Tyddyn Forgan Energy Storage System

Framework Construction Traffic Management Plan
784-B068934

Net Zero Twenty Six Limited
February 2025

Prepared on Behalf of Tetra Tech Environment Planning Transport Limited.
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CONTENTS

FIGURES

1 INTRODUCTION

GENERAL

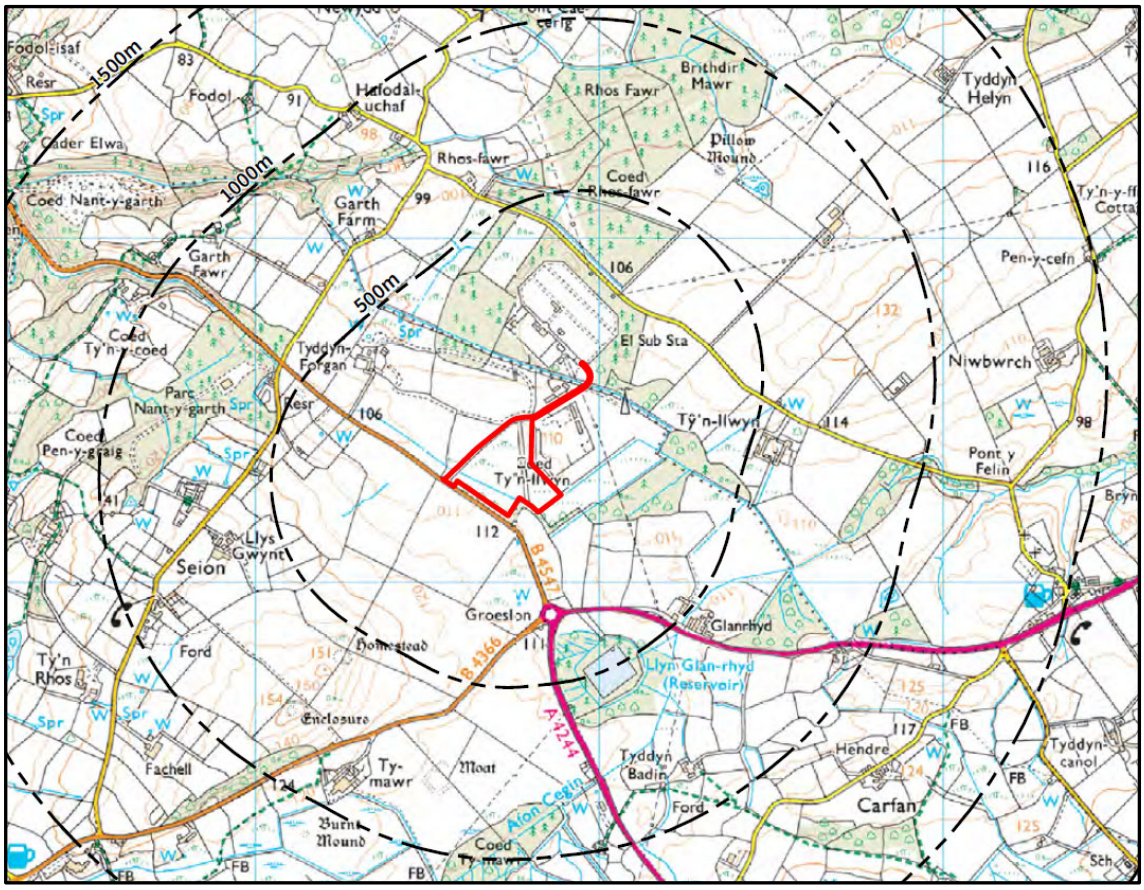
1.1 Tetra Tech has been appointed by Net Zero Twenty Six Limited (the 'applicant') to prepare a Framework Construction Traffic Management Plan (CTMP) in order to support a planning application for an Energy Storage System (ESS). The site is located to the north of the B4547 in proximity to the Pentir Substation, located approximately 2.8km to the south of Bangor in north Wales.

1.2 This document serves as a framework and will be revised as details regarding construction, contractors, and management are finalized.

SITE LOCATION

1.3 The site lies is located to the north of the B4547 which runs broadly east – west to the south of Bangor, Gwynedd. A site location plan showing the development site in relation to the surrounding area is shown in **Figure 1.1**.

Figure 1.1 Site Location



1.4 The B4547 connects with the A487 Y Felinheli Bypass and A4087 Caernafon Road at a roundabout to the west; both of these roads connect with the A55 North Wales Expressway (at different junctions) to the north. The A487 continues south through north-western Wales and the A55 North Wales Expressway connects Anglesey with the M56 and M53 near Chester to the east.

1.5 To the east, the B4547 connects with the A4244 and B4366 at a roundabout. The A4244 continues north east to connect with the A5. The A5, in turn, also connects with the A55 North Wales Expressway to the north and the M54 to the southeast.

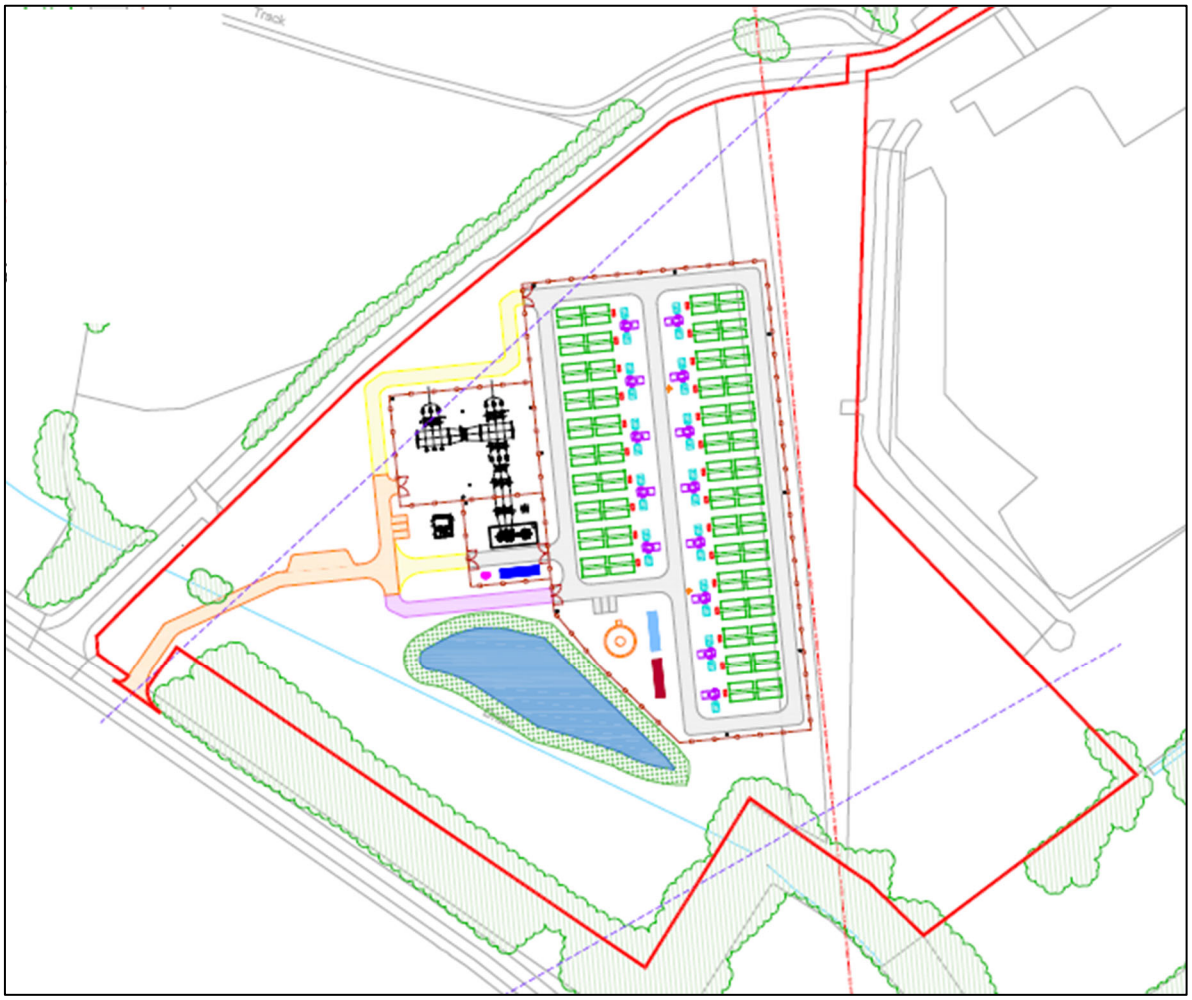
1.6 Gwynedd Council (GC) is both the Local Planning Authority (LPA) and Local Highway Authority (LHA). The North and Mid Wales Trunk Road Agent (NMWTRA) is responsible for the Strategic Road Network within the wider area, including the A487, A55 and the A5. All other local roads are managed by the LHA.

2 DEVELOPMENT PROPOSALS

DEVELOPMENT SCHEME

2.1 The development scheme comprises an ESS with storage capacity of approximately 100MW covering an area of approximately 2.57 ha. The proposed layout is provided at **Appendix A** with an extract at **Figure 2.1**.

Figure 2.1 Proposed Site Layout



ACCESS ARRANGEMENT

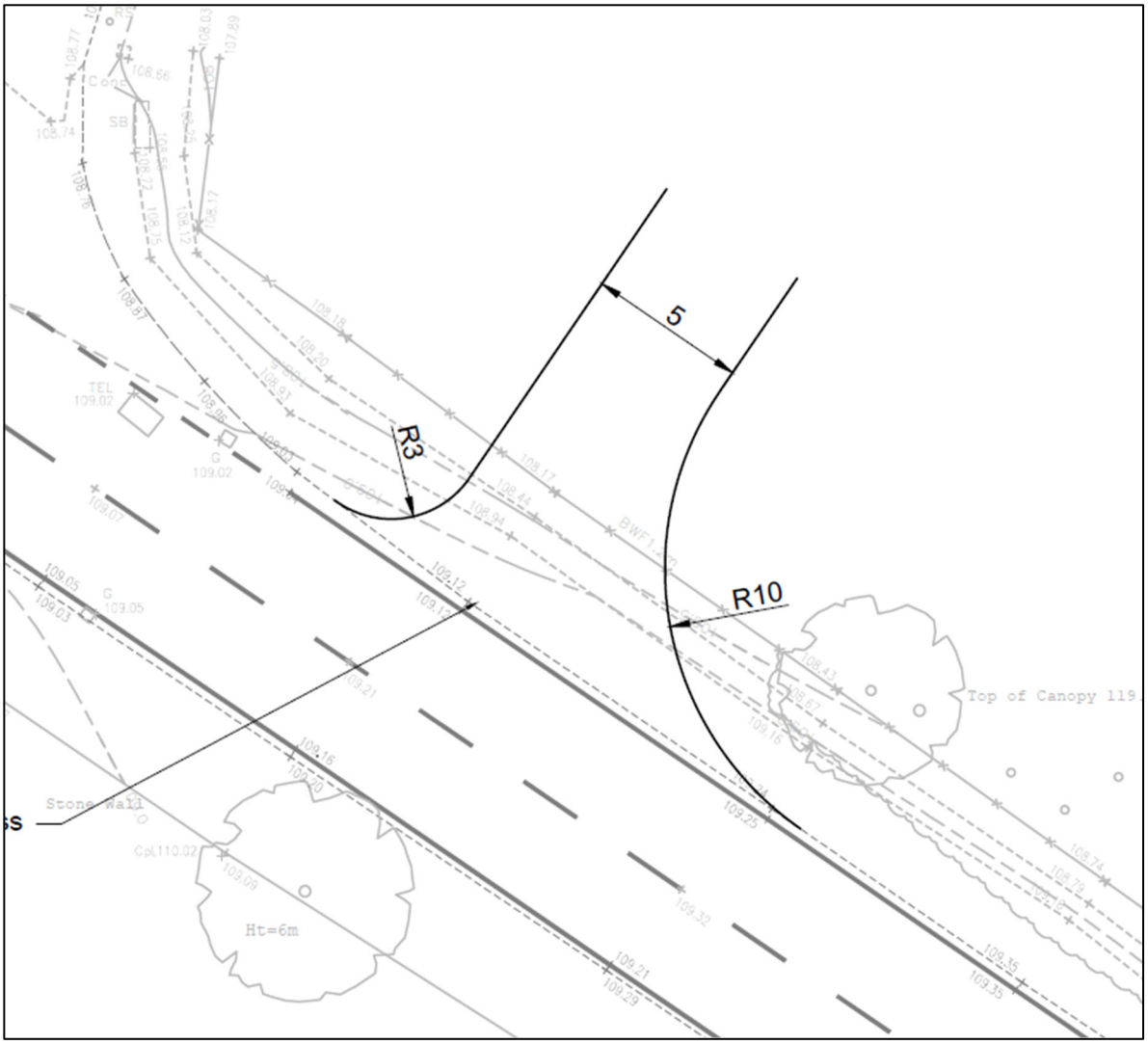
2.2 The site is located on the northern side of the B4587 and will be served by a new junction with the B4547 approximately 24 metres to the east of the existing National Grid Pentir Substation access (measured centreline to centreline).

2.3 The access scheme is designed to avoid constraining other road users. It proposes a right-in, left-out configuration, with vehicles coming from or heading to the west using the A4244/B4547 roundabout. The site management team will enforce this configuration, supported by proposed infrastructure featuring a 3m radius to the west and a 10m radius to the east. The internal carriageway (site access arm) will be 5m wide

to maintain safe and suitable vehicle turning manoeuvres. Given the secure nature of the site, a gatehouse will likely regulate vehicle movements, with arrivals and departures scheduled by the site management team. Deliveries will be prebooked, called in and managed by experienced Banksmen, with access enshrined in contracts let to subcontractors, suppliers, etc.

2.4 The proposed arrangement is shown on **Drawing Number B068934-TTE-00-00-SK-0-00003.S02,** which is reproduced at **Figure 2.2**. The drawing is provided in full at **Appendix B**.

Figure 2.2 Proposed Site Access



2.5 The access arrangement provides a visibility splays of 4.5 x 215 metres in each direction (measured to a 0.5 metre offset from the kerbline) in both directions which is commensurate with DMRB standards for a derestricted speed limit road, a maximum of 60mph.

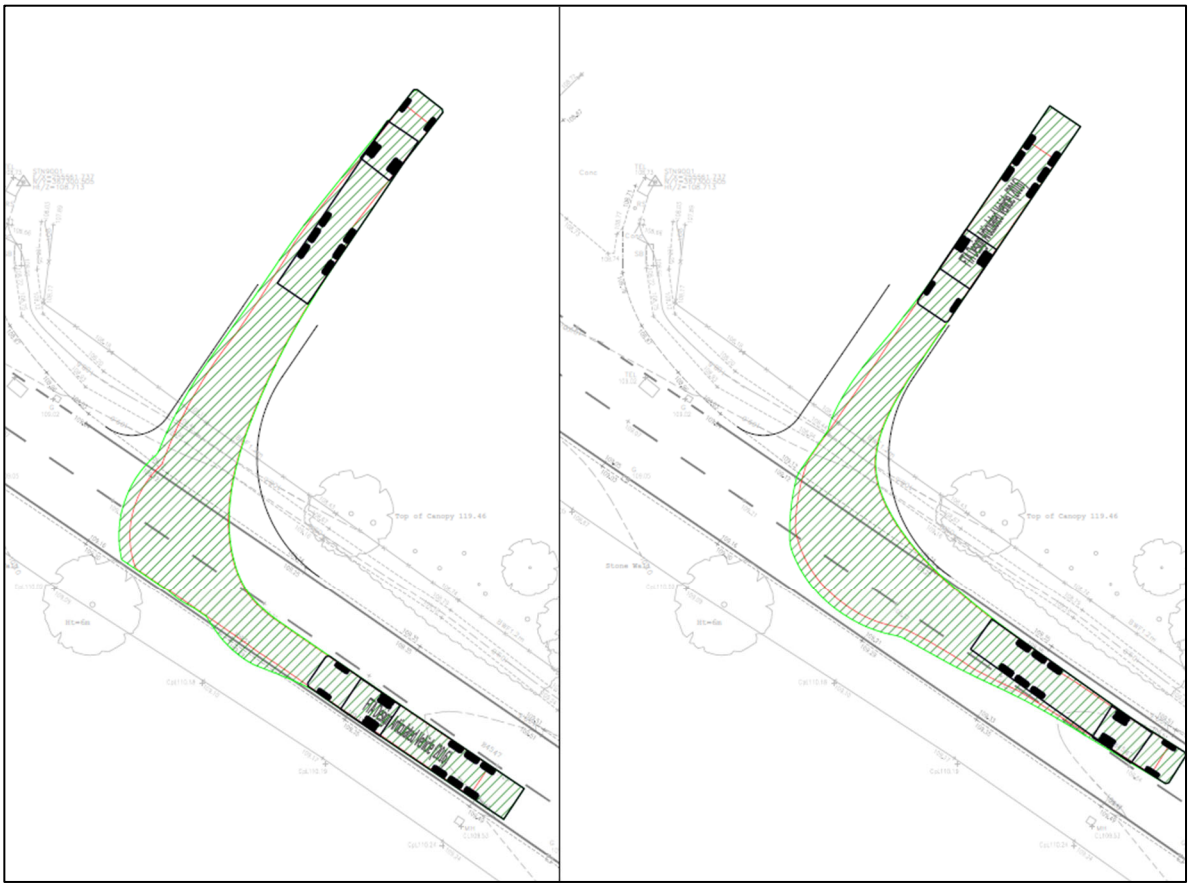
2.6 **Drawing Number B068934-TTE-00-00-SK-0-00004.S02**, included in **Appendix C**, evidences that this level of visibility can be provided.

SWEPT PATH ASSESSMENT

2.7 The suitability of the access has been assessed through swept path analyses, which consider the manoeuvrability of large delivery vehicles. The proposed access arrangement is a right-in, left-out configuration, with vehicles coming from or heading to the west using the A4244/B4547 roundabout. This arrangement will be managed by the site management team and supported by the proposed infrastructure.

2.8 The resultant assessment is presented at **Drawing Number B068934-TTE-00-00-SK-0-00005.S02**, provided at **Appendix D** and reproduced at **Figure 2.3**. The assessment vehicle is a 16.5m articulated vehicle.

Figure 2.3 Swept Path Analysis of Site Access



2.9 **Figure 2.3** advises that the proposed infrastructure is safe and suitable to accommodate the manoeuvrability of a 16.5m articulated vehicle.

ACCESS REVIEW

2.10 The access arrangement proposes a right-in, left-out configuration, with vehicles coming from or heading to the west using the A4244/B4547 roundabout. The B4547 is a two-way carriageway that facilitates traffic movements between the A487 and A4244. The A4244/B4547 roundabout has a 50m Inscribed Circle Diameter. Both the carriageway and the roundabout are suitable infrastructure to accommodate these types of vehicles.

2.11 The site management team will enforce this configuration, supported by proposed infrastructure featuring a 3m radius to the west and a 10m radius to the east. The internal carriageway (site access arm) will be 5m wide to maintain safe and suitable vehicle turning manoeuvres. Given the secure nature of the site, a gatehouse will likely regulate vehicle movements, with arrivals and departures scheduled by the site management team. Deliveries will be prebooked, called in and managed by experienced Banksmen, with access enshrined in contracts let to subcontractors, suppliers, etc.

2.12 The junction can be delivered within land under the control of the applicant and using land classified as Maintainable at the Public Expense, also known as adopted highway.

2.13 Battery Energy Storage System (ESS) sites generate low traffic. The primary traffic is associated with the initial construction phase, which involves the delivery of equipment and materials. Once operational, ESS sites typically require minimal maintenance, resulting in infrequent visits by maintenance personnel.

2.14 It is forecasted that during construction, the scheme may generate 2 HGV movements per day. During the operational phase, vehicle movements will be limited to 1 to 2 visits per month by maintenance personnel in light vehicles such as cars, 4x4s, and vans.

2.15 The access scheme is safe, suitable, and proportionate to the development scheme. It will not have a material impact on other highway users or adjacent junctions.

3 PRINCIPAL CONTRACTOR'S ROLES AND RESPONSIBILITIES

INTRODUCTION

3.1 This section of the report outlines the roles and responsibilities attributed to key parties involved in the construction process.

CONSTRUCTION TRAFFIC MANAGEMENT TEAM

3.2 The CTMP is a live document, and will be updated as development progresses. This includes the contact details of the Principal Contactor. The details of the Principal Contractor will be provided below prior to the start of construction, and will be updated if it should chance during construction.

3.3 The Principal Contractor will ensure that all contracts, including sub-contracts, in connection with the development acknowledge the CTMP and adherence to the requirements set out in the CTMP, including any revisions to the document subsequent to the making of the contract.

Key Contact

3.4 The Principal Contractor is not yet known, once know their details will be entered below:

Company	Address	Contact	Telephone	Email
TBC	TBC	TBC	TBC	TBC

Site Manager

3.5 It is expected that the Site Manager, an employee of the Principal Contractor, will be responsible for the day-to-day management of Health and Safety, Environmental and Quality performance during the construction of the proposed development. It will be a requirement that they conform to ISO14001 and will also be responsible for implementing and maintaining the CTMP and monitoring the performance of sub-contractors. This will include participating in communication with the LPA and other third parties as required.

3.6 The Site Manager will be responsible for reviewing all task-specific method statements and that an appropriate programme of training is developed and effectively communicated. In addition, the Site Manager will be responsible for ensuring that all staff on site receive the necessary health and safety and environmental induction prior to starting work on-site.

3.7 The Site Manager will be responsible for overseeing any environmental monitoring programmes, carrying out site environmental inspections and audits as necessary, and will co-ordinate the environmental monitoring programme. They will also be responsible for ensuring that all relevant legal consents, licences and exemptions are in place in advance of relevant works commencing, and that all relevant licence and legal requirements are adhered to.

3.8 All queries and complaints from the public and the local community will be directed to the Site Manager. The Site Manager will be responsible for preparing a response and maintaining a register of complaints, together with following-up on detailing the remedial actions taken.

Subcontractors

3.9 Staff and contractors present on site will be contractually responsible for adhering to the requirements of the CTMP. This includes working to agreed methods, plans and procedures to minimise the environmental and traffic impacts of the construction process. A senior member of the site staff will be made the main point of contact regarding the CTMP matters and report all incidents immediately to the Site Manager. This role includes inducting site personnel on the requirements of the CTMP and making staff aware of these prior to commencing any work on site.

Suppliers

3.10 For the purposes of this document, suppliers are split into two categories; Materials suppliers and Services suppliers. Materials suppliers delivering building supplies to the site will be made aware of the CTMP and will be obliged, contractually, to adhere to it. Of particular importance are the construction vehicle routes to and from the site. Services suppliers providing temporary site personnel will be required to induct staff on the requirements of the CTMP prior to them starting work on site.

PUBLIC RELATIONS

Communication Strategy

3.11 Pertinent information for the public including contact details for the site manager, including an emergency / out of hours telephone number, will be displayed prominently adjacent to gated access to the site during construction.

3.12 No Public Rights of Way have been identified that cross or abut the site and therefore there, it is concluded that there are no additional locations where pedestrians may need to be notified of the construction.

Complaints Procedure

3.13 The complaints procedure is as follows:

- Contact details and site information will be provided adjacent to the gated site entrance so that the general public can report any concerns to the Site Manager via email or by phone. An out-of-hours number will also be provided for emergencies.
- If a site-based comment/complaint is received, then it is the responsibility of the Site Manager to provide an initial response. In case of emergencies, the response by the Site Manager to the emergency will be immediate.
- In other cases, the response to the complainant will be as soon as practical via the appointed public relations consultant.
- If the complaint is not resolved to the satisfaction of the complainant, then it will be escalated to an appropriate individual within Net Zero Twenty Six Limited's management team.

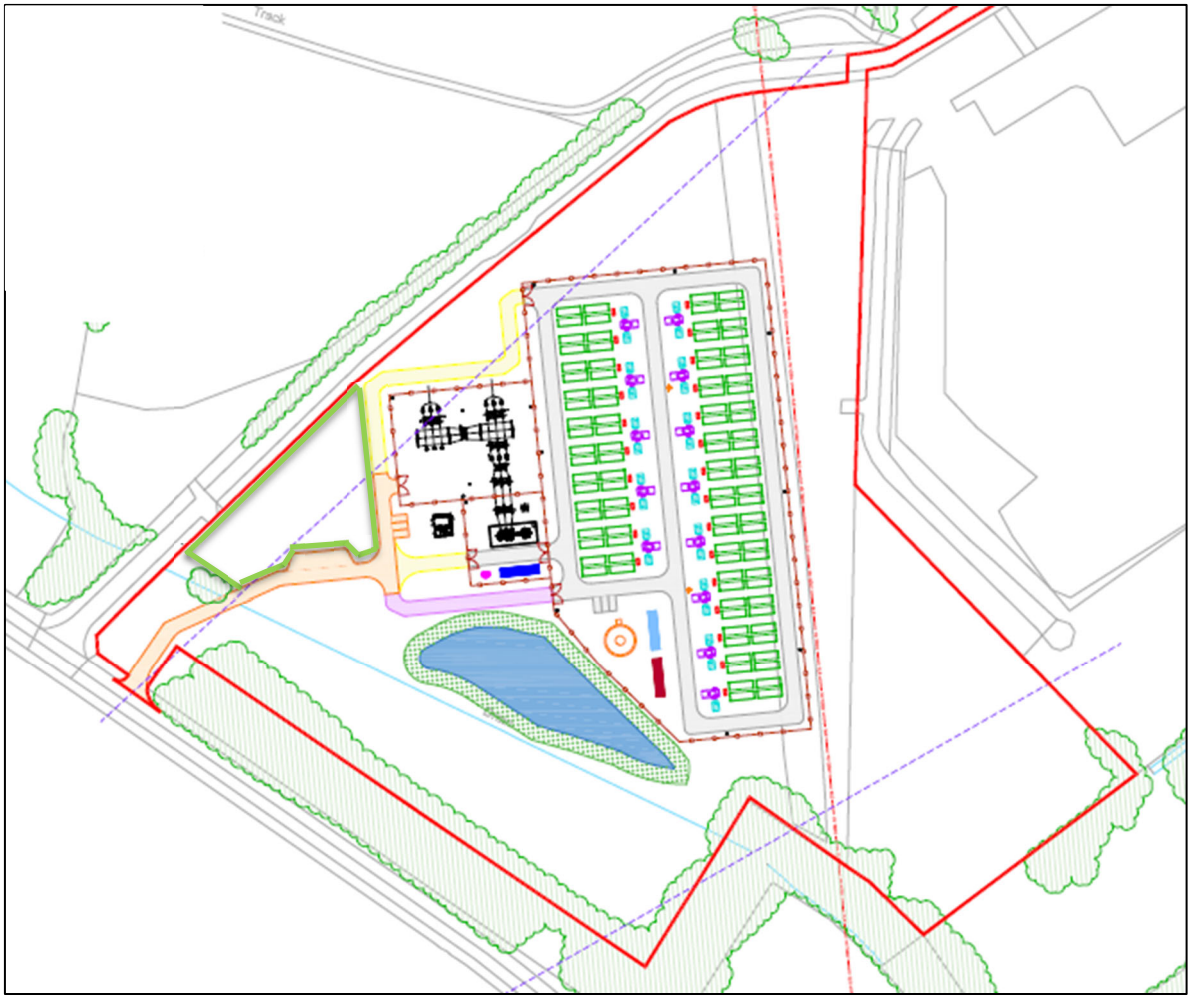
4 CONSTRUCTION METHOD

4.1 This section of the CTMP sets out the overall site setup, the construction programme, and key principles of the construction methodology regarding transport, highways, and logistics.

COMPOUNDS AND SITE SETUP

4.2 The compound and contractor parking are yet to be confirmed, at this time it expected to be within the area marked green at **Figure 4.1**. This will however be confirmed prior to the start of construction. Access to the construction site will be through the proposed access with the B4587. No other access to the construction site will be possible.

Figure 4.1 Location of Site Compound



4.3 Materials will be stored in a dedicated laydown area within the compound.

CONSTRUCTION PROGRAMME

Access Arrangement

4.4 The access arrangement proposes a right-in, left-out configuration, with vehicles coming from or heading to the west using the A4244/B4547 roundabout. The site management team will enforce this configuration.

Construction Vehicle Movements

4.5 It is forecasted that during construction, the scheme will generate 2 HGV movements per day, likely comprising pieces of high-tech equipment being delivered to site and installed by a small team of specialists.

Fencing And Hoardings

4.6 Heras style fencing will be erected and will be maintained, modified, and removed as required to maintain a safe, effective barrier to deter unauthorised access to the site. The construction vehicle access point through the fencing will be at the site access, obtained from the B4547.

Hours of Operation

4.7 Working hours will be agreed with the LPA, and are expected to be:

- 07:00 to 19:00 hours Monday to Friday;
- 08:00 to 13:00 hours Saturday; and,
- No work on Sunday or Bank Holidays

4.8 All deliveries will be scheduled to arrive and depart during the agreed working hours.

4.9 Should any work be required outside these hours, it will be subject to the prior written agreement with the local planning authority. Additionally, the contractor (once appointed) will give notice to the neighbours ahead of these activities occurring or on the day for extenuating circumstances.

Delivery Scheduling and Requirements

4.10 Deliveries will be allocated an arrival time during working hours and suitably separated from other deliveries. Swept path analysis of the construction access (**Appendix D**) confirms that large delivery vehicles will be able to enter and exit the site in a forward gear and movements by large vehicle will be assisted by a banksperson.

4.11 Deliveries will be scheduled within the agreed working hours. No out of hours deliveries will be permitted without the prior written agreement of the LPA.

4.12 For all deliveries to the site, the following information will be requested to ensure there are no unnecessary vehicle trips undertaken and all vehicle trips are managed appropriately:

- Postcode of journey start point / single or multi drop;
- Waste removal requests – size of skip / type of waste / carrier / tip location;
- All delivery requests must be submitted on to the system a week in advance;
- All delivery requests will be reviewed, and time slots will be allocated. All parties will be advised, and the booking system will be updated to show the schedule for the forthcoming week; and
- The schedule will be reviewed daily to allow for any unforeseen problems. The relevant parties will be advised of any changes.

Construction Vehicle Marshalling and Safe Unloading / Loading

4.13 Trained and qualified traffic marshals / bankspeople will marshal vehicles in and out of the designated loading area on-site. All traffic marshals will be trained in safe traffic management and control and be identified with specific colour helmets and high-visibility clothing. Any localised manoeuvring which vehicles may require for loading/unloading will also be carried out by trained and qualified traffic marshals.

4.14 Traffic marshals/bankspersons required for specific unloading operations will be provided by the contractor receiving the delivery/collection. They will be clearly identifiable via their high-visibility jackets displaying their designation as banksperson / traffic marshal. Each will be equipped with radios so that communication during loading and unloading of vehicles can be clearly controlled and coordinated. When unloading is carried out by crane or hoist, this will be undertaken by a trained/ qualified slingers/ signaller.

Diversions or Unusual Material Delivery Times

4.15 If it becomes necessary to implement a diversion route or receive deliveries outside of normal scheduling, the contractor will be required to gain approval from the local highways authority.

Transportation of Construction Waste Materials

4.16 Waste transported from the site will follow the Duty of Care requirements for ensuring waste is transported by registered carriers, taken to appropriately licensed facilities and for completing and keeping appropriate waste transfer documentation. The Site Manager will be required to maintain documented evidence that these requirements are being met, including a register of carriers, disposal sites (including transfer stations) and relevant licensing details for each waste stream.

5 TEMPORARY HIGHWAY WORKS

5.1 Temporary warning signage will be provided within the vicinity of the site access during construction. It is expected that the signage will contain wording such as “Construction Site Access Ahead” and “Large Vehicles Turning” and be on red signs. The exact form and wording on the signs will be confirmed prior to construction.

5.2 Whilst it is not considered necessary, if it is desirable to the Local Highway Authority, the applicant is willing to fund a Temporary Traffic Regulation Order (TTRO) to temporarily reduce the speed limit of the B4547 in the vicinity of the site access to 40mph during construction to potentially improve safety for construction staff, delivery drivers and general road users.

6 CLEANLINESS OF THE PUBLIC HIGHWAY

MEASURES

6.1 The construction works will involve the regular use of the local highways network by construction related vehicles. Measures will be put in place to minimise the deposition of mud and debris on the local road network generated by vehicular movements. These measures are outlined below:

- Wheel wash facilities within the site as close as practicable to the B4547 will be provided to ensure that vehicles are appropriately cleaned prior to accessing public highways;
- Wheel wash areas will be contained and appropriately disposed of to prevent suspended solids or contaminated waters from entering any nearby water courses, drains or public highway. To dispose of this water, it will be necessary to obtain the consent of the EA to discharge into the foul sewers, or if the water contains contaminants such as oil or fuel it will need to be disposed of as controlled waste;
- All waste lorries will be sheeted over to prevent debris from escaping onto the public highway;
- All vehicles leaving the site will be subject to a visual inspection before accessing the public highways to ensure that the level of dust/mud/debris on the vehicles has been minimised insofar as is practical; and,
- All road surfaces affected shall be swept clean upon completion of the works and periodically, as required, during construction.

7 CONSTRUCTION VEHICLE ROUTING AND ACCESS

ACCESS ROUTES

7.1 To minimise impact on local roads, the suggested route to the site for all traffic depends on the origin of the delivery vehicle:

- For vehicles from travelling from the east – Approach the site using the A55 North Wales Expressway, turn left at junction 11 with the A5, proceed for around 120 metres to the A5 roundabout with the A4244. Proceed along the A4244 to the roundabout with the B4547, turn right along the B4547 and continue to the site access;
- For vehicles from travelling from the east – Approach the site using the A5, turn left at the roundabout with the A4244. Proceed along the A4244 to the roundabout with the B4547, turn right along the B4547 and continue to the site access;
- For vehicles travelling from the south either:
    - Approach using the A487, join the A55 North Wales Expressway eastbound at junction 9. Continue to junction 11 then follow the same route as approaching from the east or;
    - Approach using the A487 and turn left onto the B4547. Travel for approximately 640 metres and turn left to remain on the B4547. Continue past the site access to the roundabout with the A4244, undertake a U-turn at the roundabout and continue back along the B4547 to the site access.
- Vehicles leaving the site will follow the opposite of these routes.

7.2 Given the context of the site within Wales, it is unlikely that vehicles will approach from the north or west, but should that occur, then they will be instructed to follow the A55 as far as practicable.

7.3 The routes discussed in this section are illustrated at **Appendix E**.

CONSTRUCTION VEHICLE SIZES

7.4 The following list provides details of the type of vehicles that will need to gain access to the site during the construction process. The vehicles proposed have been selected to ensure that they are of a size that can be accommodated on the highway network given the constraints of the site access route, whilst minimising the potential number of traffic movements to and from the site.

- Skip Lorry 4 Wheel, 17 Tonne G.V.W
- 16.5m articulated low loader, 40 Tonne G.V.W
- Concrete Delivery Vehicle 8 Wheel, 30 Tonne G.V.W
- Rebar delivery Articulated flatbed, 40 Tonne G.V.W
- Building Deliveries 4 Wheel, 17 Tonne G.V.W Panel body
- Ballast and Loose Materials 8 Wheel 30 Tonne, G.V.W, Tipper
- General Building Materials 4 Wheel 17 Tonne, G.V.W, HIAB Flat Bed
- Bulk delivery Articulated flatbed with HIAB 40 Tonne, G.V.W

HEAVY GOODS VEHICLE MOVEMENTS

7.5 It is forecasted that during construction, the scheme will generate 2 HGV movements per day.

VEHICLE MANAGEMENT

7.6 Construction traffic speed will be restricted to 10mph on site. Reminder signs will be posted along access and haul roads.

7.7 It is not anticipated that any road closures will be required as all the major construction works are carried out within the site boundary. No motor vehicles involved in construction operations, including deliveries, collections, and services, or site personnel's or visitors' motor vehicles will be permitted to park on the existing roads surrounding the site. No delivery, collection, or service vehicles enroute to the site will be permitted to lay up along the permitted routes, including laybys, at any time.

7.8 Delivery vehicles will be provided with an arrival time and, should a vehicle delivery vehicle be expected to arrive within the following 10 minutes, then delivery vehicles will not be held within the site to ensure that the site access is clear for arriving delivery vehicles.

SITE ACCESS CONTROL

7.9 Any interaction with the public and the public highway is minimised using a single vehicle access point off the B4547 and the use of trained bankspersons, as appropriate. The use of bankspersons will allow for:

- Vehicle manoeuvres into and out of the site to be monitored and assisted.
- Vehicles, wherever possible, to not stop at inappropriate locations on the highway causing disruption to traffic and local residents.
- All loading / unloading to be undertaken within the site.

WORKFORCE TRAFFIC

7.10 Staff movements will generally be outside of the AM peak period, with a high proportion of staff arriving at site between 7am and 8am, prior to the start of the school day. Typically, a high proportion of staff will leave site prior to the PM peak period, but after the end of the school day. Construction contractors will be responsible for encouraging workers to share vehicles. Parking for contractors will be provided in the site compound area.

8 CONTROL OF DUST

DETAILS

8.1 Dust generation associated with construction works on this site can be anticipated from the following activities:

- Construction operations: Movement of vehicles and mobile plant on bare ground, including excavators, dumpers, forklifts, and HGVs entering and leaving the site.
- Construction vehicle movement: Vehicles moving in and around the site, re-suspending loose material onto the road and passing vehicles.

8.2 While no formal dust assessment has been carried out for this site, the dust-generating potential of construction activities is generally considered to be high risk and it is therefore proposed to implement risk mitigation measures that are recommended for 'high risk' sites.

MITIGATION MEASURES

8.3 Mitigation measures to be implemented to control dust include:

- Site personnel shall be trained in construction vehicle dust mitigation and a manager shall be present for managing dust on site;
- Use of low emission plant fitted with catalysts, diesel particulate filters or similar devices;
- Construction vehicles to be located away from the closest receptor or house in closed environments wherever possible;
- Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during construction delivery;
- Provision of jet-washing facilities at the site exit where construction vehicles leave site onto public roads;
- Provision of an area of hard surfacing where tracked construction vehicles can be cleaned/checked just before leaving site;
- Impose and signpost maximum speed limits of 10 mph on surfaced haul routes and work areas within the site;
- Covering of all loads entering or leaving site; and,
- Ensuring that road and construction vehicles comply with or exceed the requirements for the Low Emission vehicles - currently Euro VI.

9 CLEANLINESS OF THE PUBLIC HIGHWAY

MEASURES

9.1 The construction works will involve the regular use of the local highways network by construction related vehicles. Measures will be put in place to minimise the deposition of mud and debris on the local road network generated by vehicular movements. These measures are outlined below:

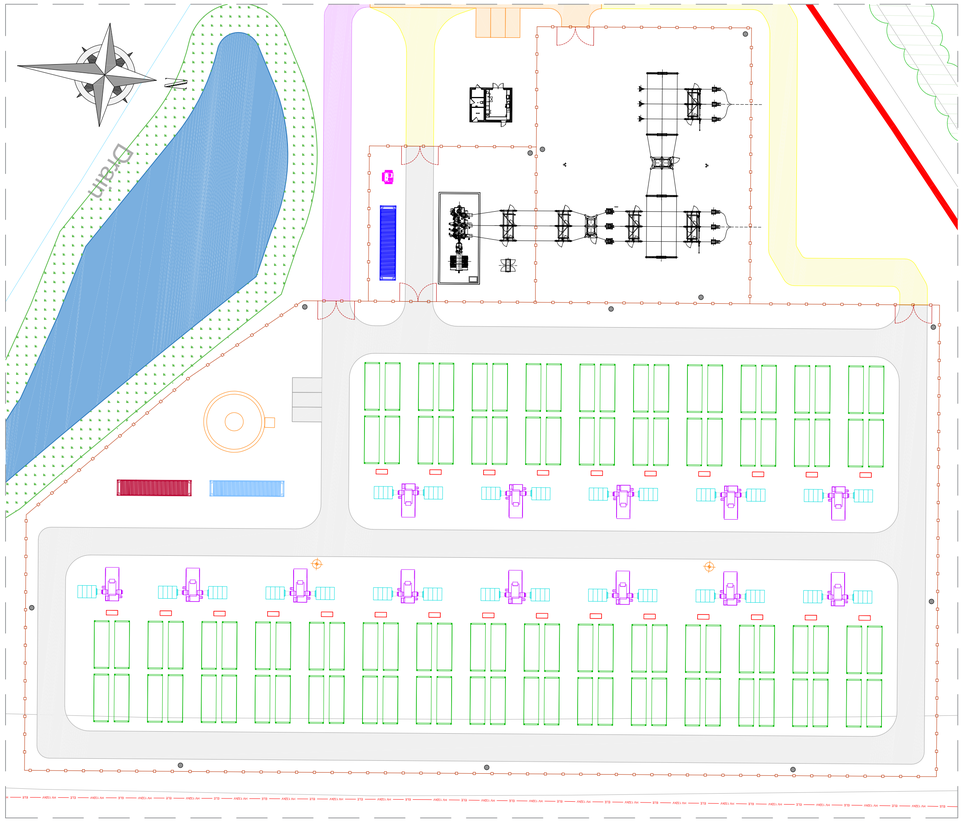
- Wheel wash facilities will be provided to ensure that vehicles are appropriately cleaned prior to accessing public highways;
- Wheel wash areas will be contained and appropriately disposed of to prevent suspended solids or contaminated waters from entering any nearby water courses or drains. To dispose of this water, it will be necessary to obtain the consent of the EA to discharge into the foul sewers, or if the water contains contaminants such as oil or fuel it will need to be disposed of as controlled waste;
- All waste lorries will be sheeted over to prevent debris from escaping onto the public highway;
- All vehicles leaving the site will be subject to a visual inspection before accessing the public highways to ensure that the level of dust/mud/debris on the vehicles has been minimised insofar as is practical; and,
- All road surfaces affected shall be swept clean upon completion of the works.

10 SUMMARY

10.1 This CTMP details the roles and responsibilities of the Construction Management Team, the Site Manager and site workers and how these controls are to be implemented. The CTMP will require regular monitoring throughout the construction period to ensure potential risks are adequately managed throughout the construction works.

APPENDIX A – PROPOSED SITE LAYOUT

A1

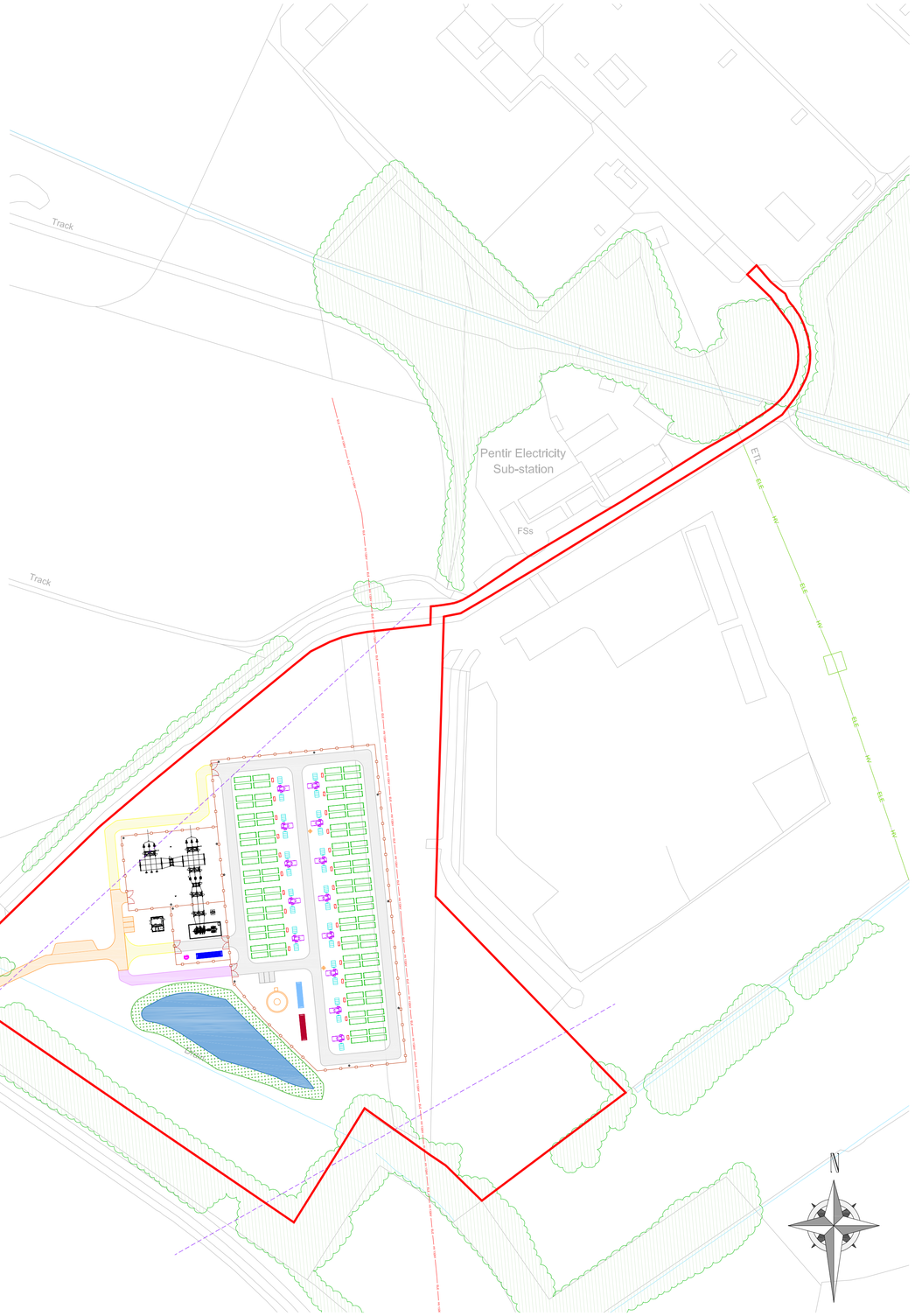


2 ESS SITE

Scale: 1:500@A1

0 5 10 15 20 25 30 35 40 45 50m

SCALE 1:500



1 TYDDYN FORGAN ESS - PROPOSED SITE LAYOUT PLAN

Scale: 1:1250@A1

0 25 50 75 100 125m

SCALE 1:1250

Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	11.01.24	First Issue	HL	RW
02	08.01.25	Applicant Amended	JC	NW
03	16.01.25	Legend/Title Amended	HL	JH
04	14.02.25	Layout Change	RR	JH
05	18.02.25	RLB Adjusted	RR	JH
06	24.02.25	SUDS Pond Added	CS	JH

LEGEND:

- WATER COURSE
- PLANNING APPLICATION BOUNDARY
- MAINTENANCE ACCESS
- SITE ACCESS
- DNO ACCESS
- EMERGENCY ACCESS
- SECURITY FENCELINE
- ELE — HV — ELE — HV — EXISTING O/H HV CABLE — HV — ELE — HV — ELE
- ELE — HV 132kV — ELE — EXISTING U/G 132 kV CABLE — ELE — HV 132kV — ELE
- ROMAN ROAD

SITE INFRASTRUCTURE:

- SECURITY GATE
- 132kV SUBSTATION
- CCTV CAMERA
- AUX TRANSFORMER
- 240,000l WATER TANK
- DNO CONTROL ROOM
- WATER HYDRANT
- TWIN SKID (TX)
- ESS UNIT
- SCS INVERTER
- ESS INTERFACE CABINET
- 40FT STORAGE CONTAINER
- 40 FT CUSTOMER SWITCHGEAR
- 40FT WELFARE OFFICE
- SUDS POND

VEGETATION:

- EXISTING VEGETATION

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Status:

PLANNING

Drawing Title:

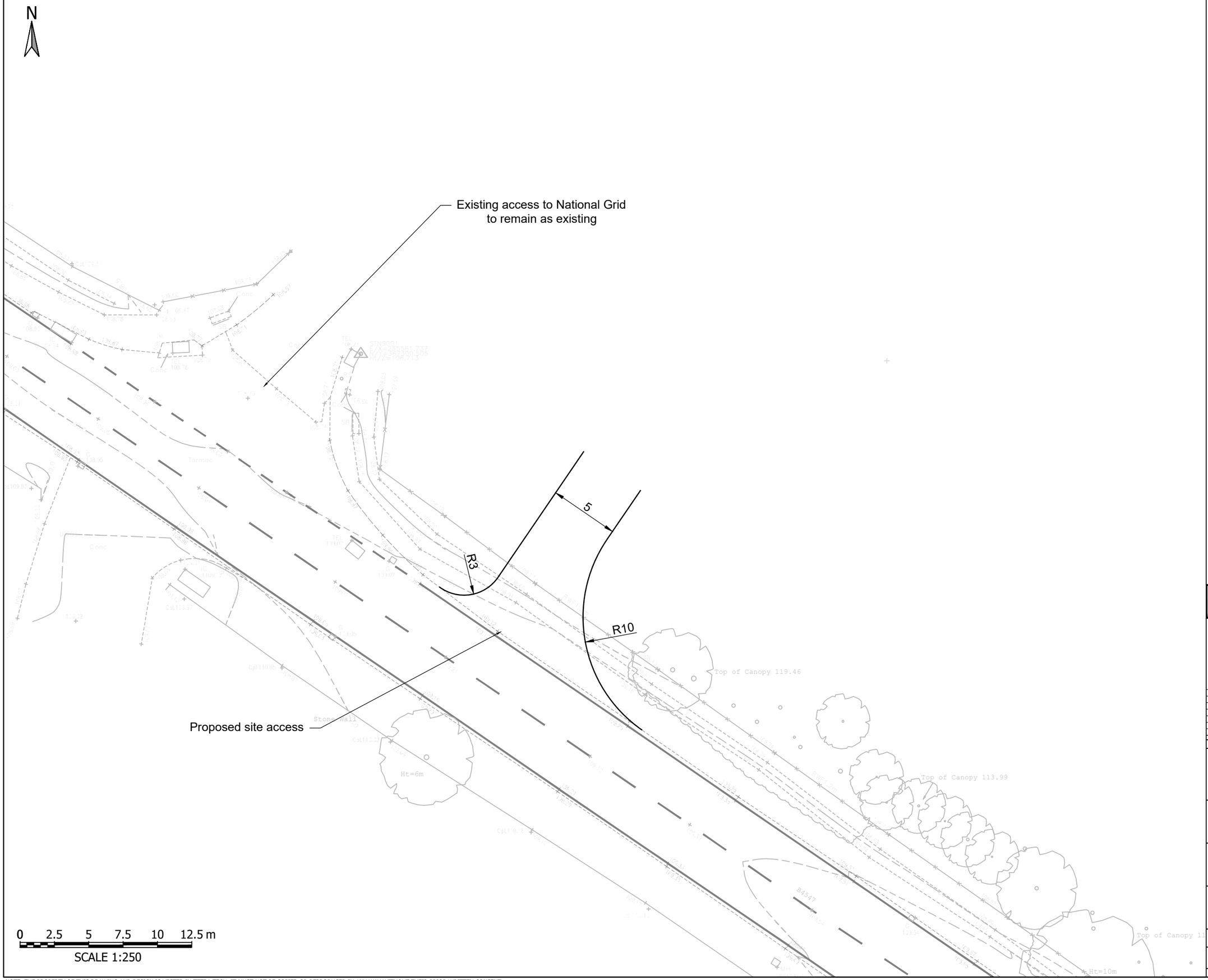
Tyddyn Forgan ESS
Proposed Site Layout Plan

Drawn:	Checked:	First Issued:
HL	RW	11.01.2024

Project Code:	Drawing Number:
FST016	**PL-01**

Sheet Size:	Scale:	Revision:
A1	**A.N**	**06**

APPENDIX B – PROPOSED SITE ACCESS



Notes:

General

1. Do not scale from drawing.
2. All dimensions are in metres, unless stated otherwise.
3. This drawing is to be read & printed in colour.
4. This drawing is for illustrative purposes only.

Disclaimer

1. The information contained in this drawing is based on a combination of OS and data provided by others and Tetra Tech shall not be liable for any inaccuracies or deficiencies.

PRELIMINARY ISSUE

Rev	Description	Date	Drn	Chk	App
S02	RED LINE BOUNDARY REMOVED	21.02.25	OS	BL	NW
S01	FIRST ISSUE	14.02.25	OS	BL	NW

Document Control

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Client
FIRSTWAY SOLAR LIMITED

Project Name
TYDDYN FORGAN ESS

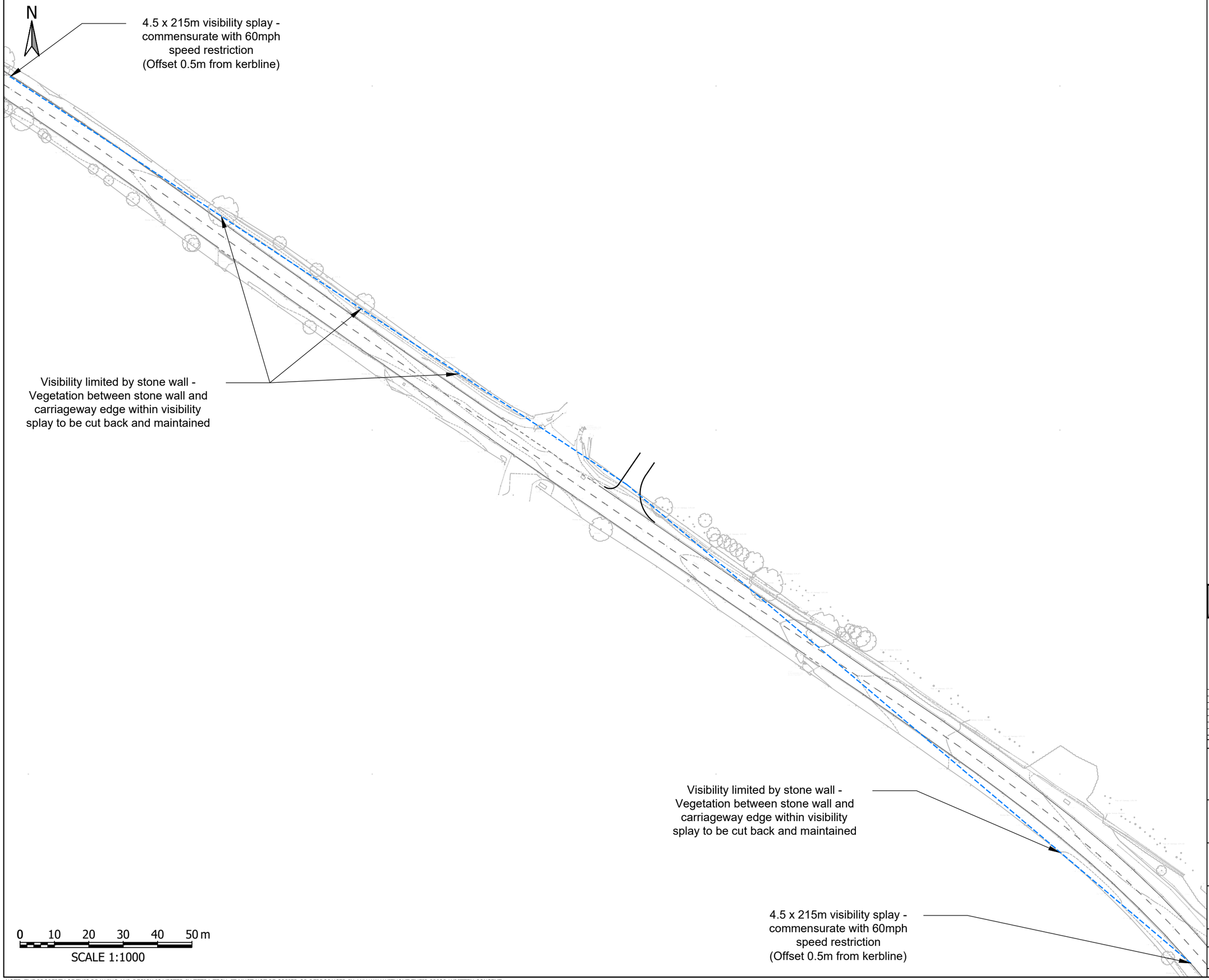
Sheet Title
INITIAL ACCESS PROPOSALS

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A3	Suitability
784-B068934	OS	Feb 25	BSL	Feb 25	NW	Feb 25	1:250	S0

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B068934	TTE	00	00	SK	O	00003	S02

TTE_MT_v1

APPENDIX C – PROPOSED SITE ACCESS – VISIBILITY SPLAYS



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TETRA TECH

Client
FIRSTWAY SOLAR LIMITED

Project Name
TYDDYN FORGAN ESS

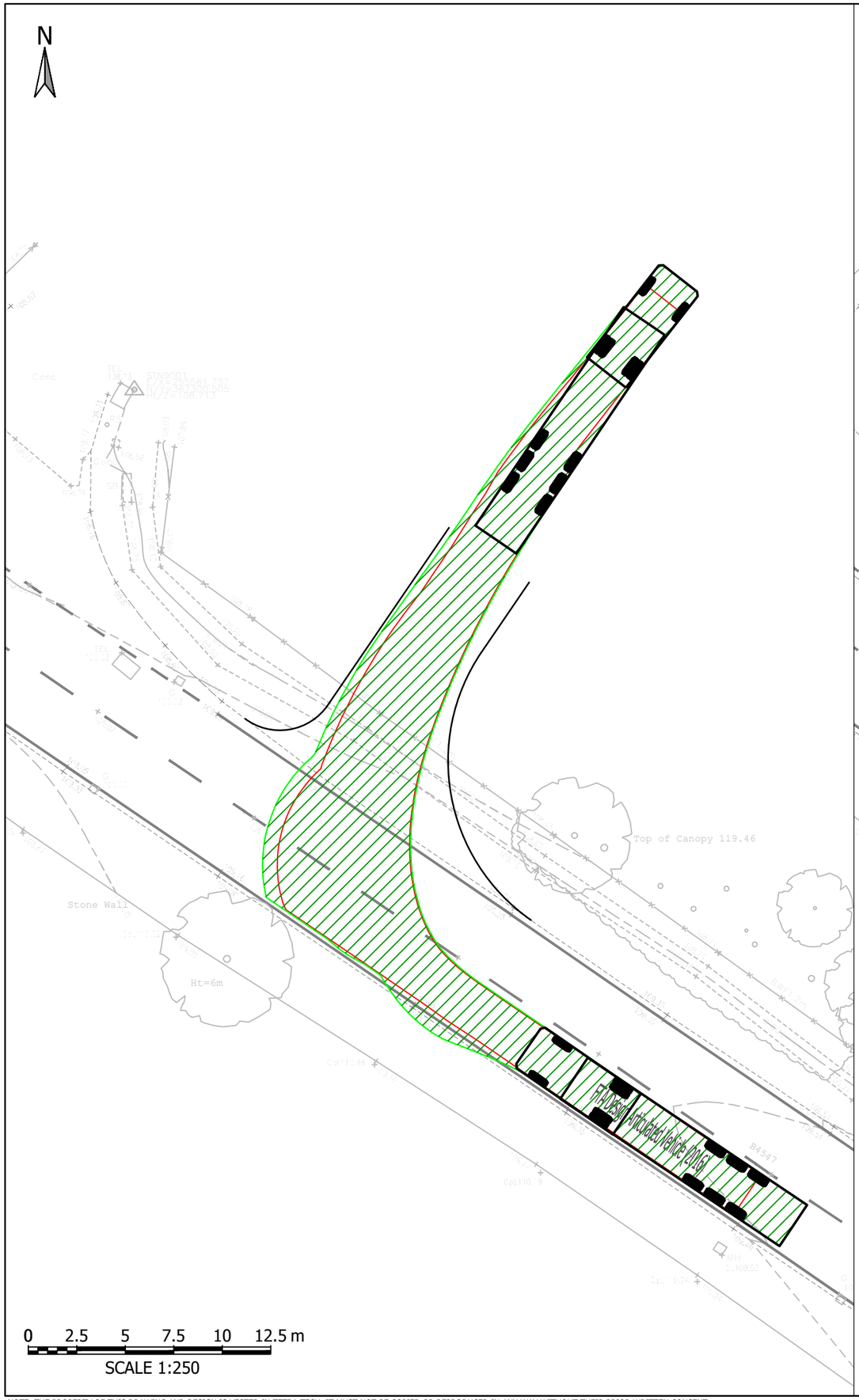
Sheet Title
INITIAL ACCESS PROPOSALS - VISIBILITY SPLAYS

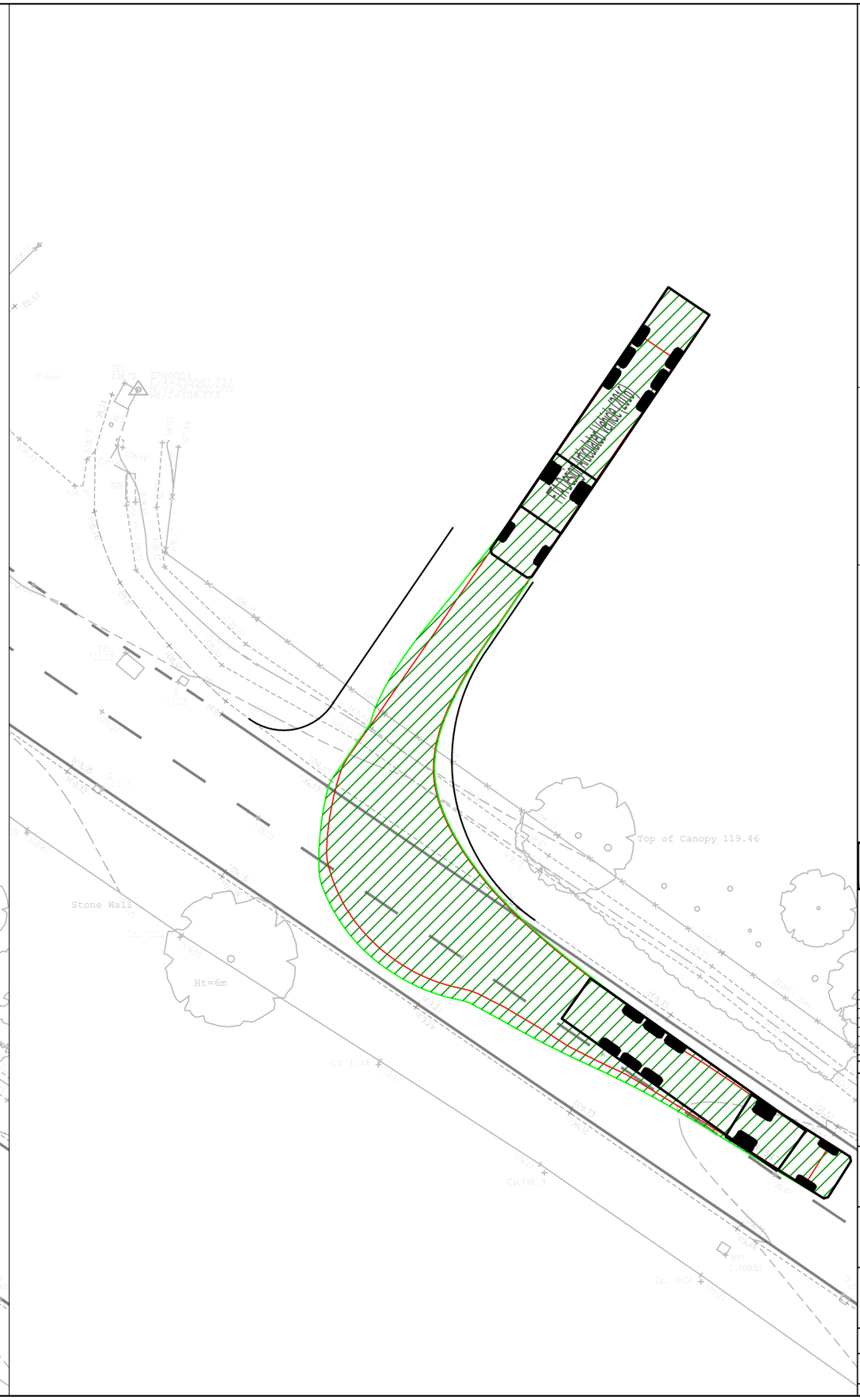
TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A3	Suitability
784-B068934	OS	Feb 25	BSL	Feb 25	NW	Feb 25	1:1000	S0

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B068934	TTE	00	00	SK	O	00004	S02

TTE_MT_v1

APPENDIX D – PROPOSED SITE ACCESS – SWEPT PATH ANALYSIS





Notes:

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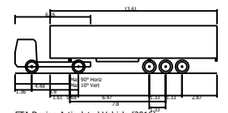

FTA Design Articulated Vehicle (2016)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	6.600m

PRELIMINARY ISSUE

Rev	Description	Date	Drn	Chk	App
S02	RED LINE BOUNDARY REMOVED	21.02.25	OS	BL	NW
S01	FIRST ISSUE	17.02.25	OS	BL	NW

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Client
FIRSTWAY SOLAR LIMITED

Project Name
TYDDYN FORGAN ESS

Sheet Title
SWEPT PATH ANALYSIS

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A3	Suitability
784-B068934	OS	Feb 25	BSL	Feb 25	NW	Feb 25	1:250	S0

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B068934	TTE	00	00	SK	O	00005	S02

TTE_MT_v1

APPENDIX E – CONSTRUCTION VEHICLE ROUTING PLAN

Tyddyn Forgan CTMP Routes

Tyddyd Forgan ESS
Net Zero Twenty Six Limited

Legend

- Route 1
- Route 2

Drawn by: AM
Checked by: AP
Office: Edinburgh

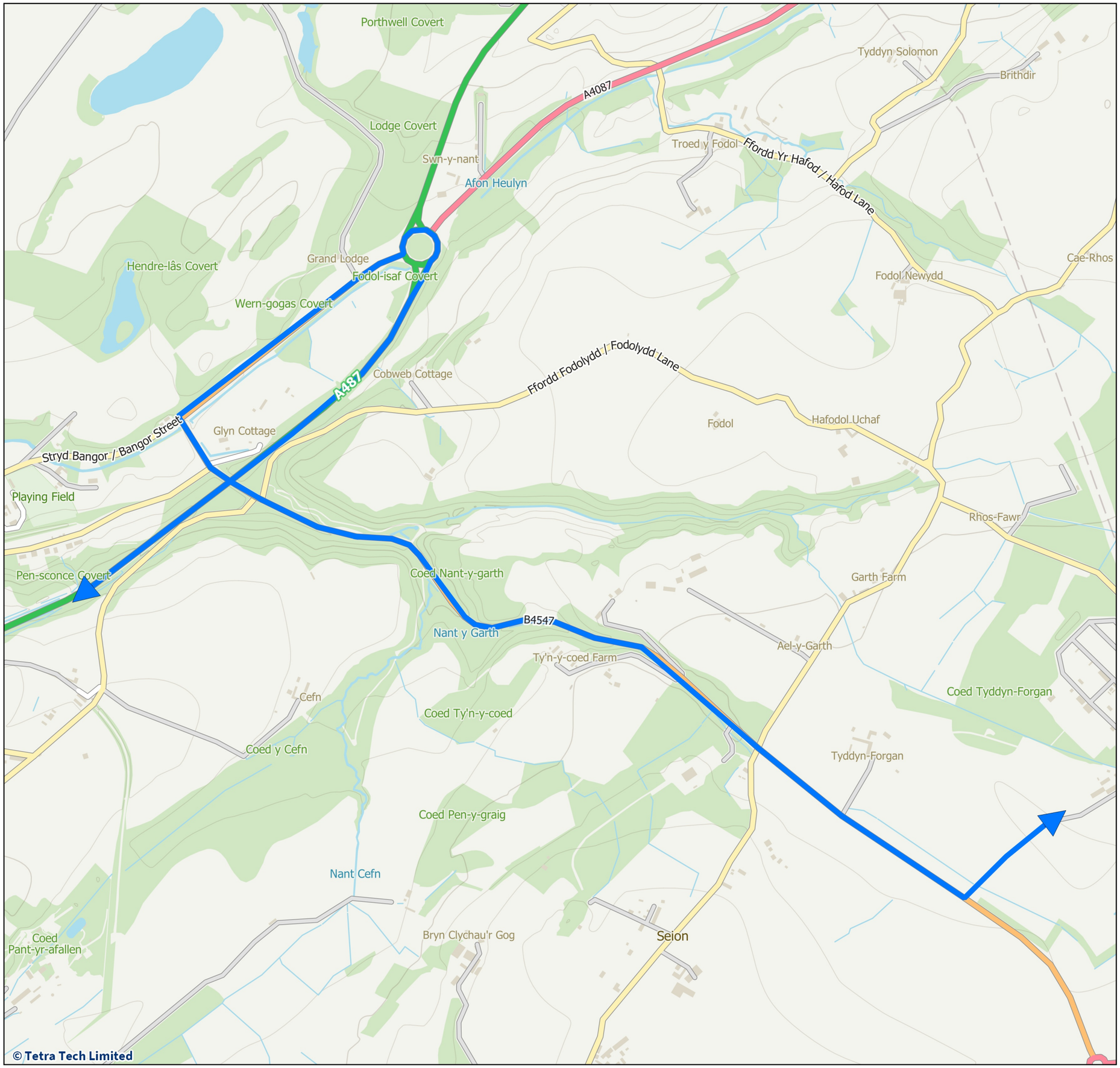
Drawing No.: 784-B068934
Revision No.: 0001

0 100 200 m
Scale at A3: 1:15,000

19 February 2025

Wales

TETRA TECH



Tyddyn Forgan CTMP Routes

Tyddyd Forgan ESS
Net Zero Twenty Six Limited

Legend

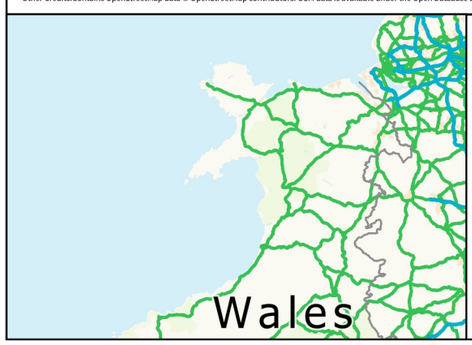
Route 1

Drawn by: AM
Checked by: AP
Office: Edinburgh

Drawing No.: 784-B068934
Revision No.: 0001

0 100 200 m
Scale at A3: 1:15,000

19 February 2025



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