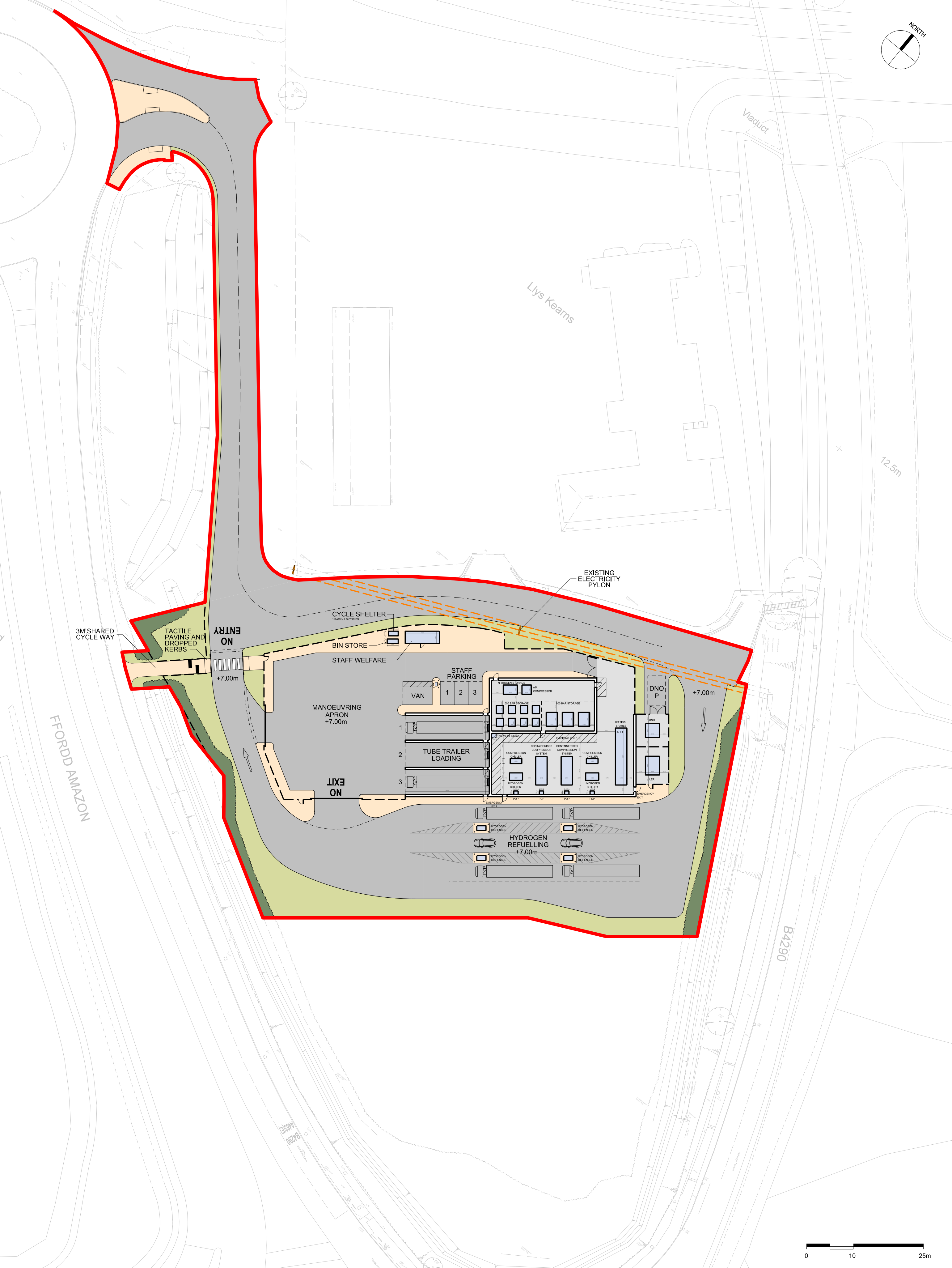

Appendix 1 – Site Masterplan



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LEGEND

	RED LINE APPLICATION BOUNDARY		ROADS
	GRASSLAND		HARDSTANDING
	FOLIAGE AND TREES		OVERHEAD ELECTRICITY CABLES
	PEDESTRIAN WALKWAY		

PROJECT		SWANSEA HYDROGEN	
DRAWING		Proposed Site Plan	
FOR PLANNING		-	25/01/30
SCALE	1:250@A0 1:500@A2	DATE	25/01/30
DWG. NO.	1463 PL011	REVISION	

GSDA

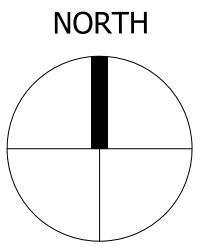
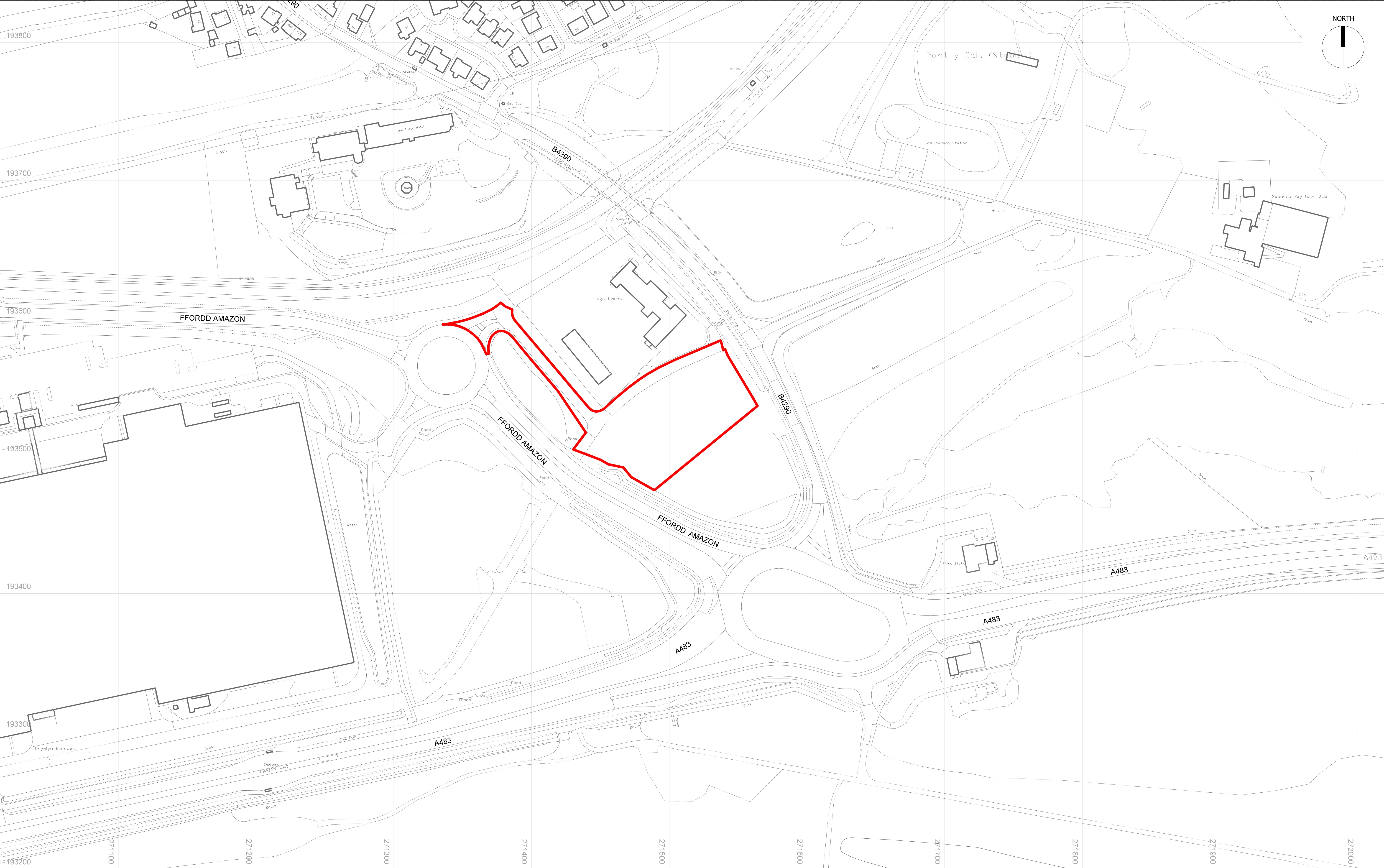
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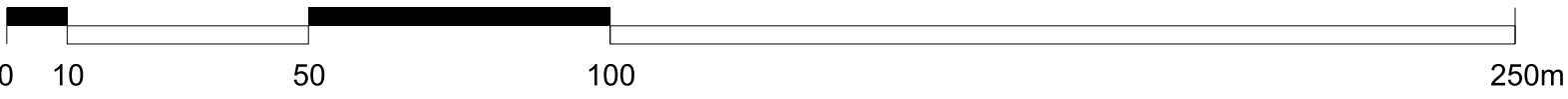
Appendix 2 – Site Location Plan



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 4. WHERE DISCREPANCIES EXIST BETWEEN REFERENCE OR
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LEGEND

 RED LINE APPLICATION BOUNDARY



PROJECT					
SWANSEA HYDROGEN					
DRAWING					
Location Plan					
FOR PLANNING		-	24/09/25	Issued for Planning	
SCALE 1:1250@A1	24/10/02	A	24/10/02	Issued for Planning	
1463 PL001	A				
DWG. NO.	REVISION				

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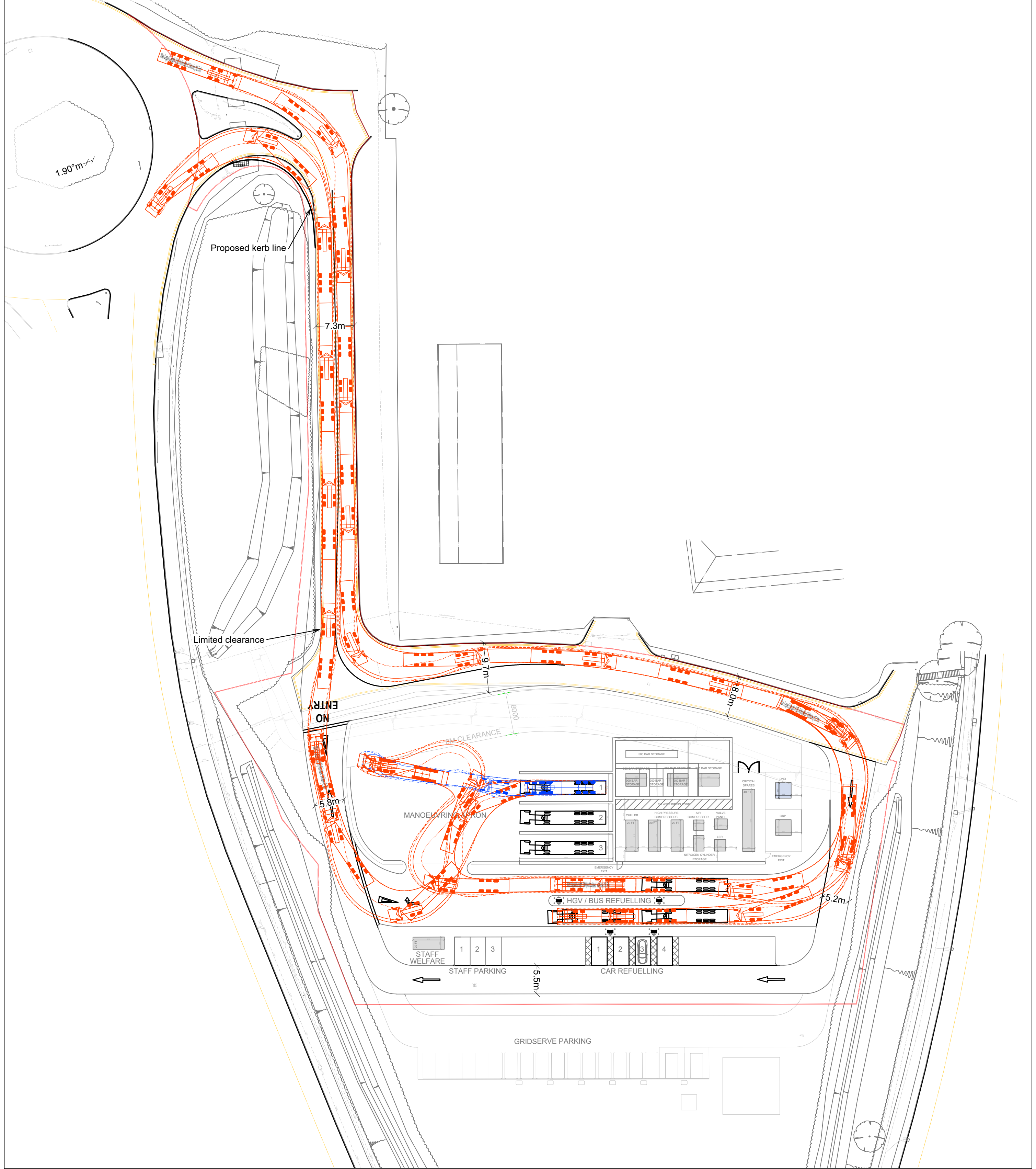
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Appendix 3 – RPS Drawings



Swept Path Key:

Body path

Chassis path

Wing mirror path

Red=forward movement

Blue=reverse movement

Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length16.500m

Overall Width2.550m

Overall Body Height3.681m

Min Body Ground Clearance0.411m

Max Track Width2.500m

Lock to lock time6.00s

Kerb to Kerb Turning Radius6.530m

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Client

Marubeni Europower Ltd

Project

HyHaul Swansea

Title

Initial 16.5m Articulated Vehicle
Swept Path Analysis

Rev	Description	By	CB	Date

Status

PRELIMINARY

Drawn By

AJ

PM/Checked by

LS

Project Number

WWP-00294

Scale @ A2

1:500

Date Created

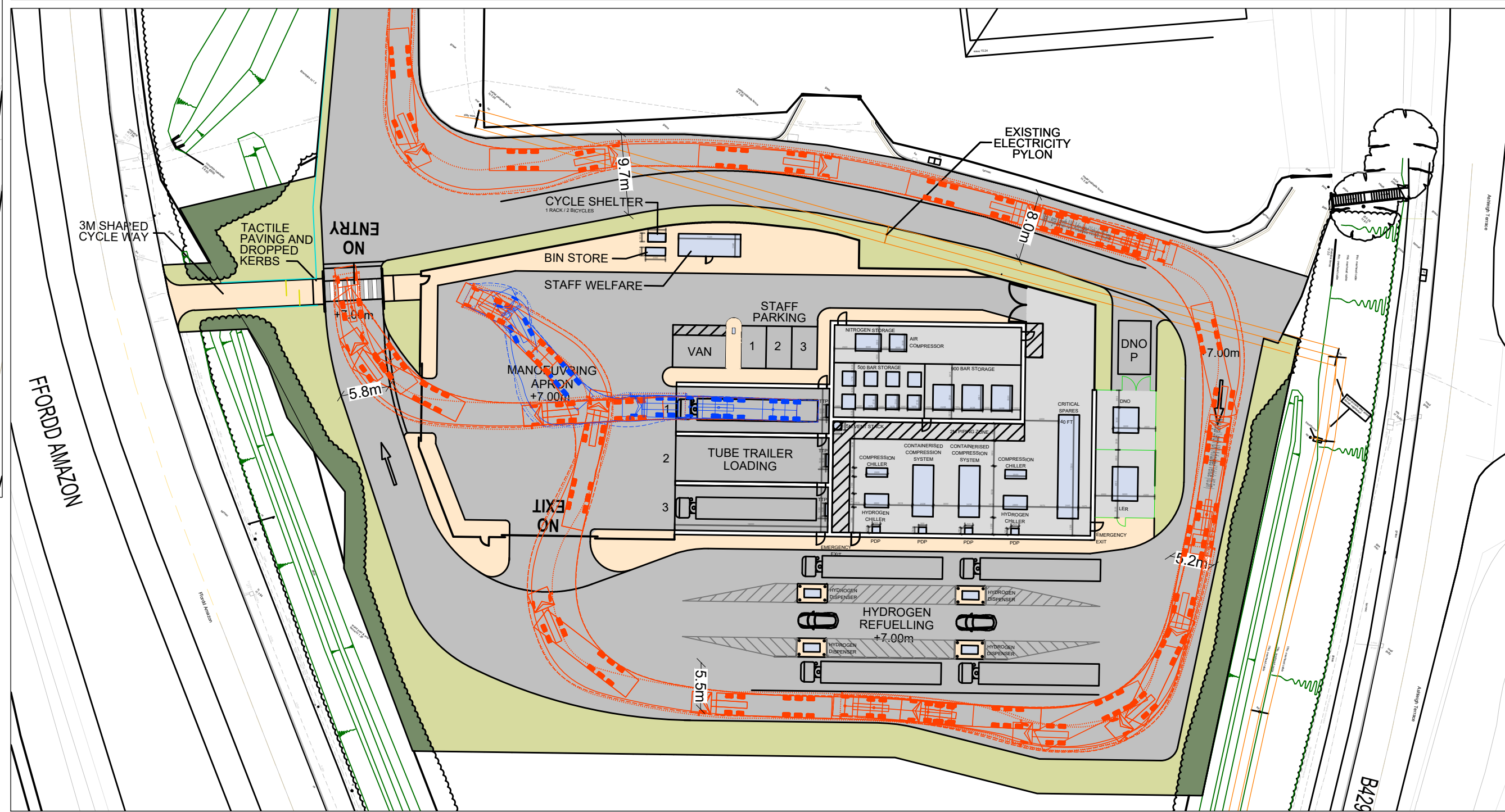
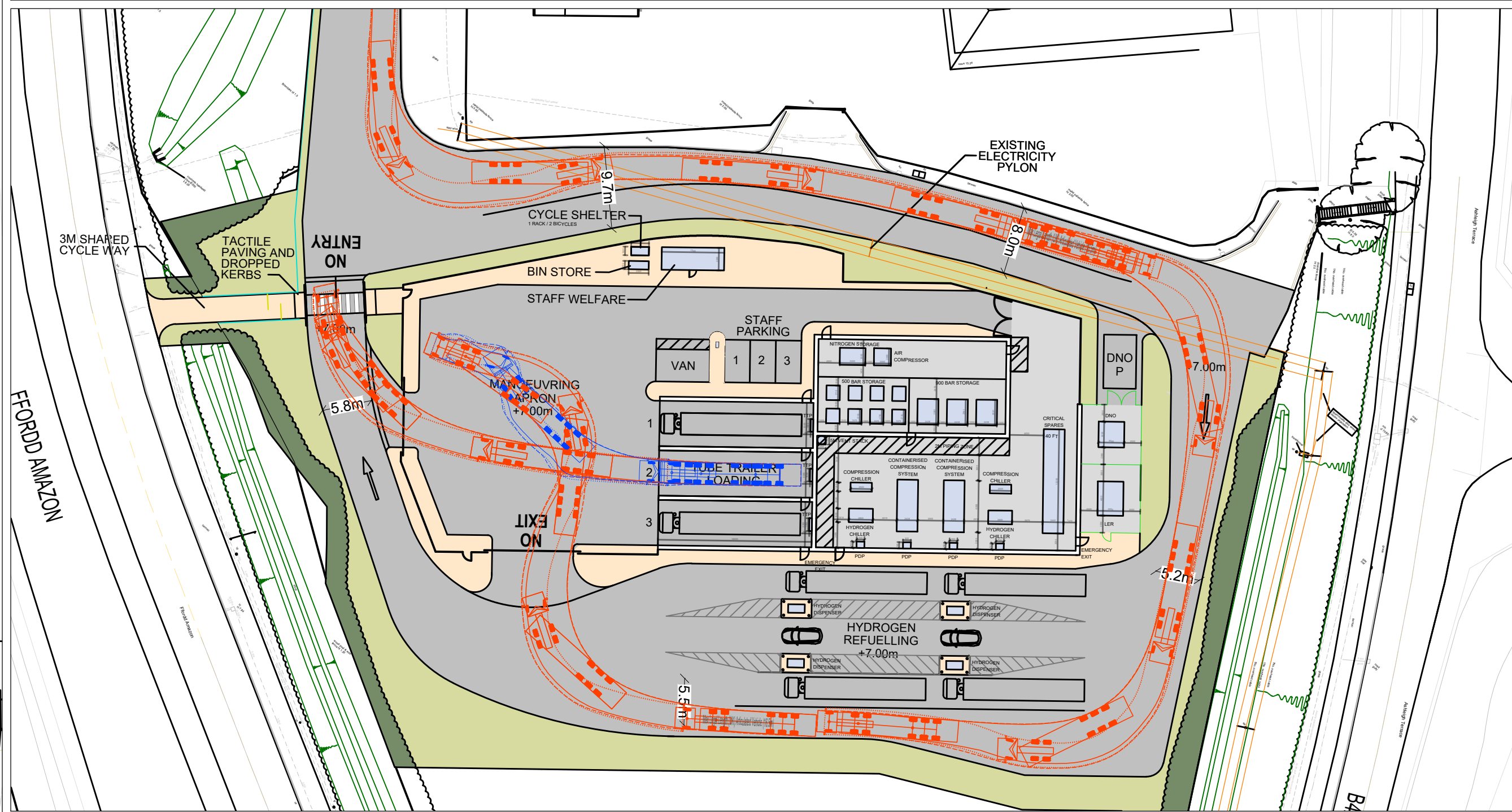
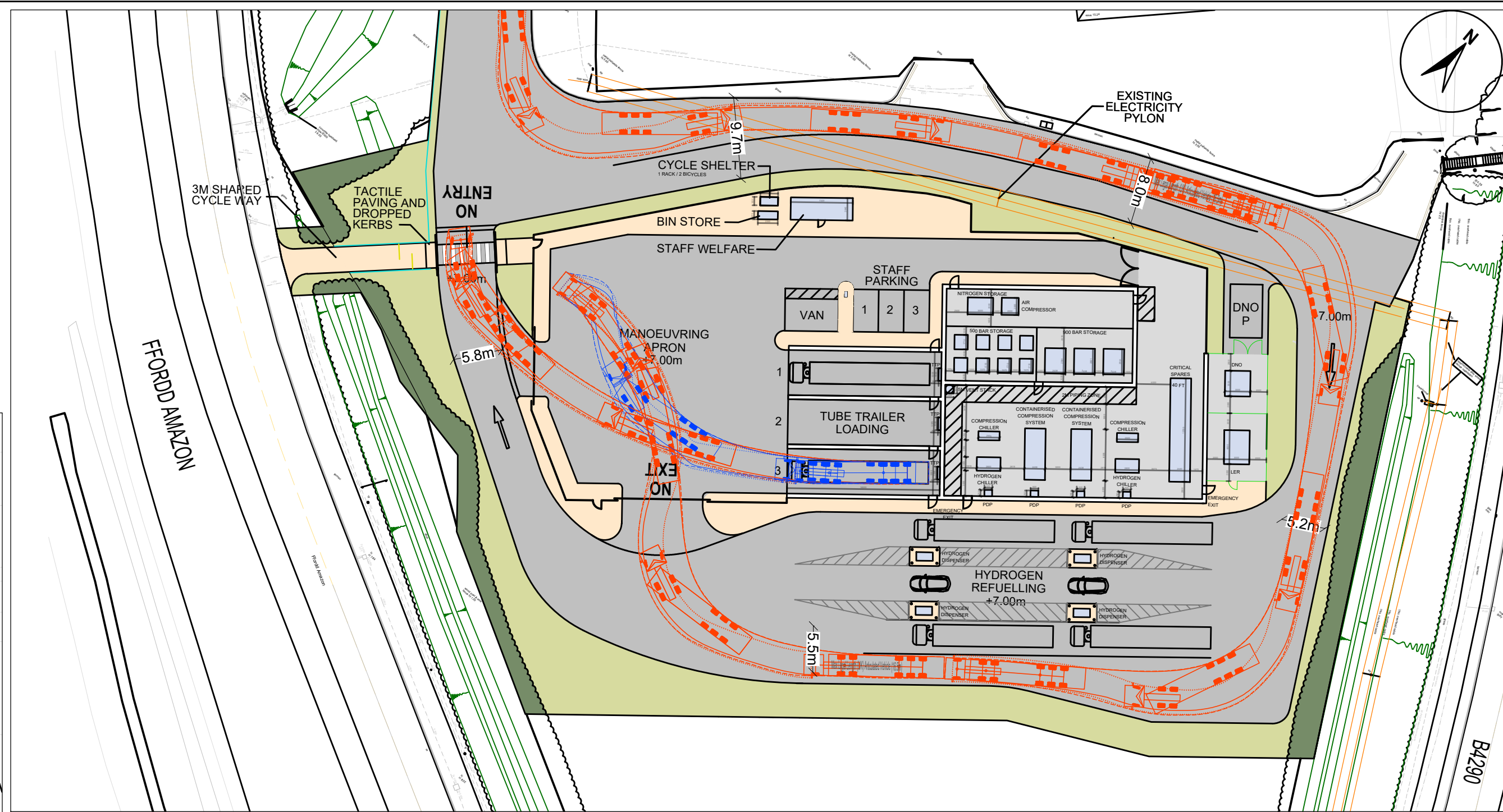
07/02/2025

RPS Drawing/Figure Number

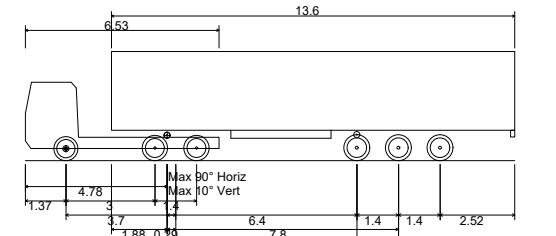
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Rev

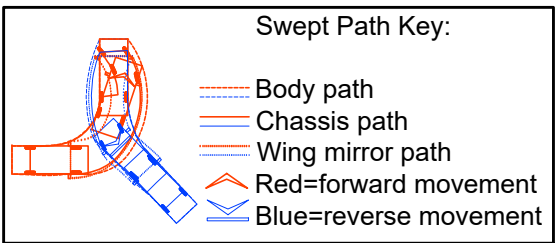
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Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 15.500m
Overall Width 2.550m
Overall Body Height 3.581m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m



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Rev	Description	By	CB	Date
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Client Marubeni Europower Ltd

Project HyHaul Swansea

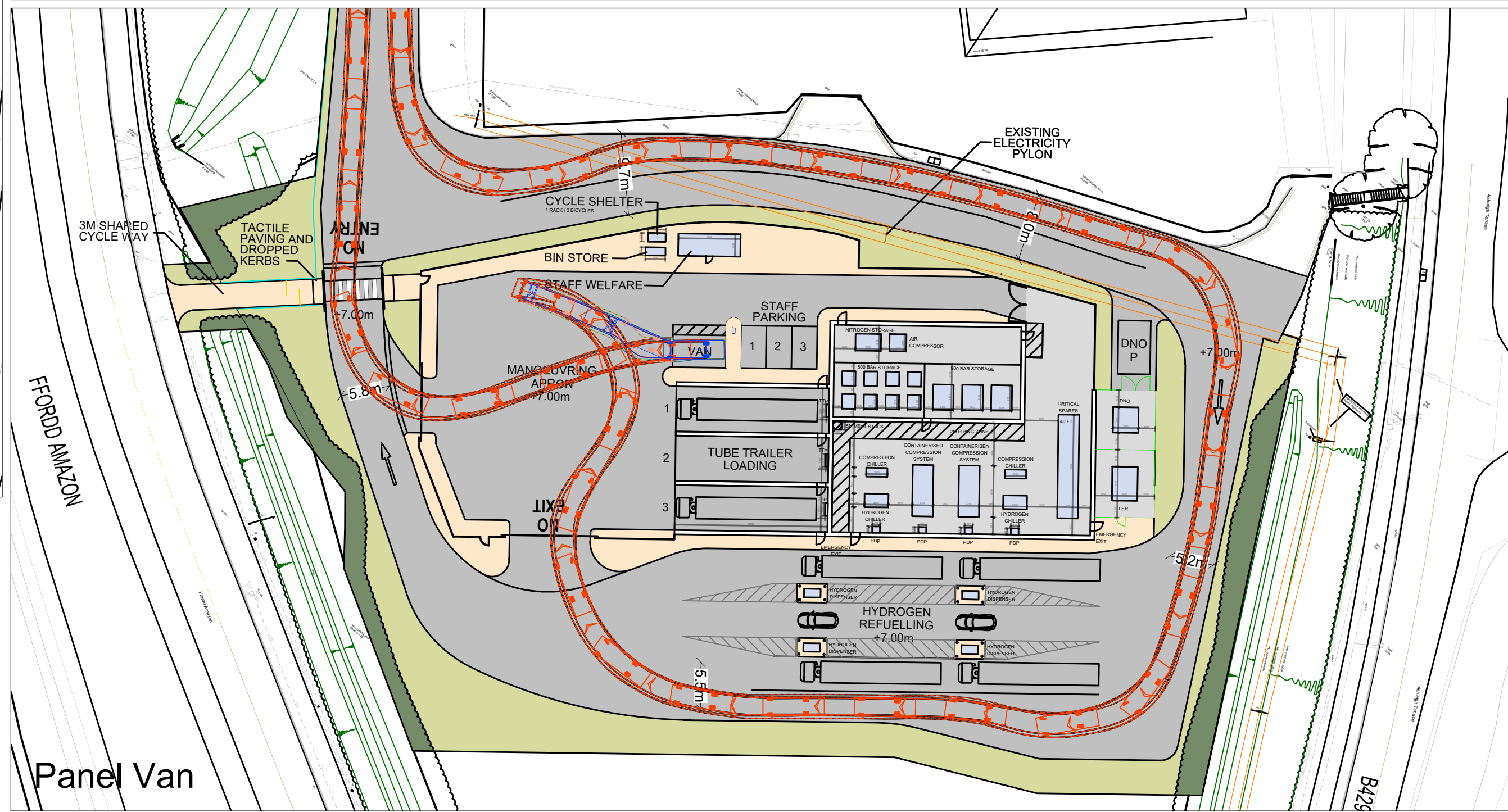
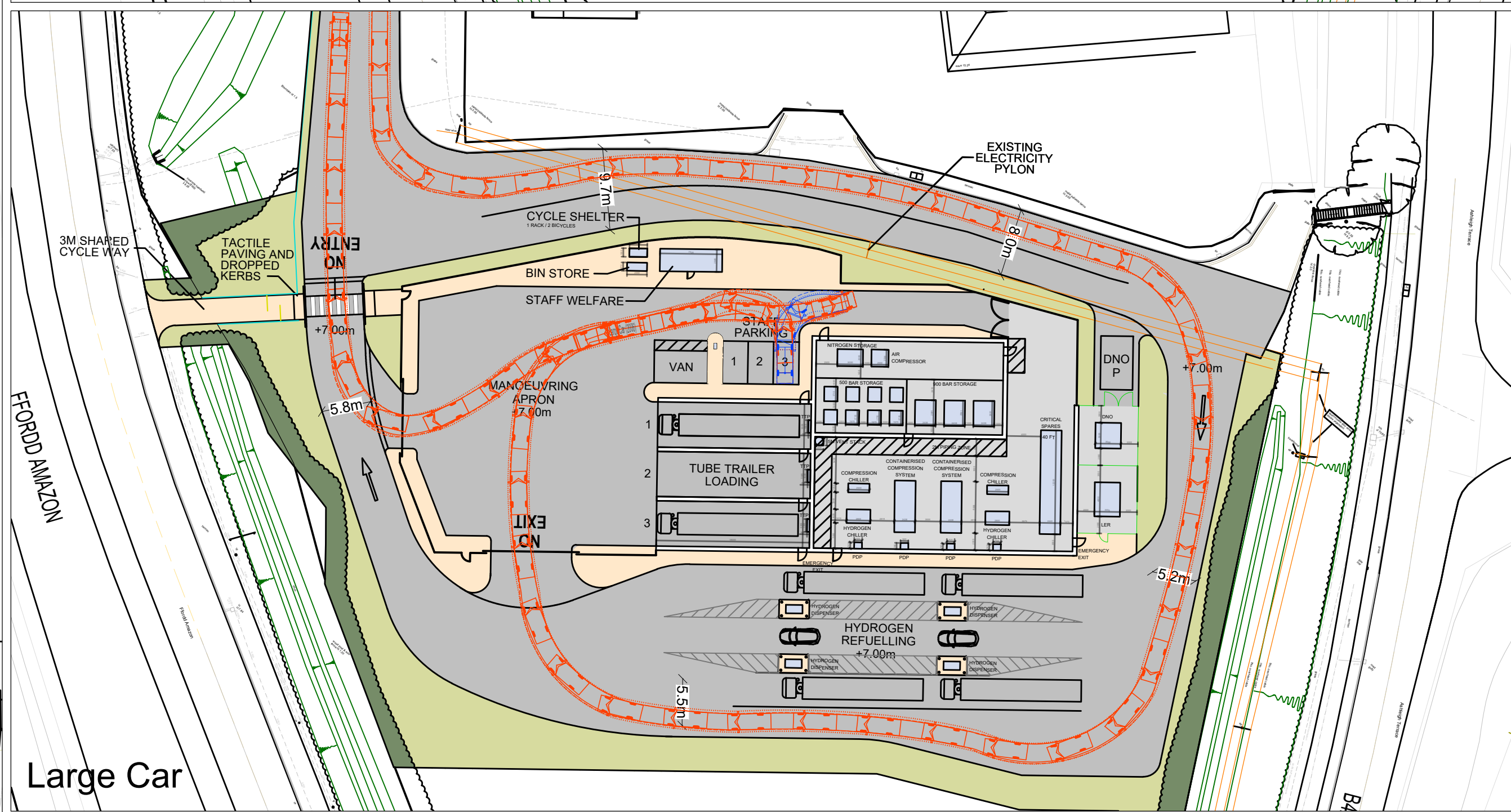
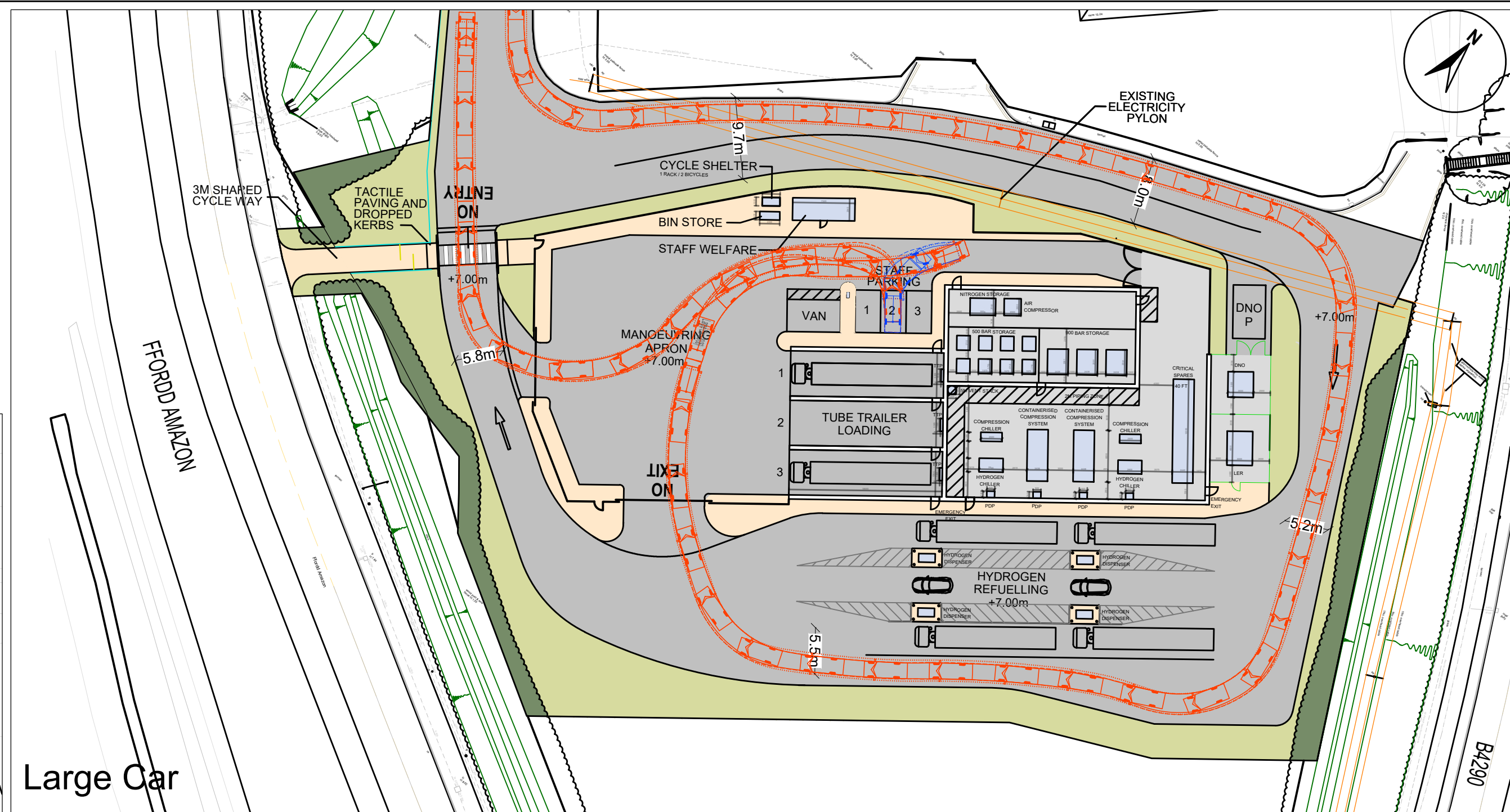
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Swept Path Analysis

Status Drawn By PM/Checked by
INFORMATION LS EON

Project Number Scale @ A1 Date Created
WWP-00294 1:500 05-02-2025

RPS Drawing/Figure Number Rev
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7.5t Panel Van
Overall Length 2.192m
Overall Width 2.544m
Min Body Ground Clearance 0.316m
Track Width 1.865m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 7.400m

Large Car (2006)
Overall Length 5.079m
Overall Width 1.872m
Overall Body Height 1.525m
Min Body Ground Clearance 0.310m
Max Track Width 1.831m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 5.900m

Swept Path Key:

- Body path
- Chassis path
- Wing mirror path
- Red=forward movement
- Blue=reverse movement

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Rev	Description	By	CB	Date

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Title Large Car and Panel Van Swept Path Analysis

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Project Number Scale @ A1 Date Created
WWP-00294 1:500 05-02-2025

RPS Drawing/Figure Number Rev
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Appendix 4 – Construction Traffic Management Plan

HYHAUL SWANSEA

Construction Traffic Management Plan

794-PLN-TRP-00294-02A
Construction Traffic
Management Plan
Version A
07 February 2025

Document Status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
-	Construction Traffic Management Plan	Louise Sheppard	Emma O'Neill	Emma O'Neill	07 February 2025
A	Construction Traffic Management Plan	Louise Sheppard	Emma O'Neill	Emma O'Neill	07 February 2025

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Prepared by:

Prepared for:

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Marubeni Europower Ltd

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Contents

1	INTRODUCTION.....	1
2	BASELINE CONDITIONS	3
3	PROPOSED DEVELOPMENT AND ACCESS ARRANGEMENTS	5
4	CONSTRUCTION TRAFFIC GENERATION.....	12
5	CONSTRUCTION TRAFFIC MITIGATION	16
6	SUMMARY AND CONCLUSIONS	21

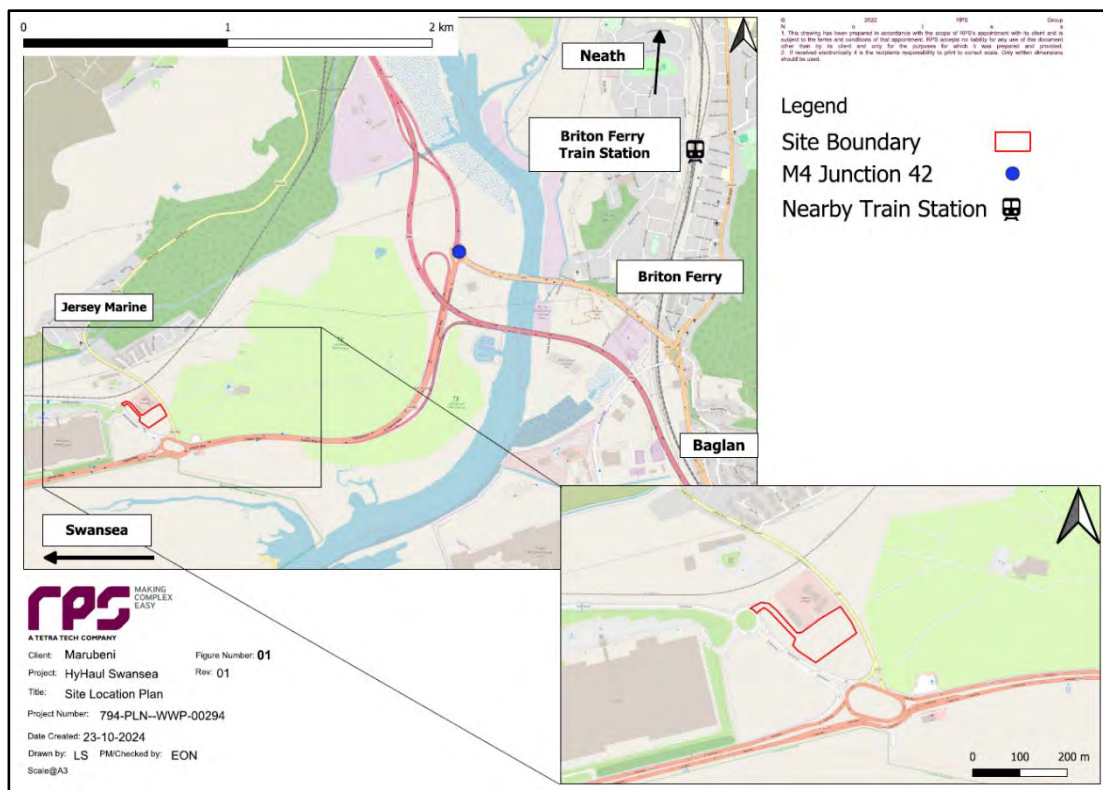
Appendices

APPENDIX 1 – SITE MASTERPLAN
APPENDIX 2 – SITE LOCATION PLAN
APPENDIX 3 – VEHICLE SWEEP PATH (ACCESS ROAD)

1 INTRODUCTION

- 1.1 RPS have been commissioned by Marubeni Eurowpower Ltd (the applicant) to produce a Construction Traffic Management Plan (CTMP) to accompany a detailed planning application for a new hydrogen refuelling facility on land east of Ffordd Amazon, located south of Jersey Marine.
- 1.2 The proposed site is approximately 0.9 hectares in size, and is located to the south of Jersey Marine, a small village approximately 5km east of Swansea. The site which is located approximately 1.6km to the west of J42 of the M4, is bound to the south by the A483, to the east by the B4290 and Swansea Bay Golf Course, to the west by Ffordd Amazon and Industrial Park and to the north by a small Industrial Estate.
- 1.3 **Figure 1** below shows the location of the site in both a strategic and local context, with key areas, including Briton Ferry Train Station and J42 identified.

Figure 1: Site Location Plan



-
- 1.4 The proposed development is a hydrogen refuelling facility, comprised of the following core components:
- Hydrogen Buffer Storage (500 and 900 bar);
 - 4 HGV and bus refuelling bays and 4 car refuelling bays;
 - Tube trailer unloading;
 - Hardstanding and demountable / containerised storage and welfare buildings, fire walls, boundary fences and gates; and
 - Ancillary infrastructure (Chiller, high pressure compressors, air compressor, valve panel, nitrogen cylinders, electrical power supply and critical spares storage).
- 1.5 Access to the development is promoted from the A483, via the existing A483/ Ffordd Amazon/ B4290/ A483 roundabout. All vehicles would access the site via the Ffordd Amazon spur of this existing junction, before accessing the site via an existing road which currently serves as access to a small Industrial Estate located directly north of the proposed site.
- 1.6 The masterplan for the site is included at **Appendix 1** with the site location plan included at **Appendix 2**.

Report Purpose

- 1.7 This CTMP has been prepared to ensure traffic management practices and necessary arrangements are in place throughout the construction period. All proposed Heavy Goods Vehicle (HGV) haulage routes presented in this plan are subject to approval by NPTCBC.
- 1.8 This CTMP identifies measures that aim to minimise the effect of construction traffic on the surrounding road network with respect to potential temporary changes to vehicular traffic and pedestrian movements.

Report Structure

- 1.9 This CTMP is structured as follows.
- **Section 2: Baseline Conditions** - Describes the existing site and the surrounding areas transport and highway characteristics.
 - **Section 3: Proposed Development and Access Arrangements** - Provides an overview of the proposed development, the construction scheme overview, and the indicative construction programme.
 - **Section 4: Construction Traffic Generation** - This section of the report sets out the estimated volume and type of vehicles that will be generated throughout the construction phase of the development.
 - **Section 5: Construction Traffic Mitigation** - Sets out the mitigation measures that will be adopted by employees during construction to minimise the impact of construction on local residents, businesses, and the local highway network; and
 - **Section 6: Summary and Conclusion** - Summarises the key points in this CTMP and provides a final conclusion.
-

2 BASELINE CONDITIONS

Context

- 2.1 This section provides information on the existing site and the surrounding area with a focus on local highway infrastructure and accessibility.

Pedestrian and Cycle Accessibility

- 2.2 The proposed development site is located within the area of the Ffordd Amazon industrial area and can be easily accessed by sustainable modes of travel. The development site benefits from existing pedestrian infrastructure within its immediate vicinity, providing continuous links to local residential areas and bus stops. Whilst the existing access road to the site does not have pedestrian infrastructure there is a wide grass verge for pedestrians (i.e. construction workers accessing the site on foot) to use to link to footways along the Ffordd Amazon.
- 2.3 Along the northern side of the carriageway along the A483 and Ffordd Amazon there is a shared cycleway / footway with wide pavements, ranging in width between approximately 2m-3.5m, this allows for a safe cycle route separated from the traffic.

Public Transport

- 2.4 The proposed development site is also accessible for construction staff wishing to access it by public transport. The nearest bus stops to the proposed site are located along Ffordd Amazon approximately 550m west of the site. Bus route AZ10 stops here and provides four services a day (two services between 04:00-07:00 and two services between 17:00-19:00). There are three stops along this service linking Sketty Cross, Swansea and Ffordd Amazon.
- 2.5 Two bus stops are also located approximately 600m southwest of the site along the A483. The bus stop serves six different bus routes including; 38, 84, T6 TrawsCymru, X1 Cymru Clipper, X5 Cymru Clipper, and X7 Cymru Clipper. Combined these routes provide a peak frequency of six buses per hour to Swansea, Brecon, Bridgend, Neath and Port Talbot.
- 2.6 Two bus stops are located along Ashleigh Terrace and serve three bus routes including; 38, T6 TrawsCymru and X7 Cymru Clipper. Combined these routes provide a peak frequency of three buses per hour. These stops are approximately 125m in walking distance from the site, the shortest route is not step free, however, an alternative route is available which is approximately 600m.
- 2.7 The nearest train station is Briton Ferry railway station, which is located approximately 4.3km from the site, equating to approximately one hour walk or a 16-minute cycle. Travel to Swansea, Neath, Port Talbot Parkway, Bridgend, and Cardiff Central can be accessed at Briton Ferry railway station.

Local Road Network Infrastructure

Site Access Road

- 2.8 Access to the site is promoted from a four-arm roundabout via an unnamed single carriageway private road. This road is approximately 6m in width, there are no footways provided along its length, but it does benefit from wide grass verges along both sides. This road provides access to a small Industrial Estate located directly north of the proposed site. In this regard, access to the new refuelling facility will be shared with those accessing this existing development.

Ffordd Amazon

- 2.9 Ffordd Amazon is located to the immediate west of the site and routes broadly on a southeast to southwest alignment from its signalised roundabout junction with the A483 to the unnamed access road detailed above.
- 2.10 Ffordd Amazon is a dual carriageway between the A483 signalised roundabout and the site access road roundabout with footways provided on both sides of the carriageway. This road is subject to a speed limit of 30mph. Ffordd Amazon provides access to a large Industrial Estate.

A483

- 2.11 The A483 is located to the south of the site and routes broadly east to west alignment from J42 of the M4 to the east through to Swansea.
- 2.12 The A483 is a dual carriageway road. Street lighting is provided along its length and footways are provided on the northern side of the carriageway to the east of the Ffordd Amazon and on both sides of the carriageway to the west of this roundabout.

Personal Injury Accident History

- 2.13 Collision data in the vicinity of the proposed development site has been obtained by RPS from CrashMap and analysed for the latest five-year period (2019-2023).
- 2.14 The data shows that there is no inherent trend on accident locations, and no accidents occurred in the vicinity of the proposed hydrogen refuelling facility access. On this basis, it is considered that the adjoining highway network currently operates with no significant highway safety issues which could be exacerbated by the development.

3 PROPOSED DEVELOPMENT AND ACCESS ARRANGEMENTS

Development Proposals

3.1 The proposed development is a hydrogen refuelling facility, comprised of the following core components:

- Hydrogen Buffer Storage (500 and 900 bar);
- 4 HGV and bus refuelling bays and car refuelling bays;
- Tube trailer unloading;
- Hardstanding and demountable / containerised storage and welfare buildings, fire walls, boundary fences and gates; and
- Ancillary infrastructure (Chiller, high pressure compressors, air compressor, valve panel, nitrogen cylinders, electrical power supply and critical spares storage).

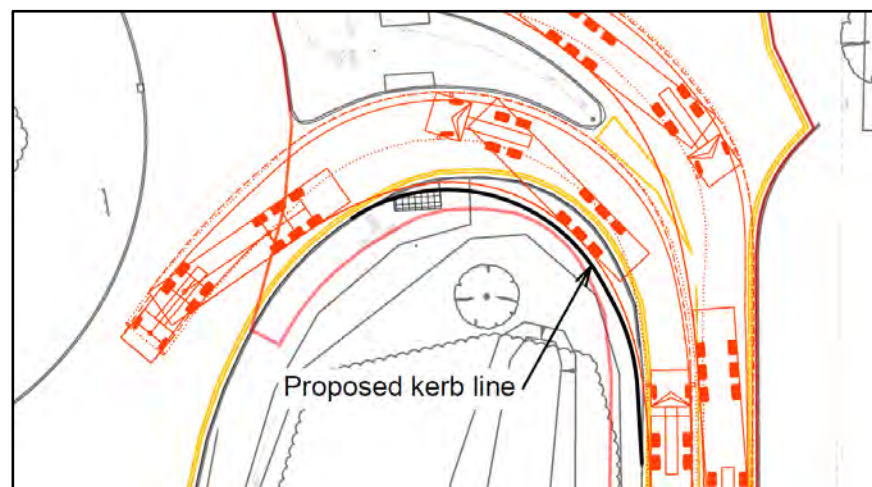
Construction Access

3.2 All construction traffic will access the site from Ffordd Amazon to the west of the site and via an existing private access road which currently serves a small industrial estate. These arrangements will be agreed with the highway officers at NPTCBC prior to commencement.

3.3 **RPS Drawing Number 794-PLN-WWP-00294-DR-003** included at **Appendix 3** shows a 16.5m HGV (as the largest vehicle expected on site during construction) accessing and egressing the site via the existing access road.

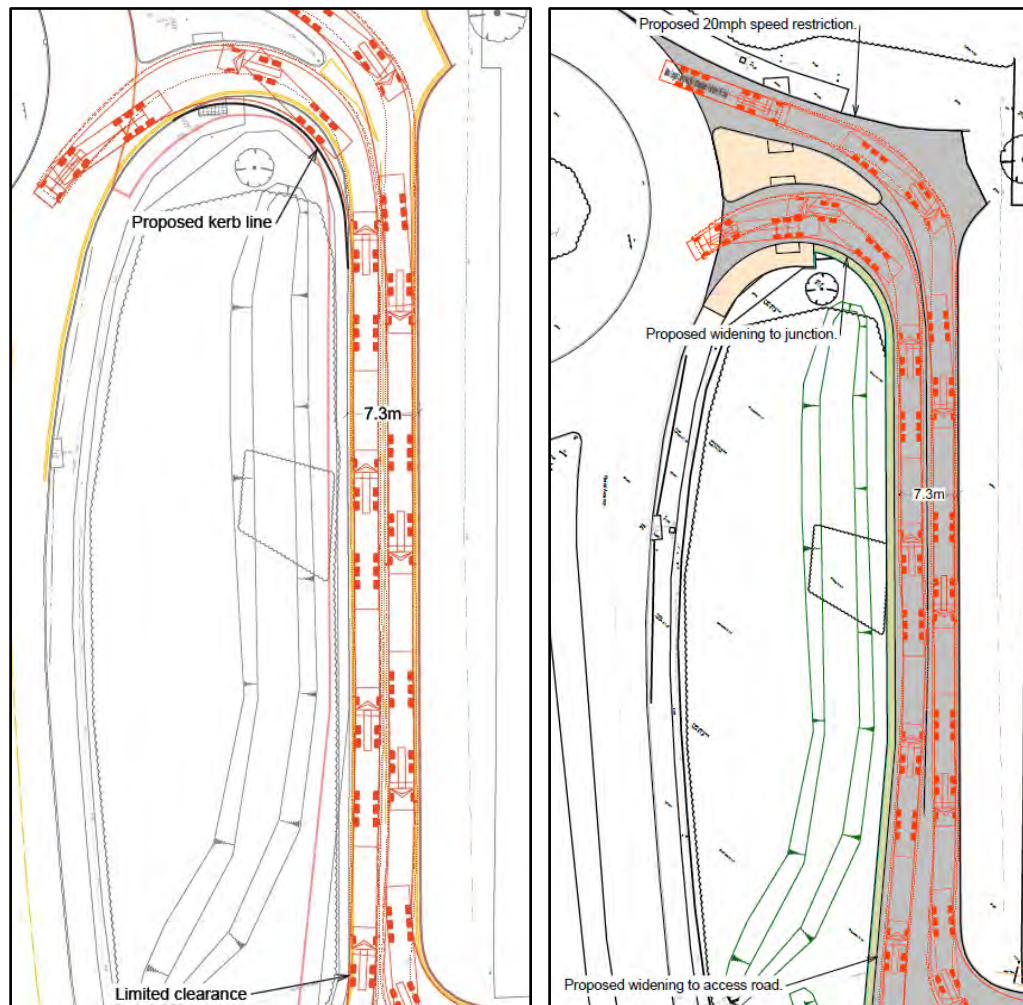
3.4 The swept path however shows that a 16.5m HGV would overrun the carriageway slightly on the southern side of the bell mouth, therefore minor realignment of the radii has been proposed. These works can be completed within the site red line boundary and is shown below on **Figure 2**.

Figure 2 – Swept path site construction access.



- 3.5 Vehicles will then route along the existing access road, which benefits from a 7.3m carriageway. This existing access will also continue to be shared with the users of the existing Industrial Estate during the construction period.
- 3.6 **Figure 3**, shows two 16.5m articulated lorries accessing and egressing via this existing access. It is noted that there is limited clearance along the existing access should two 16.5m articulated lorries access and egress simultaneously. In practice however, the egressing vehicles would hold back until the other had completed this manoeuvre. This would be managed via signage at the site access indicating priority is given to oncoming vehicles, and bankmen, who would be present on site during the construction phase.
- 3.7 Alongside the proposed widening at the bell mouth, proposed widening along the access road will mean that two HGVs could pass each other safely within the carriageway. The proposed widening is shown on **Figure 3** below, alongside the amended carriageway width showing no constraints for HGVs.

Figure 3 - Existing Access Road Swept Path



-
- 3.8 Internal access tracks will be required during the construction phase. The tracks will be constructed using permeable aggregate. It is envisaged that the site will not generate a significant number of HGV movements therefore to reduce unnecessary land requirements, articulated and rigid HGVs will utilise the width of the access tracks and management measures will be implemented to mitigate any potential conflicts.
- 3.9 A construction compound will provide an area for loading and unloading of vehicles and will provide a turning area to allow vehicles to exit the site in forward gear. All delivery drivers and construction workers will be advised of the construction routes prior to making their delivery or commencing work.
- 3.10 It is proposed that temporary signage be located in the vicinity of the site access during the construction period to warn drivers of the site entrance.
- 3.11 Examples of temporary signage is shown below in **Figure 4**.

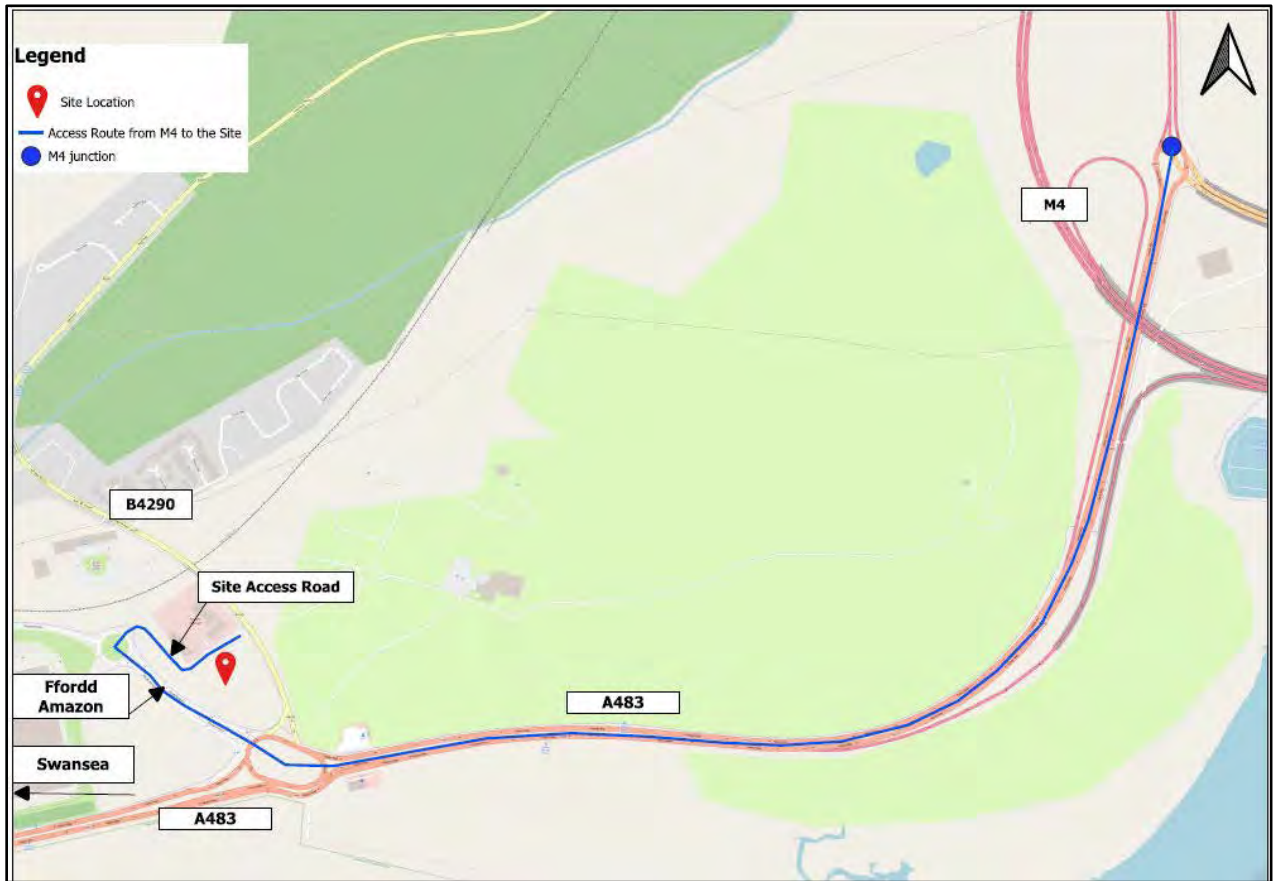
Figure 4: Temporary Signage at Site Access and Public Highway



Construction Routing

- 3.12 The details of the proposed construction routing will be agreed with NPTCBC prior to commencement of construction works. However, it is likely that the vast majority of construction trips (especially HGVs) will arrive to the site from the east via the M4, which is located 1.6km to the sites east.
- 3.13 Vehicles can access the motorway at J42 of the M4 which routes directly onto the A483, from the A483 vehicles would use Ffordd Amazon to access the industrial estate, and then route directly onto the site access road.
- 3.14 The motorway is part of the strategic road network and therefore suitable for larger vehicles.
- 3.15 All construction traffic routeing from the east will utilise the below access route, shown graphically in **Figure 5**.

Figure 5: Construction Access Route (M4 J42 to the Site)



Route Management

- 3.16 It is considered appropriate to avoid routes where vulnerable road users and construction vehicles could conflict. Likewise, it is considered appropriate to avoid routes where scheduled road works and construction vehicles could conflict.
- 3.17 All construction workers and suppliers will be advised to use a Freight Journey Planner such as <https://www.ukhaulier.co.uk/hgv-route-planner> which is designed to help freight operators plan their route for a specified size of vehicle and identify where to stop legally.
- 3.18 The Site Manager or Banksman will keep up to date on scheduled roadworks, events, and incidents in the area. Any major roadworks or events on the preferred route that result in the deviation of the preferred route will be agreed with officers at NPTCBC in advance where feasible.

Route Compliance

- 3.19 Use of the agreed vehicle route for HGVs should be accepted in the main, by the contractor and should be communicated to all individuals associated with the works. It is envisaged that this information will be communicated in the form of a leaflet or email and will include information with regard to times of operation, delivery routes, the call up procedure and delivery slot information.
- 3.20 Any repeated non-compliance of the proposed construction route could result in disciplinary procedures or the termination of the workers / supplier's contract.

Control of Deliveries

- 3.21 All deliveries should be controlled by a delivery booking system which will distribute deliveries across the week and across working hours. Deliveries should not be accepted outside of their designated timeslot, and such deliveries will be asked to re-book, unless there is capacity to accommodate within the specified loading area.
- 3.22 On a weekly basis the Site Manager should evaluate details of the daily profile of deliveries proposed for the upcoming week. Hauliers will be required to contact the site on a daily basis and indicate their delivery schedule for the following day. The proposed deliveries will be checked against the weekly delivery schedule. This will be overseen by the Site Manager to ensure that HGV deliveries are scheduled, ensuring that there is always space at the site to accommodate the necessary plant and deliveries.
- 3.23 When planning deliveries, the following will be considered:
- All deliveries to the site should be restricted to the timings set out within this document;
 - Deliveries will be permitted only in the specified loading area on site; and
 - Material storage areas will be prepared on-site in advance of deliveries to minimise loading and unloading times.
- 3.24 It is anticipated that all deliveries to the site will be organised to take place between the hours of 08:00 - 18:00, Monday to Friday and 08:00 - 14:00 Saturday (subject to confirmation / approval from NPTCBC. Where feasible the contractor will seek to minimise deliveries during the weekday peak hours (08:00- 09:00 and 17:00-18:00).
- 3.25 Sufficient time will be given between deliveries to allow for any delays as a result of the delivery vehicle getting stuck in traffic or the loading/ unloading taking longer than expected and to avoid any vehicles waiting on the surrounding highway network.
- 3.26 The following measures will be implemented to reduce the number of vehicle movements to the site:
- 'Backloading' vehicle operation, where site delivery vehicles are utilised to remove waste materials from the site as part of the same trip, where possible; and
 - Practical re-use of any aggregates on site and recycling of material, where possible.
- 3.27 With proper planning and an efficient delivery schedule, unnecessary vehicle trips to the site will be kept to a minimum.

Construction Programme and Phasing

- 3.28 The proposed construction is scheduled to last up to 12 months. The construction programme and phasing is at present unknown, when a contractor has been established, full details of the construction phasing and programme will be provided to NPTCBC for approval.

Enabling Works

Site Preparation

- 3.29 Site setup is likely to occur for a period of two to three weeks. Site setup is important to mitigating any impacts on the surrounding highway network as well as neighbouring residents and businesses.
- 3.30 The site will remain presentable and tidy at all times. Hoarding or Heras fencing will be erected along perimeters of the site. The fencing will comply with the Health and Safety Authority requirements; and will be well maintained throughout the works to ensure public safety. Further details on the type of fencing proposed, will be provided when a contractor is appointed.
- 3.31 Building inspections to identify hazardous material/asbestos will be undertaken. The purpose of the hoarding is to provide additional security, both to prevent unauthorised personnel from accessing the site as well as providing suitable segregation between pedestrians and the work being undertaken. Lockable gates will be at the entrance to the vehicular access to prevent unauthorised vehicles entering the site.

Site Office

- 3.32 Site accommodation and welfare facilities will be located on site in portable cabins erected on the site on concrete pads.

Potential Impact on Utilities

- 3.33 Utility service diversions and temporary service connections should be carried out during the initial stages of the enabling works. The exact location of these services will not be known until a survey has been carried out post planning.
- 3.34 Prior to works commencing, any existing utility services should be identified and disconnected across the site. Safe access routes would also be identified for vehicles and pedestrians across the site.

Delivery of Plant and Materials

- 3.35 All materials and plant associated with the development process will be stored within the footprint of the site. A loading and unloading area for plant and materials will be provided within the site. It is anticipated that the majority of deliveries will be made via articulated and rigid HGVs.
- 3.36 The following non-road mobile machinery is likely to be used on site:
- Breaker;
 - Dumper trucks;

-
- Tower / Mobile Cranes;
 - Drills / Cutters; and
 - Fork Lift Truck.

4 CONSTRUCTION TRAFFIC GENERATION

- 4.1 This section of the report sets out the estimated volume and type of vehicles that will be generated throughout the construction phase of the development.
- 4.2 It should be noted that the construction programme and corresponding construction traffic strategy are at present unknown. Following the appointment of a construction contractor full details of the construction programme will be communicated to NPTCBC for review.

Construction Vehicles

- 4.3 The trip generation potential of the construction phase of development has been informed through discussion with the Applicant and our experience of delivering similar developments in the United Kingdom.
- 4.4 The construction period is anticipated to last for up to 12 months, with the following types of vehicles expected on site during the construction period:
- Rigid HGV;
 - 80 tonne Crane;
 - 10t-20t HGV; and
 - Articulated / Rigid HGV.
- 4.5 The majority of materials and plant delivery is to be transported to the site via articulated and rigid HGVs.
- 4.6 Deliveries will vary in amount per day during the construction period. It is likely that HGV trips would peak during the site levelling and preparation period, when materials are being removed from site. This set up period is likely to last approximately two to three week. During this period, it is anticipated that there could be up to 50 tipper trucks on site each day. This peak however would be temporary and short lived.
- 4.7 There will be an average of 20 HGV deliveries (10 inbound plus 10 outbound movements) per day over the 12-month construction period. It is envisaged that the majority of movements would be Monday to Friday with only a limited number of movements on a Saturday.

Dwell Times

- 4.8 Delivery vehicles are likely to attend the site for approximately one hour per vehicle. There will be sufficient space within the curtilage of the site compounds to ensure that no vehicles would have to wait on the surrounding highway network.
- 4.9 Further measures that will be employed to control the number and frequency of vehicles arriving at the site are detailed further in **Chapter 5**.

Construction Staff

- 4.10 During construction, there is a balance to be made between the intensity of on-site activity and duration of activity. However, the Applicant estimates that there may be up to a maximum of 50 staff on site per day. The Applicant's experience of similar developments elsewhere suggests

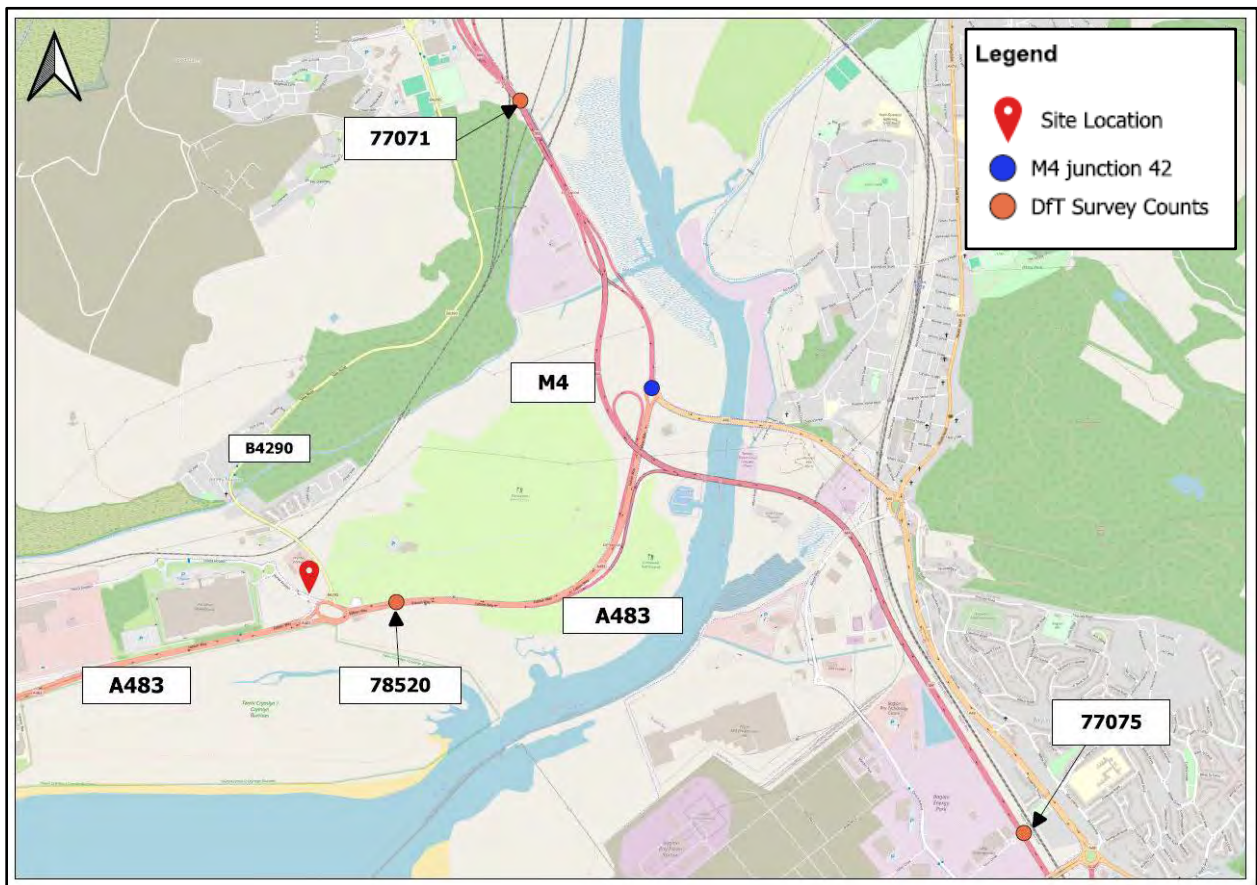
that car sharing is prevalent within the construction industry and can reduce the number of cars on site to 25. This will be achieved through management of staff travel patterns and actively encouraging car sharing.

- 4.11 All staff are anticipated to arrive at the construction site during the 30-minute period preceding the start of the operating day (i.e. 07:30 to 08:00 Monday to Saturday) and depart during the 30 minute period that follows the end of the operating day (i.e. 18:00 to 18:30 Monday to Friday and 13:00 to 13:30 on Saturdays). Staff trips are likely to travel to / from different origins / destinations and hence spread their movement across the highway network.
- 4.12 Provision will be made to enable all vehicles to park within the construction compound to avoid obstruction to the operation of the public highway or access road and this shall be strictly enforced.

Traffic Impact

- 4.13 2022 Annual Average Daily Flow (AADF) data for the A483 and the M4 have been obtained from Department for Transport, (<https://roadtraffic.dft.gov.uk/>). The following counts and their approximate locations are detailed below and shown on **Figure 6**.

Figure 6: DfT Survey Count Locations



- **Count Point 78520** – Along the A483, approximately 260m east of the B4290 / Ffordd Amazon / A483 roundabout.
- **Count Point 77071** - Along the M4 between J43 and J42.
- **Count Point 77075** – Along the M4 between J42 and J41.

4.14 The 2023 AADF data for the total (two way) flows at the three count points is summarised in **Table 1**.

Table 1: 2023 AADF

Location	Count ID	Car / LGVs	HGVs	Total
A483	78520	28,881	875	29,756
M4 between J43 and J42	77071	82,222	4,995	87,217
M4 between J42 and J41	77075	61,510	4,961	66,471

4.15 Estimated trip generation during construction of the proposed development calculates that peak two-way movements would equate to two-way movements would equate to 20 HGV movements and 50 two-way staff car movements. All traffic has been assigned in an eastbound direction along the A483 towards the M4 and in both directions along the M4. This results in an overly robust assessment and is summarised below in **Table 2**.

Table 2: Construction Traffic Flows

Location	Count ID	Car / LGVs	HGVs	Total
A483	78520	50 (0.2%)	20 (2.3%)	70 (0.2%)
M4 between J43 and J42	77071	50 (0.1%)	20 (0.4%)	70 (0.1%)
M4 between J42 and J41	77075	50 (0.1%)	20 (0.4%)	70 (0.1%)

4.16 As expected, the above changes in traffic flows along the A483 and the M4 represent a negligible change in traffic flows, similarly the A483 and the M4 in the vicinity of the site are not in a specifically sensitive location. On this basis, these predicted increases are well below the 'Guidelines for the Environmental Assessment of Road Traffic' which suggest two broad rules that can be used as a screening process to identify the appropriate extent of the assessment area. These are:

- **Rule 1** – Include highway links where traffic flows would increase by more than 30% (or the number of HGVs would increase by more than 30%); and
- **Rule 2** – Include any other specifically sensitive areas where traffic flows would increase by 10% or more.

-
- 4.12 Therefore, the construction traffic as a result of the development will not create a significant impact on the local highway network.

5 CONSTRUCTION TRAFFIC MITIGATION

General

- 5.1 This section of the Construction Traffic Management Plan sets out the mitigation measures that could be employed during construction to minimise the impact of construction traffic on the local residents, businesses, and the local highway network.

Construction Manager

- 5.2 There will be a designated Site Manager to deal with any complaints and enquiries from the general public and any other interested parties. Any changes to the designated Site Manager will be notified to NPTCBC.
- 5.3 The details of the Site Manager (including a 24-hour phone number) will be provided to NPTCBC prior to activities beginning on-site. The Site Manager's details will also be advertised at the site entrance.
- 5.4 The Site Manager for the project will undertake the transport co-ordination role for the site. In this respect, their main responsibilities should include:
- Managing the implementation of the Construction Traffic Management Plan;
 - Vehicle scheduling;
 - Informing local residents, and NPTCBC of the commencement of construction works;
 - Informing local residents and NPTCBC of any major or noise intensive works associated with the construction of the site to avoid / minimise disruption;
 - Checking for scheduled road works, special events and incidents on [Roadworks and road closures](#) | [Traffic Wales](#) websites;
 - Handling any complaints; and
 - Acting as a point of contact for employees, contractors, NPTCBC, and the general public.
- 5.5 The Site Manager should be responsible for keeping neighbours within the site's vicinity informed of the construction progress. In this respect, the Site Manager should ensure that there is adequate liaison between the following key stakeholders throughout the construction period:
- The Contractor;
 - The Developer;
 - Site neighbours;
 - NPTCBC; and
 - Other local stakeholders such as emergency services or local transport providers.

-
- 5.6 Regular review meetings and telecommunication should be held between the Site Manager and local authority. It is envisaged that update meetings/ telecommunication should be held on an ad-hoc basis with an update provided to NPTCBC approximately every six weeks. Furthermore, the Site Manager should provide any monitoring data, delivery schedules, complaints, or breaches of agreements to NPTCBC if requested.

Subcontractors

- 5.7 Individual subcontractors involved in activities such as waste removal should be required to incorporate the relevant requirements from the CTMP into their activities as well as statutory requirements. Any potential sub-contractors will be required to show how they will comply with the CTMP and how targets will be achieved and impacts minimised.

Good Neighbours Policy

- 5.8 The contractor will strive to be 'Good Neighbours', with systems employed to ensure local issues are understood. As part of this, the contractor could sign up to the Considerate Constructor Scheme (CCS).
- 5.9 Communication with local residents and businesses will begin prior to commencement of construction and they will be provided with information on the planned construction schedule including times and contact details by a senior manager based on site.
- 5.10 An induction specific to the development site will be provided to all personnel before construction commences. This will incorporate health and safety, on-site construction works and issues and sensitivities in the context of the surrounding community.

Dust and Dirt Control

- 5.11 The control of dust and dirt is a prime concern for all construction projects, particularly during periods of dry and windy weather. Best practice guidance 'Dust and Air Mitigation Measures' provided by the Institute for Air Quality Management will be utilised to control dust.
- 5.12 Mud and debris on the road is regarded as one of the main environmental nuisances and safety problems arising from construction sites. All HGVs removing spoil from the site will be fully sheeted to minimise the risk of any mud over spilling onto the highway.
- 5.13 Further to this, all skips and storage area for cement, sand and fine aggregates will be sheeted / covered when not in use. All HGVs serving the site will be required to ensure that their wheels have been cleared of mud and debris, with wheel washing facilities provided on site. Similarly, provision will be made for cleaning of the road whenever required.
- 5.14 Pavements and carriageway fronting the access used for the construction will be swept daily, and the need for this will be continuously monitored throughout the day, in light of site operations and weather conditions. Goods, waste material and wheelbarrows will be secured and covered prior to being transported to and from the site to prevent the escape of debris and dust.
- 5.15 The contractor will ensure that the area around the site including the public highway is regularly and adequately swept to prevent any accumulation of dust and dirt.
-

-
- 5.16 The Site Manager will undertake daily inspections of the site and the roads surrounding the site to ensure that dust control measures are complied with. The Site Manager will record and respond to all dust and air quality pollutant emissions complaints and will maintain a log of any complaints and any action taken to resolve the issues.
- 5.17 The frequency of site inspections will increase when activities with a high potential to produce dust are being carried out as well as during periods of prolonged dry or windy conditions.

Fuel Consumptions

- 5.18 The contractor will strive to procure local contractors for the project, thereby minimising transport costs and impact on the local environment. The use of the booking system for deliveries will also help to ensure that the construction site is serviced in an efficient manner which will help to minimise the number of vehicle movements that would be generated.
- 5.19 A further measure that will be employed is encouraging all delivery vehicles to switch off engines as they are waiting at the site, thereby preventing unnecessarily idling vehicles.

Mud on Roads

- 5.20 A wheel cleaning procedure will be used in order to mitigate the amount of mud that could potentially be deposited on the highways by vehicles exiting the site. An area close to the site exit will be utilised for wheel washing prior to vehicles leaving site. A power washer will be used to wash off any mud from the vehicle's wheels, with excess mud/slurry being collected and disposed of.
- 5.21 The wheel wash station will remain on site until the development is complete. The proposed wheel cleaning procedure will consist of:
- Before leaving the site, vehicles will be inspected for any heavy deposit left on wheels. If present, these will be removed manually.
 - Following inspection, all wheels are to be washed down using a high-pressure jet wash until clear of all deposits.
 - Vehicles will be permitted to leave site following approval of the site manager / site representative that the above steps have been completed to a satisfactory standard.
- 5.22 The site will be kept as free of mud as is practical during ground working operations. Machine and wagon trafficking around the site will be kept to a minimum in order to reduce the effects of rain on 'broken' ground.
- 5.23 The construction site access into the site will be secured. The site will be secured whenever construction personnel are not present. Site contact details and out of hours emergency contact details will also be prominently displayed on site hoardings. Daily inspections will be undertaken in the vicinity of the site and on footways to check for potential hazards (including blocked footways and the build-up of rubbish).

Pedestrian Safety Measures

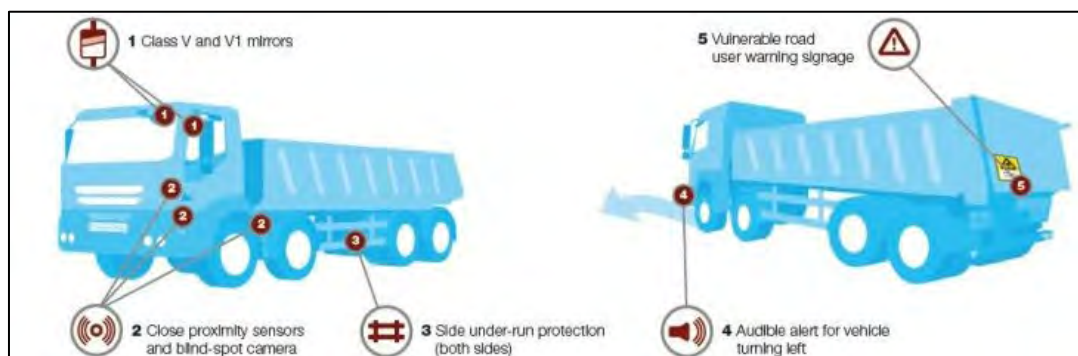
- 5.24 Pedestrian safety throughout the construction programme will be paramount. To ensure pedestrian safety during loading and unloading activity, a Banksman / traffic marshal should be
-

present to minimise the likelihood of conflict with pedestrians. Warning signage will be provided locally to the site to ensure that vehicles, pedestrians, and cyclists are aware that construction activity is taking place. The site will be properly secured, helping to ensure that pedestrians and the general public cannot access the construction site unauthorised.

Additional Measures

- 5.25 Site contact details and out of hours emergency contact details will also be prominently displayed on site hoardings. Daily inspections should be undertaken in the vicinity of the site and on footways to check for potential hazards (including blocked footways and the build-up of rubbish).
- 5.26 Heavy goods vehicles associated with the construction of the development must:
- Have Side Guards fitted, unless it can be demonstrated to the reasonable satisfaction of the Employer, that the Lorry will not perform the function for which it was built, if Side Guards are fitted;
 - Have a close proximity warning system fitted comprising of a front mounted, rear facing CCTV camera (or Fresnel Lens where this provides a reliable alternative), a Close Proximity Sensor, an in-cab warning device (visual or audible) and an external warning device to make the road user in close proximity aware of the driver's planned manoeuvre;
 - Have a Class VI Mirror; and
 - Bear prominent signage on the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.
- 5.27 The Site Manager should ensure that all contractors and fleet operators at the site sign with vehicles over 3.5 tonnes will be required to have the vulnerable road user safety kit fitted, as outlined in **Figure 7**.

Figure 7: Safety Measures



- 5.28 The Site Manager should undertake checks of vehicles accessing the site. In the event that a vehicle arrives at the site and is not fitted with the above safety kit then the vehicle may be refused entry and a non-conformance report completed.
- 5.29 The Site Manager / Contractor should ensure that all contractors and fleet operators accessing the site have received the correct level of training and have had driver license checks.
-

Engagement with Local Residents and Sensitive Sites

- 5.30 The applicant, or applicant representative, will liaise with all neighbouring residents and businesses to ensure they are aware of the construction programme and the development proposals. Communication with local residents and businesses will begin prior to commencement of construction. The appointed Main Contractor will be required to follow best practice 'Considerate Constructor' guidelines and should appoint a Community Liaison Officer (CLO).
- 5.31 The CLO could initially host and attend community meetings. Following the initial meetings, the CLO will compile a list of stakeholders in the area. These stakeholders will be kept informed of progress and planned works on the site through the publication and distribution of progress newsletters which should include details of updates to the construction programme.
- 5.32 Adjacent residents and businesses will be provided with information on the planned construction including times and contact details by the CLO. They will be given the contact details of the developer and will be invited to raise any issues during the construction works. Additionally, the contractor's contact details will be provided on the outside of the site perimeter.
- 5.33 An induction specific to the development site will be provided to all personnel before construction commences. This will incorporate health and safety; on-site construction works and issues and sensitivities in the context of the surrounding community particularly in relation to local schools.

Construction Travel Plan

- 5.34 The contractor will be encouraged as part of the contract to introduce a Travel Plan for its staff to limit the number of private car trips to the site. The Travel Plan will form part of the final Construction Traffic Management Plan and will be agreed with NPTCBC prior to works beginning on site.
- 5.35 There is good accessibility between the site and public transport links which serve the area suggesting that some staff could be encouraged to travel to work sustainably.
- 5.36 The construction site will provide facilities to encourage sustainable travel such as a drying area, storage facilities and secure bike parking. Where staff are required to travel to site by car, they will be encouraged to do so outside the peak traffic hours.

6 SUMMARY AND CONCLUSIONS

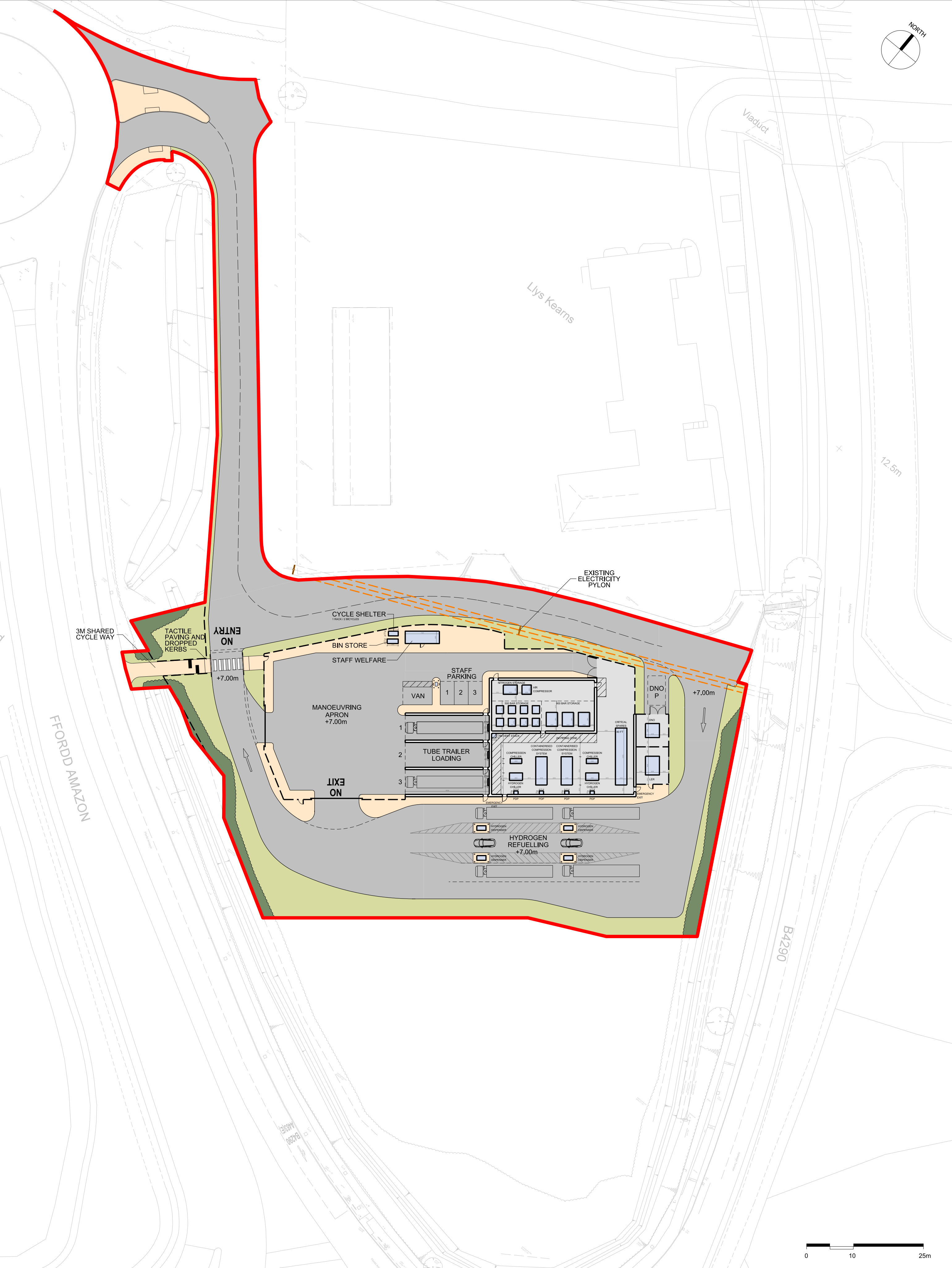
- 6.1 RPS has been commissioned by Marubeni Europower Ltd (the applicant) to produce a Construction Traffic Management Plan (CTMP) to accompany a planning application for a new hydrogen refuelling facility on land east of Ffordd Amazon, located south of Jersey Marine.
- 6.2 The proposed site is approximately 0.9 hectares in size, and is located to the south of Jersey Marine, a small village approximately 5km east of Swansea. The site which is located approximately 1.6km to the west of J42 of the M4, is bound to the south by the A483, to the east by the B4290 and Swansea Bay Golf Course, to the west by Ffordd Amazon and Industrial Park and to the north by a small Industrial Estate.
- 6.3 All construction traffic will access the site from Ffordd Amazon via the A483. These arrangements will be agreed with the highway officers at NPTCBC prior to commencement.
- 6.4 The application is yet to be determined, on that basis, all exacting details on how construction will be progressed are as yet unknown. Notwithstanding the contractor (when instructed) will adhere to all the principles of construction set out within this plan.
- 6.5 Information regarding the timescales of construction will be communicated before construction commences. Any significant changes in the build program will also be communicated to NPTBC.
- 6.6 The vast majority of construction trips (especially HGVs) will arrive to the site from the east via the M4. Vehicles can access the motorway at J42 which routes directly on the A483, from the A483 vehicles would use Ffordd Amazon to access the industrial estate, and then route directly onto the site access road. Vehicles will be met by a Banksman before being directed into a dedicated unloading area, vehicles will then load / unload before exiting the site via the same routes. Use of the agreed vehicle routes will be communicated to all individuals associated with the works.
- 6.7 All construction vehicles accessing the site should book in advance with the Site Manager who will keep a record of the schedule and all deliveries. A Banksman will be on hand to oversee any manoeuvring that does need to occur as well as the loading/ unloading of deliveries. The Banksman will also ensure that, appropriate pedestrian and road safety information is relayed to local users and vehicle checks are made.
- 6.8 The construction process will be managed by the designated Site Manager. Any changes to the designated Site Manager will be notified to NPTCBC. Their responsibilities will include acting as a point of contact for the local authority, stakeholders and members of the public. Further to this they will also be responsible for delivery scheduling, construction route compliance and managing other contractors employed on-site.

Conclusion

- 6.9 Overall, it is considered that the measures and control processes outlined in this Construction Traffic Management Plan are appropriate to overcome the identified constraints associated with the site.

Appendices

Appendix 1 – Site Masterplan



NOTE

1. THIS DRAWING IS COPYRIGHT GSDA LTD.

2. THE CONTRACTOR MUST NOT SCALE FROM THE DRAWING ALL DIMENSIONS TO BE TAKEN FROM DIMENSION STRINGS.

3. WHERE ANY DISCREPANCIES ARE FOUND BETWEEN DIMENSIONS THESE MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECTS FOR RESOLUTION.

4. WHERE DISCREPANCIES EXIST BETWEEN REFERENCE OR ASSEMBLY DRAWINGS & DETAIL DRAWINGS, THE LATTER TAKE PREFERENCE.

LEGEND

RED LINE APPLICATION BOUNDARY

GRASSLAND

FOLIAGE AND TREES

PEDESTRIAN WALKWAY

ROADS

HARDSTANDING

OVERHEAD ELECTRICITY CABLES

PROJECT

SWANSEA HYDROGEN

DRAWING

Proposed Site Plan

FOR PLANNING

SCALE 1:250@A0 1:500@A2

1463 PL011

DWG. NO.

25/01/30

DATE

-

REVISION

25/01/30

Issued for Planning

GSDA

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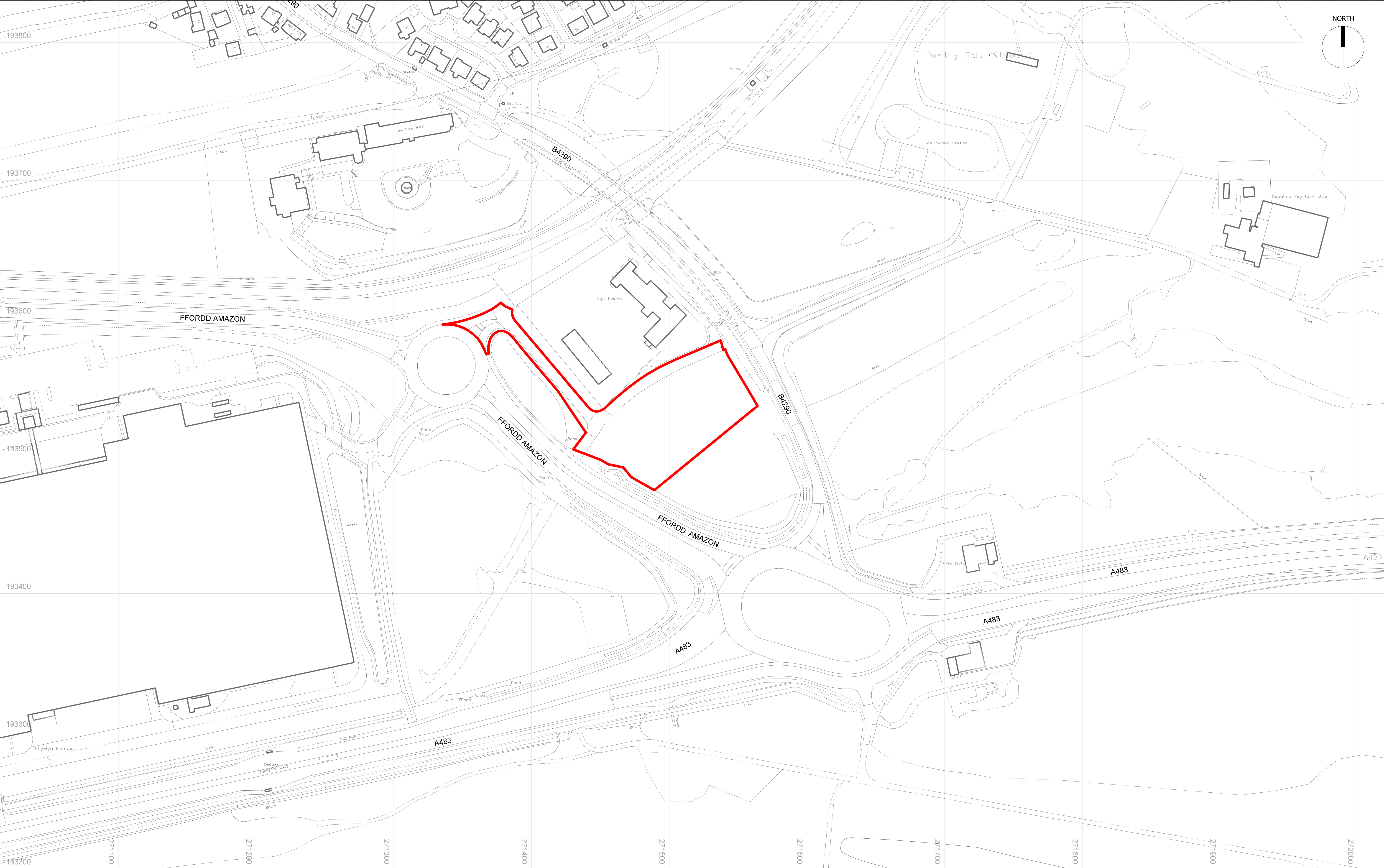
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Appendix 2 – Site Location Plan



NOTE

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ASSEMBLY DRAWINGS & DETAIL DRAWINGS, THE LATTER
TAKE PREFERENCE.

LEGEND

RED LINE APPLICATION BOUNDARY

0 10 50 100 250m

PROJECT					
SWANSEA HYDROGEN					
DRAWING					
Location Plan					
FOR PLANNING		-	24/09/25	Issued for Planning	
SCALE 1:1250@A1	24/10/02	A	24/10/02	Issued for Planning	
1463 PL001	A				
DWG. NO.	REVISION				

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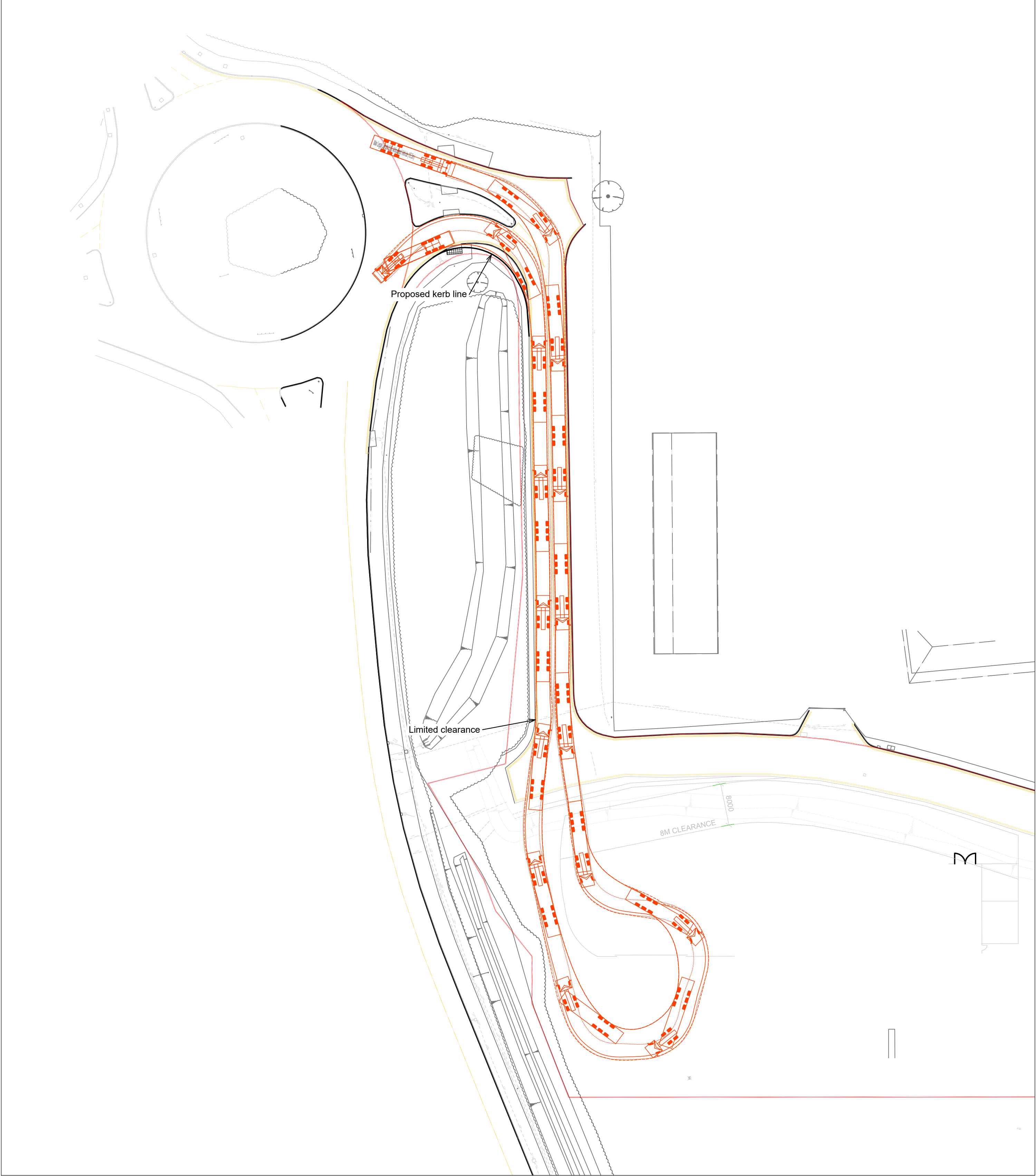
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Appendix 3 – Vehicle Swept Path (Access Road)



Swept Path Key:

Body path

Chassis path

Wing mirror path

Red=forward movement

Blue=reverse movement

FOR
INFORMATION
ONLY

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 6.90s

Kerb to Kerb Turning Radius 6.550m

Key:

Red line boundary

Scale 1:500

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A TETRA TECH COMPANY

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Client

Marubeni Europower Ltd

Project

HyHaul Swansea

Title

Construction Vehicle
Swept Path Analysis

Rev	Description	By	CB	Date

Status

INFORMATION

Drawn By

AJ

PM/Checked by

LS

Project Number

WWP-00294

Scale @ A2

1:500

Date Created

06/11/2024

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Rev

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