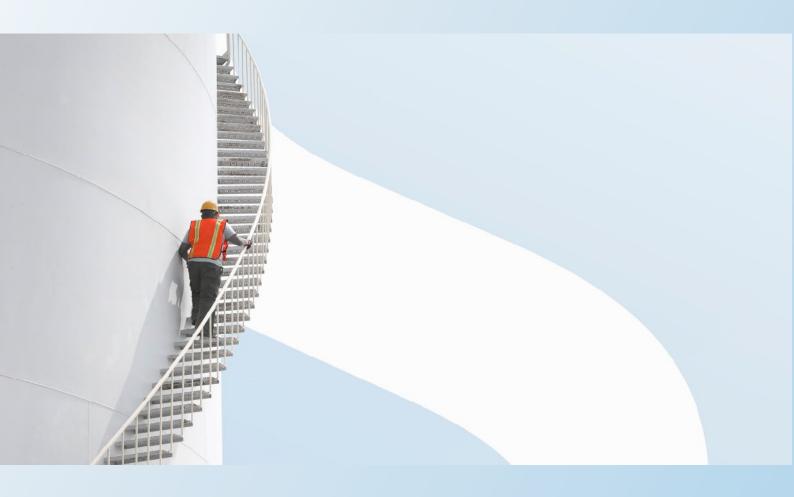


## Pennant Walters Ltd

# **Mynydd Llanhilleth Wind Farm**

Appendix 12B: Outline Construction Traffic Management Plan



#### **Report for**

Pennant Walters Limited Hirwaun House Hirwaun Industrial Estate Hirwaun Aberdare CF44 9UL

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#### **Document revisions**

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## 1. Introduction

## 1.1 **Overview**

- 1.1.1 WSP UK Limited has developed this Outline Construction Traffic Management Plan (CTMP) for the construction of a wind farm of seven turbines and connection to the grid distribution system ('the Proposed Development') on behalf of Pennant Walters Ltd. The Site of the Proposed Development is located within Blaenau Gwent County Borough Council (BGCBC) and Torfaen County Borough Council (TCBC).
- 1.1.2 The purpose of the CTMP is to outline how the interaction between existing highway users and construction traffic is managed during the programme of works and to ensure that all relevant stakeholders are consulted and fully informed of the proposed works.
- 1.1.3 Parts of the proposed construction traffic route include the Strategic Road Network (SRN). Within Wales the A465, the A4042 and the M4 are the responsibility of South Wales Trunk Road Agent (SWTRA). Connecting the SRN and the Site of Proposed Development are several local network roads which would be used; an Unnamed Adopted Road, Farm Road, the B4246, A4043, A472 and the A4042 are the responsibility of TCBC. See Section 3 for further details.
- 1.1.4 All relevant highway authorities have been contacted to gain feedback on the suitability of the construction and abnormal load access routes and traffic management practices being proposed.
- 1.1.5 Following agreement of the construction access routes and traffic management measures, Pennant Walters Ltd would be responsible for arranging all permits/licenses necessary to make any changes to public highways or Public Rights of Way (PRoWs).
- 1.1.6 At this stage in the development of the construction programme, details of the appointed site contractor, the general construction materials suppliers and the origin of the wind turbine components are not currently available. Assumptions have been made about likely construction traffic routes to the Site, which will be confirmed once the service providers have been appointed. As a result, this CTMP is a working document which sets out the principles by which construction traffic travelling to the Site should be managed, but it will require final confirmation of its suitability following the appointment of the Principal Contractor and relevant suppliers.

## 1.2 Report Purpose

- 1.2.1 The CTMP details the measures to be implemented to provide mitigation for the traffic generated during the works programme. The CTMP has been prepared to ensure that the management and mitigation measures contained within this document minimise the likely impact on existing road users. The primary objectives of the CTMP are as follows:
  - Ensuring the movement of people and materials in a safe, efficient, timely, and sustainable manner;
  - Keep construction traffic to a minimum during peak network periods to reduce the impact on the highway network;
  - Ensure that the impact and disruption on local communities is minimised;
  - Minimise vehicle trips where possible; and

• Limit the impacts on the natural and built environment.

## 1.3 **Report Structure**

- 1.3.1 The remainder of this report is structured as follows:
  - Section 2: Project Description;
  - Section 3: Principal construction access routes;
  - Section 4: Policies, Procedures, and due Process;
  - Section 5: Construction Traffic management measures; and
  - Section 6: Construction Management Structure.

## 1.4 Consultation

- 1.4.1 WSP UK Limited consulted all relevant highway authorities for comments on the scope and proposals related to HGV movements and Abnormal Indivisible Loads (AILs).
- 1.4.2 In terms of the AIL delivery route, SWTRA and other relevant highway authorities (BGCBC and TCBC) will be consulted before a trial run. The wind turbine component supplier and transporter are yet to be identified. A preliminary assessment of the AIL delivery routes has been undertaken within the AIL access study (**Appendix 12A**) to understand if there are any improvements to the highway which will need to be made to accommodate the delivery of abnormal loads. The assessment identified temporary structural improvements were required at a number of junctions. All relevant permits for abnormal load transportation will be arranged prior to commencement of deliveries.
- 1.4.3 A Section 278 Agreement of the Highways Act 1980 will be secured between the relevant local highways authorities and the developer to cover the associated highway works, needed to facilitate the delivery of the abnormal loads. The appropriate officer at each highways authority will be contacted in due course.
- 1.4.4 This Outline CTMP will be reviewed and updated when necessary to incorporate any comments and additional measures which may be required to address comments received from key stakeholders during a wider consultation exercise for the EIA and planning application.
- 1.4.5 A previous revision of this Outline CTMP formed a component to the withdrawn application for the Mynydd Llanhilleth Wind Farm (DNS Application Ref DNS/3273368). This new revision of the Outline CTMP now forms part of resubmission following the removal of turbine 5 from the proposed Mynydd Llanhilleth scheme, all other elements of the scheme remain the same. Following the final submission of the now withdrawn application, Welsh Government Highways Authority (REPS027) responded in agreement that the Outline CTMP (**Appendix 12B**) was appropriate and provided conditions for the application.

## 2. Project Description

## 2.1 Overview

- 2.1.1 The Proposed Development is to construct and operate a wind farm of up to seven turbines and associated infrastructure including access tracks, foundation, cabling, substation and connection to grid distribution system.
- 2.1.2 The construction period for the wind farm will last approximately 82 weeks. The construction process will consist of the following principal activities:
  - Upgrading of existing tracks and construction of new access tracks and passing places inter-linking the turbine locations and substation; this will require import of suitable roadstone;
  - Potential remedial works to the public highway to facilitate delivery of turbines which will be confirmed following discussion with the Highways Authority(s);
  - Formation of site compound including hardstanding and temporary site office facilities;
  - Construction of crane hardstanding areas to facilitate erection of turbines;
  - Construction of turbine foundations and transformer bases where required by the selected turbine;
  - Construction of site substation and transformer building;
  - Excavation of trenches and cable laying adjacent to site roads;
  - Connection of on-site distribution and signal cables;
  - Delivery and erection of wind turbines; and
  - Connection to national grid distribution system (underground).
- 2.1.3 Many of these operations will be carried out concurrently, although predominantly in the order identified to minimise the overall length of the construction programme. In addition, development will be phased such that at different parts of the Site, the civil engineering works will be continuing whilst wind turbines are being erected.

## 2.2 **Project Timescales**

2.2.1 The current timescales for the project are based on an expected site mobilisation and start date of the 01 June 2026. The project completion date is expected to be January 2028.

## 2.3 Vehicle Classification

2.3.1 A number of vehicle types are expected be used during the course of construction, as outlined in **Table 2.1**.

Lights (LGVs)	Medium (MGVs)	Heavy (HGVs)	Abnormal Load Transporter
Car	15t & 9T Excavator	40 Tonne Truck	Wind turbine blade transporter
Van	Winch Tractor	Low Loader	Wind turbine tower transporter
4x4 Site Vehicle	Tractor and Trailer	Flatbed Truck	Transformer transporter
4x4 Transit	10 Tonne Truck c/w Hiab	Concrete Wagon	250t Crane
Welfare Vehicle	Merlo 40/30	60t Crane	

#### Table 2.1 Typical Construction Vehicle Classification

2.3.2 The vehicles and specifications provided above have been identified based on similar projects by scale and type and their use for the Proposed Development is subject to final confirmation following appointment of the Principal Contractor.

## 2.4 Traffic Generation

2.4.1 Where possible, construction operations would be carried out concurrently, thus minimising the overall length of the construction programme. An indicative 82-week construction programme (commencing in 2026) has been assumed for the purposes of this assessment.

#### Wind Farm

2.4.2 As a worst-case scenario, it is assumed that 100% of all aggregate will be sourced from off-site via road. **Table 2.2** shows the predicted traffic generation during construction of the wind farm itself.

#### Table 2.2 Predicted traffic generation during construction phase - wind farm

Activity	Total loads	Total trips (two- way)
Delivery of Plant and Equipment	30	60
Delivery of Road Stone for Construction Compound	162	324
Delivery of Compound General Equipment	20	40
Delivery of Road Stone for Access Tracks	2,004	4,008
Delivery of Road Stone for Areas of Crane Operation	1,772	3,544
Delivery of Backfill Stone for Turbines	65	130
Delivery of Concrete for Turbines	240	480



Activity	Total loads	Total trips (two- way)
Concrete for transformer foundations	7	14
Delivery of Base Anchors/Rings	7	14
Delivery of Form work and reinforcing steel (Rebar)	26	52
Excavation of turbine foundations	596	1,192
Delivery of concrete for substation	3	6
Delivery of Road Stone for substation	46	92
Delivery of Fibre Optic Cabling	3	6
Delivery of Sand for cable trench	48	96
Delivery of Cabling	3	6
Delivery and Removal of Mobile Crane	24	48
Delivery of Turbines	70	140
Delivery of Concrete for Control Building Base	12	24
Delivery of Electrical Equipment	60	120
Delivery of External Transformers	3	6
Delivery of Plant and Equipment for Bop contract	30	60
Delivery of Plant and Equipment for turbine contract	30	60
Removal of Plant and Equipment	30	60
Total	5290	10580

### **Grid Connection**

- 2.4.3 The Site will be connected to the grid at Pontnewynydd between the onsite substation and a point to the east of the site, south of Rhiw Franc Farm which intercepts the existing overhead line network. The 66kV cables will be laid underground over a length between 1.5km and 2km, with a tee-off structure adjacent to the existing overhead line to connect the cables to the existing network. The calculation for this connection excavation, cabling and filling works is included in **Table 2.2**.
- 2.4.4 As a worst-case scenario, it is assumed that construction of compound, access track and internal tracks to Wind Turbine Generator (WTG) hardstanding points would be carried out within 8 weeks which constitutes the peak traffic of the wind farm.
- 2.4.5 Based on the construction program this construction traffic results in an approximate peak of 125 HGV movements per 24 hours two-way. This peak is predicted to occur during

month 2 (July 2026) of the total 82-week construction programme because there are considerable stone deliveries during this time. After April there is anticipated to be some overlap of deliveries for foundations for the WTG and for the internal access roads as they are being built on the way to each WTG location. These deliveries have been incorporated with the WTG foundation deliveries.

### **Construction Traffic Distribution**

- 2.4.6 It is important to note that the assessment assumes 100% of aggregate will be sourced offsite from one quarry. A definite construction route is subject to the final sources of aggregate and routing agreement with TCBC. Therefore, at this stage the assessment assumes that 100% of HGV traffic will route on each construction route as a worst-case scenario.
- 2.4.7 **Table 2.3** shows the worst-case distribution of the construction traffic (two-way) on the local road network.

## Table 2.3Predicted combined peak construction traffic on local roads (wind farm+ grid connection)

Activity	Construction traffic (two-way)
B4246 (Talywain)	125
A4043 (Pontnewynydd)	125
A472 (Pontypool)	125

## 2.5 Working Hours

2.5.1 At this stage, it is assumed that normal working hours would be 07:00 to 19:00 hours Monday to Friday and 07:00 to 13:00 hours on Saturday.

## 3. Access Routes

## 3.1 Introduction

- 3.1.1 The primary considerations to account for when delivering a route strategy are:
  - Use of the shortest route available from the location of the access points to the Strategic Road Network (SRN);
  - Use of a sliding scale approach with regards to route assignment and road classification, utilising the 'A' classified highway network as far as practicable, before resorting to lower classifications of highway;
  - Avoid single carriageway highways where alternatives are available; and
  - Avoid settlements and sensitive receptors where possible.

## 3.2 Site Access

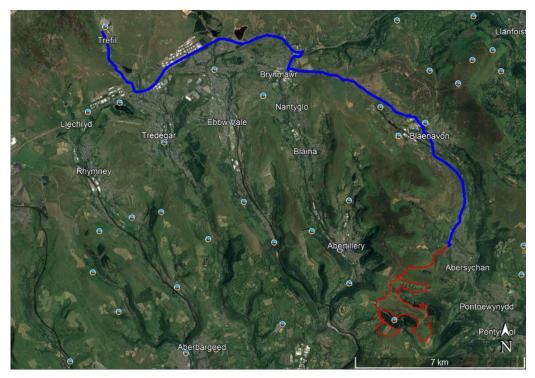
- 3.2.1 Access to the Proposed Development would be taken via four new access points located on the adopted highway which runs through the Site. An access to turbines 1 and 2, an access to turbines 3,4,6 and 7 and an additional ancillary access are proposed to be provided on an unnamed adopted highway which routes between Farm Road and Blaeny-Cwm Road. A final access is proposed to be provided on Blaen-y-Cwm Road for access to turbine 8.
- 3.2.2 Accesses to turbines 1 and 2, turbine 8 and the ancillary access are proposed to be new access points which will be provided with a 7.3m wide access track and 15m radii kerbs at the access point from the adopted highway to ensure the access can accommodate all general construction traffic such as site staff and the delivery of stone and concrete etc. Access points to the turbines will be additionally provided with an overrun area for the delivery of wind turbine components via AIL vehicle arrangements.
- 3.2.3 Access to turbines 3,4,6 and 7 is proposed to be taken via an existing access track that will be improved to accommodate construction traffic. Improvements include widening the access track and providing a wider surfaced access bellmouth from the adopted highway.
- 3.2.4 New accesses are provided with a 2.4 x 70m visibility splay. It has been considered that visibility splays to this standard alongside an appropriate traffic management scheme such as advanced warning signs would be an appropriate approach at the access locations which are all on low trafficked rural roads. Drawings detailing signage schemes at the accesses can be provided in further iterations of the CTMP beyond this outline stage.
- 3.2.5 Access designs are provided within drawings 807095-WOOD-XX-XX-DR-OT-0030\_S0\_P01, 807095-WOOD-XX-XX-DR-OT-0031\_S0\_P01 and 807095-WOOD-XX-XX-DR-OT-0032\_S0\_P01 which are included within **Annex A** of this Outline CTMP.
- 3.2.6 The accesses off the adopted highway are located as follows:
  - Access to turbines 1 and 2: 323669 (Easting), 202981 (Northing).
  - Access to turbines 3,4,6, and 7: 323442 (Easting), 202569 (Northing).
  - Access to turbine 8: 323302 (Easting), 201144 (Northing).

• Ancillary access: 323531 (Easting), 202880 (Northing).

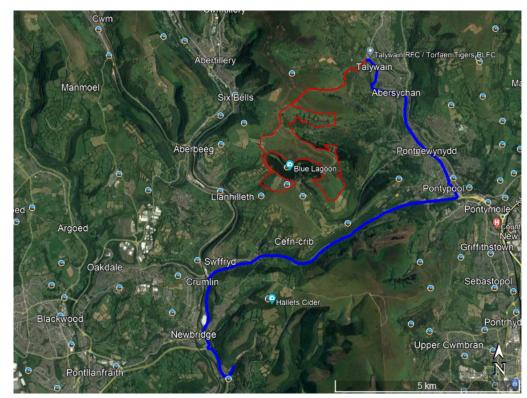
## 3.3 Route Options for Construction HGVs

- 3.3.1 A number of aggregate quarries are located north of the Site around the A465 and south of the Site between Abertillery and Newport. At this stage, it is assumed that construction materials would be sourced from one or more of the local quarries. An example of two local quarries located to the north and south of the Site respectively are identified below:
  - Gryphonn Quarry, Trefil, Tredegar; and
  - Hafod Quarry, Abercarn, Newbridge.
- 3.3.1 Construction HGV routes 1 and 2 have been included to present a worst-case robust assessment and are identified as follows and illustrated within **Figure 3.2**, and **Figure 3.3** respectively:
  - HGV Route 1 (north): Trefil Road A465 A467 B4248 Estate Road B4246 Unnamed Road / Farm Road –- Unnamed adopted road - Site; and
  - HGV Route 2 (south): Brook Street A467 A472 A4043 B4246 Unnamed Road / Farm Road – Unnamed adopted road -Site.

#### Figure 3.1 Gryphonn Quarry, Trefil, Tredegar (Northern Route)



Source: Google



#### Figure 3.2 Hafod Quarry, Abercarn, Newbridge, (Southern route)

Source: Google

3.3.2 As a worst-case scenario, it is assumed that construction vehicles would use one of the above routes. However, a combination of the above routes may be used for construction traffic subject to the location of material suppliers and aggregate from local quarries.

### Local Road Network

#### Unnamed Adopted Road between Farm Road and Blaen-Y-Cwn Road

3.3.3 An adopted road routes between Farm Road and Blaen-Y-Cwn Road providing a link between Talywain and the villages of Llanhilleth, Aberbeeg and Bryntihel. The adopted road is surfaced and constrained in nature with road widths which vary between approximately 3 – 5 metres. The horizontal alignment is constrained in various locations where trees/vegetation exist close to the carriageway edge and/or where tight bends are provided. As the adopted road rises towards higher ground a gated cattle grid is provided within the carriageway.

#### Blaen-Y-Cwn Road

3.3.4 Blaen – Y – Cwn Road is an adopted road which routes between St IIItyd and Cefn Crib Road. The road is located within a rural area, is surfaced and road widths are between 4.5 to 7 metres. Typically, farm land abuts the carriageway on the western side of the road and trees abut the carriageway on the eastern side.

#### Farm Road

3.3.5 Farm Road is a single carriageway road which routes between the B4246 at Talywain and British Road. The road is rural in nature with verges and vegetation along both sides of the carriageway. No streetlighting, road centreline or footways are provided.

#### B4246

- 3.3.6 The B4246 is a single-carriageway road and provides direct access to the Site. The B4246 routes from a T-Junction near the mid length of the A4043 (Broad Street) connecting directly to the B4246 (Union Street). The B4246 travels north-west from this junction on a slight incline onto Foundry Road to Lodge Road, to Church Road, to Commercial Road, the site access point is at the crossroads of Commercial Road, Pisgah Road, Albert Road, and Farm Road. Along the B4246 the speed limit is 30mph, the speed limit remains 30mph as it connects to the A4043 for a period until it is out of streetlights when it becomes 40mph.
- 3.3.7 Footways are provided on both sides of the carriageway from the A4043/B4246, however on the narrower roads there is poor provision, such as on Foundry Road, Lodge Road portions. Otherwise, along the B4246 stretch there is regular street lighting and pedestrian crossings with tactile paving over the carriageways along this road.
- 3.3.8 Near the end of Lodge Road and beginning of Church Road there is a sign detailing that queues are likely. At the Site access point these is another sign for pedestrians running through access point.

#### A4043

- 3.3.9 The A4043 is a single-carriageway road within the study area. The A4043 has a northwest/south-east orientation, and it passes through multiple settlements to the north of the Site including Cwmavon, Blaenavon, and Govilon. It forms a roundabout junction with the A472 at its southern extent then travels east to another roundabout connecting with the A4042 connecting to the M4. This is a key road for accessing the A465 to north and M4 to south. The A4043 operates under the national speed limit in the vicinity of the Site access. Routing north of the Site the speed limit varies (30mph/40mph).
- 3.3.10 There are footways and street lighting provided on the A4043 in the vicinity of the B4246, (next connection). However out with the urban area of Talywain and Pen-Twyn the road narrow to the north and south allowing for no footway access, however streetlight remains.

#### A472

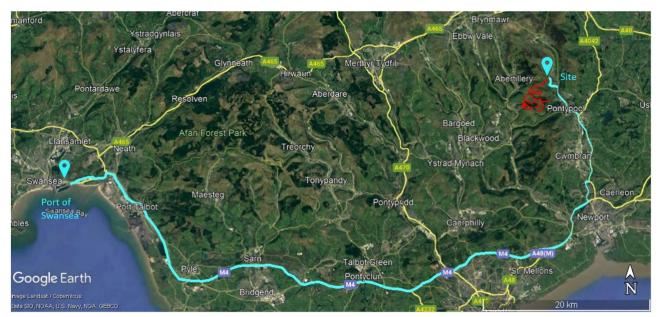
- 3.3.11 The A472 is a single carriageway that routes from A472/A4042 roundabout in Pontypool to A472/A467 signalised junction in Crumlin in an east west direction. From the A472/A4042 roundabout, the road is subject to 50mph speed limit along an approximately 1.5km dual carriageway section of the A472. The speed limit becomes 40mph from the A472/A4043 Roundabout, approximately 1.5km west of the A472/A4042 roundabout. From A472/A4043 junction the road becomes a single carriageway. The majority of the A472 is subject to the national speed limit with speed limit variations between 30mph/40mph/50mph.
- 3.3.12 There is street lighting on either side of the A472 and majority of the road has no footway. Footway is present on one side of the road approaching the village of Hafodyrynys and the town of Crumlin further west of the A472/A4043 roundabout. There are also several laybys on the A472.

## Strategic Road Network

- 3.3.13 The Strategic Road Network (SRN) comprises the routes of national strategic importance (motorways and trunk roads), which are operated and maintained by South Wales Trunk Road Agency in the vicinity of the Site.
- 3.3.14 The A465, A4042 and M4 are the strategic roads in the vicinity of the Site. The A4043 via the B4246 and A4042 via the A4043/A472 provide a route from the Site to the A465 (north) and the M4 (south). The A465 runs between Llandarcy, Swansea Bay (M4 junction 43) and Hereford, England. The A4042 runs between Newport and Abergavenny, the road is dual carriageway for a significant distance between Newport and Little Mill. The M4 is a long-distance route between Swansea and London. These routes provide a route from the Site to major settlements and Swansea seaport.

## 3.4 Route Options for Abnormal Loads

- 3.4.1 The nearest port for the delivery of turbine components is the Port of Swansea which is to be used to import all the required turbine components. The Port is connected to the strategic road network via junction 42 of the M4. The proposed route is shown in **Figure 3.4**.
- 3.4.2 Based on the AIL access study, the following is the preferred route for AIL deliveries:
  - Routing from the Port of Swansea, accessing the Proposed Development via M4 -A4051 - A4042 - A4042 Turnpike Road - A472 - A4043 – B4246 –Farm Road – Unnamed Adopted Road - Site.



#### Figure 3.3 Proposed AIL Route

Source: Google

## 4. Policies, Procedures, and due Process

## 4.1 Normal Loads

4.1.1 BGCBC and TCBC will be contacted to discuss the proposed HGV routes to secure their permissions. PRoWs management within the Site boundary will be discussed with the BGCBC / TCBC PRoW officer(s).

## 4.2 Abnormal Loads

- 4.2.1 The following is a review of current procedures for the movement of abnormal loads by road, and sources for further information and formal notifications. A review of these procedures will be made by the appointed haulage contractor and Pennant Walters Ltd prior to the delivery of the turbines to ensure that the correct procedures are followed, and approvals obtained.
- 4.2.2 Key to the successful management will be early and continuous communication with the BGCBC and TCBC.
- 4.2.3 This section of the report provides an overview of the relevant policies and procedures related to the movement of abnormal loads.
- 4.2.4 An 'abnormal indivisible load' is defined in the Road Vehicles (Authorisation of Special Types) (General) Order 2003 as a load that cannot, without undue expense or risk of damage, be divided into two or more loads for the purpose of being carried on a road and that:
  - On account of its length or width, cannot be carried on a motor vehicle of category N3 or a trailer of category O4 (or by a combination of such vehicles) that complies in all respects with Part 2 of the Construction and Use Regulations; or
  - On account of its weight, cannot be carried on a motor vehicle of category N3 or a trailer of category O4 (or by a combination of such vehicles) that complies in all respects with Authorised Weight Regulations (or if those Regulations do not apply, the equivalent provisions in Part 4 of the Construction and Use Regulations); and Part 2 of the Construction and Use Regulations.
- 4.2.5 The approved haulage contractor will be required to consult with the appropriate authorities to ensure that all relevant permissions are obtained prior to the transportation of any abnormal loads. The responsibility for ensuring that a route is suitable for the transportation of abnormal loads and ensuring the correct notifications are given rests with the haulier.

## **Department for Transport**

- 4.2.6 The Department for Transport (DfT) sets out the requirement to notify several authorities (with direct or delegated responsibility for maintenance of roads and bridges) that works may be required to their infrastructure before the movement of an abnormal load, including local police.
- 4.2.7 Notification forms and details of the procedures are available at:



<u>https://www.gov.uk/government/publications/abnormal-load-movements-application-and-notification-forms</u>

## South Wales Trunk Road Agency

- 4.2.8 South Wales Trunk Road Agency (SWTRA) acts as an agent to the Welsh Government and is responsible for the trunk roads in South Wales. SWTRA also suggest contacting the police, other highways authorities, bridge and structure owners.
- 4.2.9 Details of the notification procedures are available at:
  - <u>https://traffic.wales/swtra-street-works-and-abnormal-loads</u>

#### **South Wales Police**

- 4.2.10 South Wales Police (SWP) helps to assure the road safety during abnormal load transportation on the roads within South Wales.
- 4.2.11 Abnormal loads are usually not allowed to travel in South Wales during:
  - 07.00 to 09.30 Monday to Friday;
  - 16.30 to 19.00 Monday to Thursday;
  - 15.00 to 19.00 Friday; and
  - hours of darkness.
- 4.2.12 Information related to notification is available at:
  - <u>https://www.south-wales.police.uk/advice/advice-and-information/abnormal-loads/v2/what-is-abnormal-load/</u>

## 5. Traffic Management Measures

## 5.1 Local Highway Issues and Constraints

- 5.1.1 WSP undertook a desktop route audit to identify and review local highway issues and constraints. This included the identification and review of the following potential constraints:
  - Height restrictions;
  - Weight restrictions;
  - Road classification;
  - Road Layout;
  - Existing pedestrian crossing facilities;
  - Existing traffic calming features;
  - Sensitive receptors adjacent to the highway network
  - Visibility constraints;
  - Restricted access;
  - Speed limits and traffic speeds;
  - Congestion;
  - Gradient changes; and
  - PRoWs.

## 5.2 Mitigation Measures

- 5.2.1 To minimise the impact of construction traffic on the local road network and local communities surrounding the Proposed Development, this section sets out mitigation measures which are proposed as part of this CTMP.
- 5.2.2 Mitigation measures which are additional to this section include construction traffic routing strategies which are set out in **Section 3**. These routing strategies as mitigation are the principal measures to manage the impacts of construction traffic. However, there are numerous other mitigation solutions that should be implemented to reduce the impacts on the local highways network and local users. A summary of the measures included in this CTMP is set out below.

### Access

5.2.3 As per **section 3.2** access to the Site will be provided via four access points comprising of three new access points and an existing access track which will be upgraded to accommodate construction traffic. Where necessary an overrun area will be provided to accommodate AIL vehicles transporting wind turbine components into the site.

5.2.4 Access designs are provided within drawings 807095-WOOD-XX-XX-DR-OT-0030\_S0\_P01, 807095-WOOD-XX-XX-DR-OT-0031\_S0\_P01 and 807095-WOOD-XX-XX-DR-OT-0032\_S0\_P01 which are included within Annex A of this Outline CTMP.

## Adjustment to Existing Highway Layout for Abnormal Delivery

5.2.5 The AIL access study has identified the need for temporary measures along the AIL delivery route between Swansea port and the Site access. The details of the required measures, and an additional management strategy, can be found in the AIL access study (Appendix 12A).

### Vehicle Escorts

- 5.2.6 The SWP and SWTRA will be consulted with regards to vehicle escorts.
- 5.2.7 The SWP will be involved with vehicle escorts upon specific request from the haulier or where it is deemed that a load, due to its size or other extenuating circumstances, necessitates a Police escort.

## **Dilapidation Survey**

5.2.8 Dilapidation surveys will be required at the start and end of the construction programme to assess any damage to the highway caused by construction traffic on the access routes. Dilapidation surveys are expected to be carried out by an independent engineering consultant appointed by Pennant Walters Ltd who will work in conjunction with the relevant parties.

### **Working Hours and Timing of Movements**

- 5.2.9 The proposed core working hours for construction activities will be developed between Pennant Walters Ltd and the approved contractor. All construction activities will be limited to the core working hours to limit the effect of construction activities on the local highway network and the surrounding community.
- 5.2.10 In the interests of road safety and reducing possible nuisance, it is proposed that a planning condition is put in place that restricts traffic movements during the following periods:
  - No construction activities on Sundays;
  - No construction activities on Bank Holidays;
  - No construction activities outside the hours of 07:00 to 19:00 Mondays to Fridays; and
  - No construction activities outside the hours of 07:00 to 13:00 on Saturdays.
- 5.2.11 All relevant parties involved in making deliveries to the Site would be informed of these restrictions, whilst for other contractors making regular deliveries these restrictions will form part of their contractual obligations. This would be reinforced in the Principal Contractor's site induction and regular talks for site operatives.

## Route Timing and Enforcement

- 5.2.12 Timing restrictions for deliveries can assist in ensuring that construction vehicles avoid peak periods in sensitive areas such as schools, and where necessary, areas that experience congestion.
- 5.2.13 Contractual arrangements with all appointed hauliers will set out the enforcement/disciplinary procedures in the event HGV drivers do not abide by the preferred routes or any timing restrictions.
- 5.2.14 Road space along the abnormal load haulage routes will be booked in advance in compliance with the New Roads and Street Works Act 1991 (NRSWA). This will be undertaken as a precautionary measure to ensure that all haul roads are free of planned road works.

### Route Signage

- 5.2.15 Temporary signage will be installed along the construction route advising construction traffic of the correct route to the Site. In addition, and in the interests of road safety, the signage will also assist in advising other road users to be aware of construction vehicles. All new signage will be in accordance with the 2016 Traffic Sign Regulations and General Direction (TSRGD).
- 5.2.16 Construction traffic will not be allowed to enter the Site until the relevant local highway authority has agreed the signage design and confirmed in writing that the required signage is in place.

## **Public Information**

5.2.17 Providing detailed information to local residents and interested groups is a key part of the construction of any wind farm. To ensure that local residents are given the opportunity to obtain information about the project, and offer their views and suggestions, the developer will undertake a variety of engagement methods.

## Wheel Cleaning/Street Cleaning

5.2.18 In the interests of public safety, preventative measures to minimise any mud and debris deposited onto the Unnamed Adopted Road, Balen-y-Cwm Road, Farm Road and the B4246 will be operated on site. The Principal Contractor will arrange activities on site that minimise the carriage of mud and debris and shall provide, maintain, enforce and monitor the performance and proper use of cleaning facilities. The Principal Contractor shall promptly arrange street cleaning equipment either through BGCBC or TCBC when any significant mud and debris is carried onto public roads.

## Vehicle Livery/Identification

5.2.19 To assist in enforcing this CTMP vehicle livery/identification will be added to contract vehicles making regular deliveries to the Site, thereby showing that they are associated with the development. This could simply be in the form of a board displaying the name of the wind farm development and/or Pennant Walters Ltd. An example of such livery/identification is to be submitted to the local planning authority for approval prior to the start of construction. No such construction vehicle will be allowed to enter the site unless it is displaying approved livery/identification.

### **Construction Environmental Management Plan**

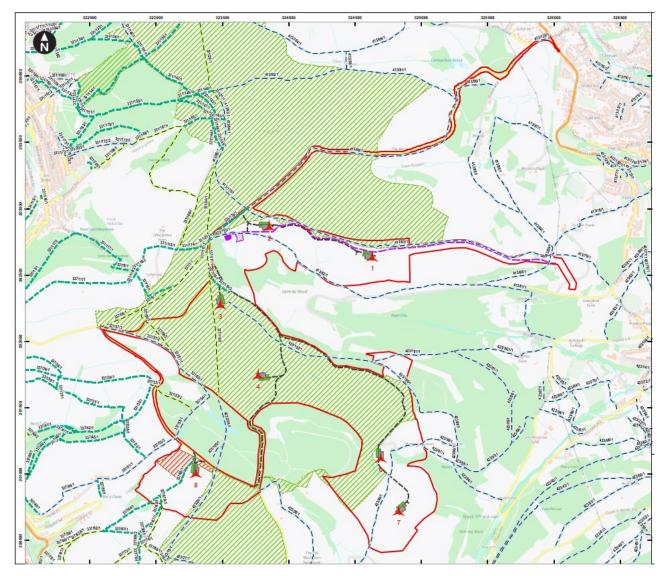
5.2.20 A separate Construction Environmental Management Plan (CEMP) will be prepared and submitted to BGCBC (and other relevant highways authorities as relevant), an Outline CEMP has been submitted as part of this applicated. The CEMP will include measures to control dust and debris resulting from the movement of HGVs.

### **PRoW Management**

#### PRoWs crossing access track

5.2.21 Based on the final design freeze, the following locations have been identified within the Site boundary, where site access tracks would cross the existing PRoWs shown in **Figure 5.1**.

#### Figure 5.1 PRoW across the Site



- 5.2.22 All locations where construction access tracks cross the existing PRoWs will have appropriate warning signage, which will advise of dates and hours of working. Along access roads, appropriate signage will be erected to alert drivers of upcoming locations where there is an interface between construction traffic and public rights of way.
- 5.2.23 However, during certain periods during the construction programme, it may be necessary to adopt active management measures with contractor staff patrolling key crossing points during periods of high construction activity. The need for active management on certain routes will be identified within the construction programme which will take into account delivery timescales and movements of plant and machinery. The need for active management will be subject to specific risk assessments prepared by the Principal Contractor when analysing impacts of any construction activities which may bring pedestrians into proximity with construction traffic.
- 5.2.24 In this instance, PRoW users may have to wait for a short period of time whilst the footpath is in use by the construction team. Users will be advised when works are completed, and it is safe to cross the footpath with Pennant Walters Ltd contractor's staff at the crossing point.

#### PRoWs crossing turbine buffers (200m)

- 5.2.25 Section 16.6 of **Chapter 16: Socio Economics** describes management of the PRoWs which cross 200m buffers from turbine.
- 5.2.26 The need for a PRoW management plan will be discussed with BGCBC / TCBC PRoW officer(s)

#### **Information packs and Communications**

- 5.2.27 Information packs will be provided to all contractors which will form part of the contractual agreement between the contractors and Pennant Walters Ltd. The information pack will contain the details of the following CTMP requirements:
  - Construction routes;
  - Non-compliance guidance;
  - Complaints procedures;
  - Internal Road Layout;
  - CTMP protocols and Code of Good Practice;
  - Guidance on standard communication procedures between contractors and site management; and
  - CTMP contacts (emergency and non-emergency).
- 5.2.28 Information packs will be shared with the relevant local road authority(s) ahead of any construction works.
- 5.2.29 Given the rural location of the Site in relation to the public transport network, the opportunity for contractors to travel to work by public transport is not a viable choice. The distance of the Site from the established cycle network and lack of footway connections to local amenities and establishments also means that travel by alternative sustainable modes is unlikely to be chosen by contractors. However, car-sharing is something that can be promoted by the contractors. To identify and support this, the site's travel information pack will include information relating to a car-sharing club to be distributed to staff.

## 6. Management Structure

## 6.1 Introduction

- 6.1.1 This section reviews the management structure that will oversee the CTMP. It is important that a strong management structure is in place to ensure the CTMP objectives are met, and that continued monitoring and review of the CTMP is maintained.
- 6.1.2 A transport coordination officer (TCO) will be appointed by the contractors to implement the CTMP (approved by the relevant local planning authorities in consultation with all relevant highway authorities). The TCO will be appointed prior to commencement of the works and will have the following transport related responsibilities:
  - Monitor contractor obligations with regards to the CTMP;
  - Liaise with and report to relevant highways authorities about mitigation and any remedial measures, if required;
  - Update the CTMP as required; and
  - Resolve issues and problems through liaison with relevant stakeholders.

## 6.2 Monitoring and Review

- 6.2.1 The TCO appointed by the contractors will undertake monitoring as necessary to ensure compliance with the requirements of the CTMP and this will include the maintenance of records and traffic management measures.
- 6.2.2 The contractor will ensure that a suitable, qualified, member of staff is employed to conduct surveys and monitor construction vehicle activity at specific locations along the construction route network to ensure adherence to the CTMP. This will include the monitoring of construction vehicles on the local road network and speed enforcement monitoring.
- 6.2.3 The TCO will monitor and review the CTMP. These reviews are required to ensure that the CTMP delivers on the commitments and achieves the agreed goals as set out in this document.

## 6.3 Compliance

- 6.3.1 As part of the CTMP a series of mechanisms will be established to provide all parties with a clear understanding of the enforcement procedures that will be applied if the requirements contained within this CTMP are not achieved. It is anticipated that these mechanisms will be determined at a later stage and will include:
  - Risk Assessment Method Statement (RAMS) procedures The contractor, through the TCO, will implement the CTMP, adhere to the requirements and meet the goals through management practices. This will include site inductions for contractors, briefing on the obligations of standards induction and adherence to RAMS procedures, DMS briefing, driver inductions and compliance guidance;
  - Contractual conditions to be employed as part of the CTMP compliance methodology and will be built into the contractor's contract, this will be subject to a performance review by Pennant Walters Ltd; and



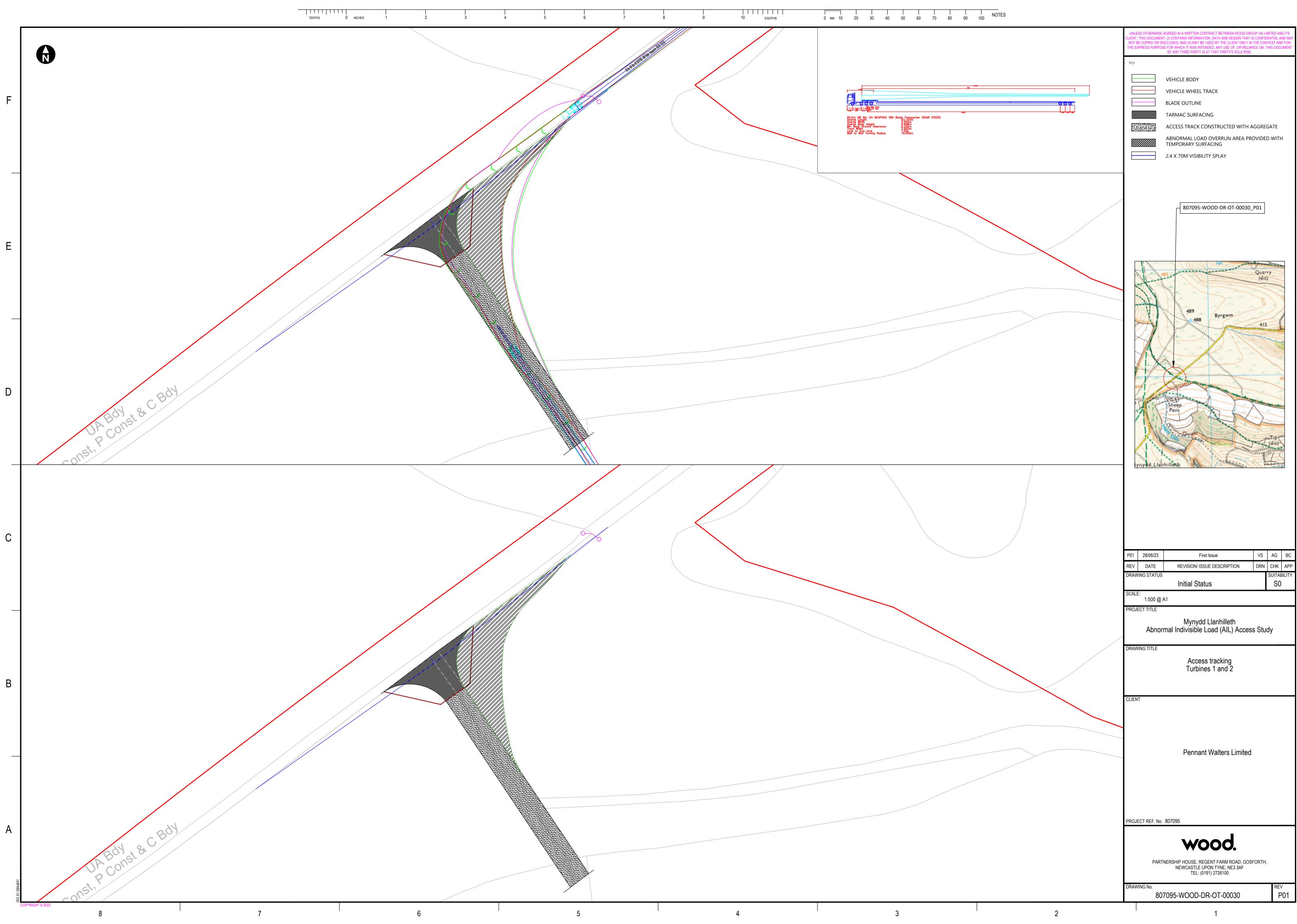
• Actions- To be employed if the commitments of the CTMP are breached.

## 6.4 Enforcement and Corrective Measures

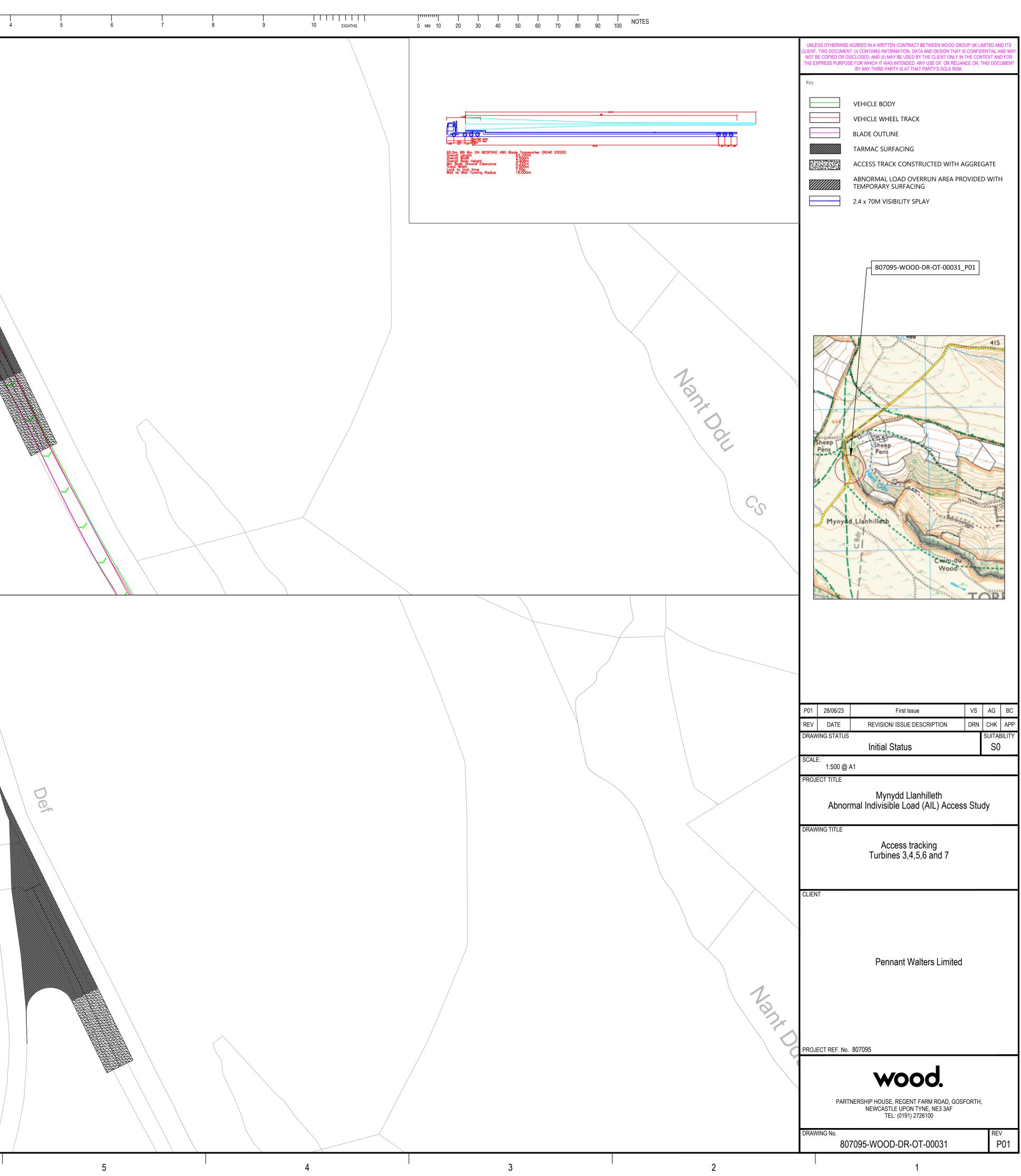
6.4.1 The TCO will ensure that appropriate measures are taken to ensure that contractor behaviour and performance is monitored where appropriate corrective measures are taken to resolve, redress and enhance service performance which is in breach of the Standards within the CTMP.

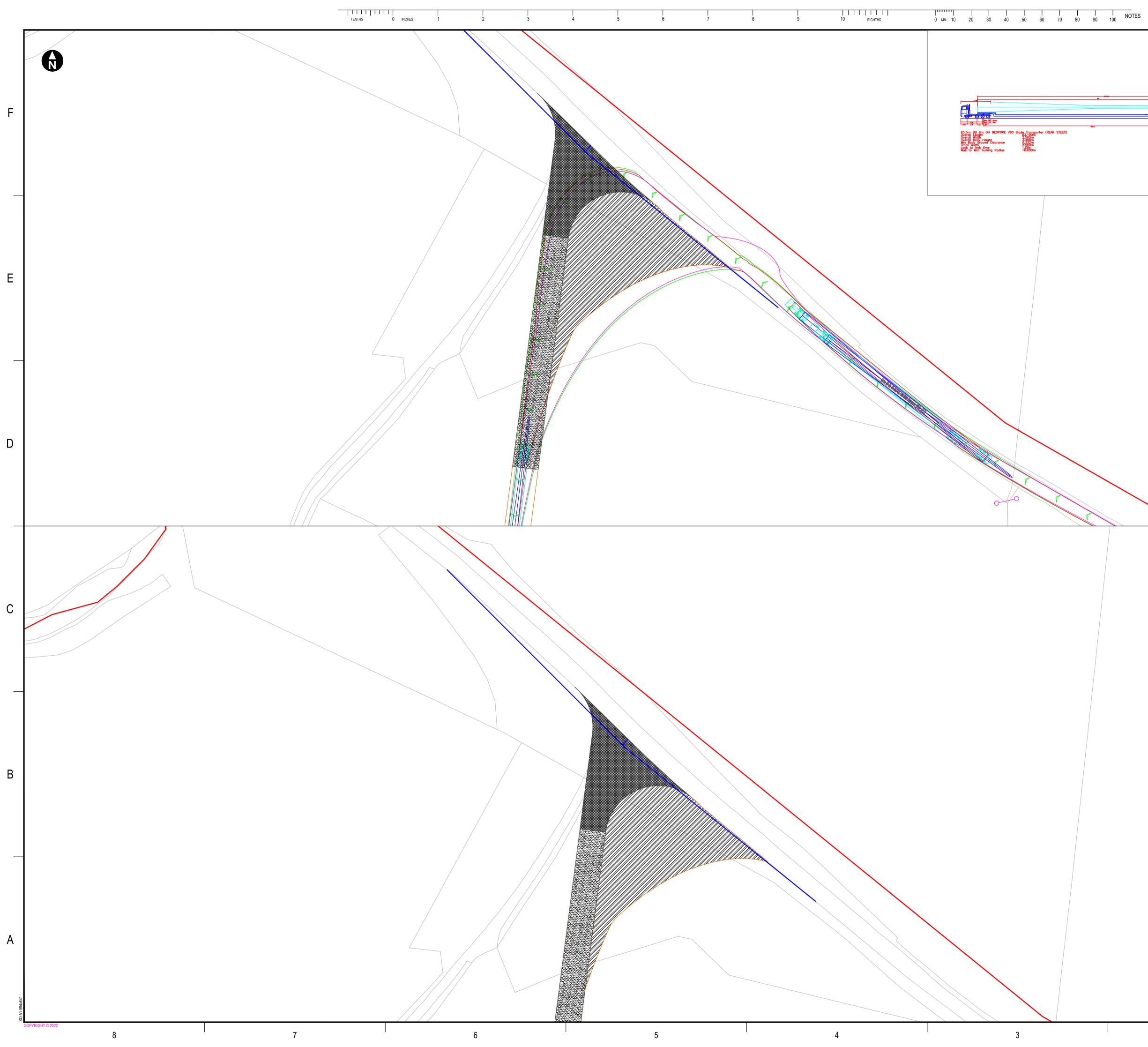


## Annex A Access Design Drawings



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	Abnormal Indivisible Load (AIL) Access Study DRAWING TITLE Access tracking Turbine 8
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	PROJECT REF. No. 807095
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