

rappor



Swansea North BESS

EDF Renewables

Transport Statement
May 2025





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Prepared By	Rob Hardyman	May 2025
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Rappor Consultants Ltd

A: 33 Bristol, Colston Avenue, Bristol, BS1 4UA

W: www.rappor.co.uk

T: 0117 370 4477

E: hello@rappor.co.uk

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1 Introduction

- 1.1 Rappor have been instructed by EDF Renewables to prepare a Transport Statement in support of a full planning application for the proposed Battery Energy Storage System (BESS) facility on land at Abergelli Farm, Felindre (the Site).
- 1.2 Full planning permission is sought for the installation of a new 250 MW BESS battery storage system facility, with associated infrastructure, engineering works and landscaping (the Proposed Development). This TS should be read alongside the Construction Traffic Management Plan (CTMP), against which any specific conditions can be applied to ensure the safe management of traffic throughout the construction period.
- 1.3 The key issues that need to be considered within this TS are:
 - a) Review of national and local transport planning policy;
 - b) Review of the local highway network, including highway safety;
 - c) Details of the Proposed Development including access arrangements,
 - d) Identification of the expected servicing arrangements during the operational period, including the expected number of vehicle trips associated with the development proposals and
 - e) Summary and conclusions.
- 1.4 A site visit was undertaken by Rappor on Monday 28th April 2025.

Site Location

- 1.5 The development site is located in Felindre approximately 7km north of Swansea. The development site is located within Abergelli Farm and presently comprises agricultural fields. The site location is included in **Appendix A**.
- 1.6 The site is split across two parcels which are located to the north and south of a farm track which routes through Abergelli Farm. The east and west of the site is surrounded by woodland which forms part of the Llety-Morfi SINC and to the south west of the site construction is currently ongoing for the Greener Grid Park. The site context is demonstrated in **Figure 1.1** below.

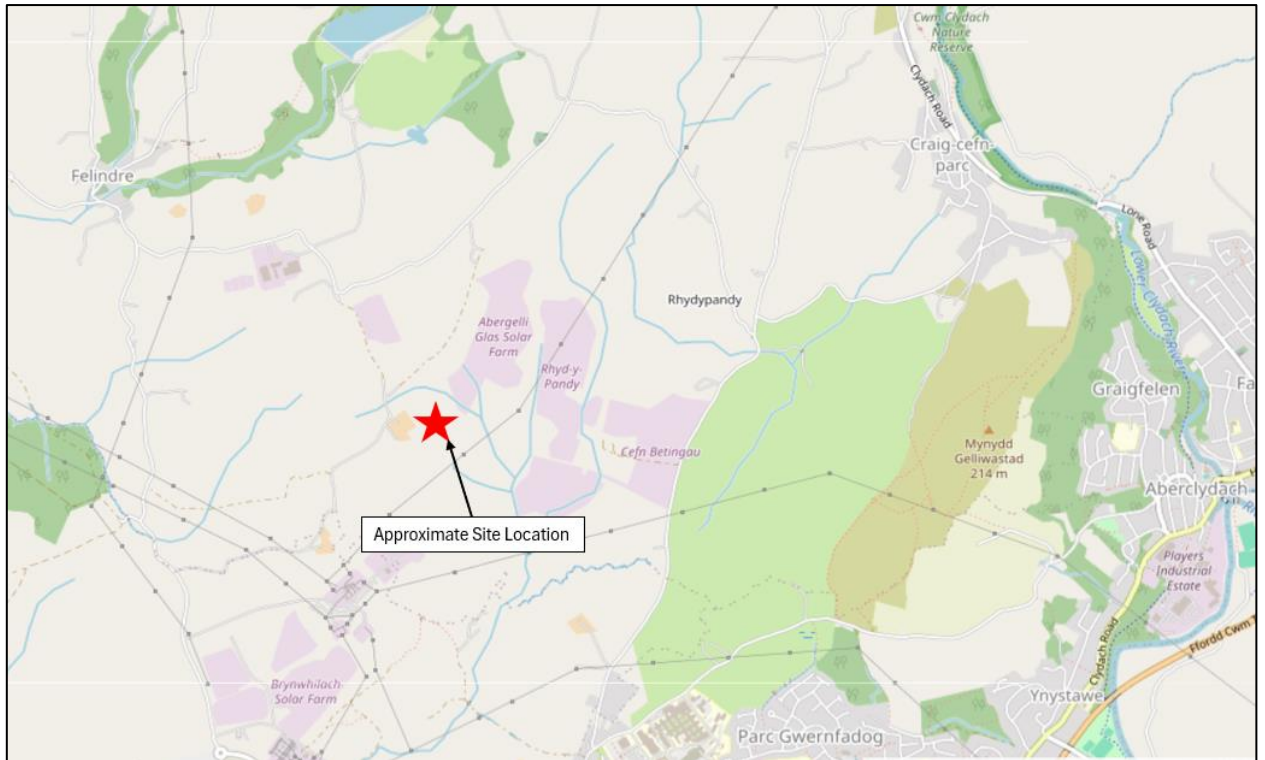


Figure 1.1 Site Context Plan



2 Relevant Transport Planning Policy

2.1 The relevant transportation policies are set out on the following National and Local documents:

- a) Future Wales: The National Plan 2040 (February 2021);
- b) Llwybr Newydd - The Wales Transport Strategy 2021 (March 2021);
- c) Planning Policy Wales – Edition 12 (February 2024);
- d) Planning Policy Wales – Technical Advice Note 18: Transport (March 2007); and
- e) Swansea Local Development Plan 2010-2025 (February 2019).

National Policy

Future Wales: The National Plan 2040 (February 2021)

- 2.2 Future Wales is the national development framework, setting the direction for development in Wales to 2040. Published by the Welsh Government in February 2021, it is the first development plan for Wales. Future Wales provides a framework for managing change and planning development. It is a development plan with a strategy for addressing key national priorities through the planning system, including sustaining and developing a vibrant economy, achieving decarbonisation and climate-resilience, developing strong ecosystems and improving the health and well-being of the Welsh communities.
- 2.3 Future Wales is one of a number of documents concerned with infrastructure and development in Wales. The specific purpose of Future Wales is to ensure the planning system at all levels is consistent with, and supports the delivery of, Welsh Government strategic aims and policies.

Llwybr Newydd - the Wales Transport Strategy 2021 (March 2021)

- 2.4 Llwybr Newydd - the Wales Transport Strategy 2021 is the Welsh Government's strategy for the future of transport in Wales. It places people and climate change at the centre of how the Welsh transport system is designed, setting the vision for an accessible, sustainable and efficient transport system.
- 2.5 It also sets out short-term priorities and long-term ambitions, and how the transport system can help deliver these. The following are the three headline priorities for the next five years:

Priority 1: Bring services to people in order to reduce the need to travel.

Priority 2: Allow people and goods to move easily from door to door by accessible, sustainable and efficient transport services and infrastructure.

Priority 3: Encourage people to make the change to more sustainable transport.



Planning Policy Wales (PPW) – Edition 12 (February 2024)

- 2.6 The national land use planning policies of the Welsh Government are set out in Planning Policy Wales, Edition 12 published in February 2024. The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales.
- 2.7 PPW is supplemented by a series of Technical Advice Notes (TANs), Welsh Government Circulars, and policy clarification letters, which together with PPW provide the national planning policy framework for Wales. PPW, the TANs, Minerals TANs (MTANs) and policy clarification letters comprise national planning policy. TAN 18: Transport published in March 2007 is of particular relevance.

Planning Policy Wales – Technical Advice Note 18: Transport (March 2007)

- 2.8 TAN 18 was published in March 2007 by the Welsh Government to supplement PPW and provides further information and detail in relation to transport matters and the integration between land use planning and transport in Wales.
- 2.9 It states that the integration of land use planning and development of transport infrastructure has a key role to play in addressing the environmental aspects of sustainable development (paragraph 2.3).
- 2.10 It goes on to say that integration can help achieve these environmental outcomes together with the Welsh Government's wider sustainable development policy objectives by:
- a) *“promoting resource and travel efficient settlement patterns;*
 - b) *ensuring new development is located where there is, or will be, good access by public transport, walking and cycling thereby minimising the need for travel and fostering social inclusion;*
 - c) *managing parking provision;*
 - d) *ensuring that new development and major alterations to existing developments include appropriate provision for pedestrians (including those with special access and mobility requirements), cycling, public transport, and traffic management and parking/servicing;*
 - e) *encouraging the location of development near other related uses to encourage multi-purpose trips;*
 - f) *promoting cycling and walking;*
 - g) *supporting the provision of high quality, inclusive public transport;*
 - h) *supporting provision of a reliable and efficient freight network;*
 - i) *promoting the location of warehousing and manufacturing developments to facilitate the use of rail and sea transport for freight;*
 - j) *encouraging good quality design of streets that provide a safe public realm and a distinct sense of place; and*
 - k) *ensuring that transport infrastructure or service improvements necessary to serve new development allow existing transport networks to continue to perform their identified functions.”*



- 2.11 Paragraph 2.4 recognises that the inter-relationships between land use planning and transport are complex and varied but summarises that:

“By influencing the location, scale, density and mix of land uses and new development, land use planning can help to reduce the need to travel and length of journeys, whilst making it easier for people to walk, cycle and use public transport.”

- 2.12 Paragraph 5.7 recognises a place for local standards and design guidance, with reference to Manual for Streets, and notes that the relevant design standard applicable to Trunk Roads remains the Design Manual for Roads and Bridges (DMRB).

Local Policy

Swansea Local Development Plan 2010-2025

- 2.13 The Swansea Local Development Plan provides a clear framework to address the key issues facing the County and forms the basis for efficient planning decisions. Policy T1 sets out the key transport criteria which new development must consider. It is stated that:

“Development must be supported by appropriate transport measures and infrastructure, and depending on the nature, scale and siting of the proposal will be required to:

- i. Within SDAs and relevant H 1 sites, prioritise the delivery of the key transport measures and schemes identified in the Transport Measures Priority Schedule, which must be delivered in an efficient and timely manner in accordance with development phases;*
- ii. Be designed to provide safe and efficient access to the transport network, which includes the Active Travel, public transport and street networks;*
- iii. Safeguard, enhance and expand the Active Travel network, particularly by means of improving connectivity;*
- iv. Reduce reliance on car use by maximising the potential of movement to/from the development by public transport, including ensuring developments within the urban area are located a walkable distance to a public transport access point on a route with a high frequency service;*
- v. Ensure all new transport measures are designed as integral elements of a scheme by means of a Placemaking approach;*
- vi. Deliver the new transport infrastructure and improvement measures that are required to mitigate the impact of the development; and*
- vii. Ensure developments are served by appropriate parking provision and circulation areas, including adequate road widths to allow access for service vehicles.*



Summary

- 2.14 This Transport Statement has been prepared to align with both national and local transport policy and primarily seeks to demonstrate the measures to limit the impacts of the construction traffic on the local highway network in terms of the operation and safety.

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3 Local Highway Network

- 3.1 As previously identified a site visit was undertaken on Monday 28th April 2025 to assess the local highway network within the vicinity of the site. Images collected whilst on the site visit will be used in this section to present the existing conditions.
- 3.2 The site is located within Abergelli Farm, which is accessed from the C159 located to the north of the site. The C159 is a two-way road subject to a derestricted (60mph) speed limited, in the vicinity of the farm access. The C159 is a two-way carriageway which is comprises a mix of two-way and single way working. Passing bays are provided at regular intervals allowing for two-way vehicle movements. Examples of the conditions on the C159 are demonstrated in **Photographs 3.1** and **3.2**.



Photo 3.1 C159



Photo 3.2 C159

- 3.3 The site is located on Abergelli Farm, which is located within the village of Felindre. The site will be accessed from the internal tracks within the farm, via the existing gated site access on the C159. The access is demonstrated in **Photograph 3.3** below. The site location is demonstrated in **Appendix A** and the local context is demonstrated in **Figure 1.1**.



Photo 3.3 Existing Access to the Abergelli Farm

- 3.4 To the east of the site, the C159 routes north to Rhydybandy Road. Along this section of the C159, there are intermittent field accesses provided and direct accesses to residential properties. As Rhydybandy Road routes to the south it passes through the village of Morryston, which comprises residential properties either side of the carriageway with direct frontage access. There are no footways provided in the village, with residents required to share the carriageway with vehicles. The conditions through the village of Morryston are demonstrated in **Photographs 3.4** and **3.5** below.



Photo 3.4 Rhydypany Road



Photo 3.5 Rhydypany Road

- 3.5 In the vicinity of the Mason Arms public house, Rhydypany Road forms the minor arm with a simple priority junction. After the junction, Rhydypany Road continues south to Mynydd Gellie Wastad Road. This section of Rhydypany Road is a two-way single carriageway road, subject to a derestricted speed limit before decreasing to 30mph approximately 400m north of the junction with Mynydd Gellie Wastad Road.
- 3.6 Mynydd Gellie Wastad Road routes south towards the mini roundabout between Pant Lasau Road and Heol Maes Eglwys. Pant Lasau Road provides a connection to the A48, which then provides an onward connection to the M4 Junction 46.
- 3.7 The route from the site to the M4 described above, previously provided the construction route for the solar farm permitted under application ref: 2013/0135. The solar farm is also located on Abergelli Farm, and it is therefore proposed to utilise the same construction route which was previously considered acceptable to provide access to the solar farm construction.

Local Highway Safety

- 3.8 To assess the safety of the existing highway network in the vicinity of the site, Personal Injury Collision (PIC) data has been reviewed via CrashMap (www.crashmap.co.uk), an online tool which maps the location of vehicle collisions which were reported to the police, which resulted in personal injury. The study period is the most recent five-year period for which records are available which is January 2019 to December 2023.
- 3.9 The study area includes the route between the A48 to the site. An extract of the PIC record from Crashmap is presented below at **Figures 3.1, 3.2 and 3.3**.

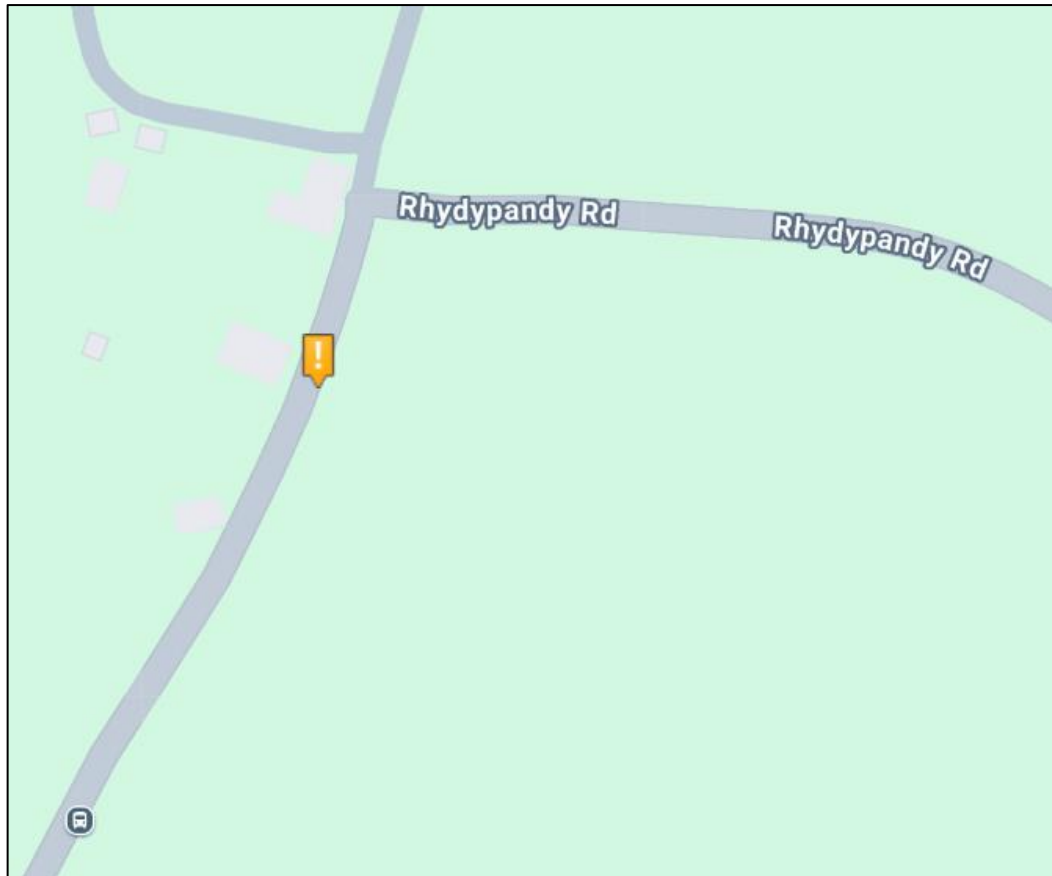


Figure 3.1 PIC Data for 2019 to 2023 (Source: Crashmap) – C159/Rhydypandy Road

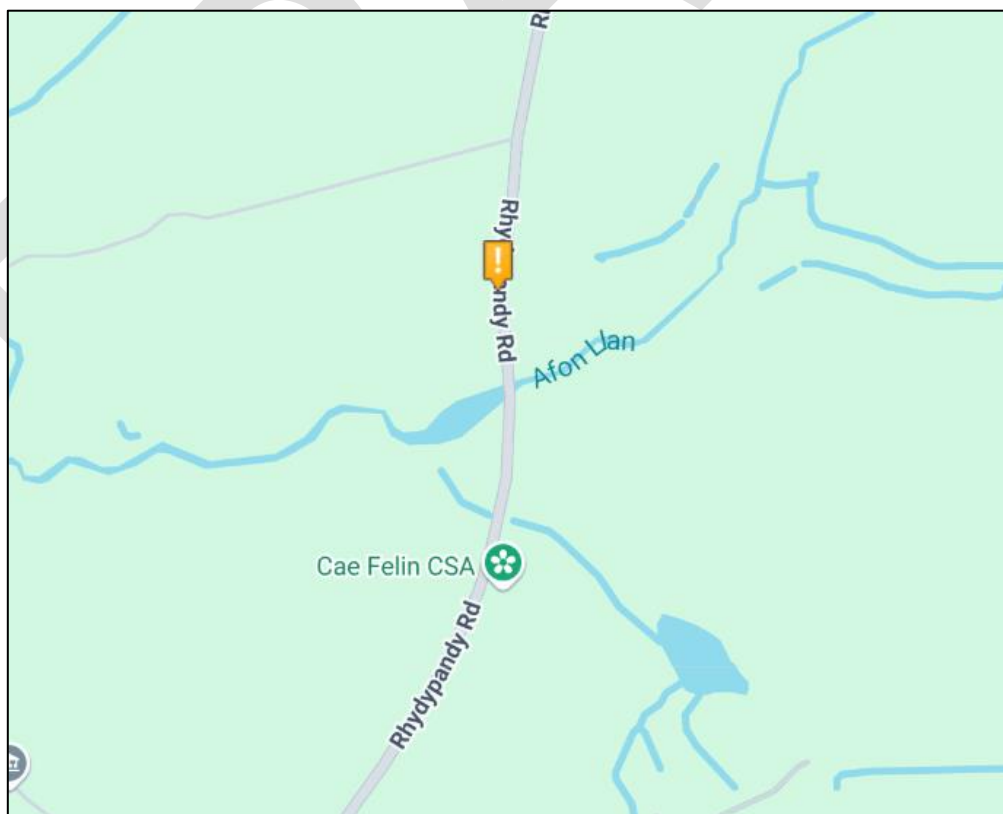


Figure 3.2 PIC Data for 2019 to 2023 (Source: Crashmap) – Rhydypandy Road

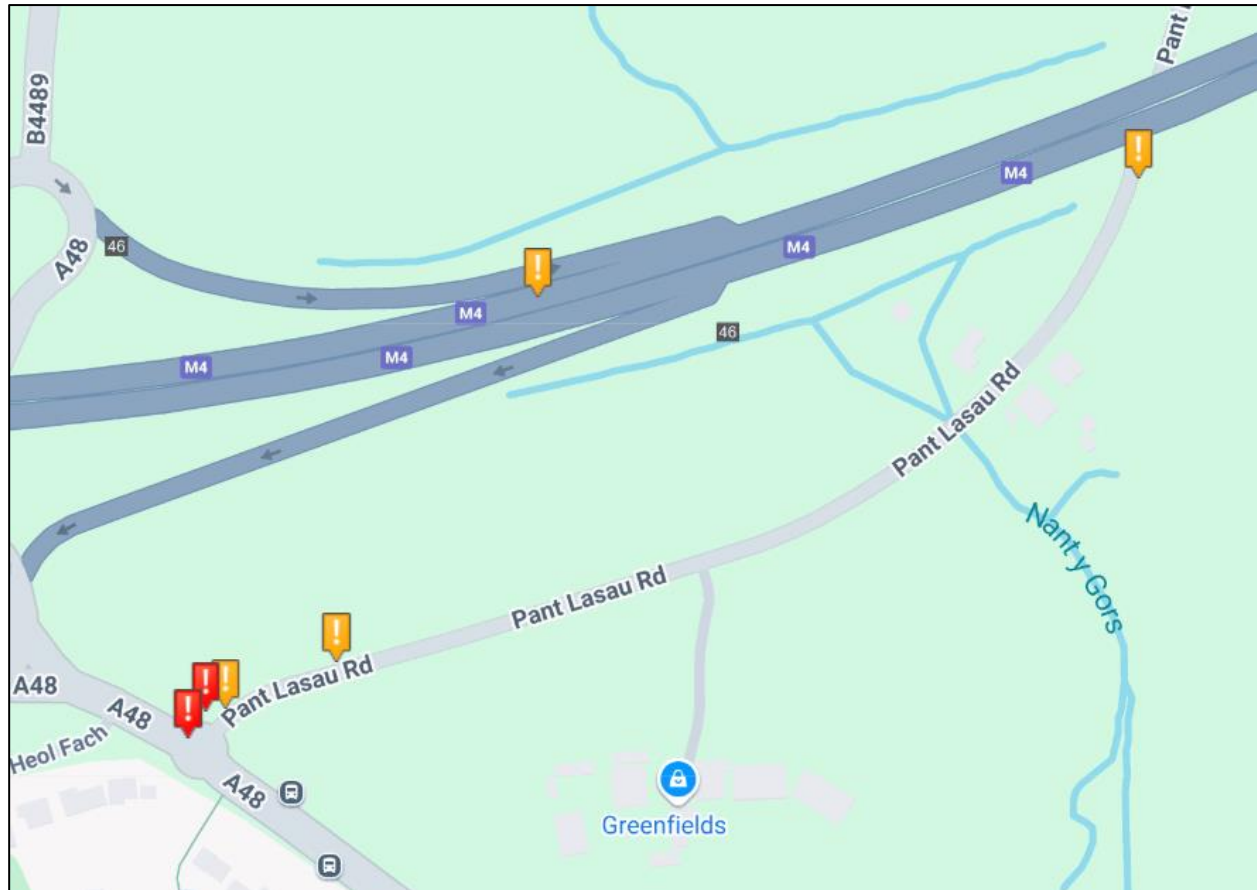


Figure 3.3 PIC Data for 2019 to 2023 (Source: Crashmap) – Pant Lasau Road

- 3.10 A review of the PICs which have occurred along the route between the A15, and the site are summarised below.

C159/Rhydypany Road

- 3.11 There was one recorded slight PIC on the C159, to the south of the simple priority junction on Rhydypany Road as demonstrated in **Figure 3.1**. The collision involved one car and resulted in slight injuries.

Rhydypany Road

- 3.12 A single slight PIC was recorded on Rhydypany Road, as demonstrated in **Figure 3.2**. The PIC occurred approximately 1.0km to the north of the junction with Mynydd Gellie Wastad Road and involved a single vehicle.

Pant Lasau Road

- 3.13 A total of five PICs occurred on Pant Lasau Road, with four occurring at the junction with the A48. Of the four PICs which occurred in the vicinity of the junction between Pant Lasau Road and the A48, two resulted in slight injury and two resulted in serious injury. Each of the four collisions involved vehicles.
- 3.14 The fifth identified collision occurred approximately 500m to the east of the A48/Pant Lasau Road. This collision resulted in slight injury and involved a single vehicle.



Summary

- 3.15 It has been identified that a total of seven PICs occurred along the route between the A48 and the access to Abergelli Farm. Of these seven collisions, five resulted in slight injury and two resulted in serious injuries. None of the recorded incidents involved pedestrians or cyclists.
- 3.16 From reviewing the data, there are no obvious patterns (five or more PICs) which would indicate a deficiency in the local highway network.

Public Rights of Way

- 3.17 The nearest Public Right of Way (PRoW) to the site, Footpath MW64B, routes to the west of the sit in a north to south direction through Abergelli Farm. The footpath routes along a short section of the access road serving the site. It is anticipated that the footpath could remain open throughout the construction period with appropriate crossing provision and warning signs for drivers utilising the construction access to make drivers aware of the potential for pedestrians to be crossing the access road. The location of the footpath relative to the site is demonstrated in **Figure 3.4** below.

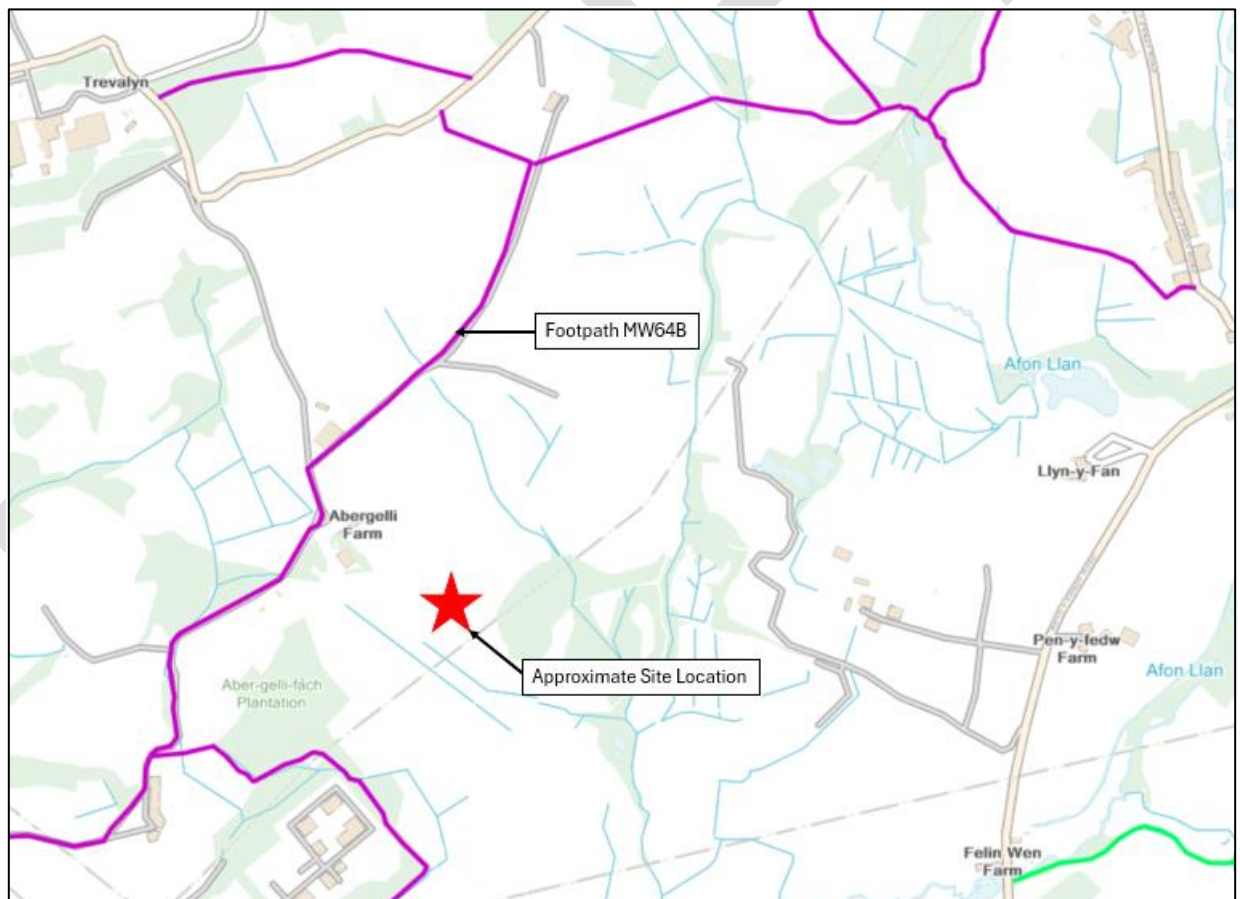


Figure 3.4 PRoW Footpath MW64B



Routing of Construction Traffic to Site

- 3.18 In determining the most suitable route to the site reference was made to application ref: 2013/0135, which permitted development for the *“Installation of ground mounted array of solar panels, inverter substations and 2.4m high fencing.”*
- 3.19 Within the Transport Statement submitted with the planning application, it was estimated that the construction of the proposed solar farm would result in 20 two-way HGV vehicle movements per day along the construction route from the M4 Junction 46 via Rhydybandy Road and the C159. Within the committee report, it was observed that *“the access roads, whilst rural in nature are of a good standard with adequate width to allow vehicles to pass clear of the highway and good visibility at the junction. They already serve the Welsh Water Treatment plant and some local farms.”*
- 3.20 As part of the site visit undertaken on Monday 28th April 2025, an alternate route to the site via the B4489 was considered. This route was discounted on the basis that the aforementioned route benefits from a prior permission for use as a construction route. The proposed construction route to the site is therefore illustrated in **Figure 3.5** below and included in **Appendix B**.

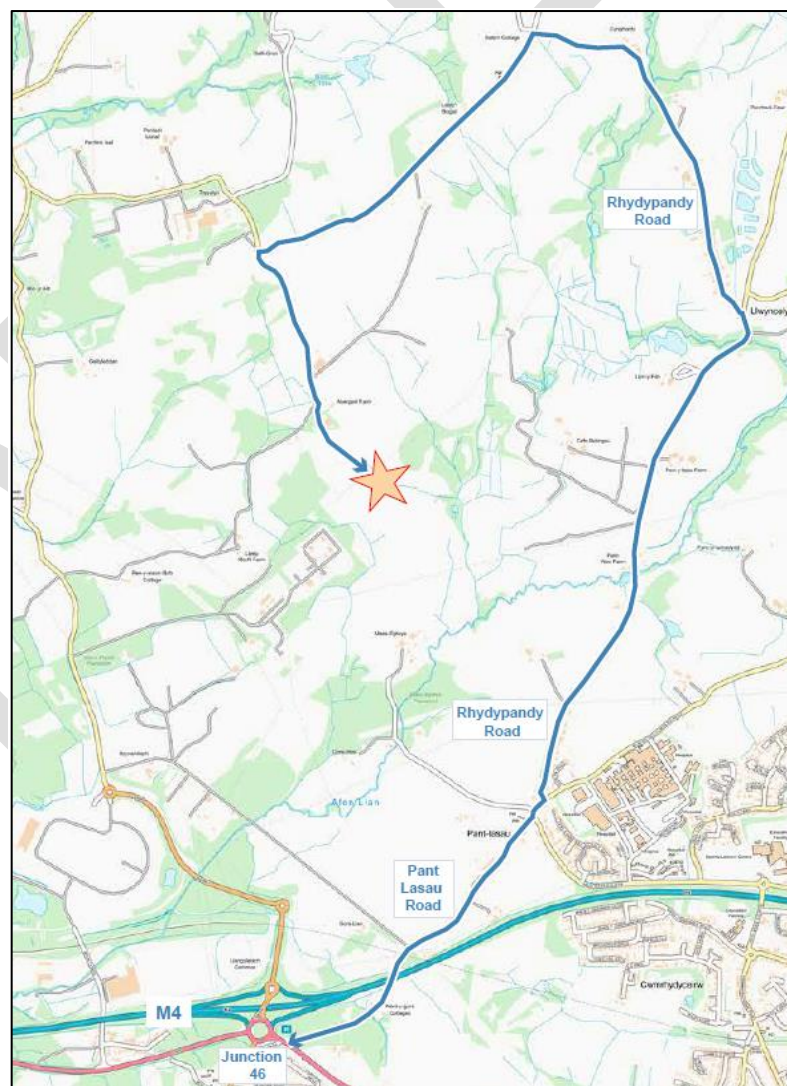


Figure 3.5 Proposed Construction Route



3.21 As identified in **Figure 3.5** construction traffic will route from the M4 Junction 46, Southwards on the A48 to Pant Lasau Road. The construction traffic will then continue north to Rhydypany Road and the C159 to the site access. Swept path analysis for a 16.5m articulated HGV is included **Appendix C**

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4 Development Proposals

Proposed Development

- 4.1 The development proposals comprise a 250MW BESS facility, that will allow for the storage of energy from the National Grid to supplement electricity supply during peak periods.
- 4.2 The masterplan for the site is provided in **Appendix D** with an extract provided in **Figure 4.1**.

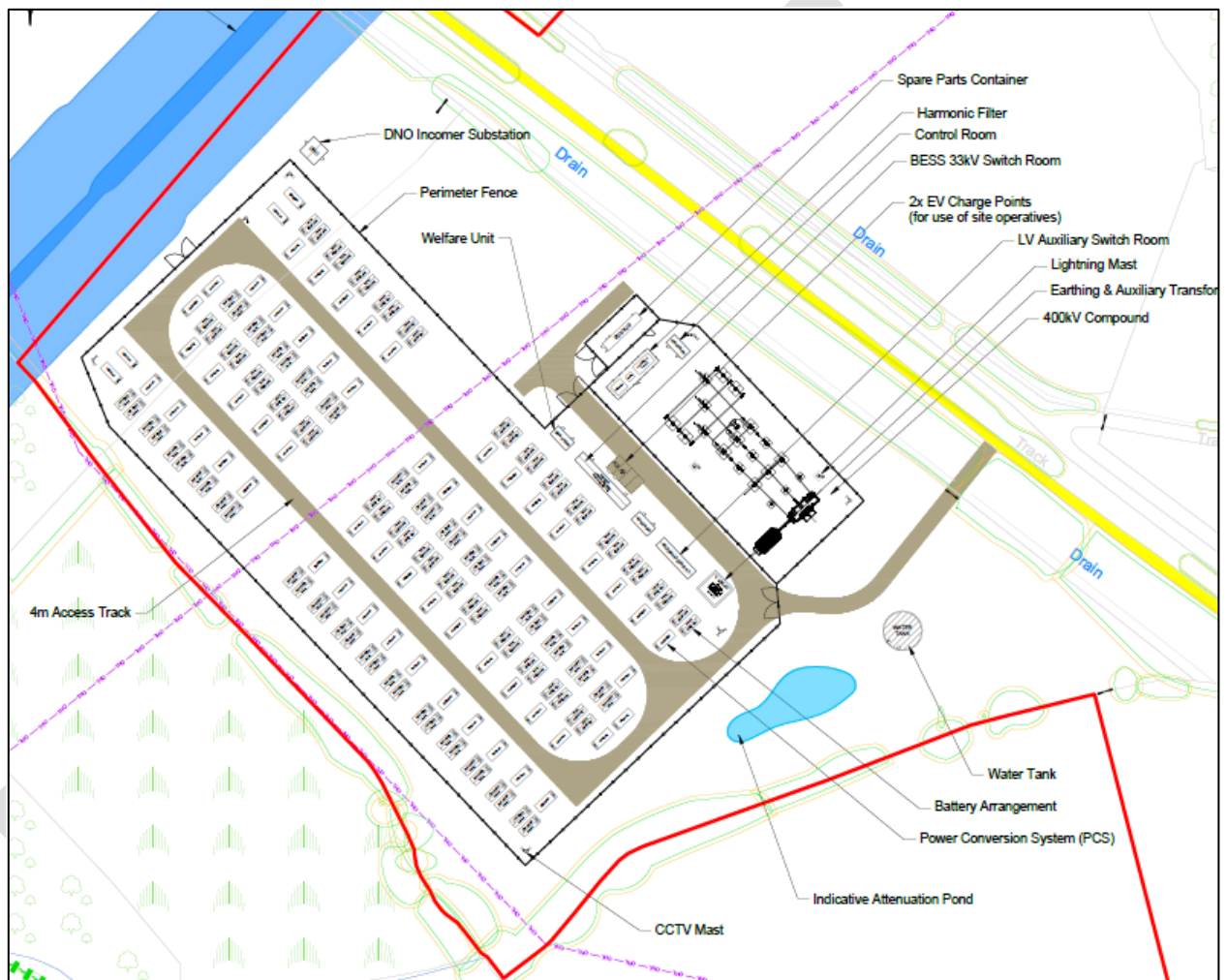


Figure 4.1 Proposed Site Layout

- 4.3 Vehicle access to the site will be provided via the existing access route within Abergelli Farm, from the gated access on the C159 to the north west of the site. Details of the proposed access arrangements are set out below.

Site Access

- 4.4 It is proposed to access the site via the existing gated access from the C159. The access was utilised as part of the proposal to construct a solar farm permitted under application ref: 2013/0135.



- 4.5 The proposed access arrangements are presented on the drawing included in **Appendix E**.
- 4.6 To demonstrate the proposed access can accommodate the access / egress of a 16.5m articulated vehicle, a swept path analysis is provided at **Appendix C**. The applicant has indicated that aside from the AILs, the vehicle used in the swept path analysis represents the largest vehicles that will require regular access to the site during the construction and operational periods. The tracking demonstrates a 16.5m vehicle can access and egress the proposed access track from the C159.

Summary

- 4.7 The local highway network is suitable to accommodate traffic arising from the temporary construction period, with no existing highway safety concerns.
- 4.8 The proposed routing strategy for the construction traffic associated with the proposed development has outlined that suitable routes are available for all construction traffic traveling from the strategic road network.
- 4.9 Safe, and suitable access is achievable, as demonstrated by the previous planning permission and the swept path analysis assessment.



5 Forecast Trip Attraction

Operational Trip Attraction

- 5.1 Once operational, there are anticipated to be up to two visits to the site every month for equipment maintenance and servicing, equating to up to four two-way vehicle trips per month. These vehicle trips would typically be made by LGV or 4x4 vehicles less than 7.5t.
- 5.2 The forecast operation of the site will therefore not have any observable impact on the local highway network.
- 5.3 It is therefore concluded that the development proposals will not impact upon the operation or safety of the local highway network.

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6 Summary and Conclusion

Summary

- 6.1 Rappor have been instructed by EDF Renewables to prepare a Transport Statement in support of a full planning application for the proposed Battery Energy Storage System (BESS) facility on land at Abergelli Farm, Felindre (the Site).
- 6.2 Full planning permission is sought for the installation of a new 250 MW BESS battery storage system facility, with associated infrastructure, engineering works and landscaping (the Proposed Development). This TS should be read alongside the Construction Traffic Management Plan (CTMP), against which any specific conditions can be applied to ensure the safe management of traffic throughout the construction period.
- 6.3 The TS has been prepared to provide an assessment of the development proposals relating to the construction of the site and has demonstrated the following:
 - a) The local highway network is suitable to accommodate forecast operational traffic;
 - b) A review of the PIC data for the local highway network had not identified any significant patterns of collisions which could be exacerbated by the construction traffic associated with the development proposals;
 - c) A safe and suitable route to the site is available, in line with the previously permitted solar farm development (ref: 2013/0135) is available to the site;
 - d) Measures can be incorporated to safeguard the existing PROW located to the west of the site during the operational period of the development;
 - e) The proposed access arrangements are suitable to allow access by HGVs associated with the construction of the site;
 - f) Once operational, the site will attract a small number of trips per month for maintenance purposes; and
 - g) Forecast trip attraction indicates that the proposals will not have an impact on the operation or safety of the local highway network; and

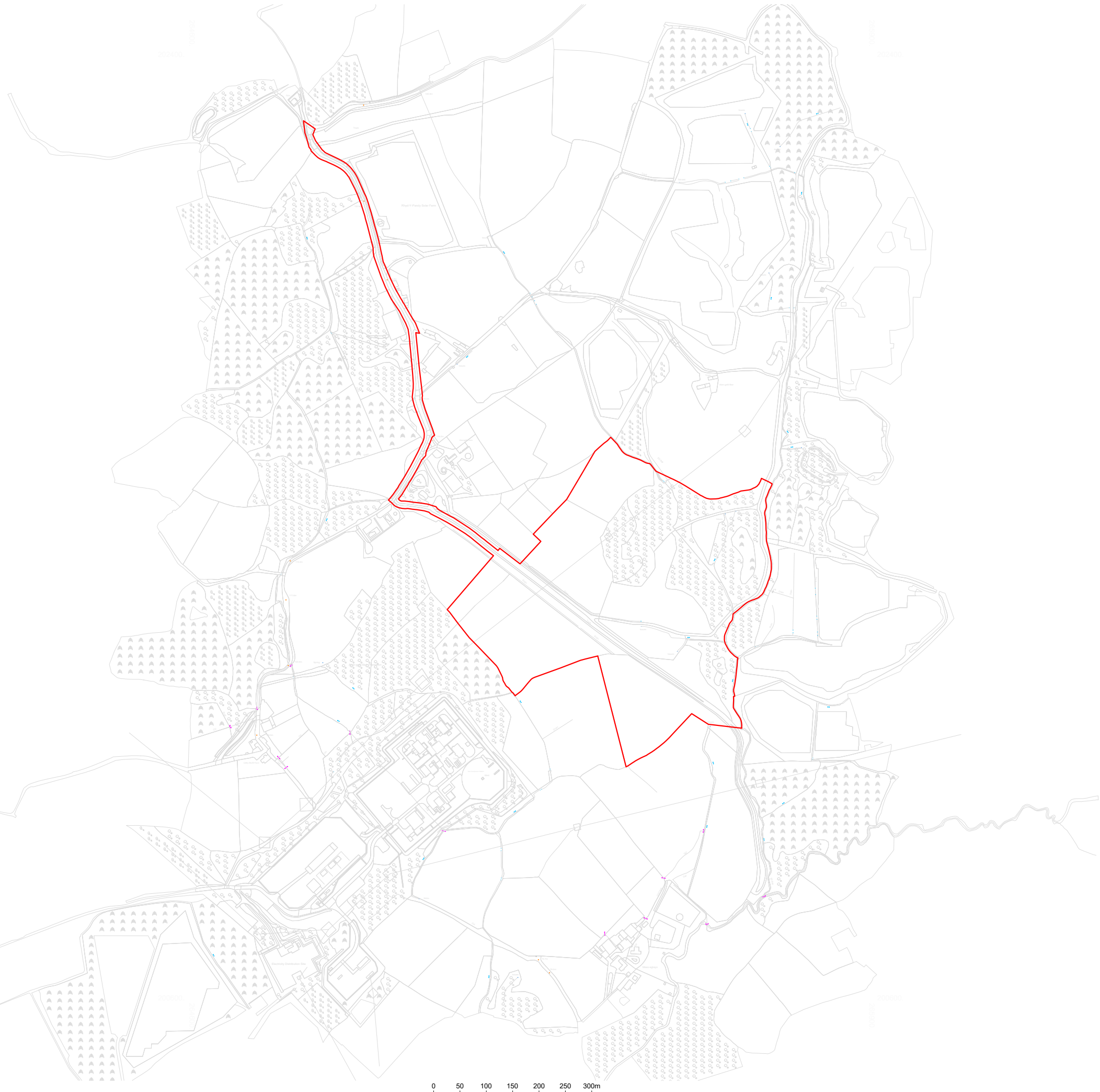
Conclusion

- 6.4 This TS has addressed the key operational traffic related issues arising from the proposed development.
- 6.5 Rappor conclude that the proposed development at the application site will accord with the requirements of Policy T1 of the Swansea Local Development Plan. As such, there are no significant highways, and transportation matters that should prevent the planning application from being permitted.



Appendix A – Site Location Plan

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NOTES

1. Drawing details and dimensions for planning purposes only.

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LEGEND

 PLANNING APPLICATION BOUNDARY

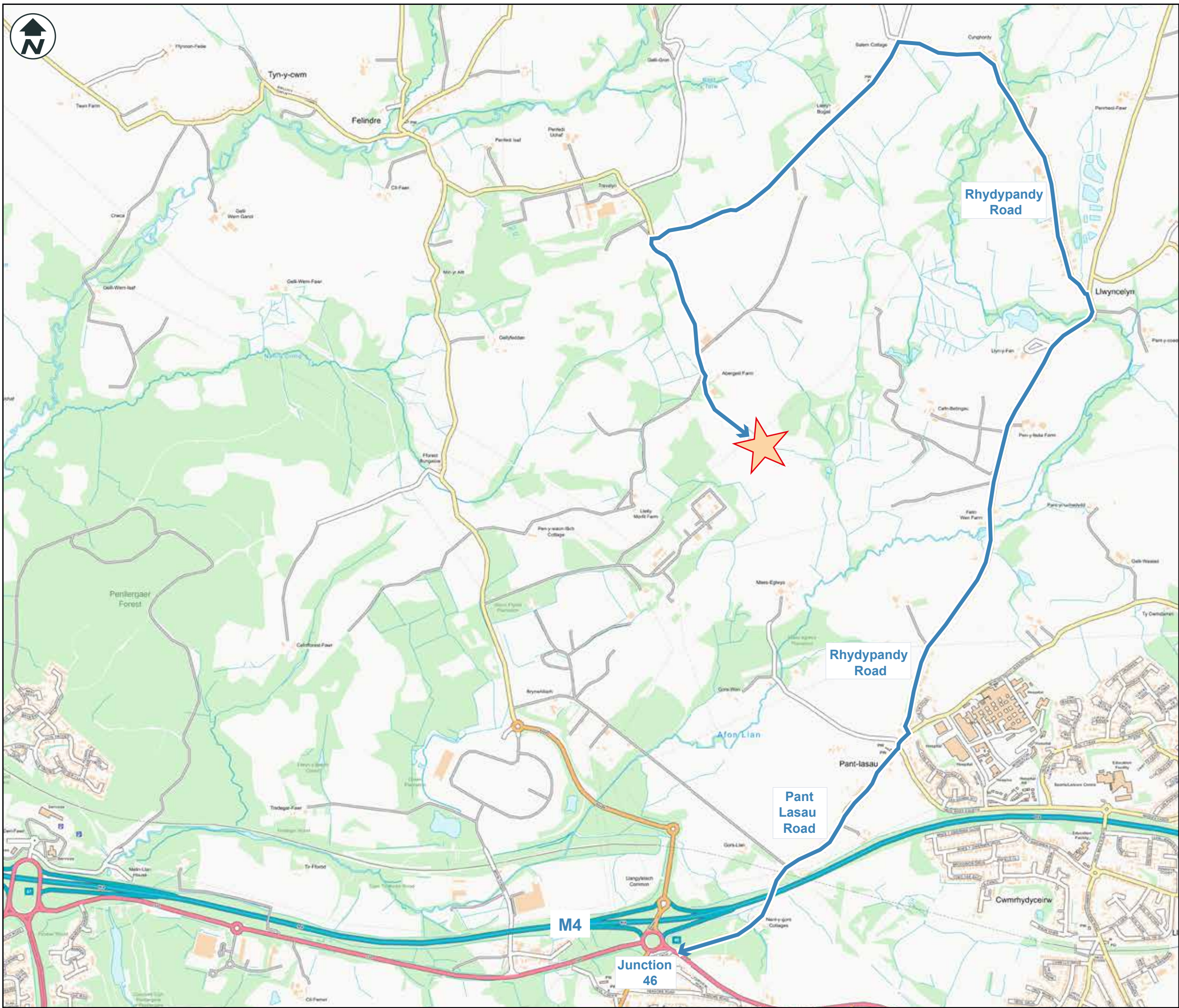
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-	First Issue	15.01.25	SS	TM
Rev	Description	Date	Checked	
Drawing No.				
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Project				
Batri Afon Llan Battery				
Title				
Site Location Plan				
Scale	1:7500 @A3	Drawn by	SS	Checked
			ARW	Date
				06.05.25





Appendix B – Proposed Construction Route

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Key:

Indicative Site Boundary

Proposed Route

Rev	Date	Details	By	Chkd

rappor

rappor.co.uk

CLIENT: EDF

PROJECT: Batri Afon Llan Battery (Swansea North BESS)

TITLE: Proposed Construction Route

DATE: 07.05.2025	DRAWN: MS	APPROVED: RH
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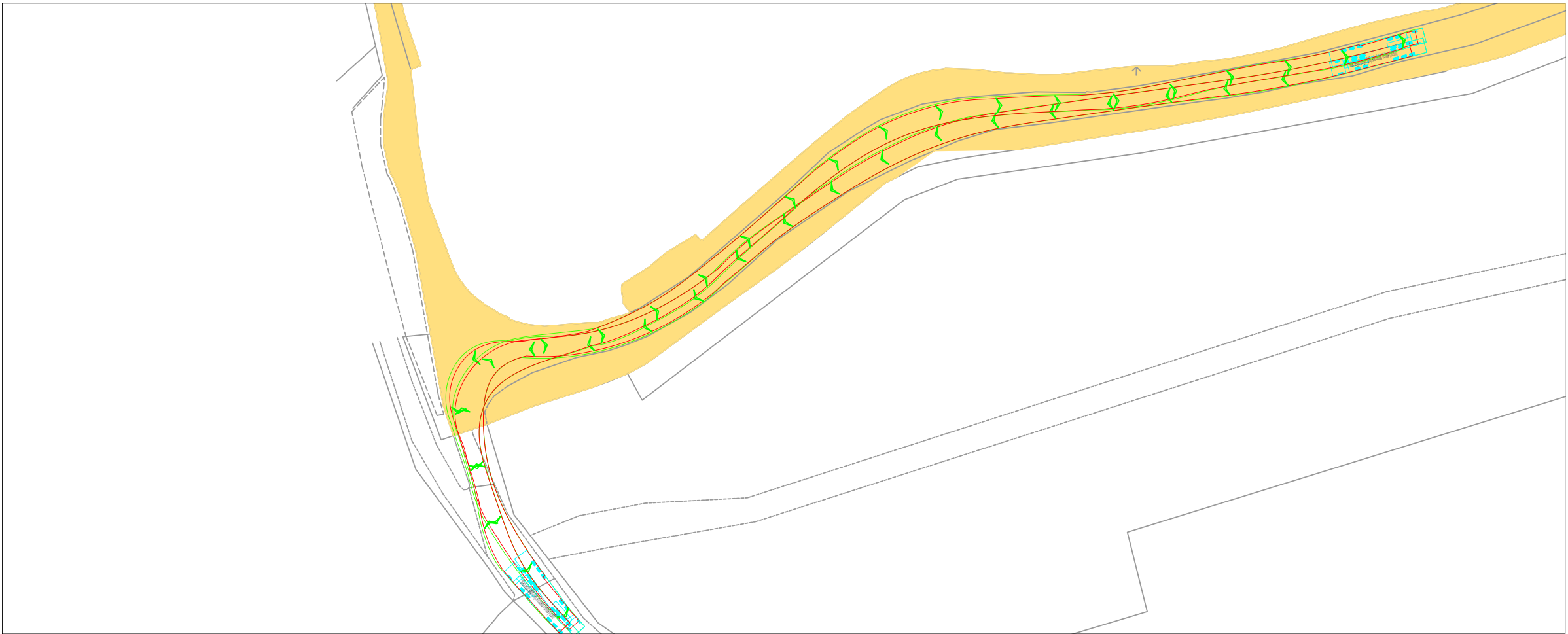
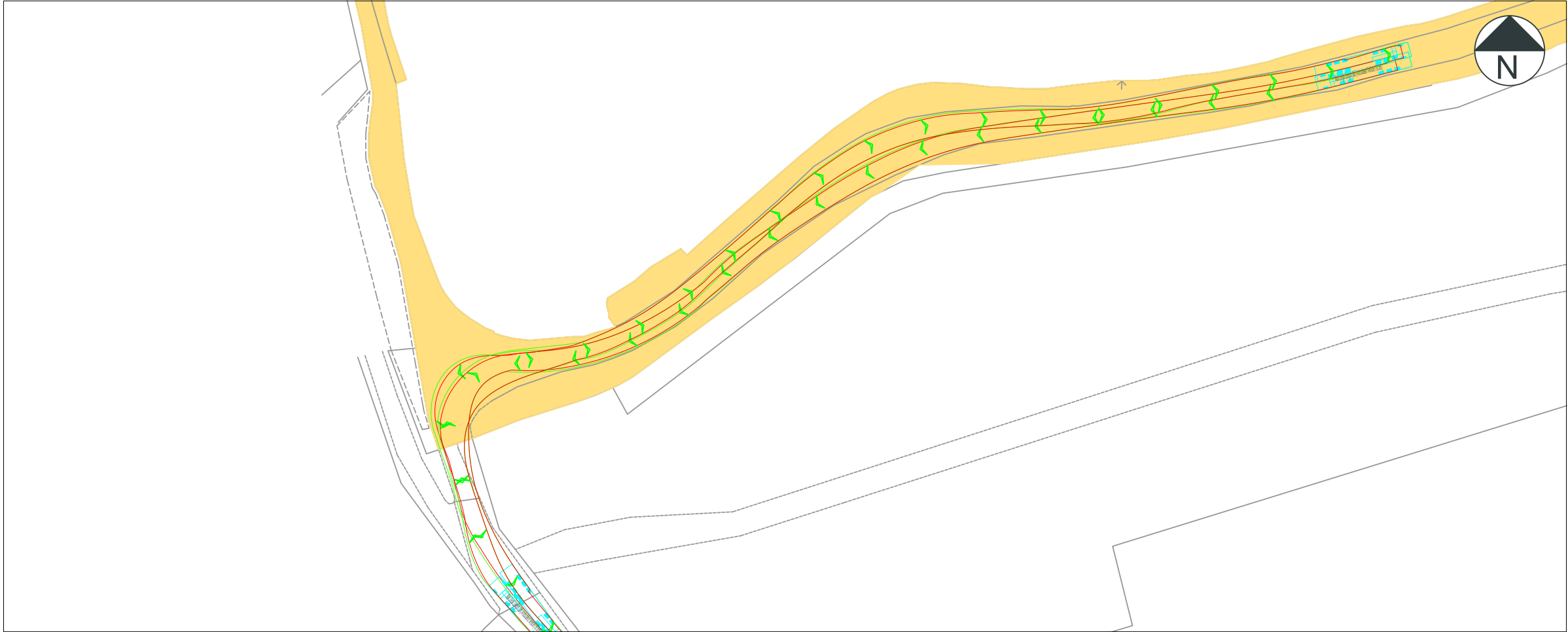
DISCLAIMER: Contains public sector information licensed under the Open Government Licence v3.0.

FIGURE no: Figure ?	REVISION: -
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Appendix C – Swept Path Analysis (16.5m Articulated Vehicle)

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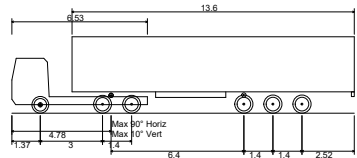
Notes:

1. Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
2. This drawing is based on the architect's layout by <architects name>, drawing number <drawing number include rev>, dated <date of drawing, date of rev if applicable>.
3. The topographical survey was received from <Surveyors Name>, drawing number <drawing number>, dated <date on drawing>.
4. Highway boundary information has been provided by <Council Name>, <date received or date on HB PFD>, and has been overlaid by Rappor onto the Topographical Survey/Ordnance Survey on a best fits basis.
5. Ordnance Survey, (c) Crown Copyright 2020. All rights reserved. Licence 100022432.
6. Drawing to be read in conjunction with all other drawings. Any discrepancies are to be reported to the engineer 5 working days in advance of undertaking any work.
7. The layout is subject to detailed design, capacity testing, ground investigations & earth modelling, road safety audit, utilities & services and confirmation of land ownership.
8. Use of the drawing does not absolve the client from their responsibilities in regards to health & safety and CDM regulations.

Key:

Adopted Highway Boundary

Vehicle Profile



Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 3.681m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m

-	-	-	-	-
Rev	Date	Details	By	Chkd

CLIENT: EDF Energy

PROJECT: Batri Afon Llan Battery
(Swansea North BESS)

TITLE: Swept Path Analysis
Articulated Vehicle (16.5)

SCALE @ A3:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:	08.05.25	MS	RH	RH

STATUS: INFORMATION

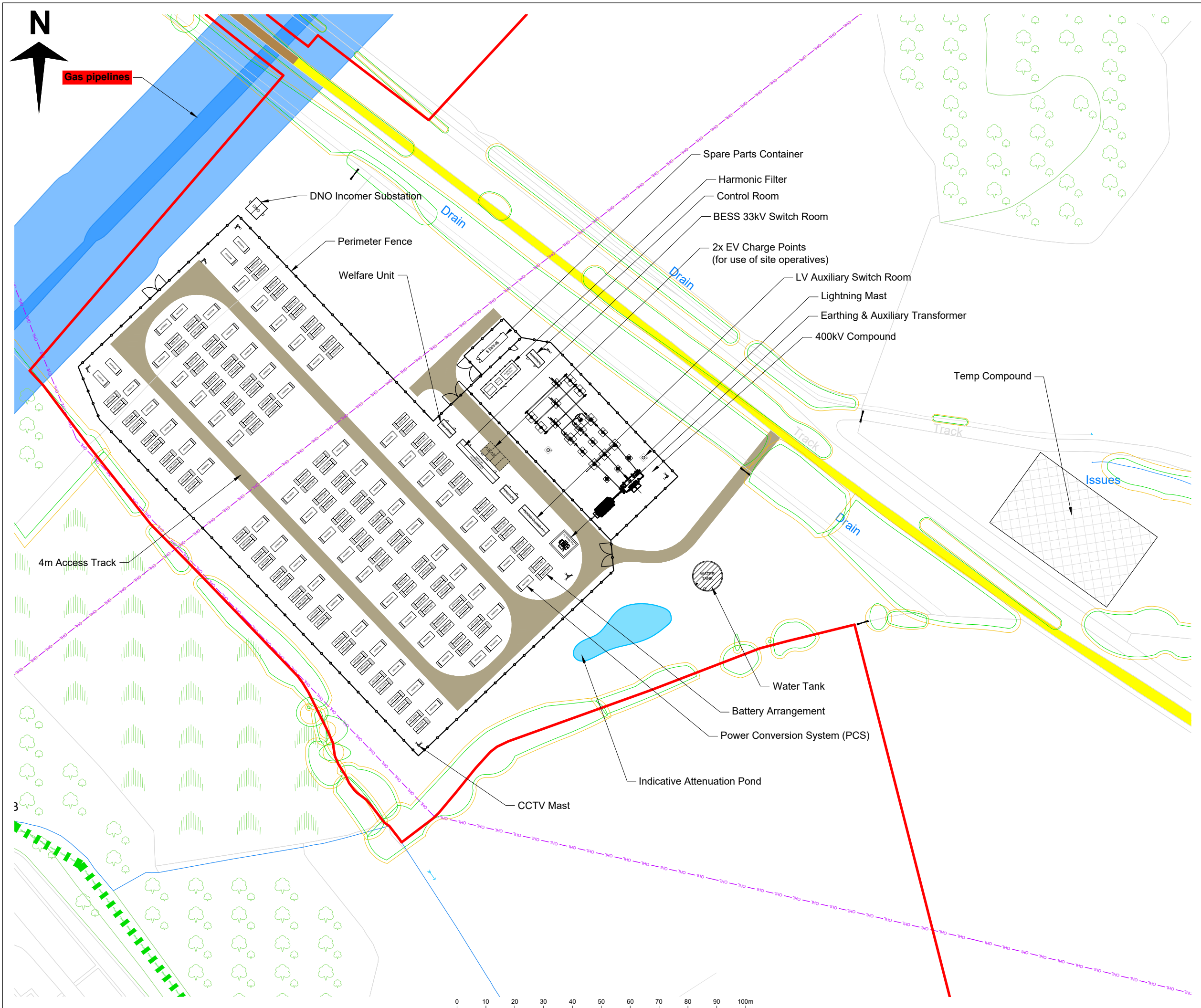
DRAWING NO: 23-XXXX-RAP-XX-XX-DR-TP-3200

REVISION: -



Appendix D – Masterplan

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NOTES
1. Drawing details and dimensions for planning purposes only.
2. Please refer to "13337D-Batri Afon Llan" for full details of the tree survey.

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LEGEND
— PLANNING APPLICATION BOUNDARY
— EASEMENT - ACCESS (EXTERNAL)
— EASEMENT - ACCESS (PERMITTED)
— PERIMETER FENCE
— OVERHEAD LINE
— GAS PIPELINE EASEMENT
— TEMPORARY COMPOUND (1500m²)
— PUBLIC RIGHT OF WAY

E	Formatting, 400kV substation changes	14.05.25	SS	TM
D	Annotations, compound shifted NW	12.05.25	SS	TM
C	Layout revised	15.04.25	SS	TM
B	Details added	15.01.25	SS	TM
A	Areas revised	10.12.24	SS	TM
-	First Issue	26.11.24	SS	TM
Rev	Description	Date	Checked	

Drawing No.

SWA-EDFR-BESS-CIV-PLN-100

Project

Swansea North BESS

Title

Proposed Site Layout

Scale	1:1250 @A3	Drawn by	Checked	Date
		SS	TM	14.05.25



Appendix E – Proposed Access Junction

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