

**Llandyfaelog Substation  
TAN15 Flood Consequences  
Assessment**



On behalf of **National Grid**  
**nationalgrid**

Version	Date	Description	Author	Check	Reviewer
1	03 November, 2025	1 <sup>st</sup> Draft	DF	WB	KL

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## **1.0 EXECUTIVE SUMMARY**

This document presents the findings of a Flood Consequences Assessment (FCA) for National Grid's Llandyfaelog 4.3 Stage Front End Engineering Design (FEED) (the Proposed Development). This document should be read alongside the accompanying Sustainable Drainage Systems (SuDS) Approving Body (SAB) report.

This FCA has been produced in accordance with Planning Policy Wales and Technical Advice Note (TAN) 15: Development. This FCA demonstrates that:

- the consequences of flooding from all sources to the Proposed Development are fully understood;
- appropriate mitigation measures will be put in place to ensure that the Proposed Development will remain safe and operational during times of flooding over its intended lifetime, whilst taking climate change into account;
- the consequences (i.e. the overall impacts) of the Proposed Development on flood risk elsewhere are understood; and
- A drainage strategy has been provided in tandem with this FCA that has been submitted to the SAB for approval.

As such, this FCA demonstrates that the Proposed Development will be safe, will not increase flood risk elsewhere and is acceptable in principle for its location.

## 2.0 INTRODUCTION

### 2.1 PURPOSE

National Grid Energy Transmission (NGET) is currently undertaking the design of a new 400 kV substation referred to hereafter as the Proposed Development. The Proposed Development aims to provide new electricity infrastructure on greenfield land to the north of Llandyfaelog in Carmarthenshire, Wales (National Grid reference: SN 41797 13516).

Measuring 260 metres by 640 metres the substation platform comprises hardstanding with drainage and earthing for electrical equipment. In addition to hardstanding, large area of the substation will also be surfaced with grey stone chippings, placed above a 600mm layer of MOT Type 3 gravel substrate. The National Grid 400 kV Air-Insulated Switchgear (AIS) substation will be located on a newly constructed level platform in a fenced compound.

This FCA demonstrates that the Proposed Development site is not at risk of flooding from rivers and the sea, and is located within Flood Zone 1. However, the site contains areas shown to be at medium and high risk of flooding from surface water, as shown by Natural Resources Wales' (NRW's) "Flood Risk from Surface Water and Small Watercourses" map. The Proposed Development will introduce new areas of impermeable hardstanding; a drainage strategy for which will need to be developed, that also accounts for the presence of these surface water flooding zones.

An application to the SuDS Approval Body (SAB) for the Proposed Development's Sustainable Drainage Systems (SuDS) design has been submitted to accompany a planning application and should be read alongside this FCA. SAB approval is required for the Proposed Development because its site area is greater than 100m<sup>2</sup>.

This FCA seeks to demonstrate that flood risk from all sources has been considered as part of the proposed development and that the requirements of TAN15 are met. As set out in TAN15, the objectives of an FCA are to ensure that:

- Flood risk is taken into account at all stages of the planning process to ensure that new development is appropriate for its location;
- The proposed development will remain safe and operational throughout the duration of its intended design lifetime; and
- The proposed development will not increase flood risk elsewhere.

The purpose of this document is to:

- Present the broad scale and nature of the proposals for the substation development;
- Summarise the potential sources of flood risk to the new plant; and
- Identify the primary source of flood risk and present detailed flood level data to inform the ongoing designs.

## **2.2 REPORT OBJECTIVES AND STRUCTURE**

This FCA concentrates on the flood risk issues over the operational lifetime of the proposed development. This report has been prepared in accordance with the requirements of the Welsh Government's Technical Advice Note 15 – Development (TAN15), last updated March 2025<sup>1</sup>. The objectives of this report are to a) quantify the flood risk to the site; b) demonstrate that the proposed development will remain safe and operational over its intended design lifetime taking climate change into consideration; and c) demonstrate that the proposed development will not increase flood risk elsewhere.

## **2.3 AVAILABLE INFORMATION**

This FCA is based on the following available information:

- Natural Resources Wales Flood Map for Planning;
- Natural Resources Wales Flood Risk from Surface Water and Small Watercourses map;
- A site layout plan showing an indicative site location; and
- The South West Wales – Stage 1 Strategic Flood Consequence Assessment<sup>2</sup>

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<sup>1</sup> [Technical advice note \(TAN\) 15: development, flooding and coastal erosion | GOV.WALES](#)

<sup>2</sup> [1-hri-jbau-xx-xx-rp-hm-0002-a1-c01-stage\\_1\\_sfca.pdf](#)

## **3.0 DESCRIPTION OF THE EXISTING SITE AND PROPOSED DEVELOPMENT**

### **3.1 EXISTING SITE DESCRIPTION**

The site is located to the north of Llandyfaelog at National Grid Coordinates (SN 41806 13449). The site is predominately agricultural in nature. The topography of the site ranges from 115 mAOD to 130 mAOD, and gradually slopes to the south west. The site is within the hydrological catchment of the Afon Tywi / River Towy, which is located 2.1km to the west of the site.

The site is shown to be at minimal risk of flooding from rivers and the sea, as demonstrated in Appendix C. However, some areas of the site are shown to have a risk of flooding from surface water and small watercourses.

### **3.2 DETAILS OF THE PROPOSED DEVELOPMENT**

Stantec has been commissioned to provide support to the 4.3 Stage Front End Engineering Design (FEED) of National Grid's Llandyfaelog Substation project. The site layout has been provided in Appendix A. The Llandyfaelog Project comprises the following principal elements:

- Construction of a single level platform (260 metres by 640 metres) on which an Air Insulated Substation (AIS) is sited measuring 155 metres by 602 metres;
- Bellmouth access to the A484 with an operational access road to connect the platform to the A484;
- Modification works to the existing 400kV Overhead Line (OHL) to connect the substation to the existing OHL involving the installation of two new towers (pylons) and one replacement tower (pylon) circa 18 metres and 62 metres; and
- Associated drainage, and hard and soft landscaping.

A sustainable drainage plan has been developed as part of the site designs, which ensures that surface water runoff from the site is attenuated to prevent an increase in surface water runoff rates in line with TAN15 guidance on drainage, Sustainable Drainage (SuDS) Statutory Guidance (Welsh Government, January 2019)<sup>3</sup>; in addition to wider benefits to water quality and biodiversity. As the proposed development comprises over 100m<sup>2</sup> of new impermeable area, SAB approval has been sought from the Carmarthenshire County Council SAB. Approval in Principle has been given for the SuDS Scheme<sup>4</sup>.

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<sup>3</sup> <https://www.gov.wales/sites/default/files/publications/2019-06/statutory-guidance.pdf>

<sup>4</sup> Preapp reference: PASAB/00355- Land at Llandyfaelog, Carmarthen. Email received from Samuel P Johnson, dated 17/062025

## 4.0 FLOOD RISKS TO THE PROPOSED DEVELOPMENT

### 4.1 POTENTIAL SOURCES OF FLOODING

Section 3 of TAN15 describes the possible sources of flooding which are presented in **Table 1**. Maps showing the potential sources of flooding that could impact the proposed development are shown in **Appendix C**. TAN15 defines Flood Zones as shown in **Table 2**.

*Table 1 - Possible sources of flooding (TAN15)*

Source	Description
Flooding from rivers (or fluvial flooding)	Flooding from rivers poses a significant threat to many communities in Wales. There have been many examples across the country where, in times of heavy and sustained rainfall, rivers have breached their banks leading to significant damage and personal loss. Whilst the causes of individual flooding events may reflect local circumstances the effects of climate change in combination with topography will mean that the risks from river floods will increase in both severity and frequency. The construction of flood defences is expensive, and it will not be possible to protect all communities in the future, and, even if flood defences are in place, there is no guarantee that they will not themselves be breached.
Flooding from the sea (or coastal/tidal flooding)	Wales 'extensive coastline faces significant risks from coastal flooding. Key contributing factors to coastal flood risk include: <ul style="list-style-type: none"> <li>• Storm surges: during storms, strong winds and low-pressure systems can cause sea levels to rise dramatically, leading to storm surges that can inundate coastal areas.</li> <li>• Sea level rise: climate change is contributing to rising sea levels, which exacerbate the risk of coastal flooding. Higher sea levels mean that storm surges and high tides can push water further inland.</li> <li>• Tidal patterns: Wales experiences some of the highest tidal ranges in the world, particularly in areas like the Bristol Channel. Extreme high tides can combine with storm conditions to create severe flooding scenarios.</li> </ul>
Flooding from surface water (or pluvial flooding)	Heavy rain falling on waterlogged ground or impermeable surfaces can cause localised flooding almost anywhere. Heavy rain can also result in drainage systems and ordinary watercourses, such as streams, reens and brooks quickly becoming inundated, leading to localised flooding.

Table 2 - TAN15 Definition of Flood Map for Planning flood zones

Zone	Flooding from Rivers	Flooding from Sea	Flooding from Surface Water and Small Watercourses
1	Less than 1 in 1000 (0.1%) (plus climate change) chance of flooding in a given year		
2	Less than 1 in 100 (1%) but greater than 1 in 1000 (0.1%) chance of flooding in a given year, including climate change.	Less than 1 in 200 (0.5%) but greater than 1 in 1000 (0.1%) chance of flooding in a given year, including climate change.	Less than 1 in 100 (1%) but greater than 1 in 1000 (0.1%) chance of flooding in a given year, including climate change.
3	A greater than 1 in 100 (1%) chance of flooding in a given year, including climate change.	A greater than 1 in 200 (0.5%) chance of flooding in a given year, including climate change.	A greater than 1 in 100 (1%) chance of flooding in a given year, including climate change.
TAN 15 Defended Zones	Areas where flood risk management infrastructure provides a minimum standard of protection against flooding from rivers of 1:100 (plus climate change and freeboard <sup>5</sup> )	Areas where flood risk management infrastructure provides a minimum standard of protection against flooding from the sea of 1:200 (plus climate change and freeboard).	Not applicable

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<sup>5</sup> Climate change and freeboard allowances are required on any flood defence scheme planned and constructed since 2016. Freeboard refers to the uncertainty allowance applied within the design and implementation of flood risk management schemes, such as flood walls and earth embankments.

## **4.1 FLOOD RISK FROM RIVERS AND SEA**

According to the Flood Risk from Rivers and Sea layer in the Wales Data Map, the site is located entirely within Flood Zone 1 (Appendix C), meaning that there is little or no risk of fluvial or tidal/coastal flooding. Under TAN15, this means that a justification test is not applicable for this development, and the full FCA will only be required to demonstrate that there is no increase in flooding elsewhere.

## **4.2 FLOOD RISK FROM SURFACE WATER AND SMALL WATERCOURSES**

Appendix C identifies flow paths within the site boundary. Surface Water has been modelled to fully assess the risk from surface water and a SuDS Strategy has been prepared. The SuDS Strategy fully mitigates the increased runoff from the proposed development, while mimicking existing processes, and incorporating runoff from these surface water flow pathways. The SuDS Strategy therefore demonstrates that the site will not flood up to the design storm event (1 in 100 year + 40% climate change uplift) and does not increase the risk of surface water flooding downstream.

A rainfall model was developed in InfoWorks ICM to better understand and quantify flow paths, flow rates and volumes for both the existing site and with the SuDS Strategy in place. The full details and results of this model are presented in the accompanying SAB report. Results showed that the existing flow routes were maintained with the SuDS operating to mimic the existing drainage conditions. Flow rates downstream of the site were reduced but not eliminated. This design preserves current wetland habitats identified in the ecology report for this application, while providing additional ephemeral wetland habitats and an adequate SuDS strategy that prevents ponding on site and does not increase flood risk offsite.

## **4.3 FLOODING FROM GROUNDWATER**

The proposed substation site is located at the top of the catchment. Any groundwater present beneath the site is likely to be deep and the effect of flooding from groundwater can be considered to be insignificant in comparison to the effect of surface water at the site. The risk of flooding from groundwater is, therefore, not considered further.

Appendix A.2 of the South West Wales Stage1 Strategic Flood Consequences Assessment shows the location of the Proposed Development to be at Low Risk from groundwater.

## **4.4 FLOODING FROM SEWERS**

The proposed development site is currently greenfield, so no sewers are, or will be present at the site. The risk of flooding from sewers is, therefore, not considered further. Appendix A.1 of the South West Wales Stage 1 Strategic Flood Consequences Assessment shows areas of historical sewer flooding. There are no records of flooding from sewers near the site.

The SuDS Strategy Report demonstrates that a proposed connection into the A484 as part of the design will not increase flood risk from sewers due to the connection. This is because surface water runoff from the site is attenuated in the SuDS train and is not discharged until after the critical storm event for the A484 has passed.

## **5.0 TAN 15 LAND USE ACCEPTABILITY**

### **5.1 TAN 15 DEVELOPMENT CATEGORY FOR THE PROPOSED DEVELOPMENT**

Under the TAN15 guidance, utilities infrastructure and renewable energy generation facilities are classed as “Less Vulnerable” development. Less Vulnerable Development is appropriate for Flood Zone 1. Therefore, this is not discussed further.

## **6.0 TAN 15 JUSTIFICATION TEST**

### **6.1 JUSTIFICATION TEST FOR THE PROPOSED DEVELOPMENT**

As the Proposed Development is within Flood Zone 1, a justification test is not applicable.

## **7.0 FLOOD RISK CONSIDERATIONS**

### **7.1 BE SAFE AND REMAIN OPERATIONAL FOR ITS LIFETIME**

#### **7.1.1 Remain Safe and Operational**

The site is shown to be at risk of flooding from surface water and small watercourses. Due to the high voltage equipment, surface water ponding is particularly dangerous at electrical substations, and as part of the standard design of the substation, all equipment will be constructed on an area of aggregate stone. A site drainage strategy has also been developed that demonstrates that surface water is safely removed from the site, and ponding does not occur.

#### **7.1.2 Climate Change**

The surface water drainage plan has included a factor to account for increased rainfall anticipated for Climate Change. The appropriate design horizon for the proposed development is the 2080 period. The 'Upper End' allowance has been used to design and assess the SuDS Strategy. Under August 2022 guidance produced by the Welsh Government<sup>6</sup>, the Upper estimate of total potential change across the whole of Wales is 40%.

The SuDS Strategy therefore has used an appropriate allowance and taken climate change into account in its design.

### **7.2 NOT INCREASE FLOOD RISK ELSEWHERE**

#### **7.2.1 No net loss of floodplain storage**

The Proposed Development is not located in an area at risk of flooding from rivers, so there is no anticipated net loss of floodplain storage.

#### **7.2.2 No impediment to flood water flows**

The Proposed Development is not located in an area at risk of flooding from rivers, so there is no anticipated impediment to flood water flows. Surface water will be managed by the site drainage strategy.

#### **7.2.3 Surface water runoff**

While there are some locations within the proposed site boundary at risk of flooding from surface water or small watercourses, the drainage strategy prepared for the site demonstrates that surface water is effectively

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<sup>6</sup> Adapting to Climate Change: Guidance for Flood and Coastal Erosion Risk Management Authorities in Wales, August 2022

managed such that the risk of ponding at the site is mitigated and there is no increase in flood risk resulting from the development.

#### **7.2.4 SAB Approval**

As the proposed development comprises over 100m<sup>2</sup> of new impermeable area, SuDS Approval Body (SAB) approval will be required for the development. This will require the development of a SuDS Strategy for the Proposed Development, which has been outlined in the drainage report submitted alongside this FCA.

## **8.0 CONSEQUENCES ASSESSMENT**

### **8.1 OBJECTIVES OF THE CONSEQUENCES ASSESSMENT**

Section 6.4 of TAN 15 states that the prime objective of a consequences assessment is to develop a full appreciation of:

- The consequences of flooding on the development; and
- The consequences (i.e., the overall impacts) of the development on flood risk elsewhere within the catchment for a range of potential flooding scenarios up to that flood having a probability of 0.1%.

Section 11.5 of TAN 15 also states that where development is justified (as demonstrated in Section 7 of this FCA) the consequences assessment can be used to establish whether suitable avoidance and mitigation measures can be incorporated within the design to ensure that development is as safe as possible and there is:

- minimal risk to life;
- minimal disruption to people living and working in the area;
- minimal potential damage to property;
- minimal impact of the proposed development on flood risk generally; and
- minimal disruption to the sustainable management of natural resources.

Finally, Section 11.4 of TAN 15 presents the acceptability criteria for flooding consequences. The main criteria for deciding whether a development in an area not at risk from flooding from rivers is acceptable will depend on there being no increase in flooding elsewhere. NRW will advise the planning authority on the consequences of flooding for the type and nature of any proposal, and this should enable the planning authority to arrive at a judgement on the acceptability of the flooding consequences. To satisfy these criteria a site should only be considered for development if the following conditions can be satisfied:

- No increase in flooding elsewhere
- Occupiers aware of flood risk

- Escape/evacuation routes present
- Flood emergency plans and procedures agreed and in place
- Flood resistant and resilient design
- Acceptable consequences for type of use (see detailed guidance below). As such, this section on the TAN 15 Consequences Assessment addresses each of these points in turn.

## **The consequences of flooding on the development**

Due to the Proposed Development being located in Flood Zone 1, outside the extent of flooding from rivers, there will be no change to the consequences of flooding.

## **The consequences (i.e. the overall impacts) of the development on flood risk elsewhere**

This FCA has highlighted that a site drainage strategy that has been developed, and calculations have been provided to demonstrate that the site runoff will not increase flood risk elsewhere. The design event will include an appropriate Climate Change factor to ensure the drainage strategy continues to provide protection against surface water flooding for the length of its design life.

### **Minimal risk to life**

The Proposed Development will not increase flood risk to third party land or property and would be routinely unmanned throughout the operational phase, with the exception of visits by National Grid's operational staff for the purposes of asset management and maintenance.

### **Minimal disruption to people**

During its operational phase, the Proposed Development will only incur minimal disruption to the surrounding communities and only as a result of visits by National Grid's operational staff for the purposes of asset management and maintenance.

### **Minimal damage to property**

The Proposed Development will not increase flood risk to third party land or property, as it is entirely located within an area with no risk of flooding from rivers.

### **Minimal impact of the Proposed Development on flood risk**

The SuDS strategy has been provided in a separate document and demonstrates that the Proposed Development will not have a significant impact on flood risk elsewhere, through the employment of sustainable drainage measures at the site.

### **Minimal disruption to natural heritage**

An Environmental Assessment Report, produced as part of the Outline Design, will demonstrate that the Proposed Development will incur minimal disruption to natural heritage.

### **Cost of future maintenance for all new/approved flood mitigation measures**

The main flood mitigation measure associated with the Proposed Development will be the site drainage strategy, which has been developed as part of the Outline Design phase, and additional flood mitigation measures are not required. The cost of future maintenance of the drainage scheme will be met by National Grid; it is anticipated that the drainage scheme will be privately maintained.

### **Occupier awareness of flooding risks and consequences**

The Proposed Development would be routinely unmanned throughout the operational phase, with the exception of visits by National Grid's operational staff for the purposes of asset management and maintenance.

### **Escape/evacuation routes**

The Proposed Development would be routinely unmanned throughout the operational phase, with the exception of visits by National Grid's operational staff for the purposes of asset management and maintenance. The provision of safe escape/evacuation routes is not required, given the low risk of fluvial flooding.

### **Flood emergency plans and procedures**

N/A – see Escape/evacuation routes above.

### **Facility for rapid movement of goods/possessions**

N/A – the Proposed Development will not be subject to flooding under the 0.1% AEP event over the duration of its intended lifetime.

### **Designed to minimise structural damage**

N/A – the Proposed Development will not be subject to flooding under the 0.1% AEP event over the duration of its intended lifetime.

### **No flooding elsewhere**

The SuDS strategy (detailed in a separate report) demonstrates that the Proposed Development would not have a significant impact on flood risk elsewhere.

## **8.2 CONCLUSION OF THE CONSEQUENCES ASSESSMENT**

Based on the above, the conclusion of this assessment is that the flood consequences of the Proposed Development are considered to be acceptable.

## 9.0 CONCLUSIONS AND RECOMMENDATIONS

National Grid Energy Transmission (NGET) is currently undertaking the design of a new 400 kV substation referred to hereafter as the Proposed Development. The Proposed Development aims to provide new electricity infrastructure on greenfield land to the north of Llandyfaelog in Carmarthenshire, Wales (National Grid reference: SN 41797 13516).

Measuring 260 metres by 640 metres the substation platform comprises hardstanding with drainage and earthing for electrical equipment. In addition to hardstanding, large area of the substation will also be surfaced with grey stone chippings, placed above a 600mm layer of MOT Type 3 gravel substrate. The National Grid 400 kV Air-Insulated Switchgear (AIS) substation will be located on a newly constructed level platform in a fenced compound.

This FCA demonstrates that the Proposed Development site is not at risk of flooding from rivers and the sea, and is located within Flood Zone 1. However, the site contains areas shown to be at medium and high risk of flooding from surface water, as shown by Natural Resources Wales' (NRW's) "Flood Risk from Surface Water and Small Watercourses" map. The Proposed Development will introduce new areas of impermeable hardstanding; a drainage strategy for which will need to be developed, that also accounts for the presence of these surface water flooding zones.

An application to the SuDS Approval Body (SAB) for the Proposed Development's Sustainable Drainage Systems (SuDS) design has been submitted to accompany a planning application and should be read alongside this FCA. SAB approval is required for the Proposed Development because its site area is greater than 100m<sup>2</sup>.

This FCA seeks to demonstrate that flood risk from all sources has been considered as part of the proposed development and that the requirements of TAN15 are met. As set out in TAN15, the objectives of an FCA are to ensure that:

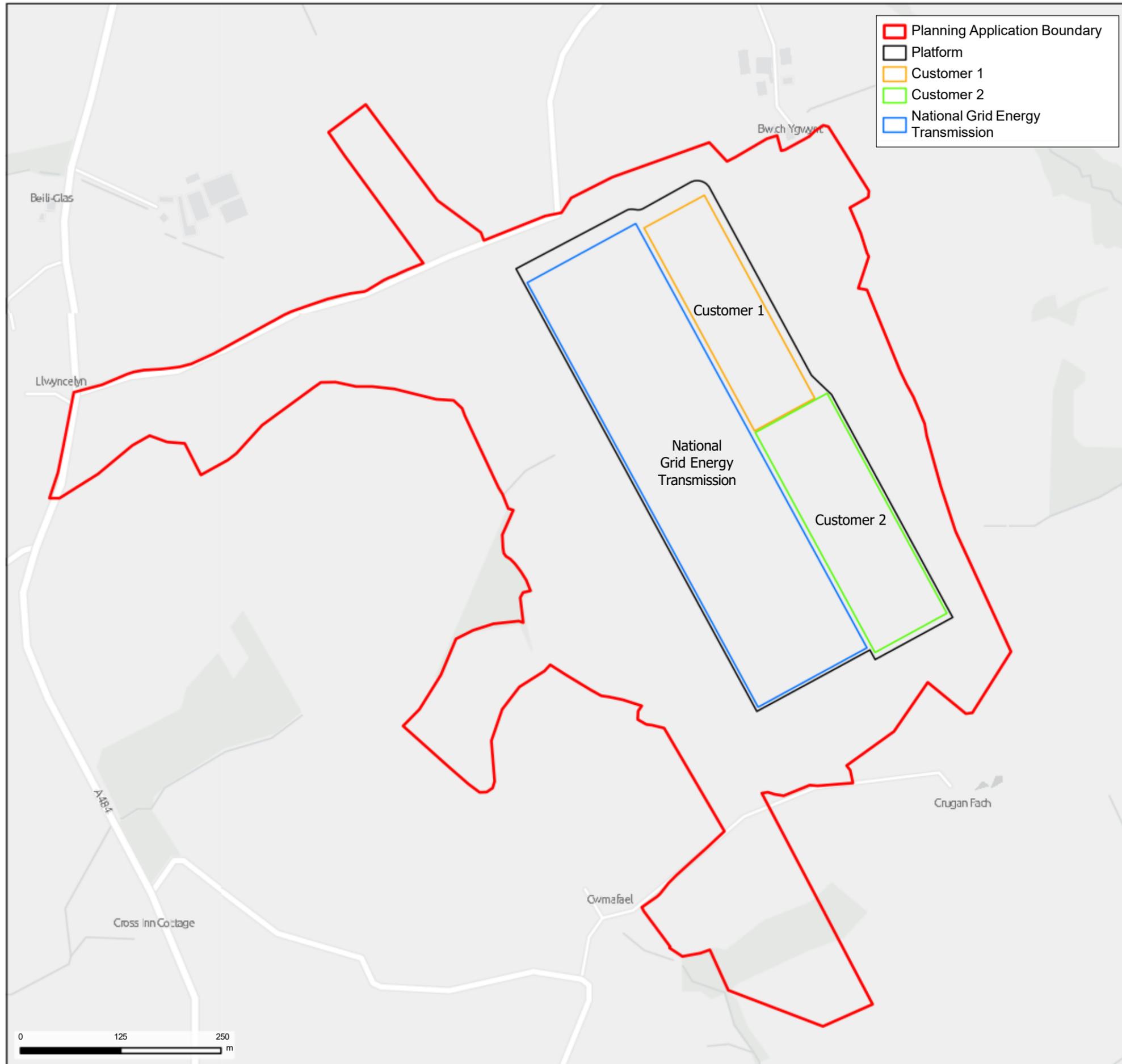
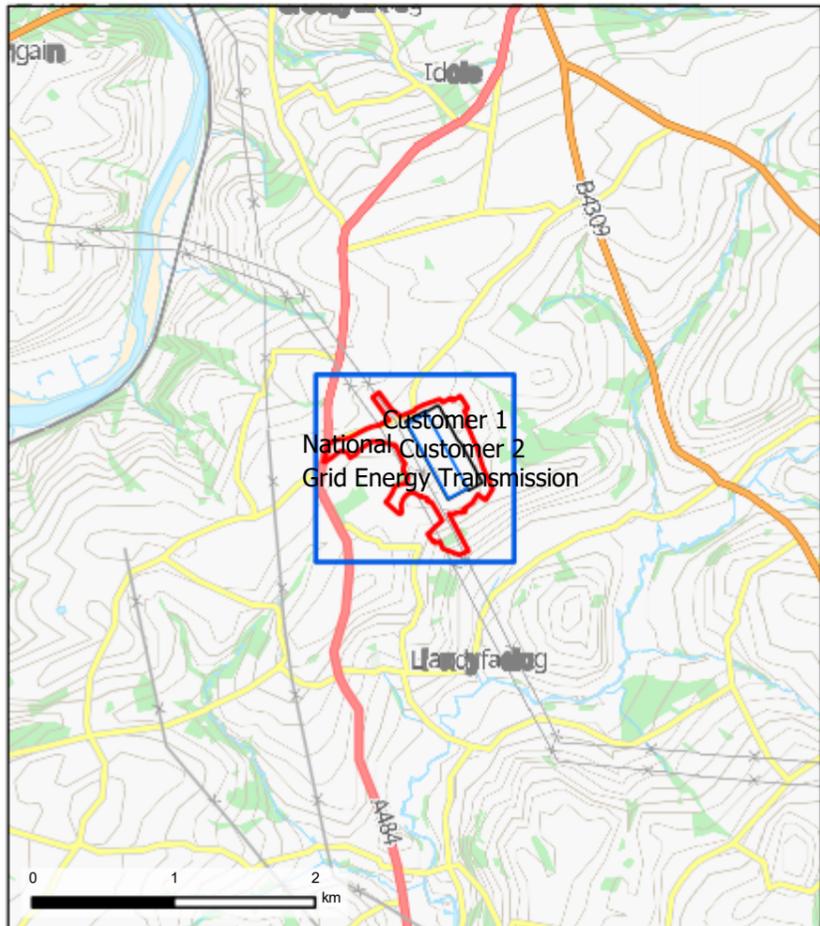
- Flood risk is taken into account at all stages of the planning process to ensure that new development is appropriate for its location;
- The proposed development will remain safe and operational throughout the duration of its intended design lifetime; and
- The proposed development will not increase flood risk elsewhere.

The purpose of this document is to:

- Present the broad scale and nature of the proposals for the substation development;
- Summarise the potential sources of flood risk to the new plant; and
- Identify the primary source of flood risk and present detailed flood level data to inform the ongoing designs.

# APPENDICES

# Appendix A. EXISTING SITE LOCATION



- Planning Application Boundary
- Platform
- Customer 1
- Customer 2
- National Grid Energy Transmission



Client  
**nationalgrid**

**LLANDYFAELOG 400KV SUBSTATION**  
Site Location

Contains OS data © Crown Copyright and database right 2025  
Contains data from OS Zoomstack, Contains OS data © Crown Copyright and database right 2023  
Contains data from OS Zoomstack

1:16,000 @ A3	Date: 03/11/2025
Drawn: DF	Checked: WB
Figure: 01	Rev: A

# Appendix B. PROPOSED DEVELOPMENT DRAWINGS



**LEGEND**

- SITE BOUNDARY
- PLATFORM BOUNDARY
- NEW HV OHL
- EXISTING HV OVERHEAD LINE
- WETLAND AREA
- DRAINAGE SWALE

**GENERAL NOTES**

1. ALL LANDSCAPING FEATURES (INCLUDING VISIBILITY BUND, PLANTING ETC.) ARE COVERED IN DRAWING 331201448 STN 13 001 TO 3003.

SITE LAYOUT PLAN  
1:2000

OS DISCLAIMER: BACKGROUND MAPPING INFORMATION HAS BEEN REPRODUCED FROM THE ORDNANCE SURVEY MAP BY PERMISSION OF ORDNANCE SURVEY ON BEHALF OF THE CONTROLLER OF HIS MAJESTY'S STATIONERY OFFICE. ©CROWN COPYRIGHT ORDNANCE SURVEY NATIONAL GRID ELECTRICITY TRANSMISSION (100024241)



Master Scheme No: 101256  
Sub-Scheme No: 207820  
Site: LLANDYFAELOG SUBSTATION  
Scheme Name: NEW LLANDYFAELOG SUBSTATION

**PROPOSED SITE LAYOUT PLAN**

Created by:	Date:	Checked by:	Date:	Approved by:	Date:
LW	31/10/2025	MK	31/10/2025	JC	31/10/2025
Development Eng	Document Type:	Scale:	Format:	Sheet(s):	Rev:
D BANHAM	DWG	1:2000	A1	01 OF 01	B

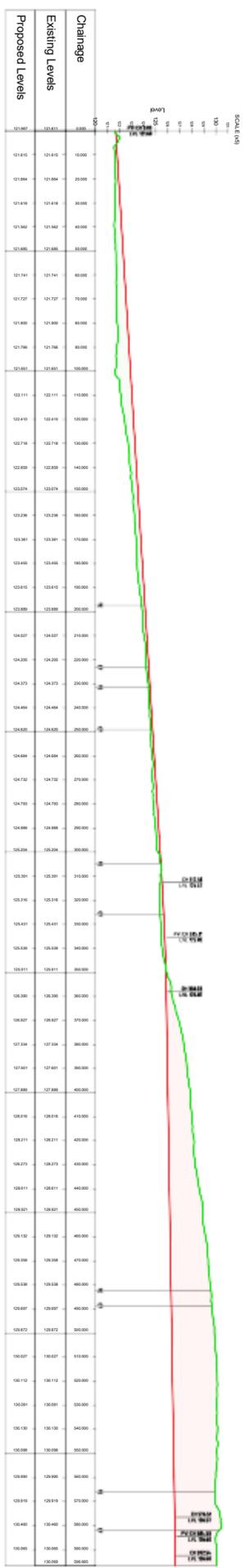
National Grid Document Number: PDD-101256-LAY-082

FEED Document Number: 331201448-STN-13-XX-LAY-TC-003

ISSUE	A	NO equipment No.	10/26	ISSUE	B	NO equipment No.	10/28
DESIGN	LA	Reason for issue		DESIGN	LI	Reason for issue	
CHECKED	MR	FIRST ISSUE		CHECKED	MR	ISSUE LAYOUT	
APPROVAL	JC	31/10/25		APPROVAL	JC	31/10/25	



ACCESS ROAD ARRANGEMENT PLAN  
1:1000



SECTION ALONG CHAINAGE  
NTS

DATE	31/10/2025	BY	JK
REVISION	01 OF 01	DATE	31/10/2025
PROJECT	NEW LANDYFAELOG SUBSTATION	SCALE	1:1000
DRAWN	JK	CHECKED	JK
APPROVED	JK	DATE	31/10/2025

**nationalgrid**

Stattec

Site: LANDYFAELOG SUBSTATION  
Scheme Name: NEW LANDYFAELOG SUBSTATION

Project No: 101256  
Drawing No: 20750

Document Title: PROPOSED ACCESS ROAD PLAN

Client: LW  
Date: 31/10/2025  
Scale: 1:1000

Author: D BANNAM  
Date: 31/10/2025  
Scale: 1:1000

Checked: LW  
Date: 31/10/2025  
Scale: 1:1000

Approved: JC  
Date: 31/10/2025  
Scale: 1:1000

Revision: 01 OF 01

Document No: PDD-101256-LAY-083  
Revision: 331201448-STN-13-XX-LAY-TC-004

- LEGEND**
- SITE BOUNDARY
  - PLANNING BOUNDARY
  - NEW HV OVERHEAD LINE
  - EXISTING HV OVERHEAD LINE
  - SECTION HEIGHT EXTENTS FOR CONSTRUCTION DURATION
  - NEW HV OH
  - EXISTING HV OH



LEGEND

-  ROAD WORK
-  ALL OTHERS WITH EXISTING UTILITIES
-  PROPOSED BELLMOUTH WITH EXISTING UTILITIES
-  FLOOD PLAIN
-  WATER



EXISTING ACCESS TRACK

180.1

VSM 1

2464

C207

1:500

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 Scheme Name: NEW LLANDYFAELOG SUBSTATION

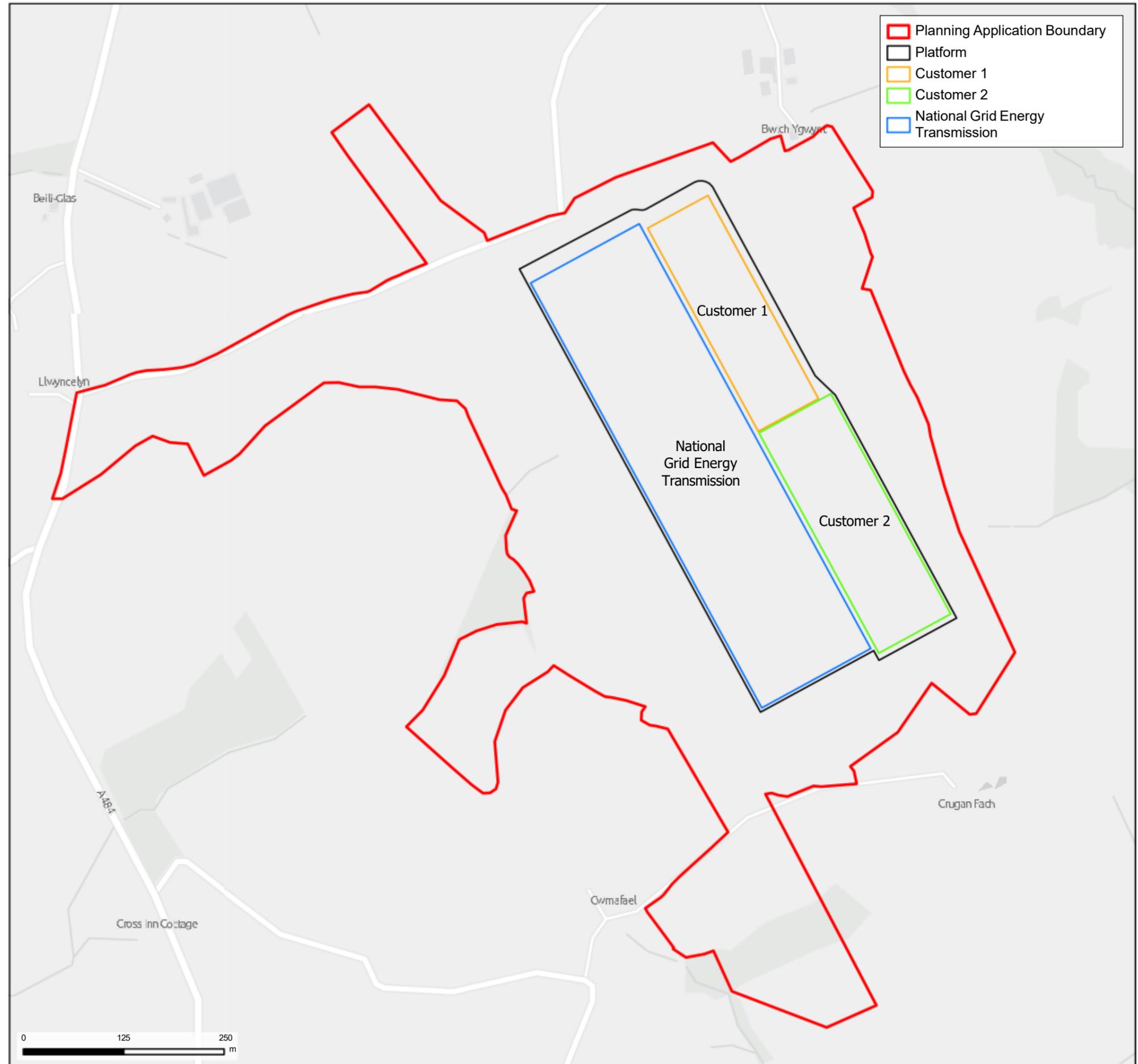
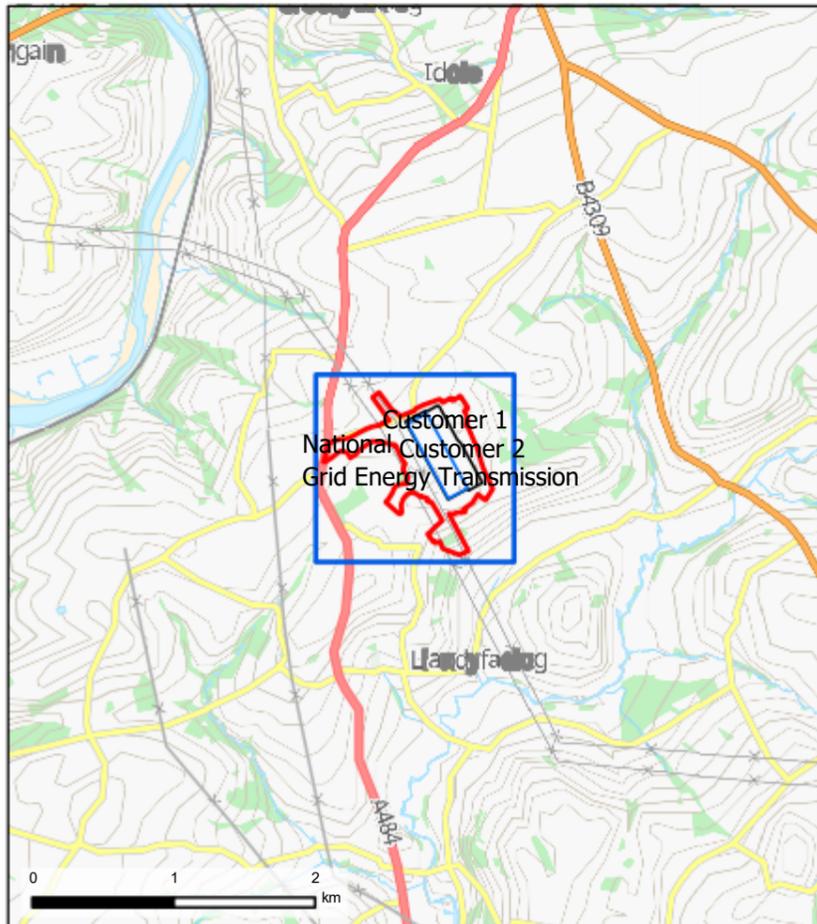
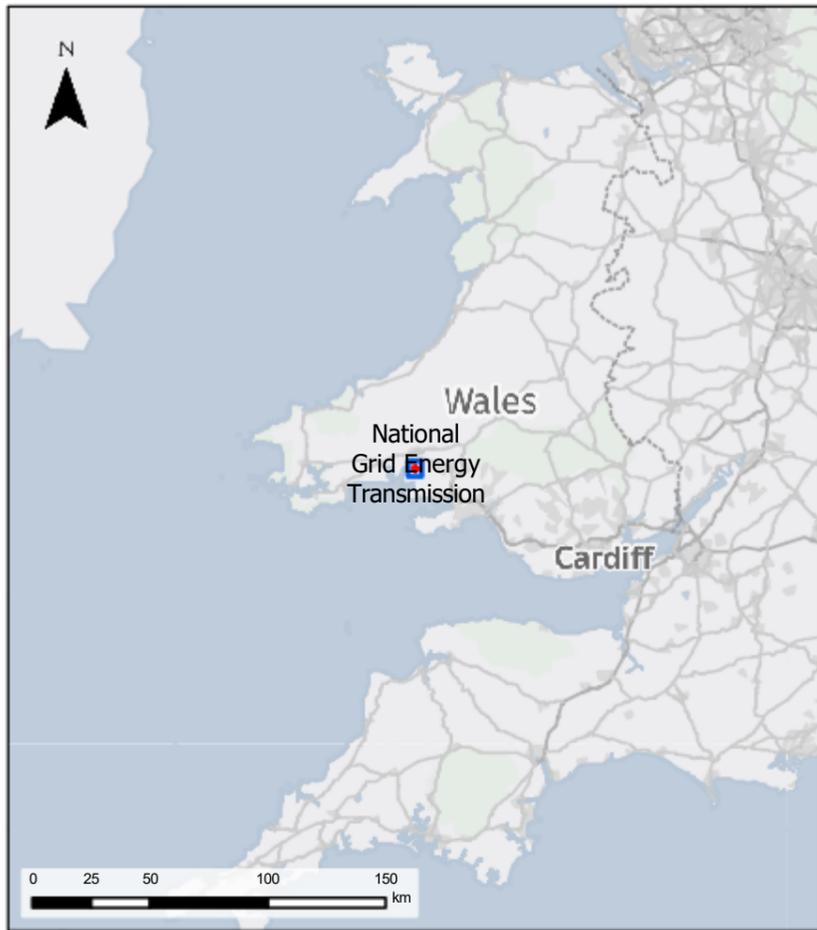
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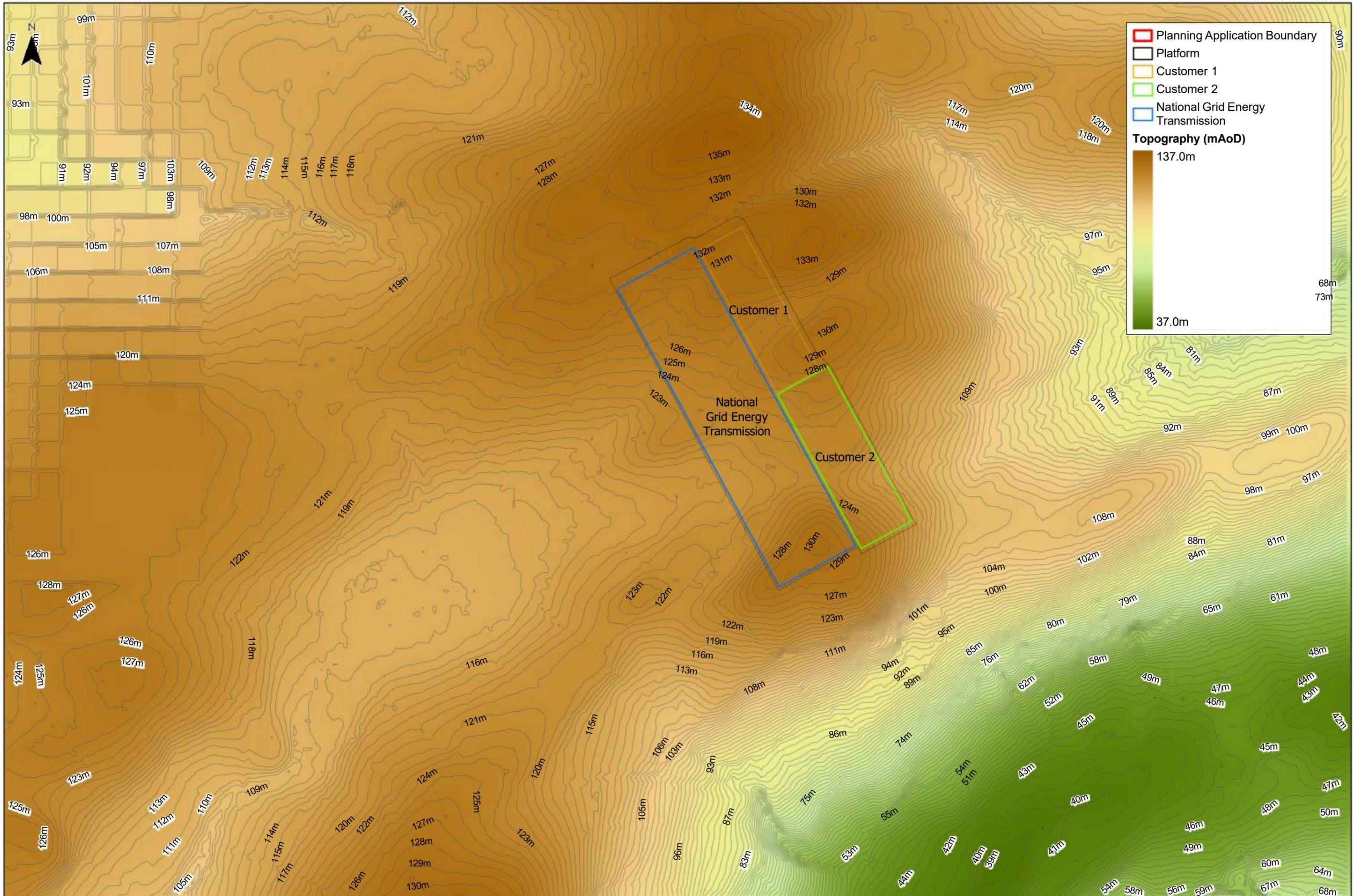
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A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W

# Appendix C. FLOOD RISK AND TOPOGRPAHY



- Planning Application Boundary
- Platform
- Customer 1
- Customer 2
- National Grid Energy Transmission



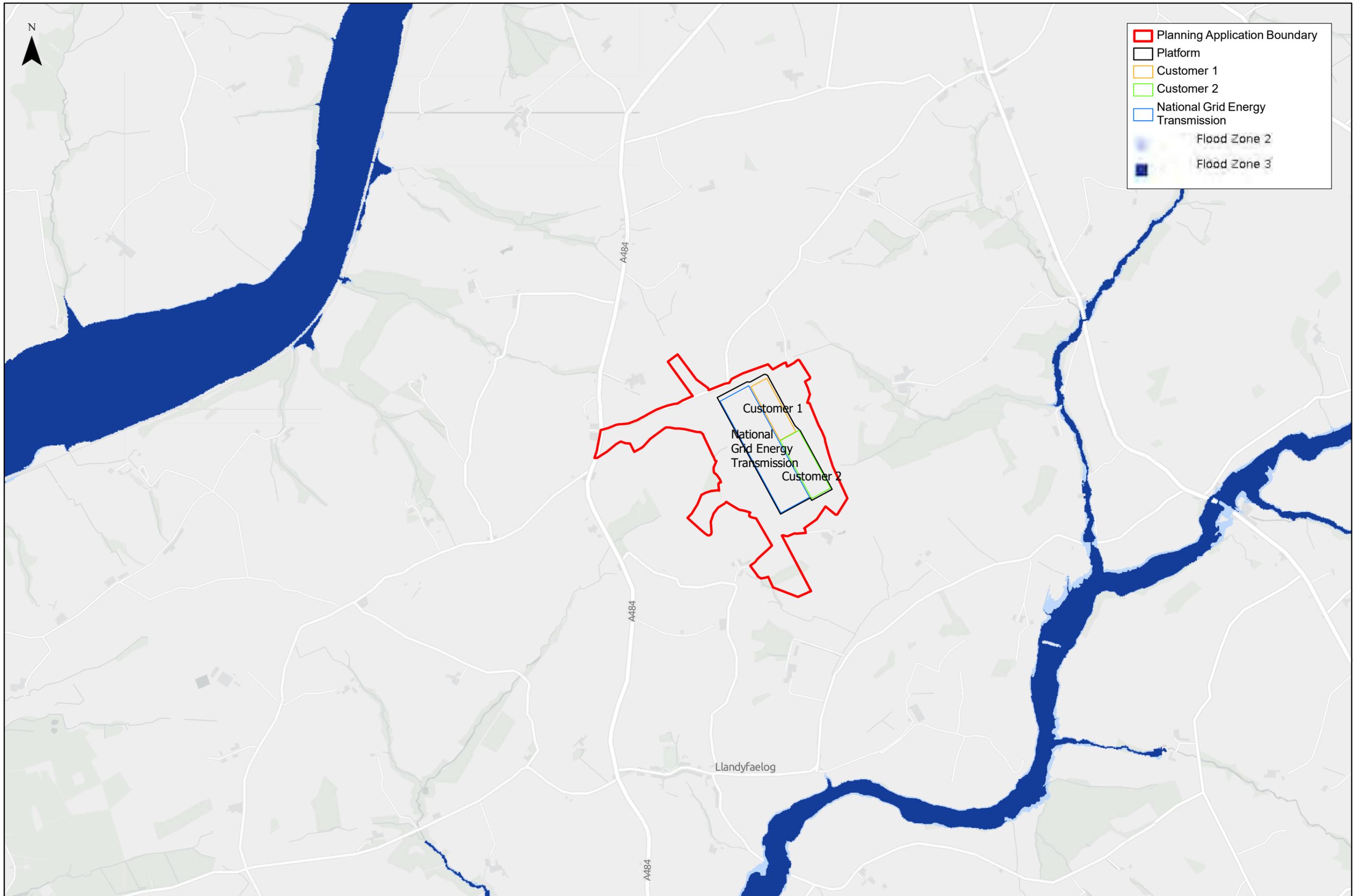
Client  
nationalgrid

**LLANDYFAELOG 400KV SUBSTATION**  
Topography - Detailed

0 300 600 m

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1:6,000 @ A3	Date: 03/11/2025
Drawn: DF	Checked: WB
Figure: 02	Rev: A



	Planning Application Boundary
	Platform
	Customer 1
	Customer 2
	National Grid Energy Transmission
	Flood Zone 2
	Flood Zone 3



Client  
nationalgrid

**LLANDYFAELOG 400KV SUBSTATION**  
National Resource Wales Flood Risk from Rivers and Sea

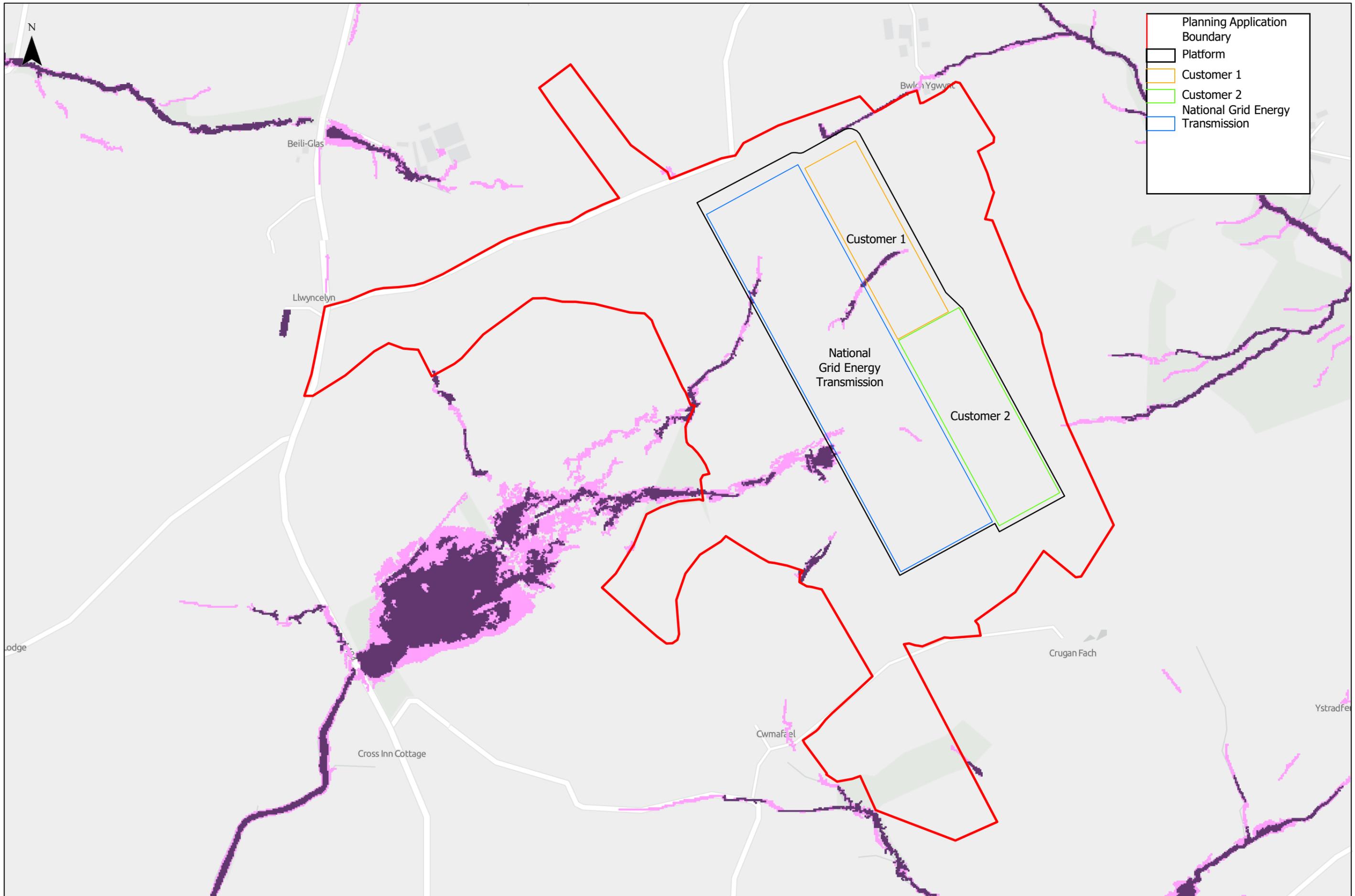


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Flood Zones refer to the probability of river and/or sea flooding, ignoring the presence of defences.

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Figure: 03 Rev: A



Planning Application Boundary

Platform

Customer 1

Customer 2

National Grid Energy Transmission



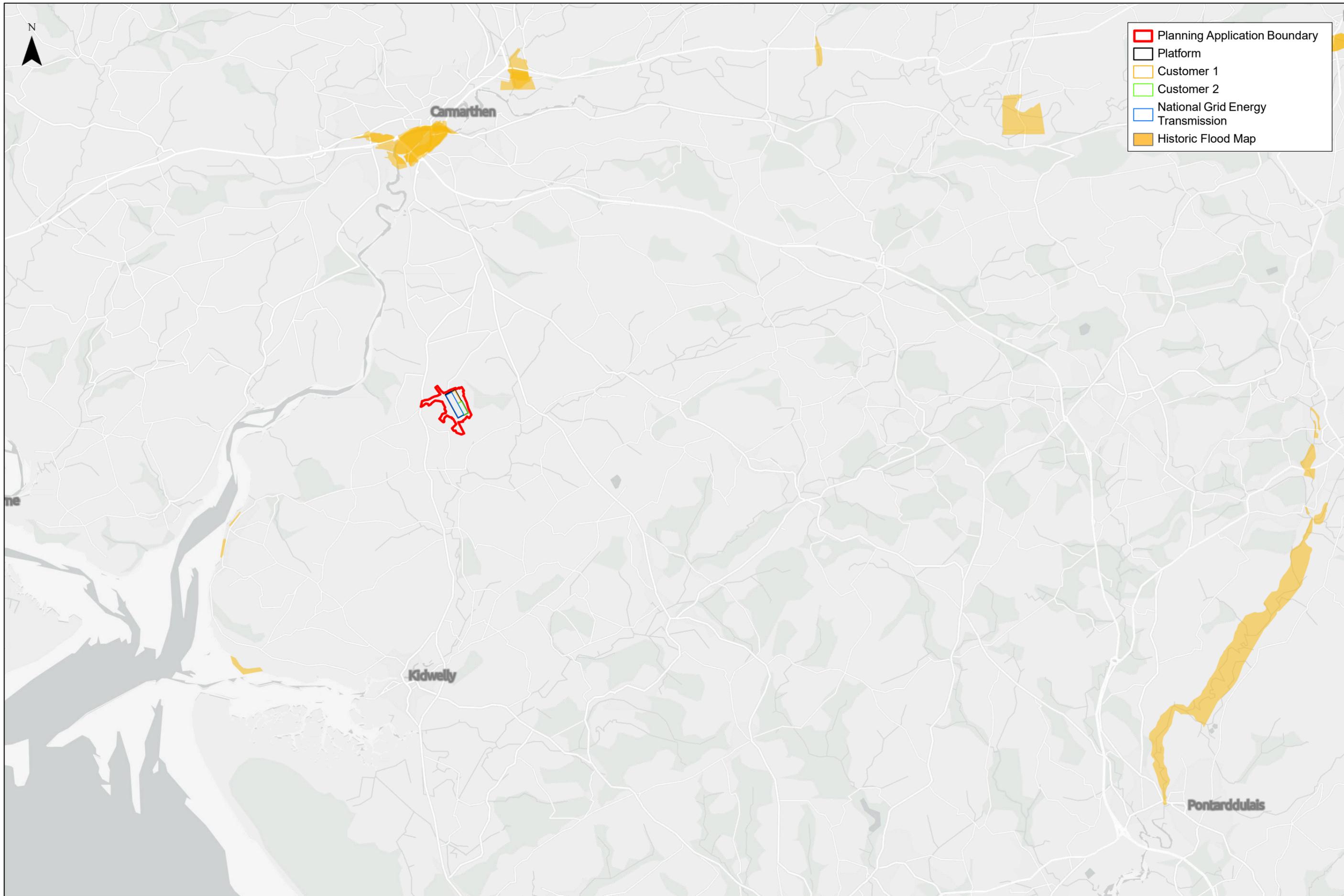
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**LLANDYFAELOG 400KV SUBSTATION**  
Natural Resource Wales Surface Water Flood Risk

0 250 500 m

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Maps based on EA updated 'Flood Map for Surface Water' (uFMISW) released in 2013 as the latest iteration of a national scale surface water modelling exercise.

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Figure: 04	Rev: A



- Planning Application Boundary
- Platform
- Customer 1
- Customer 2
- National Grid Energy Transmission
- Historic Flood Map