

Margam Substation

Transport Statement

On behalf of National Grid Electricity Transmission



Project Ref: 331201497| Rev: P02 | Date: August 2025



Document Control Sheet

Project Name: Margam Substation

Project Ref: 331201497

Report Title: Transport Statement

Doc Ref: P02

Date: August 2025

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For and on behalf of Stantec UK Limited

Revision	Date	Description	Prepared	Reviewed	Approved
P02	August 2025	Revision with updated CLP	FL	TH	AN

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1 Introduction

- 1.1.1 This Transport Statement has been prepared by Stantec UK Limited (Stantec) to support National Grid Electricity Transmission (NGET)'s (the Applicant) proposed development at Margam, Port Talbot. The 'Proposed Development' comprises an extension of the Margam 275kV substation including the erection of a gas insulated switchgear hall (GIS hall) and the demolition of the existing control and amenities buildings to enable the erection of a new amenities building. The purpose of the Proposed Development includes increasing capacity for future demand in the UK, customer demands, energy security, and investing for growth.
- 1.1.2 It is important to recognise the context of the Proposed Development within the broader Tata Steel project which will also provide the new 275/33kV Port Talbot Substation; and installation of two 275kV cable interconnectors between the new Margam Substation and the new Port Talbot Substation. However, the TS pertains exclusively to the new Margam Substation only.
- 1.1.3 A Construction Logistics Plan (CLP) has been produced by Principal Contractor Laing O'Rourke and accompanies this TS. A summary of the headlines of the CLP is provided in Chapter 7 and the full document is included in Appendix D.

1.2 Project Description

- 1.2.1 The Proposed Development will consist of a 275kV GIS substation and ancillary equipment. A detailed overview of the proposed works to the existing Margam 275kV substation compound is provided below:
 - Construction of a GIS hall to house 275kV electrical switchgear and ancillary equipment;
 - The GIS hall to include 12 bays with the provision of 3 spare bays;
 - Mechanically Switched Capacitor with Damping Network;
 - Realignment of the existing downleads and Super Grid Transformer circuits to new bays within the GIS hall;
 - New amenities building to include welfare facilities, meeting room and ancillary office space;
 - Hardstanding for the freestanding diesel generator to be used in a backup situation only;
 - Security fencing;
 - Surface water management and drainage infrastructure including internal drainage systems;
 - Flood defence wall (1150mm high and depth 1000mm) and flood gates at existing access points into the existing substation;
 - Water storage tank (6m high and 6.1m diameter);
 - CCTV
 - Lighting to include 6m medium duty, tilt down tubular steel constructure (exact location to be agreed), 27no. 'label C', 18no. 'label E' and 13no. 'label EX1), dark sky approved;
 - Creation of new designated car parking area (four standard bays and two accessible bays);
 - Landscaping to incorporate native planting / wildflowers;
 - Ecological mitigation to include a wildlife tower and gabion baskets.
- 1.2.2 The TS is divided into the following chapters:
 - Chapter 1: summarises the Site context, background, and Proposed Development



- Chapter 2: summarises the existing national, regional and local planning policy that informs
 the approach and methodology of this TS.
- Chapter 3: outlines the baseline conditions for the local transport network and the existing
 accessibility by all modes of transport
- Chapter 4: details the methodology and results of the trip generation and distribution for the Proposed Development.
- Chapter 5: presents the approach taken and results of the traffic impact assessment.
- Chapter 6: outlines the strategy for accessing the Site during construction and operation.
- Chapter 7: summarises the Construction Logistics Plan (CLP) that accompanies the TS.
- Chapter 8: summarises and concludes the TS.

1.3 Site Context

- 1.3.1 The application Site (hereby referred to as 'the Site') is located adjacent to the existing Margam 275kV mesh substation to the west. The Site within the Red Line Boundary is approximately 15ha and is located within the jurisdiction of Neath Port Talbot Council (NPTC). The Site is located on the east periphery of the TATA Steel Facility approximately 1km to the south of Margam.
- 1.3.2 The existing Margam Substation comprises hardstanding, a maintenance access road, ancillary buildings and electrical infrastructure which includes distribution pylons. Surrounding the Site is undeveloped marshland and scattered trees and shrubs. To the east of the Site is Margam Green Energy Plant, and to the south lies an Industrial Gas Plant (BOC).
- 1.3.3 The Site is accessible via the existing Margam Substation maintenance access road that leads from the A48 Margam Interchange located west of the M4 motorway.
- 1.3.4 Figure 1.1 presents the Site location in the context of the local area.

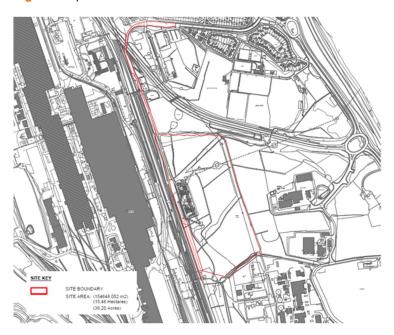


Figure 1.1: Site Boundary



1.3.5 Appendix B presents the Site plan for the Proposed Development within the context of the Tata Steel project and should be referred to for more detailed information regarding the Site location and layout.



2 Policy Context

2.1 Introduction

2.1.1 This chapter outlines the following national, regional, and local transport planning policies relevant to the proposed development which have been considered in preparing this TS:

2.2 National Policy and Guidance

Future Wales: The National Plan 2040

- 2.2.1 Future Wales: The National Plan 2040 was published on 24 February 2021 and is a national spatial strategy that sets out where and how development should take place in Wales to address key national priorities, such as sustaining and developing a vibrant economy, achieving decarbonisation and climate resilience, developing strong ecosystems, and improving the health and wellbeing of communities.
- 2.2.2 It is stated on page 99 under Policy 18 of Future Wales that: "The provision of access to the site for construction and maintenance of the scheme must respond to the environment in which the renewable and low carbon energy projects are located."

Planning Policy Wales (PPW), 2024

- 2.2.3 Planning Policy Wales (PPW) was revised in February 2024 and sets out the government's planning policies for Wales and how these are expected to be applied.
- 2.2.4 Paragraphs 4.1.55 and 4.1.56 of Planning Policy Wales includes the following policy regarding Transport Assessments:

"Transport Assessments are an important mechanism for setting out the scale of anticipated impacts a proposed development, or redevelopment, is likely to have. They assist in helping to anticipate the impacts of development so that they can be understood and catered for appropriately.

Planning applications for developments, including changes of use, falling into the categories identified in TAN 18: Transport must be accompanied by a Transport Assessment. In addition, in areas where the transport network is particularly sensitive, planning authorities should consider requiring Transport Assessments for developments which fall outside of the thresholds set out in TAN 18. Transport Assessments can be required for any proposed development if the planning authority considers that there is a justification or specific need. Transport Assessments provide the basis for negotiation on scheme details, including the level of parking, and measures to improve walking, cycling, and public transport access, as well as measures to limit or reduce levels of air and noise pollution. They should cover the transport impacts during the construction phase of the development, as well as when built and in use. Transport Assessments also provide an important basis for the preparation of Travel Plans. Further guidance on Transport Assessments and Travel Plans is contained in TAN 18."

Planning Policy Wales Technical Advice Note (TAN) 18: Transport

2.2.5 Para D.4 identifies the categories of development for which a transport assessment would be required (shown in full in Appendix A). The Proposed Development does not fall into the identified categories, as it would not generate significant levels of movements or have significant effects on existing patterns or movements. Therefore, a Transport Assessment is not required for this Proposed Development. However, A Transport Statement has been produced to accompany the planning application and confirmed through the pre-application engagement process with Neath Port Talbot Council (NPTC).



Traffic Management Act (2004)

2.2.6 Part 2 of the Traffic Management Act sets out the responsibility of Local Traffic Authorities to manage traffic networks within their geographical area of responsibility. This includes efficient use of the highway network and the requirement to take measures to minimise contributions to traffic congestion.

2.3 Regional and Local Policy and Guidance

Joint Local Transport Plan for South West Wales (2015)

- 2.3.1 The Local Transport Plan (LTP) has been jointly produced by the four local authorities in South West Wales, namely, Carmarthenshire County Council, City and County of Swansea, Neath Port Talbot Council, and Pembrokeshire County Council. The LTP covers a detailed programme from 2015 2020 and provides medium and longer infrastructure aspirations until 2030. The LTP is a statutory document that's sits alongside the Local Development Plans and other policies and plans for each of the local authorities.
- 2.3.2 Page 10 of the LTP states that one of the LTP objectives for a better-connected region is:
 - "To improve the efficiency and reliability of the movement of people and freight within and beyond South West Wales to support economic growth in the City Region"
- 2.3.3 Policy E4 of the LTP states that City Region partners will:
 - "Encourage more sustainable freight distribution through better access to and use of rail, intermodal facilities and ports"
- 2.3.4 As part of the Proposed Development, the Applicant will consider the use of freight consolidation in construction and will look to utilise suppliers who have freight consolidation integrated into their operational structure.

Neath Port Talbot Council Local Development Plan (2011 - 2026)

- 2.3.5 The LDP was adopted by NPTC on 27 January 2016 and is now the development plan for Neath Port Talbot, superseding the Unitary Development Plan, and provides the basis for decisions on land use planning in the County Borough up to 2026.
- 2.3.6 Policy TR 2 Design and Access of New Development states:
 - "Development proposals will only be permitted where all of the following criteria, where relevant, are satisfied:
 - 1. The development does not compromise the safe, effective and efficient use of the highway network and does not have an adverse impact on highway safety or create unacceptable levels of traffic generation;
 - Appropriate levels of parking and cycling facilities are provided and the access arrangements for the Site allow for the safe manoeuvring of any service vehicles associated with the planned use;
 - 3. The development is accessible by a range of travel means, including public transport and safe cycle and pedestrian routes;
 - 4. Transport Assessments and Travel Plans are provided for developments that are likely to create significant traffic generation."



2.3.7 The policies identified above establish the importance of assessing and where appropriate mitigating the impact of the transport movements associated with both the construction and operational phases of the Proposed Development. To satisfy this policy requirement the Applicant has committed to submitting a TS and CLP.



3 Baseline Conditions

- 3.1.1 This chapter provides a detailed review of the predominant transport conditions within the vicinity of the Site. This includes the existing use of the Site, the local and strategic networks providing access to the Site and an accident data review. This provides the context for the assessment of the likely impact of the Proposed Development and of the potential enhancements that may be required in order deliver a development that is sustainable in transport terms.
- 3.1.2 This chapter considers the following elements:
 - Site location and current use;
 - Site access arrangements;
 - Existing conditions of local transport network;
 - Local highway network performance; and
 - Road safety.

3.2 Site Location and Description

- 3.2.1 The Site is located in Margam, Port Talbot in the county borough of Neath Port Talbot, Wales, situated on the east side of Swansea Bay, approximately 13km from Swansea.
- 3.2.2 Figure 3.1 places the Site in a regional context and shows it in relation to locations including Pembroke, Carmarthen, Swansea, Cardiff, Newport and Bristol.



Figure 3.1: Site Location - Regional Context

3.2.3 The Proposed Development is on land between the M4 and the Swansea to London railway line, south of Harbour Way (A4241). There are over ten residential properties located within 20m of the site boundary, with the closest residential properties being within 10m of the existing access road to the north of the Site. Nearby residential areas to the Site include:



- Taibach 3km north;
- Margam Village (Coed Hirwaun) 3.75km south east;
- Cwmafan 5.5km north;
- Baglan 7km north west;
- Larger settlements in proximity to the Site include Port Talbot (4km north west), Bridgend (12km south east) and Neath (11km north west).
- 3.2.4 The Site is located within an industrial area on a wetland habitat complex, the majority of which is designated as a local Site of Importance for Nature Conservation. 150m to the east is a woodland area which separates the Site and surrounding marsh from three industrial plant facilities:
 - Margam Green Energy Plant;
 - Western Bio-Energy; and
 - BOC Gas & Gear Limited.
- 3.2.5 Figure 3.2 presents the Site and the immediate surrounding area.

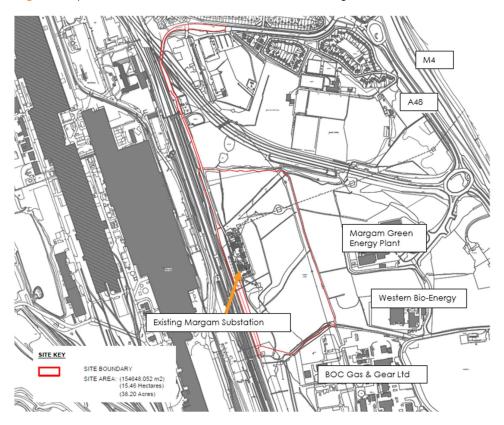


Figure 3.2: Site Location Plan

- 3.2.6 The existing Margam Substation, which comprises of hardstanding, a maintenance access road, ancillary buildings, and electrical infrastructure which includes distribution pylons.
- 3.3 Existing Conditions of Local Transport Network

Highway Network



- 3.3.1 The main strategic routes to the area near the Site are:
 - M4 Motorway: The M4 is a major motorway from Pont Abraham in Carmarthenshire, Wales, to Chiswick, West London. Primary destinations along the M4 include Swansea, Cardiff, Newport, Bristol and London.
 - A48 Road: The A48 is a major road that runs from Carmarthen in Wales to Highnam, near Gloucester. It serves as an important alternative route to the M4, particularly during heavy traffic or roadworks. The A48 passes through several key towns and cities, including Newport, Cardiff, and Bridgend.
- 3.3.2 To access the Site from the strategic highway network the A48 Margam Road and Cefn Gwrgan Road can be utilised.
- 3.3.3 The A48 Margam Road is a designated trunk road directly connected to M4 Junction 38 and Junction 39. The section of the A48 Margam Road from M4 Junction 38 to Groes Interchange is subject to a 50mph speed limit. From Groes Interchange to Cefn Gwrgan Road, the A48 Margam Road is designated as 30mph. The Site can be approached from both directions along the A48. However, it is anticipated that traffic travelling via the M4 will use Junction 38 and approach the Site from that junction, rather than exit and approach via Junction 39.
- 3.3.4 Cefn Gwrgan Road is the primary access to the Site and is a well-maintained private road that provides access to an industrial unit (Solar Heat Energy Demonstrator) in addition to the Site. The road is subject to a 20mph speed limit from A48 Margam Road towards the Steel Works and 30mph from the Steel Works to Margam Road. In addition, there is a pedestrian crossing located half way down Cefn Gwrgan Road that provides a pedestrian link between Brynhyfryd Road and Abbots Close.

Public Transport - Rail

- 3.3.5 The nearest railway station to the Site is Port Talbot Parkway, located approximately 3.5km north of the Site. The station is served by Great Western Railway and Transport for Wales offering frequent services to Cardiff, Swansea, and London Paddington. Trains typically run every 30 minutes during peak times. For regular weekdays, trains typically run from 04:00 to 23:00.
- 3.3.6 Port Talbot Parkway can be accessed from the Site via Harbour Way and Oakwood Road.

Public Transport – Bus

3.3.7 The nearest bus stop is located approximately 1km north of the Site on the A48 at Tollgate Park. There are five bus services that operate at the Tollgate Park bus stop: 7, 82, 87, 901, and X1. The 7 service is a coach service, and the 901 service runs a school/college service. Table 3.1 details the service provided by the 82, 87, and X1.

Table 3.1: Tollgate Park Bus Stop Services

Comileo	0	Doute	Timetable		
Service	Operator	Route	Weekday	Weekend	
82	First Cymru	Margam - Sandfields	Mon – Fri	Sat (08:00 – 19:30)	
	-	_	(08:00 – 19:30)	Sun (No Service)	
87	First Cymru	Neath Victoria Gardens -	Mon – Fri	Sat (06:00 – 20:00)	
	-	Margam (Tollgate Park)	(06:00 – 20:00)	Sun (No Service)	
X1	First Cymru	Swansea – Bridgend	Mon – Fri	Sat (06:30 - 23:00)	
	,		(06:30 - 23:00)	Sun (No Service)	

3.3.8 The abovementioned rail and bus provisions are presented in the context of the Site in Figure 3.3.





Figure 3.3: Public Transport Provisions In Close Proximity to the Site

Cycle and Pedestrian Network

- 3.3.9 A footway is provided along the southern side of Cefn Gwrgan, leading towards the Site. Additionally, a shared pedestrian cycleway is provided along the south/west side of A48 Margam Road. Given the Site's location to the industrial port and the TATA Steel Facility, there are few opportunities to walk directly to and from the Site from nearby residential areas or from public transport infrastructure. The type and nature of the Proposed Development means that walking trips are expected to be minimal.
- 3.3.10 The type and nature of the Proposed Development means that cycling trips are expected to be minimal. However, the EV14 cycle route crosses the Margam Interchange at the M4 Junction 38 and runs along the A48 Margam Road and is a practical cycle route to be used by the workforce to commute to the Site.

Public Rights of Way (PRoW)

3.3.11 The Public Rights of Way (PRoW) network in the vicinity of the Site has been assessed. There are several PRoWs in the surrounding area of the Site as shown in Figure 3.4. There are no PRoWs within the Site boundary or in close proximity that will require diversion or extinguishment as a result of the Proposed Development.





Figure 3.4: Public Rights of Way Network around the Site

3.4 Local Highway Network Performance

- 3.4.1 The Department for Transport (DfT) manual traffic count data has been used to understand the existing traffic flows on the local highway in close proximity to the Proposed Development. Traffic counters No. 84064 and No. 84067 located on the M4 and A48 Margam Road respectively have been utilised:
 - No.84064: 800 east of the Site was used (Grid Ref: 51.56620, -3.74337). The data used from the counter is from a manual traffic count conducted in 2023;
 - No.84067: 850m east of the Site was used (Grid Ref: 51.56369, -3.74167). The data used from the counter is from a manual traffic count conducted in 2023.
- 3.4.2 The DfT counter on the M4 represents the traffic volume near the M4 Junction 38, which is in close proximity to the Site. The section of A48 Margam, where the DfT counter is located, is anticipated to be the designated vehicle route associated for the Proposed Development. Vehicles travelling both inbound and outbound on the M4 to/from the south will use this section of road, as will vehicles travelling inbound on the M4 from the north.
- 3.4.3 A map of the DfT traffic counter locations in relation to the Site is presented in **Figure 3.5**.





Figure 3.5: DfT Traffic Counter Locations (Approximate)

3.4.4 The baseline daily traffic flows for the A48, taken from the DfT traffic counter is set out in Table 3.2 and Table 3.3.

Table 3.2: M4 DfT Traffic Count (84064) Annual Daily Traffic Flow

DfT Traffic Counter No.	84064				
Count Year	2023				
Road Section	M4				
Start Junction, End Junction	M4 Junction 39, M4 Junction 38				
Direction	Northbound Southbound Two-Wa				
Annual Average Daily Traffic Flow (07:00 – 18:00)	23300	27032	50332		
% HGV (Rigid and Artic)	7.8%	7.8%	7.8%		

Table 3.3: A48 Margam Road DfT Traffic Count (84067) Annual Average Daily Traffic Flow

DfT Traffic Counter No.	84067				
Count Year	2023	2023			
Road Section	A48 Margam Road	A48 Margam Road			
Start Junction, End Junction	A4241, M4 Junction 38				
Direction	Northbound	Southbound	Two-Way		



Annual Average Daily Traffic Flow (07:00 – 18:00)	8603	5239	13842
% HGV (Rigid and Artic)	5.8%	7.4%	6.4%

- 3.4.5 As shown in Table 3.2 and Table 3.3, the baseline data indicates that the daily traffic flow on the M4 and A48 Margam Road is relatively high, which is typical for a motorway and major road close to a motorway. Based on professional judgement, both the M4 and the A48 Margam Road appear to be operating within their effective capacities and these levels of daily traffic flow reflect normal operating conditions and do not present any specific operational challenges. Note that the Design Manual for Roads and Bridges (DMRB) no longer provide guidance on capacity for motorways and major roads and therefore a judgement based on professional experience has been made.
- 3.4.6 The annual average daily traffic flows (including weekends) by time of day for the DfT traffic counters, No. 84064 (M4) and No. 84067 (A48), are outlined in Figure 3.6 and Figure 3.7.
- 3.4.7 As shown, in Figure 3.6, there are slight peak periods in the morning and afternoon, roughly between 07:00 08:00 and 16:00 17:00. The southbound M4 daily traffic flow is moderately higher than the southbound daily traffic flow.

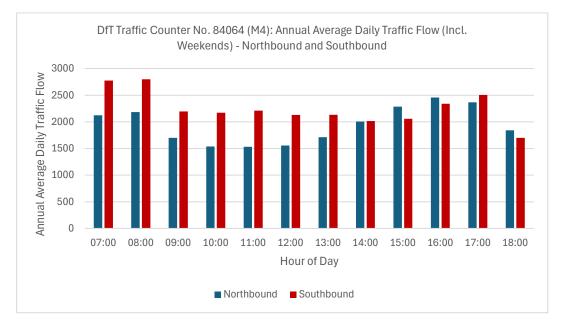


Figure 3.6: DfT Traffic Counter No. 84064 Annual Average Daily Traffic Flow (Incl. Weekends) - Northbound and Southbound

3.4.8 As shown in Figure 3.7, there are peak periods in the morning and afternoon, roughly between 07:00 - 08:00 and 16:00 - 17:00. The northbound A48 Margam Road daily traffic flow is moderately higher than the southbound daily traffic flow.



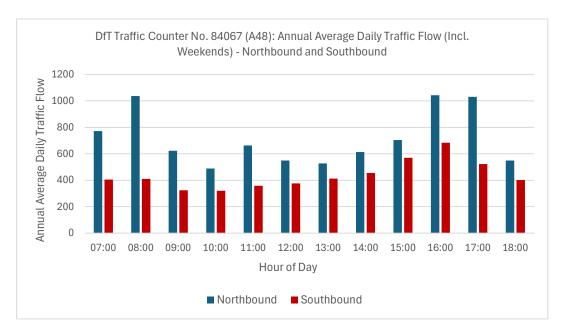


Figure 3.7: DfT Traffic Counter No. 84067 Annual Average Daily Traffic Flow (Incl. Weekends) - Northbound and Southbound

3.4.9 The annual average daily flow (including weekends) by vehicle class for the M4 is shown in Figure 3.8. Cars constitute a significant proportion, approximately 71% of the mode share in both directions. Light Goods Vehicles (LGVs) represent approximately 21% northbound and southbound. Heavy Goods Vehicles (HGVs), including rigid and articulated, account for approximately 8% northbound and westbound.

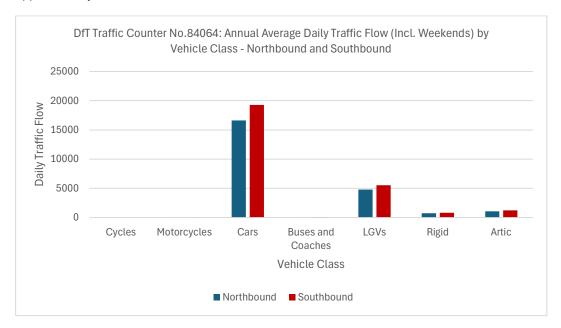


Figure 3.8: DfT Traffic Counter No.84064: Annual Average Daily Traffic Flow (Incl. Weekends) by Vehicle Class - Northbound and Southbound

3.4.10 The annual average daily flow (including weekends) by vehicle class for the A48 Margam Road is shown in Figure 3.9. Cars constitute a significant proportion, approximately 73% of the mode share in both directions. Light Goods Vehicles (LGVs) represent approximately 20% northbound



and 17% southbound. Heavy Goods Vehicles (HGVs), including rigid and articulated, account for approximately 6% northbound and 7 southbound.

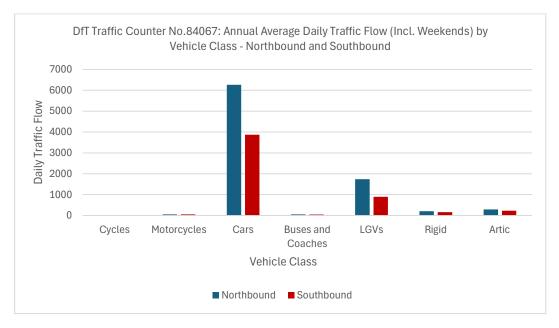


Figure 3.9: DfT Traffic Counter No.84067: Annual Average Daily Traffic Flow (Incl. Weekends) by Vehicle Class - Northbound and Southbound

3.5 Road Safety

- 3.5.1 Road traffic collision statistical data for the road network to be utilised by vehicles associated with the Proposed Development has been obtained from the CrashMap website.
- 3.5.2 All fatal (black flag), serious (red flag), and slight (orange flag) accidents which occurred within the study area and during the latest five-year period (2019 to 2023) were identified.



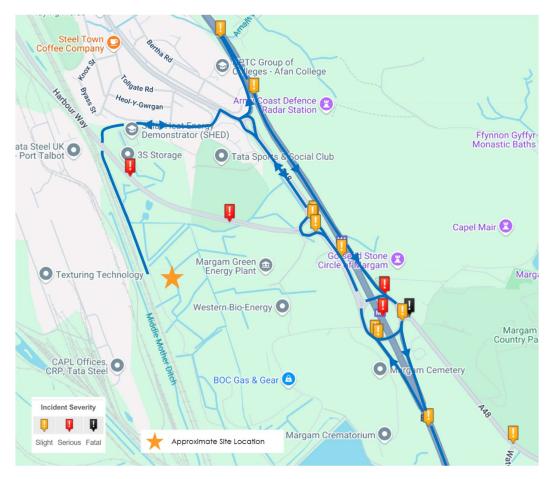


Figure 3.10: Location and Severity
Source: www.crashmap.co.uk, Data Source: DfT Road Safety Data. Background map: Google

- 3.5.3 The roads outlined in **Figure 3.10** consists of the road network in proximity to the Site, including M4, Margam Interchange, A48 Margam Road, and Cefn Gwrgan Road. The slip road from Groes Interchange onto M4 northbound is also included.
- 3.5.4 **Table 3.4** summarises the collision data within the study area.

Table 3.4: Personal Injury Collision Records (2018 – 2022)

	Slight	Serious	Fatal	Total
Cefn Gwrgan Road	0	0	0	0
A48 Margam Road	4	0	0	4
M4	3	1	0	4
Margam Interchange	4	1	1	6

3.5.5 No incidents have occurred in the last five years of available data on Cefn Gwrgan Road and therefore there are not considered to be any existing highway issues on this road.



- 3.5.6 On the A48 Margam Road only four slight incidents were recorded during the latest five-year period. This indicates there are no notable safety concerns for the A48 Margam Road for the Proposed Development.
- 3.5.7 On the section of M4 in close proximity to the Site, only four collisions (three slight, one serious) were recorded during the latest five-year period. This indicates there are no notable safety concerns for the M4 for the Proposed Development.
- 3.5.8 In the last five-year period of available data, six collisions (four slight, one serious, and one fatal) were recorded on the Margam Interchange. This junction has been inspected in more detail to further assess its safety. Figure 3.11 shows a magnified image of Margam Interchange. On closer inspection, it is evident that the collisions on this junction are less densely clustered than initially perceived.

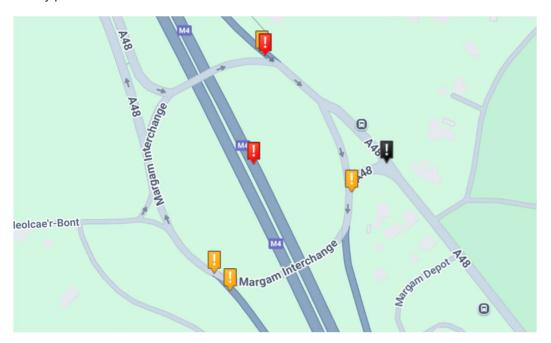


Figure 3.11: Margam Interchange Collision Location and Severity (2018 – 2022)



4 Trip Generation

4.1 Introduction

- 4.1.1 Trip generation for the construction and operation phases of the Proposed Development has been determined using a first principles approach, based on information provided by the Principal Contractor (Laing O'Rourke) through the CLP. Additionally, professional judgement regarding transport and logistics requirements for the Site has been applied.
- 4.1.2 The trip generation associated with the decommissioning phase is anticipated to be no greater than the construction phase, with similar activities taking place but in reverse. This is subject to changes in technology and construction methodologies.

4.2 Construction Trip Generation

- 4.2.1 It is anticipated that a range of construction vehicle types would access the Site to enable construction of the Proposed Development. This includes but is not limited to:
 - Light Goods Vehicles (LGVs) i.e. vans and small flatbeds: movements for plant maintenance, PPE, fixings/small components; and
 - Heavy Goods Vehicles (HGVs) i.e. 2 6 axles rigid or articulated lorries and mobile cranes: movements of materials/component deliveries, plant deliveries, concrete, aggregate supplies, cabling, containerised equipment, fencing etc.
- 4.2.2 The Principal Contractor has indicated that should an Abnormal Indivisible Load (AIL) be required, it will be the responsibility of the haulier, in collaboration with the affected police and the Local Highway Authorities, to determine the routeing and requirements of the AIL movement. These will be determined by the configuration of the load, depending on its height, width, weight, and length. The need for escort vehicles would be determined through this process. The haulier will be required to make use of relevant guidance, such as FORS abnormal load toolkit and the ESDAL or AbHaulier notification process.
- 4.2.3 The Applicant has indicated, based on previous experience of similar substation construction projects, the monthly and daily construction vehicle trips for each construction stage. It is recognised that a flat profile across the programme is unlikely and there will be peaks in activity associated with overlaps in the construction programme and more transport intensive activities taking place.
- 4.2.4 Throughout a typical day during the construction phase, deliveries will be scheduled, planned, and coordinated to avoid congestion. Where feasible, deliveries will be scheduled outside of peak network hours. Additionally, deliveries will be spread throughout the day to further mitigate congestion.
- 4.2.5 Table 4.1 outlines the number of construction vehicles anticipated for the Proposed Development, including the anticipated peak daily trips. It is anticipated that the construction vehicle numbers presented will primarily consist of HGVs, with a small proportion dedicated to LGVs.

Table 4.1: Estimated Construction Vehicle Movements - Monthly and Daily



Construction Stage	One-way Trips (Monthly)	Average One-way Trips (daily)	Average Two-way Movements (daily)	Average Two-way Movements (hourly)	Peak One- way Trips (daily)	Peak Two-way Movements (daily)	Peak Two-way Movements (hourly)
Site Establishment and Enabling Works	400	13	26	2	20	40	4
Piling	300	10	20	2	15	30	3
Foundation / Structure	300	10	20	2	15	30	3
Cladding	200	7	14	1	10	20	2
Fit out, Testing, and Commissioning	200	7	14	1	10	20	2
Project Completion	100	3	6	1	5	10	1

4.2.6 As shown in Table 4.1, even during peak construction the number of two-way movements per hour is not anticipated to exceed four (two arriving / two departing) and is not anticipated to have a significant impact on the local highway network. This is calculated based on the daily construction working hours shown below.

4.3 Construction Workforce Trip Generation

- 4.3.1 The anticipated hours of construction for the Site are as follows:
 - 07:00 18:00 Monday Friday;
 - 07:00 13:00 Saturday; and
 - No works anticipated on Sundays or Bank Holidays.
- 4.3.2 The average workforce and staff requirement is anticipated to be up to 77 people per day. However it is recognised that the construction programme does not have a flat profile and there will be peaks in staff and workforce requirement. The peak workforce requirement is therefore anticipated to be up to 115 people per day, comprising of 73 workforce and 42 staff.
- 4.3.3 Table 4.2 presents an indication of peak and average staff / workforce requirement in addition to number of vehicles generated. An assumption has been made for 100% of staff / workforce to travel to site by car, assuming an average of 1.5 people per car.

Table 4.2: Indicative Construction Workforce Numbers per Day

	Workforce + Staff per Day	Number of Cars per Day
Peak Day	115	77 (154 movements)
Average Day	77	52 (104 movements)



4.3.4 The number of construction worker trips for this scenario is not anticipated to have a significant impact on the local highway network. Additionally, the scheduled working hours for the construction phase results in workers arriving before 7am and therefore missing the AM network peak. Workforce and staff will then likely have a staggered departing profile during the afternoon depending on the activities taking place on site, with limited trips occurring during the PM network peak. Consequently, the workforce trip generation is expected to have a negligible impact on the surrounding highway network.

4.4 Operational Trip Generation

- 4.4.1 Once operational, the Proposed Development is anticipated to be manned infrequently and monitored remotely, and it is not required for any permanent staff to be located on-Site. There will be no intensification to the number of staff working from the amenities building and occasional maintenance activities will be required, typically for equipment maintenance and substation upkeep. This is normally undertaken by maintenance workers together with additional supervisors depending on the complexity of the tasks.
- 4.4.2 Given the electrical nature of the site and health and safety implications, it is often necessary for several staff to be on site during routine operations, maintenance and monitoring. It is therefore anticipated that there will be on average approximately 1 2 visits per month using a LGV or car. Approximately 1 2 operational staff will conduct these operational visits per month. As stated previously, this will be on a temporary basis only and there will be no permanent members of staff on-Site. There may be more visits required for longer duration maintenance activities and/or switching activities or asset replacements.
- 4.4.3 The operational trip generation presented above is minimal and would not be expected to result in a material impact on the operation of the adjacent or wider highway network.

4.5 End of Operation

- 4.5.1 It is anticipated that the minimum operational life for the Proposed Development is approximately 40 years. Equipment can be removed from the Site at the end of the Proposed Development's operational life (c. 2067).
- 4.5.2 The installation of the equipment will be designed in a way that it could be deconstructed non-intrusively due to the above ground nature of the development. Should the Proposed Development be decommissioned, all above ground structures would be removed from the Site.
- 4.5.3 The number of vehicle movements associated with the decommissioning phase is not anticipated to exceed that set out for the construction phase. In terms of vehicle trip generation, it is anticipated that the decommissioning method would be similar to construction but in reverse. Therefore, similar vehicles numbers are anticipated subject to changes in technology and construction techniques.



5 Traffic Impact Assessment

5.1.1 This chapter considers the impact on the road network during the construction and operation of the Proposed Development.

5.2 Construction

- 5.2.1 During the construction phase is anticipated that the likely maximum number of construction vehicle trips on a single day could be approximately 20 trips (40 movements).
- 5.2.2 As stated in Chapter 4, it is estimated on average there will be 77 construction staff / workforce on Site per day, with a maximum of up to 115 staff / workforce on Site at any one time during peak construction. This equates to a peak of up to 77 vehicles per day (154 movements), assuming 1.5 people per car.
- 5.2.3 Table 5.1 shows the anticipated percentage increase on the M4 and A48 Margam Road during the peak construction. The M4 is expected to experience a 0.39% increase, and the A48 is anticipated to see a 3.70% increase (in Average Annual Daily Traffic (AADT)). Both increases are considered to be imperceptible and are within the bounds of daily variation of the respective roads, therefore, having a negligible impact. These figures represent the peak construction vehicle movements, with the majority of the construction phase expected to have a smaller impact on traffic. It should be noted that construction traffic impacts are temporary in nature.

Table 5.1: Traffic Percentage Increase - Peak Construction

Road Network	Baseline Daily Traffic Flow	Peak Construction Traffic Daily Two- way Movements	Peak Construction Workforce Two- way Movements	% Increase in AADT
M4	50332			0.39%
A48 Margam Road	5239	40	154	3.70%

- 5.2.4 To further demonstrate the minimal impact of the peak construction figures, Table 5.2 shows a worst-case scenario where peak construction traffic and workforce would arrive and depart the Site during network peak hours (AM: 07:00 08:00 and PM: 17:00 18:00). This scenario is highly unlikely to occur as workforce hours and construction deliveries will be scheduled to avoid network peaks, however, this scenario is shown to display the largest potential impact the construction phase could have on the local highway network.
- 5.2.5 As can be seen in Table 5.2, even during the highly unlikely worst-case scenario, the impact on the M4 and A48 in percentage terms is not significant.

Table 5.2: Worst Case Scenario Impact for Peak Construction Traffic During AM and PM Network Peaks

Road Network	Peak Daily Construction Traffic + Staff / Workforce One-Way	AM Peak (07:00 – 08:00) Baseline Traffic Flow	AM Peak % Increase in AADT	PM Peak (17:00 – 18:00) Baseline Traffic Flow	PM Peak % Increase in AADT
M4	117	4899	2.39%	4871	2.40%



A48 Margam Road	1177	9.94%	1,554	7.53%
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- 5.2.6 The CLP accompanying this TS details the measures to further reduce the construction traffic impact and minimise disruption to the local highway network. As stated in Chapter 5 of the CLP, to reduce the traffic impact during network peak hours, all deliveries to the Site will be prebooked for agreed delivery slots and fewer slots will be provided during peak hours.
- 5.2.7 The working hours for the construction phase will be 07:00 to 18:00 Monday to Friday and 07:00 to 13:00 Saturday. Therefore, from Monday to Friday the workforce will arrive at Site between 06:00 and 07:00, prior to the AM network peak and will depart across the day depending on the construction activity and the scheduled working hours.
- 5.2.8 Based on the existing highway network performance presented in **Chapter 3**, the construction trip generation figures presented in **Chapter 4**, and the proposed management measures presented in the CLP, it is considered that the impact on the highway network will be insignificant. It should also be noted that construction traffic impacts are temporary in nature and only occur during the construction period.
- 5.2.9 A detailed CLP, secured by way of a condition to the planning permission will be a primary control document for the construction phase and will be submitted and approved by the LPA prior to the commencement of the works on-Site.

5.3 Operation

5.3.1 As noted in the Chapter 4, once operational the development will only require occasional maintenance activities. This would equate to approximately 1 – 2 LGV visits per month. On this basis the vehicle movements associated with the maintenance visits to the Site would have an imperceptible impact on the highway network and would be considerably less than daily variation in traffic flows. Maintenance visits would still be timed to avoid network peak hours.

5.4 End of Operation

5.4.1 At the end of the Proposed Development's operational life, equipment and all above ground structures would be removed from the Site. This decommissioning phase is anticipated to be similar to the construction phase, but in reverse. As such, similar impacts are anticipated subject to changes in technology and construction techniques.

5.5 Safety

5.5.1 The road safety data for years 2019 – 2023 has been obtained using CrashMaps and analysed. As noted in **Chapter 3.5**, there are no notable safety concerns relating to the A697 and B6456 in the surrounding area to the Site.



6 Access Strategy

6.1.1 This chapter considers the approach to the Site access for the Proposed Development in the construction and operational phases of the development.

6.2 Access Strategy

6.2.1 Figure 6.1 outlines the Site access for the Proposed Development, via Cefn Gwrgan Road, a minor road south of the A48 Margam Road.



Figure 6.1: Proposed Route for Operational and Construction Traffic to/from the Site

- 6.2.2 Vehicles will access the Site via the M4 Junction 38, A48 Margam Road, and Cefn Gwrgan.
- 6.2.3 Vehicles departing from the Site, to travel southbound, will travel via Cefn Gwrgan, A48 Margam Road and M4 Junction 38.
- 6.2.4 Vehicles departing from the Site, to travel northbound, will travel via Cefn Gwrgan, A48 Margam Road, and Groes Interchange to join the M4 northbound.

6.3 Margam Delivery Control Point and Site Access

6.3.1 All vehicles accessing the Site will be processed at a vehicle control point/security station proposed on Cefn Gwrgan Rd before proceeding down the single-track lane to the Site. Traffic marshals will control both ends of the lane.



- 6.3.2 All deliveries will be controlled by the Site management team to prevent congestion from delivery vehicles on the surrounding roads. No vehicles will be granted access to site unless booked-in and authorised. All deliveries to report to the proposed deliveries and logistics area for compliance checks and to await space on the Site for processing to prevent congestion adjacent to the Site.
- 6.3.3 **Figure 6.2** presents the access route for construction and operational traffic to the Site and the indicative location of the security station on Cefn Gwrgan. See **Appendix B** for a more detailed plan of the Proposed Development.



Figure 6.2: Site Access Route

6.4 Internal Access

- 6.4.1 Internal access roads within the Site will be constructed. The width and layout of the internal access roads will consider the swept paths of the largest required vehicles and increase at bends and the entrance points. The roads will typically measure between 3.5m and 4.5m wide.
- 6.4.2 Swept-path analysis has been undertaken for 16.5m articulated HGVs, 3.5T vans and fire tender vehicles, and are shown in Appendix C.



7 Construction Logistics Plan

7.1 Introduction

- 7.1.1 To help manage construction vehicle and staff movements a CLP has been produced by Principal Contractor Laing O'Rourke and accompanies this TS. A summary of the headlines of the CLP is provided below and the full document is included in **Appendix D**.
- 7.1.2 It should be noted that the CLP covers the wider Margam / Port Talbot project to deliver the following:
 - The new Margam 275kV GIS substation (the Proposed Development);
 - The new 275/33kV Port Talbot Substation; and
 - Installation of two 275kV cable interconnectors between the new Margam Substation and the new Port Talbot Substation.
- 7.1.3 The CLP encompasses the Margam substation, Tata Steel substation and cable interconnectors, while the TS pertains exclusively to the new Margam Substation only. The TS does not address the new Port Talbot Substation or cable installation, as these are subject to separate planning processes. This chapter, therefore, focuses on summarising the CLP in the context of the new Margam Substation (Proposed Development) only.
- 7.1.4 The strategies proposed in the CLP for the broader Margam / Port Talbot project to mitigate impacts and the methods for implementing, monitoring and updating the CLP, remain applicable to Proposed Development.

7.2 CLP Summary

- 7.2.1 The CLP has been prepared to outline the planned logistic strategies and requirements during construction. It is used to document how the main contractor, Laing O'Rourke, their suppliers, and all interested parties will comply with legislation, discharge their duties, and comply with industry standards and best practice in delivery and logistics management.
- 7.2.2 The overall objectives of this CLP are to:
 - Lower emissions;
 - Enhance safety Improved vehicle and road user safety; and
 - Reduce congestion Reduced trips overall, especially in peak periods.
- 7.2.3 The construction of the Proposed Development will consist of six stages and the construction programme for the Proposed Development will be approximately 36 months.
- 7.2.4 The principal activities for the Proposed Development include:
 - Installation of GIS at Margam 275kV substation. (12 bays with provision for three spare/future bays)
 - Construction of a new MSCDN at Margam 275kV substation.
 - Diversion of the existing overhead line and SGT (Super Grid Transformers) circuits to new bays within the GIS.
- 7.2.5 Table 7.1 details the construction programme for the Proposed Development.

Table 7.1: Construction Programme



Construction Stage	Period of Stage	
Site Establishment and Enabling Works	July 25 – March 26	
Piling	March 26 – July 26	
Foundation / Structure	July 26 – September 26	
Cladding	September 26 – November 26	
Fit out, Testing and Commissioning	November 26 – October 27	
Reinstatement, Demobilisation	November 27 – May 28	
Project Completion	June 28	

- 7.2.6 The Proposed Development is anticipated to be operational from June 28.
- 7.2.7 The CLP has been produced utilising best practice and guidance including the Transport for London (TfL) Construction Logistics Planning Guidance. The CLP also follows Construction Logistics and Community Safety (CLOCS) and Fleet Operators Recognition Scheme (FORS) standards and commits to the following:
 - All deliveries over 3.5t will be FORS Silver and above;
 - ZERO collisions between construction vehicles and the community;
 - Approved Delivery Routes;
 - Continual improvement and education with our teams/suppliers and client;
 - Fully integrated Logistics Teams;
 - Improved air quality and reduced emissions; and
 - Fewer vehicle journeys.

7.2.8 The CLP includes the following chapters:

- Context, Considerations, and Challenges: providing an overview of the site, nature of development and parking, public transport and walking/cycling access;
- Community Considerations and Workforce Interface: outlining the main considerations at a local level that may have an impact on the surrounding community;
- Construction Programme: providing information on the construction programme, stages and methods of construction;
- Vehicle Routeing and Site Access: providing details on strategic and local vehicle routes for construction vehicle movements and site access/egress arrangements;
- Strategies to Reduce Impacts: outlining the planned measures that will be used, and indicating how construction vehicles will be managed to/from and on-site;
- Estimated Vehicle Movements: providing a construction vehicle trip generation profile for the duration of the construction programme;
- Implementing, Monitoring and Updating: identifying how the implementation of the CTMP will be monitored and managed.



8 Conclusion

- 8.1.1 Stantec has been commissioned by National Grid Electricity Transmission to produce a Transport Statement in support of the proposed establishment of an extension to Margam Substation. The TS pertains exclusively to the new Margam Substation only and does not address the new Port Talbot Substation or cable installation as part of the wider Margam / Port Talbot project.
- 8.1.2 The Proposed Development is considered to be well placed to take advantage of the surrounding transport network, including good connections to the A48, M4, and wider trunk road network.
- 8.1.3 The construction and operational vehicle trip generation associated with the Proposed Development will be limited, and as such, it is considered that the development proposals can be accommodated without detriment to the highway network at the construction and operational stages. The M4 is expected to experience a 0.39% increase, and the A48 is anticipated to see a 3.70% increase. Both increases are considered to be imperceptible and are within the daily variation of the respective roads, therefore, having a negligible impact. These figures represent the peak construction vehicle movements, with the majority of the construction phase expected to have a smaller impact on traffic. It should also be noted that construction traffic impacts are temporary in nature and only occur during the construction period.
- 8.1.4 The CLP produced by the Principal Contractor demonstrates that sufficient measures can be put in place to minimise and manage the environmental and traffic impacts from the construction phase of the development. A detailed CLP, secured by way of a condition to the planning permission, will be a primary control document for the construction phase and will be submitted and approved by the LPA prior to the commencement of the works on-Site.
- 8.1.5 Whilst a Transport Assessment is not required, the Proposed Development is compliant with PPW 2024 through the inclusion on an assessment of parking provision, access by a range of transport modes, and impacts during the construction and operational phases. Strategies to reduce impacts are also indicated in the CLP (Appendix D).
- 8.1.6 As detailed in Section 2.3.4, Policy TR2 of NPTC's Local Plan states a series of criteria for the permitting of development proposals. Baseline and forecast traffic generation estimates have been undertaken to measure the impact on the highway network, and an assessment of CrashMap data has shown no notable concerns relating to the A697 and B6456 in the surrounding area to the Site. This TS has evidenced that the Proposed Development is not considered to have an adverse impact on highway safety or create unacceptable levels of traffic generation, and is therefore compliant with point 1 of Policy TR2.
- 8.1.7 As stated in the CLP (Appendix D), appropriate levels of parking will be provided at each work location and overflow parking will be provided to manage any impacts on local roads or communities. The access strategy in Section 6 additionally details the proposed routeing to site and access control points. This is considered to be compliant with point 2 of Policy TR2.
- 8.1.8 The existing conditions of the local transport network are outlined in Section 3.3 of this TS and Section 2.3 of the CLP (Appendix D) and identify access via public transport, walking and cycling. The Proposed Development has considered and detailed access to the Site by a range of travel means, and is therefore compliant with point 3 of Policy TR2.
- 8.1.9 As stated in Section 2.2.5, the Proposed Development does not fall into the identified categories to require a Transport Assessment and is therefore compliant with point 4 of Policy TR2 and with Planning Policy Wales TAN 18.



8.1.10 In conjunction with this and the conclusions stated above, it is considered that the Proposed Development will have a negligible impact in terms of transport, and is therefore compliant with Policy TR2 of the Local Plan.

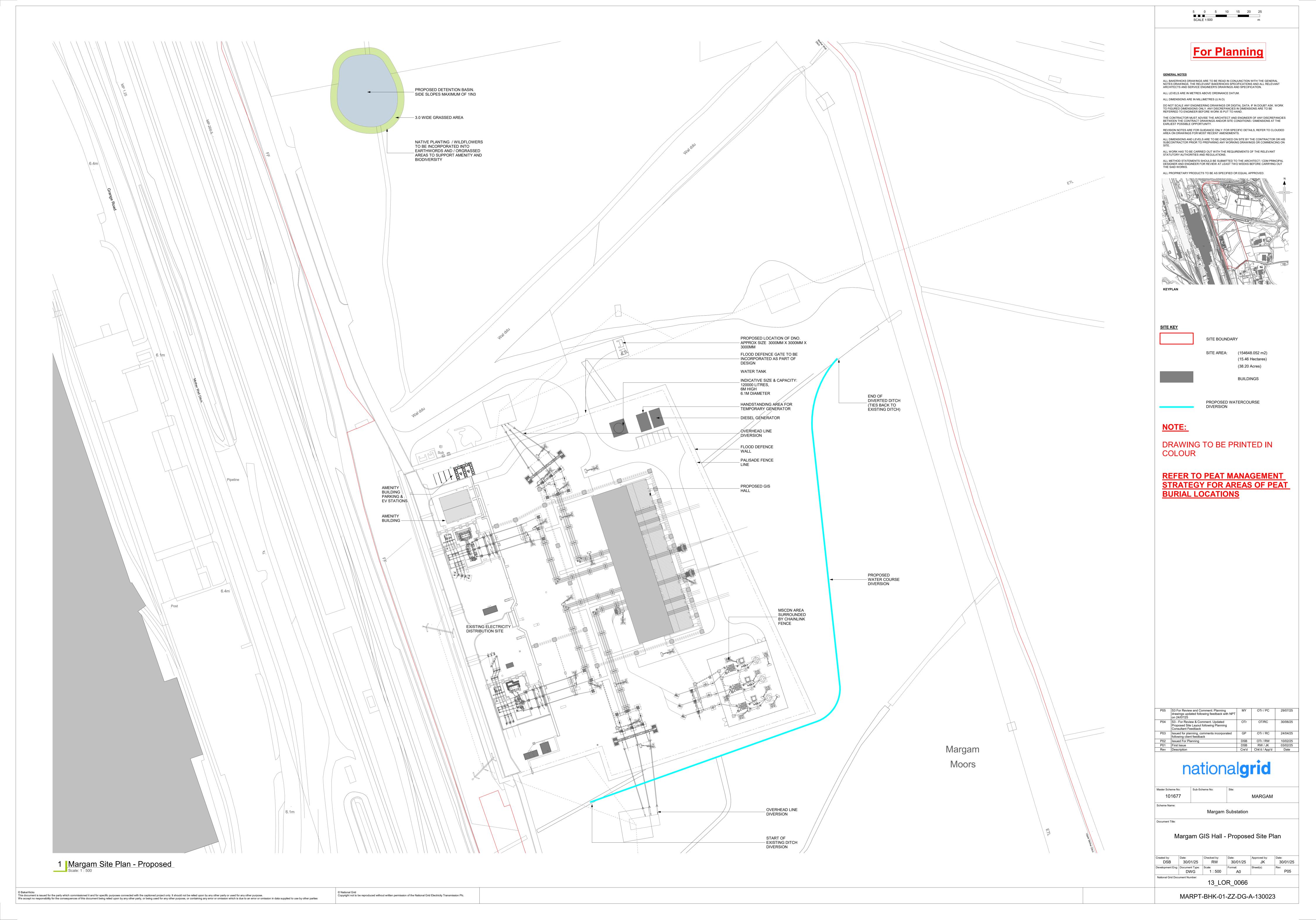


Appendix A Planning Policy Wales TAN 18: Thresholds for TA Requirement

USE	Threshold
Food retail	> 1,000m² gross floor area
Non-food retail	> 1,000m ² gross floor area
Cinemas and conference facilities	> 1,000m ² gross floor area
Leisure facilities	> 1,000m ² gross floor area
Business	> 2,500m ² gross floor area
Industry	> 5,000m ² gross floor area
Distribution and warehousing	> 10,000m² gross floor area
Hospitals	> 2,500m² gross floor area
Higher and further education	> 2,500m ² gross floor area
Schools	All new schools (see D5 below)
Stadia	> 1,500 seats
Housing	> 100 dwellings
Hotels	> 1,000m² gross floor area

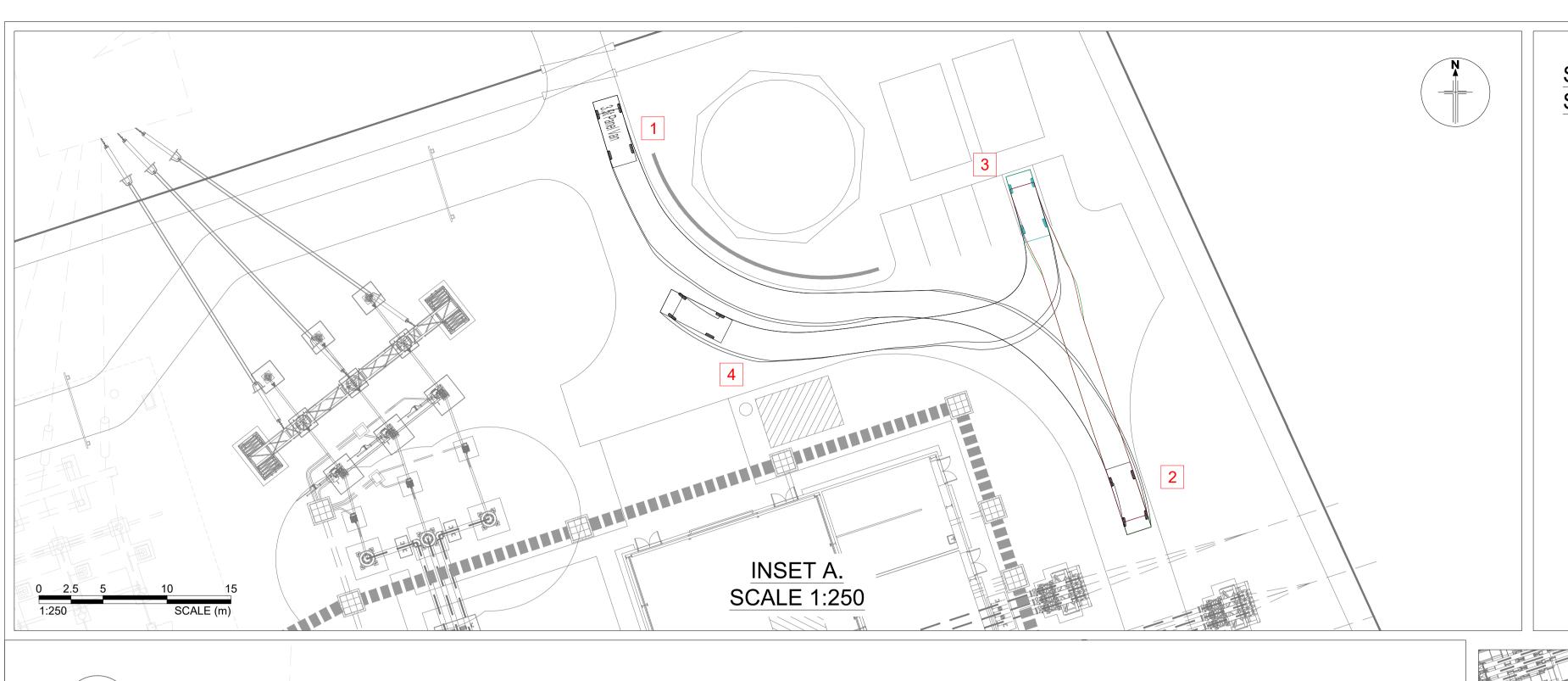


Appendix B Proposed Site Plan

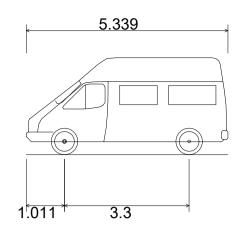




Appendix C Swept-Path Analysis



STANDARD DESIGN VEHICLE PROFILE SCALE 1:10



3.5t Panel Van
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to lock time
Kerb to Kerb Turning Radius

Health & Safety CDM regulations 2015

Significant risks associated with this drawing are identified below and, where applicable, at specific locations on the drawing. Refer to the CDM Regulation 9 Risk Register for full details.

DO NOT CONSTRUCT FROM THIS DRAWING, TO BE USED FOR PRICING / TENDER ONLY

GENERAL NOTES:

1) DO NOT SCALE FROM THIS DRAWING

UNLESS NOTED OTHERWISE, LEVELS (AOD) AND COORDINATES
 (RELATIVE TO ORDNANCE DATUM) ARE IN METRES.
 PENDING ADDITIONAL CONFIRMATION OF VEHICLE TYPE FOR
 SWITCH GEAR TRANSPORT TO CONFIRM ACCESSES TO
 HARDSTANDING AREAS OF GIS BUILDING.

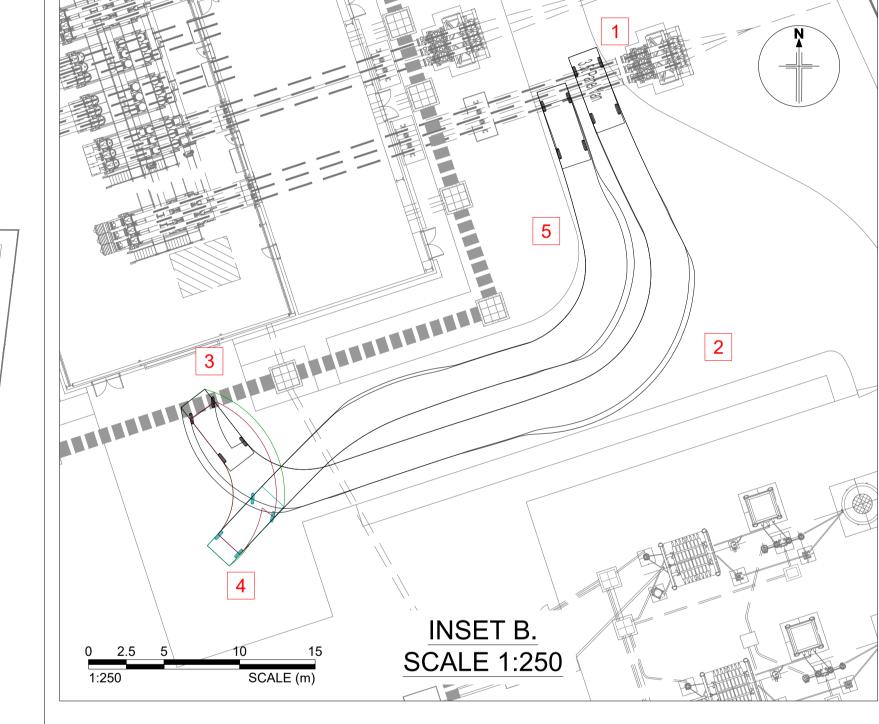
LEGEND:

5.339m 1.986m 2.565m 0.338m 1.986m 4.00s 6.400m



DENOTES VEHICLE ROUTE ORDER

DENOTES RED LINE BOUNDARY



ASSOCIATED DRAWINGS:

- MARPT-BHK-01-ZZ-DG-C-161006 (16_LOR_0690) MARGAM SURFACING LAYOUT SHEET 01 OF 01
- MARPT-BHK-01-ZZ-DG-C-161007 (16_LOR_0691) MARGAM KERBS AND FOOTPATHS LAYOUT SHEET 01 OF 01
- MARPT-BHK-01-ZZ-DG-C-161017 (16_LOR_0697) MARGAM CIVIL
- CONSTRUCTION DETAILS SHEET 02 OF 06
- MARPT-BHK-01-ZZ-DG-C-161029 (16_LOR_0704) MARGAM
- SWEPT PATH ANALYSIS LAYOUT SHEET 01 OF 02 MARPT-BHK-01-ZZ-DG-C-161030 (16_LOR_0705) MARGAM

SWEPT PATH ANALYSIS LAYOUT SHEET 02 OF 02

P03	S3 - FOR REVIEW AND COMMENT	TG	CE / JD	30/05/2025
P02	S3 - FOR REVIEW AND COMMENT	TG	CE / RC	01/04/2025
P01	FOR PLANNING	KA	CE / RC	05/02/2025
Rev	Description	Cre'd	Chk'd / App'd	Date

nationalgrid

National Grid Electricity Transmission plc, Warwick Technology Park, Gallows Hill, Warwick. CV34 6DA

101677		MARGAM / PORT TALBOT
Master Scheme No:	Sub-Scheme No:	Site:

Scheme Name:

MARGAM CONNECTION

Document Title:

MARGAM SWEPT PATH ANALYSIS LAYOUT SHEET 01 OF 02

Created by:	Date:	Checked by:	Date:	Approved by:	Date:
KA	27/01/2025	CE	04/02/2025	RC	05/02/2025
Development Eng:	Document Type:	Scale:	Format:	Sheet(s):	Rev:
	DWG	AS SHOWN	A1	01 OF 02	P03

National Grid Document Number: 16_LOR_0704

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PRELIMINARY

PLAN VIEW SCALE 1:500

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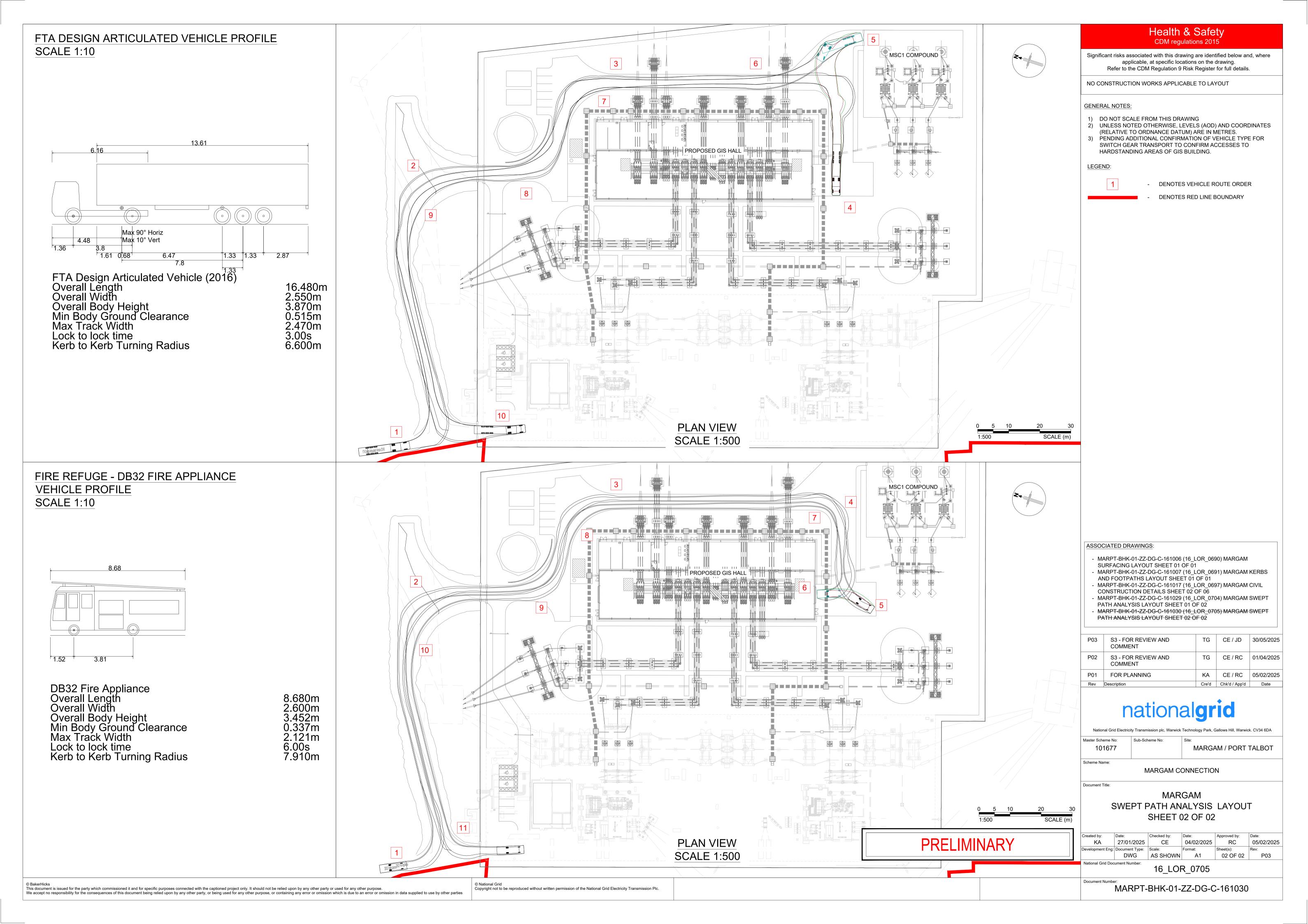
REFER TO INSET A FOR -PARKING SWEPT PATH

ANALYSIS

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MSC1 COMPOUND





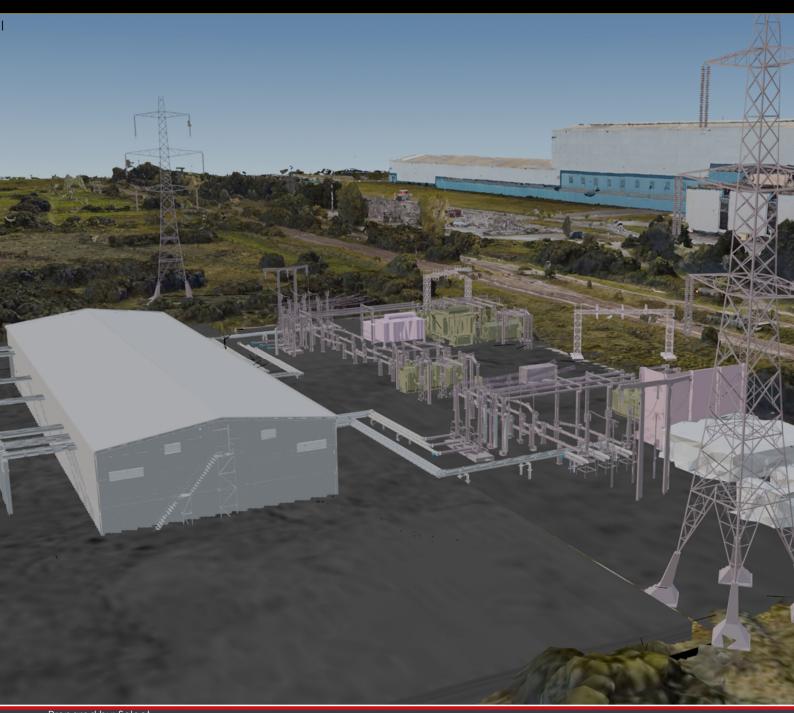
Appendix D Construction Logistics Plan



SELECT LOGISTICS

CONSTRUCTION LOGISTICS PLAN (CLP)

MARGAM / PORT TALBOT SUBSTATION



Prepared by: Select Version: For Information

Revision: P03

Reference: MARPT-LOR-XX-XX-PL-R-090002

Construction Logistics Plan S5 – For review and acceptance Security Classification: Public LAING O'ROURKE

THE POWER OF EXPERIENCE

Development name:	Margam / Port Talbot substations
Landowner:	National Grid / Tata Steel
Site address:	Cefn Gwrgan Rd / Harbour Way Port Talbot
Site postcode:	SA13 2BZ / SA13 2LZ
Existing site use:	Existing substation/ Tata Steel storage
Summary of works:	Construction of 2 new Substations for National Grid, one located at Margam (This CLP) and one within Port talbot at Tata Steel with interconnecting cable routes.
Project Site Hours.	07:00- 18:00 Mon-Fri 07:00- 13:00 Sat

Construction Logistics Manager:	Grant Lean	
Phone number:	07385 494520	
Email:	glean@laingorourke.com	
Logistics providers contact name:	Select Logistics – Robert Carter	
Phone number:	07795 300914	
Email:	RCarter@selectplanthire.com	

CLP Produced by:

Name	Signature	Date
Rob Carter	100	01/11/2024
Practitioner ID:	CLP Accreditation date:	

CLP reviewed by:

Name	Signature	Date
Jon Holder	Ton Holder 01/11/2024	
Practitioner ID: 00079	CLP Accreditation Date: 09th Aug 2019 (Advanced Planning)	



REVISION HISTORY

Rev	Author	Approved by	Date approved	Reason for issue
P01.1	R. Carter	R. Jones	01.11.2024	First Issue
P01.2	R. Carter	R. Jones	26.11.2024	Second revision, to include detail on cable route laydowns
P01	E. Hutchings	R. Jones	04.02.2025	Update – inclusion for early works, ecology mitigation site set up
P02	R. Carter	R. Jones	16.06.2025	General update ahead of planned mobilisation
P03	G. Lean	R. Jones	08.08.2025	Update to address comments ahead of planning.



3

CLP STRUCTURE

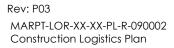
The CLP is divided into the following sections:

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1 INTRODUCTION

1.1 CLP OBJECTIVES

This Construction Logistics Plan has been prepared to outline the planned Logistic strategies and requirements during construction of the Margam connection project. It is used to document how the main contractor, Laing O'Rourke, their suppliers, and all interested parties will comply with legislation, discharge their duties, and comply with industry standards and best practice in delivery and logistics management of the Margam connection project.

The document will reference Port Talbot Substation and the Cable Route as the logistics strategy needs to be viewed and managed as a whole, however it should be noted for planning purposes that only the Margam substation extension is under consideration.

Logistics planning will be considered and implemented over the whole project life cycle to ensure that the CLP reflects the works taking place, it is recognised that this document is a live document and will be updated to coincide with this. As such the CLP will manage all partners in a supply chain, extending beyond the boundaries of Laing O'Rourke.

The CLP sets the guiding principles, driving forces and ingrained attitudes that aid in achieving objectives by coordinating goals, plans and policies between Laing O'Rourke, its partners, and key stakeholders such as clients and local authorities.

The CLP will also be aligned to the Construction Phase H&S Plan, and Delivery Strategy which have the primary purpose of communicating to stakeholders how the requirements of the project will be delivered. It also provides a record at each stage of the project lifecycle of the agreed project strategy and a basis to measure and manage change.

The overall objectives of this CLP are to:

- Lower emissions.
- Enhance safety Improved vehicle and road user safety; and
- Reduce congestion Reduced trips overall, especially in peak periods.

1.2 PROJECT LOCATION

The first substation is in Margam within National Grid land adjacent to a current substation. The land is currently unoccupied and is accessed via Cefn Gwrgan Rd SA13 2BZ. What3Words- **Applies.hoped.stirs**.

The Second is located at Port Talbot integrated iron and steel works, which is situated next to Margam Moors, with Port Talbot Docks bordering the site to the north with the town of Port Talbot, motorway, the main line railway and the PDR forming the eastern boundary.

To the southwest of the site is Swansea Bay and Margam Sands. Access to site is through Tata Steel via Harbour Way A4241, SA13 2LZ.

What3Words-Jumbo.increased.ally







1.3 DEVELOPMENT PROPOSAL

TATA Steel UK Limited (TSUK) is planning to replace their two blast furnaces at Port Talbot with an electric arc furnace. In September 2023, Tata Steel and the UK Government announced a joint investment in state-of-the-art electric arc furnace steelmaking at the Port Talbot site. The installation of the arc furnaces is aimed at reducing operating costs, securing jobs, and making the company more environmentally friendly.

In April 2024, TATA Steel UK Ltd signed a connection agreement with NGESO (National Grid Electricity System Operator) for new supplies to their site in Port Talbot. The objective is to provide new 33kV supplies to TATA Steel UK and establish a connection point for transmission network reinforcement and future customer connections. The deadline for the new supplies is October 31, 2027.



The project aims to engineer, procure, and construct a new high voltage connection for TATA Steel UK Limited. In summary, the project will deliver the following works:

Extension to the existing Margam 275kV substation (Considered within the planning application):

- Installation of gas insulated switchgear (GIS) at Margam 275kV substation. (12 bays with provision for 3 spare/future bays)
- Construction of a new MSCDN at Margam 275kV substation.
- Diversion of the existing overhead line and SGT (Super Grid Transformers) circuits to new bays within the GIS.
- Modifications to interconnecting circuits at Baglan Bay 275kV and Pyle 275kV substations.

Establishment of a new 275/33kV substation at TATA Steel UK Ltd, Port Talbot (Not considered within this planning application).

- Creation of 33kV connections between the new Port Talbot 275kV substation and the user's substation at TATA Steel UK Ltd. (8 bays)
- Provision of a Local Demand Tripping Scheme (specific requirements to be confirmed later).

Installation of two 275kV cable interconnectors between the new GIS at Margam 275kV substation and the new Port Talbot 275kV substation (Not considered within this planning application).

 Includes HDD below Wales Mainline Rail, as well as further HDD's along the route dependant on local ecology and ground conditions.

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1.3.1 Overview- Margam Substation Extension (Considered in this planning application)



As shown in the above image the substation extension will be supported by a temporary construction compound sitting on (predominantly) existing hardstanding. The temporary compound will be utilised for workforce welfare, storage and parking. This is further detailed in section 4.

Overview- Port Talbot Substation (Not considered in this planning application)



The new substation will be constructed within TATA steelworks land at Port Talbot. This area is predominantly brownfield land. The construction will again be supported by a temporary compound, housing parking, storage, and welfare.

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1.3.3 Overview- Proposed Cable Route (Not considered in this planning application)

The below image taken from drawing MARPT-LOR-XX-XX-DR-R-090003, shows the proposed interconnecting cable route along with working areas and compounds. Access is further detailed within Section 4.1.2 and 4.1.4





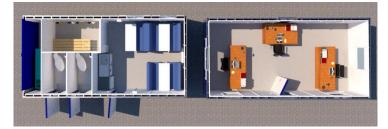
1.3.4 Early Ecology Works Package (Not considered in this planning application)

The Margam substation and horizontal directional drilling (HDD) construction area are ecologically significant, supporting Schedule 1 species of birds, water voles, and other various ecological considerations. Laing O'Rourke intends to begin early works to address the risks posed by these ecological factors. As a result, a temporary site establishment will be mobilised to support the necessary ecological prep works. Following the early ecology work the main works temporary compound for welfare, storage, and parking to be set up in line with the current access dates. This is detailed within the site mobilisation plan MARPT-LOR-XX-XX-PL-R-090001.

The planned commencement date for these early ecological prep works is 03.03.25, with completion expected by 30.06.25.

Initial works will include establishing temporary welfare facilities within the larger hard standing compound area, as depicted below. This will be located on the area of existing hardstanding. The temporary welfare facilities will be in the form of static units consisting of drying rooms, toilets, canteen, and office. Welfare units will be delivered to site by the supplier and offloaded using a lorry-mounted crane (Hiab) under the control of a slinger/signaller, and setup following the suppliers RAMS. Regular servicing of the welfare units will be undertaken by the providers, at intervals as demanded by the project to ensure cleanliness and suitable for hygienic use. A cleaner will be employed to maintain the temporary welfare units on a regular basis as the project requires. Additional facilities will be added / reduced during the Early works phase as required by project demands.







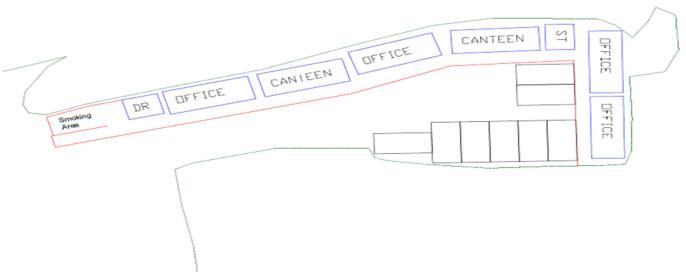
Early works site laydown and welfare.

MARPT-LOR-XX-XX-PL-R-090002

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The temporary welfare will be moved from the above position to the newly formed car park area to allow for the ground to be prepared for the final main welfare cabin setup. Welfare units will be moved by the supplier, transported to the new location (Position 2 as depicted below), and offloaded using a lorry-mounted crane (Hiab) under the control of a slinger/signaller, and setup following the suppliers RAMS. Regular servicing of the welfare units will continue as required.



Setup and location of Temporary Welfare setup, including provision of additional units as required



2 CONTEXT, CONSIDERATIONS AND CHALLENGES

2.1 POLICY CONTEXT

This CLP has been produced to comply and align with the below policies.

TRAFFIC MANAGEMENT ACT (2004)

A section of the Traffic Management Act (2004) part 2, highlights the duty of local traffic authorities in managing road networks within their ownership; including the efficient use of the local network as well as their ability to adopt measures when necessary to avoid the occurrence of heavy traffic congestion.

NATIONAL PLANNING POLICY FRAMEWORK (2018)

The National Planning Policy Framework (NPPF), produced by the Department for Housing, Communities and Local Government (July 2018), sets out the Government's planning policies. As a result, almost all existing national guidance in the form of Planning Policy Guidance (PPGs) and Planning Policy Statement (PPSs) have been revoked, although the accompanying guides largely remain relevant. Government guidance is now published as an online resource in the form of National Planning Practice Guidance (NPPG). Transport policy is dealt with in the 'Promoting Sustainable Transport' section. Paragraph 103 states that 'Significant development should be focused on locations which are or can be made sustainable through limiting the need to travel and offering a genuine choice of transport modes. The NPPF suggests that a key tool for achieving the aims is that all developments that are likely to generate a significant amount of movement should be required to produce a travel plan.

TFL CONSTRUCTION LOGISTICS PLAN GUIDANCE (2017)

This guidance document seeks to ensure that CLPs are developed of a high quality are produced to minimise the impact of construction logistics on the road network. The document provides detailed advice on writing each section of a CLP, from policy through to planned measures. It is noted that well-planned construction logistics will reduce:

- Environmental impact: Lower vehicle emissions and noise levels
- Road risk: Improving the safety of road users
- Congestion: Reduced vehicle trips, particularly in peak periods
- Cost: Efficient working practices and reduced deliveries

CONSTRUCTION LOGISTICS AND CYCLIST SAFETY (CLOCS)

The Transport Research Laboratory published the 'Construction Logistics and Cyclist Safety' (CLOCS) report in February 2013. CLOCS aims at achieving a visionary change in the way the construction industry manages work-related road risk. This is being achieved through three industry-led work streams:

- Improving vehicle safety through design and manufacture of safer new vehicles and
- Appropriate safety equipment for existing vehicles
- Addressing the safety imbalance in the construction industry by ensuring road safety is considered as important as health and safety on-site
 - Encouraging wider adoption of best practice across the construction logistics industry by
 - Developing a common national standard and a new norm

CLOCS has developed the "CLOCS Standard for Construction Logistics: Managing work-related road risk" which has become a common standard for use by the construction logistics industry. Implemented by construction clients through contracts, it provides a framework that enables ownership in managing road risk which can be adhered in a consistent way by fleet operators.



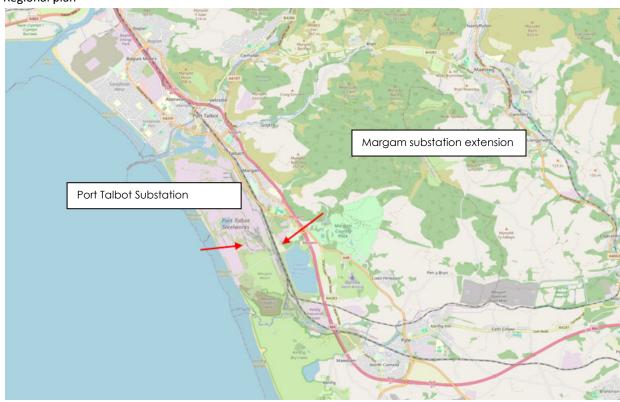
MARPT-LOR-XX-XX-PL-R-090002

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2.2 SITE CONTEXT

• Regional plan

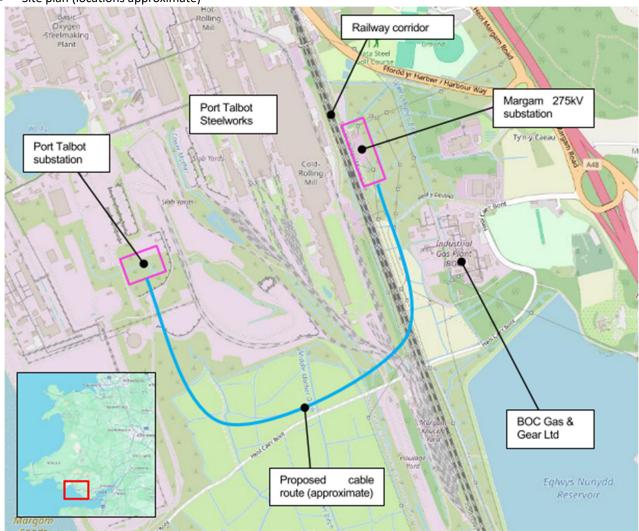


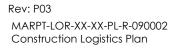
Local context plan





• Site plan (locations approximate)







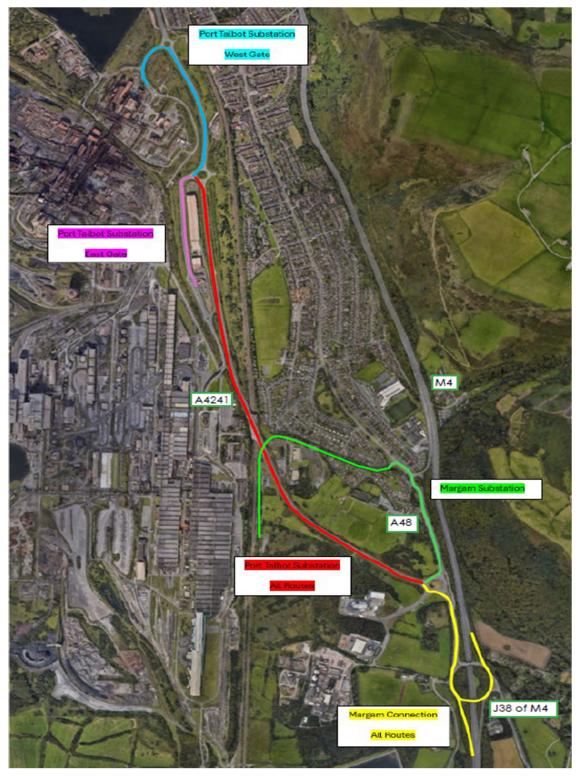
2.3 LOCAL HIGHWAYS, PUBLIC TRANSPORT CYCLING & WALKING

2.3.1 HIGHWAYS, PUBLIC TRANSPORT AND FOOTWAYS

Each Site Entrance is located within 2 miles of the M4 Junction 38 (Yellow Route).

Margam is accessed from A48 leading to Cefn Gwrgan Road (Green Route).

Port Talbot via A4241 Harbour way (Red Route). See section 4 for more detailed vehicle access routes.

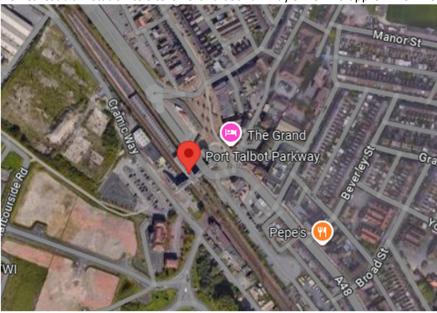




2.3.2 RAILWAY/UNDERGROUND

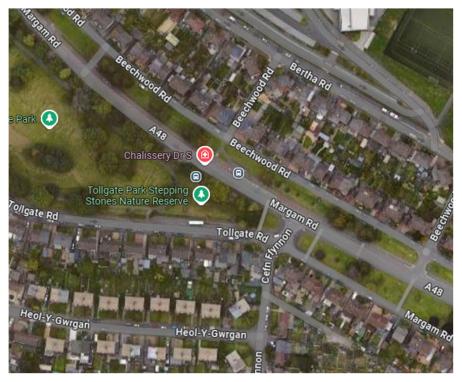
Margam substation is located next to South Wales mainline with directional drilling works being undertaken for the cable routing under the tracks.

The nearest train station to site is Port Talbot Parkway SA13 1RU approx. 4.6 miles.



2.3.3 BUS ROUTES

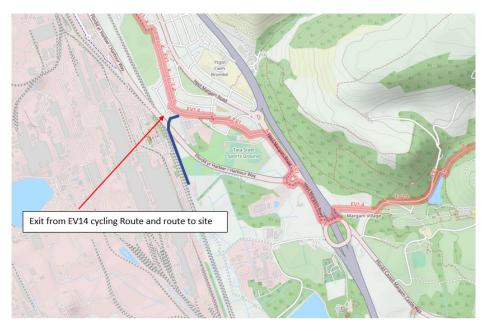
The nearest bus routes is located on Margam Road providing the following services- 7,909, x1 Cymru clipper and 82,87 service.





2.3.4 CYCLING

Whilst not expected to be the main method of commute to the project, EV14 cycle route crosses nearby access roads from junction 38 of the M4 and Laing O'Rourke do expect a number of local workforce to utilise the cycle route to site, as shown below



2.3.5 WALKING

From the bust stops identified within section 2.3.3 the site at Margam is approximately a 12 minute walk, as shown below. The site within TATA steelworks is not accessible directly by foot.







2.3.6 **CLOCS & FORS**

FORS helps businesses improve operator safety, fuel efficiency and vehicle emissions. It also helps embed economical operations throughout. Put simply – FORS is a voluntary accreditation scheme that is an effective way to demonstrate to clients you are a high-performing operator who seeks to instil industry leading best practice.

CLOCS is a national Standard that requires all stakeholders in construction to take responsibility for health & safety beyond the hoardings. It demands collaborative action to prevent fatal or serious collisions between vehicles servicing construction projects and vulnerable road users: pedestrians, cyclists, and motorcyclists.

Whilst working we will commit to the following:

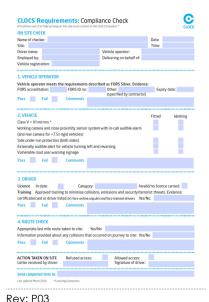
- All deliveries over 3.5t will be FORS Silver and above
- ZERO collisions between construction vehicles and the community
- **Approved Delivery Routes**
- Continual improvement and education with our teams / suppliers and client
- Fully integrated Logistics Teams over ALL our projects
- Improved air quality and reduced emissions
- Fewer vehicle journeys

In the last 5 years, more than 28,000 pedestrians, cyclists, motorcyclists were injured in a collision with a construction related vehicle in Britain. Laing O'Rourke has been working to reduce this in and around its sites through the CLOCS (Construction Logistics and Community Safety) programme. In 2013, CLOCS was set up to protect vulnerable road users in and around Greater London, and Laing O'Rourke has supported the programme since its inception by implementing the CLOCS standard across our Greater London sites. With construction activity set to increase in the coming years and due to the success of the programme in London, our Health and Safety team has expanded the CLOCS programme to a national level. This means that all our UK sites will now be working to the CLOCS standard. Richard Byrne, Health, and Safety Leader - Building and Specialist Businesses, said:

"We consider CLOCS to be fundamental to how we establish our projects and manage the risk to vulnerable road users posed by construction related vehicles. The implementation of the CLOCS programme in Greater London has had a significant impact in reducing incidents between vulnerable road users and construction related vehicles. Some local authorities have seen a 47% decrease in incidents due to applying the CLOCS standard to progressive planning and procurement policies. "Laing O'Rourke is committed to supporting this national expansion by implementing the CLOCS standard. at all our UK workplaces."

Laing 'O Rourke's, Select Logistics team and site management will carry out spot checks and formal audits to ensure that the supply chain is compliant with CLOCS. Details will be published and reviewed monthly.

Example of Monitoring and Audit Check List









2.4 COMMUNITY CONSIDERATIONS & WORKFORCE INTERFACE

2.4.1 LOCAL AND NATIONAL POLICY

- Neath Port Talbot council
- Construction Logistics and Community Safety (CLOCS)
- Fleet Operator Recognition Scheme (FORS)
- Building a better future for freight. Construction Logistics Plans (CLP)

2.4.2 SCHOOLS, HOSPITAL

There are no schools in the local vicinity of site so not requiring specific control measures to be put in place.

The nearest hospital with a minor wound's treatment centre approx. 4.8 miles from both sites.

Neath Port Talbot Hospital

Baglan Way Port talbot SA12 7BX

The nearest A&E hospital is 12 miles from site.

Princess of Wales Hospital

Coity Road Bridgend CF31 1RQ

2.4.3 NEIGHBOURING SITES

Margam Substation is being built directly adjacent to National Grids current 275kv substation. Port Talbot substation is within Tata Steel and accessed via a designated road network.

The installation of the 275kv cable interconnectors between the new GIS at Margam 275kv substation and the new Port talbot 275kv substations runs through National Grid land, BOC land and requires HDD below Wales Mainline Rail into Tata Steel. The cable route will be accessed predominately via TATA steelworks and the Margam construction site entrance. There will be a section of cable route within BOC owned land that will be accessed from the South as outlined in section 4 of this document.





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STAFF PARKING AND WELFARE – Margam substation extension

Staff Parking will be provided at each work location adjacent to the welfare facilities and not impact local roads or communities.

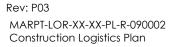


Parking and welfare facilities for Margam Substation including induction centre shown above, additional overflow carparking is proposed on Cefn Gwargan Road, this CLP will be updated once use has been confirmed, a walkway will be provided from the overflow carpark to the Margam welfare units.

STAFF PARKING AND WELFARE - Port Talbot 2.4.5



Parking and welfare facilities located in tata Steel for Port Talbot substation.





2.4.6 Site Security – Margam

The site perimeter will be protected by 2.4M V-mesh hoarding with dedicated vehicle and pedestrian access points, CCTV will also cover site and further details will be within SMP (Security Management Plan MARPT-LOR-XX-XX-PL-R-090021)

Margam site entrance





3 CONSTRUCTION PROGRAMME

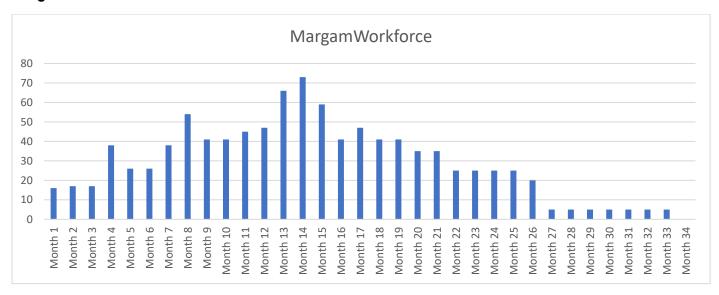
3.1.1 Construction summary – As of May 2025

Construction Stage	Period of Stage
Site Establishment and Enabling Works	July 25 – March 26
Piling	March 26 – July 26
Foundation / Structure	July 26 – Sep 26
Cladding	Sep 26 – Nov 26
Fit out, Testing and Commissioning	Nov 26 – Oct 27
Reinstatement, Demobilisation	Nov 27 – May 28
Project Completion	June 28

3.1.2 Workforce Histogram

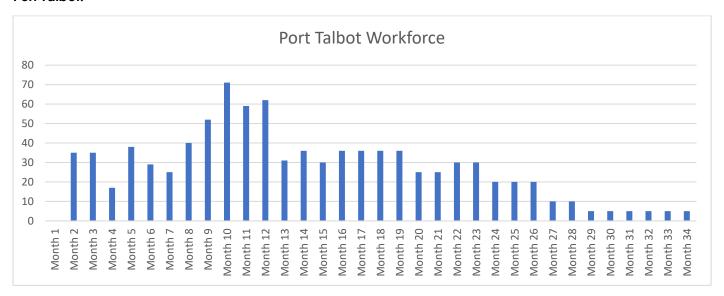
The below histogram shows expected workforce numbers across the two sites. The dates shown reflect the programme as of September 2024. The numbers shown do not include staff across the two sites, which are expected to peak at 42 on each site.

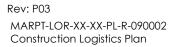
Margam:





Port Talbot:







4 VEHICLE ROUTING AND SITE ACCESS

4.1 Access to site entrance locations from main road network.



Vehicle route network – Note Margam Substation Extension accessed via route 'A'

4.1.1 Margam delivery control point & Site access

All vehicles accessing Margam site will be processed at a vehicle control point proposed on Cefn Gwrgan Rd (shown as 'A' above) before proceeding down the single-track lane to site, with either end controlled by traffic Marshals. A 2.4M V-Mesh fence will be put in place along the road adjacent to the golf course to prevent access.

A traffic Management scheme will be implemented along Cefn Gwargan Road to manage vehicle movements to and from site, refer to Appendix A. A walkway will be implemented from the public highway on Cefn Gwargan Road, to the site welfare entrance point.

A temporary over bridge will be required to the North of the Margam Welfare site, spanning the Upper Mother Ditch

Wheel washing will be implemented during the earthworks phase and tyre checks carried out to ensure material is not transferred to the public road network. Road sweepers will be deployed if and where necessary. See section 5.1.6 for more information.









Margam Holding bay.



Walkway installed alongside golf course



INCLUSION + WELLBEING

Port Talbot Construction Access Plan



The image above details the road network within TSUK, access from the public highway via route D and K.

4.1.3 **Port Talbot Control Point**



All vehicles entering Port talbot will be processed and given drivers induction with vehicle routing through TATA Steel site either before proceeding to the security barrier, or by TSUK security if agreed. Signage will be installed within TATA steelworks to direct vehicles.

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4.1.4 Cable route access – BOC Land

When undertaking the civils construction associated with the cable route, as well as installation of the cable, there will be a requirement to access the construction area to the east of the rail lines as shown below, due to high pressure gas mains and sensitive ecological areas, this will need to be accessed from the South. Any construction activities undertaken within TATA steelwork land will be accessed via TATA local road networks.



BOC land access point

Access along Heolcae'r-Bont road will be subject to survey an alternative approach is shown below, which will require engagement with Network Rail and upgrades to the crossing point.



Alternative approach to BOC land



Wheel washing will be implemented during the earthworks phase and tyre checks carried out to ensure material is not transferred to the public road network. Road sweepers will be deployed if and where necessary. See section 5.1.6 for more information.

5 STRATEGIES TO REDUCE IMPACTS

Planned Measure Checklist	Committed	Proposed	Considered	
Measure influencing construction vehicles and deliveries				
Safety and environment standards and programmes	X			
Adherence to designated routes	X			
Delivery scheduling	X			
Re-timing for out of peak deliveries			X	
Re-timing for out of hours deliveries			X	
Use of holding areas and vehicle call off points		Х		
Use of logistics and consolidation centres		X		
Measures	s to encourage sustainal	ole freight		
Freight by water*	N/A	N/A	N/A	
Freight by rail*	N/A	N/A	N/A	
Mat	erial procurement meas	ures		
DfMA and off-site manufacture	X			
Re-use of material on site	X			
Smart procurement	X			
Other measures				
Collaboration with other sites in the area	X			
Implement a staff travel plan			X	

^{*} If site, consolidation centre or holding areas are within 100m of foreshore of navigable waterway or rail freight siding.

5.1 Measures influencing construction vehicles and deliveries.

It is understood that the timely management of deliveries is key to the success of the project and in minimising disruption to local stakeholders.

During the works, weekly logistics planning meetings will be held with all the contractors to ensure their deliveries are scheduled, planned, and coordinated to avoid congestion. The project will utilise a Delivery Management System (DMS) utilises for the booking and scheduling of deliveries, which aids visibility of the planned contractors' delivery dates and times, locations of delivery, and offloading facility required.

All deliveries will be controlled by our site management team to prevent congestion from delivery vehicles on the surrounding roads.

No vehicles will be granted access to site unless booked-in and authorised. We will require subcontractors to strictly adhere to a just-in-time delivery methodology for loading out to the respective workface. This protocol will be embedded into the supply chain and trade contractor contract documents and agreed in detail at pre- and post-contract meetings.



This process will be managed and coordinated by the DMS (Datascope); this is a live and interactive system linking the project and the supply chain, and provides environmental and sustainability reporting for the project.

- a) It enables suppliers to request their preferred time slots and receive confirmation of their allocated slot
- b) Provides greater visibility for all application users
- c) Provides advanced notice to gate personnel and allows for a more efficient flow of site traffic
- d) Facilitates more efficient operations
- e) Enables planning of daily allocation of banksmen and plant
- f) Prevents congestion on adjacent streets
- g) Provides a detailed record of all deliveries, should follow-up investigations be needed in the unlikely event of a breach in security
- h) All delivery vehicles to be CLOCS & FORS compliant.
- i) Packaging proposals are to ensure that waste is minimal.
- j) All deliveries to report to the proposed lorry holding area for compliance checks and to await space on site for processing to prevent congestion adjacent to the site.

5.1.1 DATA SCOPE (DMS)

As part of our commitment to National Grid we are committed to using a delivery management system for all vehicles coming onto the Project.

DataScope's Delivery Management System is an online contractor and supplier portal which allows for dynamic management of all site deliveries throughout the logistics life cycle.

Our online Delivery Management System is a simple yet efficient way to book, track and manage your site's deliveries. The system is made bespoke to our site requirements and specific needs allowing gates, lay-down areas, allocate delivery slots, off-loading Crane /Forklift etc.

The Logistics Team will be working based on `NO BOOKING' /`NO DELIVERY' to ensure we have controlled delivery system on site.

DataScope builds on our templated solution to build you a delivery booking form that meets your exact requirements.



High level of system administration



Custom delivery booking form



CO2 calculations & FORS database validation



Management of deliveries and delivery schedule



Custom reporting options



All supply chain contractors will be contractually required to use the project delivery management system, failure to book all vehicle movements using this system will result in transport being denied access to the project.

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5.1.2 SAFETY AND ENVIRONMENTAL STANDARDS

- a) CLOCS Refer to Section 2.3.4 Cycling
- b) All suppliers must be registered with FORS with a minimum silver standard
- c) For further HSE standards and programme requirements please refer to the project H&S Plan.

The highest level of transport safety, vehicle loading/ off loading and logistics operations will be accepted. A non-exhaustive list of standards required is:

- All construction transport will need to achieve minimum standards.
- Logistics plans and detailed risk assessments taking into all points of the logistics strategy will be supplied by the supply chain.
- Delivery, plant, and labour forecasting for 1 month; 3 months; 6 month and overall contract duration will be supplied by the supply chain.
- All supply chain logistics and lifting teams will be trained to Construction Plant Competence Scheme (CPCS) standard and authorised by the principal logistics team.
- Supply chain will conform to all exclusion and authorised access requirements including permitted access to Haul Rds. and Loading Bays
- All plant and equipment will be maintained, inspected and in fit state for purpose with records held and issued to the principal logistics team.
- Working at height hierarchy will be followed in all operations including vehicle off loading and loading.

5.1.3 Considerate Constructors Scheme

Laing O'Rourke will register the Site under the Considerate Constructors Scheme. This scheme is a voluntary code of practice that ensures contractors and sub-contractors carry out their operations in a safe and considerate manner and with due regard to passing pedestrians, road users and neighbouring properties.

The Code of Considerate Practice describes the basic expectations of registration within the scheme and outlines five key aspirations related to these requirements. The five key aspirations are:

- Care about appearance.
- Respect the community.
- Protect the Environment.
- Secure everyone's Safety.
- Value your workforce.

These Expectations outlined in the code include:

- Careful consideration to be given to the impact of construction on neighbours and the public, including in relation to parking, deliveries and works on the public highway.
- Promoting respectable and safe standards of behaviour and dress from the workforce.
- Enhancing and properly maintaining the appearance of the site to give a positive impression of the construction industry.
- Minimising the impact of vibration, and air, light and noise pollution and reducing waste.
- Embedding attitudes and behaviours that enhance safety performance and protect the public and workforce; and
- Providing and maintaining high standards of welfare for the workforce and caring for their health and wellbeing.







INCLUSION + WELLBEING Rethinking safety through

MANAGEMENT OF OUT OF PEAK DELIVERIES

All deliveries will be booked in with enough allowance to be safely off loaded and distributed to final location within authorised working hours.

At no point will materials be authorised to be left in Haul Rds./ Loading Bays or unspecified storage areas.

All deliveries to site will need to be pre-booked for agreed delivery slots. Fewer slots will be provided during peak times. Slots for quiet deliveries will be provided outside normal site hours when needed and in compliance with Local Authority consent. Daily logistics meetings will take place with all site stakeholders and agreement on delivery slots will be scheduled well in advance as per Voyage Control booking procedure.

MANAGEMENT OF OUT OF HOURS DELIVERIES 5.1.5

Abnormal loads will be received and removed from the project as detailed by the transport constraints imposed by the local authority. A Section 61 variation will be obtained in advance and local stakeholder informed.

5.1.6 MANAGEMENT OF PUBLIC HIGHWAYS

The following measures will be employed to prevent mud and site run off from contaminating public roads and completed sections of the works.

- Provision of cleaned hard standings to all site access roads.
- Provision of wheel washing facilities at all site exit points.
- Visits by road sweeping vehicles attending the site entrance areas, adjacent roads, and approach roads to the site. Adequate sheeting of muck away vehicles
- Provision of welfare facilities for operatives to change before leaving site.
- The site entrances will be regularly maintained with regular washing down at the site entrance.

Winter working - provision of road and footpath gritting and clearance services to site entrance roads and local roads to minimise potential delays at the site entrance.

5.1.7 **DESIGN FOR MANUFACTURE AND ASSEMBLY**

Reducing delivery numbers and effective delivery management are key factors in successful delivery of the project. Off-site manufacture of prefabricated components has been considered through a smart design and procurement strategy.

5.1.8 MATERIAL PROCUREMENT MEASURES

The following will be considered as part of a smart procurement strategy when appointing suppliers and subcontractors.

- Minimisation of the number of vehicle movements.
- Promote collaboration with other suppliers to minimise the number of deliveries to site.
- Type of delivery vehicle specification considering the safest and most suitable vehicle, with the most appropriate offloading equipment.
- Efficient site off-loading process and distribution strategy
- Waste minimisation and reduction in packaging
- Material collection and recycling by suppliers under a "take back scheme".
- Focus on material scheduling to avoid over ordering and generation of waste material. Include materials that are precut to size (off-site) rather than using standard sizes.

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WASTE MINIMISATOIN AND MANAGEMENT

The key aim will be to minimise the impact on waste streams through elimination of waste by design, minimising waste at source and recycling waste where practical to the benefit of reducing construction traffic movements. It is also to ensure legislation and environmental best practice is adhered to in disposal of non-recyclable waste.

Where the design permits, it will be the intention to have elements prefabricated and finished off-site to minimise packaging.

A site-specific Waste Management Plan (SWMP) has been prepared and will be updated and controlled from the start of the pre-construction stage and sets out the procedures for managing and controlling waste through the construction period. The plan will specifically identify types of waste generated, how waste will be reduced, reused, and recycled.

Laing O'Rourke will appoint contractors and suppliers ensuring that waste is correctly recycled and disposed of appropriately.

The construction logistics manager will be primarily responsible for the effective removal of waste from site. Wherever possible all waste will be segregated into separate waste stream containers on site subject to available space. If this is not possible, waste will be transferred to recycling stations using established waste management and recycling contractors for separation into recyclable waste streams off site.

Materials and waste would be managed in accordance with the targets set in the Sustainability Statement submitted as part of the planning application. LOR propose to adopt the use of prefabricated elements, and standard profiles and sections which can be easily assembled and dissembled for reuse elsewhere, where possible. Materials efficiency would be integrated with the waste hierarchy principles adopted, such as identifying opportunities to reuse existing materials and reducing constriction waste on site via appropriate benchmarks. Local material selection and procurement will be explored and is a sustainability target for the design team.

Materials selection and procurement will also be informed by the increasing availability of healthy certified material, where feasible, including but not limited to materials and products that:

- Meet testing and emission standards for low or zero VOC as defined by Building Research Establishment's Environmental Assessment Method (BREEAM), Leadership in Energy and Environmental Design (LEED) and/or WELL.
- Meet the toxic materials reduction standards set by the WELL standard.
- Are sustainably sourced, for example, 100% of timber and timber products should be sourced from accredited Forest Stewardship Council (FSC) or Programme for the Endorsement of Forestry Certification (PEFC) source.
- Have low Global Warming Potential (GWP) or zero Ozone Depletion Potential (ODP)
- Are Cradle to Cradle Certified Products

It is proposed that the waste management will be carried out by a specialist waste management contractor. Duties will include.

- Supply & removal of bins -General/ mixed construction/ metal/ plasterboard/ COSHH
- Supply & removal of skips -As above
- Management of staffing to ensure site remains tidy which contributes to a safer working environment.
- Site clear up notices -costs contra charged to contractors.
- The management of waste will be in line with group policy and hierarchy which focuses on the importance of segregation and recycling.

Construction generates a very large amount of waste annually with a sizeable proportion of material simply thrown away without being used.

It is important to minimise waste by:

- PREVENTION of waste
- If there is waste. PREPARE FOR RE-USE 2.
- 3. Next consider RECYCLING
- If it can't be recycled, then think of OTHER RECOVERY (for example, for energy) 4
- 5. Last resort - DISPOSAL in landfill

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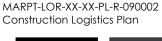
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Why?

- Avoid environmental harm: reduction, reuse and recycling waste minimise the environmental effects of disposing waste to landfill.
- Reduce costs: the true cost of waste is more than just the disposal cost and is made up of:
- The original purchase price of the material.
- Cost of unloading, handling, storage, and transport material around site.
- Collecting waste/damaged materials, reloading, moving and storage of waste on site.
- Cost of disposal of waste.
- Cost of replacing damaged/wasted materials.

DO	DON'T
Prevent	Burn or bury waste – it's ILLEGAL.
Store materials neatly to avoid damage/loss and keep in packaging until needed.	Leave materials unprotected and where they
(protection).	are likely to be damaged by rain or mud (etc.).
Think of ways to reduce waste created on site and where	Open new cans/pallets before the ones in use are empty.
appropriate, implement them.	Mix different types of waste – it prevents recycling.
PREPARE FOR RE-USE	Put waste materials into the wrong waste container.
Keep significant off-cuts for use elsewhere. Re-use materials	Leave materials at risk from site traffic.
until not fit for purpose. Re-use materials for alternative purposes.	movements.
RECYCLE	
Segregate waste for recycling where possible and store in the correct container until removed from site.	
Ensure skips are labelled clearly.	

Segregation of waste streams such as hazardous and non-hazardous will be implemented wherever possible, Laing O'Rourke has a requirement that all sites provide segregation of waste types with separate signed bins/ skips provided.



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6 ESTIMATED VEHICLE MOVEMENTS

Estimated vehicle movements for Margam Substation Extension, Port Talbot Substation and the Cable Route.

Margam Substation Extension

Construction Stage	Period of stage	No. of trips (monthly)	Peak no. of trips (daily)
Site establishment and enabling works	July 25 – March 26	400	20
piling	March 26 – July 26	300	15
Foundation/ structure	July 26 – Sept 26	300	15
Cladding	Sept 26 – Nov 26	200	10
Fit out, testing and commissioning	Nov 26 – Oct 27	200	10
Reinstatement, Demobilisation	Nov 27 – May 28	200	10
Project completion	Dec 28	100	5

Port Talbot Substation

Construction Stage	Period of stage	No. of trips (monthly)	Peak no. of trips (daily)
Site establishment and enabling works	Oct 25 – Nov 25	200	10
Piling	Nov 25- Mar 26	300	15
Foundation/ structure	Mar 26- May 26	300	15
Cladding	May 26- Sept 26	200	10
Fit out, testing and commissioning	Sept 26-Oct 27	200	10
Reinstatement, Demobilisation	Nov 27 – May 28	200	10
Project completion	June 28	100	5

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Cable Route -

Construction Stage	Period of stage	No. of trips (monthly)	Peak no. of trips (daily)
Site establishment and enabling works	Sept 25 – April 26	200	10
Civils and HDD	April 26 - Dec 26	400	20
Cable Pulling and commissioning	Jan 27 – Sept 27	200	10



7 IMPLEMENTING, MONITORING AND UPDATING

The implementation and monitoring of the Construction Logistics Plan will be split between both the group central team and the project Logistics team.

The split for implementing and issuing will be as below.

Select Central Logistics Team

- Group procurement
- Explore Transport
- Explore Industrial Park
- CHT Oldbury

Project Logistics Team

- Project procurement
- Supply chain/ Trade contractors
- Document control
- Office management

The monitoring of the Logistics Strategy will also be split between both functions.

Central Logistics Team responsibilities:

- · Quarterly meetings chaired with revisions updated and implemented
- Project Logistics Team
- Attendance at quarterly meetings with revisions implemented
- Attendance at project BPR to review performance against objectives

The appointed Construction Logistics Manager will oversee implementing the Detailed CLP. Their job description will include collecting data on the number of vehicle movements to site; collected through a delivery booking-in system.

- Total
- By vehicle type/size/age
- Time spent on site
- Consolidation centre utilization
- Delivery/collection accuracy compared to schedule



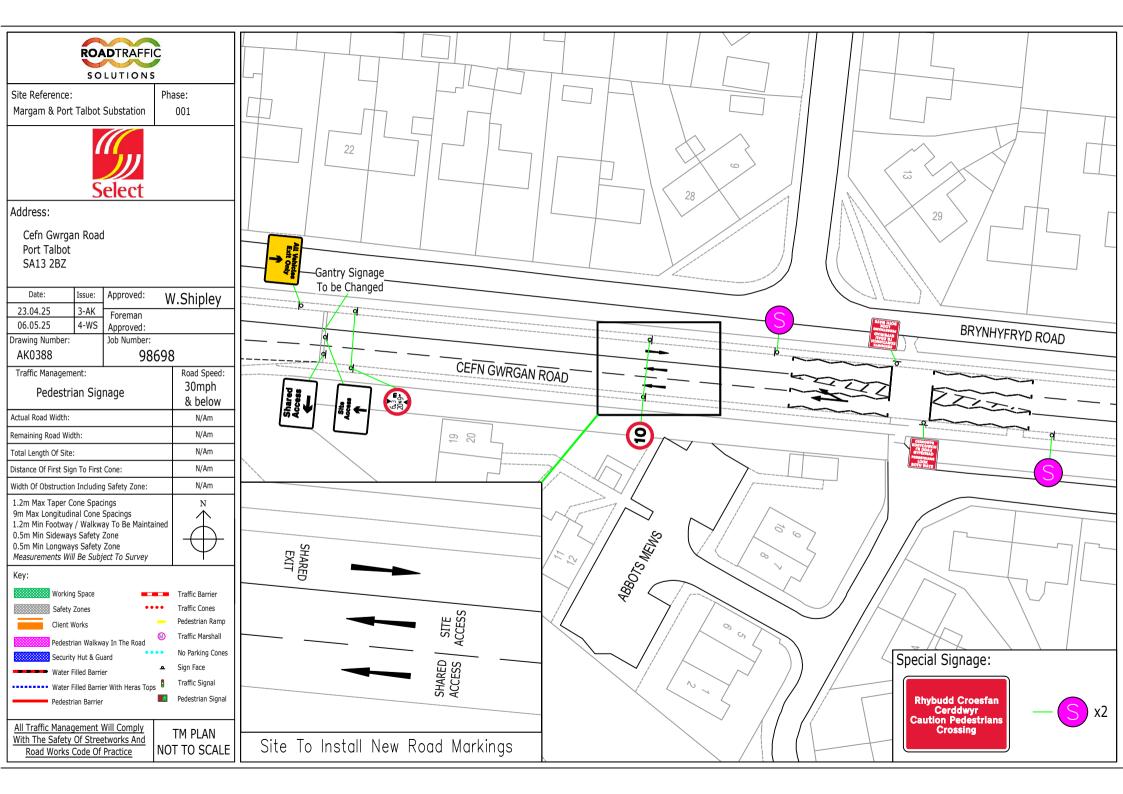


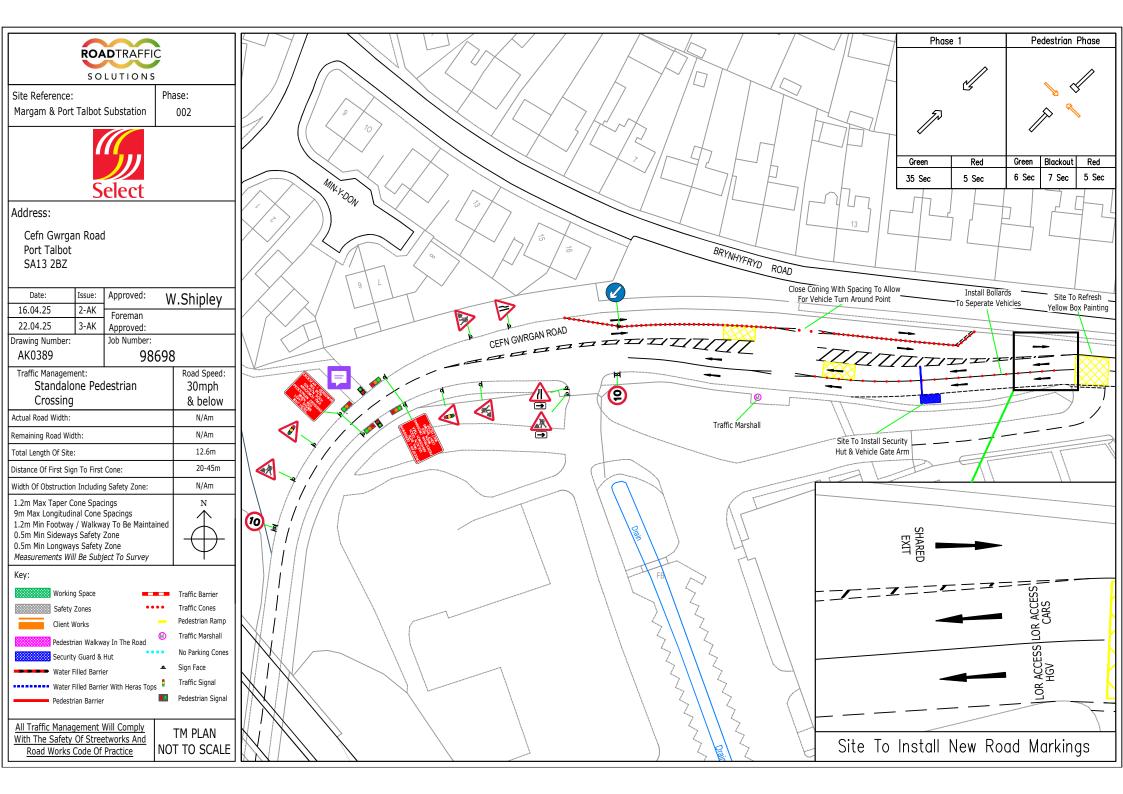
8 Appendix A – Margam Traffic Management Scheme



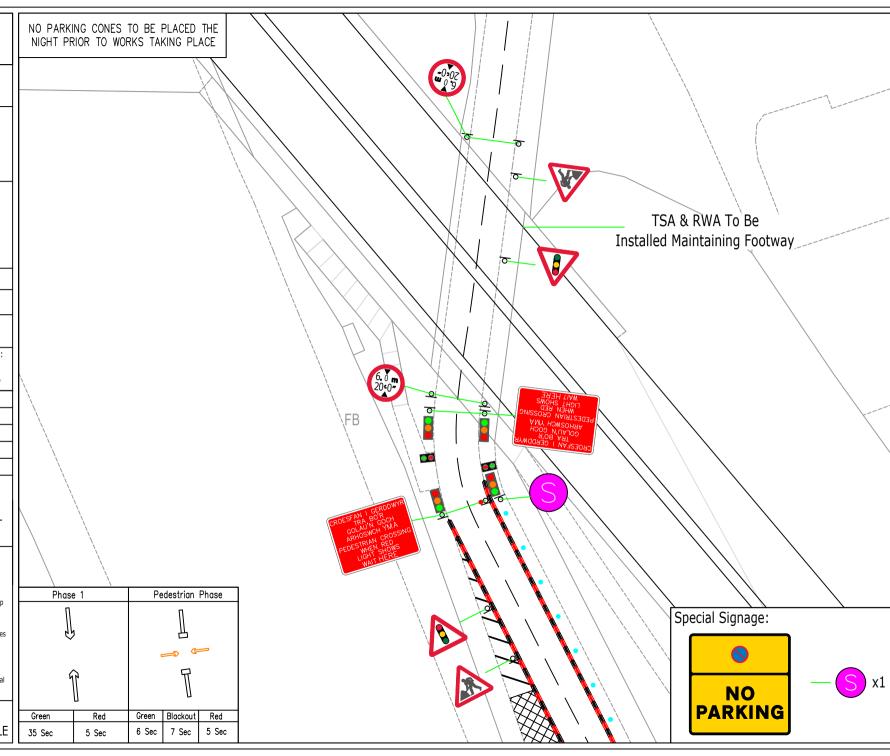
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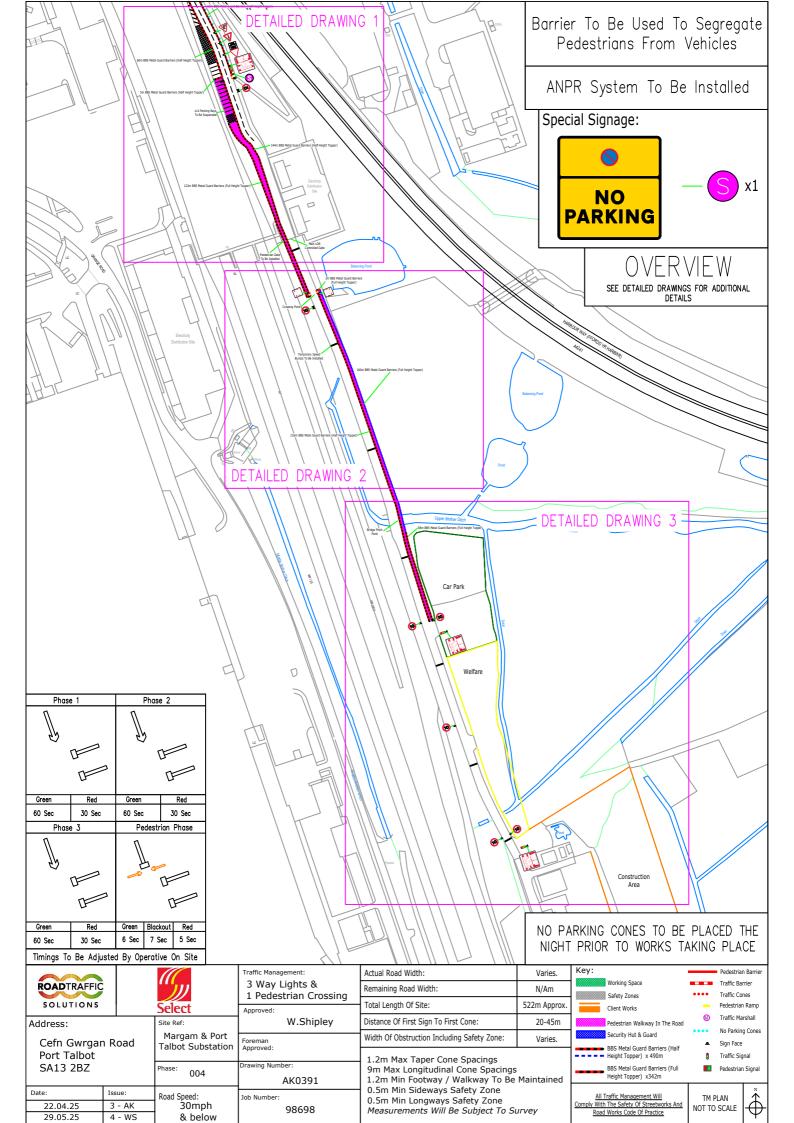


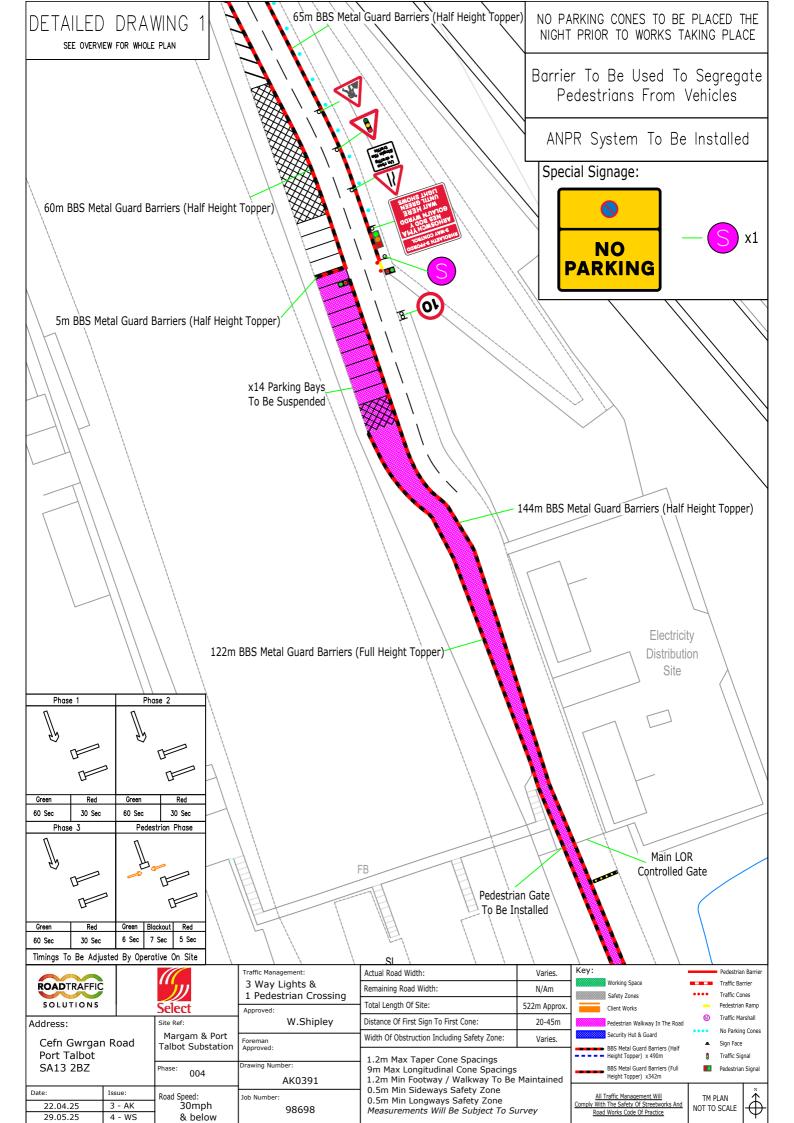


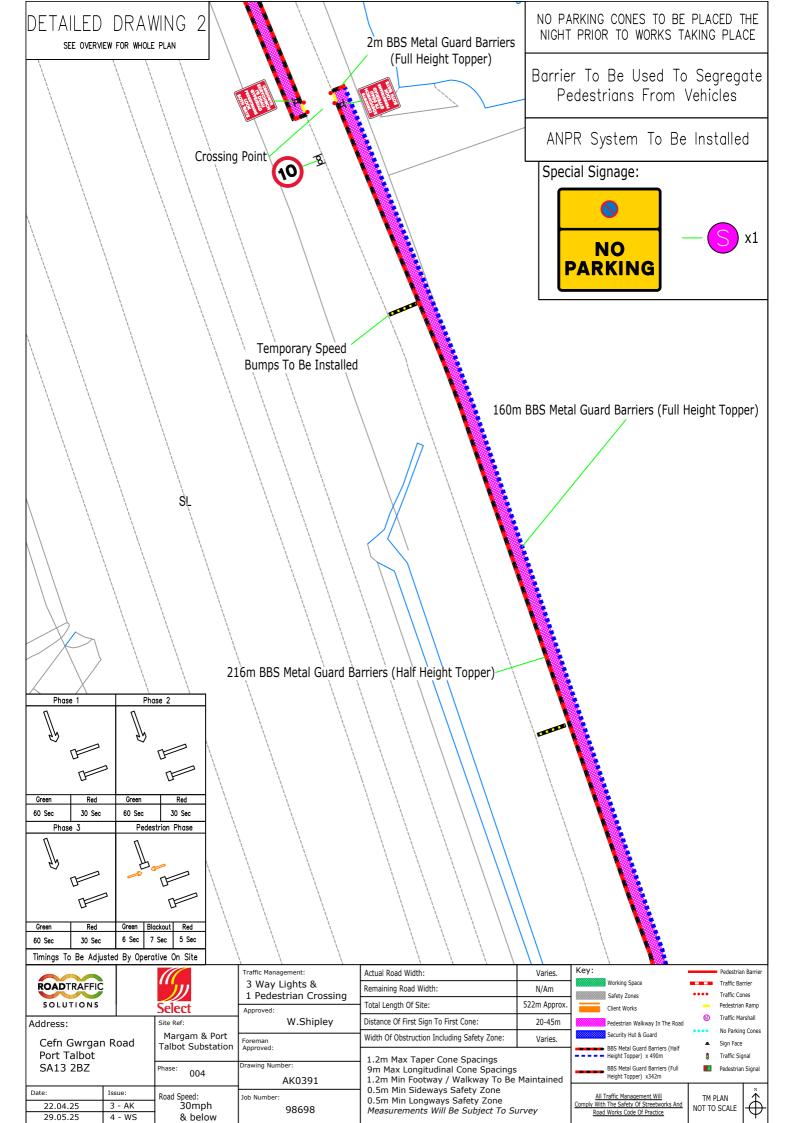


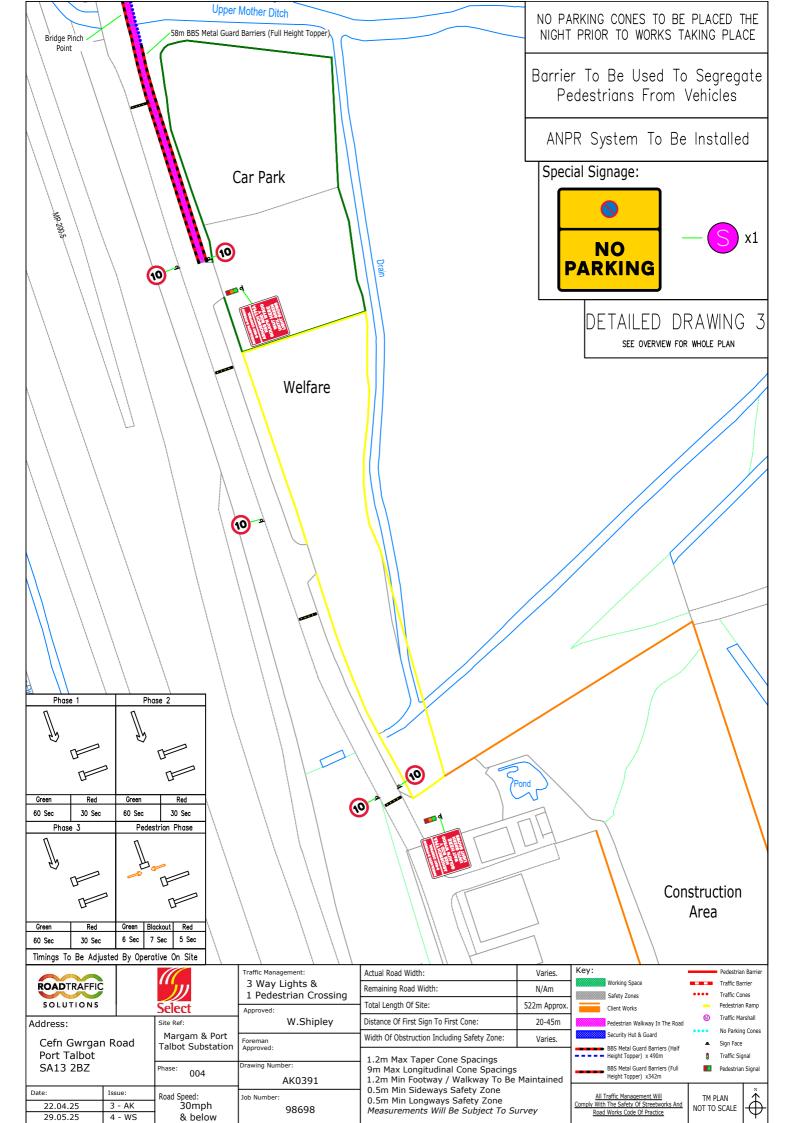


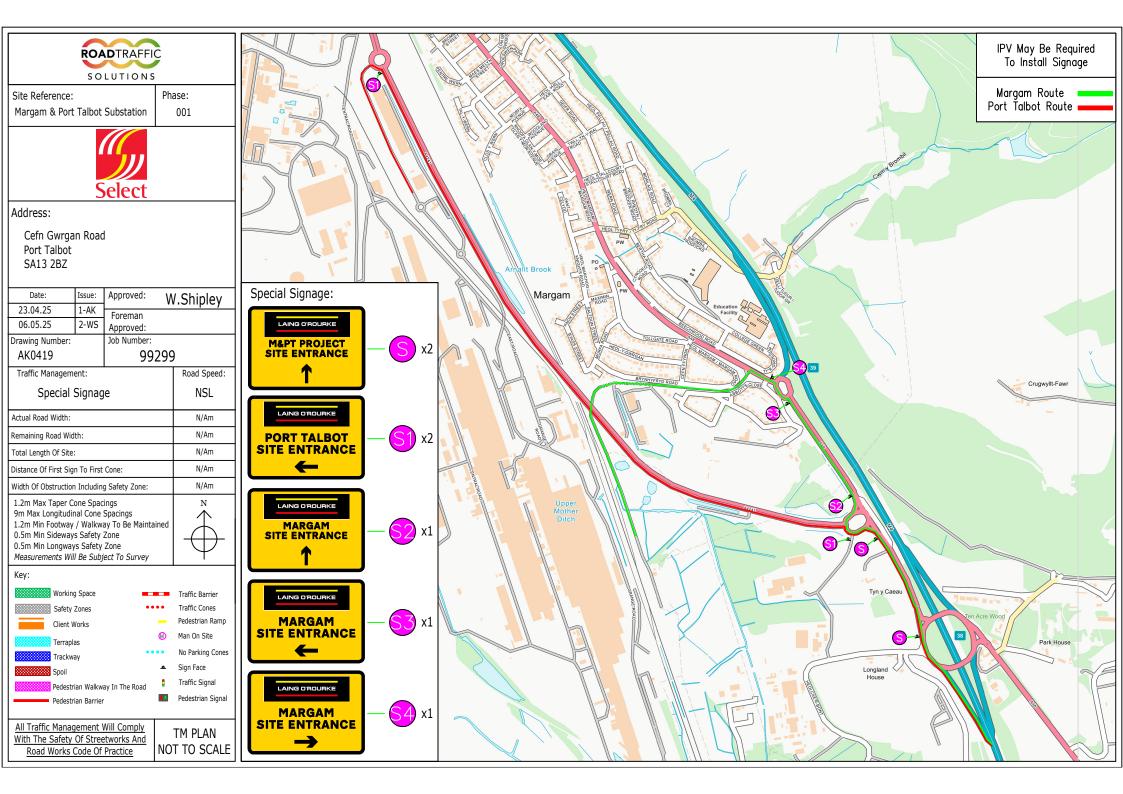












9 Appendix B – Logistics Routes



Non-Business Margam Welfare Key: A – Margam Site















