

Wylfa Newydd Project A5025 On-line Highway Improvements

Environmental Report – Volume 3A Appendices



APPLICATION November 2017

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**A5025 On-line Highway Improvements
Environmental Report
Volume 3 – Appendix 2.1
A5025 Temporary Construction
Compound Optioneering Exercise**

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MEMO - A5025 Temporary Construction Compound Optioneering Exercise

DCRM Number:	WN034-JAC-PAC-REP-00075
To:	Gwyndaf Jones, Isle of Anglesey County Council
From:	Andrew Murdoch, Horizon Nuclear Power
Date:	30 th August 2016
Subject:	Information contained within this A5025 Temporary Construction Compound Optioneering document is provided in support of the A5025 On-Line Highway Improvements: Environmental Impact Assessment Screening Request - DCRM Ref. No: WN034-JAC-PAC-REP-00055.

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1 Introduction

- 1.1 This report presents the findings of the options appraisal undertaken to identify a preferred site to locate a Temporary Construction Compound (the compound) to support the construction of the A5025 On-line Highway Improvements.

Background

- 1.2 The main route to the Wylfa Newydd Development Area from the mainland and the port of Holyhead is along the A55, the A5 and the A5025. The Wylfa Newydd Development Area is the indicative area of land and sea that would be used for the construction and operation of the Wylfa Newydd Generating Station. A variety of highway improvement works would be needed to address existing safety and environmental concerns, and mitigate the impacts of the construction and operation of the Wylfa Newydd Power Station (Power Station).
- 1.3 The A5025 will be improved between Valley to the Wylfa Newydd Development Area. The existing road will undergo minor modifications, such as resurfacing and new signage (On-line works), as well as major works which include new junction arrangements and bypasses (Off-line works).
- 1.4 The route has been divided into eight sections, defined by the start and end points of the On-line and Off-line Highway Improvements:
- Section 1: A55 Junction 3 to north of Valley Junction (A5/A5025);
 - Section 2: north of Valley Junction (A5/A5025) to north of Llanynghenedl;
 - Section 3: north of Llanynghenedl to north of Llanfachraeth;
 - Section 4: north of Llanfachraeth to south of Llanfaethlu;
 - Section 5: south of Llanfaethlu to north of Llanfaethlu;
 - Section 6: north of Llanfaethlu to north of Llanrhyddlad;
 - Section 7: north of Llanrhyddlad to north of Cefn Coch; and
 - Section 8: north of Cefn Coch to the Power Station Site access road.
- 1.5 Sections 1, 3, 5 and 7 comprise sections of road that relate to the Off-line Highway Improvements. Sections 2, 4, 6 and 8 relate to the On-line Highway Improvements that would be reconstructed and widened where necessary. Construction works would be undertaken in two of the four sections concurrently for these sections. Other On-line Highway Improvements comprising the replacement of the top surface of the road (pavement resurfacing) would be required along the existing A5025 within Sections 1, 3, 5 and 7. The reconstruction and resurfacing of the On-line Highway Improvements would involve planing off the existing surface and replacing it with new material.
- 1.6 Heavy goods vehicles would be used to transport planed and processed materials along the A5025 corridor. Pavement resurfacing (Sections 1, 3, 5 and 7) and reconstruction (Sections 2, 4, 6 and 8) would be undertaken in lengths of 300m across half the road width

over a given three-day period. This would comprise one day for planing off material, one day for material processing and a final day for material re-laying.

Need for the compound

- 1.7 As part of the A5025 On-line Highway Improvements a compound would be required to support construction activities. The site would need to accommodate temporary pavement recycling plant, potential short-term parking of plant and equipment, storage and management of materials and waste, site offices, construction staff parking and welfare facilities.
- 1.8 Construction (Design and Management) Regulations 2015 advises that welfare facilities would be required for normal construction activities.
- 1.9 The temporary pavement recycling plant would handle and process highway arisings for re-use across the scheme (approximately 14,000m³ of material would be processed). It is assumed that up to 95% of the existing pavement material would be able to be recycled within the plant, thereby reducing the reliance on importing raw materials. The residual 5% would be sent to a suitably licensed landfill. This will be managed by the appointed contractor using the framework of a CL:AIRE Materials Management Plan which will seek to minimise waste and maximise recovery, whilst also avoiding excessive stockpiling for long periods.
- 1.10 The nearest hazardous waste disposal site is located in Swindon. This is where materials containing tar would have to be taken if they were not reused. Having a temporary pavement recycling plant local to the A5025 would therefore significantly reduce vehicle movements on the local network associated with off-site disposal and material importation. The provision of the compound would therefore help to minimise the carbon footprint of the On-line Highway Improvements. Minimisation of the carbon footprint would also be achieved through re-using recycled materials and ensuring that the compound is located in close proximity to where the highway improvement works are taking place (i.e. the A5025).

Description of the compound

- 1.11 The compound for the On-line Highway Improvements would be sited on an area greater than 0.6ha to ensure all required facilities are accommodated. The site would also need to be in close proximity to the A5025. Depending on the nature of the site (current use, location, topography etc.), there may be an element of site establishment to prepare the site for use. For a greenfield site, activities such as site clearance and potential levelling, site access arrangements, removal and storage of topsoil, any temporary visual mitigation required e.g. hoarding, and formation of hardstanding using porous hard surface such as compacted crushed stone (which also assists drainage) may be required. For a brownfield site, existing infrastructure may require dismantling, removal and disposal.
- 1.12 The compound would require a hardstanding area in the form of a porous hard surface and appropriate screening taking into consideration the surrounding landscape. Appropriate operational hours of the compound would be agreed between Horizon, the contractor and the Isle of Anglesey County Council. Plant noise levels are anticipated to be relatively low

- and comparable to those experienced on a general construction site. Standard dust suppression techniques would be used to control dust emissions within the site.
- 1.13 The compound would be required for the duration of the On-line highway Improvements, approximately two years. Products taken into the compound would be materials such as asphalt, bitumen, cement, water and planed pavement to be recycled. Resultant materials would be Cold Recycled Bound Material (CRBM) and other wastes.
- 1.14 The temporary pavement recycling plant would recycle aggregate and pavement material planed from the existing A5025, which would be prepared and used for new pavement surface across the On-line Highway Improvements. Key plant and equipment is likely to include crusher, screener, mixer, silo for storing materials, excavator, loading shovel and tractor. Plant and equipment would be delivered and transported on an articulated vehicle. No structures are required to be built as the plant is temporary in nature. Images of similar plant and equipment are contained in Appendix 2.
- 1.15 The proposed process for the temporary pavement recycling plant is as follows:
- I. Incoming materials visually inspected, and once approved, weighed in at the weighbridge;
 - II. Confirmation is given of which stockpile to deliver the material to;
 - III. Stockpiled material is screened (and if necessary crushed) to technical grading; and
 - IV. Material loaded into the mixer and processed, discharged to the ground and place in small stockpiles according to the end-use and product specification.
- 1.16 The recycling process would require material to be crushed and screened within the compound, which would generate some localised continual background noise. The process would use water during the recycling operations, and bulk tanker deliveries would be required.
- 1.17 The temporary pavement recycling plant would be of a temporary nature and would be required for a maximum period of 2 years from the commencement of the On-line Highway Improvements.

2 Optioneering

Methodology

Overview

- 2.1 A review of the On-line Highway Improvements was undertaken by the project team in late April 2016, which identified a requirement for a dedicated compound to be included in the overall design of the On-line Highway Improvements.
- 2.2 A desk-based review was subsequently undertaken by the project team to identify the minimum requirements of a compound, and to identify potential sites that could successfully accommodate such facilities. The process was undertaken by way of an interactive workshop held on 5th May 2016, attended by representatives of:
- Horizon Nuclear Power;
 - Jacobs (appointed environmental consultants);
 - AECOM (appointed highway designers);
 - The Isle of Anglesey County Council (local highways authority); and
 - An existing operator of similar recycling compounds in the UK.
- 2.3 In order to establish minimum site requirements, operational factors and criteria to inform site identification, the following high-level considerations were explored with an existing operator, drawing on their extensive experience of developing and running temporary pavement recycling plant operations in particular, on other projects:
- The nature, duration and sequencing of recycling operations - discussed to determine the type of works that would be undertaken, the typical size and forms of plant and equipment required, and the phasing of works;
 - Requirements for the importing, exporting and movement of raw and treated materials - discussed to determine the likely traffic movements to and from the site and any requirements for traffic management measures;
 - Site and operational requirements - discussed to determine the minimum size (0.6ha), accessibility and safe working conditions of the site;
 - Environmental considerations - discussed to determine whether operations need to be located away from communities and environmentally sensitive locations; and
 - Commercial considerations - discussed to determine the availability of potential land parcels.
- 2.4 Based on the above, the preliminary review focused on the identification of existing commercial operations (brownfield sites) and land parcels (greenfield sites) along and beyond the existing A5025, using aerial photography and mapping. The following potential sites were accordingly identified in the workshop:

- Existing garage/depot (north of Llanfaethlu) - discussions concluded this to be an advantageous site as it comprises existing hardstanding, has existing utility connections and is accessible directly from the A5025. Its main disadvantage was that it was located in close proximity to sensitive receptors (albeit impacts could be minimised and reduced);
- West of the A5025 at Cefn Coch - discussions concluded this to be an advantageous site in respect of its remote location away from sensitive receptors. The site's main disadvantage related to its greenfield status, which would require topsoil stripping and formation of hardstanding. The area to the west of the site was also considered to be at risk of flooding, according to available published information from Natural Resources Wales;
- Existing Quarry west of Gwalchmai - discussions concluded that this site had merits in terms of its brownfield status and presence of existing facilities. Its disadvantages were that heavy goods vehicles would need to travel via Valley traffic light junction to reach the A5025 corridor, and there could be difficulty in agreeing the commercial use of this site given current operations.

2.5 Based on the preliminary review, it was concluded that a detailed optioneering study should be undertaken to:

- Further analyse the identified sites to determine their relative advantages, disadvantages, constraints and opportunities;
- Broaden the area of search to establish whether other sites exist which could be utilised for the temporary construction compound, drawing on the local knowledge of Horizon Nuclear Power and the Isle of Anglesey County Council;
- Appraise all identified sites through the application of criteria-based analysis, focused on the subjects of Planning, Environment, Engineering and Logistics; and
- Record the impartial analysis and selection of a preferred site for the temporary construction compound transparently in a site optioneering report.

Identification of sites

2.6 Following further analysis and discussion within the project team, the following sites were identified as potentially available and suitable for accommodating the compound.

- I. Option 1: Land within the Wylfa Newydd Development Area.
- II. Option 2: Land for the preferred location of the Replacement Magnox AECC and DSL.
- III. Option 3: Land for the preferred location of the Power Station Alternate Emergency Control Centre and Environmental Survey Laboratory (AECC and ESL).
- IV. Option 4: Land for the preferred location of the Mobile Emergency Equipment Garage (MEEG).

- V. Option 5: Land for the preferred location of the Park and Ride facility at Dalar Hir (A55 Junction 4).
 - VI. Option 6: Land occupied by an existing quarry north of Gwalchmai.
 - VII. Option 7: Former site of Anglesey Aluminium Metal Ltd. (Holyhead).
 - VIII. Option 8: Land for the preferred location of the Logistics Centre at Parc Cybi.
- 2.7 A second workshop was held on 16th June 2016 with the highways project team, the purpose of which was to discuss the characteristics of the site options in more detail and appraise their opportunities and constraints from an engineering and logistics perspective.
- 2.8 The proximity to the A5025 is a key consideration in the selection of a site due to Horizon's aim of limiting environmental effects, which may arise as a result of increased traffic levels. At the workshop, it was concluded that Option 6 (Land occupied by an existing quarry north of Gwalchmai), Option 7 (former site of Anglesey Aluminium Metal Ltd.) and Option 8 (land for the preferred location of the Logistics Centre at Parc Cybi) could all be discounted from further appraisal as these sites would result in heavy goods vehicles travelling greater distances, which would result in an increase in noise and vibration, potentially effecting sensitive receptors, as well as the potential to cause severance and local community disruption. Heavy goods vehicles would also pass through an existing constrained junction within the settlement of Valley. The sites are also within third party ownership and therefore their availability for use is not confirmed and may have further restrictions or limitations.
- 2.9 Although Option 5 (land for the preferred location of the Park and Ride facility at Dalar Hir) is also located further away from the A5025 than Sites 1-4, the site is within Horizon's ownership. It was therefore considered that for completeness Option 5 should proceed through to the next stage of optioneering.
- 2.10 The remaining five sites (Options 1-5) were then subjected to the appraisal process, using the criteria presented in the following section.

Option criteria and appraisal approach

- 2.11 The objective of the optioneering exercise was to identify a site for the compound which performed best against a set of planning, environmental and engineering/logistics criteria.

Planning

- 2.12 The following were identified as potential option differentiators in the appraisal for the subject of Planning: Planning History and Planning Policy.
- 2.13 A planning history review of each site has been undertaken to establish whether a site already has planning consent for an alternative use. It would be preferable if the site already has consent for an industrial use (but one that is not expected to be delivered in the near future) or if the site does not already have permission for an alternative use.
- 2.14 Planning policy relevant to each site has also been considered during the optioneering exercise. This includes analysis of whether the site is allocated for a specific use within the

Ynys Mon Local Plan (1996)¹ and Stopped UDP (2005)¹, The New Nuclear Build SPG (2014)² or the emerging Joint Local Development Plan (JLDP)³ (which has reached submission stage). It would be preferable if the site was not a Greenfield site, protected by environmental designations nor allocated for a conflicting use e.g. residential.

Environmental

- 2.15 A desk-based exercise has been undertaken to identify and determine the potential environmental constraints and opportunities of the identified sites, involving a criteria-based review.
- 2.16 The process has involved a number of tasks and interrogation of published information.
- I. Review of available mapping and aerial photography.
 - II. Analysis of the proposed site boundaries, existing topography, settlement patterns, and their relationships to the A5025 corridor.
 - III. Identification of environmental topics of relevance to the five sites.
 - IV. Identification and mapping of known sensitivities and constraints within defined areas of search, which could be directly and/or indirectly affected by the construction and operation of the proposed recycling compound.
 - V. Development of criteria, against which each site has been tested and appraised to evaluate their relative advantages and disadvantages from an environmental perspective.
- 2.17 The topics of landscape, ecology, cultural heritage, public access and recreation, socio-economics, land-use (including soils and geology), noise, air quality/dust, hydrology and flood risk were initially considered in the appraisal, in order to inform the identification of criteria.
- 2.18 Environmental data was then gathered for these topics by way of desk-based studies and interrogation of published studies and on-line data sources comprising the following:
- GIS datasets relating to mapped designations, sites of archaeological and built heritage interest, ecological sensitivities, hydrology, and other land-based interests.
 - Photographic information available within Google Maps, Google Earth and Google Streetview.

¹ <http://www.anglesey.gov.uk/planning-and-waste/planning-policy/current-plans-and-policies/>

² <http://www.anglesey.gov.uk/business/energy-island/energy-island-news/new-nuclear-build-at-wylfa-supplementary-planning-guidance/123426.article>

³ <http://www.anglesey.gov.uk/planning-and-waste/planning-policy/joint-local-development-plan-anglesey-and-gwynedd/>

- Ordnance Survey mapping to identify proximity of identified sites to residential, commercial and recreational receptors.
- 2.19 The following aspects of the compound were assumed:
- I. The physical footprint and operational requirements of the compound would be comparable at each of the identified sites.
 - II. Standard best practice mitigation i.e. site-based measures such as dust suppression and boundary containment are inherent in the design.
- 2.20 A review was then undertaken of the gathered information and identified topics against each of the five sites. This was undertaken to establish which topics were of genuine relevance to the exercise i.e. those which would provide a basis for option differentiation, and to develop appropriate criteria on which to subsequently appraise each site on their relative environmental advantages and disadvantages.
- 2.21 The following were identified for consideration in the options appraisal for Environment: Land Use; Hydrology; Visual and Landscape; Noise; Ecology; and Cultural Heritage. These are discussed further in this section. For each topic, the review sought to identify a) the sub-criteria within each environmental topic to be considered in the appraisal; b) the potential likely effects on each topic associated with construction and operation of the compound; and c) the geographical extent (or area of search) applied to each topic considered, as part of the appraisal. The remaining environmental topics were discounted on the basis that they would not provide a genuine differentiator in the appraisal and selection of a preferred site.

Land use

- 2.22 This criterion considers the current use and status of the land within identified sites (e.g. brownfield or greenfield), the agricultural quality of the land (based on the Agricultural Land Classification (ALC)), and presence of any important geological features.
- 2.23 Potential effects could be associated with site preparation works, specifically: the loss or downgrading of Grade 1, Grade 2 or Subgrade 3a ALC 'best and most versatile' soils; development of greenfield sites; and impacts on Regionally Important Geological Sites (RIGS).
- 2.24 Due to the direct nature of potential effects associated with this topic, the geographical extent considered for this topic comprises land within the individual site boundaries only.

Hydrology

- 2.25 This criterion considers proximity of the identified sites to surface waterbodies and watercourses (taking into account their quality and status e.g. Water Framework Directive, main river or tributary), and potential flood risk.
- 2.26 Potential effects could be associated with site preparation and operational works, specifically: the entrainment of sediment; accidental spillages of pollutants; and the discharge of any contaminated runoff (e.g. from wheel washing) into nearby watercourses.

Potential exists for the identified sites to be flooded, depending on their relationship to identified zones of flooding.

- 2.27 Due to the direct and indirect nature of potential effects associated with this topic, the geographical extent considered for this topic comprises the individual sites and an area extending approximately 100m outward.

Visual and landscape

- 2.28 This criterion considers the relationships of the identified sites to visual receptors, landscape designations, and existing landscape character.
- 2.29 Potential effects could be associated with site preparation and operational works, specifically: the intrusion of the compound into existing views from residential properties, public rights of way and established views; and localised effects on landscape character and landscape designations which could affect amenity.
- 2.30 Due to the direct and indirect nature of potential effects associated with this topic, the geographical extent considered comprises the individual sites and an area extending approximately 300m outward.

Noise

- 2.31 This criterion considers the relationships of the identified sites to noise sensitive receptors i.e. residential properties, public rights of way and community facilities.
- 2.32 Potential effects could be associated with site preparation and operational works, specifically: noise and vibration from the operation of plant, equipment and machinery; and the transportation of materials to/from and within the site.
- 2.33 Due to the direct and indirect nature of the potential effects associated with this topic, the geographical extent considered comprises the individual sites and an area extending approximately 300m outward.

Ecology

- 2.34 This criterion considers the proximity of the individual sites to ecologically designated sites and priority habitats.
- 2.35 Potential effects could be associated with site preparation and operational works, specifically: land take resulting in the loss of terrestrial habitat within statutory and non-statutory sites; and disturbance to wildlife.
- 2.36 Due to the direct and indirect nature of the potential effects associated with this topic, the geographical extent considered comprises the individual sites and an area extending approximately 300m outward.
- 2.37 If the preferred option is within 500 metres of a European Site, Ramsar or Site of Special Scientific Interest, the planning application for the Temporary Construction Compound would include a site specific risk assessment that details how contractors would manage the operations to ensure they do not impact on these receptors.

Cultural heritage

- 2.38 This criterion considers the proximity of the individual sites to designated heritage assets comprising Listed Buildings, Schedule Monuments, Conservation Areas, and Registered Parks and Gardens.
- 2.39 Potential effects could be associated with site preparation and operational works, specifically the intrusion into the setting of assets and designations.
- 2.40 Due to the indirect nature of the potential effects associated with this topic, the geographical extent considered comprises the individual sites and an area extending approximately 300m outward.

Engineering/logistics

- 2.41 The following were identified as potential option differentiators in the appraisal for the subject of Engineering and Logistics: Site Preparation; Land Availability and Future Use; and Proximity to the A5025.
- 2.42 These criteria were principally defined on the basis of the discussion outcomes during the workshop held on 16th June 2016, and a comparable approach to that applied for the subject of Environment was followed to establish existing information i.e. interrogation of available aerial photography and mapping.

Site preparation

- 2.43 This criterion considers works required to prepare the site in order to construct and operate the compound. It includes any requirements for site clearance involving activities such as vegetation clearance, removal of existing infrastructure, levelling and earthworks, installation of site drainage, connections into existing utilities and formation of new access points.

Land availability and future use

- 2.44 This criterion considers the availability of the land and what would happen to the land once the compound is no longer required. It will consider potential development over-laps (based on the current Horizon schedule) and potential issues surrounding this such as availability of space.
- 2.45 This criterion also considers whether the land is left for a significant duration between future developments associated with the Wylfa Newydd Project coming forward, or if a site would require reinstatement post completion of the On-line Highway Improvements. Any requirements for management of the site such as topsoil stripping and temporary drainage are also considered in this criterion.

Proximity to the A5025

- 2.46 This criterion considers if the site is adjacent to, or at distance from, the A5025 On-line Highway Improvements.

Environmental effects arising as a result of traffic generated by compound activities are considered in the appraisal of Environment.

3 Site options

- 3.1 This section presents an overview of the geographical location and setting of each site considered in the appraisal.

Option 1

- 3.2 The Wylfa Newydd Development Area is the indicative area of land and sea that would be used for the construction and operation of the Power Station (this includes the two UK Advanced Boiling Water Reactors, associated plant and ancillary structures and features, to be constructed and operated at Wylfa on Anglesey). The area has a range of landscape features; coastal features to the north and east, rough grazing with exposed rock and gorse thickets inland from the coastline, and farther inland the land is low lying and gently undulating with scattered farms, small settlements and isolated woodland.
- 3.3 Land within and surrounding the Wylfa Newydd Development Area is predominantly used for agricultural purposes, for grazing by sheep or cattle. It is contained by hedgerows and crossed by a network of roads, rural lanes, watercourses and overhead electricity infrastructure. Settlement patterns around the site are characterised by small clusters of residential dwellings and isolated farmsteads. Larger settlements include the villages of Cemaes to the east and Treglele to the south-east.
- 3.4 Site preparation and clearance works will likely commence in summer 2017 across a significant proportion of the Wylfa Newydd Development Area. The area which could be used for the compound is to the east of the A5025, immediately south of the existing power station access road (see figure 2 in Appendix A).
- 3.5 After these site preparation and clearance works, and during Main Construction, a Training and Simulator facility would be constructed at the site which would result in modifications to the local landscape and the overall appearance of the area.
- 3.6 The site is approximately 4.63ha and would provide the best access for HGVs and minimal disruption to site preparation works. A haul road currently exists on the site and would provide access from the power station access road.
- 3.7 Two Public Rights of Way (PRoWs) cross the area as well as overhead transmission line and associated pylons. The parcel of land is currently used for pasture and is relatively flat. The soils within the area are Grade 2 (very good quality) and Subgrade 3a (good quality). The boundary to the east of the site borders the A5025 with a hedgerow and a slight embankment. A small parcel of woodland acting as a shelter belt exists on the other side of the A5025, adjacent to the south-east boundary. The boundary to the north is defined by a stone wall along the existing power station site access road. The southern boundary is defined by a roadside hedge along the fisherman's carpark road. The western side of the site is open pasture land.

- 3.8 Tre'r Gof Site of Special Scientific Interest (SSSI) is approximately 500m north of the site, Cae Gwyn SSSI approximately 1km south-west of the site and approximately 1km to the west is the Anglesey Area of Outstanding Natural beauty (AONB). The site lies within the extensive Isle of Anglesey Special Landscape Areas (SLA) currently under review. The closest heritage asset is approximately 1km to the east of the site; a Grade II Listed Building (Cemaes Bay Windmill). A potential watercourse or ditch is to the north-west of the site, but it does not run through the area. The closest dwelling is on the east side of the site boundary on the east side of the A5025.

Option 2

- 3.9 The Magnox AECC and DSL form part of the existing power station and are located in an area of land that is required for construction activities of the proposed Power Station (see figure 2 in Appendix A). These facilities would be relocated to a parcel of land east of the A5025, north of the settlement of Treglele (within the Wylfa Newydd Development Area). The AECC and DSL will likely be constructed in late 2016, and are scheduled for completion in spring 2017. The facility would occupy a significant portion of the site.
- 3.10 The site is approximately 0.74ha and currently comprises rough pasture, with an area of marshland close to the east extent. The site is relatively flat, with a slight gradient sloping away from the north-east boundary. The soils within the area are Subgrade 3a (good quality).
- 3.11 The western boundary is defined by roadside hedge along the access road that leads to Treglele. Beyond the access road lies a distinctive tree belt, the A5025 and coastal hinterland. The site boundary to the south and south-west is a field hedgerow. Beyond the hedgerow to the south-west are residential properties and the Douglas Inn on the edge of Treglele. The north-east boundary of the site comprises an open agricultural field crossed by overhead transmission infrastructure, defined by vegetated boundary features with two adjoining residential properties beyond.
- 3.12 Tre'r Gof SSSI is approximately 550m north of the site, Cae Gwyn SSSI is approximately 1.1km south-west of the site, and approximately 1.2km to the west is the Anglesey AONB. The site lies within the extensive Isle of Anglesey SLA. The closest heritage asset is approximately 850m to the east of the site; a Grade II Listed Building (Cemaes Bay Windmill). The closest dwelling is on the south-west side of the site boundary on the east side of the A5025.

Option 3

- 3.13 Site option 3 has been identified as the preferred parcel of land to locate the new Power Station AECC and ESL (see figure 3 in Appendix A). The AECC and ESL are emergency facilities that would provide support and implement appropriate arrangements during the extremely unlikely event that the primary facilities on the Power Station Site became unavailable. The construction of the AECC and ESL would likely commence mid-2019 and would be operational mid-2024.

- 3.14 The parcel of land for the AECC and ESL is the eastern half of a pastorally farmed field, west of the existing A5025 at the small community of Cefn Coch. The site is approximately 0.67 ha in size, and is relatively flat at its southern end. The northern area exhibits a steeper gradient that slopes away from the A5025. Soils are provisionally classed as Grade 4 (poor quality), and a PRoW and overhead transmission cabling cross the site. These have been taken into consideration in the optioneering exercise as shown in section 4. A hedgerow runs parallel to the PRoW, intersecting the site.
- 3.15 The north-east border is defined by a hedgerow, to the east by a stone wall and hedgerow separating the field and the A5025, and to the north the Cylch-y-Garn Road bounds the site. A channel runs along the southern boundary and flows to the Afon Cafnan, which runs along the western boundary of the field. The proposed off-line A5025 Highway Improvements would form the site's boundary to the west in the future. The site has some potential to be accessed from the existing side road west off the A5025. The undulating landform and vertical alignment of the A5025 and side road in this area restricts driver visibility to a degree.
- 3.16 The surrounding area is rural with a number of scattered farmsteads and houses located within 200m of the site. The communities of Cefn Coch and Llanrhyddlad are located 0.5km north-east and 1.4km south-west, respectively. Several properties to the north and south-east overlook the site. The surrounding landscape is mainly agricultural of relatively flat topography.
- 3.17 An area immediately to the west of the site falls within a TAN15 Flood Risk Zone C2 and Natural Recourses Wales (NRW) Flood Zone 2 and 3. Approximately 300m to the east is Llyn Llygeirian SSSI and to the west, Pen-yr-orsedd Standing Stones, approximately 800m away. The site is located within the Isle of Anglesey SLA and 1km from the proposed SLA at Mynydd Mechell.

Option 4

- 3.18 A site located approximately 350m to the north-east of the centre of the village Llanfaethlu has been identified as the preferred location to site the MEEG (see figure 4 in Appendix A). The MEEG would house a number of specialist vehicles at a location close to but separate from the Power Station Site to support and implement appropriate arrangements during the extremely unlikely event that the primary facilities on the Power Station Site become unavailable. The construction of the MEEG would commence mid-2019 and would be operational mid-2024.
- 3.19 The site at Llanfaethlu is currently occupied by a vehicle repair garage, which until recently included facilities for commercial heavy goods vehicle repairs. Bunding (mounds) bound the site to the south and east. To the north, hedgerows and trees bound the site and to the west, the A5025. Residential properties are located directly adjacent to the site boundary to the north and on the west side of the southern boundary. To the west, the A5025 runs in parallel to the site. An existing access point to the site directly off the A5025 is available for use.

- 3.20 The site is approximately 1.19 ha. The surrounding area is relatively flat in topography and predominantly rural in nature, comprising agricultural land with hedgerows forming the southern and eastern boundaries of the site. Residential properties lie adjacent to the northern and southern extent of the site boundary and an access track to residential properties forms the northern boundary. Three PRowS are located within 120m of the site, one to the south, one to the west directly opposite the site and another north of the site.
- 3.21 The Anglesey AONB is approximately 15m to the east of the site boundary, and 3km southwest of the candidate Mynydd Mechell SLA. Carreglwyd Grade II* Registered Park and Garden lies approximately 540m to the east and a Grade II Listed Building is approximately 180m north-west of the site. Several Listed Buildings are in the village of Llanfaethlu, including Grade II* St Maethlu's Church. There are proposals for a new primary school in Llanfaethlu to be located on greenfield land approximately 200m south-west of the site. A ditch flows away from the site in the south-east corner.

Option 5

- 3.22 A site located north-east of Junction 4 (Dalar Hir Junction) of the A55 has been identified as the preferred site to accommodate a Park and Ride and associated facilities (see figure 5 in Appendix A). These facilities are required to mitigate the potential effects of construction worker transport on Anglesey's highway network. The Park and Ride would be constructed in late-2018 and become operational mid-2020.
- 3.23 The Dalar Hir site is approximately 15.6ha and is currently pastoral farmland. An area at the west end of the site could be used for the compound, to aid easy access from London Road. This area of land is approximately 2.77ha. There is no access to this site; therefore a new access point would need to be formed.
- 3.24 The site is bounded to the south by Holyhead Road (the A5), and to the west by London Road that links the A55 to the village of Bodedern. To the immediate east is the Cartio Môn Go-Karting centre, whilst to the west is a DVSA (Driver and Vehicle Standards Agency – formally known as VOSA) weighbridge and lorry checkpoint. Hedgerows mark the northern and eastern extent of the site. A public footpath north of the site is within 180m.
- 3.25 The site is generally flat within a relatively rural location, largely comprising pastoral farmland with hedgerows marking field boundaries. From aerial imaging, the site is potentially composed of a diverse range of habitats including hedgerows, grassland, boggy areas and vegetated area. Provisional ALC data for Wales indicates that the site is comprised of Grade 4 (poor quality) agricultural land.
- 3.26 A farm is located on the site, and will most likely be occupied until the site is prepared for construction in late 2019. There are also a number of isolated farm properties in the surrounding area and the nearest settlements are Llanfihangel-yn-Nhywyn, located 400m south.
- 3.27 The Anglesey AONB lies to the west of the site, approximately 2.5km. The site lies within the SLA. The Llynnau y Fali – Valley Lakes SSSI is located 1.2km south-west of the site. This SSSI consists of a series of small shallow lakes, supporting a variety of aquatic flora

and fauna: the northernmost of these (Llyn Dinam) is a designated SAC. Llyn Traffwl SSSI is located 900m south. The closest heritage asset is a Grade II Listed Building approximately 500m to the west. A watercourse follows the eastern boundary.

4 Options appraisal

4.1 An assessment of the five site options against the criteria described in section 2 of this report is presented in table 4.1.

Table 4.1 Options Appraisal

Site		Option 1 (Wylfa Newydd Development Area)	Option 2 (Preferred Location for the replacement Magnox AECC/DSL Site)	Option 3 (Cefn Coch - preferred location for the Power Station AECC/ESL Site)	Option 4 (Llanfaethlu – preferred location for the MEEG Site)	Option 5 (Dalar Hir – preferred location of the Park and Ride Facility)
Criteria						
Primary Criteria	Secondary Criteria					
Planning	Planning History	Land within the Wylfa Newydd Development Area is predominantly used for agricultural purposes. It is contained by hedgerows and crossed by a network of roads, rural lanes, watercourses and overhead electricity infrastructure. The area contains a number of small clusters of residential dwellings and the larger settlements of Cemaes and Tregele. The planning history is not identifiable using online planning register albeit the area will have been subject to applications related to the existing power station and associated infrastructure.	Currently rough pasture with an area of marshland. Greenfield site. No planning history identifiable using online planning register.	Currently pastorally farmed field. Greenfield site. No planning history identifiable using online planning register.	The site is currently occupied by a vehicle repair garage. No planning history identifiable using online planning register.	Currently pastoral farmland. Greenfield site apart from a small number of agricultural buildings. No planning history identifiable using online planning register.
	Planning Policy / Designations	NPS EN-6 defines the Wylfa Newydd Development Area for New Nuclear Build at Wylfa. The Wylfa Newydd Development Area is predominantly Greenfield. The area also lies within the locally designated Anglesey Special Landscape Area. The site shown in Appendix A is not allocated for a specific use in the extant Ynys Mon Local Plan (1996), the Stopped UDP (2005) or in the emerging Joint Local Development Plan (JLDP) (which has reached submission stage).	The site is a Greenfield site within a Special Landscape Area. The site is not allocated for a specific use in the extant Ynys Mon Local Plan (1996), the Stopped UDP (2005) or in the emerging JLDP (which has reached submission stage). GP31 of the Wylfa SPG confirms that the IACC supports proposals associated with improvements to the A5025.	The site is a Greenfield site within a Special Landscape Area. The site is not allocated for a specific use in the extant Ynys Mon Local Plan (1996) or in the Stopped UDP (2005). The site is located within an A5025 Improvement Area in the emerging JLDP (which has reached submission stage). Emerging Policies PS4 and TRA1 are therefore of relevance. These policies confirm that improvements to the strategic transportation network, including transport infrastructure improvements associated with new nuclear	The site is located adjacent to the Anglesey AONB. The site is not allocated for a specific use in the extant Ynys Mon Local Plan (1996). The site is partly within the Development Boundary of Llanfaethlu as shown in the Stopped UDP (2005). The site is not allocated within the emerging JLDP (which has reached submission stage) but is in close proximity to an A5025 Improvement Area.	The site is not allocated for a specific use in the extant Ynys Mon Local Plan (1996), the Stopped UDP (2005) or in the emerging JLDP (which has reached submission stage). The site lies within Special Landscape Area, in common on Anglesey with all sites outside of the AONB and settlement boundaries. GP31 of the Wylfa SPG confirms that the IACC supports proposals associated with improvements to the A5025.

Site		Option 1 (Wylfa Newydd Development Area)	Option 2 (Preferred Location for the replacement Magnox AECC/DSL Site)	Option 3 (Cefn Coch - preferred location for the Power Station AECC/ESL Site)	Option 4 (Llanfaethlu – preferred location for the MEEG Site)	Option 5 (Dalar Hir – preferred location of the Park and Ride Facility)
Criteria						
Primary Criteria	Secondary Criteria					
		GP31 of the Wylfa SPG confirms that the IACC supports proposals associated with improvements to the A5025.		development at Wylfa Newydd, will be secured in such areas. GP31 of the Wylfa SPG confirms that the IACC supports proposals associated with improvements to the A5025.	GP31 of the Wylfa SPG confirms that the IACC supports proposals associated with improvements to the A5025.	
Environmental	Land Use	The site is currently greenfield and the soils within the area are Grade 2 (very good quality) and Subgrade 3a (good quality). Site preparation (vegetation and topsoil strip) may result in the loss of greenfield and quality soils. However as the site is to be used for the construction of the power station and training and simulator building, this area would be cleared none the less by wider development within the Wylfa Newydd Project.	The site is currently greenfield and the soils within the area are Subgrade 3a (good quality). Site preparation may result in the loss of greenfield and quality soils. However as the site is to be used for the construction of the replacement Magnox AECC and DSL, this area would be cleared none the less by wider development within the Wylfa Newydd Project.	The site is currently a greenfield site and the soils within the area are Grade 4 (poor quality). Site preparation may result in the loss of greenfield. However as the site is to be used for the construction of the AECC and ESL, this area would be cleared none the less by wider development within the Wylfa Newydd Project.	The site is currently brownfield and occupied by a garage/depot. No effects would occur in respect of site preparation works given the site already comprises hardstanding. The whole of the site is to be used for the construction of the MEEG; therefore this site would be modified at a future date by wider development within the Wylfa Newydd Project.	The site is currently greenfield and the soils within the area are Grade 4 (poor quality). Site preparation may result in the loss of greenfield. However as the site is to be used for the construction of the Park and Ride facility, this area would be cleared at a future date by wider development within the Wylfa Newydd Project.
	Hydrology	Two SSSIs which have hydrological features are located within 1km of sites 1 and 2; neither is likely to be affected by the construction and operation of the recycling compound. No other hydrological features have been identified which could be affected by the construction or operation of the compound. Porous hardstanding and best practice measures would be applied on site to control drainage and runoff.		A watercourse runs south of the site flowing east to west into the Afon Cafnan. There is potential for effects on the watercourse from sedimentation through surface run off. The western extents of the site are identified as being at risk of flooding. Porous hardstanding and best practice measures would be applied on site to control drainage and runoff.	A watercourse rises to the south-east corner and flows away from the site. Effects on the watercourse could result from sedimentation through surface run off. The site has existing drainage utilities/infrastructure which could be used. Best practice measures would be applied on site to control drainage and runoff from hardstanding areas.	A number of small watercourses run along the western and southern edge of the site boundaries. Effects on the watercourse could result from sedimentation through surface run off. Porous hardstanding and best practice measures would be applied on site to control drainage and runoff.
	Visual and landscape	This site would have limited impact on existing landscape features and character. No direct impact on designations. Views of this site would be available from a small number of	This site would have limited impact on existing landscape features and character. No direct impact on designations. Views of this site would be available from a small number of	This site would have limited impact on existing landscape features and character. No direct impact on designations. Views of this site would be available from three residential	The site is directly adjacent to the Anglesey AONB boundary. No effects would arise as the site is currently occupied by large buildings and the compound would be smaller than	This site would have limited impact on existing landscape features and character. No direct impact on designations.

Site		Option 1 (Wylfa Newydd Development Area)	Option 2 (Preferred Location for the replacement Magnox AECC/DSL Site)	Option 3 (Cefn Coch - preferred location for the Power Station AECC/ESL Site)	Option 4 (Llanfaethlu – preferred location for the MEEG Site)	Option 5 (Dalar Hir – preferred location of the Park and Ride Facility)
Criteria						
Primary Criteria	Secondary Criteria					
		properties along the A5025 to the north-east of the site, and potentially from Tregele. Two public footpaths run through the site. Views from these would potentially be affected as a result of the siting of the recycling compound.	properties which abut the south-western boundary and properties approximately 100m south-east of the boundary. In addition to the above, there would be potential for increased landscape and visual impacts due to the overlap of construction with the replacement Magnox AECC and DSL works at this site.	properties; one to the east, north and north-west. The public footpath would be diverted or temporary closed.	these, therefore would not alter the existing character. Close-range views of this site would be available from a small number of properties which abut the south-western and norther boundaries. Several public footpaths are in the local area of the site. Views from these would potentially be affected as a result of the siting of the compound.	Close-range views of this site would be available from an existing property on the site. A public footpath is to the north of the site. Views from this path could be potentially affected.
	Noise and Vibration	The closest residential property is within 100m from the south-east boundary of the site. The settlement of Tregele is also within 200m of the site. Residents therefore would be affected by the noise emitted from operations of the compound. The Douglas Inn is also opposite the site on the south-east tip of the site boundary. Two public footpaths run through the site. Noise from the operations of the recycling compound would affect users of the footpaths.	Residential properties and the Douglas Inn are adjacent to the southern boundary of the site. The settlement of Tregele is also within 100m of the site. Residents therefore would be affected by the operations of the compound.	A small number of properties (potentially less than 10) within 200m of the site would be affected by the compound. No other sensitive noise receptors have been identified in the local area of the site. A public footpath runs through the site. This will be diverted. Noise from the operations of the compound would affect users of the diverted footpath.	The site is surrounded by residential properties, and the village of Llanfaethlu is approximately 350m south-west of the site. Residents therefore would be affected by the noise emitted from operations of the compound. The proposed school could also be affected by the noise. Several public footpaths are in the local area of the site. Noise from the operations of the recycling compound would affect users of the footpaths.	The farm on-site would potentially be significantly affected by noise from the operations of the compound. A public footpath is to the north of the site. Noise from the operations of the compound would affect users of the footpath. Due to the location of the site, an increase of traffic on roads other than the A5025 would occur. This could increase noise levels and effect sensitive receptors along the route to the A5025.
	Ecology	No designated ecological features have been identified on the site or in the surrounding area which would be affected by the compound. The small parcel of woodland on the other side of the A5025 could have bat roost potential. Hedgerows that bound the site may have species such as nesting birds. Noise could affect bats and species using boundary features.	No designated ecological features have been identified on the site or in the surrounding area which would be significantly affected. The small parcel of woodland adjacent to the A5025 could have bat roost potential. Hedgerows that bound the site may have species such as nesting birds. Noise could affect bats and species using boundary features.	No designated ecological features have been identified on the site or in the surrounding area which would be significantly affected. Trees on the south boundary could have bat roost potential, and the hedgerows along the boundaries could have species sensitive to noise. Loss of hedgerows within the site through site preparation. Some boundary features would be lost to gain access to the site. A loss of priority habitat and	From aerial imaging, there are trees and buildings on the boundaries of the site which could have bat roost potential. Hedgerows bound the site may have species such as nesting birds. Noise (disturbance) could affect species using boundary features.	No designated ecological features have been identified on the site or in the surrounding area which would have a significant effect. The western area is mainly pastoral farmland with hedgerows and stone walls marking field boundaries. The area could support protected species, which could be affected by the noise generated from the compound. Trees on the boundaries could have bat roost potential, and the hedgerows along the boundaries

Site		Option 1 (Wylfa Newydd Development Area)	Option 2 (Preferred Location for the replacement Magnox AECC/DSL Site)	Option 3 (Cefn Coch - preferred location for the Power Station AECC/ESL Site)	Option 4 (Llanfaethlu – preferred location for the MEEG Site)	Option 5 (Dalar Hir – preferred location of the Park and Ride Facility)
Criteria						
Primary Criteria	Secondary Criteria					
				disturbance to species would occur. The watercourse at the south end of the site could be affected from sedimentation through surface run-off.		could have species sensitive to noise. Some boundary features would be lost to gain access to the site. A loss of priority habitat and disturbance to species would occur.
	Cultural Heritage	No heritage assets have been identified on the site or in the immediate surrounding area which would be directly or indirectly affected by the compound.				
Engineering/L ogistics	Site Preparation	<p>The site is a relatively flat greenfield site.</p> <p>An access point from the power station access road exists as a result of early preparatory works on the Wylfa Newydd Development Area, and a haul road runs through the site.</p> <p>An area of the site would have to be stripped of vegetation and topsoil, with porous hardstanding laid. Soil management activities could be combined with the Power Station Site preparation and clearance works.</p> <p>The southern area of the site has been identified for an area to store topsoil during site preparation and clearance, therefore the northern section of the area would be used for the recycling compound. The area would be secured within the site preparation and clearance site perimeter fence.</p> <p>The size of the site and access is suitable for the type and numbers of operational vehicles using the compound. Sufficient space would be available for vehicles to safely enter and leave the site, and for materials storage.</p>	<p>The site is a relatively flat greenfield site.</p> <p>The area will be developed to site the replacement Magnox AECC and DSL, and construction of these facilities would occur prior to the operations of the compound. Accordingly, the site would have already been accessed with some site preparation works undertaken.</p> <p>Notwithstanding this, an area of the site would still likely need stripping of vegetation and topsoil, with a porous hardstanding laid. Soil management activities could be combined with the replacement Magnox AECC and DSL site preparation and clearance works if the schedule aligns.</p> <p>The site would be secure and have a site perimeter fence as part of the replacement Magnox AECC and DSL development.</p> <p>Existing utilities would be available at the site.</p>	<p>The site is a greenfield site which slopes upwards from the south and away from the A5025.</p> <p>An area of the site would have to be stripped of vegetation and topsoil, with a porous hardstanding laid. Due to the gradient of the site, some site levelling/earthmoving would likely be required which would involve vehicle movements.</p> <p>The site is to be used to locate the AECC and ESL.</p> <p>The size and shape of the site could affect operations and traffic movements due to visibility and accessibility restrictions from the side road off the A5025. This could lead to vehicle stacking at the junction and on the A5025 itself.</p> <p>Fencing and hoarding would be used to contain and secure the site.</p> <p>Control and protection measures for drainage may be required due to the watercourse on the southern boundary.</p> <p>Connections to utilities would be required.</p>	<p>The site is a brownfield site currently occupied by a garage and depot.</p> <p>The site is secure; however additional fencing may be required for security and protection of adjacent residents.</p> <p>The site is on the west side of the A5025 and has good accessibility from the road. Sufficient space is available within the site and on the A5025 to accommodate traffic movements and stacking up of vehicles, if required.</p> <p>Existing utilities are available, and existing site drainage can be utilised.</p>	<p>The site is a relatively flat greenfield site.</p> <p>The site is to be used to locate the Park and Ride facility. The whole area would require topsoil and vegetation strip to allow the construction of the facility.</p> <p>An area to the west of the site has been identified as this would facilitate access from London road, of the A55 subject to the formation of a new access into the field (requiring boundary removal).</p> <p>Fencing and hoarding would be used to contain and secure the site.</p> <p>An area of the site would have to be stripped of vegetation and topsoil, and a porous hardstanding laid. Soil management would have to be undertaken on site.</p> <p>Connections to utilities would be required.</p>

Site		Option 1 (Wylfa Newydd Development Area)	Option 2 (Preferred Location for the replacement Magnox AECC/DSL Site)	Option 3 (Cefn Coch - preferred location for the Power Station AECC/ESL Site)	Option 4 (Llanfaethlu – preferred location for the MEEG Site)	Option 5 (Dalar Hir – preferred location of the Park and Ride Facility)
Criteria						
Primary Criteria	Secondary Criteria					
		Existing utilities would be available at the site.				
	Land availability & future use	<p>The land is owned by Horizon and will be used for the Power Station and associated facilities.</p> <p>The southern section would be used for the stockpiling of topsoil at the same time as the recycling compound is operational, therefore the compound would be sited in the northern half of the site.</p> <p>The northern half would be used as compound areas to aid the construction of the Power Station, followed by the construction of the training and simulator building. The operations of the recycling compound would occur during early site preparation works prior to the area being used for lay down areas; however the size of the area could allow activities to work in unison with minimal impacts on each other. The operations of the recycling compound would end prior to main construction of the Power station and subsequently the construction of the training and simulator building.</p>	<p>The land is owned by Horizon and will be used for the replacement Magnox AECC and DSL.</p> <p>The final stages of constructing the replacement Magnox AECC and DSL would overlap with the operations of the compound. Due to the size of the site and activities associated with both developments, operating the compound may be restricted in terms of safety and operational movements, in particular the stacking up of vehicles and storage of materials.</p>	<p>The land is owned by Horizon and is intended to be used for the AECC and ESL. Construction of the AECC and ESL would occur once the compound ceases operations.</p> <p>There may be a short period of time where the site is left unoccupied; however the aim is to start construction works for the AECC and ESL as soon as the compound is no longer required.</p> <p>The whole of the site would be utilised.</p>	<p>An option deal is currently being agreed and Horizon intend to use the site for the MEEG facility. The construction of the MEEG would commence after the operations of compound are completed. There would be a period of time (approximately 9 months, potentially more) where the site is left unoccupied, so mitigation measures may be required to minimise effects when site is left for period of time.</p>	<p>The land is owned by Horizon and is intended to be used for the Park and Ride facility.</p> <p>Construction of the Park and Ride would occur once the compound operations are completed. There may be a short period of time where the site is left unoccupied, so mitigation measures may be required to minimise effects when site is left for period of time.</p>
	Proximity to A5025	The site is located on the west side of the A5025 by Tregele.	The site is located on the east side of the A5025 by Tregele.	The site is located on the west side of the A5025 by Cefn Coch, accessible from a side road.	The site is located on the east side of the A5025 by Llanfaethlu.	The site is located off Junction 4 of the A55, approximately 4 miles Valley / A5025.

5 Options appraisal conclusion

- 5.1 Based on the assessment of the five options considered in table 4.1, the following conclusions are noted below for each option

Option 1

- 5.2 Option 1 performs the best with respect to effects on hydrological features (as there are no adjacent watercourses), land availability and has good proximity to A5025. This option also has minimal effects on ecological receptors and would require limited option preparation. This option is constrained in relation to effects on landscape and noise receptors (due to presence of a large number of adjacent residential properties), and land use (due to a large land take and potential loss of good quality agricultural land).

Option 2

- 5.3 Option 2 performs the best with respect to effects on hydrological features, (as there are no adjacent watercourses), and has good proximity to A5025. This option also has minimal effects on ecological features and would require limited option preparation. This option is constrained in relation to effects on landscape and noise receptors (due to presence of a large number of adjacent residential properties), and land use (due to a large land take and potential loss of good quality agricultural land). The option is also constrained by land availability as the final stages of constructing the future Replacement Magnox AECC and DSL option would overlap with the operations of the compound.

Option 3

- 5.4 Option 3 performs the best with respect to planning policy/designations, as the option is located within an A5025 Improvement Area in the emerging JLDP (which has reached submission stage). Emerging Policies PS4 and TRA1 are therefore of relevance. These policies confirm that improvements to the strategic transportation network, including transport infrastructure improvements associated with new nuclear development at Wylfa Newydd, will be secured in such areas. The option also performs best for noise effects to residential receptors (due to a low number of receptors adjacent to the option). It also performs well in terms of proximity to A5025, land availability, and would have a minimal effect on landscape receptors and land use (due to a small land take and potential loss of poor quality agricultural land). The option is constrained in relation to the effects on ecological and hydrological receptors. The option would also need a large amount of option preparation and is constrained due to its shape and size, which may cause a problem with queueing of vehicles entering and leaving the option. This issue could be eased by careful option/traffic management.

Option 4

- 5.5 The proximity to the A5025 was a key consideration in the selection of the site due to Option 4 performs best with respect to effects on landscape receptors (due to a low number of receptors adjacent to the option) and effects on ecological features. The option also has good land availability and would require minimal option preparation as it has existing hard standing, some fencing and existing utility services. As the option is currently a brownfield

option, there would be no loss of agricultural land, so there would be a minimal effect on land use. This option performs well with respect to planning policy/designations, as it is located partly within the Development Boundary of Llanfaethlu as shown in the Stopped UDP (2005), albeit this designation is not shown in the emerging JLDP. This option is constrained in relation to effects on landscape and noise receptors (due to presence of a large number of adjacent residential properties and proposed new school).

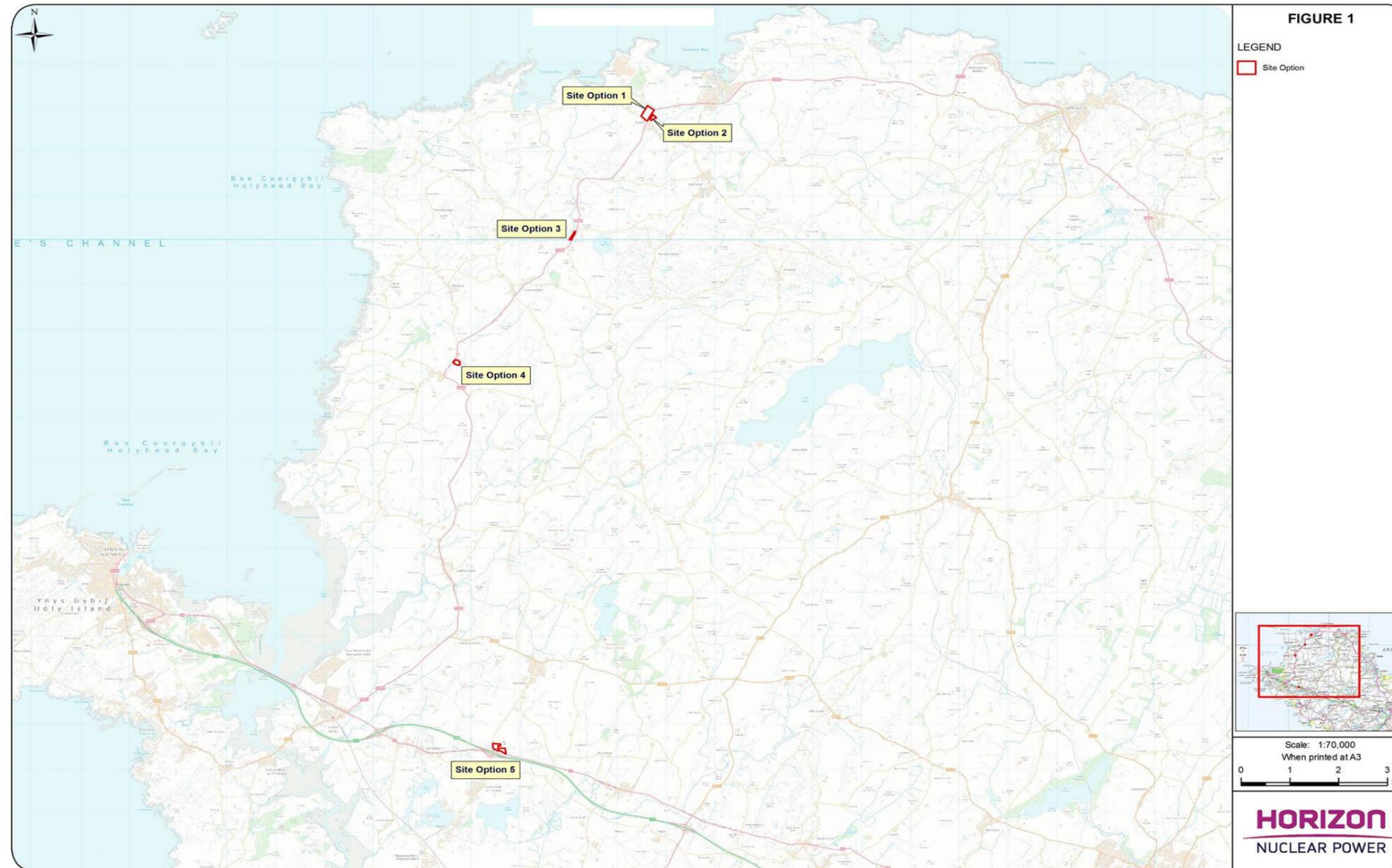
Option 5

- 5.6 Option 5 performs best for effects on landscape and noise receptors (due to a low number of receptors adjacent to the option). It also performs well in terms of proximity to A5025, land availability, and would have a minimal effect on land use (due to a small land take and potential loss of poor quality agricultural land). The option is constrained in relation to the effects on ecological and hydrological receptors. The option would also need a large amount of option preparation.

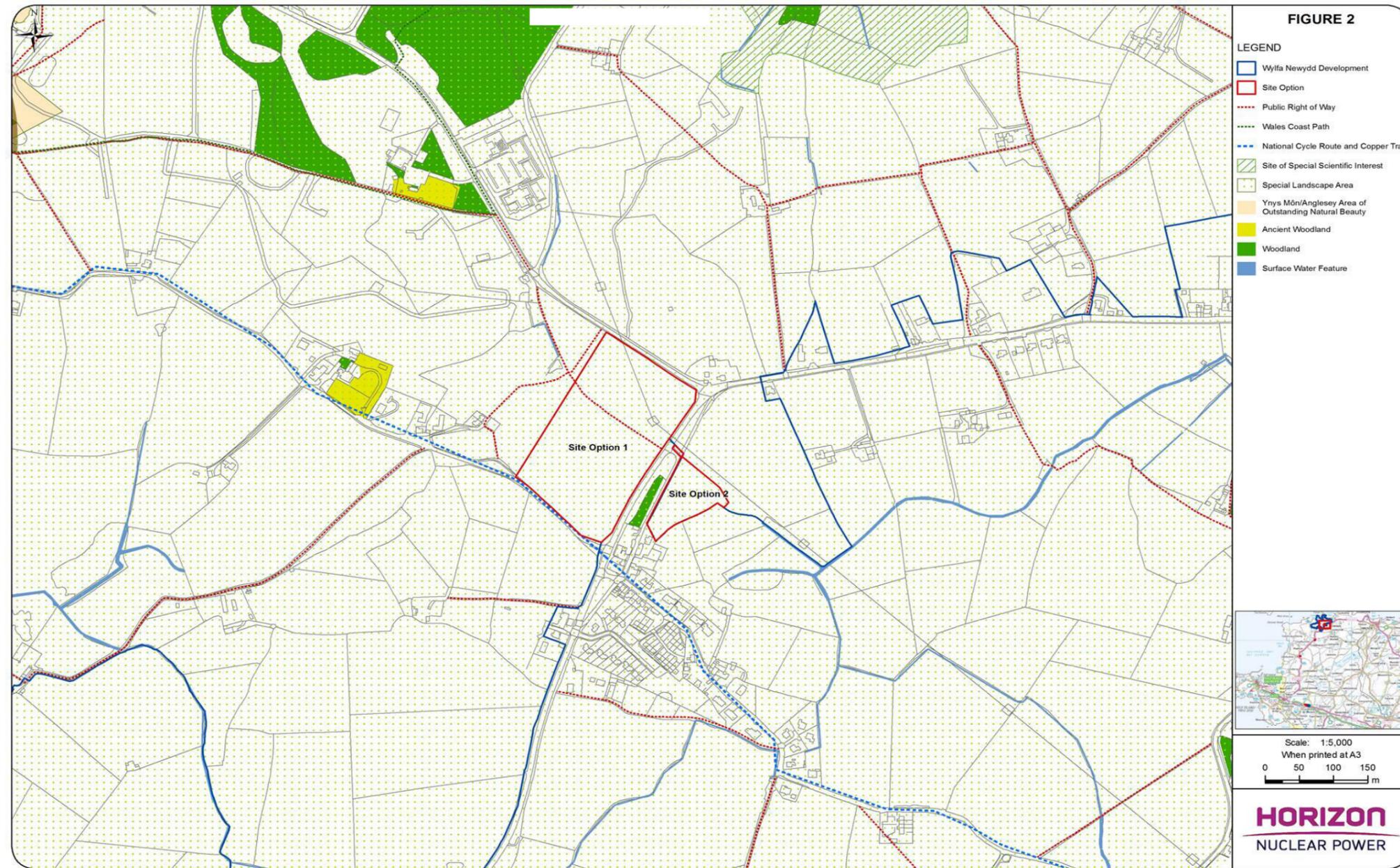
Conclusion

- 5.7 In considering all options Horizon considers that, upon review of all material factors, Site 3 'Cefn Coch' is, on balance, the most suitable site to accommodate the compound and has therefore been selected as the preferred location for this facility.

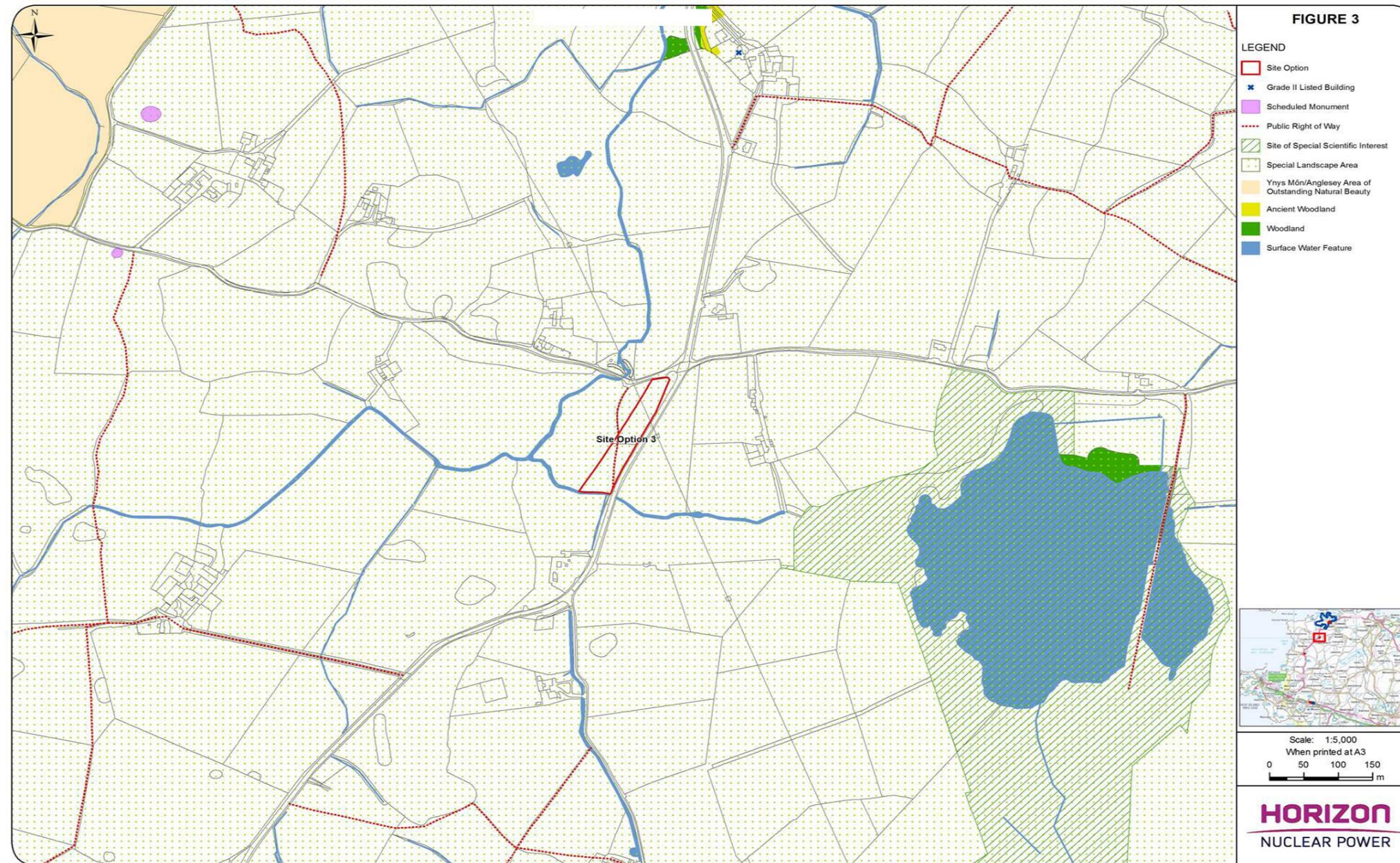
Appendix A Site options plan



Appendix B Site 1 and 2 plan



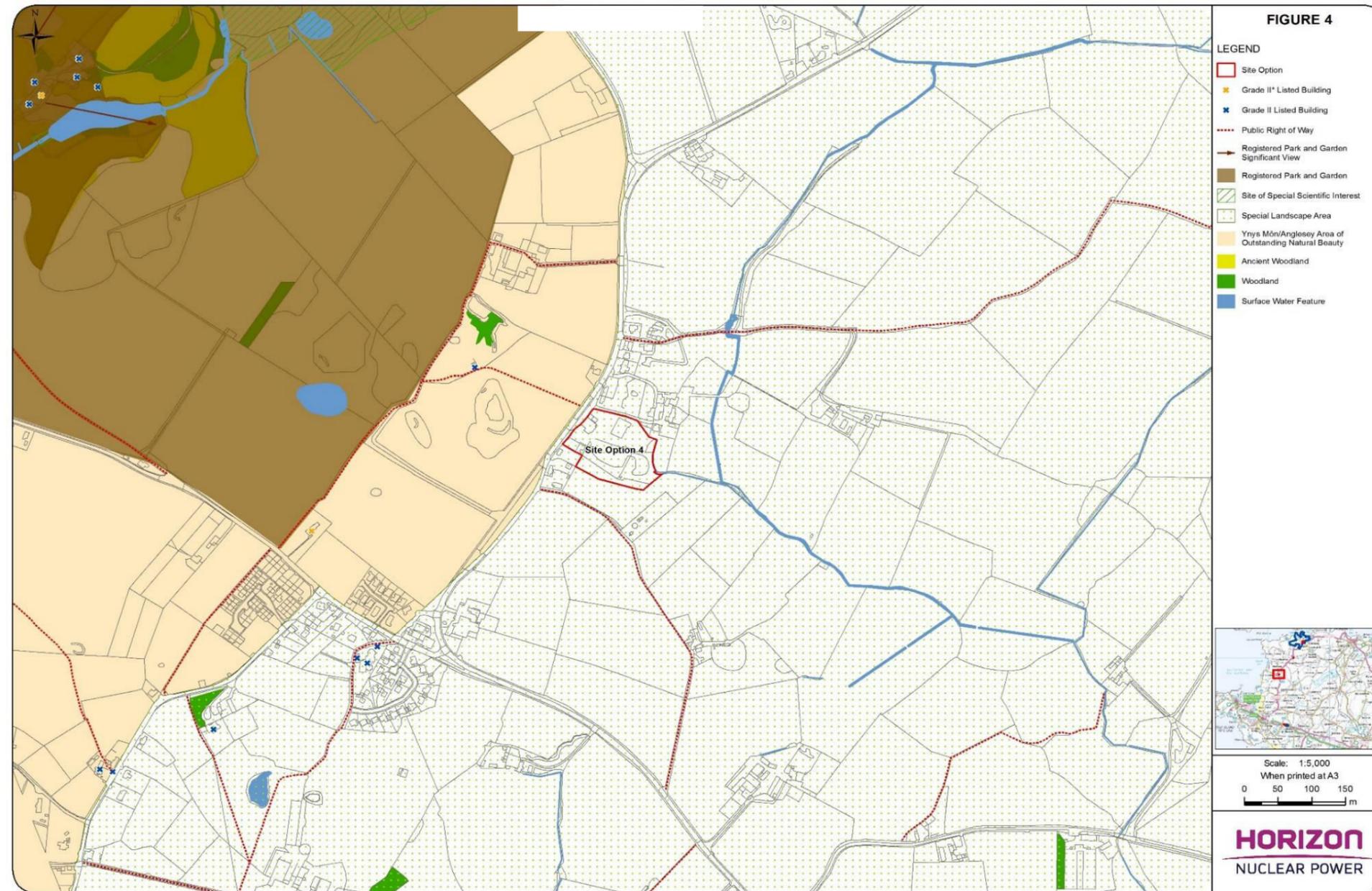
Appendix C Site 3 plan



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FIGURE 3 / SITE OPTION 3 AND ENVIRONMENTAL CONSIDERATIONS / 60PO8033_OPT_REP_003 Rev 0.0

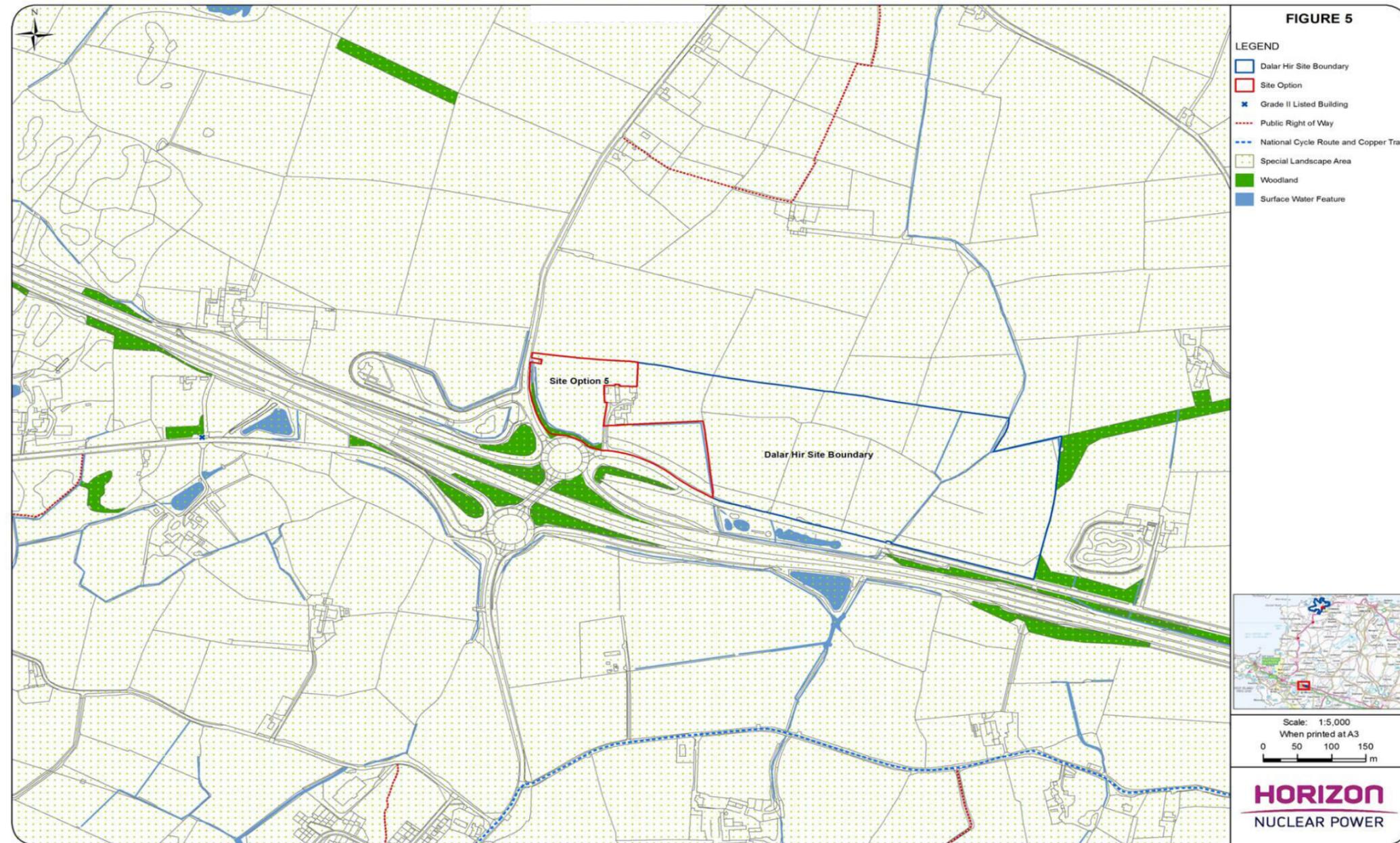
Appendix D Site 4 plan



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FIGURE 4 / SITE OPTION 4 AND ENVIRONMENTAL CONSIDERATIONS / 60PO8033_OPT_REP_004 Rev 0.0

Appendix E Site 5 plan



Appendix F Pavement recycling plant photos



CONTACT US:

If you have any questions or feedback regarding the Wylfa Newydd Project you can contact us on our dedicated Wylfa Newydd freephone hotline and email address, by calling on **0800 954 9516** or emailing **wylfaenquiries@horizonnuclearpower.com**

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