

TRANSPORT STATEMENT



SYSTRA

SVIP PROJECT – TEMPORARY ACCOMMODATION FOR WORKERS

TRANSPORT STATEMENT

IDENTIFICATION TABLE

Client/Project owner	Hochtief (UK) Construction Ltd
Project	SVIP Project – Temporary Accommodation for workers
Study	Transport Statement
Date	16/05/2023
Reference number	TS_SVIP_16052023

APPROVAL

Version	Name		Position	Date	Modifications
1	Author	JH	Senior Consultant	16/05/2023	Draft
	Checked	SE	Associate Director	16/05/2023	
	Approved	SE	Associate Director	16/05/2023	
2	Author	JH	Senior Consultant	29/06/2023	Final
	Checked	SE	Associate Director	29/06/2023	
	Approved	SE	Associate Director	29/06/2023	

TABLE OF CONTENTS

1.	INTRODUCTION	1
1.1	BACKGROUND	1
1.2	THE COMMISSION	1
1.3	SITE AND SURROUNDING AREA	1
1.4	PURPOSE OF THIS REPORT	3
1.5	REPORT STRUCTURE	3
2.	POLICY CONTEXT	4
2.1	INTRODUCTION	4
2.2	NATIONAL PLANNING POLICY	4
2.3	LOCAL PLANNING POLICY	5
3.	BASELINE CONDITIONS	7
3.1	INTRODUCTION	7
3.2	DESCRIPTION OF ROAD NETWORK	7
3.3	BUS TRAVEL	8
3.1	TRAIN TRAVEL	9
3.2	CYCLING	9
3.3	WALKING	9
3.4	PERSONAL INJURY COLLISIONS (PIC) REVIEW	10
3.5	SUMMARY	11
4.	PROPOSED TEMPORARY SCHEME & OPERATIONS	12
4.1	INTRODUCTION	12
4.2	DEVELOPMENT DESCRIPTION	12
4.3	SITE ACCESS AND INTERNAL LAYOUT	12
4.4	STAFF NUMBERS AND SHIFT PATTERNS	15
5.	TRIP GENERATION AND DISTRIBUTION	16
5.1	INTRODUCTION	16
5.2	BASE TRAFFIC VOLUME	16
5.3	TRIP GENERATION	16
5.4	TRIP DISTRIBUTION	17
6.	MITIGATION MEASURES	19
6.1	INTRODUCTION	19
6.2	MITIGATION MEASURES	19
7.	SUMMARY AND CONCLUSION	20
7.1	SUMMARY	20
7.2	CONCLUSION	20

1. INTRODUCTION

1.1 Background

- 1.1.1 Planning permission has been granted to National Grid Electricity Transmission (plc) (“National Grid”) for its stakeholder-driven proposals to reduce the visual impact of a section of electricity transmission line near the village of Penrhyndeudraeth. The project involves the removal of an approximately 3.5km section of the 4ZC overhead line and replacing it within underground infrastructure.
- 1.1.2 HOCHTIEF (UK) Construction Ltd (“HOCHTIEF”), are the Principal Contractor for the Eryri (Snowdonia) Visual Impact Provision (SVIP) Project being brought forward by National Grid. HOCHTIEF are responsible for the Tunnel contract and cable element of the project only.
- 1.1.3 This Transport Statement (TS) has been produced by SYSTRA on behalf of Hochtief (UK) Construction Ltd “Hochtief” in relation to the proposed temporary accommodation for workers at the Blaen Cefn Caravan Park, Penrhyndeudraeth.
- 1.1.4 The temporary development proposals include for approximately 100 No. ‘Bunkabin’ units within the site, which is a small room comprising of a bed, bathroom and storage facilities for the workers, who will be temporarily working on tunnelling operations in the area.
- 1.1.5 In addition, 100 No. parking spaces are to be included within the temporary proposals. Access into the site is to be taken via an existing access off the A487 located approximately 400m west of the access to the caravan park, and as part of the proposals will be upgraded.
- 1.1.6 As part of the proposals, a new internal access road is to be provided with the overall scheme expected to be active from November 2023 to approximately 2026. Full occupation is expected between April 2024 and September 2025.

1.2 The Commission

- 1.2.1 SYSTRA Ltd has been commissioned to provide access and transport advice in relation to the site, including the preparation of this TS to accompany the planning application.

1.3 Site and Surrounding Area

- 1.3.1 The application site is in a rural location approximately 1.2km east of Penrhyndeudraeth, on the outskirts of the Eryri National Park boundary. The site is bound by Blaen Cefn Caravan Park to the north, the A487 to the south, rural land to the east and a lake to the west. An overview of the site location is in Figure 1.

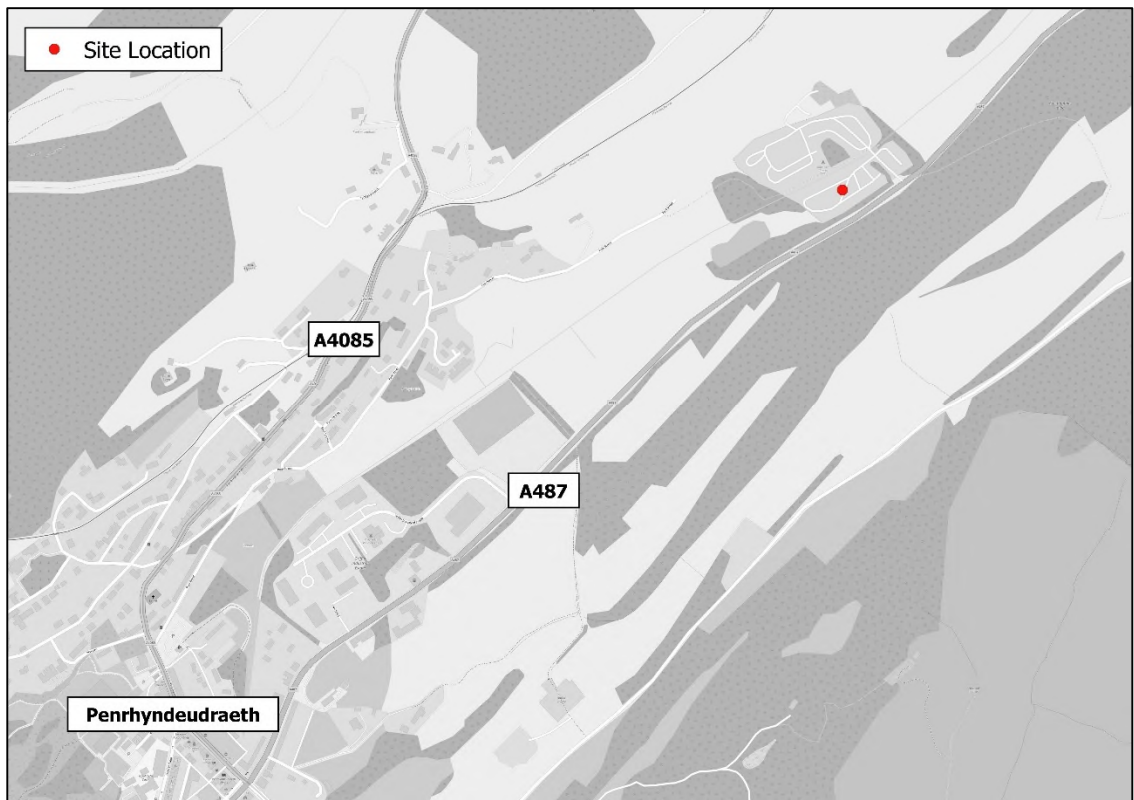


Figure 1. Site Location

1.4 Purpose of this Report

- 1.4.1 This report is the TS for the proposal of the temporary accommodation for workers at the Blaen Cefn Caravan park, Penrhyndeudraeth. The report has been commissioned to help understand and analyse the effects of the proposed temporary development from a transport perspective and to inform the proposals for the site.
- 1.4.2 The purpose of the Transport Statement is to provide a systematic review and robust understanding of the transport impacts of the temporary development and to provide a commentary on any mitigation measures to reduce car travel that are to be introduced by the proposals.
- 1.4.3 Included within the pre-application advice received, there were observations and comments from officers at Eryri (Snowdonia) National Park which included concerns about the impact on the A487 trunk road. This report has been prepared in accordance with the pre-application response received.
- 1.4.4 The intention of this report is to provide the necessary information to assist Gwynedd Highways Authority and North and Mid Wales Trunk Road Agent (NMWTRA), determine the planning application.

1.5 Report Structure

- 1.5.1 Following this introductory chapter, the remainder of this TS is structured as follows:
 - Chapter 2: Policy Context
 - Chapter 3: Baseline Conditions
 - Chapter 4: Proposed Temporary Scheme & Operations
 - Chapter 5: Trip Generation and Distribution
 - Chapter 6: Mitigation Measures
 - Chapter 7: Summary and Conclusion

2. POLICY CONTEXT

2.1 Introduction

- 2.1.1 Before considering the proposed development, it is important to examine the context of the site and how this relates to relevant planning policies and guidelines. This section of the report sets out these elements, providing an overall spatial and planning context for the development proposal.
- 2.1.2 A planning system which places greater emphasis on the link between transport and land use planning policies has also been adopted to encourage transport decisions at a local level that are compatible with environmental and community goals and best reflect local circumstances and requirements.

2.2 National Planning Policy

Planning Policy Wales (PPW) (2021)

- 2.2.1 Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs), Welsh Government Circulars, and policy clarification letters, which together with PPW provide the national planning policy framework for Wales. PPW, the TANs, MTANs and policy clarification letters comprise national planning policy.
- 2.2.2 The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales, as required by the Planning (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation and resultant duties such as the Socio-economic Duty.
- 2.2.3 PPW promotes action at all levels of the planning process which is conducive to maximising its contribution to the well-being of Wales and its communities. It encourages a wider, sustainable and problem solving outlook which focuses on integrating and addressing multiple issues rather than on an approach which is fragmented, un-coordinated and deals with issues in isolation.
- 2.2.4 Land use and transport planning must be integrated within the planning system to ensure seamless integration for new developments, including:
- within and between different types of transport
 - between transport measures and land use planning
 - between transport measures and policies to protect and improve the environment
 - between transport measures and policies for education, health, social inclusion and wealth creation.

Wales Transport Strategy (2021)

- 2.2.5 The Wales Transport Strategy, last updated in March 2021, is a document that sets out the strategic direction of transport in Wales. The document gives an overview of the three key priorities it aims to tackle within the transport sector, including:

- Bring services to people in order to reduce the need to travel
- allow people and goods to move easily from door to door by accessible, sustainable and efficient transport services and infrastructure
- encourage people to make the change to more sustainable transport

2.2.6 As part of encouraging people to make the change to more sustainable transport, the plan will aim to deliver:

- develop a range of behaviour change projects to encourage people to make smarter travel choices to reduce congestion and increase use of sustainable modes of transport
- transform the customer experience of public transport including reliability, punctuality and training for staff and drivers, so people are more confident about using services
- move away from individual vehicle ownership to shared solutions, including car-sharing, car clubs, bike sharing and mobility as a service
- develop a framework for fair and equitable road-user charging in Wales and explore other disincentives to car use, taking into account equality issues including needs of people in rural areas, people who share protected characteristics and people on low incomes
- use new revenue sources to fund large improvements in public transport services and active travel facilities
- reduce the cost of sustainable travel through initiatives such as scrappage schemes for older vehicles, grants towards the cost of electric bikes, and by extending concessionary travel schemes to those who most need it
- support digital innovation and look at options for a transport 'open data' store, to improve journey planning and booking, develop integrated ticketing, and improve real-time information for passengers
- get buy-in at a local level by engaging with communities to design transport interventions that meet local needs and circumstances
- use education, campaigning, marketing and other tools to transform the image of walking, cycling and public transport

2.3 Local Planning Policy

North Wales Joint Local Transport Plan 2015 - 2030

2.3.1 The Local Transport Plan has been jointly prepared by six North Wales Local Authorities, including Gwynedd County Council in response to the Welsh Government requirement for LTPs to be submitted by the end of January 2015. The plan preparation has been overseen by Taith as a Joint Committee of the local authorities for transport. The Plan is a statutory document for transport in the region.

2.3.2 The plan aims to address the key issues for North Wales including:

- The ability of the strategic road and rail corridors to provide the necessary good connectivity, for people and freight, within North Wales, to the ports and to the rest of the UK to support the economy and jobs, including tourism
- The lack of resilience of the road and rail networks to planned and unplanned events including extreme weather

- The need for good access to and between the three Enterprise Zones in North Wales
- The lack of viable and affordable alternatives to the car to access key employment sites and other services

2.3.3 The need for good road links to / from the trunk road network into the rural areas to help retain the viability of local businesses and support the Welsh language and culture.

Eryri Local Development Plan 2016 -2031

2.3.4 The Local Development Plan aims to reflect the land use implications of the Eryri National Park Management Plan as well as providing an opportunity to deliver the spatial elements of other plans and strategies at the national, regional and local level. The Local Development Plan includes strategic policies and development policies which will deliver the long term spatial vision for the future of Eryri National Park.

2.3.5 There are two accessibility objectives which detail the development of the Development Plan and include:

- Encourage new development to locations that reduce the need to travel with reasonable access to community services and facilities and sustainable modes of transport. (A Wales of cohesive communities; a more equal Wales; a globally responsible Wales)
- Support initiatives aimed at encouraging use of sustainable modes of transport. (A healthier Wales; a globally responsible Wales)

2.3.6 The overall wider aims of the objectives are to connect people, connect businesses and facilitate the free movement of goods efficiently across all modes of transport.

3. BASELINE CONDITIONS

3.1 Introduction

- 3.1.1 This chapter provides a general overview of the existing transport conditions, including a description of the local highway network and a commentary of existing cycling and pedestrian accessibility. A review of the road safety history for the surrounding area is also considered.

3.2 Description of Road Network

- 3.2.1 The application site is well served by the existing road network. At a local level, the A487, provides connectivity to the site and a direct link into Penrhyndeudraeth. The A487 is a single carriageway A road that runs through Penrhyndeudraeth, where national speed limit applies passing the site and continues into a 30mph through Penrhyndeudraeth.
- 3.2.2 The A4085 runs in a north to south direction north of the A487, where it continues through Penrhyndeudraeth. The A4085 is a single carriageway road that narrows as it continues through Penrhyndeudraeth, and eventually joins to the A487 crossroads. Through the centre of Penrhyndeudraeth, the A4085 largely is bounded by residential buildings and local amenities on either side on the main High Street.
- 3.2.3 Cambrian View is a local distributor road that connects the A487 to Penrhyndeudraeth train station. Cambrian View provides two accesses onto the A487, one heading north and heading west from the train station. Cambrian View has double yellow lines present and has a 30mph speed limit applied.
- 3.2.4 The local highway network surrounding the proposed development can be seen below:



Figure 2. Local Road Network

3.3 Bus Travel

- 3.3.1 The bus is generally considered a viable mode of travel over short and medium distances although some routes and services with limited stops make longer distances viable.
- 3.3.2 The two nearest bus stops are approximately a 11-minute walk west of the proposed site, located on the A487 and in proximity to a local car garage. A full list of services from the two nearest bus stops is below:

LOCATION	SERVICE	FREQUENCY (MON -SAT)	FREQUENCY (SUN)
Blaenau Ffestiniog - Caernarfon via Porthmadog	1S	N/A	Five services a day, with each service approx. 2 hours apart
Porthmadog - Blaenau Ffestiniog	3B	Approx. every 90 mins Monday – Friday, approx. every 2 hours on a Saturday	N/A
Oakeley Arms - Harlech	38	One service at approximately 7.45am every Monday - Friday	N/A
Bangor - Aberystwyth	T2 Traws Cymru	Approx. every 2 hours	One service in the AM and PM peak, with one at approx. midday

Table 1. Bus Services

- 3.3.3 From Penrhyndeudraeth, there is amicable connectivity to Porthmadog, Aberystwyth and Bangor, with services running along the A487. The two bus stops are shown in Figure 3.



Figure 3. Location of Bus Stops

3.1 Train Travel

- 3.1.1 The nearest train station to the site is Penrhyndeudraeth train station, and is approximately located 1.2km south west of the site. The station has access to Llandecwyn and Harlech in the nearby area.
- 3.1.2 Another station in proximity to the proposed site is Minffordd station, which is approximately 2.4km to the west. Services from Minffordd continue to Penrhyndeudraeth and are operated by Transport for Wales (TFW).

3.2 Cycling

- 3.2.1 Cycling has the potential to cater for many trips and is considered a viable mode of travel for journeys less than five kilometres and in combination with other modes. It is influenced by many the same factors as walking but will also be influenced by route conditions, traffic levels and secure parking at destination.
- 3.2.2 National Cycle Route 8 (NCR8) runs through Penrhyndeudraeth and has both traffic free routes and on-road routes available. There is also NCR82, which provides an on-road route from the north of Penrhyndeudraeth and provides a cycle link into Eryri National Park.
- 3.2.3 Figure 4 shows the cycling routes available in in close proximity to the proposed temporary development:



Figure 4. Cycling connectivity

3.3 Walking

- 3.3.1 Walking is the most sustainable form of transport and it offers a range of benefits to everyday living including improvements in: health, safety, access to services and sense of community.

Moreover, it is free and predictable, making it an economic and time efficient transport choice.

- 3.3.2 Although walking distances will vary between individuals and circumstances, the Chartered Institution of Highways & Transportation (CIHT) suggests that up to 2.0km is an acceptable walking distance for commuting and some other journey purposes, and 800m is acceptable for walking in town centres.
- 3.3.3 Almost all journeys include an element of walking therefore pedestrian facilities should not be considered in isolation. Walking offers the connection between cycling, public transport and highway transport to destinations.
- 3.3.4 The footway and footpath connectivity from the proposed temporary site is limited, especially on the A487. The green dashed lines in Figure 5 show there is footpath connectivity at the rear of the caravan park, which eventually leads onto Pool Street, and then into the centre of Penrhyndeudraeth.
- 3.3.5 A map of the PROW (Public Rights Of Way) can be seen in the figure below:

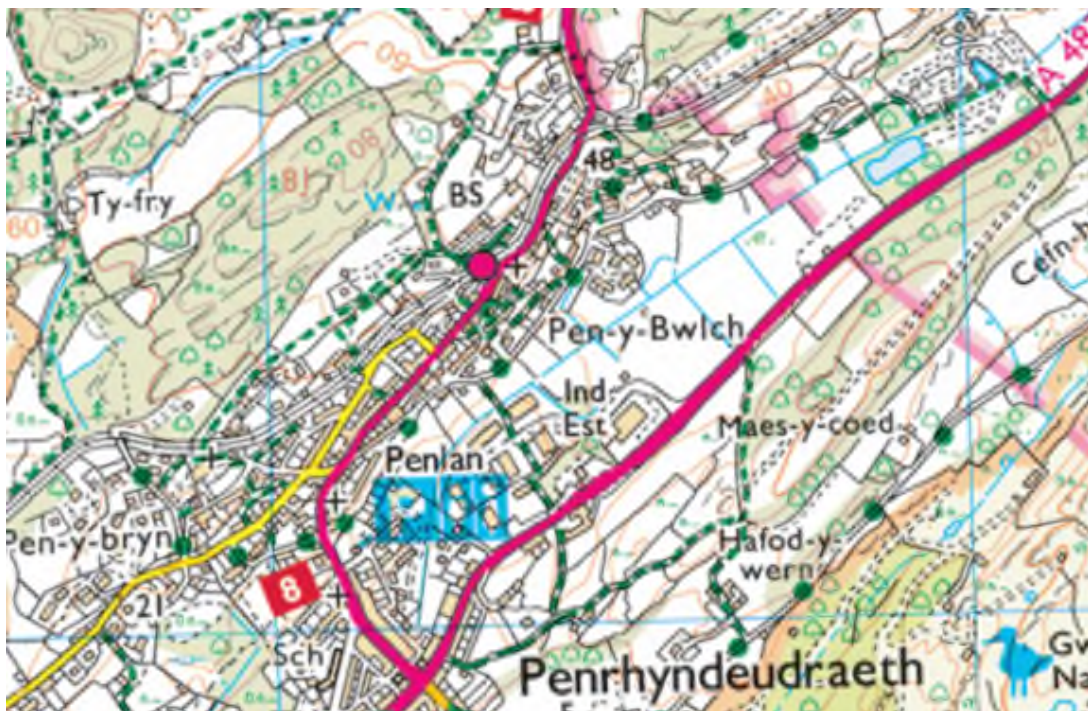


Figure 5. Walking Connectivity

3.4 Personal Injury Collisions (PIC) Review

- 3.4.1 To gain an understanding of the road safety record in the immediate vicinity of the site, PIC data has been assessed using data from the 'Crashmap' website (www.crashmap.co.uk) for the period 2017-2021. PICs are classified as 'slight', 'serious' and 'fatal' depending on the severity of the injuries sustained.
- 3.4.2 Figure 6 illustrates that there are zero collisions within 500m of the proposed site access.

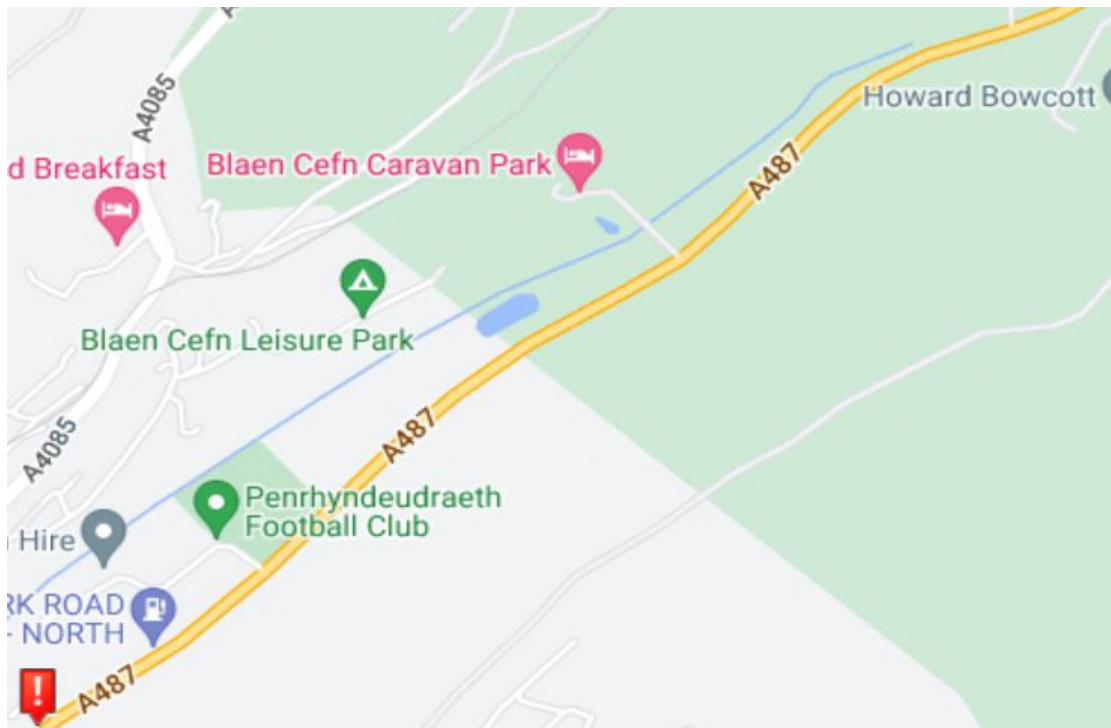


Figure 6. PIC Severity

- 3.4.3 Notably, there are zero collisions reported in proximity to the existing caravan park access as well, which is susceptible to slow manoeuvring vehicle movements.
- 3.4.4 This review of collision data does not identify any collisions at the site accesses within the period of 2017-2021. It is therefore considered highway safety on the surrounding network does not experience any on-going concerns that would be exacerbated by the proposed development.

3.5 Summary

- 3.5.1 The temporary site is in a location on the outskirts of Penrhyndeudraeth, with public transport accessibility available within walking distance and amicable connectivity to cycle and pedestrian infrastructure.
- 3.5.2 A review of the local highway network has been undertaken and the site has ample connectivity to Penrhyndeudraeth, Minffordd and Porthmadog, with the A487 being the main arterial connector between all these locations.
- 3.5.3 There have been no reported collisions in the immediate vicinity of the site access, and also the caravan park site access is evidence of no current safety concerns which would be exasperated by the temporary accommodation development.

4. PROPOSED TEMPORARY SCHEME & OPERATIONS

4.1 Introduction

- 4.1.1 This chapter presents an overview of the proposed temporary workers accommodation development, including the site access arrangements, staff numbers and shift patterns.

4.2 Development Description

- 4.2.1 As part of the development, staff will be working on tunnelling operations in the local area for the Snowdonia Visual Impact Provision (SVIP) project.
- 4.2.2 The temporary accommodation for workers is the provision of 100 staff cabins, with 100 parking spaces. An internal access road will be constructed as well as cycle parking provision provided.
- 4.2.3 A general services building will be provided that includes dining and laundry facilities as well as a recreational area for the workers, which will reduce the need for temporary workers to travel off site.
- 4.2.4 The temporary staff accommodation is expected to have full occupation from April 2024 to approximately September 2025.

4.3 Site Access and Internal Layout

- 4.3.1 The site access will be taken from an existing access point off the A487, approximately 400m west of the site access to Blaen Cefn caravan park, also shown in Figure 7.

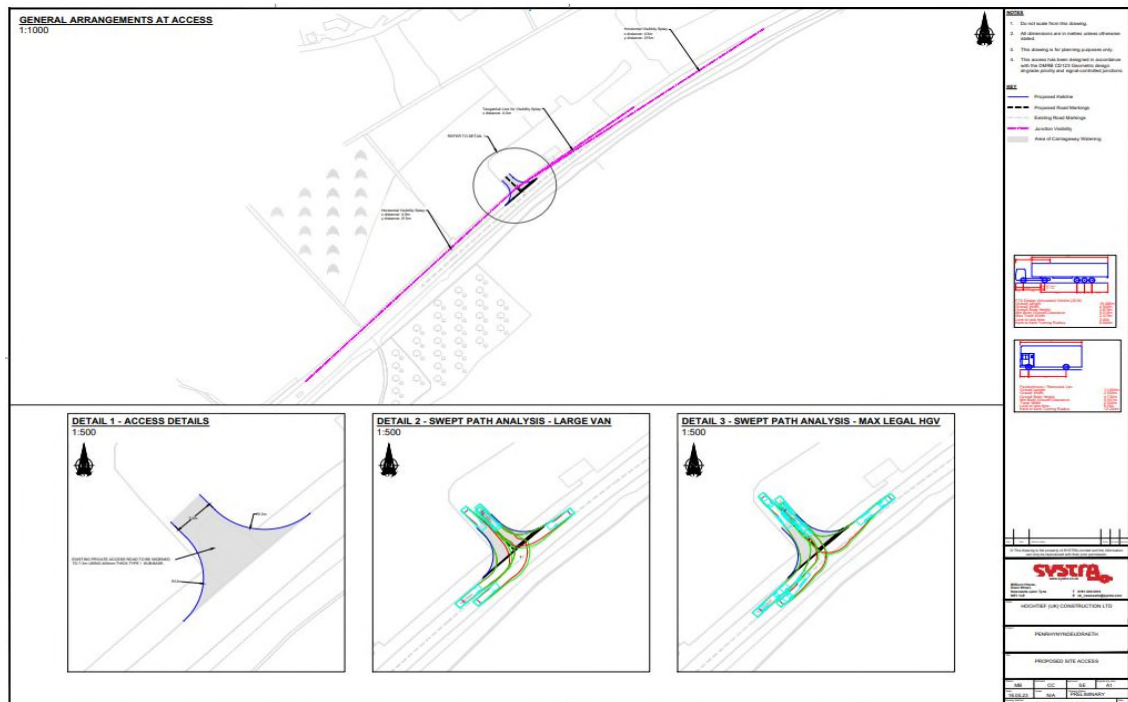


Figure 7. Proposed Site Access

- 4.3.2 The existing private access is to be widened as per Figure 7, which conforms to the requirements of DMRB CD123 'Geometric design of at-grade and signalised junctions' with the 215m visibility splays achieved from a set-back distance of 4m. Vehicle tracking is also shown.
- 4.3.3 The existing lake to the west of the proposed temporary development is to be retained as part of the development, with the proposed internal access road to be constructed along the perimeter, and eventually joining to the A487. A site plan overview is shown in Figure 8 and Figure 9.
- 4.3.4 A security gate and cabin is proposed as part of the temporary development, to ensure maximum safety at the site during daylight and night time hours.
- 4.3.5 In terms of pedestrian accessibility, gates are proposed at the rear of the temporary site and the existing caravan site to provide a separation between the two amenities. Pedestrian access into the temporary site exists using the public footpath at the rear, which also provides a safe connecting link into Penrhyndeudraeth.
- 4.3.6 A drop off and delivery point is also proposed as part of the temporary development proposals to allow for the safe delivery of services and goods.

[illegible]

4.4 Staff Numbers and Shift Patterns

Shift Patterns

- 4.4.1 Tunnelling operations are proposed to occur over 24 hours, 7 days per week, as set out in the Construction Environmental Management Plan. Operations will be primarily conducted over three shifts, comprising of:
- 06:00hrs to 14:00hrs
 - 14:00hrs to 22:00hrs
 - 22:00 to 06:00hrs

Staff Numbers

- 4.4.2 The tunnelling operations will comprise of the following numbers per team:
- Approx. 60 staff allowing for below ground workers and office staff
- 4.4.3 Table 2 sets out a summary of the maximum forecast staff numbers per shift, and the times they will be operating within:

Table 2. Shift Pattern and Staff Numbers

Type	SHIFT TIMES		
	06:00-14:00hrs	14:00-22:00hrs	22:00-06:00hrs
Tunnelling Operations Staff	60	60	60
Total	60	60	60

- 4.4.4 As can be seen from Table 2, under normal operations it is expected that a maximum of 60 shift staff will be on site at any one time.

5. TRIP GENERATION AND DISTRIBUTION

5.1 Introduction

- 5.1.1 This section sets out the methodology used to calculate the number of trips generated to and from the proposed temporary accommodation. The trip generation methodology is synthesised from the number of workers on each designated shift.

5.2 Base Traffic Volume

- 5.2.1 To understand the operating capacity on the local road network, traffic data has been taken from Road Traffic Statistics (DfT) at a site point in proximity to the site access, to understand the levels of traffic along the A487. The site location of where traffic data has been collected is shown in the map adjacent.



- 5.2.2 The data taken is from the latest 5-year period available and shows the Average Annual Daily Flow (AADF), which is the number of vehicles that have travelled past the counter point (in both directions) on an average day of the year.
- 5.2.3 Table 3 outlines the AADF for the site location along the A487.

Table 3. AADF on A487 by year

YEAR	EASTBOUND	WESTBOUND	TOTAL
2021	4963	4717	9680
2020	4284	4073	8357
2019	6157	5855	12,012
2018	6122	5821	11,943
2017	5392	5744	11,136

- 5.2.4 As seen in Table 3, the total AADF has decreased from the year 2019 to 2020, largely due to national lockdowns in the COVID-19 pandemic. In 2021, the total AADF has risen slightly above the AADF for 2020 but is still short of the total AADF numbers present in previous years.

5.3 Trip Generation

- 5.3.1 It is noted within the proposal that a minibus will be transporting staff from the temporary accommodation to Garths Tunnel Head where tunnelling operations will occur, and vice versa. Therefore our trip generation exercise has taken into account this factor.
- 5.3.2 A first principles approach has been used to outline the trip generation for the temporary workers accommodation.

- 5.3.3 Typically, the largest minibus available can have upto 16 seats plus the driver. This would mean for a maximum of 60 shift staff to travel to work from the accommodation, four minibus trips would have to be made.
- 5.3.4 It is expected that shift workers travelling back to the accommodation after their shift will use the minibus to travel back to their temporary accommodation.
- 5.3.5 An outline of the trip methodology is in the table below, and shows the approximate number of people per minibus trip at every shift change over time.

Table 4. Trip Generation at Shift Change Periods

SHIFT TIME	MINIBUS (TRIP ONE)	MINIBUS (TRIP TWO)	MINIBUS (TRIP THREE)	MINIBUS (TRIP FOUR)	TOTAL
06:00-14:00hrs (Going to work)	16	16	16	12	60
06:00-14:00hrs (Going to accommodation)	16	16	16	12	60
14:00-22:00hrs (Going to work)	16	16	16	12	60
14:00-22:00hrs (Going to accommodation)	16	16	16	12	60
22:00-06:00hrs (Going to work)	16	16	16	12	60
22:00-06:00hrs (Going to accommodation)	16	16	16	12	60

- 5.3.6 At each shift change over time, a maximum of eight single trips would have to be made to transport all the shift workers to work, and also from work back to their temporary accommodation. Notably, there is very limited car parking at Garths tunnel head, and as such temporary workers are unlikely to use their personal car for work trips.
- 5.3.7 Taking into account the AADF on the A487 at a site location on the route the minibus will take, a maximum of four single trips added onto the network in the shift change over periods is likely to have negligible impact on the surrounding road network.

5.4 Trip Distribution

- 5.4.1 This section summarises the trip distribution from the temporary workers accommodation.

- 5.4.2 Appropriate routing assignments have been applied for the route from the temporary workers accommodation to Garths tunnel head, the journey the minibus will be taking at each shift change over period.
- 5.4.3 From the site access, it is expected the minibus will turn right onto the A487, continue for approximately 2.2km to the Minffordd roundabout, take the 2nd exit off Minffordd roundabout onto High Street, then travel approximately 1.5km west along High Street to where the road changes to Britannia Terrace, then turn right towards Garths tunnel head.

6. MITIGATION MEASURES

6.1 Introduction

- 6.1.1 This chapter presents an overview of the measures that will be implemented to reduce the number of vehicle movements to and from the site and therefore limit the impact on the surrounding road network.

6.2 Mitigation Measures

- 6.2.1 An overview of such measures include:

- Vehicle movements will be limited to a minibus to take workers from their temporary accommodation to Garths tunnel head and vice versa. This is to limit the number of car trips to and from the site.
- A drop off point for staff has been implemented into the temporary proposals, to allow for a safe pick up and drop off place for workers at each shift change over period.
- A security gate and cabin is to be located west of the temporary workers cabins, to ensure safety and security on site.
- Shift change over periods are to be outside of normal working hours throughout the day. This is to minimise the trips on the local road network in both the AM and PM peaks. The three shifts per day are at 06:00-14:00hrs, 14:00-22:00hrs and 22:00-06:00hrs.
- Temporary workers are to use the footpath available at the rear of the site, for pedestrian connectivity into Penrhyndeudraeth. Using this pedestrian link means temporary workers can avoid walking along the edge of the A487, where pedestrian infrastructure is limited and not suitable or safe for pedestrian footfall.
- Cycle parking is to be provided as part of the facilities in the proposed temporary scheme. This is to enhance sustainable travel opportunities to and from the site and minimise single car use trips.
- A general services building is proposed on the temporary site which includes dining and laundry facilities, as well as a recreational area for workers. Such provisions can reduce the need for temporary workers to travel off site.

- 6.2.2 During the planning application consultation period, concern was raised by NMWTRA that pedestrian movements may occur along the A487, which has no footway provision. To address this, all staff will receive instruction within their Accommodation Package Information that this route is not permitted. An escalated warning system will be deployed and discipline measures put in place if there is a continued occurrence.

- 6.2.3 It is important to note that the measures are temporary, as the site will be active from November 2023 till approximately 2026 with full occupation expected from April 2024 till approximately June 2025.

7. SUMMARY AND CONCLUSION

7.1 Summary

- 7.1.1 This TS has been produced in relation to the proposed temporary workers accommodation village at Blaen Cefn caravan park, Penrhyndeudraeth. A temporary scheme which is to provide 100 No. 'Bunkabin' units, 100 No. parking spaces, an associated internal road, general services and cycling parking.
- 7.1.2 Existing baseline conditions have been reviewed, including the local highway network, sustainable transport accessibility by public transport, walking and cycling.
- 7.1.3 A PIC review has been undertaken and there are zero collisions within 500m of both the site access and the caravan park access. It is considered highway safety on the surrounding network does not experience any on-going concerns.
- 7.1.4 There are a maximum of 60 staff every shift working on tunnelling operations, and vehicle movements to and from the site and workplace will be via a minibus. At each shift change over period, a maximum of eight single trips would have to be made to ensure all temporary workers access work and the temporary accommodation via minibus.
- 7.1.5 Base traffic data for the latest 5-year available period has been taken from DfT where the AADF along the A487 is shown, to understand the traffic volume along the main route the minibus will be taking. An additional eight single trips at each shift change over time is likely to produce a negligible impact on the surrounding road network.
- 7.1.6 Opportunities have been identified to minimise the frequency of motor vehicle trips from the site. These include transporting shift workers to and from the site via minibus, shift patterns outside of normal working hours, and utilisation of a footpath at the rear of the site to provide connectivity into Penrhyndeudraeth for pedestrians.

7.2 Conclusion

- 7.2.1 With consideration of all of the above, it is concluded that the proposed temporary workers accommodation is acceptable from a transport perspective and as such, should be supported.

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

A diverse group of results-oriented people, we are part of a strong team of professionals worldwide. Through client business planning, customer research and strategy development we create solutions that work for real people in the real world.

Birmingham – Newhall Street

5th Floor, Lancaster House, Newhall St,
Birmingham, B3 1NQ
T: +44 (0)121 233 7680 F: +44 (0)121 233 7681

Birmingham – Innovation Court

Innovation Court, 121 Edmund Street, Birmingham B3 2HJ
T: +44 (0)121 230 6010

Bristol

10 Victoria Street, Bristol, BS1 6BN
T: +44 (0)117 922 9040

Dublin

2nd Floor, Riverview House, 21-23 City Quay
Dublin 2, Ireland
T: +353 (0) 1 905 3961

Edinburgh – Thistle Street

Prospect House, 5 Thistle Street, Edinburgh EH2 1DF
United Kingdom
T: +44 (0)131 220 6966

Edinburgh – Manor Place

37 Manor Place, Edinburgh, EH3 7EB
Telephone +44 (0)131 225 7900 Fax: +44 (0)131 225 9229

Glasgow – St Vincent St

Seventh Floor, 124 St Vincent Street
Glasgow G2 5HF United Kingdom
T: +44 (0)141 225 4400

Glasgow – West George St

250 West George Street, Glasgow, G2 4QY
T: +44 (0)141 221 4030 F: +44 (0)800 066 4367

Leeds

100 Wellington Street, Leeds, LS1 1BA
T: +44 (0)113 397 9740 F: +44 (0)113 397 9741

Liverpool

Cotton Exchange, Bixteth Street, Liverpool, L3 9LQ
T: +44 (0)151 230 1930

London

3rd Floor, 5 Old Bailey, London EC4M 7BA United Kingdom
T: +44 (0)203 714 4400

Manchester – 16th Floor, City Tower

16th Floor, City Tower, Piccadilly Plaza
Manchester M1 4BT United Kingdom
T: +44 (0)161 831 5600

Newcastle

PO Box 438, Newcastle upon Tyne, NE3 9BT
United Kingdom
T: +44 (0)191 2136157

Perth

13 Rose Terrace, Perth PH1 5HA
T: +44 (0)1738 621 377 F: +44 (0)1738 632 887

Reading

Soane Point, 6-8 Market Place, Reading,
Berkshire, RG1 2EG
T: +44 (0)118 334 5510

Woking

Dukes Court, Duke Street
Woking, Surrey GU21 5BH United Kingdom
T: +44 (0)1483 728051 F: +44 (0)1483 755207

Other locations:

France:

Bordeaux, Lille, Lyon, Marseille, Paris

Northern Europe:

Astana, Copenhagen, Kiev, London, Moscow, Riga, Wroclaw

Southern Europe & Mediterranean: Algiers, Baku, Bucharest,

Madrid, Rabat, Rome, Sofia, Tunis

Middle East:

Cairo, Dubai, Riyadh

Asia Pacific:

Bangkok, Beijing, Brisbane, Delhi, Hanoi, Hong Kong, Manila,
Seoul, Shanghai, Singapore, Shenzhen, Taipei

Africa:

Abidjan, Douala, Johannesburg, Kinshasa, Libreville, Nairobi

Latin America:

Lima, Mexico, Rio de Janeiro, Santiago, São Paulo

North America:

Little Falls, Los Angeles, Montreal, New-York, Philadelphia,
Washington