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T - Transport Scoping Note

Merthyr Tydfil County Borough Council

GOAT MILL ROAD DEVELOPMENT

Transport Scoping Note v3



1.0
OCTOBER 2026

CONFIDENTIAL

Merthyr Tydfil County Borough Council

GOAT MILL ROAD DEVELOPMENT

Transport Scoping Note v3

TYPE OF DOCUMENT (VERSION) CONFIDENTIAL

PROJECT NO. UK0041132

OUR REF. NO. 1.0

DATE: OCTOBER 2026

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QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Draft	V3		
Date	02/12/2025	26/10/2026		
Prepared by	GW, RC, PT	PT		
Signature				
Checked by	PT & LMC	TM		
Signature				
Authorised by	LMC	LMC		
Signature				
Project number	UK0041132			
Report number	1.0			
File reference	RCT, Bridgend and Merthyr County Borough Councils - 3XX05 Reports - All Documents			

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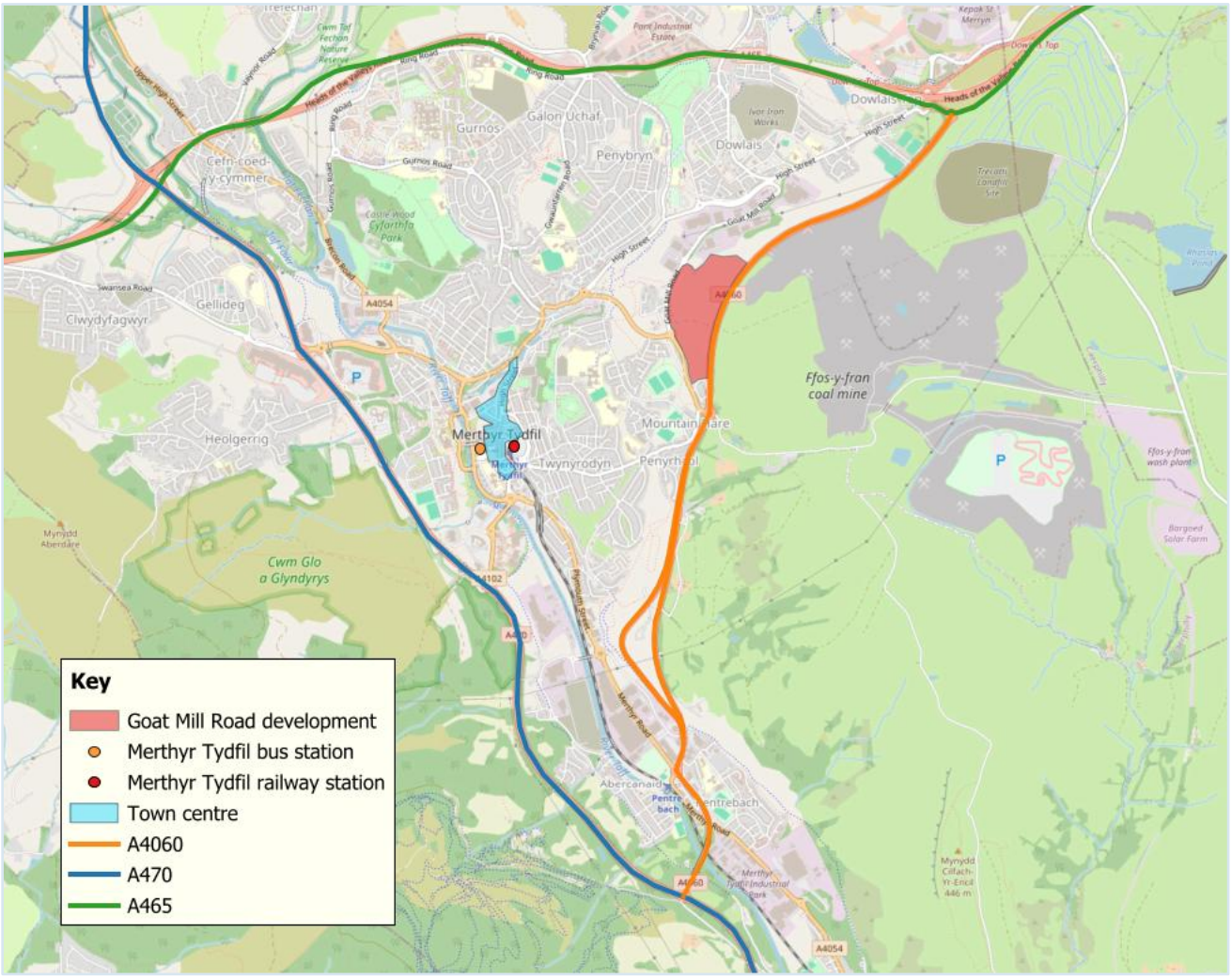
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1 INTRODUCTION

1.1 INTRODUCTION

1.1.1. WSP has been appointed by Merthyr Tydfil County Borough Council to produce a Transport Assessment (TA) for the Goat Mill Road Development. The application is for a mixed use commercial and industrial development on an urban brownfield site. The location of the site is shown in Figure 1-1 below.

Figure 1-1 - Goat Mill Road site location



1.1.2. Access to the site will be provided on Goat Mill Road by two existing roundabout junctions at the northern and southern site boundaries.

1.1.3. The development proposals associated with the Transport Scope are detailed below:

- A mix of B2 and B8 use classes; and,
- Up to 17,456 sqm of business units.

1.2 REPORT STRUCTURE

1.2.1. The structure of this report is as follows:

- Chapter 2 – Existing Site Conditions
- Chapter 3 –Traffic Surveys
- Chapter 4 – Trip Generation
- Chapter 5 – Trip Distribution and Assignment
- Chapter 6 – Junction Capacity Analysis
- Chapter 7 – Summary and Conclusions

2 EXISTING SITE CONDITIONS

2.1 OVERVIEW

2.1.1. This chapter details the existing highway conditions surrounding the site and considers current highway safety conditions. It will also consider the existing sustainable transport opportunities including access to bus services, trains, and active travel infrastructure – i.e. walking and cycling.

2.2 LOCAL HIGHWAY NETWORK

2.2.1. The site is connected via the A4060 link road to the A470 and A465 Heads of the Valleys Road, making the development highly accessible. Figure 1-1 indicates the location and proximity of following roads to the Goat Mill Road development.

A4060

2.2.2. The A4060 is a two-lane dual carriageway running to the eastern side of the development and extending from the A470 junction at Pentrebach to the A465 junction at Dowlais Top. Goat Mill Road, along which the proposed development is located, is accessed directly off the A4060. The carriageway operates at the national speed limit throughout the entirety of its length.

A470

2.2.3. The A470 is a two-lane single and dual carriageway and offers strategic connectivity to the proposed development; it extends from Cardiff, South Wales to Llandudno, North Wales. The section of the A470 carriageway through Merthyr Tydfil, which is located on the western side of the local authority area, operates at the national speed limit.

A465

2.2.4. The A465 Heads of the Valleys Road is a two-lane dual carriageway located on the northern extent of the Merthyr Tydfil local authority area. The full length of the A465 carriageway extends from Herefordshire to Llandarcy, while the more local section known as the Heads of the Valleys extends from Abergavenny to Neath. The Heads of the Valleys section operates a speed limit of 50mph.

2.3 EXISTING TRAFFIC CONDITIONS

JOURNEY TO WORK

2.3.1. Journey to work data has been obtained from 2011 and 2021 Census date for residents within the Middle Super Output Areas (MSOAs) in which the proposed development is located (W02000284 Merthyr Tydfil 002 and W02000287 Merthyr Tydfil 005). Table 2-1 shows the calculated modal split of journeys to work.

Table 2-1 - Journey to Work - Modal Split

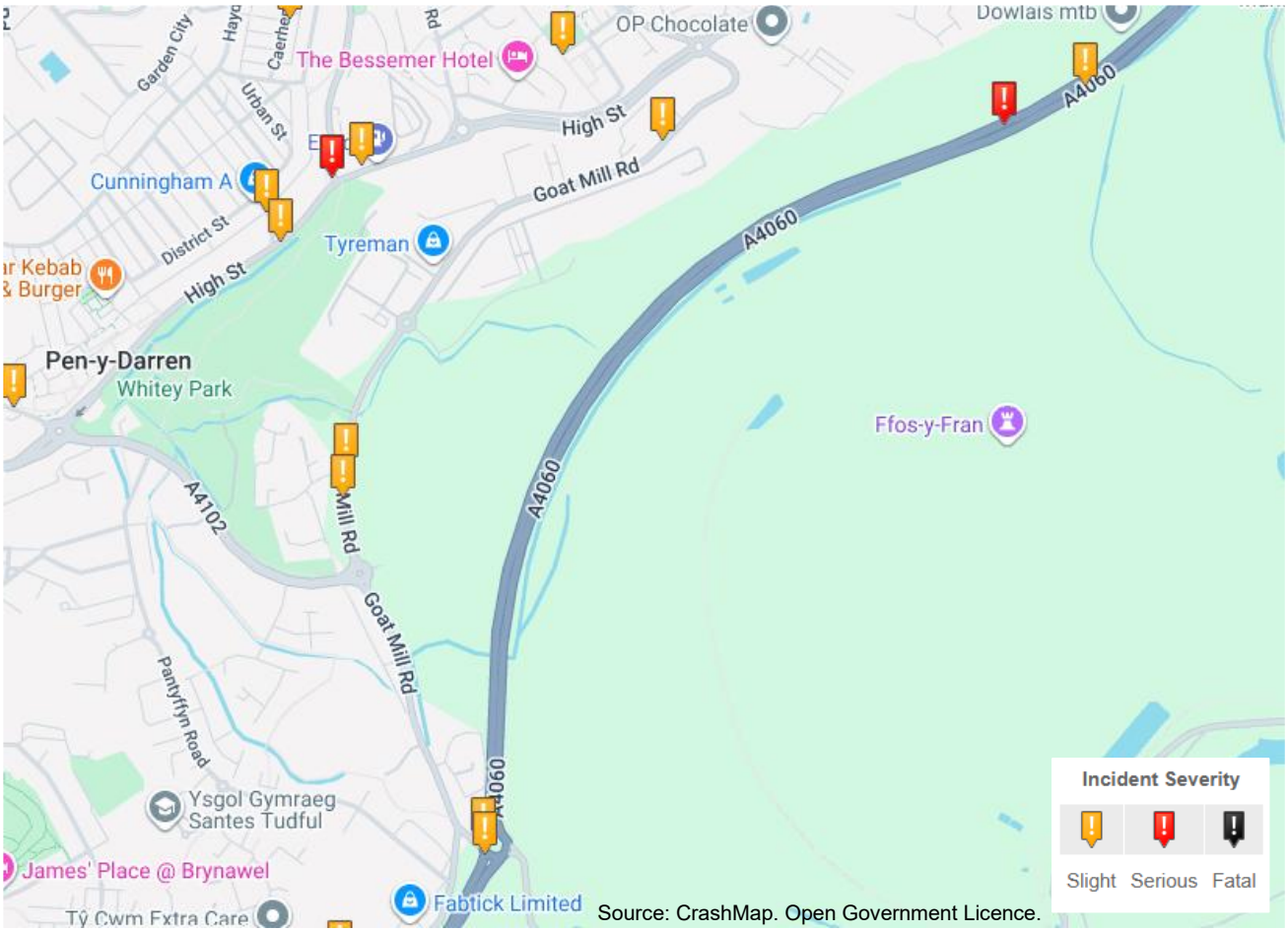
Method of Travel	2011 Modal Split (%)	2021 Modal Split (%)
Work mainly at or from home	2.2%	17.6%
Underground, metro, light rail, tram	0.1%	0.1%
Train	1.2%	0.8%
Bus, minibus or coach	6.0%	2.3%
Taxi	1.1%	1.5%
Motorcycle, scooter or moped	0.3%	0.2%
Driving a car or van	66.8%	61.0%
Passenger in a car or van	10.9%	8.0%
Bicycle	0.4%	0.3%
On foot	10.4%	7.4%
Other method of travel to work	0.6%	0.8%

2.3.2. It is considered that the modal split presented in Table 2-1 provides a robust assessment of trip mode distribution. Modal split for both 2011 and 2021 Census years was provided to account for the increase of working from home and changes in how people travel for work due to the Covid-19 pandemic.

2.4 HIGHWAY SAFETY

2.4.1. To assess existing highway safety, CrashMap has been interrogated to obtain Personal Injury Collision data on Goat Mill Road within the most recent five-year period (2020 – 2024), which is the main road providing access into the site. Figure 2-1 illustrates the area considered in the interrogation, including the location and severity of these collisions.

Figure 2-1 - CrashMap analysis



2.4.2. The review of collision data shows that there have been three collisions of 'slight' severity on Goat Mill Road.

2.4.3. The northernmost collision occurred on 4th March 2020, involved two cars and resulted in two casualties.

2.4.4. The middle collision occurred on 17th November 2024, involved a car and a motorcycle, and resulted in one casualty (the motorcyclist).

2.4.5. The southernmost collision occurred on 29th April 2021, involved two cars and resulted in two casualties. This collision was caused by defective brakes.

2.5 PUBLIC TRANSPORT

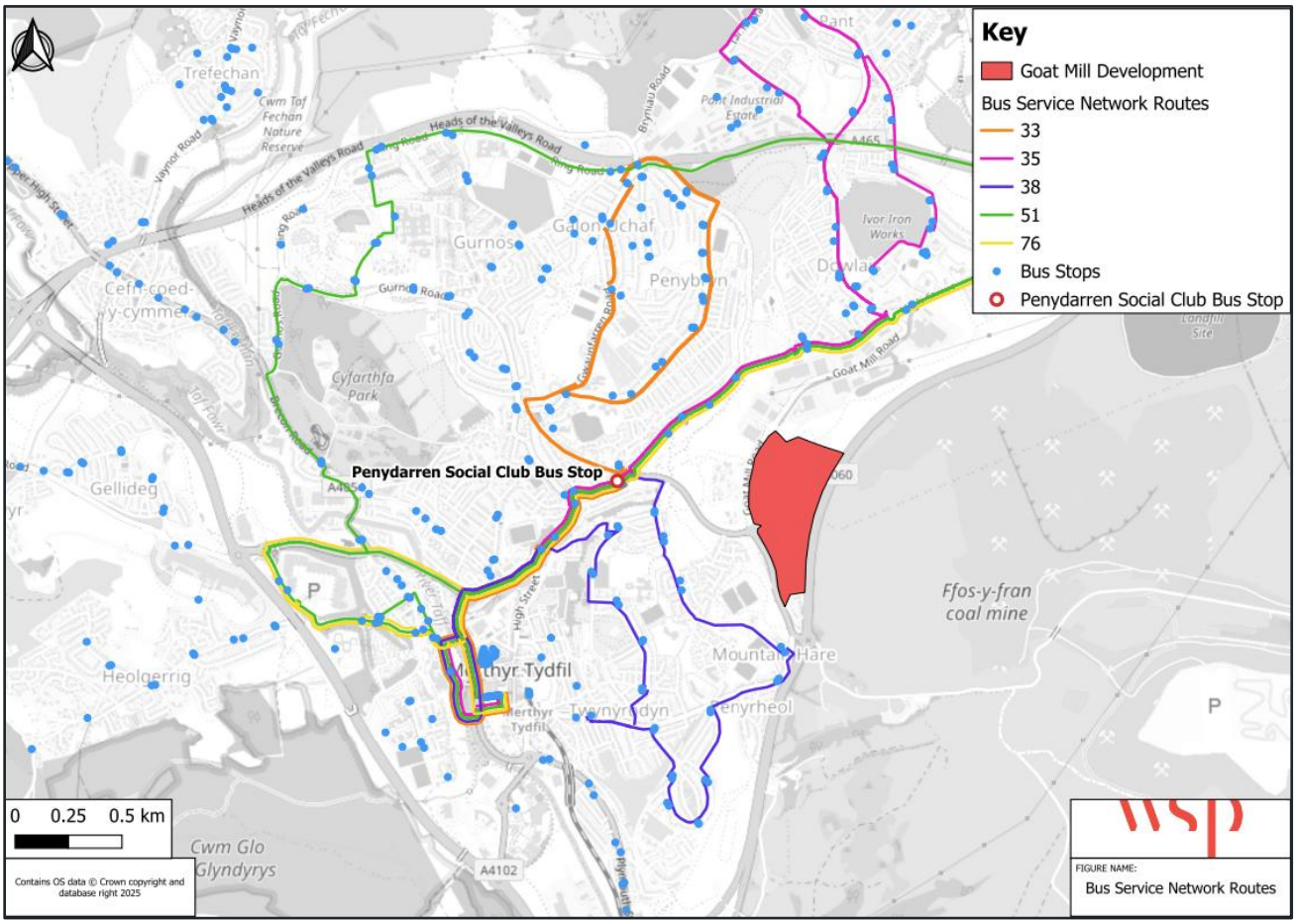
Bus

2.5.1. The nearest bus stop to the proposed site is Penydarren Social Club, which is located 800m from the southern site access along the A4102. A summary of the bus services that operate within the vicinity of the Goat Mill Road development is provided in **Table 2-2**. **Figure 2-2** below shows the location of the nearest bus stop along with other bus stops and service routes within the vicinity of the development. There are currently no known consultations or proposals to include a bus stop on Goat Mill Road.

Table 2-2 - Bus Services at Penydarren Social Club bus stop

Service Number	Route	Usual frequency (Weekdays)	First and last service* (Weekdays)
33	Merthyr Tydfil – Galon Uchaf	1 per hour	First: 08:05 Last: 19:04
35	Merthyr Tydfil – Rhydybedd	3 per hour	First: 07:05 Last: 18:39
38	Merthyr Tydfil – Twynyrodyn – Merthyr Tydfil	1 per hour	First: 08:51 Last: 18:51
51	Merthyr Tydfil – Caerphilly	1 per hour	First: 07:24 Last: 18:24
	Caerphilly – Merthyr Tydfil	1 per hour	First: 07:13 Last: 22:29
76	Merthyr Tydfil – Abergavenny	1 - 2 per hour	First: 06:42 Last: 20:43
	Abergavenny – Merthyr Tydfil	1 per hour	First: 06:04 Last: 22:09

Figure 2-2 - Bus Stops and Routes



2.5.2. The local bus services near the Goat Mill Road site run frequently, with connections to the town centre, Merthyr Tydfil railway and bus stations, nearby residential areas, and Cyfarthfa Shopping Park. However, their operating hours are limited, typically between 7am and 8pm with reduced or no services on weekends, making them unsuitable for all work patterns and potentially forcing some commuters to use private vehicles.

Rail

2.5.3. The nearest railway station is Merthyr Tydfil, which is located 2km from the Goat Mill Road development site. Travel times between the station and the development are a 26-minute walk, which is more than the suitable walking distance preferred by commuters[1], or a 19-minute bus / walk journey using bus service route 33, 35, 51 and 76.

2.5.4. The cycle route to the station faces significant gradients, downhill to the site and uphill away from it. Furthermore, they would also have to contend with high traffic volume on roads at several points. Hence, the route is suited only for well experienced cyclists or electric bikes.

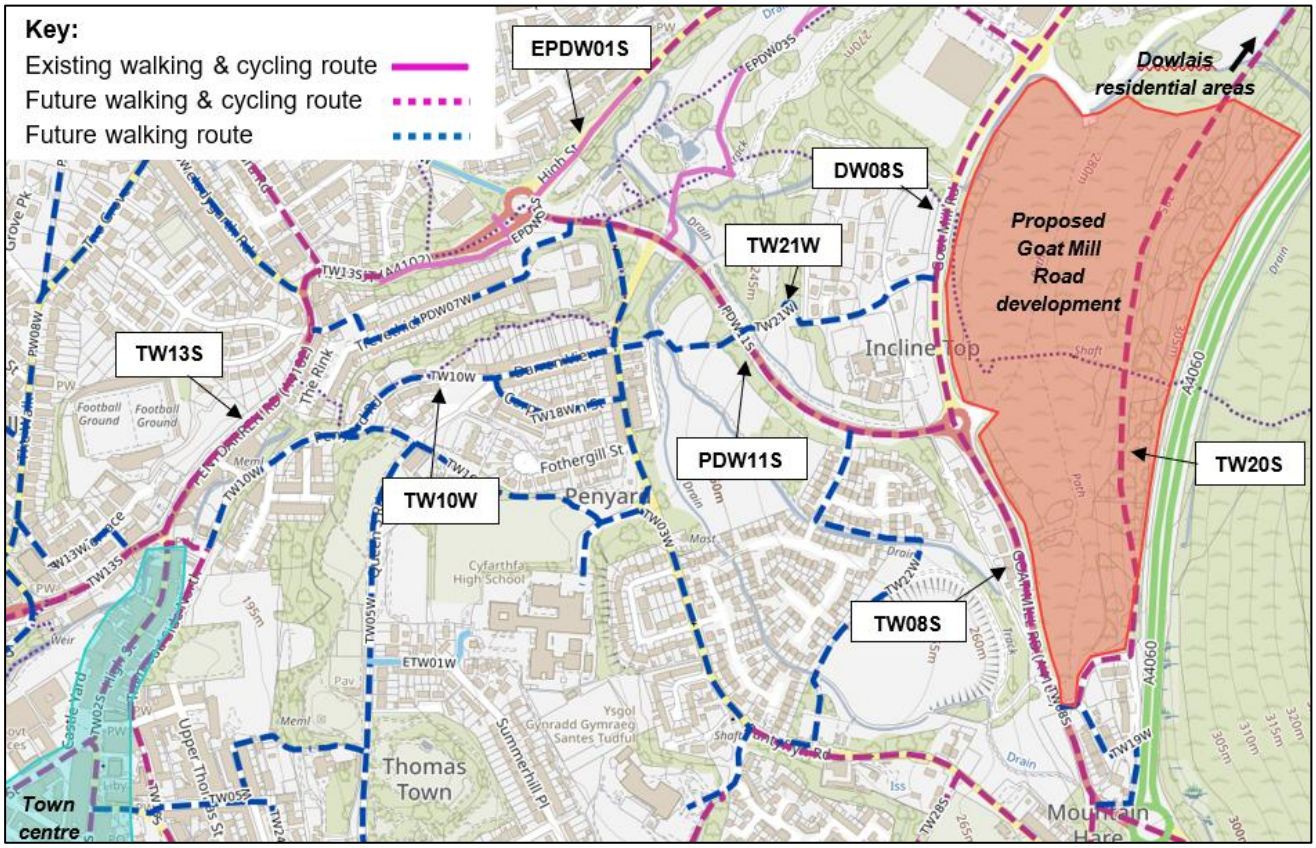
[1] Department for Transport (2017), Local Cycling and Walking Infrastructure Plans, Local cycling and walking infrastructure plans technical guidance (publishing.service.gov.uk) [accessed 18/11/2025]

2.5.5. Merthyr Tydfil Railway Station is the terminus of the Merthyr Line on the Core Valley Lines network and is served by Transport for Wales (TfW) rail services. Merthyr Tydfil Station is served by a half hourly service to and from Cardiff Central on weekdays and Saturdays and a less frequent (hourly to two-hourly) service on Sundays. During the week, there are normally 29 trains per day travelling from Merthyr Tydfil to Cardiff Central (via Pontypridd) and the journey takes approximately 1 hour.

2.6 ACTIVE TRAVEL

2.6.1. Figure 2-3 shows MTCBC's Active Travel Network Map, as sourced from DataMapWales, which depicts existing and future walking and cycling routes in the immediate vicinity of the Goat Mill Road site.

Figure 2-3 - Active Travel Network Map



2.6.2. Figure 2-3 shows that there is no existing dedicated active travel provision in the vicinity of the Goat Mill Road development. However, there is a comprehensive network of proposed future routes, including:

- Walking and cycling route (DW08S & TW08S) – along the length of Goat Mill Road to the west of the site.
- Walking and cycling route (TW20S) – within the proposed development boundary on a currently unofficial path.
- Walking and cycling route (PDW11S) – a key enhancement providing connectivity between the Goat Mill Road development site and the town centre along the A4102 from the proposed southern site access to the A4102/High Street junction. Connects with the existing walking and cycling route EPDW01S.

- Walking and cycling route (TW13S) – along the A4102 High Street and Penydarren Road until it meets with the High Street.
- Walking route (TW21W & TW10W) – connects Goat Mill Road with the town centre via minor residential roads, crossing the A4102.

2.6.3. Regarding existing walking infrastructure, roads in proximity to the site, such as Goat Mill Road and the A4102, have constrained infrastructure including narrow footways, poor visibility around bends, uneven surfaces and steep topography. There are also no formal crossing provisions on Goat Mill Road.

2.6.4. While the above shows there are no current or future routes within the Goat Mill site for active travel, the proposed development will provide these links within the design of the site and they will connect to the nearest routes to ensure suitable connectivity to the site by all modes.

2.6.5. There are also leisure routes within the vicinity of the area, including through Whitey Park to the west of the proposed development. While these leisure routes may provide some well-being benefits to users of the development, such as access to green space, they may not be suitable for active travel journeys or for all users. This is due to the routes not offering direct connections between residential areas, the town centre and the proposed development, as well as not being maintained to Active Travel Act standards.

2.7 DISTANCES TO FACILITIES

2.7.1. This section considers the location of the site inr elation to key local facilities, amenities and destinations, which assists in an assessment of the likely need to travel to and from the site by car.

2.7.2. Manual for Streets (MfS) guidance suggests that walkable neighbourhoods are typically characterised by having facilities located within 800m walking distance (approximately 10 minutes). However, MfS also states that 'this is not the upper limit and walking distances offers the greatest potential to replace short car trips, particular those under 2km'.

2.7.3. In addition to the above, the CIHT guidance on suggested acceptable walking distances set out in "Providing for Journeys on Foot, 2000" states that the average length of a walking journey is 1km (0.6 miles) and that this differs little by age.

2.7.4. The CIHT guidance acknowledges that "acceptable" walking distances will vary between individuals and circumstances. These identify "desirable", "acceptable" and "preferred maximum" distances as reproduced in Table 2-3.

Table 2-3 - Acceptable Walking Distances (MfS)

Distance Class	Town Centre (m)	Commuting / Education (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

2.7.5. Differences in the propensity to walk by journey purpose may relate to individuals being more willing to walk further on foot to locations they have the greatest need to reach and/or where longer may be spent upon arrival (e.g. work or school).

2.7.6. An accessibility study has been undertaken to establish what facilities and amenities are available in the local area. The walk/cycle distances from the development to these facilities have been measured using existing footways, foot/cycle paths, footbridges and local roads (in case of cyclists).

2.7.7. Approximate walk times are based on the Institution of Highways and Transportation's guidance within the 'Providing Journeys on Foot' document, which states that an average walking speed of 1.4 m/s can be assumed for most pedestrians. This measurement equates to approximately 400m every 5 minutes. The time required to cycle to a facility/amenity has been based on a "comfortable cycle speed" of 4.44 m/s as suggested in Sustrans' 'Cycle Friendly Employers' Information Sheet.

2.7.8. Table 2-4 provides a summary of the local facilities and amenities and their respective distances, as well as the walk and cycle time from the application site. The table demonstrates that the majority of the nearest amenities are located outside of the preferred walking and cycling distances from the proposed development. On this basis, it is reasonable to assume that there is limited opportunity for journeys to be undertaken by foot or bicycle.

2.7.9. However, it is recognised that the proposed development is an employment site, and therefore there may be less requirement to travel between the development and local amenities.

Table 2-4 - Proximity to local amenities

Facility	Distance from site (km)	Walking Travel Time (minutes)*	Cycling Travel Time (minutes)*
Public Transport			
Railway station	2.0	23	7
Nearest bus stop	0.8	9	3
Health			
Nearest Pharmacy	1.8	21	6
Leisure			
Library	1.7	20	6
St David's Church	1.7	20	6
Retail			
High Street	1.8	21	6
Nearest Post Office	1.8	21	6
Premier Store	1.1	13	4

3 TRAFFIC SURVEYS

3.1 INTRODUCTION

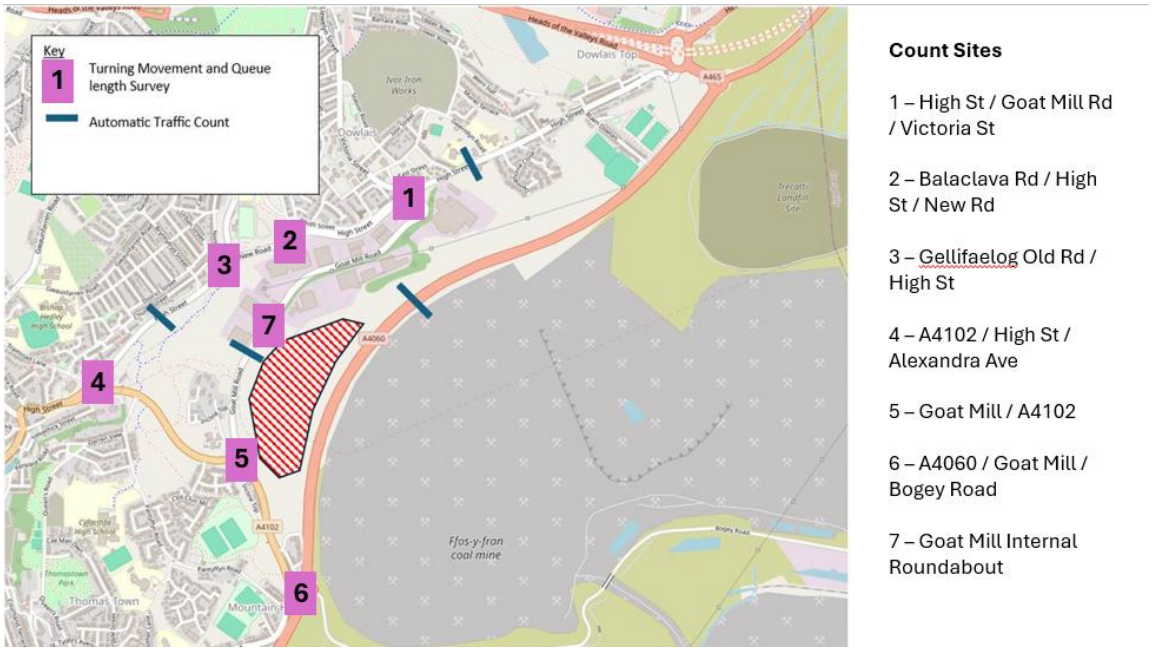
3.1.1. Traffic surveys have been commissioned to establish the existing conditions on the local highway network. These surveys will provide a robust evidence base, capturing current traffic flows, turning movements, and queue lengths at key junctions surrounding the proposed development site. The data collected will be fundamental in informing the assessment of the development's potential impacts, ensuring that the analysis reflects real-world conditions and supports a transparent, evidence-led approach to forecasting and modelling future scenarios.

3.2 TRAFFIC SURVEY DATA

3.2.1. Junction turning counts, link counts and queue length surveys were commissioned at the location presented in Figure 3-1. In total there were 7 Manual Classified Counts (MCC) and 4 link counts. The junction turning counts and queue lengths were collected on Tuesday 2nd September and Wednesday 3rd September 2025.

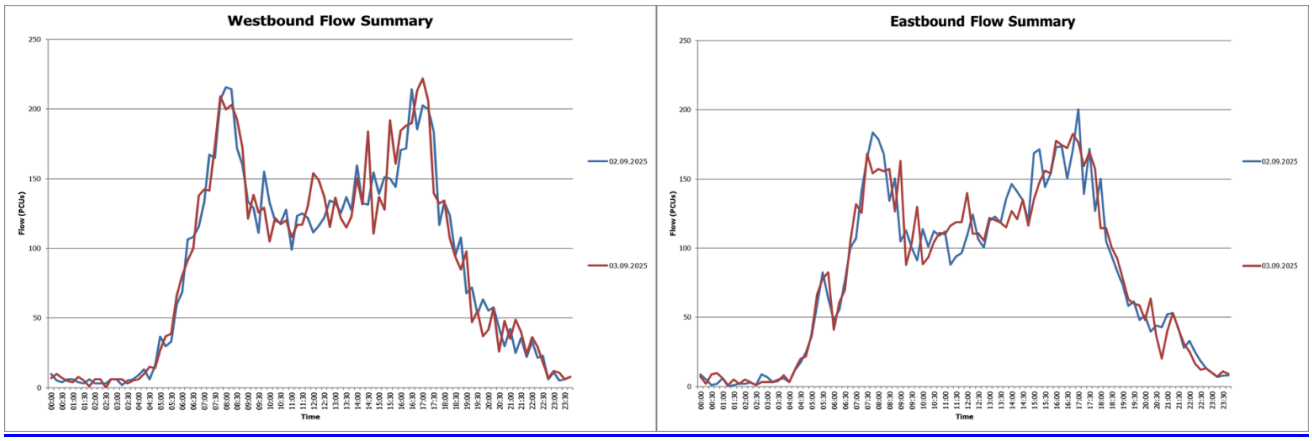
3.2.2. Link counts were collected for 7 days between Monday 1st September and Wednesday 17th September.

Figure 3-1 - Counts Location Diagram



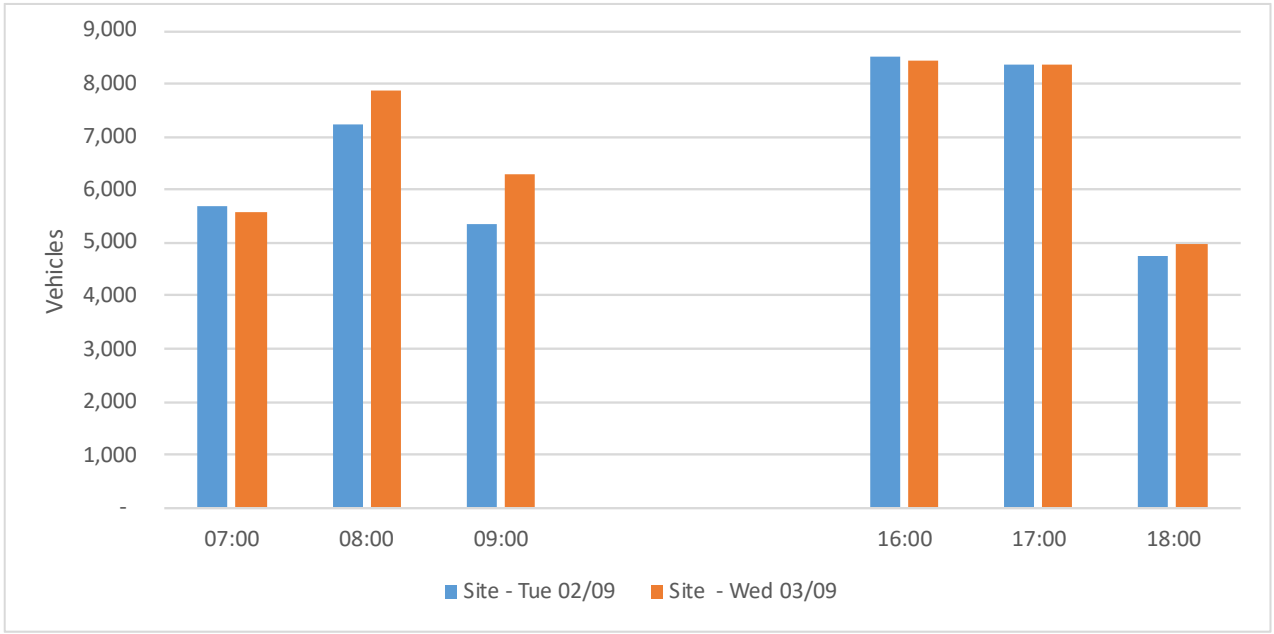
3.2.3. The A4060 traffic count was used for the peak-hour selection analysis because it recorded the highest traffic flows within the study area and is considered representative of trips travelling to and from the proposed development. In addition, traffic flows on the A4060 are less influenced by retail activity than those recorded at other survey locations. The analysis identified 07:00 to 08:00 as the AM peak hour and 16:00 to 17:00 as the PM peak hour, as shown in Figure 3-2.

Figure 3-2 - A4060 Peak Hour Identification



3.2.4. In addition to the A4060 analysis described above, the turning movements recorded at all surveyed junctions were summed to compare overall network-wide traffic volumes on the two survey days. This analysis showed that Wednesday, 3 September experienced higher total traffic volumes than Tuesday, 2 September, as illustrated in Figure 3-3. Consequently, Wednesday was identified as the more representative day for subsequent modelling and analysis. This analysis also confirmed the peak hours as being 07:00 to 08:00 for the AM peak and 16:00 to 17:00 for the PM peak.

Figure 3-3 - Total Turning Counts Flow 02/09 & 03/09 2025



3.2.5. It is noted that observed traffic flows during the 16:00 to 17:00 and 17:00 to 18:00 PM peak periods are similar. Although 16:00 to 17:00 has been identified as the observed network peak, the proposed development may generate more trips between 17:00 and 18:00. Consequently, once development traffic is added, the 17:00 to 18:00 period could become the busier of the two. To ensure that the assessment captures the most critical conditions, both PM peak hours will therefore be modelled, together with a single AM peak hour. The proposed assessment periods are:

- 07:00 to 08:00 for the AM peak;

- 16:00 to 17:00; and
- 17:00 to 18:00 for the PM peaks.

4 PROPOSED TRIP GENERATION

4.1 INTRODUCTION

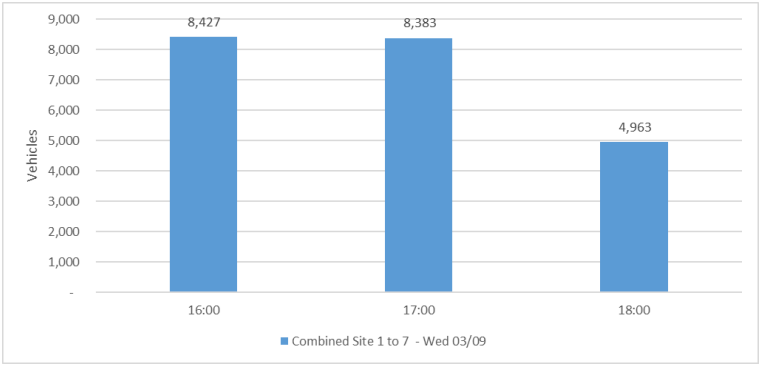
4.1.1. This Chapter provides detail on the vehicular trip generation forecasts for the proposed development and how they have been derived. This note primarily deals with vehicular modes, as a key purpose of the note is to seek to agree the scope of vehicular traffic impact assessments. Details of the projected multi-modal trip generation and impacts associated with the proposed development will be included within the Transport Assessment.

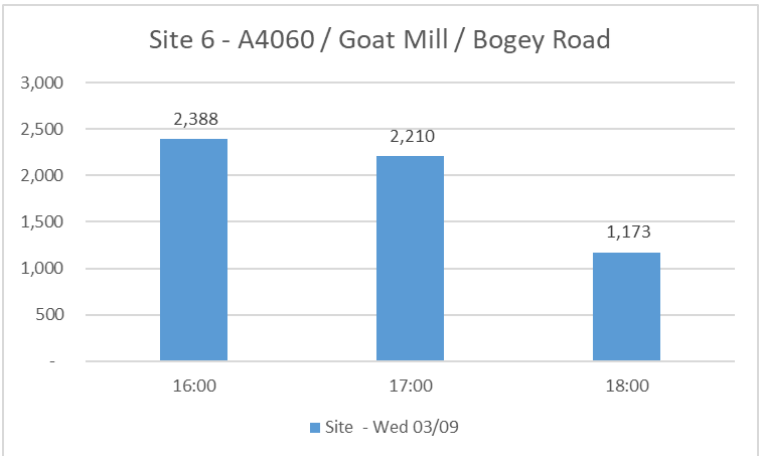
4.2 TRIP PEAK HOUR ASSESSMENT

4.2.1. The identification of the peak hour is critical for assessing the traffic impact of the proposed development. Traffic flow data for all seven sites across the network was reviewed across consecutive hourly periods to determine the time frame with the highest trip generation and network demand. The AM period was clearly busier between 08:00 to 09:00; however, the PM required further analysis.

4.2.2. Analysis of the observed flows indicates that the 16:00 to 17:00 and 17:00 to 18:00 periods exhibit similar overall volumes. However, for junctions located near the development access (Sites 5 and 6), the 16:00 to 17:00 period shows a significantly higher total number of trips compared to 17:00 to 18:00. This suggests that 16:00 to 17:00 hour better represents the development-related peak as presented in Figure 4-1.

Figure 4-1 - PM Peak Hour Comparison (All Sites & Site 6)





4.3 PROPOSED TRIP GENERATION

4.3.1. Trip generation for the proposed development will be estimated using the TRICS database, which provides observed trip-rate data for comparable developments. The assessment will consider the likely vehicular trip generation associated with the proposed land uses during the weekday AM and PM peak periods, together with a Saturday assessment.

4.3.2. In accordance with the Highway Authority's comments on the Transport Scoping Note, the initial TRICS site selection will apply the following parameters:

- Exclude London, Greater Dublin and Scotland;
- Main Location: Edge of Town;
- Sub-location: Industrial Zone / Development;
- Trip Rate Parameter Range: 10 km to 30 km;
- a minimum of six comparable sites, where sufficient suitable data are available; and
- survey data covering three weekdays and an additional Saturday.

4.3.3. These parameters reflect those requested by the Highway Authority.

4.3.4. The TRICS site selection will initially seek to identify a minimum of six suitably comparable sites using the above criteria. However, it is recognised that application of all of the specified parameters may result in fewer than six suitable sites being available for some land uses or assessment periods. Where this occurs, the selection criteria will be reviewed in accordance with the principles set out in the TRICS Good Practice Guide, with any changes to the selection criteria clearly identified and justified within the Transport Assessment.

4.3.5. In considering how the dataset should be widened, regard will be given to the TRICS Good Practice Guide which advises that regional selection should not be a major consideration when filtering sites and that it is not considered good practice to exclude surveys solely on the basis of region. The TRICS Good Practice Guide refers to a TRICS study *A Comparison of Vehicular Trip Rate Variation by TRICS Regions and Location Types – Technical Note*. The study found no clear and consistent pattern of vehicular trip-rate variation by geographical region, whereas analysis by location type demonstrated a more structured and consistent variation. On this basis, where insufficient data are available, priority will be given to maintaining a representative location type, rather than seeking to achieve a minimum number of sites through the inclusion of sites with materially different locational characteristics. Any relaxation of the remaining selection criteria will be undertaken in a controlled manner and clearly documented.

4.3.6. Where fewer than six suitably comparable sites remain following this review, the available comparable dataset will be presented transparently within the Transport Assessment. A sensitivity assessment will also be undertaken using a suitably widened TRICS dataset, where appropriate, to establish whether the conclusions of the assessment are sensitive to the limited sample size. This approach avoids the inclusion of poorly comparable sites solely for the purpose of achieving a prescribed minimum sample while providing a robust check on the resulting trip-generation forecasts.

4.3.7. The development proposals comprise a mix of employment uses. The Highway Authority has requested that the trip generation assessment considers 100% B1, 100% B8 and a 50% B1 / 50% B8 split. Accordingly, these scenarios will be considered within the Transport Assessment to demonstrate the potential range of trip generation associated with the development.

- 100% B1 scenario, representing the whole development as B1;
- 100% B8 scenario, representing the whole development as storage or distribution; and
- 50% B1 / 50% B8 scenario, with the total development floor area divided equally between the two uses

4.3.8. The principal weekday highway assessment will be based on the agreed development scenario used for the junction capacity assessment. The alternative 100% B8 and 50% B1 / 50% B8 scenarios will be presented as descriptive sensitivity assessments, providing a comparison of the resulting trip generation and demonstrating the potential effect of different future occupier/use mixes. This is particularly relevant given that the Highway Authority has requested explicit consideration of B8 activity.

4.3.9. In addition to the weekday assessment, TRICS trip generation will be derived for a Saturday in response to the Highway Authority's request for weekend data. The Saturday results will be presented as a descriptive assessment to demonstrate the anticipated level and profile of weekend development traffic. The results will be compared with the weekday assessment to provide context regarding the relative magnitude of development-generated traffic.

4.3.10. The TRICS outputs, including the site-selection parameters, selected sites and calculated trip rates for each assessed land-use scenario, will be provided within the appendices to the Transport Assessment to ensure that the derivation of the development trip generation is transparent and reproducible.

5 TRIP DISTRIBUTION AND ASSIGNMENT

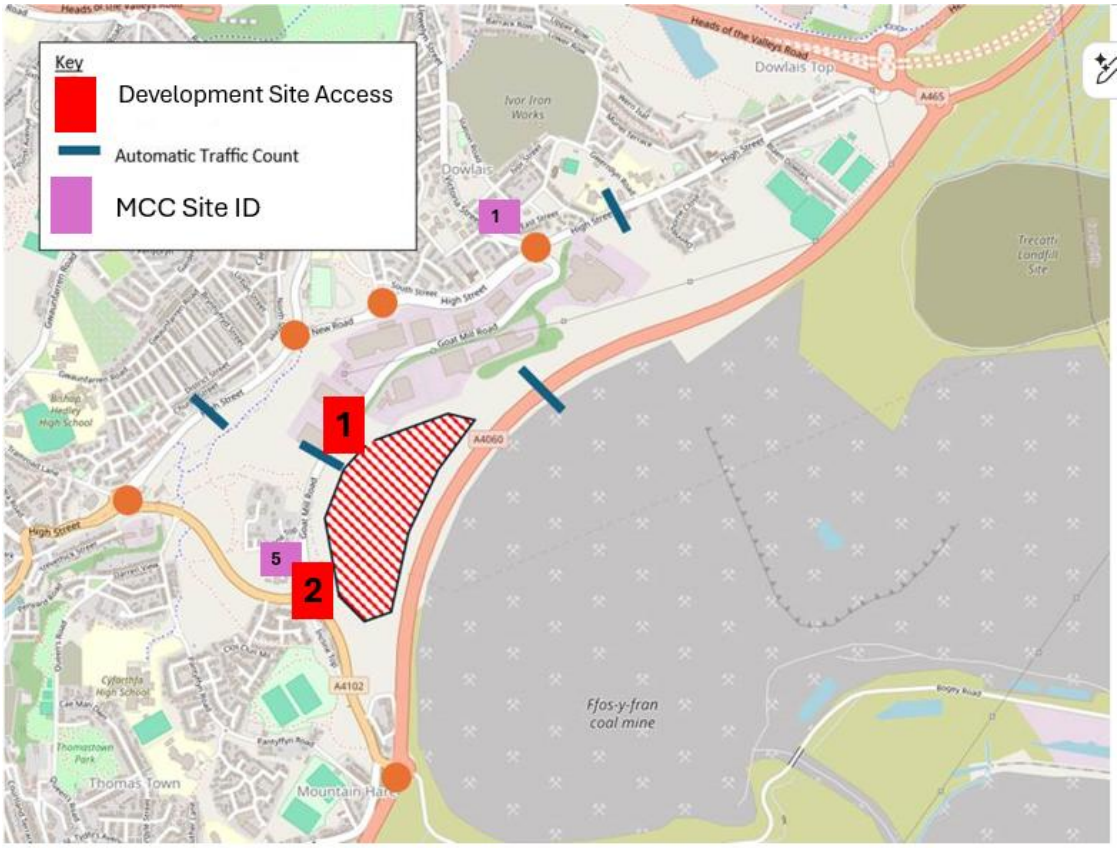
5.1 INTRODUCTION

5.1.1. This chapter presents the projected distribution of trips identified in Chapter 3, detailing how these trips are assigned across the local highway network. The methodology ensures that the forecast traffic flows accurately reflect realistic travel patterns, considering the development's location, the characteristics of the surrounding network, and overall accessibility. This approach supports a robust and evidence-led assessment of the development's potential transport impact.

5.2 EMPLOYMENT TRIPS

5.2.1. The development will be accessed via two points, identified as Locations 1 and 2 in Figure 5-1.

Figure 5-1 - Development Site Access (1 & 2)



5.2.2. Trip Distribution has been carried out using the arrival trips on Goat Mill Road by taking the inbound and outbound total trips at Site 1 (High Street / Goat Mill Road / Victoria Street) and Site 5 (Goat Mill / A4102). These observations were used to determine the proportion of development traffic travelling in the northbound and southbound directions from the proposed site. This approach effectively uses the distribution of trips from the existing industrial units on Goat Mill Road as a proxy, ensuring that the projected development traffic reflects established travel patterns in the area.

5.2.3. A spreadsheet model will be used to redistribute development trips across the local junctions. This redistribution will be based on existing turning movement proportions, ensuring that the forecast

flows reflect current traffic patterns. Conventional presentation methods showing turning movements on a traffic flow diagram will be used.

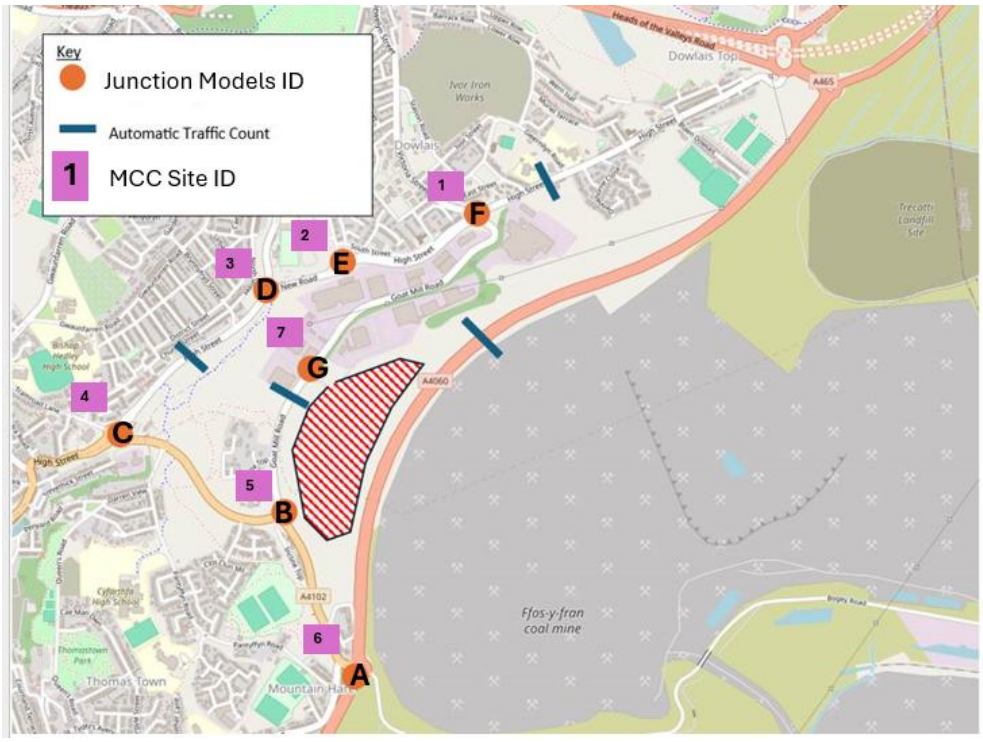
6 JUNCTION CAPACITY ANALYSIS

6.1 INTRODUCTION

6.1.1. This section evaluates the operational performance of key junctions surrounding the proposed development site. The analysis examines the impact of forecast development traffic during the weekday AM (07:00–08:00) and PM (16:00–17:00 & 17:00-18:00) peak periods, utilising the trip generation and distribution established in earlier chapters to ensure a comprehensive assessment of junction capacity and functionality.

6.1.2. Junction modelling will be undertaken using TRL standalone junction capacity assessment software, Junctions 11. The assessment will include 6 ARCADY (Assessment of Roundabout Capacity And Delay) and 1 PICADY (Priority Intersection Capacity And Delay) model. The locations of the junctions subject to analysis are illustrated in Figure 6-1.

Figure 6-1 - Junction Capacity Analysis



6.2 METHDOLOGY

6.2.1. Observed traffic survey data will be utilised to create baseline traffic matrices for each of the 7 junction locations presented in Figure 6-1. These matrices will represent existing traffic conditions and form the foundation for the capacity assessment, drawing on traffic counts collected in September 2025.

6.2.2. The base models will be validated against observed queue length data to ensure that the models accurately reflect existing traffic conditions prior to applying development flows.

6.2.3. It is noted that previous WSP surveys and analysis have been undertaken at the Penheolferthyr/Goat Mill Road Junction and the Goat Mill Road/A4060 roundabout junction. These

will be reviewed and incorporated into the Transport Assessment where relevant, alongside updated survey data and junction modelling, to assess current queueing conditions and determine whether mitigation measures are required.

6.2.4. Growth factors will be derived from the National Trip End Model (NTEM) Core Scenario, which provides forecasts of future travel demand based on changes in population, employment, and land use at a local and national level. These NTEM-derived factors will be applied to the base traffic models to represent projected conditions for 2028 (the opening year) and 2038 (the design year). The models will first be run to create a Do Minimum scenario, reflecting future traffic conditions without the proposed development. Development-related trips will then be added to generate a With Development scenario, enabling a robust assessment of the incremental impact of the proposed scheme.

6.2.5. Table 6-1 provides the NTEM-derived factors for the Merthyr Tydfil local authority area. These factors have been extracted for the 'All Roads' category, reflecting the mix of trunk and local roads within the study area. Forecasts indicate a growth of 2.8% in the AM peak and 2.7% in the PM peak between 2025 and 2028. Over the longer term, from 2025 to 2043, growth is projected at 3.1% in the AM peak and 2.5% in the PM peak. The lower growth rate in the PM period is primarily attributed to changes in population and employment patterns.

Table 6-1 - NTEM Forecast Factors (Core Scenario)

	AM 2025 to 2028	PM 2025 to 2028	AM 2025 to 2043	PM 2025 to 2043
Merthyr Tydfil	2.8%	2.7%	3.1%	2.5%

6.3 RESULTS

The following scenarios will be analysed, in terms of Ratio of Flow to Capacity (RFC), queue lengths, arm and junction delay:

- Base Year 2025
- Opening Year 2028 (Opening Year)
- Opening Year 2028 (including Development Flows)
- Design Year 2038
- Design Year 2038 (including Development Flows

7 SUMMARY AND CONCLUSIONS

7.1.1. WSP has been appointed by Merthyr Tydfil County Borough Council to prepare a Transport Assessment for the proposed development at Goat Mill Road, comprising up to 17,456 sqm of mixed employment floorspace. The site is well connected to the strategic highway network via the A4060, A470 and A465 and will be served by two existing access roundabouts. A review of collision records identified three slight collisions on Goat Mill Road during the five-year study period, with no apparent pattern indicating an existing highway safety issue.

7.1.2. Although bus and rail services are available, the nearest bus stops are approximately 800m from the site and Merthyr Tydfil railway station is approximately 2km away. Existing walking and cycling provision is constrained by limited infrastructure, steep gradients and the absence of formal crossings on Goat Mill Road. Most local amenities are also beyond preferred walking distances, although several future active travel routes are proposed in the surrounding area.

7.1.3. Traffic surveys were undertaken at seven junctions, supported by link and queue-length surveys. Wednesday 3 September 2025 recorded the higher overall traffic flows and will form the basis of the assessment. Junction modelling will consider the weekday AM peak and both the 16:00–17:00 and 17:00–18:00 PM periods to ensure the busiest combined network and development conditions are assessed.

7.1.4. Development trip generation will be derived using TRICS for the requested B1 and B8 land-use scenarios, including weekday and Saturday assessments. The agreed selection criteria will be applied initially, with any necessary widening of the dataset clearly justified and sensitivity testing undertaken where appropriate. Development traffic will be distributed using observed travel patterns on Goat Mill Road and assigned through the surrounding network.

7.1.5. Seven junctions will be assessed using Junctions 11, with the base models validated against observed queues. The assessment will consider the 2025 base year and future-year scenarios for 2028 and 2038, both without and with the development. Overall, the proposed methodology provides a proportionate and transparent basis for assessing the development's transport impacts. The Transport Assessment will confirm the operational effects at each junction and identify any mitigation or sustainable transport measures required.

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