

Wylfa Newydd Project Pre-Application Consultation - Stage One

Consultation Overview Document





Aerial photo including the Power Station Site and the existing Magnox power station

Foreword from Alan Raymant

Anglesey has a proud industrial history, including nuclear power generation for the last 40 years. We want to build on this heritage and are proposing a multi-billion pound investment in a new power station, using the latest generation of nuclear technology. This will play a key role in meeting the UK's need for a cleaner energy future.

This is the first stage of public consultation on our Wylfa Newydd Project and builds on the dialogue we have worked hard to develop with the local community in recent years. Our Wylfa Newydd Project will bring significant investment to Anglesey and North-West Wales. We will create many thousands of construction jobs, which could reach 8,500 during peak periods at the Power Station Site, as well as creating and supporting further employment and supply chain opportunities in support services and industries, helping to secure Anglesey's long-term economic future. We are keen to understand your thoughts as we develop our proposals.

We want to provide a consultation that is meaningful, inclusive and clear and we encourage you to take part in the consultation process. Your views count.

We are also committed to working with you to understand the potential impacts of the Project and consider ways in which we can manage these effects and create benefits for the community.

In this document we outline our specific proposals and ask a number of questions about particular elements of the Project where your comments could have a real impact. We want to know what you like

about our proposals and what you think could be done differently.

We're pleased to have reached the point of formal consultation with the community and we're looking forward to hearing your views.



Alan Raymant

Chief Operating Officer
Horizon Nuclear Power



OUR VISION

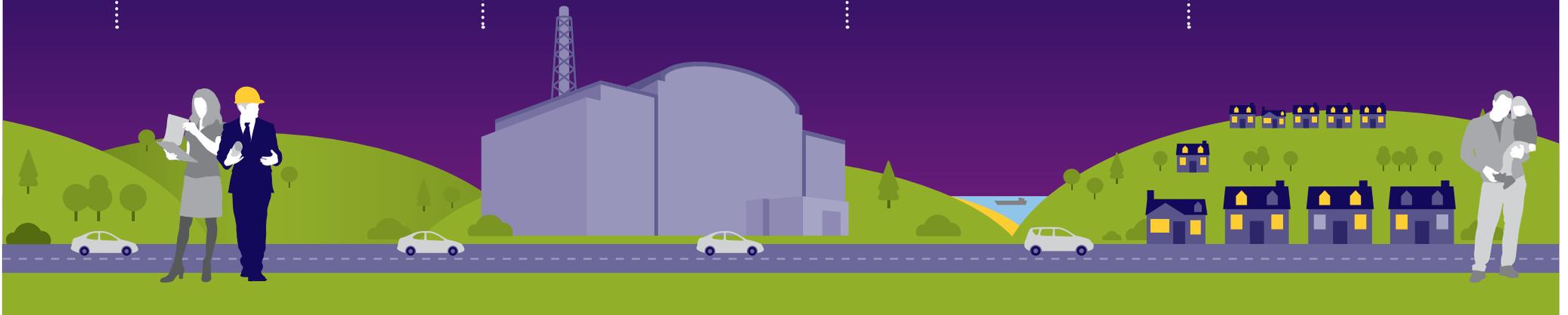
We believe there is a compelling requirement for new nuclear power in the UK to help tackle the vital and complex challenge of delivering a sustainable energy future. Horizon will deliver secure, affordable, low carbon energy for present and future generations.

Multi-billion pound investment in UK nuclear power stations

Two UK Advanced Boiling Water Reactors with operating lives of around 60 years each

Wylfa Newydd will generate 2,700 MW of low carbon electricity

Enough low carbon electricity for around 5 million homes



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MORE INFORMATION

This is an overview of the Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Document for our Project. We’ve listed the important documents that are available during this consultation on page 36 and you can download copies of these from our website at: www.horizonnuclearpower.com/consultation.

We’ve included notes throughout this document, like this one, to let you know where you can find more information about particular topics.

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PLEASE LOOK OUT FOR THESE ICONS THROUGHOUT THIS DOCUMENT



QUESTION

We have included our consultation questions about elements of the Project where your input could be particularly helpful. The question mark indicates when to refer to the feedback form, enclosed with this document.



MORE INFORMATION

This indicates more detailed information about the Project.



FURTHER READING

This indicates where and how further reading about the Project can be accessed.

Project overview

We are planning to construct and operate a new nuclear power station at Wylfa, to the west of Cemaes, and immediately south of the existing Magnox power station. Our project will not only provide secure low carbon electricity for many decades, but will create significant long-term employment opportunities and economic benefits for Anglesey and North Wales.

OUR PROJECT

This overview is about the **Wylfa Newydd Project** (or Project) as a whole, which includes the **Power Station** and **Associated Development**.

The Power Station

The Power Station is the proposed new nuclear power station including two UK Advanced Boiling Water Reactors (UK ABWR) to be supplied by Hitachi-GE Nuclear Energy, Ltd, associated plant and ancillary structures and features to be constructed and operated at Wylfa. See 'The Power Station' section of this document beginning on page 11 for more information.

Specific information on the construction activities that need to take place both on the land and in the water near the Porth-y-pistyll coastline, including a cooling water system and marine off-loading facility, as well as our initial ideas on landscaping and contouring the land around the Power Station, is provided in this document.

We have also included information on our proposals to help local people understand what skills they will need to become involved in our Project, as well as information on potential proposals and opportunities for community facilities, sports and leisure and recreation.

Associated Development

Associated Development supports delivery of the Power Station. This will include such works as highway improvements along the A5025, park and ride facilities for workers, at least one logistics centre and off-site temporary worker accommodation. See the 'Meeting Transport and Construction Workforce Requirements' section of this document beginning on page 25 for more information.

We have three areas that we use when referring to the Project:

- **Power Station Site** – the indicative area of land and sea within which the majority of the permanent Power Station buildings, plant and structures would be situated.
- **Wylfa Newydd Development Area** – the indicative area of land including the Power Station Site and the surrounding areas that would be used for the construction and operation of the Power Station.
- **Wylfa NPS Site** – the Government has issued a National Policy Statement (NPS) regarding a small number of sites in the UK suitable for the development of a new nuclear power station. The area identified at Wylfa is known as the Wylfa NPS Site.

The Isle of Anglesey County Council has published planning guidance which we will consider in developing our Project proposals. This guidance includes the Council's vision for the Project to be *"a positive driver for the transformation of the economy and communities on Anglesey, providing sustainable employment opportunities, improving the quality of life for existing and future generations and enhancing local identity and distinctiveness."*

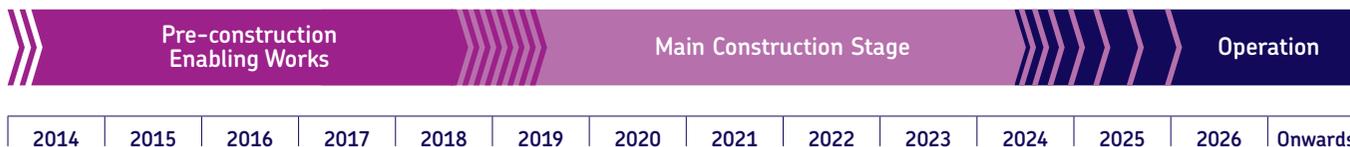


Figure 1: Proposed timeline and phasing of the Wylfa Newydd Project

QUESTION 1

Do you have any general comments about the Project?

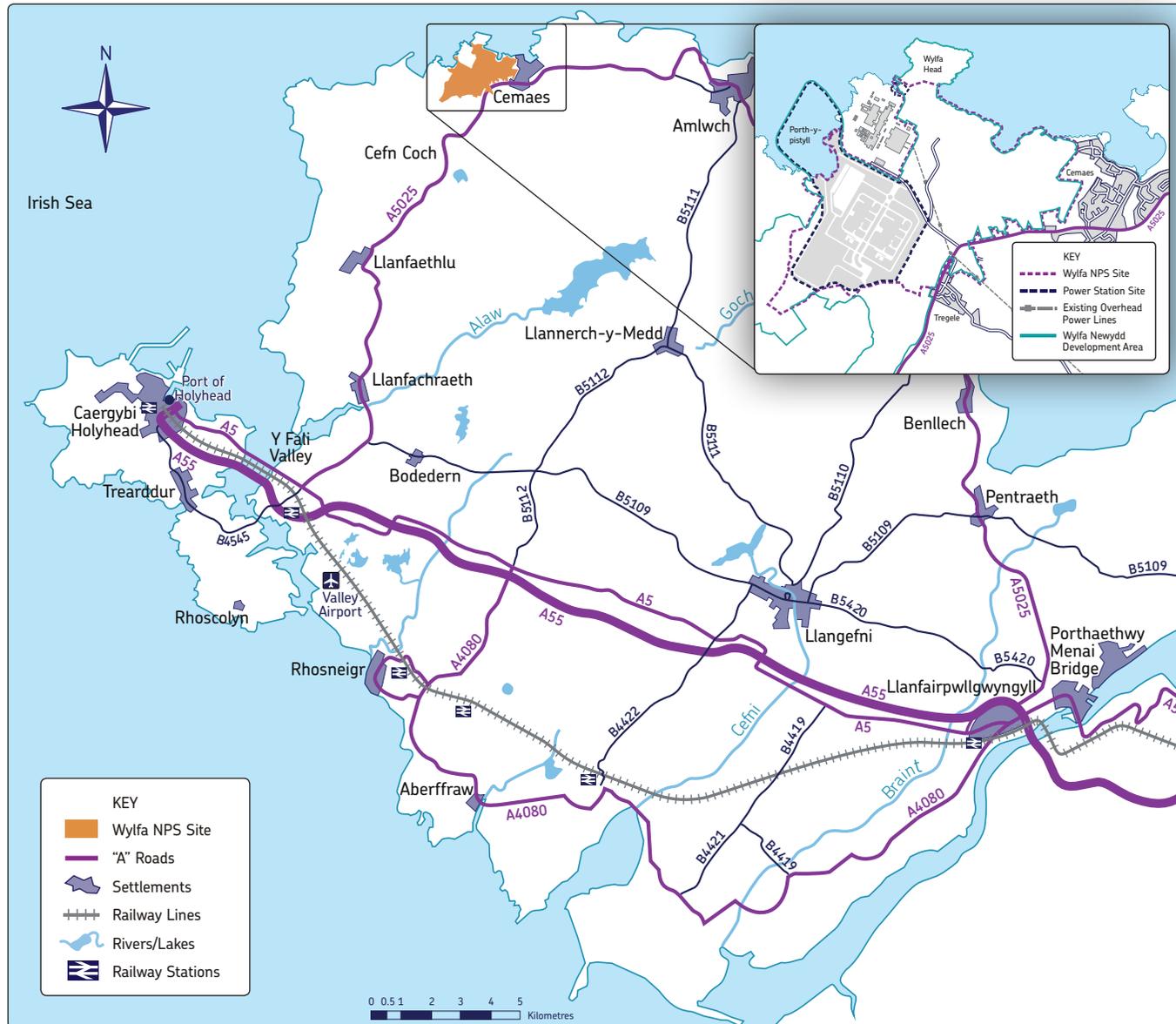


Figure 2: Power Station location

PROCESS FOR PROJECT APPROVAL

The UK faces significant energy challenges in the coming years, requiring substantial investment in new technologies and infrastructure as it moves towards reducing carbon emissions and the use of alternative forms of energy. National planning policy makes a clear commitment to the delivery of low carbon energy generation to help maintain secure energy supplies for the UK, whilst tackling climate change.

The Government considers nuclear power will have an important role in meeting these challenges, and has identified the Wyifa NPS Site on Anglesey as a potentially suitable site for a new nuclear power station.

The Planning Act 2008 provides the legal framework for consenting 'nationally significant infrastructure projects' such as nuclear power stations. A key authorisation that we need to build the Power Station is a development consent order, granted by the Secretary of State for Energy and Climate Change. We plan to make an application for the development consent order for the Power Station in 2017.

Nuclear power is a highly regulated industry and a nuclear site licence will be required to install and operate the Power Station. Various other licences and permits will be required, including planning permissions, marine licences and environmental permits.

FURTHER READING

More information on how the Wyifa NPS Site and seven other sites were determined to be potentially suitable for nuclear power generation is available in a National Policy Statement that can be found at: www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure

This consultation

The Planning Act 2008 requires the promoter of a nationally significant infrastructure project to undertake pre-application consultation before making an application for a development consent order. In this case, Horizon is the promoter and our Power Station is the nationally significant infrastructure project. We anticipate that this is the first of a two-stage pre-application process about our Project.

DOCUMENTS AVAILABLE FOR CONSULTATION

The documents available for this consultation vary in the level of technical information provided, as shown in Figure 3. They are available for downloading at: www.horizonnuclearpower.com/consultation.

NEXT STEPS

After this first stage of consultation, we will further develop our Project proposals. We intend to keep you informed about the way your comments have been considered. We plan to do this using our established engagement processes, such as Project Liaison Group meetings, newsletters and monthly open surgeries. Our second stage of consultation with you is envisaged to be towards the end of 2015.

We will produce an Interim Consultation Report that will accompany our Stage Two pre-application consultation, outlining the relevant responses that we've received and how we have taken them into account in developing the Project.



QUESTION 2

Do you have any comments about the way in which the consultation is being carried out?

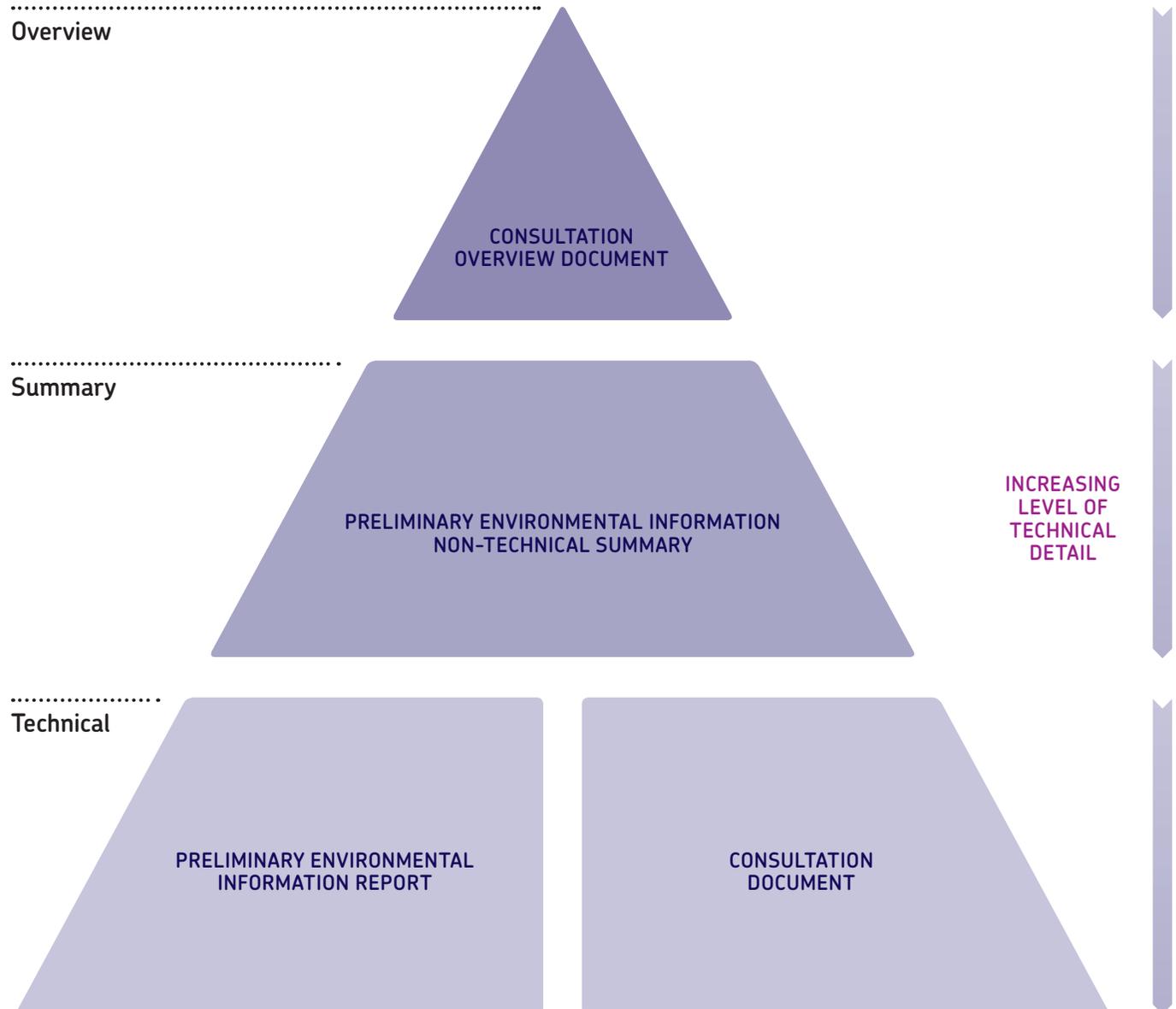


Figure 3: Stage One pre-application consultation materials

SCOPE TO INFLUENCE THE PROJECT

It is important to understand that we are not consulting on the principle of nuclear power or the suitability of our site for a new nuclear power station as the acceptability of both matters has already been established by the Government. Rather, we are consulting on our specific proposals for the Project.

We have sought to identify your scope to influence the Project, which differs according to the amount of progress that we have made developing the various elements of our Project proposals. More information regarding your scope to influence individual elements of the Project can be found in Chapters 6, 8, 9, 10 and 11 of the Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Document. Generally, our consultation questions relate to elements where options exist, giving you the greatest ability to influence the Project.

Your feedback is important to us as we develop our proposals. We will take your views into account alongside our own assessments, contributing to future Project proposals.

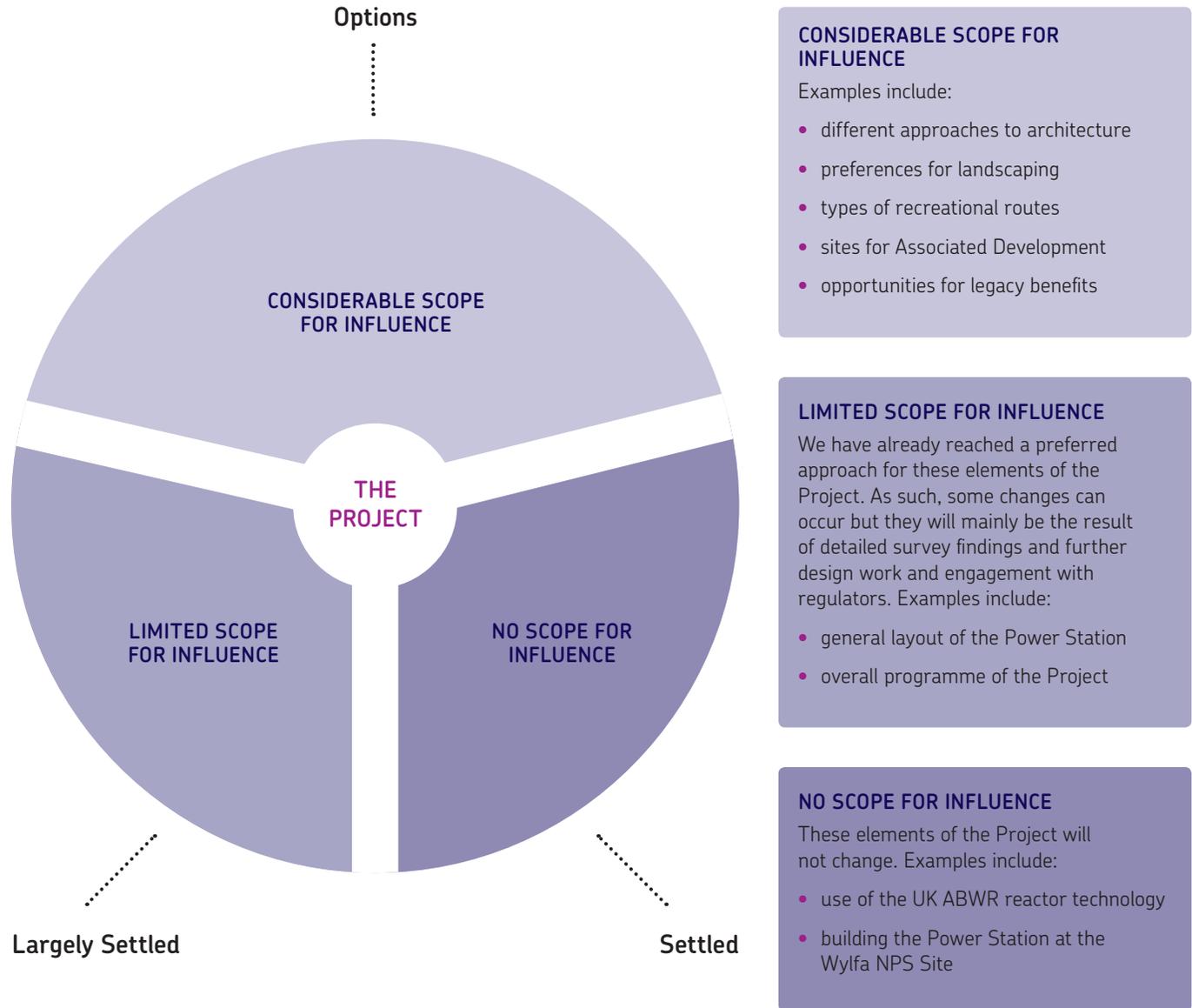


Figure 4: Scope for influencing the Project

Environmental overview

LOCAL ENVIRONMENT

In addition to the settlements of Cemaes and Tregele, the land around the Wylfa Newydd Development Area includes small clusters of residential dwellings and farmsteads. The landscape in the area is characterised by small rounded hills (known as drumlins) along with settlements and local roads. The exposed weathered coastlines of the Irish Sea form prominent features.

Land in the area is generally managed as grazing pasture, contained by hedgerows and crossed by a network of roads, rural lanes, watercourses and overhead power lines. Much of the land surrounding the Wylfa Newydd Development Area is designated as an Area of Outstanding Natural Beauty, parts of which coincide with sections of the North Anglesey Heritage Coast. As shown in Figure 5, other designated features nearby include:

- Tre'r Gof and Cae Gwyn Sites of Special Scientific Interest
- Ynys Feurig, Cemlyn Bay and The Skerries Special Protection Area
- Cemlyn Bay Special Area of Conservation
- Grade II listed Cestyll Garden, also a Registered Park and Garden of Special Historic Interest in Wales
- Large areas of land locally designated as a Special Landscape Area

A number of public rights of way, including the Wales Coast Path and the Copper Trail, are located within the Wylfa Newydd Development Area.

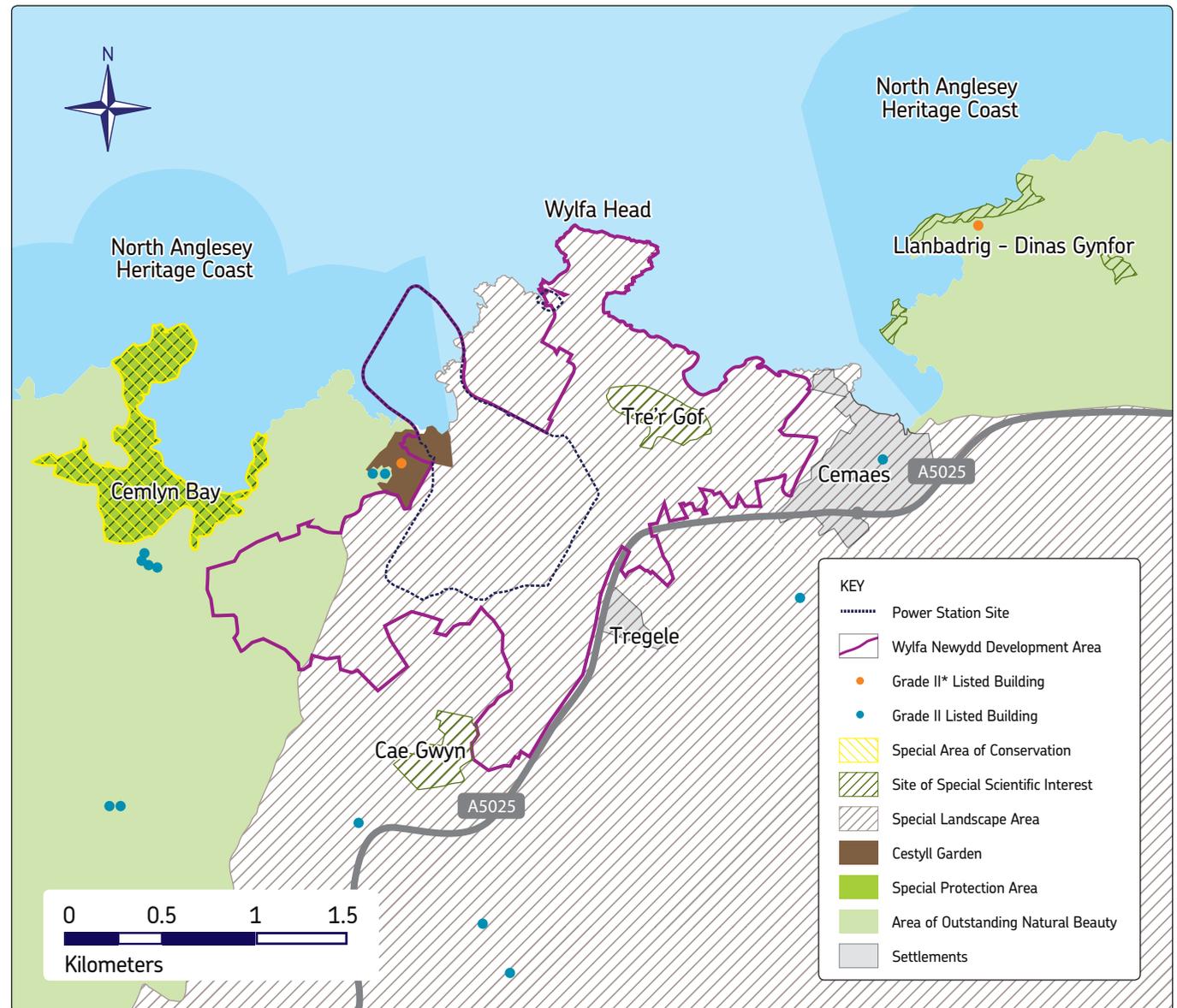


Figure 5: Local environment - Key designations

ENVIRONMENTAL IMPACT ASSESSMENT

In order to understand the likely effects on the existing environment, we will undertake an environmental impact assessment of our Project.

While the Project has not yet reached the stage where a detailed environmental impact assessment can be carried out, we have prepared the Wylfa Newydd Project Pre-Application Consultation – Stage One Preliminary Environmental Information Report that sets out the environmental topics that we plan to address, information about the existing environmental conditions, and the potential environmental impacts of the Project. Our current expectation is that the Project would have potential impacts on socio-economics, recreation, traffic and transport, noise, air quality, soils, hydrology, ecology, tides and sea currents and existing views. The Preliminary Environment Information Report also provides an indication of measures that could reduce or manage potential adverse impacts that we have identified, or offer enhancement of potential beneficial impacts.



View looking across part of the Power Station Site



YOUR VIEWS

We welcome your views on mitigation measures that you think would help reduce and offset likely adverse effects of construction and operation of the Power Station.

SUPPORTING ASSESSMENTS

IMPACT ASSESSMENT OF THE PROJECT ON WELSH LANGUAGE AND CULTURE

We recognise the importance of the Welsh language and culture and have commissioned a Language Impact Assessment to identify any positive or potentially negative effects of the Project on the Welsh language and culture and, if needed, appropriate measures for mitigation and improvement. A scoping report has been prepared which sets out the methodology of our upcoming assessment. We are currently reviewing this scoping report with the Isle of Anglesey County Council and key stakeholders.

HEALTH IMPACT ASSESSMENT

We have commissioned a Health Impact Assessment, which will consider the potential impacts of the Project on health and wellbeing in the community. A scoping report has been prepared to set out our proposed methodology for the assessment and we are reviewing this with the Isle of Anglesey County Council and key stakeholders.

SUSTAINABILITY ASSESSMENT

We recognise the importance of sustainability. We have prepared a scoping report that sets out our objectives for sustainable development. We plan to periodically review our Project against these objectives to help check that we're working towards a sustainable construction and operation. Our scoping report is being reviewed with the Isle of Anglesey County Council and key stakeholders.

Although they are not being formally consulted upon, these scoping reports are available on our website: www.horizonnuclearpower.com/consultation. The assessments will form part of our application for a development consent order for the Power Station.



QUESTION 3

Do you have any comments relating to the Preliminary Environmental Information Report presented by Horizon?



MORE INFORMATION

You can read more about the potential impacts that our Project may have on the environment in the Wylfa Newydd Project Pre-Application Consultation – Stage One Preliminary Environmental Information Report and accompanying Non-Technical Summary. Both of these documents can be downloaded from www.horizonnuclearpower.com/consultation.

The Power Station

PROJECT LOCATION AND COMPONENTS

The majority of the Power Station buildings will be located in the area referred to as the Power Station Site, indicated in Figure 6.

We estimate that the operational Power Station will only need about 80-90 hectares of land rather than the whole of the Wylfa NPS Site. The Power Station Site includes parts of the relatively sheltered waters of Porth-y-pistyll, south-west of the existing Magnox power station. The two nuclear reactors, cooling water intake/pumphouse, breakwaters and outfall structures, as well as other ancillary structures will be situated within the Power Station Site.

An indicative area for the Wylfa Newydd Development Area is also shown on Figure 6 and includes the Power Station Site and the surrounding areas that will be used for the construction and operation of the Power Station. This will give us enough space to store plant, machinery and materials that will be needed for construction works as well as a number of temporary buildings to provide office, storage and welfare facilities for construction workers. The Wylfa Gateway Complex is within this area and will contain alternative premises for a number of facilities that we need to relocate during our Enabling Works, including the Wylfa Sports and Social Club. The Wylfa Gateway Complex is also the preferred location for our visitor centre. We may also locate some temporary worker accommodation within the Wylfa Newydd Development Area.

Some areas of land needed for the Project are yet to be identified but would be outside the Wylfa Newydd Development Area and are referred to as 'off-site'. These areas are expected to be needed for the development of off-site temporary worker accommodation (see page 31), highways improvements (see page 28) along with other transport initiatives such as park and ride facilities and at least one logistics centre (see page 32).

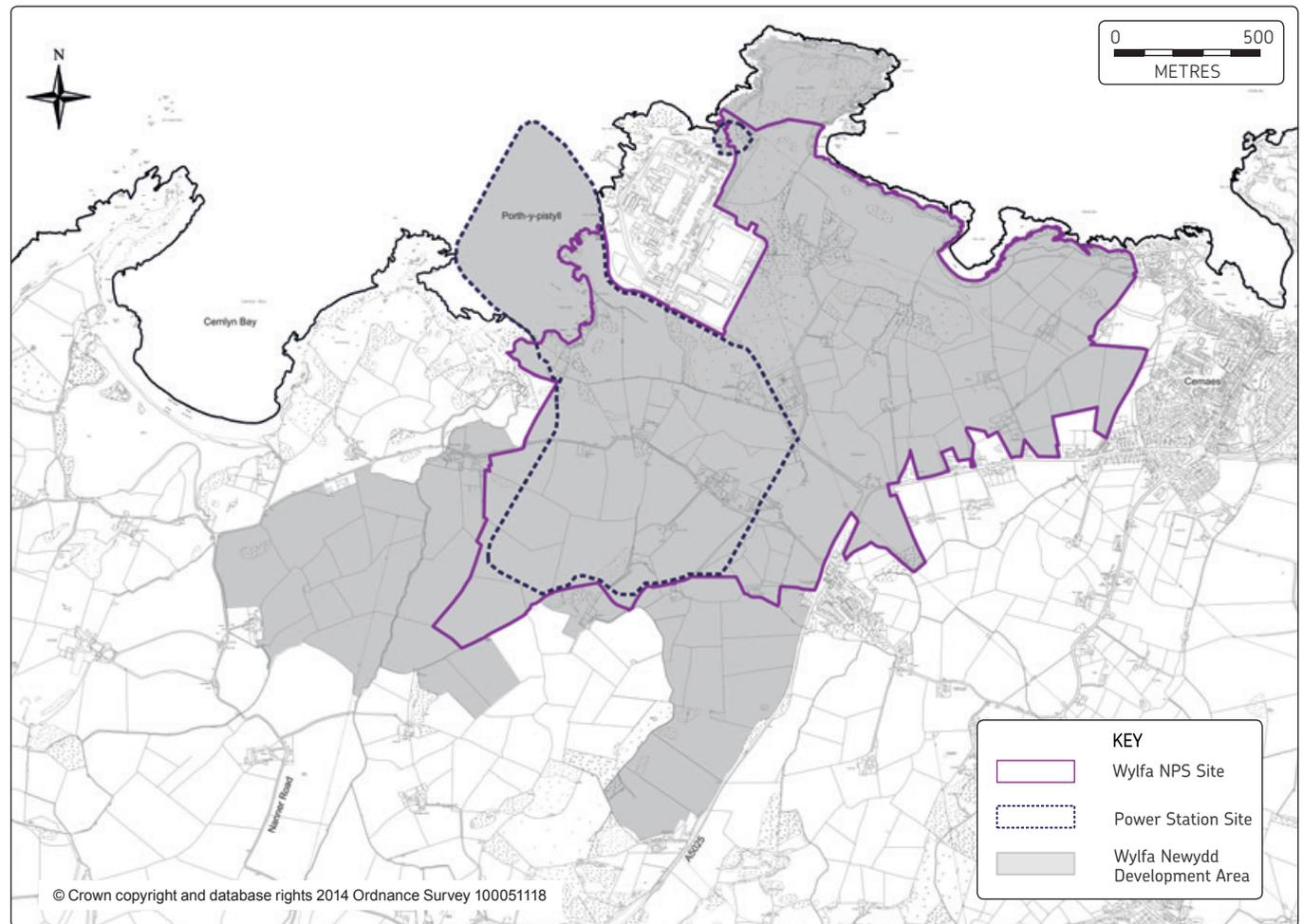


Figure 6: Geographic areas of the Project

POWER STATION CONFIGURATION

The Power Station will generate electricity using two UK ABWR nuclear reactors supplied by Hitachi-GE Nuclear Energy, Ltd. An indicative layout of the Power Station is provided in Figure 7.

The operational layout of the Power Station is largely determined by the reactor technology to be used. This is assessed by the Office for Nuclear Regulation, Natural Resources Wales and the Environment Agency.

We also have to develop some facilities that are physically separate from but local to and part of the Power Station, such as an alternate emergency control facility for the Power Station and garages to store specialist vehicles. For most of the facilities we expect to be located outside of an identified emergency zone but close enough to the Power Station Site to limit the travel time between the emergency facilities and the Power Station Site. Generally, we expect that this distance is between 1.5km and 5km away, with easy access to main roads.

We are particularly keen to receive feedback on elements of the Power Station that are at the options stage, including the layout of our proposed coastal development and the location of temporary interim storage of radioactive waste and spent fuel, for which we provide additional information in the following pages.

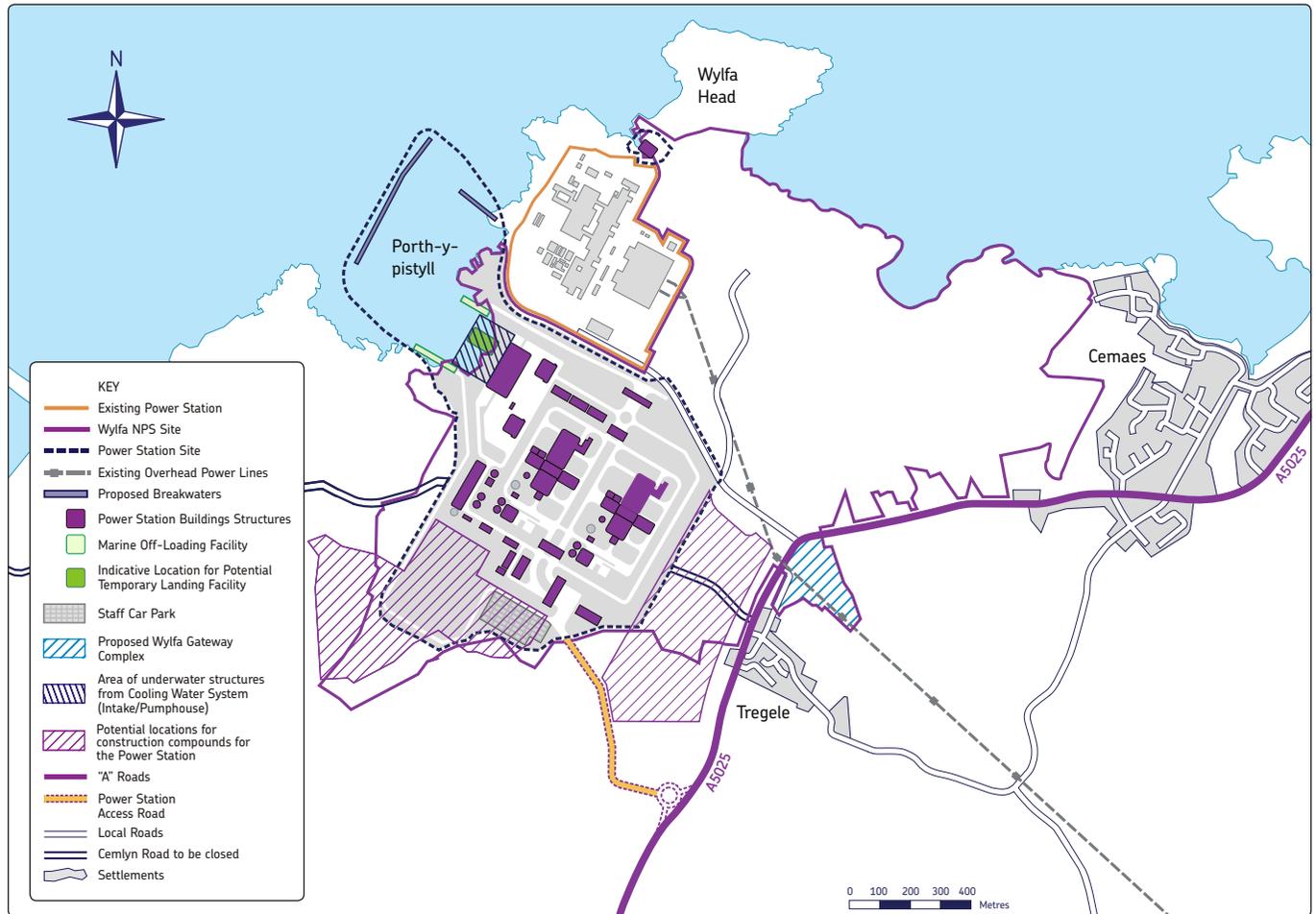


Figure 7: Indicative distribution of Project components - Power Station Site and surroundings



FURTHER READING

You can read more about the Power Station and how a nuclear power station works in Chapter 6 and Appendix A of the Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Document.

The Power Station

COASTAL DEVELOPMENT

Cooling Water System

We plan to use the Irish Sea as the water source for the Power Station cooling water system, similar to current arrangements at the existing Magnox power station. The cooling water system needs the following parts:

- An intake structure, which will draw water in from the Irish Sea
- A pumphouse, to distribute the water through the cooling water pipes within the Power Station
- Underground tunnels, to carry seawater away from the Power Station to the outfall structure
- An outfall structure, to discharge cooling water back to the Irish Sea

Intake for cooling water system

We have identified Porth-y-pistyll as the location for the intake structure. The coastline here already offers some protection from wave action and we need to build two breakwater structures to increase this protection and ensure a suitable wave climate at the cooling water intake. The indicative layout of the coastal development at Porth-y-pistyll, including the breakwaters, is shown in Figure 8.

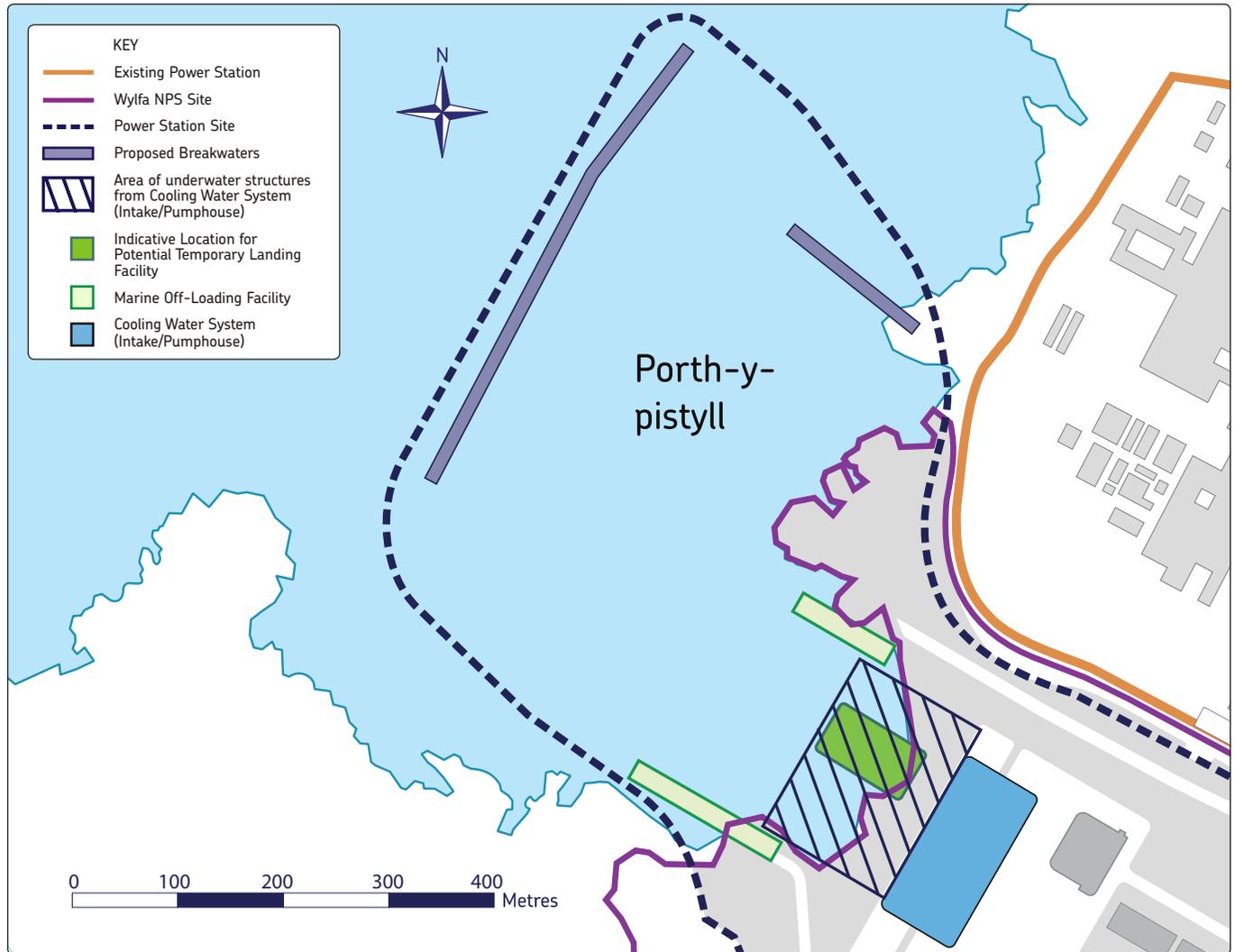


Figure 8: Indicative coastal development at Porth-y-pistyll



FURTHER READING

You can read more about how we chose Porth-y-pistyll for the cooling water intake and the proposed design of the breakwaters in Chapter 5 of the Wylfa Newydd Project Pre-Application Consultation – Stage One Preliminary Environmental Information Report.

Outfall for cooling water system

We have considered the way that tides and currents move water along the Anglesey coastline as it is important to ensure that cooling water returned to the Irish Sea at the outfall structure will disperse rapidly and, in addition, will not be drawn back in through the intake before it has had a chance to mix well with the cooler seawater. We have identified a preferred option for the outfall structure, shown in Figure 9. This would involve the construction of a new outfall structure that would discharge to the same location as the existing Magnox power station outfall and would re-use the channel already cut into the sea bed.

Our ability to re-use the existing Magnox power station outfall channel will depend on a number of factors, including discussions with Magnox Limited and the Nuclear Decommissioning Authority, particularly in relation to the compatibility of our timeframes, as well as further assessments and consultation feedback. If we conclude that it will not be possible to construct at this location, we would use an alternative location a short distance to the north of the existing Magnox power station outfall, on the south-western coast of Wylfa Head. At this location, water would discharge to the same bay, but in a different direction.

Marine Off-Loading Facility

The final piece of infrastructure located within Porth-y-pistyll would be a Marine Off-Loading Facility (MOLF). The MOLF will include two quays and will have an access route to allow deliveries directly to the Wylfa Newydd Development Area from the sea, reducing the need to use local roads. This facility would be made available during both construction and operation. See the 'Meeting Transport and Construction Workforce Requirements' section of this document for more information on how we will meet transport requirements.

We are proposing to position the MOLF in the same bay as the cooling water system intake. This will allow vessels to take advantage of the protection and shelter of the proposed breakwaters, as well as focussing potential impacts on the coastline and environment in one main location. We are also considering constructing a temporary landing facility at this location to use before the MOLF is fully constructed and operational.



QUESTION 4

Do you have any comments on Horizon's coastal development proposals at Porth-y-pistyll and Wylfa Head, relating to the cooling water system (including breakwaters) and Marine Off-Loading Facility?

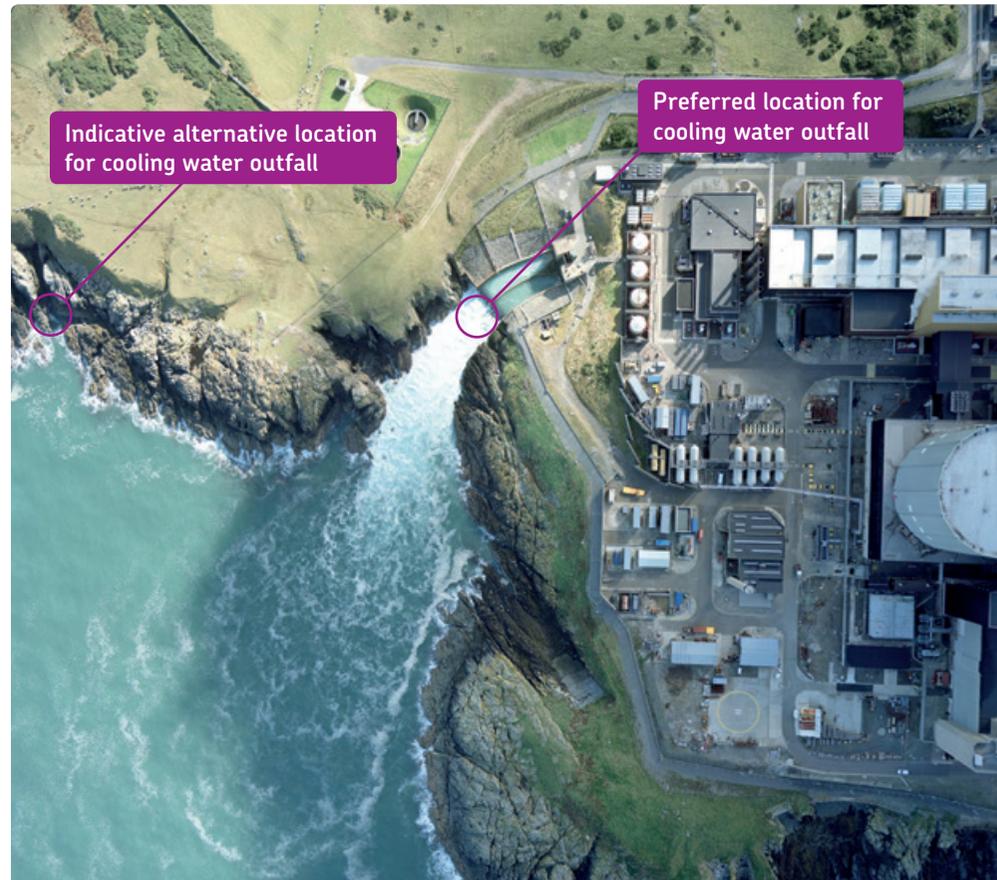


Figure 9: Existing Magnox power station cooling water system outfall location



YOUR VIEWS

We are keen to receive feedback on the development of a MOLF to manage freight deliveries to the Wylfa Newydd Development Area and the possibility of a temporary landing facility.

Your thoughts on the options for the cooling water outfall and the proposed co-location of the MOLF with the cooling water intake at Porth-y-pistyll are also welcome.

The Power Station

RADIOACTIVE WASTE

Once operational, the Power Station will start to produce spent fuel and radioactive wastes, which will be carefully segregated and categorised. Radioactive wastes with very low and low levels of radioactivity, such as contaminated gloves and overalls, are expected to be disposed of in licensed facilities away from the Power Station Site.

Radioactive wastes categorised as intermediate level waste and spent fuel will need to be stored at the Power Station Site pending disposal, in the longer term, to a national radioactive waste disposal facility elsewhere in the UK, in accordance with Government strategy.

Intermediate level waste and spent fuel will require special handling and storage to meet health, safety, security and environmental regulations. Specially designed packages would be used for the storage of intermediate level waste and these would be contained within an interim storage building, likely to be similar in size to existing stores at the Trawsfynydd and Berkeley power stations. Spent fuel must be cooled for a period of time once it is removed from the reactor and it is then transferred to its own separate interim storage buildings.

Figure 10 identifies the general location within the Power Station Site where the interim storage buildings for intermediate level waste and spent fuel could be accommodated. This location has been proposed as it is close to the site of the nuclear reactors and would allow safe and efficient transfer and storage of spent fuel and intermediate level waste. We also intend to work with Magnox Limited to explore the possibility that interim storage facilities could instead be located within the area of the existing Magnox power station, following its planned decommissioning. Use of this land would also reduce the amount of land that we need for the Power Station Site.

YOUR VIEWS

Your thoughts on the indicative and indicative alternative potential locations for the storage of intermediate level waste and spent fuel are welcome.

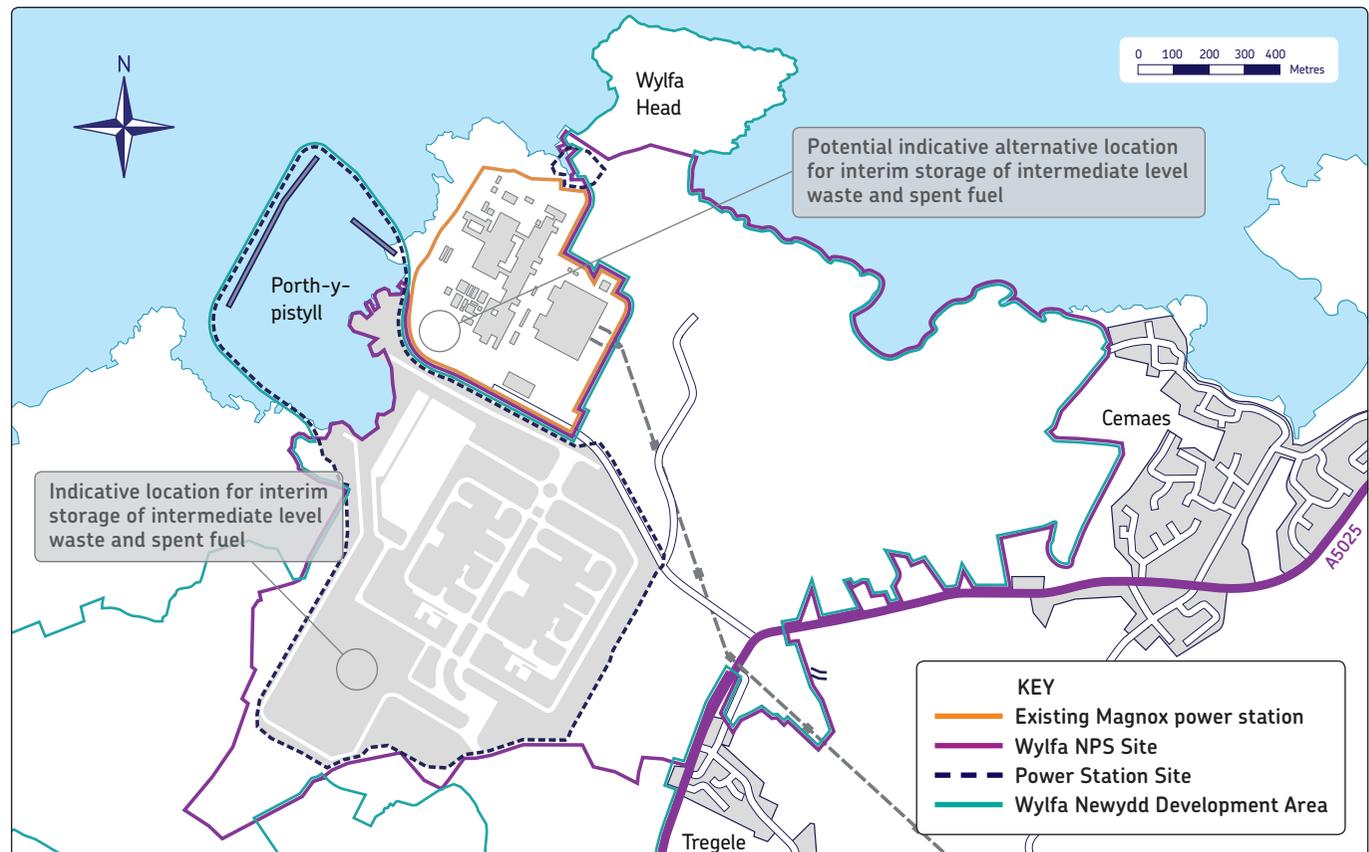


Figure 10: Indicative location for interim storage of intermediate level waste and spent fuel

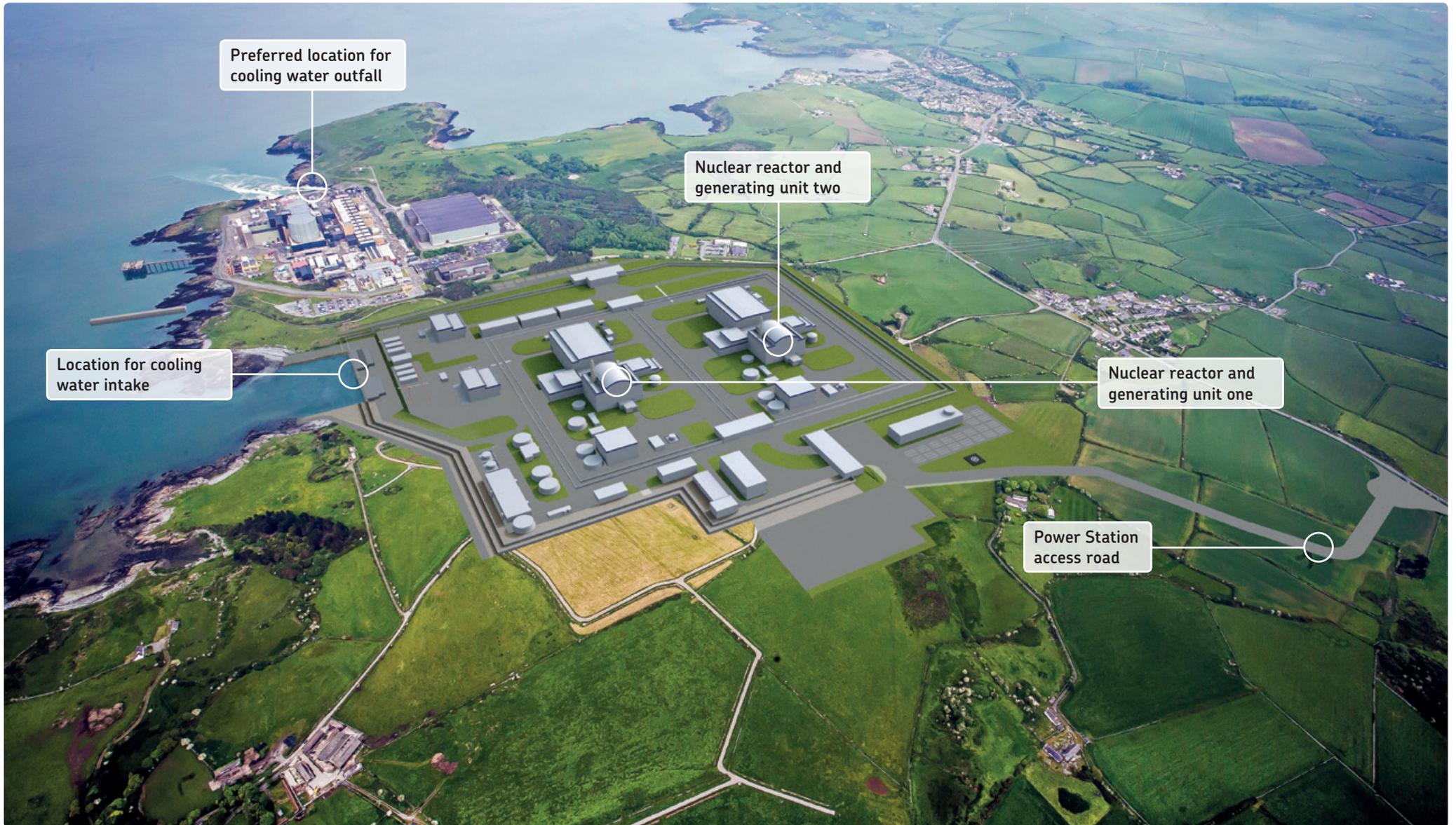


Figure 11: Power Station indicative layout

Building the Power Station

ENABLING WORKS

Enabling Works is the term we use to refer to the activities that are needed to prepare the Wylfa Newydd Development Area for construction of the Power Station. The bulk of the Enabling Works include activities such as levelling areas for construction compounds; permanent closure of the Cemlyn Road and some public footpaths (and diversion of others); removal of buildings and vegetation; enclosing the working area with fencing; installing lighting and security measures; and installing the temporary landing facility. Prior to the closure of Cemlyn Road, we will be upgrading the alternate route to Cemlyn Bay via Nanner Road.

We also intend to create a new access road for the Power Station. As shown in Figure 7 the likely route of the Power Station Access Road would leave the A5025 just to the south of Tregele.

In order to ensure that Associated Development is ready in time to support main construction activities, we will plan for building work to start before the beginning of the Main Construction stage.



FURTHER READING

You can read more about the Enabling Works in Chapter 7 of the Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Document.



MAIN CONSTRUCTION

The Main Construction stage is anticipated to last nine years, overlapping for a period with the Enabling Works. Construction activities will form a significant temporary feature in the local landscape although we will try to reduce the effects through mitigation, such as visual screening.

We plan to create large construction compounds for uses such as the storage of materials, site offices and concrete batching and have identified potential areas that would be needed to the south and east of the Power Station Site. We would also need several additional construction compounds elsewhere within the Wylfa Newydd Development Area, to support specific parts of the Project, such as the construction of the cooling water outfall at Wylfa Head. Main Construction works will include final site leveling and excavations for the Power Station main foundations, main civil works, building erection and commissioning of each nuclear reactor. We are considering 24-hour shift working (primarily low-noise uses) at key points during the Main Construction stage.

Construction works could give rise to around 10 million cubic metres of excavated materials. A significant proportion of this will be used to form the level areas needed for the Power Station building platform and to level the construction compounds. The vast majority of the remaining excavated materials will need to be used within the Wylfa Newydd Development Area to create an appropriate landscape setting for the Power Station and help to mitigate likely noise and visual effects. The general approach to Landscape and Appearance is found on the following page. We intend to further develop our proposals for accommodating the construction requirements, which will be a key driver in determining the phasing of our landscaping proposals in the Wylfa Newydd Development Area.



Copyright CHUGOKU ELECTRIC POWER CO., INC. 2013 Provided by Hitachi-GE Nuclear Energy, Ltd

Figure 12: Construction of ABWR building at Shimane 3 in Japan



FURTHER READING

You can read more about the Main Construction Stage in Chapter 7 of the Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Document.

Building the Power Station

LANDSCAPE AND APPEARANCE

Our proposal is to create a setting for the Power Station that would reflect the existing drumlin landscape. This would make use of excavated materials from the Power Station Site to form the rounded mounds, which would be formed in a number of different locations within the Wylfa Newydd Development Area. As part of the landscape proposal, these mounds would be planted with typical local vegetation including hedgerows, native trees and shrubs. This would allow some of the land to be returned to agricultural and recreational use when it is no longer needed for construction. An indication of how this might be arranged once the Power Station is operational is provided in Figure 13. Visualisations of how this might look from specific viewpoints can be found in the Preliminary Environmental Information Report.

Our preferred landscape approach is to form mounds and a landscape setting that will incorporate the mitigation of visual and noise effects of the Project. We are currently undertaking work to explore the likely characteristics of the excavated materials which will help us to understand how densely the material might pack down during mounding activities and, therefore, how much we will need. If further work suggests that we will need to excavate a greater volume of material than currently anticipated, we may have to adapt our indicative landscape proposal. This would require us to review the use of land across the Wylfa Newydd Development Area, including designated areas such as the Tre'r Gof SSSI and Cestyll Garden. Consideration may also need to be given to taking some excavated material away from the Power Station Site and we would need to understand the potential opportunities and implications of doing this, by sea or by road.



FURTHER READING

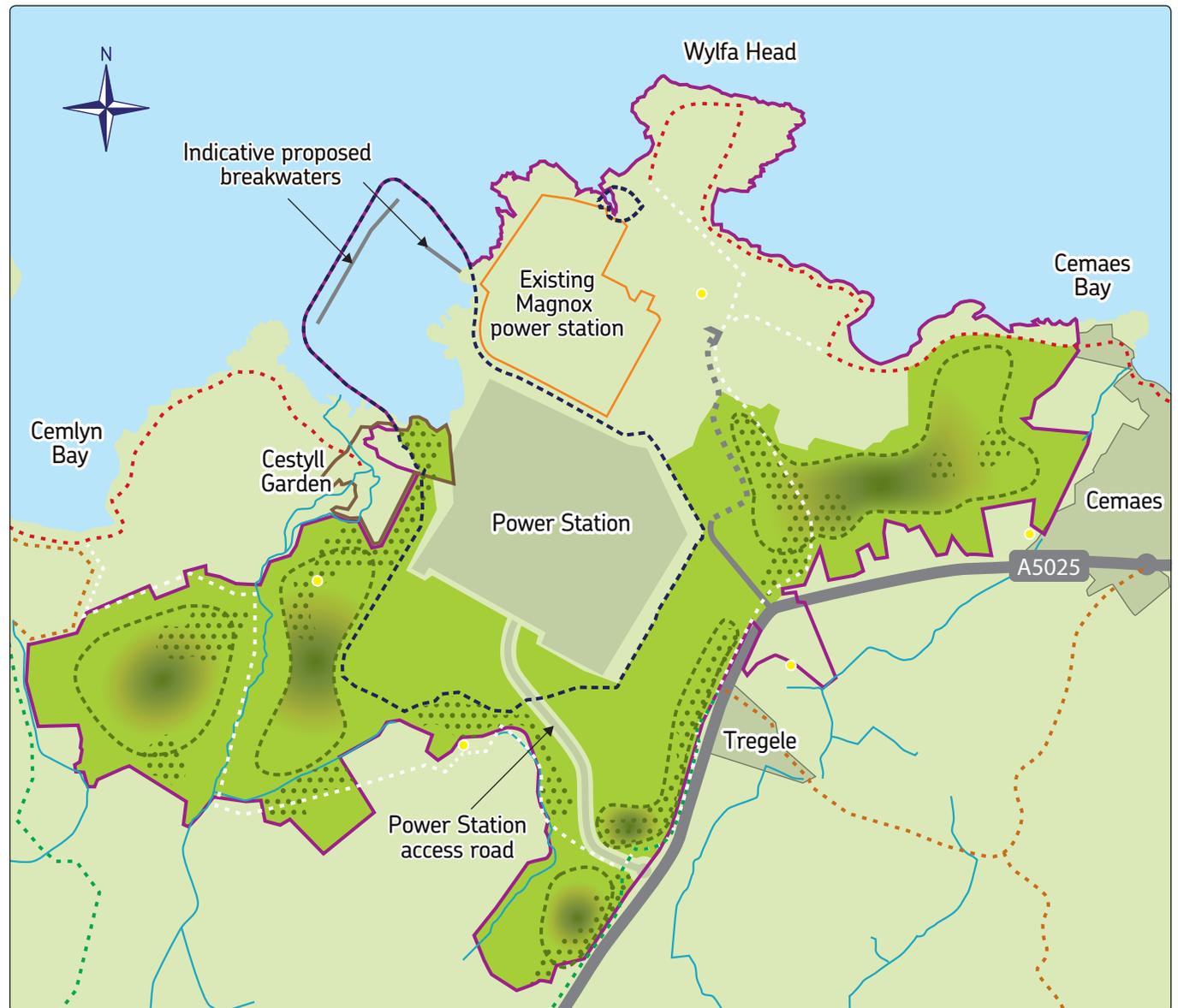
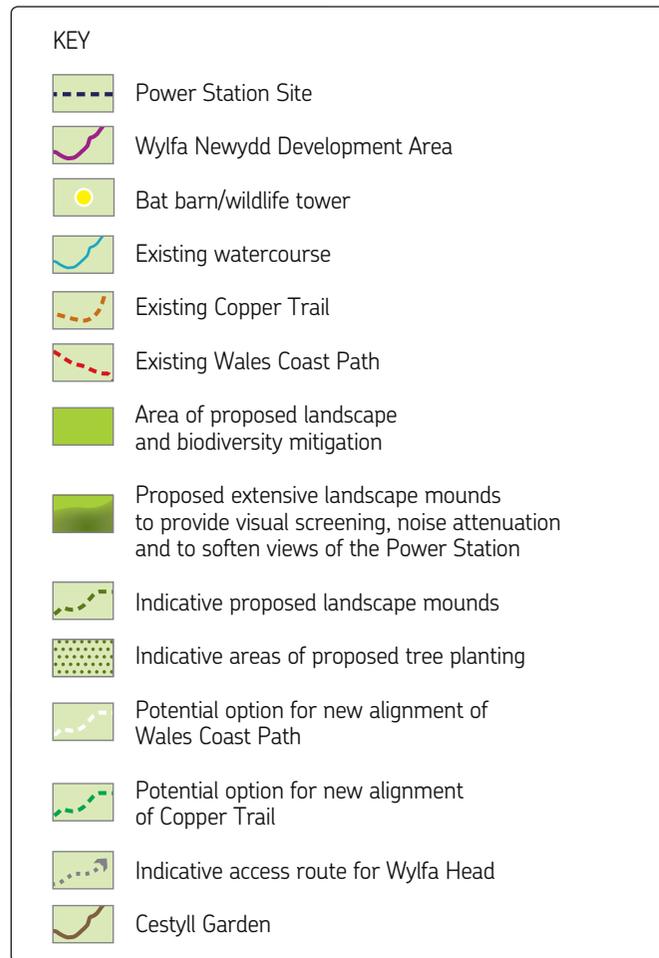
You can read more about our landscape design proposal and the Landscape and Biodiversity Masterplan in Chapter 8 of the Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Document.



YOUR VIEWS

We are keen to hear your thoughts on how we form the landscape and your preferences on the types of planting that could be selected.





QUESTION 5

Do you have any comments on Horizon's indicative landscape proposal?

Figure 13: Indicative landscape proposal

Building the Power Station

VISUAL APPEARANCE OF BUILDINGS

We have not yet made firm decisions about the architectural treatment for the buildings we plan to erect, keeping in mind that they will vary considerably in size and prominence. At the moment, there are three main concepts that we are considering for the proposed buildings:

- **Blend** into the surrounding environment with the use of natural colours and materials;
- Make a **bold** statement to form a striking landmark, with the use of bold colours and contemporary materials; or
- A combination of the blend and bold concepts.

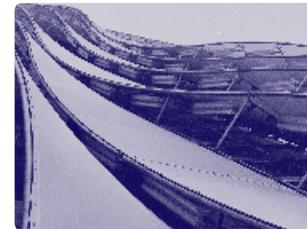
As an example, the existing Magnox power station would be considered a combination of blend and bold approaches to architecture, with the colours and materials of the buildings generally blending into the landscape while the sheer scale and location of the buildings creates a contrast to the surrounding landscape.



Existing Magnox power station - combination of blend and bold



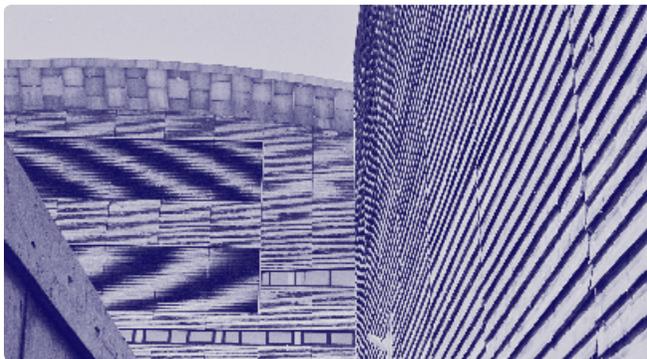
Use of local materials



Examples of bold architecture



Examples of bold architecture



Examples of bold architecture, using local materials



Natural colours and planting working together to blend



FEEDBACK

We are keen to hear your views on preferred colours, materials and style of the Power Station. We have included a variety of images here to help you in forming your opinions and you are welcome to refer to them in your response. Your views will be considered as we develop a design brief for our architectural specialists.



QUESTION 6

Do you have any comments or preferences on whether the Power Station buildings should be designed to blend in or make a striking architectural feature in the landscape?

JOB OPPORTUNITIES

We will need significant numbers of workers throughout both the construction and operational stages of our Project, which will create opportunities to support the local employment base. The size of the workforce required during construction of the Power Station will be around 4,000 for the majority of the time, but could reach 8,500 during peak periods. We will also need to employ several hundred people to construct the Associated Development and jobs will be created in running the logistics centre, temporary worker accommodation and bus route serving the park and ride facilities. Our Project will also indirectly create and support associated jobs and employment in industries such as hospitality, leisure and retail.

Once operational, the Power Station would employ up to 1,000 workers with an approximately 1,000 additional workers needed during planned periods of plant outage for maintenance. As with construction activities, operation of our Project will indirectly support jobs and employment opportunities within the service industries.

This means that throughout the lifetime of the Project, a wide range of job roles will be available – from skilled technical roles, to supervisory and managerial roles, to support roles (administrative, cooks, cleaners, etc) – and we are working with training organisations to help ensure that all of this range will be available to the residents of Anglesey and North Wales.



FURTHER READING

More information on the Jobs and Skills Strategy can be found in Chapter 9 of the Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Document.

INVESTMENT IN THE WORKFORCE

Whilst we want to capture the local, skilled workforce, we realise that the number of workers currently available will not sustain the Project over its lifetime. We are therefore committed to setting up and running programmes that will partner with colleges and organisations who are closely involved with apprentice training and recruitment. This will allow us to focus on the upskilling, reskilling and training of young people, the long term unemployed and others who could join our workforce in the future, benefiting both current and future generations on Anglesey. We will seek to proactively put in place appropriate training for local workers so that necessary skills can be acquired to meet our demand.

To manage both employment demand and available skills in the local and regional areas, we intend to implement a Jobs and Skills Strategy. This will help us to match job roles with workers who have the relevant skills and to address training opportunities within the region.



QUESTION 7

Do you have any comments relating to skills and training and the promotion of local and regional employment?



Building the Power Station

SUPPLY CHAIN ENGAGEMENT AND LOCAL PROCUREMENT

The Project represents a multi-billion pound investment into the economy and will create a range of business opportunities. As part of the benefits arising from the Project, it is our hope that a significant proportion of these opportunities can be captured within the local, regional, Welsh and UK markets. We believe that the UK supply chain should supply a substantial portion of the value of the Project and we want to assist this with early and proactive engagement with potential suppliers and local businesses.

We have put in place robust procurement processes to ensure that the supply of goods and services is secured in a timely manner whilst meeting our objectives of safety, quality and value for money. It is our intention to closely manage this to ensure potential suppliers clearly understand our processes and requirements.

To further support this, we intend to produce a Supply Chain Charter which will outline our commitments to contract procurement and explain how you can best and most easily engage with us and our main framework suppliers.

We will endeavour to communicate clearly about potential business opportunities and we're working on the best mechanism for sourcing local products and service suppliers. While these arrangements are being set up, we are exploring the best way to promote greater awareness of tendering opportunities and contracting processes, including for smaller value, non-nuclear related contracts that may be more attainable for local suppliers.

Suppliers can register at our Supplier Registration system found at: www.horizonnuclearpower.com/supplier-registration which will be made available for tendering opportunities in the future.



MORE INFORMATION

Over 50 contracts have been placed with local companies to date.



QUESTION 8

Do you have any comments relating to Horizon's engagement with the supply chain and proposals for buying from local and regional suppliers and businesses?





FEEDBACK

We are keen to understand the types of advice and assistance that we could make available to help in readying you and local businesses to become involved in the Project supply chain. Your feedback could help to influence what we include in our Supply Chain Charter.

Meeting transport and construction workforce requirements

INTEGRATED TRAFFIC AND TRANSPORT STRATEGY

We are committed to ensuring that the transport needs of the Project are managed to reduce effects on the communities of Anglesey. We want to do this by moving people and goods efficiently, managing environmental impacts, ensuring user and community safety and presenting solutions that offer some potential legacy benefits.

Our proposed Integrated Traffic and Transport Strategy (ITTS) would address these matters in a co-ordinated manner; offering a package of transport measures that cover a range of different transport modes available during both construction and operation of the Power Station. The principles of the draft ITTS seek to:

- Ensure the safety of roads for all types of users, including pedestrians and cyclists
- Promote the use of non-road modes for the movement of freight and promote the use of sustainable transport modes for the movement of the workforce
- Reduce the need to travel, including through demand restraint to limit traffic growth
- Reduce the number of trips by all modes through transport efficiency
- Offer efficient, flexible, reliable and sustainable modes of transport to the workforce
- Control private vehicle and freight movements along the A5025 corridor
- Manage disruption to existing communities from additional road traffic and develop measures to enable control of traffic to avoid exacerbating peak hour congestion on the existing highway network

- Avoid, where possible, and mitigate against predicted significant adverse environmental effects arising from the transport requirements of the Project
- Reduce land take requirements in delivering necessary transport infrastructure
- Provide, where possible, a legacy benefit for Anglesey



FURTHER READING

More information on the overall transport needs of the Project and options for movement of goods and people can be found in Chapter 10 of the Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Document.

TRANSPORT MODES

We have considered and studied a combination of air, rail, road and sea transport to determine what would best serve the community as well as meeting our construction and operational goals. The Project will require the delivery of substantial quantities of freight, some of which will be extremely large plant and equipment called 'Abnormal Indivisible Loads', or AILs, which tend to overhang normal haulage vehicles and which need special permissions and escorts. Moving AILs by road could cause significant disruption so we have considered alternative ways of delivering AILs and decided that direct delivery to the Power Station Site by sea is the best solution.

The use of rail and air as key modes for getting freight to north Anglesey is less practical and efficient in comparison to sea-based deliveries. Additionally, as delivery to the closest existing railhead and airport would both require freight to be transferred to heavy goods vehicles for onward transport to the Power Station Site via the A5025, these modes would not avoid adding substantially to heavy goods traffic along the road network on the approaches to Wylfa. As a result, we are focusing on making best use of sea-based proposals for the delivery of freight and supplementing this with controlled use of the road network.

We recognise that there could be a role for rail, air and ferries to form part of longer journeys for our workforce and we are considering how to support this, perhaps using shuttle bus services between the railway station, airport, Holyhead Port and the Power Station Site.



QUESTION 9

Do you have any comments on Horizon's draft Integrated Traffic and Transport Strategy (ITTS) principles?

DELIVERIES BY SEA

To reduce the number of construction freight vehicles on the roads and address safety concerns along the route from the closest port at Holyhead, we have proposed a new MOLF, as discussed on Page 14 of this document. This will allow for the majority of the freight needed to construct the Power Station to be delivered directly by sea. The MOLF will include two quays, land-based cranes for unloading and a direct access route to the various construction compounds in and around the Power Station Site. Construction of the MOLF would also include installation of navigation markers and lighting, highlighting the safe approach channel for vessels.

During operation of the Power Station, the MOLF would allow for the occasional delivery of large items of replacement plant and equipment directly to the Power Station Site, without movement along public roads.



QUESTION 10

Do you have any comments on Horizon's sea transport proposals?



FURTHER READING

You can find additional information regarding the design of the MOLF in Chapter 10 of the Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Document.



One barge trip to the Wylfa Newydd Development Area removes numerous heavy goods vehicle trips from public roads



Meeting transport and construction workforce requirements

MOVEMENTS BY ROAD

We intend to enforce the use of a designated route to move freight traffic generated by the Project, shown as the Designated Freight Route in Figure 14. Controlling freight in this way will allow us to ensure that heavy goods vehicles use main roads and avoid passing through villages and hamlets that line alternative routes between the mainland and the Wylfa Newydd Development Area.

In addition to promoting the use of the Designated Freight Route, our Project proposals include providing at least one logistics centre that will allow us to manage the timing and amount of construction and freight traffic on the roads.

To address the issue of commuter vehicle traffic, we are going to develop park and ride facilities, which would act as hubs for the transfer of construction workers from private vehicles to buses. This measure would allow Horizon to manage the amount of private vehicle trips made between the facilities and the Wylfa Newydd Development Area.

We are also considering a bus system that would follow a set route, picking workers up at settlements and transport nodes (such as a railway station) on Anglesey and delivering them to construction areas within the Wylfa Newydd Development Area. This type of initiative would best service employees who live on Anglesey. We are also planning to provide bus services from off-site temporary worker accommodation sites.

Implementation of these initiatives means that we would be able to control the number of vehicles added to the road network during construction.

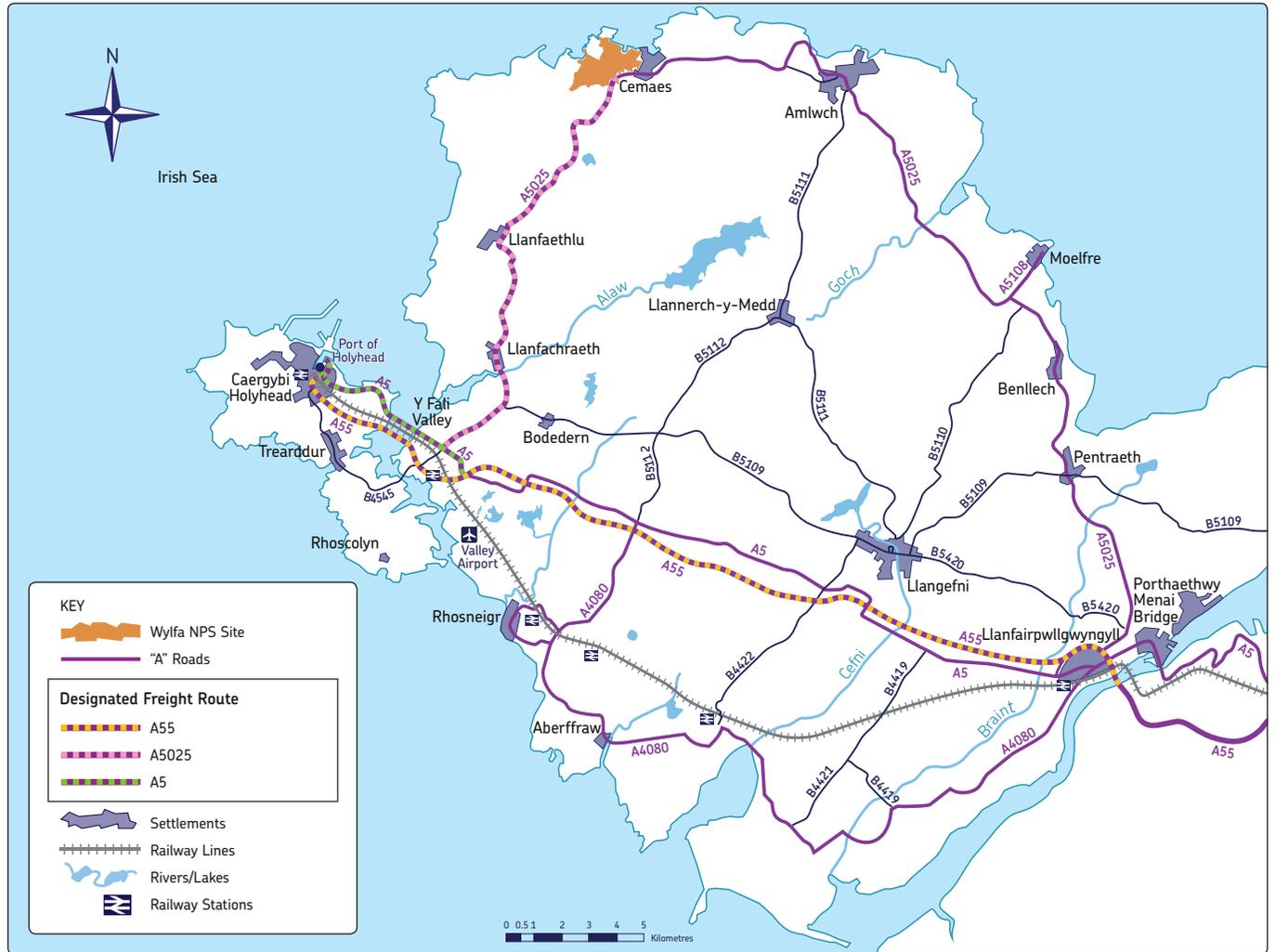


Figure 14: Designated freight route



QUESTION 11

Do you have any comments on Horizon's road transport proposals?

Meeting transport and construction workforce requirements

HIGHWAY IMPROVEMENT OPTIONS

The main route to the Wylfa Newydd Development Area from the mainland and port at Holyhead is along the A55, the A5 and the A5025 and these roadways have been included in the Designated Freight Route. Although our full studies are not yet complete, we expect that a variety of highway improvement works would be needed along the A5025 from Valley to the Wylfa Newydd Development Area to address existing safety and environmental issues that may be made worse by construction traffic related to the Project. These improvement works could include widening, realignment and resurfacing.

We also understand that there are a number of specific locations, as shown in Figure 15, where the flow of traffic along the A5025 may be constrained and we have developed proposals for improvements, some of which have multiple options.

These improvements would generally involve the construction of new sections of road to ease and improve these constraints. These improvements are described on the following pages.



MORE INFORMATION

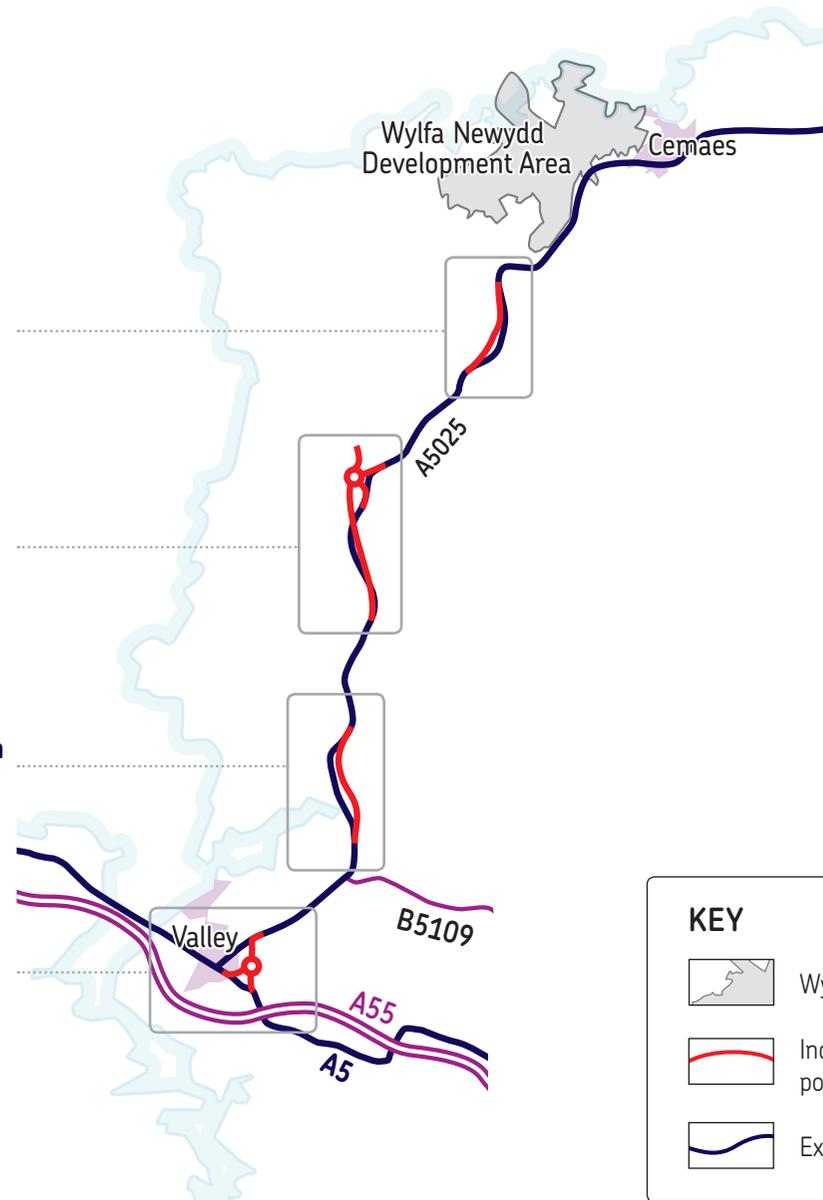
For the times when we are proposing to move a large load of freight along the roads, we will communicate with affected portions of the community.

Cefn Coch
Figure 19

Llanfaethlu
Figure 18

Llanfachraeth
Figure 17

Valley
Figure 16



YOUR VIEWS

Thoughts on the current proposals for off-line highway improvements along the A5025 are welcomed.

Figure 15: Overview of locations for potential road improvements

Meeting transport and construction workforce requirements

Valley junction improvement option

We are currently undertaking traffic counts to understand capacity issues in this area. Based on this information, we will determine if a new junction that would bypass the existing crossroads and take traffic away from the centre of Valley is required to cope with the Project's predicted increase in heavy goods vehicles, and the necessary turning space for these large vehicles. If we decide that a new junction is necessary, our proposed alignment is shown in Figure 16.

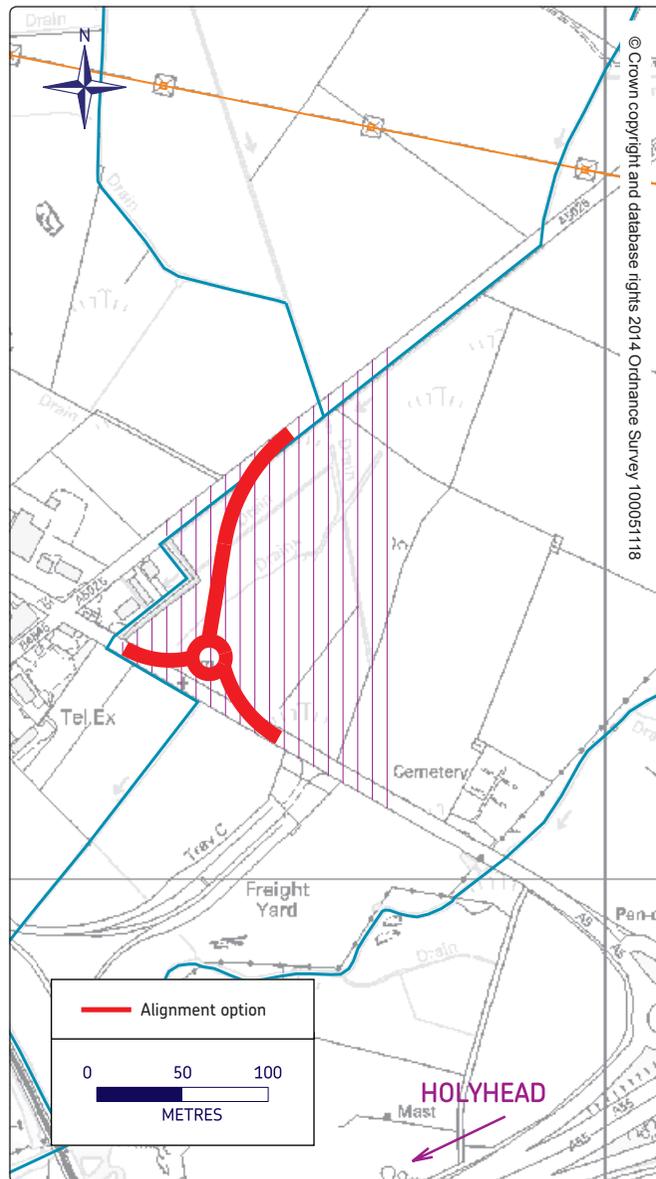
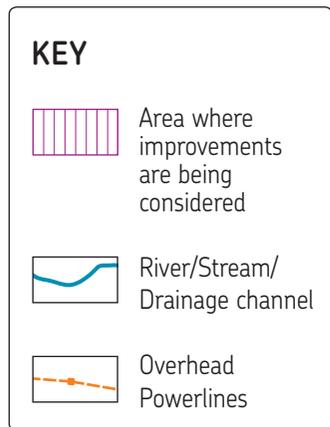


Figure 16: Valley junction improvement option

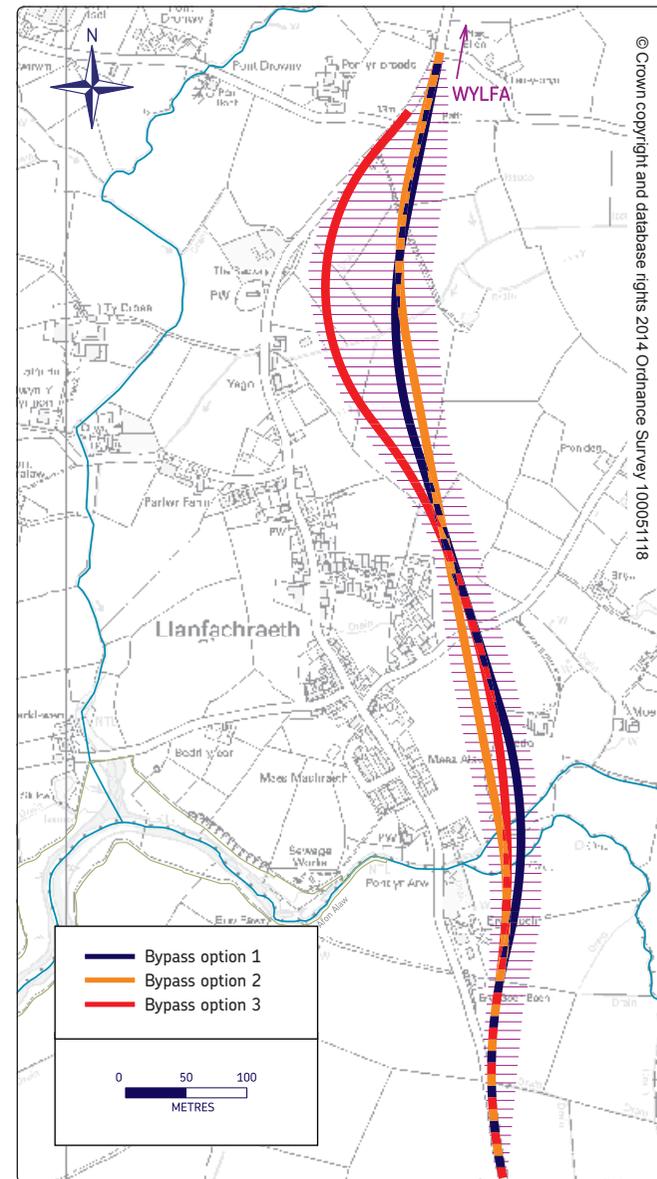


Figure 17: Llanfachraeth bypass options

Llanfachraeth bypass options

Buildings through this section of the A5025 are quite close to the road presenting both safety and environmental concerns in relation to construction traffic. We have proposed three alternatives that would bypass Llanfachraeth to the east of the village, avoiding environmental features that lie to the west. As shown on Figure 17, these include:

- Llanfachraeth Option 1 (blue) – allows for traffic to be routed away from the centre of the settlement, which includes a school and several listed buildings.
- Llanfachraeth Option 2 (orange) – creates a straighter alignment that would increase overtaking opportunities.
- Llanfachraeth Option 3 (red) – the longest option that most closely follows the existing settlement boundary and is also closest to the Area of Outstanding Natural Beauty.

Llanfaethlu road straightening options

Llanfaethlu has several properties close to the A5025, which is characterised by tight bends and climbs making visibility and traffic flow difficult. We are proposing the alignments shown on Figure 18 to improve user safety and reduce or avoid effects to the environment and the local community:

- Llanfaethlu Option 1 (blue) – straighten the bends to deliver a more suitable alignment for heavy goods vehicles that would not pass through the centre of Llanfaethlu.
- Llanfaethlu Option 2 (red) – straighten the bends over a longer distance of the road so that the A5025 through Llanfaethlu would be realigned to avoid residential properties, both in the centre of the settlement and also to the north. This alignment would involve a small encroachment into the Anglesey Area of Outstanding Natural Beauty.

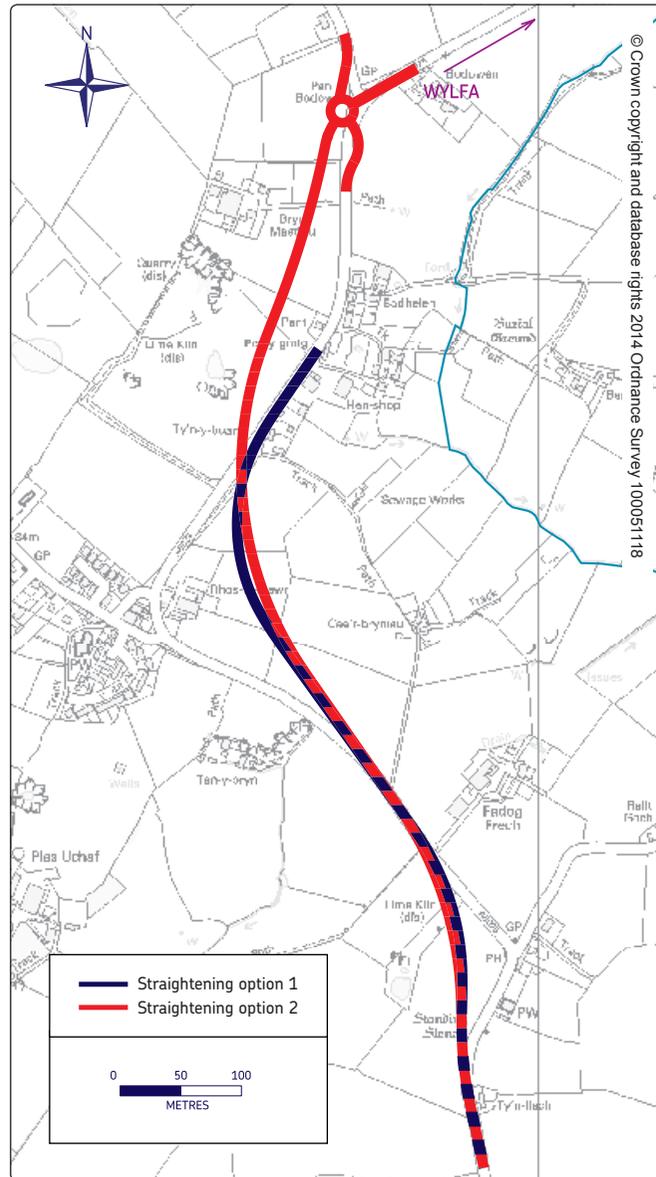


Figure 18: Llanfaethlu road straightening options

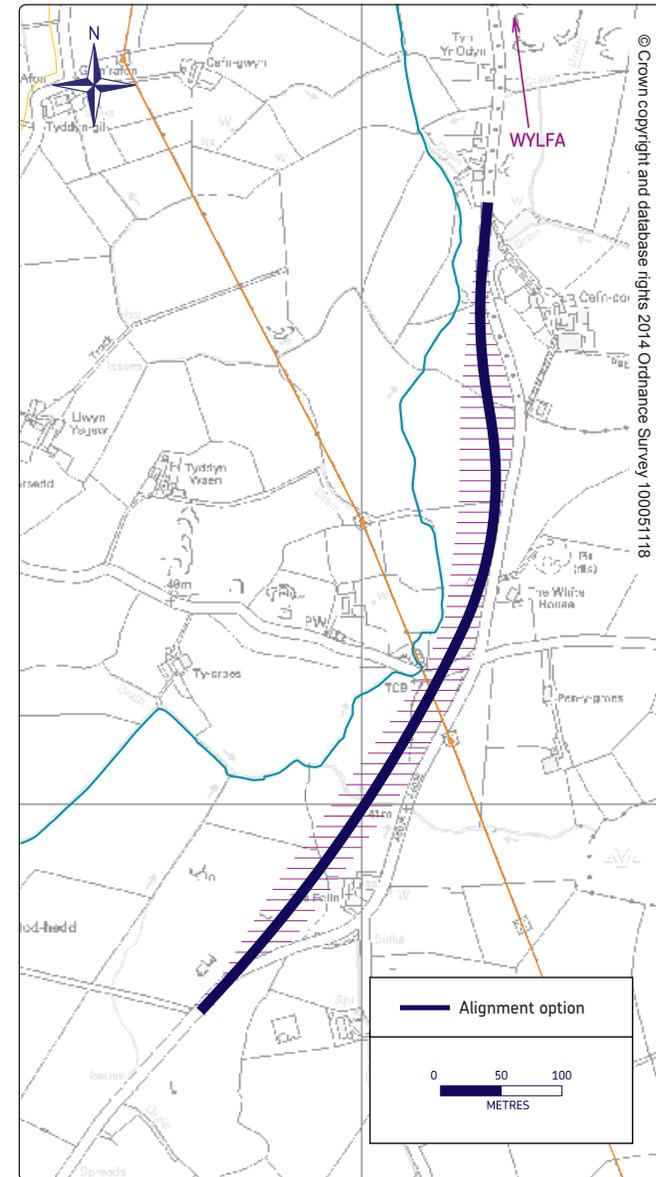


Figure 19: Llanrhyddlad to Cefn Coch improvement option

Llanrhyddlad to Cefn Coch improvement option

To the south of Cefn Coch, the A5025 does not meet current highway standards for safe and easy passage of heavy goods vehicles. To address this, we are proposing a bypass of the area as shown in Figure 19.

KEY

- Area where improvements are being considered
- River/Stream/ Drainage channel
- Overhead Powerlines

Meeting transport and construction workforce requirements

WORKER ACCOMMODATION STRATEGY

The numbers of construction workers, and therefore their accommodation requirements, would vary over time. We have prepared principles for a Worker Accommodation Strategy that will help us to manage this temporary workforce while seeking to control impacts to both the community and the environment. We expect a proportion of construction workers to be local which means that they will not need accommodation. For non-local workers, the principles of the draft Worker Accommodation Strategy would:

- Identify the use of existing bed spaces before considering increasing the supply
- Facilitate a range of housing options to address expected workforce needs
- Minimise the need to travel by locating housing opportunities near to public transport options, services and leisure facilities
- Identify the location of additional housing, especially temporary worker accommodation facilities, near to health and recreational services, and away from environmentally sensitive sites, using the broad area of search
- Consider legacy benefits once the temporary worker accommodation is no longer needed to support construction

Development of off-site temporary worker accommodation would meet any shortfall in existing capacity and would most likely be of a campus style. As this type of accommodation would support a large number of workers, we plan to provide specific sport, leisure and recreational facilities as part of the design. Having this many workers in one place would also allow us to implement sustainable mass transit solutions such as bus and shuttle transport which would reduce impacts to the community.

As with the envisioned park and ride facilities and logistics centre, suitable locations for an off-site temporary worker accommodation are being identified within the broad area of search, which is explained on the next page of this document.



YOUR VIEWS

We are keen to understand your views on the use of tourist accommodation, existing housing stock, and the construction of bespoke housing opportunities.



FURTHER READING

Additional information on our Worker Accommodation Strategy can be found in Chapter 10 of the Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Document.



MORE INFORMATION

A logistics centre is a secure 24-hour facility capable of accepting vehicles, with the principal role of managing the onward flow of construction traffic. This type of facility will help us to control the impact construction traffic would have on peak congestion on the highway network and would enable the consolidation of loads into a smaller number of deliveries.

Legacy benefits and community facilities

LEGACY BENEFITS

We recognise that investment in relevant infrastructure and mitigation measures identified through the environmental impact assessment process will be required to manage the impacts of the Project on Anglesey's communities and environment. In addition to the benefits expected as a result of job opportunities and training, we intend to deliver a number of improvements with the Project. We consider the following to have the potential to deliver a positive legacy for Anglesey:

- Highway improvements will be designed so that, where possible, they would be permanent enhancements. Particularly where bypasses are being considered, we plan to work with the community to understand local issues and consider appropriate enhancements
- Health service provision will be enhanced to meet the demand anticipated during the Main Construction Stage; however, we are exploring the means of delivering these services so that they remain in the community afterwards
- Design of temporary worker accommodation whilst being mindful of the potential for legacy benefit
- Investment in initiatives to enhance and upgrade existing housing stock to support the anticipated construction worker demand but with the potential for adaptation to quality, long-term housing stock or transfer to tourism
- Sustainable transport options, such as improvements to walking, cycling or bus routes that will improve the long-term connectivity on Anglesey for residents and visitors
- Use or redevelopment of park and ride facilities and logistics centres proposed for development at desirable locations along major roads. These could serve as a logistics hub for future construction projects or other significant development
- Habitat enhancement and creation, as well as targeted biodiversity mitigation as part of our overall ecological mitigation strategy. This would build on our recent works such as erection of a wildlife tower, and development of a tree nursery on Anglesey



FEEDBACK

We welcome your comments on the potential legacy benefits that we have identified and are keen to understand what facilities would be of most value to the community.



QUESTION 13

Do you have any comments or suggestions for long-term legacy benefits or community facilities?



FURTHER READING

Information on our proposed Public Access and Recreation Strategy and further detail about the Wylfa Sports and Social Club and proposed visitor centre can be found in Chapter 11 of the Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Document.



COMMUNITY FACILITIES

We also intend to provide new or replacement facilities for the following resources:

WYLFA VISITOR CENTRE: Our Project proposals include replacement of the existing Wylfa visitor centre, currently used by schools and tourists for both formal and informal educational opportunities. We view this as an important way to integrate the Power Station into the community and the wider region and our preferred location for this facility is at the Wylfa Gateway Complex. While we view the new visitor centre as an opportunity to provide an exhibition area, meeting and training rooms, classrooms and a cafe, we are committed to incorporating education, learning and displays, and other visitor centre amenities.

WYLFA SPORTS AND SOCIAL CLUB: The existing Wylfa Sports and Social Club will need to be relocated from its existing premises during our Enabling Works, from early 2016 onwards. In order to ensure continuity, we are planning to provide new premises at our preferred location, the Wylfa Gateway Complex, in the short-term. We are also considering the potential for developing long-term leisure facilities. These could be located at the Wylfa Gateway Complex or we could look to invest in existing sports and leisure facilities in nearby communities, either by supporting existing facilities or creating new ones.

PUBLIC ACCESS AND RECREATION: It is our intention to maintain or improve the existing condition of public access and recreation in the area, which we will implement through a Public Access and Recreation Strategy that will be developed following this consultation period. As part of preparing the strategy, we are currently undertaking a survey of the public rights of way network and recreational facilities in the area, which has identified such resources as the Wales Coast Path, the Copper Trail, and Cestyll Garden. We have identified potential opportunities for improving the quality of the public rights of way network, promotion of walking and cycling routes, upgrading community recreation areas, as well as enhancing accessibility, directional signage and provision of educational information.



YOUR VIEWS

We are keen to understand what existing facilities or services you consider particularly valuable and how we may be able to address these through design of the Project. Also, your thoughts on what we have proposed would be helpful, in as much as these facilities, their function and location will shape your community in the years to come.

Responding to this consultation

HOW TO SUBMIT YOUR FEEDBACK

Your response to this public consultation is very important to help us shape the Project and we are looking forward to receiving your responses.

We will consider responses received during consultation and explain how they have been taken into account in the development of our Project proposals. Where we have not altered our proposals to reflect comment, we will try to give our reasons.

The current consultation is taking place for 10 weeks, between 29 September and 8 December 2014. There are a number of ways in which you can respond:

- **Via a feedback form** available at consultation events and online at www.horizonnuclearpower.com/consultation
- **In writing** to our freepost address **FREEPOST HORIZON NUCLEAR POWER CONSULTATION**
- **Via email** at wylfaenquiries@horizonnuclearpower.com

We also operate a freephone number in Welsh and English at **0800 954 9516** to help with queries during and after the consultation.

Please ensure that your feedback reaches us by **8 December 2014**.



QUESTION 14

Do you have any additional comments on Horizon's Project proposals?



A series of events will be held in support of this consultation, generally following three formats:

- Public exhibitions
- Staffed 'drop-in' sessions
- Information points

The location and timing of all events will be available on our website at www.horizonnuclearpower.com/consultation.

You are encouraged to attend these events to gather additional information, ask questions of staff and provide feedback.



NEXT STEPS

We aim to provide an acknowledgement of receipt of responses to this consultation. An Interim Consultation Report will be prepared after this consultation to help us highlight matters that we need to address as design progresses.

This report will be published along with our Stage Two pre-application consultation activities, summarising relevant activities, responses and actions we've taken throughout the consultation process.

CONSULTATION DOCUMENTS

The following documents are available for your review as part of this consultation:

- This document, the Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Overview Document (available in both Welsh and English)
- A non-technical summary of the Wylfa Newydd Project Pre-Application Consultation – Stage One Preliminary Environmental Information Report (available in both Welsh and English)
- The Wylfa Newydd Project Pre-Application Consultation – Stage One Consultation Document
- A Wylfa Newydd Project Pre-Application Consultation – Stage One Preliminary Environmental Information Report

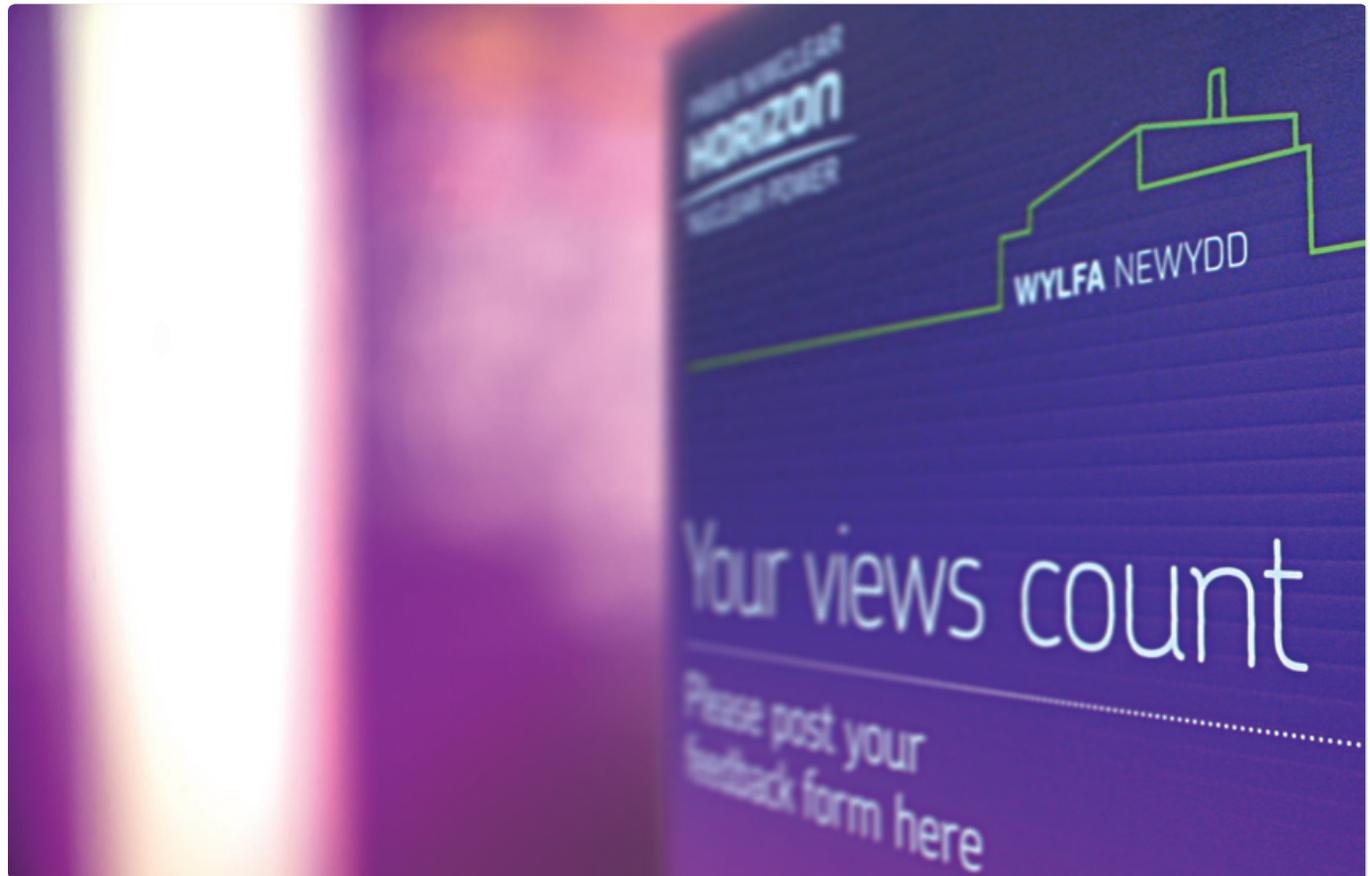
These four documents are available to download from our website, www.horizonnuclearpower.com/consultation, or to view in hard copy format at our exhibitions.

SUPPORTING DOCUMENTS

The following supporting documents are available to provide you with additional information although they are not being formally consulted on:

- Wylfa Newydd Project Language Impact Assessment Scoping Report
- Wylfa Newydd Project Health Impact Assessment Scoping Report
- Wylfa Newydd Project Sustainability Assessment Scoping Report

These three documents are available to download from our website, www.horizonnuclearpower.com/consultation.



If you would like a large text or alternative version of this document, please contact us on **0800 954 9516** or go to our website: www.horizonnuclearpower.com/consultation

Notes

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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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