)</li> </ul>		<p>No heritage assets within nearby proximity to the site.</p>
10 Mineral safeguarding	<ul style="list-style-type: none"> <li>Not within safeguarded area (<b>green</b>)</li> </ul>		<p>No sites identified within the Gwynedd and Anglesey Joint Local Development Plan.</p>

### J3 Garage at Llanrhuddlad

Criteria	RAG rating	Assessment	Comments
	<ul style="list-style-type: none"> <li>Partially within safeguarded area (<b>amber</b>)</li> <li>Wholly within safeguarded area (<b>red</b>)</li> </ul>		
11 Agricultural Land Classification	<ul style="list-style-type: none"> <li>Grade 4 or 5 (<b>green</b>)</li> <li>Grade 3 (<b>amber</b>)</li> <li>Grade 1 or 2 (<b>red</b>)</li> </ul>		The site is classified as Grade 4.
12 Visual impact	<ul style="list-style-type: none"> <li>Negligible/minor visual impact likely (<b>green</b>)</li> <li>Moderate impact likely (<b>amber</b>)</li> <li>Major impact likely (<b>red</b>)</li> </ul>		<p>Potential impact on adjacent residential properties.</p> <p>Potential impact on views into and out of the AONB.</p> <p>As a result of being at a high elevation, the development would be visible from a larger surrounding area.</p>
13 Does the shape of the site constrain development?	<ul style="list-style-type: none"> <li>No – ample space for all development (<b>green</b>)</li> <li>Possible – irregular shape but reasonable available space (<b>Amber</b>)</li> <li>Yes – irregular shape and close to site size criterion limit (<b>red</b>)</li> </ul>		<p>The shape of the site is not considered to have any impact on the sites development potential</p>
14 Consultation feedback	<ul style="list-style-type: none"> <li>Largely positive (<b>green</b>)</li> <li>Balanced feedback or no feedback received (<b>amber</b>)</li> <li>Largely negative (<b>red</b>)</li> </ul>		<p>No comments were received regarding this site option.</p> <p>Although, some consultees expressed favour for the use of previously developed land.</p>

### J3 Garage at Llanrhuddlad

Criteria	RAG rating	Assessment	Comments
15 Would the site adversely impact Welsh language and culture?	<ul style="list-style-type: none"> <li>• Unlikely to result in a significant adverse effect (green)</li> <li>• Potential to result in significant adverse effect (amber)</li> <li>• Likely significant adverse effect (red)</li> </ul>		The site is not situated within a settlement and there would be suitable facilities available on-site.
16 Is the site available?	<ul style="list-style-type: none"> <li>• Available – held by developer/ willing owner/ public sector/on the market (green)</li> <li>• Unknown (amber)</li> <li>• Unavailable (red)</li> </ul>		The sites availability is unknown.
17 Commercial viability	<ul style="list-style-type: none"> <li>• Good viability(green)</li> <li>• Moderate viability (amber)</li> <li>• Poor viability(red)</li> </ul>		Not known.

## **Appendix 6-4    Stage 4: J7 Bus Garage at Llanfaethlu**

Criteria	RAG rating	Assessment	Comments
1 Previously Developed	<ul style="list-style-type: none"> <li>• All/majority of the site is previously developed land (green)</li> <li>• Part of the site is previously developed land (amber).</li> <li>• None/minority of the site is previously developed land (red)</li> </ul>		The site is mainly previously developed land comprising of existing commercial garages and workshops with associated hardstanding.
2 Flood risk	<ul style="list-style-type: none"> <li>• Low risk (A) (green)</li> <li>• Medium risk (B) (amber)</li> <li>• High risk (C) (red)</li> </ul>		Flood Zone A (Low Risk).
3 Living Conditions	<ul style="list-style-type: none"> <li>• Unlikely to result in a significant adverse effect (green)</li> <li>• Potential to result in significant adverse effect (amber)</li> <li>• Likely significant adverse effect (red)</li> </ul>		The site is generally remote. However, there is a residential property situated in close proximity to the northern, western and southern boundaries of the site. However, it is considered that these potential impacts would capable of mitigation through the design and siting of the facilities.
4 Access	<ul style="list-style-type: none"> <li>• No known constraints (green)</li> <li>• Minor constraints (amber)</li> <li>• Major constraints (red)</li> </ul>		The existing A5025 runs immediately to the west of the site, where an existing access from the site for both vehicles and pedestrians is available.
5 Ground conditions	<ul style="list-style-type: none"> <li>• Negligible contamination or instability likely (green)</li> <li>• Minor contamination or instability likely (amber)</li> <li>• Major contamination or</li> </ul>		Due to use as a garage it is considered that minor remediation may be required due to potential contamination.

Criteria	RAG rating	Assessment	Comments
	instability likely ( <b>red</b> )		
6 National landscape designations	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (<b>green</b>)</li> <li>Adjacent (<b>amber</b>)</li> <li>Within designation (<b>red</b>)</li> </ul>	AONB is located 20m to the west of the site.	
7 Local environmental designations	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (<b>green</b>)</li> <li>Adjacent (<b>amber</b>)</li> <li>Within designation (<b>red</b>)</li> </ul>	No environmental designations on site.	
8 National or international environmental designations (not including landscape)	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (<b>green</b>)</li> <li>Adjacent (<b>amber</b>)</li> <li>Within designation (<b>red</b>)</li> </ul>	None within or adjacent to the site.	
9 Designated heritage assets	<ul style="list-style-type: none"> <li>Not affected (<b>green</b>)</li> <li>Setting affected (<b>amber</b>)</li> <li>Directly affected (<b>red</b>)</li> </ul>	Grade II Limekiln, Carreglwyd located 150m to the west of the site. Due to the sites already industrialised nature the new use is not considered to enhance any impact upon the site.	
10 Mineral safeguarding	<ul style="list-style-type: none"> <li>Not within safeguarded area (<b>green</b>)</li> <li>Partially within safeguarded area (<b>amber</b>)</li> <li>Wholly within safeguarded area (<b>red</b>)</li> </ul>	No sites identified within the Gwynedd and Anglesey Joint Local Development Plan.	
11 Agricultural Land Classification	<ul style="list-style-type: none"> <li>Grade 4 or 5 (<b>green</b>)</li> <li>Grade 3 (<b>amber</b>)</li> <li>Grade 1 or 2 (<b>red</b>)</li> </ul>	The land is classified as Grade 3.	
12 Visual impact	<ul style="list-style-type: none"> <li>Negligible/minor visual</li> </ul>	Potential impact on adjacent residential properties.	

## J7 Bus Garage at Llanfaethlu

Criteria	RAG rating	Assessment	Comments
	<ul style="list-style-type: none"> <li>Impact likely (green)</li> <li>Moderate impact likely (amber)</li> <li>Major impact likely (red)</li> </ul>		The site is relatively well screened from longer views given its low lying location in the surrounding land form. There is a degree of potential impact on views into and out of the AONB.
13 Does the shape of the site constrain development?	<ul style="list-style-type: none"> <li>No – ample space for all development (green)</li> <li>Possible – irregular shape but reasonable available space (Amber)</li> <li>Yes – irregular shape and close to site size criterion limit (red)</li> </ul>		A review of the site has been conducted and the site is considered appropriate to fit the AECC, ESL and MEEG in.
14 Consultation feedback	<ul style="list-style-type: none"> <li>Largely positive (green)</li> <li>Balanced feedback or no feedback received (amber)</li> <li>Largely negative (red)</li> </ul>		IACC expressed support for development of the MEEG on this site. A few members of the public expressed support for the proposals for locating the MEEG at Llanfaethlu, alongside a few requests for further information including construction impacts, traffic effects and the scale of the development. Support at PAC3 for use as a Combined Site; although there were concerns regarding potential impact on Llanfaethlu.
15 Would the site adversely impact Welsh language and culture?	<ul style="list-style-type: none"> <li>Unlikely to result in a significant adverse effect (green)</li> <li>Potential to result in significant adverse effect (amber)</li> <li>Likely significant adverse effect (red)</li> </ul>		The site is not situated within a settlement and there would be suitable facilities available on-site.
16 Is the site available?	<ul style="list-style-type: none"> <li>Available – held by developer/ willing owner/</li> </ul>		The site is known to be available on reasonable commercial terms.

Criteria	RAG rating	Assessment	Comments
	<ul style="list-style-type: none"> <li>public sector/on the market (green)</li> <li>Unknown (amber)</li> <li>Unavailable – complex/multiple ownership or subject to ransom strip (red)</li> </ul>		
17	Commercial viability	<ul style="list-style-type: none"> <li>Good viability(green)</li> <li>Moderate viability (amber)</li> <li>Poor viability(red)</li> </ul>	Terms have been agreed on the site and a review has shown development can be accommodated.

## **Appendix 6-5 Stage 4: J24 A5025 Site Llanfaethlu**

Criteria	RAG rating	Assessment	Comments
1 Previously Developed	<ul style="list-style-type: none"> <li>• All/majority of the site is previously developed land (<b>green</b>)</li> <li>• Part of the site is previously developed land (<b>amber</b>).</li> <li>• None/minority of the site is previously developed land (<b>red</b>)</li> </ul>		The site is greenfield land
2 Flood risk	<ul style="list-style-type: none"> <li>• Low risk (A) (<b>green</b>)</li> <li>• Medium risk (B) (<b>amber</b>)</li> <li>• High risk (C) (<b>red</b>)</li> </ul>	Flood Zone A (Low Risk).	
3 Living Conditions	<ul style="list-style-type: none"> <li>• Unlikely to result in a significant adverse effect (<b>green</b>)</li> <li>• Potential to result in significant adverse effect (<b>amber</b>)</li> <li>• Likely significant adverse effect (<b>red</b>)</li> </ul>		<p>There are individual properties in close proximity to the site, including one property adjacent to the site's northern boundary. Given the proximity of these residential properties traffic movements and construction activities need to be taken into account in the overall balance. However, it is considered that these impacts would be capable of mitigation through the design and siting of the facilities.</p>
4 Access	<ul style="list-style-type: none"> <li>• No known constraints (<b>green</b>)</li> <li>• Minor constraints (<b>amber</b>)</li> <li>• Major constraints (<b>red</b>)</li> </ul>		<p>The existing A5025 runs to the west of the site. As part of the wider Project the proposed off line highway improvements would see the new road alignment run immediately adjacent to the west of the site and could therefore provide a new access directly off the new road alignment.</p>
5 Ground conditions	<ul style="list-style-type: none"> <li>• Negligible contamination or instability likely (<b>green</b>)</li> <li>• Minor contamination or instability likely (<b>amber</b>)</li> <li>• Major contamination or</li> </ul>		<p>As the site is greenfield it is considered that any remediation is likely to be negligible.</p>

Criteria	RAG rating	Assessment	Comments
	Instability likely (red)		
6 National landscape designations	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (green)</li> <li>Adjacent (amber)</li> <li>Within designation (red)</li> </ul>		Outside of AONB
7 Local environmental designations	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (green)</li> <li>Adjacent (amber)</li> <li>Within designation (red)</li> </ul>		There are no environmental designations within the immediate proximity of the site.
8 National or international environmental designations (not including landscape)	<ul style="list-style-type: none"> <li>Not within the designation and not adjacent (green)</li> <li>Adjacent (amber)</li> <li>Within designation (red)</li> </ul>		None within or adjacent to the site.
9 Designated heritage assets	<ul style="list-style-type: none"> <li>Not affected (green)</li> <li>Setting affected (amber)</li> <li>Directly affected (red)</li> </ul>		Limekiln, Carreglwyd (Grade II) is located 200m to the north-west and the Church of St Maethlu (Grade II) is located 200m to the west of the site. Due to the proposed sites built surroundings to the north and south the new use is not considered to enhance any negative impact upon the heritage assets.
10 Mineral safeguarding	<ul style="list-style-type: none"> <li>Not within safeguarded area (green)</li> <li>Partially within safeguarded area (amber)</li> <li>Wholly within safeguarded area (red)</li> </ul>		No sites identified within the Gwynedd and Anglesey Joint Local Development Plan.
11 Agricultural Land Classification	<ul style="list-style-type: none"> <li>Grade 4 or 5 (green)</li> <li>Grade 3 (amber)</li> </ul>		The land is classified as Grade 3.

Criteria	RAG rating	Assessment	Comments
12 Visual impact	<ul style="list-style-type: none"> <li>Grade 1 or 2 (<b>red</b>)</li> <li>Negligible/minor visual impact likely (<b>green</b>)</li> <li>Moderate impact likely (<b>amber</b>)</li> <li>Major impact likely (<b>red</b>)</li> </ul>		<p>Potential impact on adjacent residential properties.</p> <p>Potential impact on views into and out of the AONB.</p> <p>Site is at a higher elevation than surrounding area, and may be more visible in longer views.</p>
13 Does the shape of the site constrain development?	<ul style="list-style-type: none"> <li>No – ample space for all development (<b>green</b>)</li> <li>Possible – irregular shape but reasonable available space (<b>Amber</b>)</li> <li>Yes – irregular shape and close to site size criterion limit (<b>red</b>)</li> </ul>		<p>The sites shape is not considered to have any impact on the sites development potential.</p>
14 Consultation feedback	<ul style="list-style-type: none"> <li>Largely positive (<b>green</b>)</li> <li>Balanced feedback or no feedback received (<b>amber</b>)</li> <li>Largely negative (<b>red</b>)</li> </ul>		<p>No comments were received regarding this site option.</p>
15 Would the site adversely impact Welsh language and culture?	<ul style="list-style-type: none"> <li>Unlikely to result in a significant adverse effect (<b>green</b>)</li> <li>Potential to result in significant adverse effect (<b>amber</b>)</li> <li>Likely significant adverse effect (<b>red</b>)</li> </ul>		<p>The site is not situated within a settlement and there would be suitable facilities available on-site.</p>
16 Is the site available?	<ul style="list-style-type: none"> <li>Available – held by developer/ willing owner/ public sector/on the</li> </ul>		Availability is unknown

Criteria	RAG rating	Assessment	Comments
	<ul style="list-style-type: none"> <li>market (green)</li> <li>• Unknown (amber)</li> <li>• Unavailable – complex/multiple ownership or subject to ransom strip (red)</li> </ul>		
17 Commercial viability	<ul style="list-style-type: none"> <li>• Good viability(green)</li> <li>• Moderate viability (amber)</li> <li>• Poor viability(red)</li> </ul>		Not known.

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