# Proposed Discount Foodstore
# Land off Caernarfon Road, Bangor

The Bampton Property Group
Transport Assessment

**Feb 2019**

## Contents


**1.0 INTRODUCTION ..... 1**
1.1 Appointment of Connect Consultants ..... 1
1.2 Site Location ..... 1
1.3 Development Proposals ..... 2
1.4 Report Overview ..... 3
**2.0 SITE TRANSPORT CONTEXT ..... 5**
2.1 Introduction ..... 5
2.2 Pedestrian Access ..... 5
2.3 Cycling ..... 7
2.4 Bus Access ..... 8
2.5 Highways Access ..... 9
2.6 Section Conclusion ..... 10
**3.0 PROPOSED DEVELOPMENT ..... 11**
3.1 Introduction ..... 11
3.2 Proposed Site Access Arrangements ..... 11
3.3 Servicing ..... 11
3.4 Parking Policy ..... 12
3.5 Section Conclusion ..... 13
**4.0 TRAFFIC ASSESSMENT ..... 14**
4.1 Introduction ..... 14
4.2 Existing Traffic Flows ..... 14
4.3 Future Year Traffic Flows ..... 16
4.4 Existing Industrial Use – Traffic Generation ..... 16
4.5 Existing Industrial Use – Traffic Distribution and Assignment ..... 17
4.6 Proposed Discount Foodstore Trip Attraction ..... 17
4.7 Pass-by / Diverted / Linked Trips / Trade Diversions ..... 18
4.8 Net Development Effect ..... 20
4.9 Traffic Flows for Testing ..... 21
4.10 Section Summary ..... 21
**5.0 JUNCTION CAPACITY AND COLLISION ANALYSIS ..... 22**
5.1 Introduction ..... 22
5.2 Existing Collision Analysis ..... 22
5.3 Future Collision Consideration ..... 23
5.4 Capacity Analysis ..... 23
5.5 Section Summary ..... 25
**6.0 SUMMARY AND CONCLUSIONS ..... 26**
6.1 Summary ..... 26
6.2 Conclusions ..... 26

## List of Tables


Table 2.1 – Bus Service Details 9
Table 4.1 – TEMPRO Growth Rates 16
Table 4.2 – TRICS Assessment - Existing Industrial Unit Potential Trips 17
Table 4.3 – TRICS Assessment - Discount Foodstore 17
Table 4.4 – Linked Trip Survey Results 19
Table 4.5 – Summary of Trip Types 20
Table 4.6 – Net Traffic Effect 21
Table 5.1 – Junctions 9 – Proposed Site Access Mini Roundabout 23
Table 5.2 – Junctions 9 – Ffordd Coed Mawr Mini Roundabout 24
Table 5.3 – Junctions 9 Summary – Toronnen/A4087 junction 24
Table 5.4 – Junctions 9 Summary – Right turn to Dunelm 25


## List of Figures


Figure 1.1 – Site Location Plan 1
Figure 1.2 – Site in its Local Context 2
Figure 2.1 – 800m and 2km Walk Catchment 6
Figure 2.2 – Cycle Catchment Area 7
Figure 2.3 – Cycle Map 8
Figure 2.4 – Highway Network 10

## List of Appendices

Appendix 1 – Site Layout
Appendix 2 – Proposed Access Arrangements
Appendix 3 – Bus Timetables
Appendix 4 – Road Safety Audit & Response
Appendix 5 – Swept Path Analysis
Appendix 6 – Traffic Survey Data
Appendix 7 – 2017 Survey Flows
Appendix 8 – 2024 Base Flow
Appendix 9 – TRICS Data - Industrial
Appendix 10 – Traffic Distribution
Appendix 11 – Industrial Traffic
Appendix 12 – TRICS Data - Discount Foodstore
Appendix 13 – Foodstore Traffic - New
Appendix 14 – Foodstore Traffic - Passby/Diverted
Appendix 15 – Net Traffic Effect
Appendix 16 – 2024 Base + Industrial
Appendix 17 – 2024 Base + Foodstore
Appendix 18 – Junctions 9 Output

# 1.0 INTRODUCTION

## 1.1 Appointment of Connect Consultants

1.1.1 Connect Consultants Limited is a firm of transport planning and highway design consultants that have been instructed by The Bampton Property Group to produce a Transport Assessment (TA) in support of their proposal to redevelop a vacant industrial unit off Caernarfon Road, Bangor.

1.1.2 The proposed development will see the provision of a 1,725sq.m. Gross Internal Area (GIA) Aldi discount foodstore and 113 car parking spaces in lieu of the industrial unit.

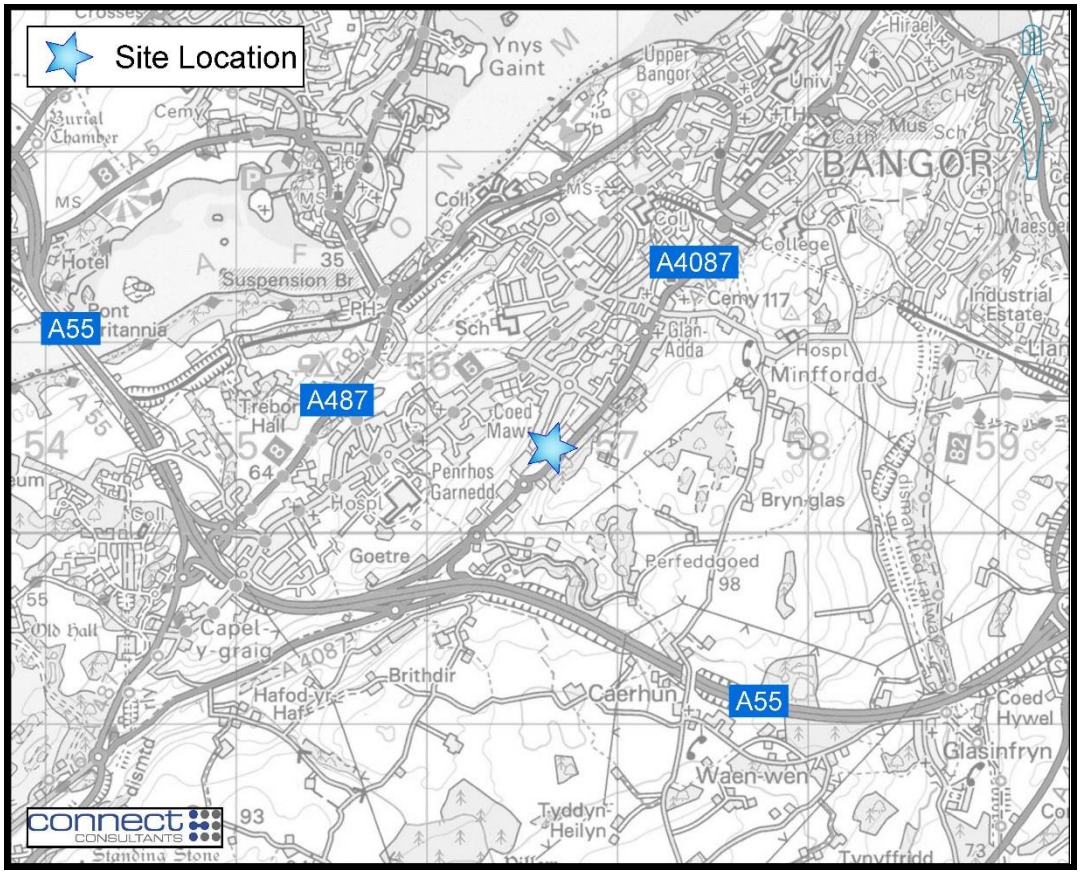
## 1.2 Site Location

1.2.1 The proposal site is located on the north-western side of the A4087 Caernarfon Road, Bangor. The site is currently occupied by an industrial unit with a Gross Floor Area (GFA) of 2,300sq.m. The unit is vacant.

1.2.2 The proposal site is bound to the northeast by a Dunelm retail unit, to the southeast by the A4087 Caernarfon Road, to the southwest by a road called Toronnen and the northwest a road called Trehwfa.

1.2.3 The location of the proposal site, in the context of the urban area, is presented at Figure 1.1.

**Figure 1.1 – Site Location Plan**




*Source: Promap*

1.2.4 The site is located in a largely built up urban area, to the south west of the centre of Bangor. There are residential dwellings and retail uses near to the site.

1.2.5 Figure 1.2 identifies the context of the site in relation to the local area.

**Figure 1.2 – Site in its Local Context**

*Source: Google*

1.2.6 The main vehicular site access takes the form of a priority t-junction formed with the A4087 Caernarfon Road. The minor arm of the junction gives access to both the site and also the adjoining Dunelm unit.

1.2.7 Service access to the site is to the west, via a road called Trehwfa. Trehwfa forms a priority t-jucntion with the A4087 Caernarfon Road to its northern side.

## 1.3 Development Proposals

1.3.1 The development proposals are shown on the plan provided at Appendix 1. The proposals include the development of an Aldi discount foodstore with site composition including the following:-

- An Aldi store with Gross Internal Area (GIA) of 1,725sq.m.
- A car park with 113 spaces, of which six will be reserved for disabled users, seven for parents with young children and seven spaces for staff.

1.3.2 The proposed site access arrangements are also shown on the site layout plan at Appendix 2. A brief description of the site access arrangements is set out below:-

- 3-arm mini roundabout will be provided to serve the proposed Aldi and adjoining Dunelm site to replace the existing t-junction.
- Service vehicles will access the site via Torronnen, to the southwest of the site.

- Pedestrians will access the site via a footway provided around the perimeter of the mini roundabout, connecting with the site frontage and also to the rear of a site via a link formed with Trehwfa.

Planning Policy Wales (PPW) Edition 9, December 2018

1.3.1 The document 'Planning Policy Wales' (PPW) published December 2018 sets out the Welsh Government's planning policies and includes a framework for local authorities to produce their own development plans. Chapter 4 relates to Transport.

1.3.2 Paragraph 4.1.9 describes how the planning system should facilitate developments that;

- *are sited in the right locations, where they can be easily accessed by sustainable modes of travel and without the need for a car;*
- *are designed in a way which integrates them with existing land uses and neighbourhoods; and*
- *make it possible for all short journeys within and beyond the development to be easily made by walking and cycling.*

1.3.3 PPW is supplemented by 21 Technical Advice Notes (TANs). The most pertinent in regards to this TA is TAN 18: Transport, dated March 2007

1.3.4 Paragraph 8.1.5 of the PPW indicates that land use planning can help to achieve the Welsh Government's objectives for transport through:

*"reducing the need to travel, especially by private car, by locating development where there is good access by public transport, walking and cycling;*

*locating development near other related uses to encourage multi-purpose trips and reduce the length of journeys;"*

1.3.5 Paragraph 2.3 of TAN 18 reflects the above by setting out that integration can help the Welsh Government achieve its objectives by:

*"ensuring new development is located where there is, or will be, good access by public transport, walking and cycling thereby minimising the need to travel and fostering social inclusion;".*

## 1.4 Report Overview

1.4.1 As discussed in a pre-app meeting on the 18th October 2018, a TA scoping note was submitted to Gwynedd Council in January 2019.

1.4.2 This report is divided into five sections, which are as follows:-

Section 2.0 Site Transport Context

1.4.3 This section of the report provides details of the site context, including its accessibility by all relevant transport modes.

Section 3.0 Proposed Development

1.4.4 The various components of the development proposal, including the site access arrangements and parking provision, are described within this section of the report.

Section 4.0 Traffic Assessment

1.4.5 This report section provides an assessment of the vehicular attraction of the proposed development and its traffic effects.

Section 5.0 Junction Capacity and Collision Analysis

1.4.6 The results of the traffic assessment have been used to inform junction capacity and collision analysis, and the methodology and results are outlined in this section of the report.

Section 6.0 Summary & Conclusions

1.4.7 A summary and the conclusions of the report are provided in this section.

# 2.0 SITE TRANSPORT CONTEXT

## 2.1 Introduction

2.1.1 This section of the report considers the accessibility of the site in terms of a range of transport modes.

## 2.2 Pedestrian Access

2.2.1 The Department for Transport's (DfT) document titled 'Manual for Streets' dated 2007 provides guidance in relation to walk distances. Section 4.4 gives the following advice:-

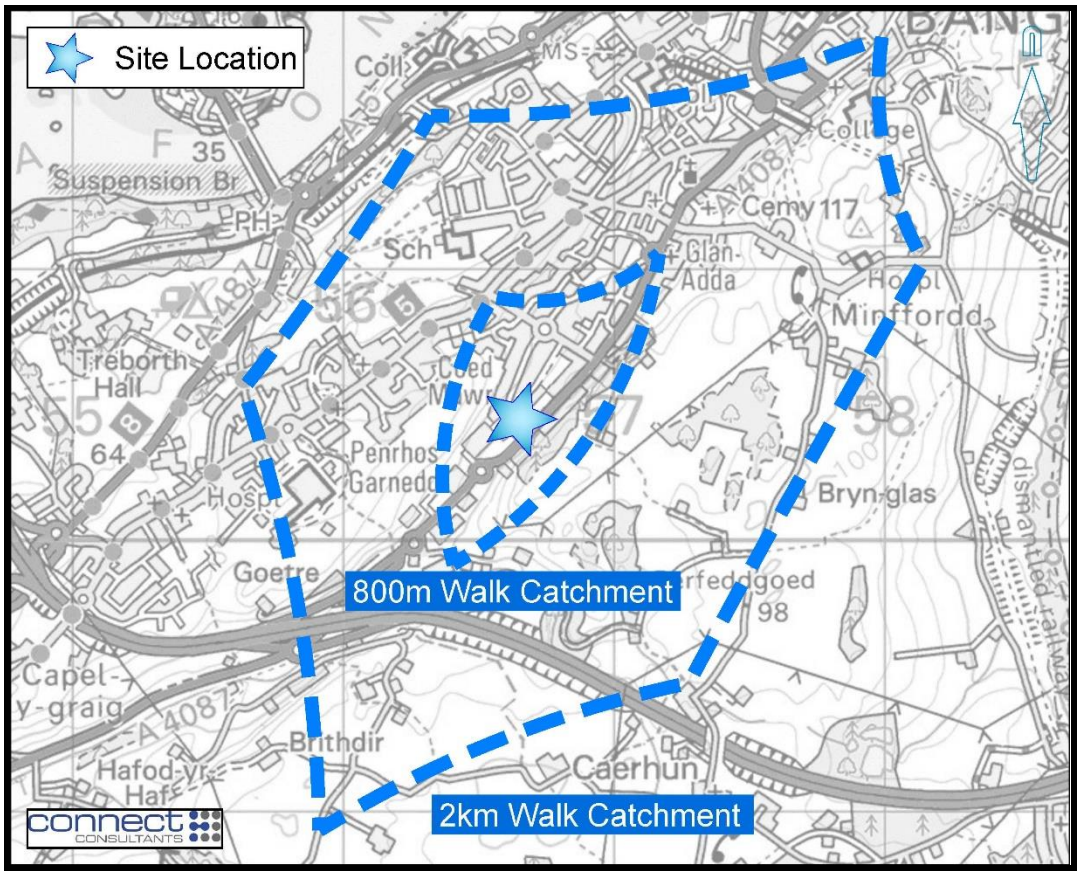
> *"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot".*

2.2.2 Table 3.2 of The Institute of Highways and Transportation (IHT) guidance document titled 'Providing for Journeys on Foot' identifies a maximum walk distance of 2.0km for commuter, school and sightseeing walk trips, 800m for town centre walk trips and 1.2km for trips elsewhere.

2.2.3 The actual distance that people will be prepared to walk will vary depending on the trip purpose and other factors such as the presence of road crossings and terrain. For retail trips, the likely maximum walk distance is 800m due to the fact that shoppers will be carrying bags on their return journey, while for work based trips to the foodstore, people are likely to be prepared to walk the full 2km referred to in 'Providing for Journeys on Foot'.

2.2.4 Based on a maximum walk distance of 800m for shoppers and 2km for employees, the approximate walk catchments are shown at Figure 2.1.

**Figure 2.1 – 800m and 2km Walk Catchment**




*Source: Promap*

2.2.5 The walk catchments above indicate that there are a number of residences within the 800m customer walk catchment area as well as a substantial staff pool residing within the 2km walk catchment.

2.2.6 Caernarfon Road has footways on both sides for at least 500m in either direction. Toronnen and Trehwfa, to the rear of the site have footways on at least one side. Side roads are complemented with tactile paving and/or dropped kerbs.

2.2.7 There is an uncontrolled pedestrian crossing point, on Caernarfon Road approximately 30m distant from the site's existing priority junction formed with Caernarfon Road.

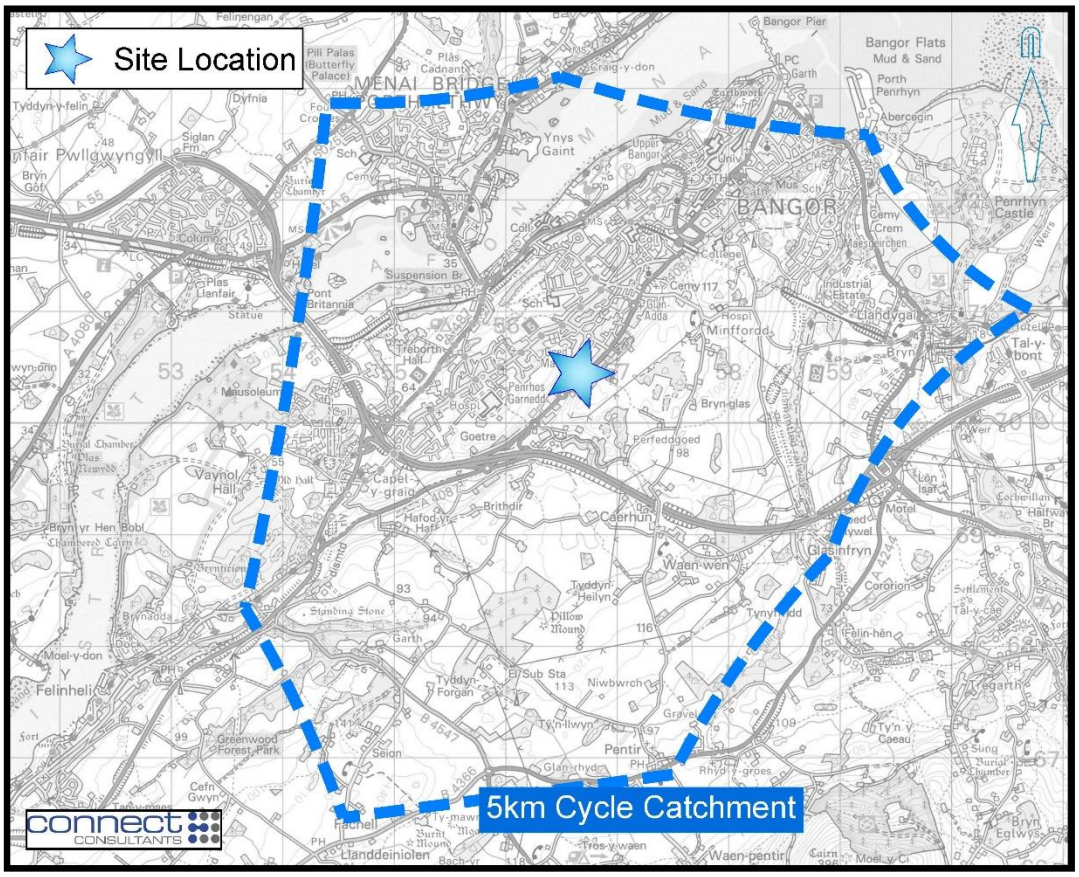
2.2.8 In light of the local pedestrian facilities, the site is well connected to the local pedestrian network with opportunities for customers to make trips by foot. There are also good opportunities for future staff members to walk to work.

## 2.3 Cycling

2.3.1 For the purposes of this assessment, it has been assumed that cycling has the potential to replace short car trips, particularly for journeys of less than 5km in length. Small quantities of shopping can be carried on a cycle rack without impediment and cycling is therefore a viable mode of transport, particularly for staff and customers making 'top-up' shopping trips.

2.3.2 Based on a maximum cycle distance of 5km, the approximate cycle catchment is shown at Figure 2.2.

**Figure 2.2 – Cycle Catchment Area**




*Source: Promap*

2.3.3 The 5km cycle catchment includes all of Bangor to the north and northeast and most of Menai Bridge to the north. This provides a significant local population within cycle distance of the site.

2.3.4 Figure 2.3 shows a cycle map for the site and surroundings, taken from the Sustrans website.

**Figure 2.3 – Cycle Map**

*Source: Sustrans. N.B. The proposal site is indicated by a blue star.*

2.3.5 To the southwest, alongside Caernarfon Road and to the rear of the site, along Trehwfa, runs a local cycle route called Lon Adda. The local route is a mixture of on-road (purple) and off-road (green) routes.

2.3.6 The nearest section of long-distance cycle route is located approximately 500m to the northwest of the site, this being Route 5. Near to the site, route 5 is an on-road route that locally connects Colwyn Bay with Bangor.

2.3.7 Considering that the roads local to the site are urban in character, and that the local topography is generally gentle, cycling provides an opportunity to access the store by a sustainable mode of transport for potential customers and staff members.

## 2.4 Bus Access

2.4.1 The publication 'Planning for Public Transport in Developments' produced by the Institution of Highways and Transportation (IHT) specifies that new developments should be located within 400m of the nearest bus stop.

2.4.2 The nearest bus stops to the site are located directly adjacent to the site boundary on the A4087 Caernarfon Road. Both stops have flag-and-poles with timetables. The location of the stops is indicated at Figure 1.2.

2.4.3 Table 2.1 summarises the routes that serve the above bus stops. Full details of these services are provided at Appendix 3.

**Table 2.1 – Bus Service Details**

| Service | Route | Approximate Frequency | | |
|---|---|---|---|---|
| | | Monday - Friday | Saturday | Sunday |
| 53L | Bangor - Llanddona | 2 - 3 Serices/day | | - |
| 58 | Bangor - Glanrafon | 5 services/day | | 6 services/day |
| 58L | Bangor - Llangoed | 3 services/day | | - |
| 56 | Bangor - Llanddona | 2 services/day | | |
| 6A | Mynydd Llandygai - Bangor | 4 services/day | | - |
| 73 | Bangor Circular | 5 services/day | | |

2.4.4 The above buses provide access to a variety of destinations, including Llangoed, Llanddona and Glanrafon.

2.4.5 Having regard to the proximity of the bus stops, the frequency of buses and the areas that the existing local buses serve, the site is accessible by public transport.

## 2.5 Highways Access

2.5.1 The site is currently accessed from a priority junction formed with the A4087 Caernarfon Road, with the site access forming the minor arm. The access is shared with Dunelm. Having turned off the A4087 Caernarfon Road, vehicles bear left to the proposal site or right to Dunelm.

2.5.2 The A4087 Caernarfon Road to the southwest leads to the A55 North Wales expressway, which is some 1km distant.

2.5.3 A road called Toronnen abuts the site on its southwestern boundary. The site has a service access that is formed with the eastern side of Torronen by way of a priority junction, with the site's service access being the minor arm.

2.5.4 To the northeast, approximately 250m distant the A4087 Caernarfon Road meets Ffordd Coed Mawr from the west by way of a 3-arm mini roundabout, with the A4087 Caernaforn Road forming the through-movement. The A4087 heads into the centre of Bangor, to the northeast.

2.5.5 Where it passes the site, the A4087 Caernarfon Road has a nominal roadwidth of approximately 8.5m and a speed limit of 30mph.

2.5.6 Figure 2.4 shows the site in its local highway context.

**Figure 2.4 – Highway Network**

*Image Source: OpenStreetMap.org*
*Site is denoted by a blue star*

2.5.7 Overall, the site has a prominent location in relation to the local road network from which it is readily accessible.

## 2.6 Section Conclusion

2.6.1 The proposal site is surrounded by a pedestrian network that includes a number of crossing facilities, and both a residential and mixed retail catchment within walking distance of the proposal site. The topography is conducive to cycling and the bus stops that are immediately opposite the site, on the A4087 Caernarfon Road are served by regular bus services, which provide access to / from a variety of destinations.

2.6.2 The proposal site also has a prominent location relative to the local highway network. Overall, the site has a good level of accessibility by all relevant transport modes.

# 3.0 PROPOSED DEVELOPMENT

## 3.1 Introduction

3.1.1 This report is based on a scheme comprising a new Aldi foodstore with a GIA of 1,725sq.m. The development includes a total parking provision of 113 parking spaces.

3.1.2 The proposed site layout is identified on the plan provided at Appendix 1.

## 3.2 Proposed Site Access Arrangements

3.2.1 The existing site access priority junction onto the A4087 Caernarfon Road will be upgraded through the provision of a 3-arm mini roundabout with a diameter of 20m. This access will accommodate customer traffic to the proposal site, the adjoining Dunelm store and the service vehicles of Dunelm.

3.2.2 A right-turn lane has been provided for traffic turning into the Dunelm site, having turned off the A4087 Caernarfon Road. The proposed access arrangements can be seen at Appendix 2.

3.2.3 Service vehicles to the proposal site will access the store via Torronnen, as they do as at present.

3.2.4 The access arrangement has been subject to a stage 1 Road Safety Audit (RSA), a copy of which can be seen at Appendix 4. A designer's response is also included at Appendix 4.

3.2.5 The site access arrangements shown at Appendix 2 include the changes suggested by the RSA.

## 3.3 Servicing

3.3.1 An Aldi store typically receives an average of four HGV deliveries per day. Three articulated HGV deliveries per day come from the Regional Distribution Centre (RDC) and there is one delivery per day of milk by a local supplier, usually using a medium sized goods vehicle.

3.3.2 Daily deliveries of milk, bread and morning fresh produce are received prior to, or as early as possible after, the store opening in the morning, and are delivered by one Aldi HGV and one milk delivery vehicle.

3.3.3 In addition to goods deliveries, each store has 1-2 collections of general waste and animal by-products per week.

3.3.4 Newspapers are delivered daily to the store, and a dedicated locker is provided within the service bay area for newspapers to be securely delivered.

3.3.5 Aldi stores have a cardboard bailer within the warehouse, and all cardboard packaging is bailed. Together with any plastics as required for recycling, this is then back loaded to the RDC with each Aldi HGV.

3.3.6 Aldi operate a closely managed servicing arrangement for each of its stores. The Aldi articulated service vehicle is able to carry frozen, chilled and mixed goods assembled at Aldi's RDC, enabling the potential to reduce journeys and vehicle kilometres compared to separate deliveries, thus providing an efficient servicing regime.

3.3.7 Aldi operates its own fleet of dedicated vehicles and drivers. Aldi HGVs are driven and operated by the dedicated Aldi driver.

3.3.8 The Aldi store warehouse has been designed as a result of years of experience to hold enough stock to prevent unnecessary deliveries, but is also of efficient size to ensure the freshest possible products and to prevent over-stocking. The efficient stock holding in their stores further reduces the need for multiple daily deliveries.

3.3.9 Stores are constructed with a delivery ramp, sheltered canopy and dock leveller system which means products can be unloaded without any external activity, such as forklift trucks, scissor lifts or cages, and in less than half the time were these facilities not provided. The usual time for unloading an Aldi HGV is 30 - 60 minutes.

3.3.10 During unloading, the back of the vehicle body is at the shop floor level, enabling the driver to wheel pre-packed pallets directly from the HGV to the dedicated storage area within the store. The delivery system is extremely efficient.

3.3.11 All Aldi vehicles are equipped with reversing cameras and audible warning systems enabling the driver and customers to be aware of the reversing vehicle. Where required, a trained Pedestrian Marshal is utilised by the store to guide pedestrians in a safe manner whilst a service vehicle is manoeuvring.

3.3.12 HGV access to the service area has been designed to accommodate the required turning manoeuvres of the largest service vehicle (FTA 16.5m articulated goods vehicle). The service vehicle will drive forwards into the site, reverse into the service ramp and then drive out forwards to exit the site.

3.3.13 The proposed site layout has been assessed for delivery vehicle manoeuvres based on the FTA 16.5m articulated goods vehicle and details of the swept path assessment are provided at Appendix 5.

3.3.14 The track plots show:-

- A 16.5m articulated vehicle entering the service yard and then reversing to the loading bay.
- A 16.5m articulated vehicle entering the service yard and waiting while another vehicle is waiting at the loading bay.
- A vehicle turning left on to Toronnen while there are cars parked on the eastern side of Toronnen.

3.3.15 The track plots show that the service route is satisfactory and that service vehicles would be able to manoeuvre within the site, enabling service vehicles to arrive and depart to / from the site in forward gear.

## 3.4 Parking Policy

Car Parking

3.4.1 At a local level, the 'CSS Wales - Parking Standards 2008' apply. This site is considered to fall within *"Zone 4 – Suburban or Near Urban".*

3.4.2 Page 21 of CSS Wales indicates that supermarkets between 1001sq.m. and 2000sq.m. should provide 1 parking space per 20sq.m. when applied to the proposed development this would equate to the need to provide 87 standard parking spaces.

3.4.3 With regards disabled provision, Appendix 1 of CSS Wales indicates that disabled parking should be provided at a rate of 6% of standard parking provision. This would equate to 6 disabled spaces.

3.4.4 The development provides 93 standard car parking spaces and six disabled spaces and hence is aligned with policy. In addition, seven parent and child and seven staff spaces are provided, the latter being located in the service yard. Total provision is 113 car parking spaces.

Cycle Parking

3.4.5 Appendix 4 of CSS Wales indicates that long stay and short stay parking should each be provided at a rate of one stand per 500sq.m, or one stand per 250sq.m. overall. When applied to the proposed development this equates to seven stands.

3.4.6 The development provides 14 cycle parking spaces through the provision of seven stands, and hence is in accordance with policy.

## 3.5 Section Conclusion

3.5.1 Swept path analysis has shown that access arrangements of the proposed development are suitable for their intended use.

3.5.2 Car and cycle parking provision is shown to be aligned with policy.

# 4.0 TRAFFIC ASSESSMENT

## 4.1 Introduction

4.1.1 This section of the report provides details of the traffic data used for the assessment of the study area junctions. The assessment considers the effect of the traffic that would be attracted to the development using the following study network. The junctions comprising the study network are:-

1) Site access mini roundabout/A4087 Caernarfon Road
2) A4087 Caernarfon Road/Toronnen priority junction
3) A4087 Caernarfon Road/Ffordd Coed Mawr mini roundabout
4) Right turn lane into Dunelm

## 4.2 Existing Traffic Flows

4.2.1 Details of the existing traffic flows for the study area have been obtained from surveys undertaken on Friday 7th July 2017, 07:00-10:00 and 16:00-19:00 and Saturday 8th July 2017, 10:00-14:00. It is noted that the proposal site is currently vacant so there is no traffic associated with it.

4.2.2 The data collected as part of the traffic surveys can be seen at Appendix 6.

4.2.3 The peak hours, based on the volume of traffic on the A4087 Caernarfon Road passing the existing site access, have been calculated as follows:-

- Weekday AM Peak: 08:15-09:15
- Weekday PM Peak: 16:00-17:00
- Saturday Midday Peak: 11:45-12:45

4.2.4 The level of traffic seen over the study area for the three peak periods, in the 2017 survey year can be seen at Appendix 7.

4.2.5 The profile of through traffic on the A4087 for the weekday AM and PM as well as Saturday peak periods is shown at Figure 4.1, Figure 4.2 and Figure 4.3.

**Figure 4.1 – AM Traffic Profile**

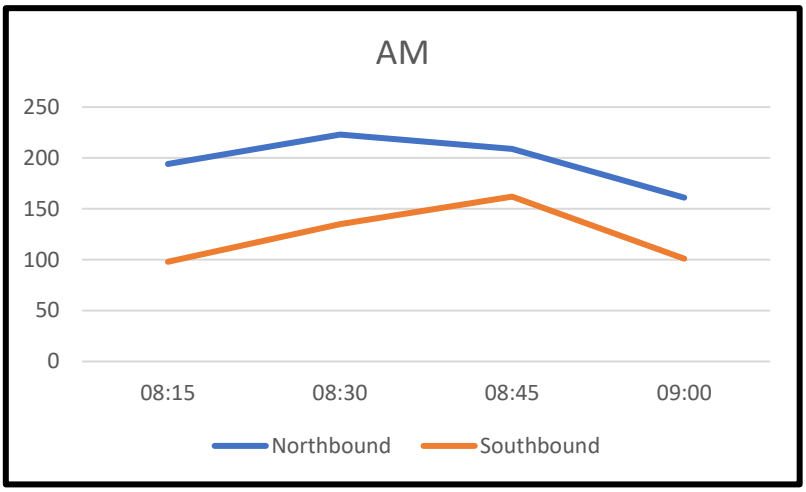



**Figure 4.2 – PM Traffic Profile**

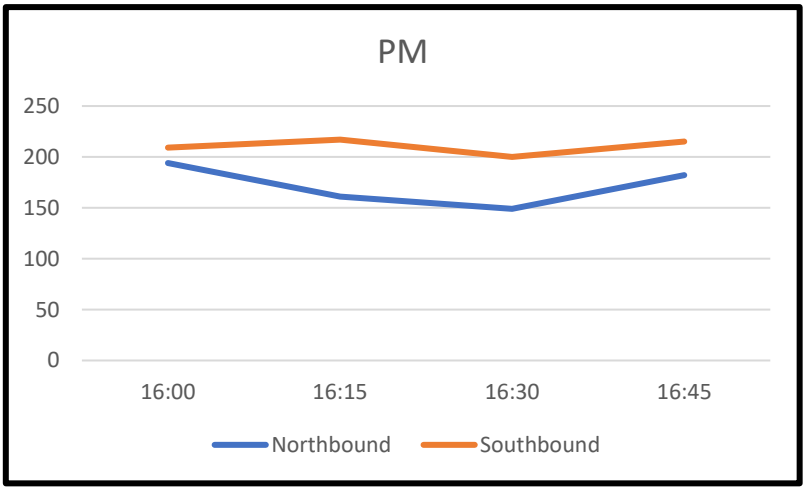
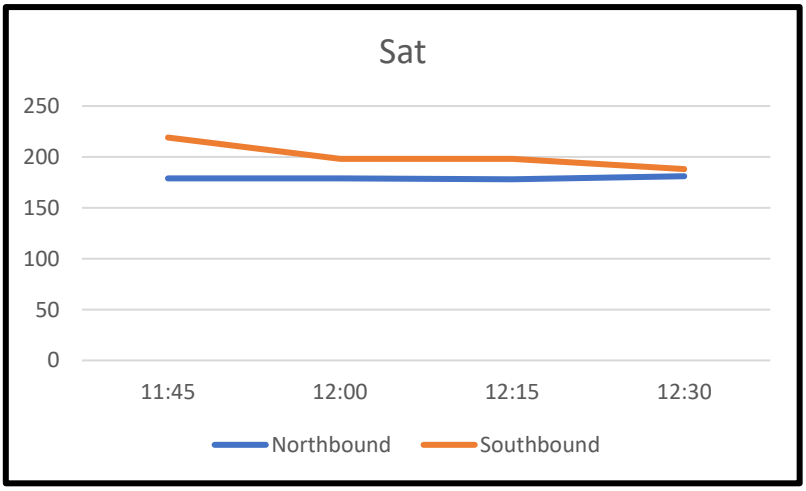



**Figure 4.3 – Sat Traffic Profile**



4.2.6 Figure 4.1 to Figure 4.3 show a trend for minor fluctuations in traffic flow over the hour rather than pronounced peak.

## 4.3 Future Year Traffic Flows

4.3.1 The assessment will be based on a future year of 2024 (Application year + 5 years). Growth factors have been applied to the July 2017 traffic flows at Appendix 7 to represent the 2024 future year.

4.3.2 The growth factors have been derived based on the TEMPRO version 7.2 database for the period 2017 to 2024.

4.3.3 This has been adjusted based on the TEMPRO output for car drivers for the geographical area of "Gwynedd 002" for car driver selected as Origin/Destination. The National Traffic Model selections were AF15 dataset, Urban, Principal. The results of the assessment are summarised at Table 4.1.

**Table 4.1 – TEMPRO Growth Rates**

| Peak Period | 2017 to 2024 |
|---|---|
| | Growth Factor |
| AM | 1.0839 |
| PM | 1.0788 |
| Sat | 1.0781 |

## 4.4 Existing Industrial Use – Traffic Generation

4.4.1 The TRICS database v7.5.4 has been used to assess the potential traffic attraction of the existing industrial unit that is on-site. The unit has an industrial permission and a floor area of 3,430sq.m. Sites in Greater London, Scotland an ROI and NI were excluded from within the *Employment -> Industrial Unit* category.

4.4.2 The floor area range was selected as 1000sq.m. to 6000sq.m. TRICS selected a total of 15 survey sites. The resulting output can be seen at Appendix 9 and is summarised at Table 4.2.

4.4.3 The 08:15-09:15 peak hour has been assessed by taking 0.75 of the 08:00-09:00 TRICS hour and combining it with 0.25 of the 09:00-10:00 TRICS hour.

**Table 4.2 – TRICS Assessment - Existing Industrial Unit Potential Trips**

| | Trip Rates per 100sq.m. | | | Traffic Attraction to 2,300sq.m. | | |
|---|---|---|---|---|---|---|
| Peak | Arrivals | Departures | Total | Arrivals | Departures | Total |
| W'day 08:00-09:00 | 0.44 | 0.131 | 0.575 | - | - | - |
| W'day 09:00-10:00 | 0.277 | 0.167 | 0.444 | - | - | - |
| W'day 08:15-09:15 | 0.399 | 0.140 | 0.542 | 9 | 3 | 12 |
| W'day 16:00-17:00 | 0.099 | 0.439 | 0.538 | 2 | 10 | 12 |
| Sat 11:45-12:45 | N/A | N/A | N/A | - | - | - |

## 4.5 Existing Industrial Use – Traffic Distribution and Assignment

4.5.1 It is necessary to assign the industrial traffic on to the study network. The apportionment of the surveyed traffic flows at the site access/A4087 Caernarfon Road junction, as given at Appendix 6, has been used for this purpose. Away from the junction, traffic has been assigned based on the apportionment of survey flows.

4.5.2 The distribution of industrial traffic over the study network can be seen at Appendix 10.

## 4.6 Proposed Discount Foodstore Trip Attraction

4.6.1 The TRICS database (version 7.5.4) has been used to calculate the traffic effect using the category 'Discount Foodstore'. Sites in Greater London, Scotland an ROI and NI were excluded from the selection. Separate weekday and Saturday trip rates have been produced.

4.6.2 As per the industrial unit assessment, the 08:15-09:15 peak hour has been assessed by taking 0.75 of the 08:00-09:00 TRICS hour and combining it with 0.25 of the 09:00-10:00 TRICS hour. The Saturday 11:45-12:45 peak hour has been assessed by taking 0.25 of the 11:00-12:00 TRICS hour and combining it with 0.75 of the 12:00-13:00 TRICS hour.

4.6.3 The resultant trip attractions during the surveyed peak hours, are set out at Table 4.3 and the TRICS outputs are provided at Appendix 12

**Table 4.3 – TRICS Assessment - Discount Foodstore**

| | Trip Rates per 100sq.m. | | | Traffic Attraction 1,725sq.m. | | |
|---|---|---|---|---|---|---|
| Peak | Arrivals | Departures | Total | Arrivals | Departures | Total |
| Weekday 08:00-09:00 | 2.354 | 1.587 | 3.941 | - | - | - |
| Weekday 09:00-10:00 | 3.144 | 2.650 | 5.794 | - | - | - |
| Weekday 08:15-09:15 | 2.552 | 1.853 | 4.404 | 44 | 32 | 76 |
| Weekday 16:00-17:00 | 3.948 | 4.158 | 8.106 | 68 | 72 | 140 |
| Sat 11:00-12:00 | 6.236 | 8.805 | 12.041 | - | - | - |
| Sat 12:00-13:00 | 5.761 | 6.340 | 12.101 | - | - | - |
| Sat 11:45-12:45 | 5.880 | 6.956 | 12.086 | 101 | 120 | 208 |

## 4.7 Pass-by / Diverted / Linked Trips / Trade Diversions

4.7.1 The traffic that will be attracted to the proposed foodstore will comprise the following trip types:-

- Pass by trips resulting from people who currently use the road adjacent to the site for a trip involving another purpose who will visit the site while passing.
- Diverted trips derived from people who are using the road network close to the site for another purpose who will divert their trips to visit the store while passing in the broad vicinity.
- Transferred trips by people who would change their destination from a competing attraction, to the proposed development.
- Linked trips undertaken by existing visitors to a specific local retail centre who visit the proposed development as part of their existing trip.
- Primary trips made by people who travel for the specific purpose of visiting the proposed foodstore, but not included in the trip types above.

4.7.2 TRICS research report 14/1 titled 'Pass-by & Diverted Trips' sets out that a large variety of results have been observed for the combination of pass-by, diverted, and linked trips and that a site-by-site approach should be taken to the application of these 'secondary' trips. Specifically the TRICS 14/1 report notes that:

> *"It is recommended that for an assessment of the quantum of pass-by and diverted trips that a first principles approach is taken for each site, whereby a process is defined for the assessment of these trips and agreed by the applicant and determining authority."*

4.7.3 The commercial and academic research contained within the TRICS 14/1 report identifies levels of pass-by proportions ranging from 6% to 72%, combined levels of pass-by and diverted trip proportions ranging from 57% to 67%, and average linked trip proportions (with town centres / district centres) ranging from 46% to 60%.

4.7.4 The research is undertaken by a number of researchers and institutions, which shows (and which is logical) that some trip types will overlap others, such as 'transferred pass-by' trips.

Aldi Linked Trips Surveys

4.7.5 A substantial proportion of customers that visit Aldi combine their trips with a visit to other nearby stores. As a result of this, many of the trips associated with Aldi are linked trips and are therefore derived from existing trips that are already on the highway network.

4.7.6 The proportion of trips linked with nearby uses has been assessed by reference to the survey data collected at Aldi stores in February 2008 / 2009 respectively. The survey results are shown at Table 4.4.

**Table 4.4 – Linked Trip Survey Results**

| Location | Day(s) | Total Interviews | Other Linked Location | Town Centre Linked | | Other Linked | | Both Town Centre and Other Linked | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | No. | % | No. | % | No. | % |
| Lichfield | Friday | 310 | Tesco | 54 | 17.4 | 70 | 22.6 | 45 | 14.5 |
| Lichfield | Saturday | 366 | Tesco | 96 | 26.2 | 60 | 16.3 | 57 | 15.5 |
| Calcot | Friday and Saturday | 548 | Sainsbury's | - | - | 111 | 20.3 | - | - |
| Lewes | Week long (excl. Tuesday) | 1,200 | Not Specified | 207 | 17.3 | 378 | 31.5 | 102 | 8.5 |

4.7.7 Table 4.4 indicates that, on a Friday 40%, of customers visiting the Aldi store in Lichfield linked their trips with visits to the nearby Tesco supermarket or the town centre, and 14.5% linked with both. On the Saturday 42.5% of customers linked their trip with the Tesco supermarket or town centre and 15.5% visited both. A total of 54.5% of trips to the store on the Friday and 58% of trips on the Saturday were linked. These results indicate linkage figures in the range identified within the TRICS research (i.e. 46% to 60%).

4.7.8 At the Calcot store, the total number of visitors linking their trip with the Town Centre was not identified, but 20.3% of trips on the Friday and Saturday combined were linked with the Sainsbury's foodstore located approximately 2.5km to the west of the Aldi store.

4.7.9 At the Lewes store, across the six days 40% of respondents linked their trips with the Town Centre or another off-site facility. Of the respondents travelling by all modes this ranged from 27% on the Sunday to 68% on the Saturday, while for respondents travelling by car this ranged from 23% on the Sunday to 68% on the Saturday.

Assessment of Secondary Trip Types

4.7.10 The first principles that determine the proportion of secondary trips used within this assessment involve consideration of the site, and the ability for the location characteristics to result in proportions of secondary trips within the ranges set out within the TRICS research. In doing so, the assessment will identify a set of proportions that are suitably robust as a means to consider the effects of the proposed development.

4.7.11 The TRICS research shows that the proportion of pass-by trips can vary significantly up to observed values of approximately 70% and is dependent on a number of factors, not limited to vehicle volumes on the roads adjacent to the site, the proximity of residences, the proximity of employment / retail, and the number of competing attractions.

4.7.12 Likewise, the TRICS research shows that proportion of diverted trips can vary site-to-site and again for simplicity, a diverted rate of 0% has been used. The combined pass-by / diverted assumption used is therefore 40%, which is less than the combined pass-by and diverted range established within the Harries et al. (2012) research set out in TRICS 14/1.

4.7.13 The TRICS and Aldi store research identifies linked trip proportions in the region of c50% and above, which is dependent upon the proximity of local retail destinations. As above, and established within the TRICS research, linked trips may include pass-by or diverted trips and so care must be taken when assigning these proportions. For simplicity 0% linked trips has been used.

4.7.14 The total proportion of secondary trips used in this assessment is therefore 40%, which is lower than the range identified within the TRICS research.

Assessment of Primary Trip Types

4.7.15 Primary trips to the proposed development will be a combination of transferred trips from journeys (already using the study area network) to competing attractions and new trips to the study area network.

4.7.16 The assessment is based on the simplified assumption that 0% of trips are transferred and 60% are 'new' to the study area network.

4.7.17 The distribution of primary trips is based on the same methodology as that used for the industrial use, namely traffic is initially distributed as per the surveyed turning proportions at the site access/A4087 Caernarfon Road junction. Away from this junction, traffic is distributed as per surveyed turning proportions.

4.7.18 The distribution pattern of new traffic over the study network can be seen at Appendix 10.

Distribution of Secondary Trip Types

4.7.19 Secondary trips will be assigned to the study area network as follows:-

- Pass-by/Diverted Trips: taken proportionally from the through-traffic on the A4087 Caernarfon Road at 40%. Traffic has been assumed to divert in to the site. On exit, traffic continues on its original journey

Assessment Trip Types - Summary

4.7.20 By way of summary, this assessment is based on the trip type assumptions shown at Table 4.5.

**Table 4.5 – Summary of Trip Types**

| Trip Type | Assessed Proportion (%) |
|---|---|
| New to Study Area Network | 60% |
| Transferred Trips | 0% |
| Pass-by / Diverted Trips | 40% |
| Linked Trips | 0% |

4.7.21 Diagrams showing the foodstore traffic that is new to the study network are given at Appendix 13. Passby traffic is given at Appendix 14.

## 4.8 Net Development Effect

4.8.1 By subtracting the industrial traffic (Appendix 11) from the foodstore traffic (Appendix 13 and Appendix 14) the net traffic effect of the discount foodstore can be identified.

4.8.2 The net traffic effect of the discount foodstore in terms of vehicle movements is shown at Appendix 15 and summarised at Table 4.6.

**Table 4.6 – Net Traffic Effect**

| Junction | AM Peak | PM Peak | Sat Peak |
|---|---|---|---|
| Site access junction/A4087 Caernarfon Road | +46 | +100 | +181 |
| A4087 Caernarfon Road/Toronnen priority junction | +18 | +46 | +79 |
| A4087 Caernarfon Road/Ffordd Coed Mawr mini roundabout | +11 | +27 | +62 |

## 4.9 Traffic Flows for Testing

4.9.1 In order to allow for the scenario of the industrial unit being reoccupied, it is necessary to combine the 2024 base flows (Appendix 8) with the industrial flows (Appendix 11) to create the '2024 Base + Industrial' scenario. This can be seen at Appendix 16.

4.9.2 To allow for the scenario of the discount foodstore being on site as a replacement to the industrial unit, it is necessary to combine the 2024 base flows (Appendix 8) with the Foodstore traffic (Appendix 13 and Appendix 14) to create the '2024 Base + Foodstore' scenario. This is can be seen at Appendix 17.

## 4.10 Section Summary

4.10.1 The potential change to traffic due to the proposed development has been calculated based on data from TRICS national database.

4.10.2 The assessment shows that the potential increase to traffic will be minor at all junctions.

# 5.0 JUNCTION CAPACITY AND COLLISION ANALYSIS

## 5.1 Introduction

5.1.1 The assessment in Section 4.0 has identified the net traffic effect of the proposed development over the study network.

5.1.2 Junction capacity tests and analysis along with collision analysis have been undertaken for the junctions forming the study area, namely:

- Site access mini roundabout/A4087 Caernarfon Road
- A4087 Caernarfon Road/Toronnen priority junction
- A4087 Caernarfon Road/Ffordd Coed Mawr mini roundabout
- Right turn lane into Dunelm

## 5.2 Existing Collision Analysis

5.2.1 Crashmap.co.uk has been reviewed for the study network for the three year period 2016 to 2018. An extract from Crashmap is given at Figure 5.1.

**Figure 5.1 – Accident Study Area**

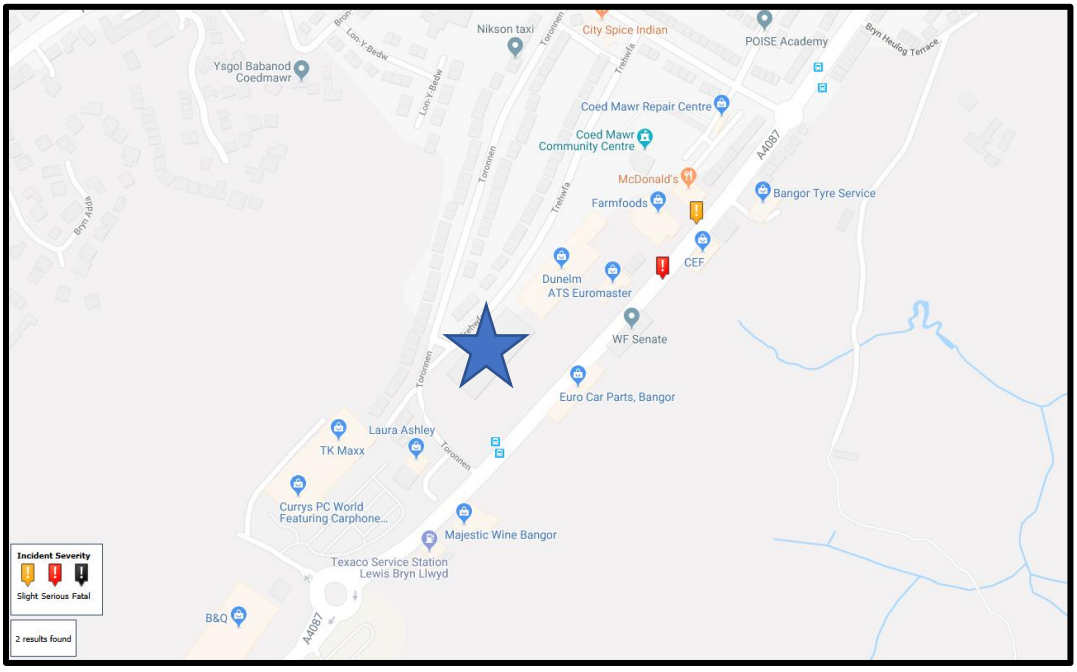



*Image Source: Crashmap.co.uk N.B. The site is denoted by a blue star.*

5.2.2 The Crashmap extract at Figure 5.1 shows there have been two accidents within the study area, one slight and one serious. Each accident occurred in a separate year.

5.2.3 Based on the above no particular pattern in causes for the collisions have been identified.

5.2.4 The proposed development traffic effect shown at Section 4.0, is not likely to materially worsen the occurrence or materially affect the pattern of collisions.

## 5.3 Future Collision Consideration

5.3.1 There have been three accidents in three years over the study area.

5.3.2 On this basis, no pattern of collisions has been identified which is attributable to a road layout deficiency, nor one which is likely to be materially worsened by the development proposals.

## 5.4 Capacity Analysis

Site Access/A4087 Caernarfon Road Mini Roundabout

5.4.1 The ARCADY module of the Junctions 9 computer program has been used to assess the operation of the proposed site access/A4087 Caernarfon Road mini roundabout junction as this is an industry standard computer package for modelling the operation of roundabout junctions. The Junctions 9 mini roundabout model within the program has been used for assessment purposes.

5.4.2 ARCADY uses the geometry of the junction combined with traffic flow information to predict capacity. The software provides a number of results in its output, the most meaningful of which is the Ratio of Flow to Capacity (RFC), where an RFC of 1.00 reflects a demand equal to the theoretical capacity of the junction approach.

5.4.3 The operation of the roundabout has been assessed for the '2024 Base + Foodstore' scenario (Appendix 17), for the weekday AM, PM and Saturday peak periods. The model has been run using the FLAT traffic profile. In a FLAT profile, the demand is the same for each time segment.

5.4.4 The results of the modelling are set out at Table 5.1 and can be seen in full at Appendix 18.

**Table 5.1 – Junctions 9 – Proposed Site Access Mini Roundabout**

| | AM With Dev | | | PM With Dev | | | SAT With Dev | | |
|---|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC |
| | 2024 | | | | | | | | |
| 1 - A4087 West | 4.8 | 19.55 | 0.83 | 3.1 | 13.85 | 0.75 | **4.7** | **19.61** | **0.83** |
| 2 - Site Access | 0.2 | 17.94 | 0.16 | 0.5 | 17.21 | 0.34 | **1.6** | **31.53** | **0.62** |
| 3 - A4087 East | 0.9 | 5.69 | 0.46 | 3.9 | 14.87 | 0.79 | **3.5** | **14.08** | **0.78** |

5.4.5 Table 5.1 shows that the proposed mini roundabout site access junction has been assessed as operating within capacity.

A4087 Caernarfon Road/Ffordd Coed Mawr Mini Roundabout

5.4.6 The ARCADY module of the Junctions 9 computer program has been used to assess the operation of the A4087 Caernarfon Road/Ffordd Coed Mawr mini roundabout junction.

5.4.7 The operation of this junction has been assessed for both the '2024 Base + Industrial' and '2024 Base + Foodstore' scenarios, as given at Appendix 16 and Appendix 17.

5.4.8 The net traffic effect at this junction has been shown to be 9 vehicles in the AM, 24 in the PM and 62 on the Saturday.

5.4.9 The model has been run using the FLAT traffic profile. In a FLAT profile, the demand is the same for each time segment. The assessment results are given at

5.4.10 Table 5.2.

**Table 5.2 – Junctions 9 – Ffordd Coed Mawr Mini Roundabout**

| | AM | | | PM | | | SAT | | |
|---|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC |
| | 2024 Base With Industrial | | | | | | | | |
| 1 - A4087 West | 5.8 | 25.66 | 0.85 | 3.8 | 18.10 | 0.79 | 4.6 | 21.41 | 0.82 |
| 2 - Ffordd Coed Mawr | 1.6 | 23.15 | 0.61 | 1.3 | 18.83 | 0.57 | 0.8 | 15.79 | 0.45 |
| 3 - A4087 East | 0.8 | 7.15 | 0.44 | 5.3 | 25.00 | 0.84 | 6.0 | 26.27 | 0.86 |
| | 2024 Base With Foodstore | | | | | | | | |
| 1 - A4087 West | 6.1 | 26.93 | 0.86 | 4.1 | 19.39 | 0.80 | **6.5** | **28.68** | **0.87** |
| 2 - Ffordd Coed Mawr | 1.7 | 23.91 | 0.62 | 1.4 | 19.91 | 0.58 | **0.9** | **17.75** | **0.48** |
| 3 - A4087 East | 0.8 | 7.21 | 0.44 | 5.9 | 27.19 | 0.86 | **6.9** | **29.91** | **0.88** |

5.4.11

5.4.12 Table 5.2 shows that the operation of the Ffordd Coed Mawr mini roundabout similar in both the '2024 Base + Industrial' or 2024 Base + Foodstore' scenario. The roundabout operates with a maximum RFC of 0.86 in the '2024 + Industrial' scenario and 0.88 in the '2024 + Foodstore' scenario.

Toronnen/A4087 Caernarfon Road Priority Junction

5.4.13 The PICADY module of the Junctions 9 computer program has been used to assess the operation of the proposed Toronnen/A4087 Caernarfon Road priority junction. Junctions 9 is an industry standard computer package for modelling the operation of priority junctions.

5.4.14 Junctions 9 uses the geometry of the junction combined with traffic flow information to predict capacity. The software provides a number of results in its output, the most meaningful of which is the Ratio of Flow to Capacity (RFC), where an RFC of 1.00 reflects a demand equal to the theoretical capacity of the junction approach.

5.4.15 The operation of the junction has been assessed for the add year base traffic 'with' the proposed development (Weekday AM/PM and Saturday Peaks), based on the junction geometry. The model has been run in 'One Hour' mode. The 'One Hour' mode estimates the traffic profile for an hour long period using a bell shaped curve with a 15 minute 'Warm Up' period before, and a 15 minute 'Cool Down' period after, the hour central period. This simulates the effect of a peak within the peak hour.

5.4.16 The results of the Junctions 9 tests are set out at Table 5.3 and can be seen in full at Appendix 18 assessment is based on the '2024 Base + Foodstore' scenario given at Appendix 17.

**Table 5.3 – Junctions 9 Summary – Toronnen/A4087 junction**

| | AM | | | PM | | | SAT | | |
|---|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC |
| | 2024 | | | | | | | | |
| Stream B-AC | 0.0 | 0.00 | 0.00 | 0.1 | 13.92 | 0.07 | **0.1** | **13.88** | **0.11** |
| Stream C-AB | 0.0 | 8.46 | 0.01 | 0.0 | 7.96 | 0.01 | **0.0** | **8.13** | **0.02** |

*Note - B=Toronnen, A=A4087 West, C=A4087 East*

5.4.17 The results at Table 5.3 show the junction operating within capacity.

Site Access/Right Turn Lane to Dunelm

5.4.18 The PICADY module of the Junctions 9 computer program has been used to assess the operation of the right turn lane into Dunelm.

5.4.19 A right turn lane has been provided on the site access road into the Dunelm. The local authority have indicated that not all drivers may use the turn lane. To replicate this, the model assumes that there is no right turn lane, this mirroring the position whereby drivers elect not to use the right turn lane. On the ground results are therefore expected to be better than those assessed.

5.4.20 The results of assessing the right turn into the Dunelm site are given at Table 5.4. The assessment is based on the '2024 Base + Foodstore' flows given at Appendix 17. The output is given in full at Appendix 18.

**Table 5.4 – Junctions 9 Summary – Right turn to Dunelm**

| | AM With Foodstore | | | PM With Foodstore | | | SAT With Foodstore | | |
|---|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC |
| | 2024 | | | | | | | | |
| **Stream B-AC** | 0.0 | 5.14 | 0.01 | 0.1 | 5.49 | 0.06 | **0.1** | **5.94** | **0.11** |
| **Stream C-AB** | 0.0 | 6.26 | 0.02 | 0.1 | 6.75 | 0.08 | **0.2** | **7.23** | **0.14** |

*Note - B=Dunelm arm, A=Aldi arm, C=access arm*

5.4.21 Table 5.4 shows that junction has been assessed as operating within capacity with an RFC no greater than 0.14 and with minimal queuing on the shared site access road.

## 5.5 Section Summary

5.5.1 The capacity assessment shows that the junctions forming the study network will operate satisfactorily for all peak periods.

5.5.2 Overall therefore, the traffic effect of the proposed development is acceptable.

# 6.0 SUMMARY AND CONCLUSIONS

## 6.1 Summary

6.1.1 Connect Consultants Limited is a firm of transport planning and highway design consultants that have been instructed by The Bampton Property Group to produce a Transport Assessment in support of their proposal to redevelop a vacant industrial unit off Caernarfon Road, Bangor.

- The proposed development will see the provision of a 1,725sq.m. Gross Internal Area (GIA) Aldi discount foodstore and 113 car parking spaces in lieu of the industrial unit.
- The site is accessible by a choice of travel modes and will reduce reliance on the private car consistent with national and local planning policy.
- The proposed development is well conceived in terms of its access arrangements, composition and layout.
- It has been demonstrated that the service arrangements will be able to accommodate delivery traffic.
- The traffic assessment included in this report is based on a realistic traffic impact scenario and demonstrates the development traffic effects are capable of being accommodated on the highway network.
- The negligible traffic effect of the development is not likely to materially worsen any potential occurrence or pattern of collisions on the local highway network.

## 6.2 Conclusions

6.2.1 The results of this assessment highlight that the proposed development is acceptable from a transport perspective.

# Appendix 1

**Proposed Site Plan -** 1:200 scale

0 2 4 6 8 10m
SCALE 1:200

CAD file reference CAD FILE REFERENCE

Please note Proposed Levels taken from engineers details, dwg ref: 12500972-GHD-DR-C-5603 P01 Proposed Levels (2019.01.019)

**Application Area =**
12,520sqm / 3.09 acre

| Rev | Date | Description | Rev By | Chk'd By |
|---|---|---|---|---|
| B | 15.02.19 | Drawing updated to removed foul pumping station as advised by Drainage engineer. 1no. car parking space removed from Dunelm Car park to improve pedestrian route. | SSR | SSR |
| A | 11.02.19 | Drawing updated to co-ordinate Highway consultant comment. tree locations updated and additional topographical survey information added to Dunelm Car park. | SSR | SSR |

| | |
|---|---|
| Project Title | PROPOSED DEVELOPMENT<br>LAND ADJACENT TO DUNELM MILLS<br>CAERNARFON ROAD<br>BANGOR |
| Client | FRESHWATER GROUP |
| Status | PLANNING |
| Scale | 1:200 — Drawing Size A0 |
| Date | JAN 19 — Drawn By SSR — Checked SSR |
| Drawing Title | PROPOSED SITE PLAN |
| JOB-Dwg No | 15252 - 101 — Rev B |


☐ 2 St. Johns North, Wakefield, WF1 3QA
t. 01924 291800

☐ Corvers Warehouse, 77 Dale Street, Manchester, M1 2HG
t. 0161 2388555

☐ The Old Factory, 79 High Street, Newport Pagnell, MK16 8AB
t. 01908 211577

☐ 101 London Road, Reading, RG1 5BY
t. 0118 9507700

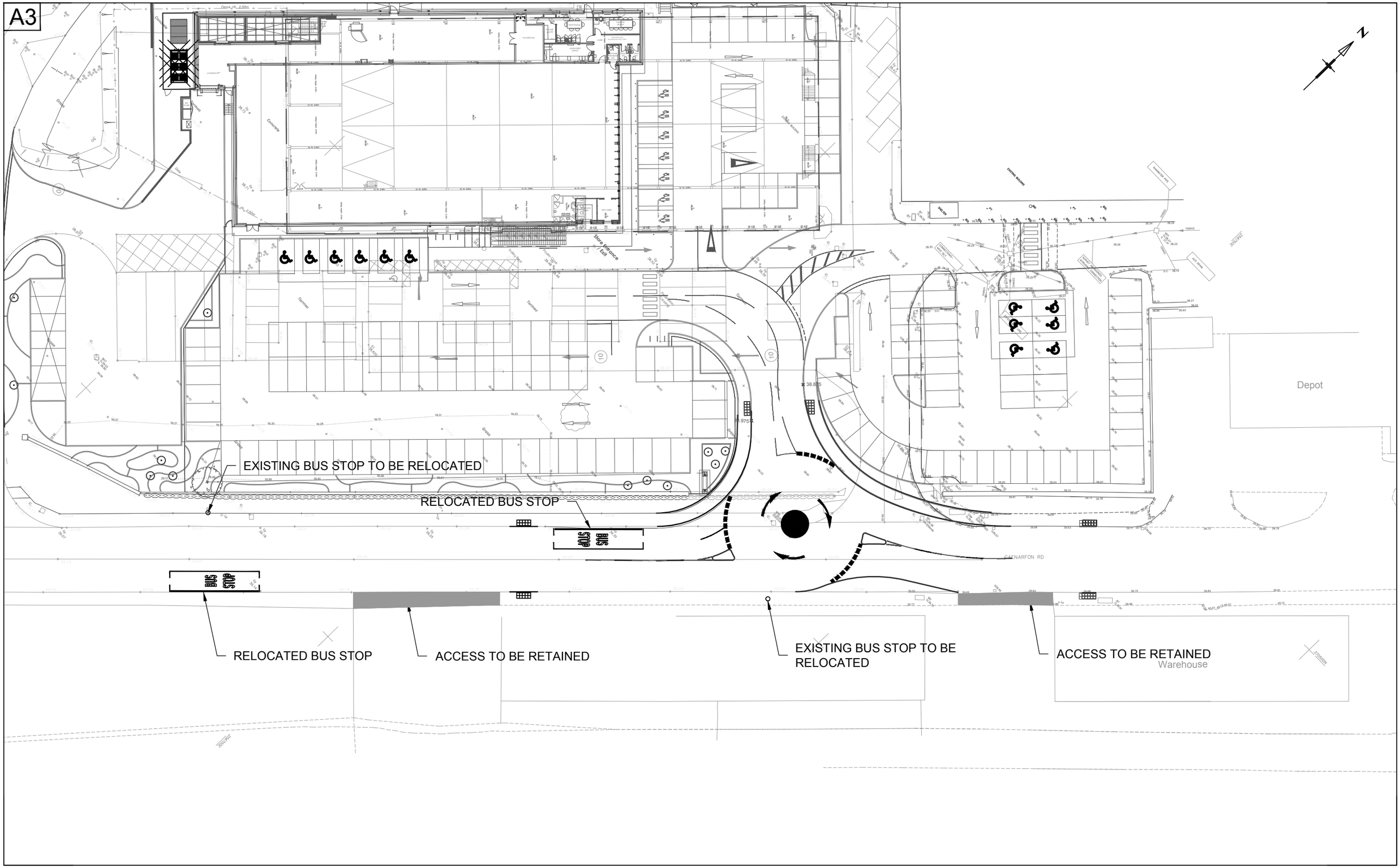
☐ 10 Gees Court, St Christophers Place, London, W1U 1JJ
t. 0207 4091215

THE HARRIS PARTNERSHIP
ARCHITECTS
www.harrispartnership.com


This drawing is copyright and may not be reproduced in whole or part without written authority. Do not scale off this drawing.

# Appendix 2

A3




Reproduced from Ordnance Survey material by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Connect Consultants Ltd Licence number: 100022432

connect CONSULTANTS
78 BROAD STREET, CHIPPING SODBURY, BRISTOL. BS37 6AG
Tel: 01454 320 220 Web: www.connect-consultants.com
Fax: 01454 320 099 Email: bristol@connect-consultants.com

safecontractor APPROVED

committed to CSCS Platinum award

QUALITY MANAGEMENT SYSTEM ISO 9001 : 2008 FS 594947

client
TPS

project
CAERNARFON ROAD,
BANGOR

title
PROPOSED SITE ACCESS ARRANGEMENTS

| date | drawn by | checked by |
|---|---|---|
| FEBRUARY 2019 | B.W.L | J.C |

| scale | status |
|---|---|
| 1:500 | PLANNING |

| drawing number | rev. |
|---|---|
| 16054 - 010 | D |

# Appendix 3

# Mar-16

**BETHESDA - BANGOR** via Mynydd Llandygai **6**
**MYNYDD LLANDYGAI - BANGOR - TESCO** via Tregarth **6A**

**Llun i Sadwrn** **Monday to Saturday**

| Rhif gwasanaeth/Service No: | 6 | 6A | 6 | 6A | 6 | 6A | 6A |
|---|---|---|---|---|---|---|---|
| Mynydd Llandygai | .... | 0923 | .... | 1223 | .... | 1513 | 1625 |
| BETHESDA, Rhes Ogwen Terrace | .... | 0930 | .... | 1230 | .... | 1530 | 1635 |
| BETHESDA, Spar | 0735 | ---- | 1110 | ---- | 1330 | ---- | ---- |
| Brynbella | ---- | 0936 | ---- | 1236 | ---- | 1536 | 1640 |
| Mynydd Llandygai | 0748 | ---- | 1117 | ---- | 1337 | ---- | ---- |
| Tregarth, Capel Siloh | 0755 | ---- | 1123 | ---- | 1345 | ---- | ---- |
| GLASINFRYN | 0803 | ---- | ---- | ---- | ---- | ---- | ---- |
| Felin Hen | 0807 | ---- | 1127 | ---- | 1350 | ---- | ---- |
| Llandygai | 0815 | 0943 | 1130 | 1242 | 1353 | 1542 | 1648 |
| Canolfan Feddygol Bron Derw | | | | Additional | | | |
| **BANGOR**, Cloc Safle/Stop (A) cyrr/arr | 0821 | 0949 | 1136 | 1249 | 1400 | 1549 | 1654 |
| **BANGOR**, Cloc Safle/Stop (F) gad/dep | 0822 | 0950 | 1137 | 1250 | .... | .... | 1655 |
| Tesco | ---- | 0957 | 1145 | 1258 | .... | .... | ---- |
| **YSBYTY GWYNEDD HOSPITAL** | 0837 | …. | …. | .... | .... | .... | 1703 |
| Parc Menai | 0843 | …. | …. | …. | .... | .... | 1708 |

| Rhif gwasanaeth/Service No: | 6 | 6A | 6 | 6A | 6 | 6 | 6 |
|---|---|---|---|---|---|---|---|
| Parc Menai | 0845 | …. | .... | .... | .... | .... | 1709 |
| **YSBYTY GWYNEDD HOSPITAL** | ---- | …. | ….. | ….. | .... | .... | 1715 |
| Tesco | 0850 | 1041 | 1150 | 1300 | | .... | ---- |
| **BANGOR**, Cloc Safle/Stop (F) cyrr/arr | 0859 | 1049 | 1159 | 1309 | | .... | 1725 |
| **BANGOR**, Cloc Safle/Stop (F) gad/dep | 0900 | 1050 | 1200 | 1310 | 1450 | 1600 | 1735 |
| Canolfan Feddygol Bron Derw | | | | Additional | | | |
| Llandygai | 0905 | 1055 | 1205 | 1315 | 1455 | 1605 | 1740 |
| Glasinfryn | 0908 | ---- | 1208 | ---- | 1458 | 1608 | 1743 |
| GLASINFRYN | ---- | ---- | 1209 | ---- | 1459 | 1609 | 1744 |
| TREGARTH | 0915 | ---- | 1215 | ---- | 1505 | 1616 | 1751 |
| Mynydd Llandygai | 0923 | ---- | 1223 | ---- | 1513 | 1625 | 1800 |
| BETHESDA, Rhes Ogwen Terrace | 0930 | ---- | 1230 | ---- | 1525 | 1635 | 1811 |
| Tregarth | .... | 1104 | .... | 1324 | .... | .... | .... |
| BETHESDA, Spar | .... | 1110 | .... | 1330 | .... | .... | .... |
| Mynydd Llandygai | .... | 1117 | .... | 1337 | .... | .... | .... |

changes March 2016

LLANRWST -BETHESDA 6

Llun I Sadwrn

| | |
|---|---|
| Llanrwst Watling Street……. | 632 |
| Betws y Coed Railway Station | 642 |
| Rhaydr Ewynol / Swallow Falls | 647 |
| Capel Curig Cobdens…….. | 652 |
| Capel Curig Pinacle Café | 655 |
| Ogwen Cottage……. | 705 |
| Ogwen Bank Holiday Village | R |
| Bethesda Spar | 715 |
| Bangor Cloc | 730 |

| | |
|---|---|
| Bethesda Spar | 1811 |
| Ogwen Bank | 1815 |
| Ogwen Cottage | 1820 |
| Capel Curig Pinacle | |
| Capel Curig Cobdens | |
| Swallow Falls | |
| Betws Y Coed Rail Stn | |
| Llanrwst Plas yn Dre | |

On Request Only

## Monday to Friday - towards Glan-yr-afon Glanrafon House

| | 53L | 53L | 53 | 53L[1] | 53 | 53 | 53 |
|---|---|---|---|---|---|---|---|
| Bangor Bus Station | 0939 | 1335 | 1535 | 1630 | 1740 | 2040 | 2240 |
| Coed Mawr Tesco | 0947 | -- | -- | 1637 | -- | 2047 | 2247 |
| Menai Bridge Bus Station | 1002 | 1353 | 1553 | 1652 | 1758 | 2101 | 2301 |
| Llandegfan Trem Arfon | 1008 | 1359 | 1559 | 1658 | 1804 | 2107 | 2307 |
| Llansadwrn Hall | 1017 | 1408 | -- | 1707 | -- | -- | -- |
| Llanddona Terminus | 1025 | 1416 | 1611 | 1715 | 1821 | 2117 | 2317 |
| Beaumaris Bakery | -- | -- | -- | -- | -- | -- | 2327 |
| Beaumaris Bulkeley Hotel | 1035 | 1426 | 1621 | 1723 | 1829 | 2127 | -- |
| Llanfaes Burton Way | -- | -- | -- | -- | 1834 | 2131 | 2332 |
| Penmon Ty Gwyn | -- | -- | -- | -- | -- | -- | 2337 |
| Llangoed Playing Field | 1043 | 1431 | 1629 | 1731 | 1839 | 2137 | -- |
| Glan-yr-afon Glanrafon House | -- | 1434 | -- | 1734 | 1842 | -- | 2347 |

[1]Term Time Only

## Monday to Friday - towards Bangor Bus Station

| | 53 | 53L | 53L | 53 | 53 | 53 | 53 |
|---|---|---|---|---|---|---|---|
| Glan-yr-afon Glanrafon House | 0745 | -- | -- | 1435 | -- | 1843 | -- |
| Llangoed Playing Field | 0747 | 1044 | 1230 | 1437 | 1635 | 1845 | 2137 |
| Llanfaes Burton Way | 0752 | 1049 | 1235 | -- | -- | -- | 2142 |
| Beaumaris Bakery | 0757 | 1054 | 1240 | 1441 | 1643 | 1851 | 2147 |
| Llanddona Terminus | 0807 | 1104 | 1250 | 1451 | 1658 | 1901 | 2157 |
| Llansadwrn Hall | -- | 1112 | 1258 | -- | -- | -- | -- |
| Llandegfan Trem Arfon | 0819 | 1121 | 1307 | 1501 | 1708 | 1911 | 2209 |
| Menai Bridge Wood Street | 0825 | 1127 | 1313 | 1507 | 1714 | 1917 | 2216 |
| Parc Menai Ffordd y Parc | 0831 | -- | -- | -- | -- | -- | -- |
| Coed Mawr Tesco | -- | -- | -- | -- | -- | -- | 2230 |
| Bangor Bus Station | 0847 | 1144 | 1330 | 1524 | 1731 | 1934 | 2238 |

## Saturday - towards Glan-yr-afon Glanrafon House

| | 53L | 53L | 53 | 53 | 53 | 53 |
|---|---|---|---|---|---|---|
| Bangor Bus Station | 0939 | 1335 | 1535 | 1740 | 2040 | 2240 |
| Coed Mawr Tesco | 0947 | -- | -- | -- | 2047 | 2247 |
| Menai Bridge Bus Station | 1002 | 1353 | 1553 | 1758 | 2101 | 2301 |
| Llandegfan Trem Arfon | 1008 | 1359 | 1559 | 1804 | 2107 | 2307 |
| Llansadwrn Hall | 1017 | 1408 | -- | -- | -- | -- |
| Llanddona Terminus | 1025 | 1416 | 1611 | 1821 | 2117 | 2317 |
| Beaumaris Bakery | -- | -- | -- | -- | -- | 2327 |
| Beaumaris Bulkeley Hotel | 1035 | 1426 | 1621 | 1829 | 2127 | -- |
| Llanfaes Burton Way | -- | -- | -- | 1834 | 2131 | 2332 |
| Penmon Ty Gwyn | -- | -- | -- | -- | -- | 2337 |
| Llangoed Playing Field | 1043 | 1431 | 1629 | 1839 | 2137 | -- |
| Glan-yr-afon Glanrafon House | -- | 1434 | -- | 1842 | -- | 2347 |

## Saturday - towards Bangor Bus Station

| | 53 | 53L | 53L | 53 | 53 | 53 | 53 |
|---|---|---|---|---|---|---|---|
| Glan-yr-afon Glanrafon House | 0745 | -- | -- | 1435 | -- | 1843 | -- |
| Llangoed Playing Field | 0747 | 1044 | 1230 | 1437 | 1635 | 1845 | 2137 |
| Llanfaes Burton Way | 0752 | 1049 | 1235 | -- | -- | -- | 2142 |
| Beaumaris Bakery | 0757 | 1054 | 1240 | 1441 | 1643 | 1851 | 2147 |
| Llanddona Terminus | 0807 | 1104 | 1250 | 1452 | 1658 | 1901 | 2157 |
| Llansadwrn Hall | -- | 1112 | 1258 | -- | -- | -- | -- |
| Llandegfan Trem Arfon | 0819 | 1121 | 1307 | 1502 | 1708 | 1911 | 2209 |
| Menai Bridge Wood Street | 0825 | 1127 | 1313 | 1508 | 1714 | 1917 | 2216 |
| Parc Menai Ffordd y Parc | 0831 | -- | -- | -- | -- | -- | -- |
| Coed Mawr Tesco | -- | -- | -- | -- | -- | -- | 2230 |
| Bangor Bus Station | 0847 | 1144 | 1330 | 1525 | 1731 | 1934 | 2238 |

# Bangor to Llanddona via Llansadwrn 56

## Monday to Friday - towards Llanddona Terminus

| | 56 | 56 |
|---|---|---|
| Bangor Bus Station | 0607 | 0830 |
| Coed Mawr Tesco | 0615 | 0838 |
| Menai Bridge Bus Station | 0630 | 0853 |
| Llandegfan Gazelle Hotel | 0635 | 0858 |
| Beaumaris Bakery | 0639 | 0902 |
| Llanddona Terminus | 0649 | 0916 |

## Monday to Friday - towards Bangor Bus Station

| | 56 | 56 |
|---|---|---|
| Llanddona Terminus | 0652 | 0917 |
| Beaumaris Bakery | 0702 | 0928 |
| Llandegfan Gazelle Hotel | -- | 0932 |
| Llandegfan Trem Arfon | 0713 | -- |
| Menai Bridge Wood Street | 0719 | 0937 |
| Coed Mawr Tesco | 0733 | 0951 |
| Bangor Bus Station | 0741 | 0959 |

## Saturday - towards Llanddona Terminus

| | 56 | 56 |
|---|---|---|
| Bangor Bus Station | 0607 | 0830 |
| Coed Mawr Tesco | 0615 | 0838 |
| Menai Bridge Bus Station | 0630 | 0853 |
| Llandegfan Gazelle Hotel | 0635 | 0858 |
| Beaumaris Bakery | 0639 | 0902 |
| Llanddona Terminus | 0649 | 0916 |

## Saturday - towards Bangor Bus Station

| | 56 | 56 |
|---|---|---|
| Llanddona Terminus | 0652 | 0917 |
| Beaumaris Bakery | 0702 | 0928 |
| Llandegfan Gazelle Hotel | -- | 0932 |
| Llandegfan Trem Arfon | 0713 | -- |
| Menai Bridge Wood Street | 0719 | 0937 |
| Coed Mawr Tesco | 0733 | 0951 |
| Bangor Bus Station | 0741 | 0959 |

## Llangoed - Bangor

## Service 58 (ANAO058)

**Bank Holiday Mondays (Inbound)**

Timetable valid from 27th January 2019 until further notice

| Operator: | ACYM | ACYM | ACYM | ACYM | ACYM | ACYM |
|---|---|---|---|---|---|---|
| Llangoed, Playing Field | -- | -- | 1259 | 1449 | 1654 | 1849 |
| Llanfaes, Burton Way | -- | -- | 1304 | 1454 | 1659 | 1854 |
| Beaumaris, Bakery | 0927 | 1110 | 1309 | 1459 | 1704 | 1859 |
| Llanddona, Ponc-y-Felin | 0937 | 1120 | \| | \| | 1714 | \| |
| Llansadwrn Hall | 0949 | \| | \| | \| | \| | \| |
| Llandegfan, Trem Arfon | 0954 | 1129 | 1319 | 1509 | 1723 | 1909 |
| Menai Bridge, Wood Street, opp | 1000 | 1136 | 1326 | 1516 | 1730 | 1916 |
| Bangor, Bus Station, Stand D | 1017 | 1153 | 1343 | 1533 | 1747 | 1933 |

## Bangor - Llangoed

## Service 58 (ANAO058)

**Bank Holiday Mondays (Outbound)**

Timetable valid from 27th January 2019 until further notice

| Operator: | ACYM | ACYM | ACYM | ACYM | ACYM | ACYM |
|---|---|---|---|---|---|---|
| Bangor, Bus Station, Stand D | 0900 | 1025 | 1200 | 1350 | 1540 | 1750 |
| Menai Bridge, Bus Station | 0917 | 1042 | 1217 | 1407 | 1557 | 1807 |
| Llandegfan, Trem Arfon | \| | 1048 | 1223 | 1413 | 1603 | 1813 |
| Llansadwrn Hall | \| | \| | \| | \| | 1608 | \| |
| Llanddona, Ponc-y-Felin | \| | 1058 | \| | \| | 1618 | \| |
| Beaumaris, Bulkeley Hotel | 0926 | 1109 | 1234 | 1424 | 1629 | 1824 |
| Llanfaes, Burton Way | -- | -- | 1239 | 1429 | 1634 | 1829 |
| Penmon, Ty Gwyn | -- | -- | 1244 | 1434 | 1639 | 1834 |

## Llangoed - Bangor
## Llangoed - Bangor

## Service 58L (ANAO058L)
## Service 58 (ANAO058)

**Monday to Friday (Excluding Bank Holidays) (Inbound)**

Timetable valid from 27th January 2019 until further notice

| Operator: | ACYM | ACYM | ACYM | ACYM | ACYM | ACYM | ACYM | ACYM |
|---|---|---|---|---|---|---|---|---|
| Service: | 58L | 58L | 58 | 58 | 58 | 58 | 58 | 58L |
| Llangoed, Playing Field | 0732 | 0832 | 1120 | 1320 | 1520 | 1730 | 1930 | 2115 |
| Llanfaes, Burton Way | 0737 | 0837 | 1125 | 1325 | 1525 | 1735 | 1935 | 2120 |
| Beaumaris, Bakery | 0742 | 0841 | 1130 | 1330 | 1530 | 1740 | 1940 | 2124 |
| Llandegfan, Trem Arfon | 0754 | 0852 | \| | \| | \| | \| | \| | 2135 |
| Menai Bridge, Wood Street, opp | 0800 | 0858 | 1139 | 1339 | 1539 | 1749 | 1949 | 2141 |
| Coed Mawr, Tesco | 0814 | 0912 | 1153 | 1353 | 1553 | 1803 | 2003 | 2155 |
| Bangor, Bus Station, Stand D | 0822 | 0920 | 1201 | 1401 | 1601 | 1811 | 2011 | 2203 |

## Bangor - Llangoed
## Bangor - Llangoed

**Service 58 (ANAO058)**
**Service 58L (ANAO058L)**

**Monday to Friday (Excluding Bank Holidays) (Outbound)**

Timetable valid from 27th January 2019 until further notice

| Days: | | | | SH | |
|---|---|---|---|---|---|
| Operator: | ACYM | ACYM | ACYM | ACYM | ACYM |
| Bangor, Bus Station, Stand D | 1020 | 1220 | 1420 | 1630 | 1830 |
| Coed Mawr, Tesco | 1027 | 1227 | 1427 | 1637 | 1837 |
| Menai Bridge, Bus Station | 1042 | 1242 | 1442 | 1652 | 1852 |
| Llandegfan, Gazelle Hotel | 1046 | 1246 | 1446 | 1656 | 1856 |
| Beaumaris, Bulkeley Hotel | 1051 | 1251 | 1451 | 1701 | 1901 |
| Llanfaes, Burton Way | 1056 | 1256 | 1456 | 1706 | 1906 |
| Penmon, Ty Gwyn | 1101 | 1301 | 1501 | 1711 | 1911 |
| Llangoed, Playing Field | 1112 | 1312 | 1512 | 1722 | 1922 |

**Notes:**
**SH** School Holidays

## Llangoed - Bangor
## Llangoed - Bangor

**Service 58L (ANAO058L)**
**Service 58 (ANAO058)**

**Saturday (Inbound)**

Timetable valid from 27th January 2019 until further notice

| Operator: | ACYM | ACYM | ACYM | ACYM | ACYM | ACYM | ACYM | ACYM |
|---|---|---|---|---|---|---|---|---|
| Service: | 58L | 58L | 58 | 58 | 58 | 58 | 58 | 58L |
| Llangoed, Playing Field | 0732 | 0832 | 1120 | 1320 | 1520 | 1730 | 1930 | 2115 |
| Llanfaes, Burton Way | 0737 | 0837 | 1125 | 1325 | 1525 | 1735 | 1935 | 2120 |
| Beaumaris, Bakery | 0742 | 0841 | 1130 | 1330 | 1530 | 1740 | 1940 | 2124 |
| Llandegfan, Trem Arfon | 0754 | 0852 | \| | \| | \| | \| | \| | 2135 |
| Menai Bridge, Wood Street, opp | 0800 | 0858 | 1139 | 1339 | 1539 | 1749 | 1949 | 2141 |
| Coed Mawr, Tesco | 0814 | 0912 | 1153 | 1353 | 1553 | 1803 | 2003 | 2155 |
| Bangor, Bus Station, Stand D | 0822 | 0920 | 1201 | 1401 | 1601 | 1811 | 2011 | 2203 |

## Bangor - Llangoed
## Bangor - Llangoed

**Service 58 (ANAO058)**
**Service 58L (ANAO058L)**

**Saturday (Outbound)**

Timetable valid from 27th January 2019 until further notice

| Operator: | ACYM | ACYM | ACYM | ACYM | ACYM |
|---|---|---|---|---|---|
| Bangor, Bus Station, Stand D | 1020 | 1220 | 1420 | 1630 | 1830 |
| Coed Mawr, Tesco | 1027 | 1227 | 1427 | 1637 | 1837 |
| Menai Bridge, Bus Station | 1042 | 1242 | 1442 | 1652 | 1852 |
| Llandegfan, Gazelle Hotel | 1046 | 1246 | 1446 | 1656 | 1856 |
| Beaumaris, Bulkeley Hotel | 1051 | 1251 | 1451 | 1701 | 1901 |
| Llanfaes, Burton Way | 1056 | 1256 | 1456 | 1706 | 1906 |
| Penmon, Ty Gwyn | 1101 | 1301 | 1501 | 1711 | 1911 |
| Llangoed, Playing Field | 1112 | 1312 | 1512 | 1722 | 1922 |

## Llangoed - Bangor

**Service 58 (ANAO058)**

**Sunday (Inbound)**

Timetable valid from 27th January 2019 until further notice

| Operator: | ACYM | ACYM | ACYM | ACYM | ACYM | ACYM |
|---|---|---|---|---|---|---|
| Llangoed, Playing Field | -- | -- | 1259 | 1449 | 1654 | 1849 |
| Llanfaes, Burton Way | -- | -- | 1304 | 1454 | 1659 | 1854 |
| Beaumaris, Bakery | 0927 | 1110 | 1309 | 1459 | 1704 | 1859 |
| Llanddona, Ponc-y-Felin | 0937 | 1120 | \| | \| | 1714 | \| |
| Llansadwrn Hall | 0949 | \| | \| | \| | \| | \| |
| Llandegfan, Trem Arfon | 0954 | 1129 | 1319 | 1509 | 1723 | 1909 |
| Menai Bridge, Wood Street, opp | 1000 | 1136 | 1326 | 1516 | 1730 | 1916 |
| Bangor, Bus Station, Stand D | 1017 | 1153 | 1343 | 1533 | 1747 | 1933 |

## Bangor - Llangoed

**Service 58 (ANAO058)**

**Sunday (Outbound)**

Timetable valid from 27th January 2019 until further notice

| Operator: | ACYM | ACYM | ACYM | ACYM | ACYM | ACYM |
|---|---|---|---|---|---|---|
| Bangor, Bus Station, Stand D | 0900 | 1025 | 1200 | 1350 | 1540 | 1750 |
| Menai Bridge, Bus Station | 0917 | 1042 | 1217 | 1407 | 1557 | 1807 |
| Llandegfan, Trem Arfon | \| | 1048 | 1223 | 1413 | 1603 | 1813 |
| Llansadwrn Hall | \| | \| | \| | \| | 1608 | \| |
| Llanddona, Ponc-y-Felin | \| | 1058 | \| | \| | 1618 | \| |
| Beaumaris, Bulkeley Hotel | 0926 | 1109 | 1234 | 1424 | 1629 | 1824 |
| Llanfaes, Burton Way | -- | -- | 1239 | 1429 | 1634 | 1829 |
| Penmon, Ty Gwyn | -- | -- | 1244 | 1434 | 1639 | 1834 |

## Bangor - Bangor via Minffordd - Y Felinheli

**Service 73 (GYGO073)**

**Monday to Friday (Excluding Bank Holidays) (Outbound)**

Timetable valid from 10th December 2018 until further notice

| Days: | | | | SD | SH | |
|---|---|---|---|---|---|---|
| Operator: | GWCO | GWCO | GWCO | GWCO | GWCO | GWCO |
| Bangor Bus Station B | 0900 | 1100 | 1330 | 1515 | 1640 | 1730 |
| Vardre | \| | \| | \| | 1540 | \| | \| |
| Bangor, Plaza | 0902 | 1102 | 1332 | \| | 1642 | 1732 |
| Minffordd | 0907 | 1107 | 1337 | 1545 | 1647 | 1737 |
| Caerhun | 0913 | 1113 | 1343 | 1551 | 1653 | 1743 |
| Glasinfryn | 0916 | 1116 | 1346 | 1554 | 1656 | 1746 |
| Pentir | 0918 | 1119 | 1349 | 1557 | 1659 | 1749 |
| Rhiwlas | \| | \| | \| | 1602 | \| | 1753 |
| Gelli Gyffwrdd / Greenwood | \| | 1125 | \| | \| | 1703 | \| |
| Bethel | 0925 | 1130 | 1355 | 1612 | \| | 1803 |
| Y Wern | 0931 | 1136 | 1401 | 1618 | \| | -- |
| Y Felinheli | 0935 | 1140 | 1405 | 1622 | \| | -- |
| Tesco, Bangor | 0941 | 1146 | 1411 | 1628 | 1715 | -- |
| Home Bargains, Bangor | 0944 | 1149 | 1414 | 1631 | 1718 | -- |
| Bangor Rail Station | 0947 | 1153 | 1417 | 1634 | 1721 | -- |
| Bangor Bus Station B | 0948 | 1155 | 1420 | 1636 | 1723 | -- |

**Notes:**
**SD** Schooldays Only
**SH** School Holidays

## Bangor - Bangor via Minffordd - Y Felinheli

**Service 73 (GYGO073)**

**Saturday (Outbound)**

Timetable valid from 10th December 2018 until further notice

| Operator: | GWCO | GWCO | GWCO | GWCO | GWCO |
|---|---|---|---|---|---|
| Bangor Bus Station B | 0900 | 1100 | 1330 | 1640 | 1730 |
| Bangor, Plaza | 0902 | 1102 | 1332 | 1642 | 1732 |
| Minffordd | 0907 | 1107 | 1337 | 1647 | 1737 |
| Caerhun | 0913 | 1113 | 1343 | 1653 | 1743 |
| Glasinfryn | 0916 | 1116 | 1346 | 1656 | 1746 |
| Pentir | 0918 | 1119 | 1349 | 1659 | 1749 |
| Rhiwlas | \| | \| | \| | \| | 1753 |
| Gelli Gyffwrdd / Greenwood | \| | 1125 | \| | 1703 | \| |
| Bethel | 0925 | 1130 | 1355 | \| | 1803 |
| Y Wern | 0931 | 1136 | 1401 | \| | -- |
| Y Felinheli | 0935 | 1140 | 1405 | \| | -- |
| Tesco, Bangor | 0941 | 1146 | 1411 | 1715 | -- |
| Home Bargains, Bangor | 0944 | 1149 | 1414 | 1718 | -- |
| Bangor Rail Station | 0947 | 1153 | 1417 | 1721 | -- |
| Bangor Bus Station B | 0948 | 1155 | 1420 | 1723 | -- |

# Appendix 4

# CAERNARFON ROAD, BANGOR

# PROPOSED FOODSTORE DEVELOPMENT

## Stage 1 Road Safety Audit

**January 2019**

**RDW/DC/19/1882/RSA1**

PO Box 831, Godalming, Surrey, GU7 9HT ◆ Tel: 01483 860999 ◆ enquiries@thesafetyforum.co.uk ◆ www.thesafetyforum.co.uk

Registered in England No.04514601. Registered office: Shackleford Suite, Mill Pool House, Mill Lane, Godalming, Surrey GU7 1EY

| Revision Status | Prepared by: (Name) | Checked by: (Name) | Approved by: (Signature) | Date Approved: |
|---|---|---|---|---|
| Original | R Westhead | D Crawford | | 25/01/19 |
| Designer's Response | | | | |
| Authority's Response | | | | |
| Audit Response | | | | |

| **Client:** | |
|---|---|
| Connect Consultants | The Safety Forum Ltd |
| 78 Broad St<br>Chipping Sodbury<br>Bristol<br>BS37 6AG | PO Box 831<br>Godalming<br>Surrey<br>GU7 9HT |
| | Date: 25/01/19 |

## TABLE OF CONTENTS

1.0 INTRODUCTION....3
2.0 ITEMS CONSIDERED....5
3.0 MATTERS ARISING FROM THIS STAGE 1 AUDIT....6
4.0 AUDITOR STATEMENT....8

**APPENDIX A** Location Plan

## 1.0 INTRODUCTION

1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on the proposed access arrangements and highway improvements at Caernarfon Road, Bangor associated with a proposed food store development.

1.2 The highway proposals include: closure of an existing priority junction off Caernarfon Road; provision of a new three arm mini roundabout to serve the development site an adjacent existing retail unit; some additional minor highway alterations.

1.3 The Stage 1 RSA was carried out at the request of Connect Consultants.

1.4 The Audit was carried out on 23rd January 2019 by consultants working on behalf of The Safety Forum Limited. The Audit Team, which is established from The Safety Forum Ltd and independent of the project design team, has had no involvement with the project.

The Auditors were:

R Westhead – Team Leader (MSoRSA, RSA Cert Comp)

D Crawford – Team Member BSc IEng MICE MIHT

1.5 The report has been prepared in accordance with General Principles and Scheme Governance General Information, GG 119, Road Safety Audit (Formerly HD 19/15).

1.6 The Audit consisted of a desktop study and a site visit. The site visit was carried out on 23rd January 2019, between 13:15 and 14:00 hours by all member of the Audit Team together. The weather was dry and overcast and the road surface was wet. Traffic conditions were moderate to heavy with some pedestrian and cycle movements observed.

1.7 Issues relating to the health & safety of operatives constructing, operating or maintaining the highway are not covered by Road Safety Audit. Only issues relating to the design and construction of facilities for highway maintenance that may potentially contribute to a Road Safety Matter are considered by the Road Safety Audit process.

Road Safety Audit is not a technical check that the design conforms to Standards and/or best practice guidance. Design Organisations are responsible for ensuring that their designs have been subjected to the appropriate design reviews (including, where applicable, Walking, Cycling & Horse Riding Assessment & Review) prior to Road Safety Audit.

Road Safety Audit is not a check that the scheme has been constructed in accordance with the design.

Whilst reference is made to certain design standards, where safety may be compromised by a reduction in standard, this report is not intended to provide a design check. The Auditors have only reported on matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme or the appropriateness of the design. Consequently, the Auditors accept no responsibility for the design or construction of the scheme.

1.8 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.

1.9 The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit, and would encourage the Designer to consult them on this matter.

1.10 The Overseeing Organisation response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in the *As Built* design pack to be provided and retained by the Overseeing Organisation on final completion.

1.11 All problems identified in this Road Safety Audit Report are indicated on a location plan in Appendix A

## 2.0 ITEMS CONSIDERED

2.1 The Road Safety Audit was undertaken on the scheme detailed in the following documentation.

| Drawing No. | Rev | Title |
|---|---|---|
| 16054 - 010 | A | PROPOSED SITE ACCESS ARRANGEMENTS |
| 15252-004 | L | Proposed Development. Land Adjacent to Dunelm Mills Caernarfon Road, Bangor |
| - | - | Appendix 1 – 2017 Flows |
| - | - | Appendix 2 – 2024 + Foodstore Flows |

2.2 No departure from standards or other information was submitted to the Audit Team.

## 3.0 MATTERS ARISING FROM THIS STAGE 1 AUDIT.

3.1 PROBLEM

LOCATION: Development arm of roundabout.

SUMMARY: Level difference though approach to roundabout.

There is a level difference between Caernarfon Road and the development site in the area of the proposed site access. This may mean that there is an uphill approach to the roundabout from the development.

During the site visit it was noted that there is currently an uphill slope from the development site and some vehicles were observed having difficulty retaining traction as they entered Caernarfon Road.

Should vehicles entering the roundabout have to do so from an uphill slope they may have difficulty retaining traction as they entered Caernarfon Road leading to possible conflicts with traffic on Caernarfon Road, or shunt type collisions.

RECOMMENDATION

Ensure that the gradient on the approach to the roundabout is suitable and a plateau is provided from which vehicles can move off.

3.2 PROBLEM

LOCATION: Southbound bus stop on Caernarfon Road.

SUMMARY: Buses using stop will obscure visibility from nearby access.

A bus using the proposed relocated stop on Caernarfon Road may obscure visibility for vehicles exiting the access immediately to the south. This could increase the risk of a conflict with southbound traffic passing a stationary bus. The Audit Team do however recognise buses would only be stationary for short periods, and intermittently.

RECOMMENDATION

Locate the bus stop in a position that does not have a detrimental impact on visibility; or, install measures to prevent traffic passing a stationary bus.

3.3 PROBLEM

LOCATION: Caernarfon Road approach to proposed roundabout.

SUMMARY: Conspicuity of roundabout.

The proposed roundabout is on a wide and straight section of Caernarfon Road and the Audit Team are concerned that the form of the roundabout may not be clearly apparent to all road users, particularly those travelling into Bangor, northbound.

Other mini-roundabouts further north towards Bangor have pedestrian refuges or other vertical features within or around them which help to highlight the location and type of junction and generate some deflection on entry.

Should road users fail to be aware of the roundabout they may fail to give way or brake suddenly and failure to give way or shunt conflicts could occur.

RECOMMENDATION

Install kerbed splitter island(s) and bollards on the junction approaches; or, use over-run raised markings to delineate the splitter islands and increase awareness of the roundabout or a combination of both.

## 4.0 AUDITOR STATEMENT

4.1 We certify that this audit has been carried out in accordance with GG 119.

**AUDIT TEAM LEADER**
Name: R Westhead
Position: Road Safety Auditor
The Safety Forum Ltd
PO Box 831
Godalming
Surrey
GU7 9HT

**Signed:**

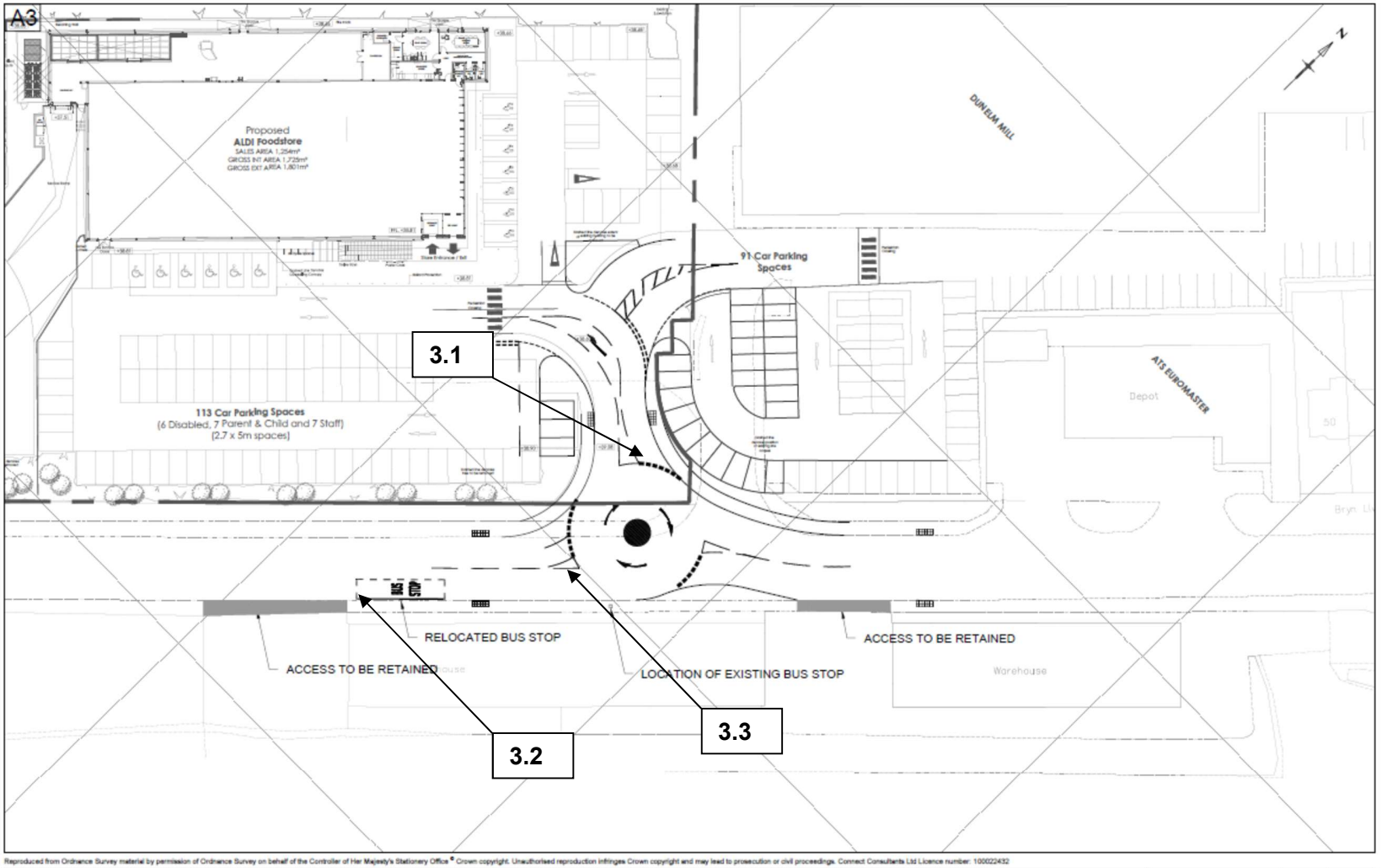
**Date: 25 January 2019**

**AUDIT TEAM MEMBER**
Name: D Crawford
Position: Road Safety Auditor
The Safety Forum Ltd
PO Box 831
Godalming
Surrey
GU7 9HT

**Signed:**

**Date: 25 January 2019**

# APPENDIX A: LOCATION PLAN


A3
Proposed
ALDI Foodstore
SALES AREA 1,254m²
GROSS INT AREA 1,725m²
GROSS EXT AREA 1,801m²
91 Car Parking Spaces
113 Car Parking Spaces
(6 Disabled, 7 Parent & Child and 7 Staff)
(2.7 x 5m spaces)
DUN ELM MILL
A15 EUROMASTER
Depot
Warehouse
3.1
RELOCATED BUS STOP
ACCESS TO BE RETAINED
ACCESS TO BE RETAINED
LOCATION OF EXISTING BUS STOP
3.2
3.3
Reproduced from Ordnance Survey material by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Connect Consultants Ltd Licence number: 100022432
connect CONSULTANTS
78 BROAD STREET, CHIPPING SODBURY, BRISTOL. BS37 6AG
Tel: 01454 320 220 Web: www.connect-consultants.com
Fax: 01454 320 099 Email: bristol@connect-consultants.com
committed to CSCS Platinum award
client
TPS
project
CAERNARFON ROAD,
BANGOR
title
PROPOSED SITE ACCESS ARRANGEMENTS
date
JANUARY 2019
drawn by
T.A.S
checked by
J.C
scale
1:500
status
PLANNING
drawing number
16054 - 010
rev.
A

# Designers Response

# DISCOUNT FOODSTORE, CAERNARFON ROAD, BANGOR
# DESIGNERS RESPONSE TO STAGE 1 ROAD SAFTEY AUDIT
# 25.01.2019

## 1.0 Introduction

1.1 This designers response has been produced as a response to a Stage 1 Road Safety Audit (RSA) produced by The Safety Forum for a foodstore development off Caernarvon Road, Bangor. The report is dated January 2019.

1.2 This report is structured such that each point in the RSA is addressed in turn.

---

***PROBLEM***

***LOCATION:*** *Development arm of roundabout.*

***SUMMARY:*** *Level difference though approach to roundabout.*

*There is a level difference between Caernarfon Road and the development site in the area of the proposed site access. This may mean that there is an uphill approach to the roundabout from the development.*

*During the site visit it was noted that there is currently an uphill slope from the development site and some vehicles were observed having difficulty retaining traction as they entered Caernarfon Road.*

*Should vehicles entering the roundabout have to do so from an uphill slope they may have difficulty retaining traction as they entered Caernarfon Road leading to possible conflicts with traffic on Caernarfon Road, or shunt type collisions.*

***RECOMMENDATION***

*Ensure that the gradient on the approach to the roundabout is suitable and a plateau is provided from which vehicles can move off.*

## 2.0 Designers Response – Development Arm of Roundabout

2.1 The existing access gradient is approximately 1:17. The proposed access gradient will be approximately 1:50 or shallower. This gradient is much shallower and there would be no reason to pre-suppose that vehicles would not be able to negotiate this modest gradient.

2.2 The proposed levels around the site access can be seen at Appendix 2 of the Transport Assessment.

---

***PROBLEM***

***LOCATION:*** *Southbound bus stop on Caernarfon Road.*

***SUMMARY:*** *Buses using stop will obscure visibility from nearby access.*

*A bus using the proposed relocated stop on Caernarfon Road may obscure visibility for vehicles exiting the access immediately to the south. This could increase the risk of a conflict with southbound traffic passing a stationary bus. The Audit Team do however recognise buses would only be stationary for short periods, and intermittently.*

***RECOMMENDATION***

*Locate the bus stop in a position that does not have a detrimental impact on visibility; or, install measures to prevent traffic passing a stationary bus.*

## 3.0 Designers Response – Bus Stop Location

*3.1* Noted. The bus stops on Caernarfon Road have been reconfigured accordingly, such that their stagger has been reversed over that audited, thereby moving the westbound stop away from a sightline.

3.2 The pedestrian crossing point has been relocated such that it is located between the two bus stops. This configuration is as indicated with "*Guidelines for Planning for Public Transport in Developments".*

3.3 The reconfigured access arrangement can be seen at Appendix 2 of the Transport Assessment

---

***PROBLEM***

***LOCATION:*** *Caernarfon Road approach to proposed roundabout.*

***SUMMARY:*** *Conspicuity of roundabout.*

*The proposed roundabout is on a wide and straight section of Caernarfon Road and the Audit Team are concerned that the form of the roundabout may not be clearly apparent to all road users, particularly those travelling into Bangor, northbound. Other mini-roundabouts further north towards Bangor have pedestrian refuges or other vertical features within or around them which help to highlight the location and type of junction and generate some deflection on entry. Should road users fail to be aware of the roundabout they may fail to give way or brake suddenly and failure to give way or shunt conflicts could occur.*

***RECOMMENDATION***

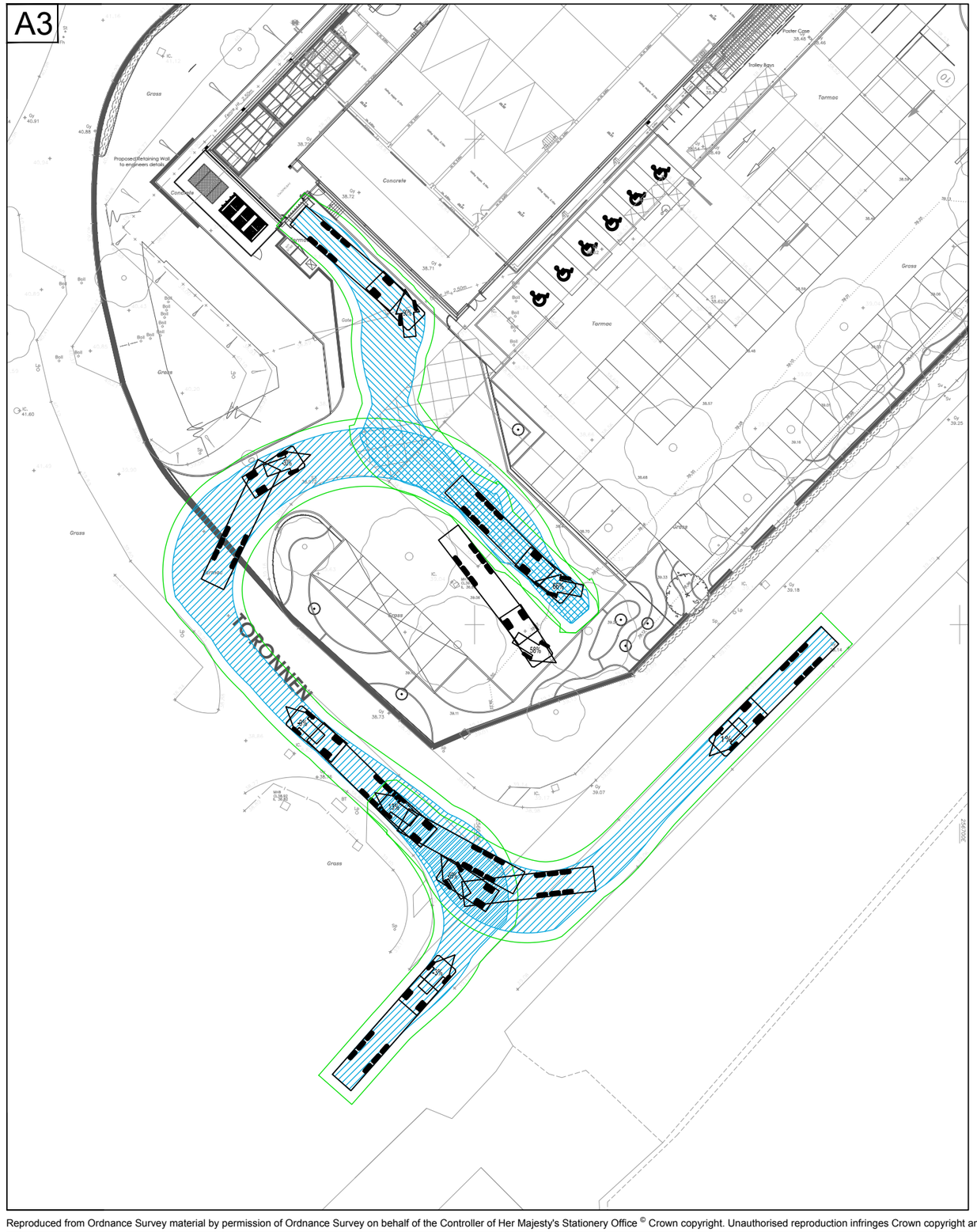
*Install kerbed splitter island(s) and bollards on the junction approaches; or, use overrun raised markings to delineate the splitter islands and increase awareness of the roundabout or a combination of both.*

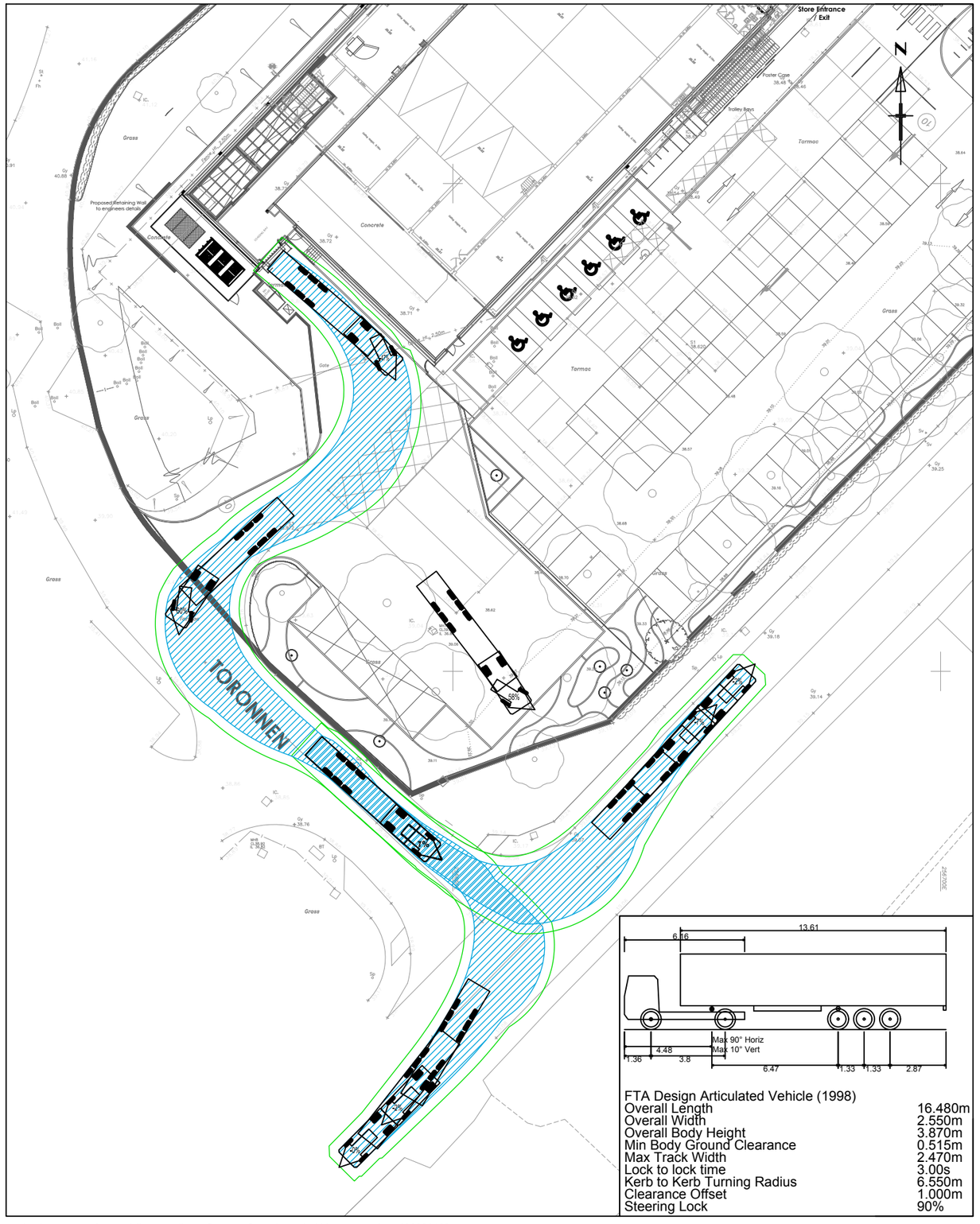
## 4.0 Designers Response – Conspicuity

4.1 The roundabout design has been altered such that the through-road splitter island are now solid/kerbed. There is sufficient width on them for a bollard. The roundabout can be seen at Appendix 2 of the Transport Assessment.

# Appendix 5

A3







| FTA Design Articulated Vehicle (1998) | |
|---|---|
| Overall Length | 16.480m |
| Overall Width | 2.550m |
| Overall Body Height | 3.870m |
| Min Body Ground Clearance | 0.515m |
| Max Track Width | 2.470m |
| Lock to lock time | 3.00s |
| Kerb to Kerb Turning Radius | 6.550m |
| Clearance Offset | 1.000m |
| Steering Lock | 90% |

Reproduced from Ordnance Survey material by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Connect Consultants Ltd Licence number: 100022432

connect CONSULTANTS
78 BROAD STREET, CHIPPING SODBURY, BRISTOL. BS37 6AG
Tel: 01454 320 220 Web: www.connect-consultants.com
Fax: 01454 320 099 Email:bristol@connect-consultants.com

safecontractor APPROVED
bsi. UKAS MANAGEMENT SYSTEMS
QUALITY MANAGEMENT SYSTEM
ISO 9001 : 2015 FS 594947

client
TPS

project
PROPOSED DEVELOPMENT
BANGOR, CAENARDON ROAD

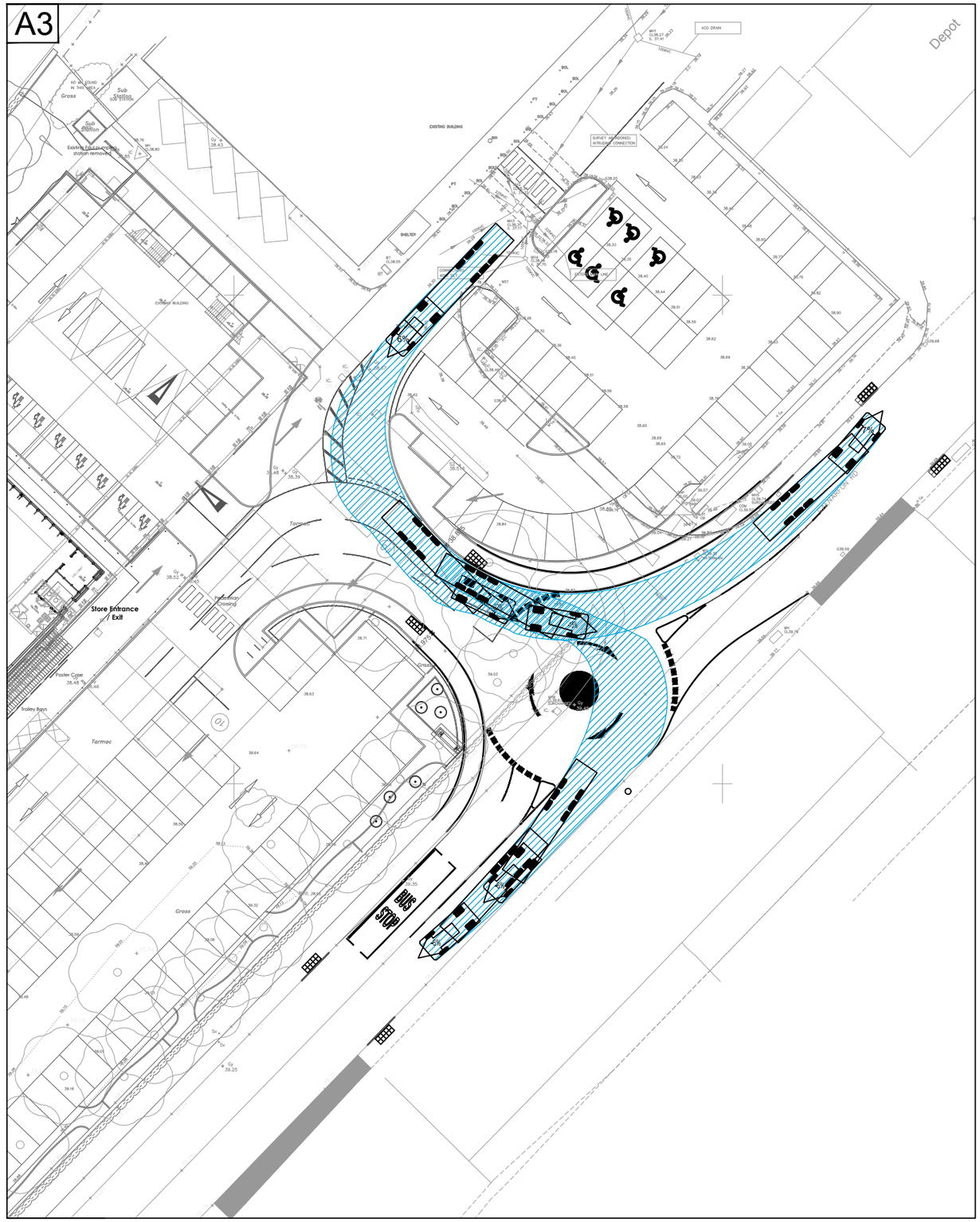
title
SWEPT PATH ANALYSIS
FTA DESIGN ARTICULATED VEHICLE

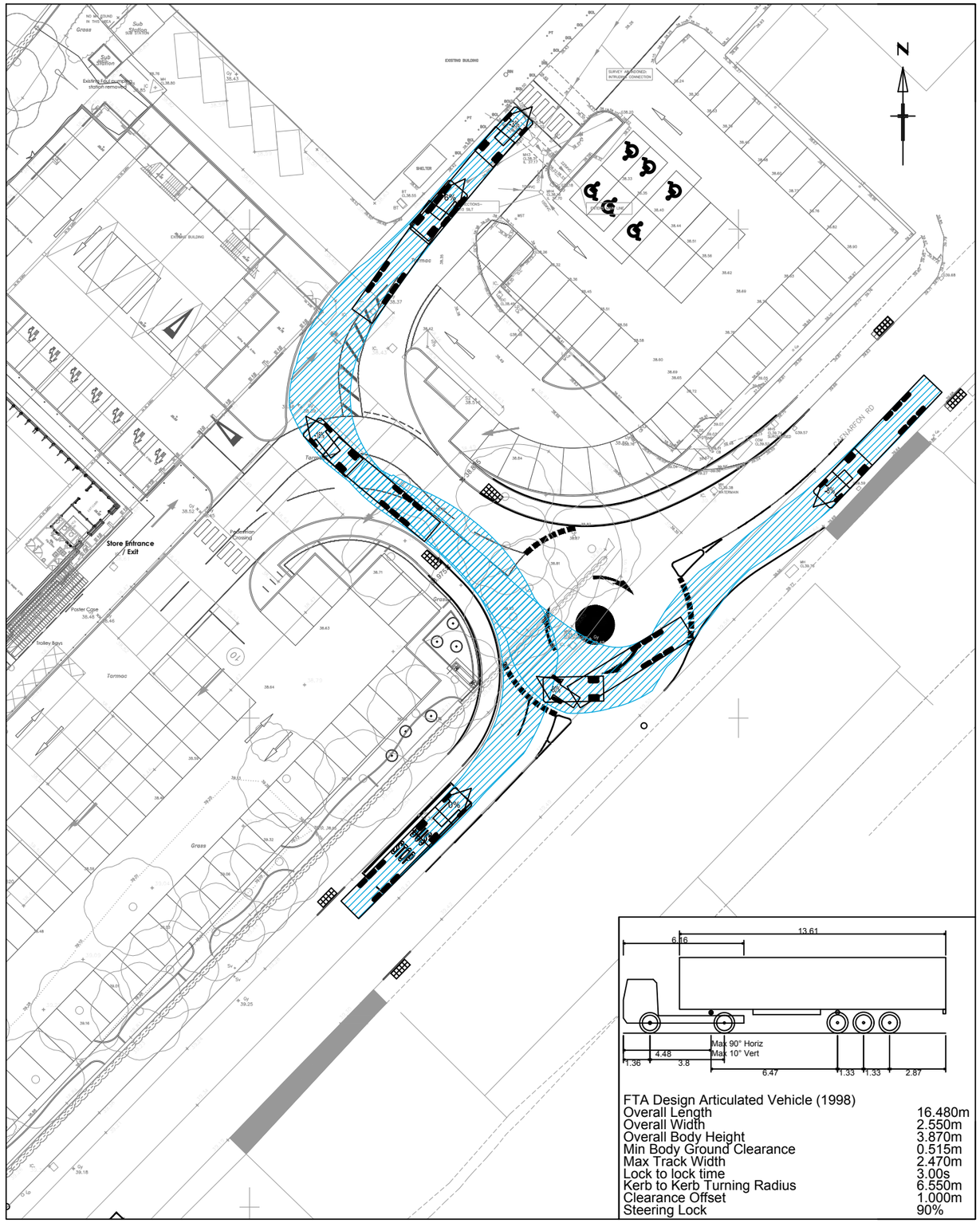
| date | drawn by | checked by |
|---|---|---|
| FEBRUARY 2019 | B.W.L | J.C |

| scale | status |
|---|---|
| 1:500 | PLANNING |

| drawing number | rev. |
|---|---|
| 16054 - TR001 | -- |

A3







| FTA Design Articulated Vehicle (1998) | |
|---|---|
| Overall Length | 16.480m |
| Overall Width | 2.550m |
| Overall Body Height | 3.870m |
| Min Body Ground Clearance | 0.515m |
| Max Track Width | 2.470m |
| Lock to lock time | 3.00s |
| Kerb to Kerb Turning Radius | 6.550m |
| Clearance Offset | 1.000m |
| Steering Lock | 90% |

Reproduced from Ordnance Survey material by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Connect Consultants Ltd Licence number: 100022432

connect CONSULTANTS
78 BROAD STREET, CHIPPING SODBURY, BRISTOL. BS37 6AG
Tel: 01454 320 220 Web: www.connect-consultants.com
Fax: 01454 320 099 Email:bristol@connect-consultants.com

safecontractor APPROVED

bsi. UKAS MANAGEMENT SYSTEMS
QUALITY MANAGEMENT SYSTEM
ISO 9001 : 2015 FS 594947

client
TPS

project
PROPOSED DEVELOPMENT
BANGOR, CAERNARFON ROAD

title
SWEPT PATH ANALYSIS
FTA DESIGN ARTICULATED VEHICLE

| date | drawn by | checked by |
|---|---|---|
| FEBRUARY 2019 | B.W.L | J.C |

| scale | status |
|---|---|
| 1:500 | PLANNING |

| drawing number | rev. |
|---|---|
| 16054 - TR002 | -- |

# Appendix 6

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Friday, 07 July 2017*

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caernarfon Road N / B - A4087 Caernarfon Road S / C - Toronnen

**Approach:** A - A4087 Caernarfon Road N

| | A to B | | | | | | A to C | | | | | | A to A | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 07:00 - 07:15 | 35 | 12 | 1 | 1 | 0 | **49** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| 07:15 - 07:30 | 39 | 10 | 2 | 0 | 2 | **53** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| 07:30 - 07:45 | 53 | 8 | 4 | 0 | 0 | **65** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| 07:45 - 08:00 | 47 | 13 | 0 | 2 | 0 | **62** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **174** | **43** | **7** | **3** | **2** | **229** | **1** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **0** | **0** | **0** |
| 08:00 - 08:15 | 71 | 12 | 1 | 1 | 1 | **86** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| 08:15 - 08:30 | 78 | 18 | 5 | 0 | 1 | **102** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| 08:30 - 08:45 | 105 | 20 | 4 | 1 | 1 | **131** | 2 | 0 | 0 | 0 | 0 | **2** | 0 | 0 | 0 | 0 | 0 | **0** |
| 08:45 - 09:00 | 128 | 25 | 4 | 0 | 3 | **160** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **382** | **75** | **14** | **2** | **6** | **479** | **5** | **0** | **0** | **0** | **0** | **5** | **0** | **0** | **0** | **0** | **0** | **0** |
| 09:00 - 09:15 | 89 | 13 | 2 | 0 | 0 | **104** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| 09:15 - 09:30 | 90 | 15 | 4 | 1 | 1 | **111** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| 09:30 - 09:45 | 94 | 25 | 7 | 0 | 0 | **126** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| 09:45 - 10:00 | 100 | 26 | 8 | 1 | 3 | **138** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **373** | **79** | **21** | **2** | **4** | **479** | **2** | **0** | **0** | **0** | **0** | **2** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Session Total** | **929** | **197** | **42** | **7** | **12** | **1187** | **8** | **0** | **0** | **0** | **0** | **8** | **0** | **0** | **0** | **0** | **0** | **0** |
| 16:00 - 16:15 | 195 | 23 | 2 | 0 | 1 | **221** | 2 | 0 | 0 | 0 | 0 | **2** | 0 | 0 | 0 | 0 | 0 | **0** |
| 16:15 - 16:30 | 202 | 16 | 0 | 0 | 1 | **219** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| 16:30 - 16:45 | 191 | 9 | 5 | 0 | 0 | **205** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| 16:45 - 17:00 | 191 | 20 | 0 | 0 | 1 | **212** | 2 | 0 | 0 | 0 | 0 | **2** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **779** | **68** | **7** | **0** | **3** | **857** | **5** | **0** | **0** | **0** | **0** | **5** | **0** | **0** | **0** | **0** | **0** | **0** |
| 17:00 - 17:15 | 194 | 16 | 0 | 0 | 1 | **211** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| 17:15 - 17:30 | 184 | 19 | 0 | 0 | 1 | **204** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| 17:30 - 17:45 | 198 | 14 | 0 | 0 | 0 | **212** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| 17:45 - 18:00 | 165 | 3 | 0 | 0 | 0 | **168** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **741** | **52** | **0** | **0** | **2** | **795** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| 18:00 - 18:15 | 166 | 14 | 0 | 0 | 0 | **180** | 2 | 0 | 0 | 0 | 0 | **2** | 0 | 0 | 0 | 0 | 0 | **0** |
| 18:15 - 18:30 | 162 | 15 | 0 | 0 | 1 | **178** | 2 | 0 | 0 | 0 | 0 | **2** | 0 | 0 | 0 | 0 | 0 | **0** |
| 18:30 - 18:45 | 131 | 7 | 0 | 0 | 1 | **139** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| 18:45 - 19:00 | 116 | 6 | 1 | 0 | 0 | **123** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **575** | **42** | **1** | **0** | **2** | **620** | **4** | **0** | **0** | **0** | **0** | **4** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Session Total** | **2095** | **162** | **8** | **0** | **7** | **2272** | **9** | **0** | **0** | **0** | **0** | **9** | **0** | **0** | **0** | **0** | **0** | **0** |

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Friday, 07 July 2017*

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caernarfon Road N / B - A4087 Caernarfon Road S / C - Toronnen

**Approach:** B - A4087 Caernarfon Road S

| | B to C | | | | | | B to A | | | | | | B to B | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 07:00 - 07:15 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 7 | 2 | 0 | 0 | 57 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 - 07:30 | 1 | 0 | 0 | 0 | 0 | 1 | 43 | 15 | 3 | 0 | 1 | 62 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 - 07:45 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 15 | 1 | 0 | 2 | 80 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 - 08:00 | 1 | 0 | 0 | 0 | 0 | 1 | 96 | 19 | 1 | 2 | 2 | 120 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **2** | **0** | **0** | **0** | **0** | **2** | **249** | **56** | **7** | **2** | **5** | **319** | **0** | **0** | **0** | **0** | **0** | **0** |
| 08:00 - 08:15 | 0 | 0 | 0 | 0 | 0 | 0 | 108 | 24 | 2 | 0 | 0 | 134 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 - 08:30 | 1 | 0 | 1 | 0 | 0 | 2 | 178 | 13 | 6 | 0 | 1 | 198 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:30 - 08:45 | 1 | 1 | 1 | 0 | 0 | 3 | 193 | 25 | 2 | 1 | 1 | 222 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:45 - 09:00 | 0 | 0 | 0 | 0 | 0 | 0 | 188 | 19 | 3 | 1 | 2 | 213 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **2** | **1** | **2** | **0** | **0** | **5** | **667** | **81** | **13** | **2** | **4** | **767** | **0** | **0** | **0** | **0** | **0** | **0** |
| 09:00 - 09:15 | 0 | 0 | 0 | 0 | 0 | 0 | 136 | 19 | 3 | 0 | 0 | 158 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:15 - 09:30 | 1 | 0 | 0 | 0 | 0 | 1 | 135 | 14 | 3 | 0 | 0 | 152 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:30 - 09:45 | 1 | 0 | 0 | 0 | 0 | 1 | 128 | 14 | 2 | 0 | 2 | 146 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:45 - 10:00 | 2 | 0 | 0 | | | 2 | 116 | 18 | 2 | 0 | 2 | 138 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **4** | **0** | **0** | **0** | **0** | **4** | **515** | **65** | **10** | **0** | **4** | **594** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Session Total** | **8** | **1** | **2** | **0** | **0** | **11** | **1431** | **202** | **30** | **4** | **13** | **1680** | **0** | **0** | **0** | **0** | **0** | **0** |
| 16:00 - 16:15 | 0 | 0 | 0 | 0 | 0 | 0 | 167 | 26 | 0 | 0 | 3 | 196 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:15 - 16:30 | 2 | 0 | 0 | 0 | 0 | 2 | 145 | 17 | 2 | 0 | 2 | 166 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 - 16:45 | 0 | 1 | 0 | 0 | 0 | 1 | 136 | 16 | 1 | 1 | 1 | 155 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 - 17:00 | 5 | 0 | 0 | 0 | 0 | 5 | 176 | 14 | 1 | 0 | 1 | 192 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **7** | **1** | **0** | **0** | **0** | **8** | **624** | **73** | **4** | **1** | **7** | **709** | **0** | **0** | **0** | **0** | **0** | **0** |
| 17:00 - 17:15 | 1 | 0 | 0 | 0 | 0 | 1 | 138 | 10 | 3 | 0 | 0 | 151 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 - 17:30 | 5 | 0 | 0 | 0 | 0 | 5 | 164 | 11 | 0 | 0 | 1 | 176 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 - 17:45 | 1 | 0 | 0 | 0 | 0 | 1 | 161 | 13 | 1 | 0 | 1 | 176 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 - 18:00 | 3 | 0 | 0 | 0 | 0 | 3 | 138 | 9 | 0 | 0 | 1 | 148 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **10** | **0** | **0** | **0** | **0** | **10** | **601** | **43** | **4** | **0** | **3** | **651** | **0** | **0** | **0** | **0** | **0** | **0** |
| 18:00 - 18:15 | 1 | 0 | 0 | 0 | 0 | 1 | 127 | 14 | 0 | 0 | 0 | 141 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 - 18:30 | 1 | 0 | 0 | 0 | 0 | 1 | 139 | 8 | 0 | 0 | 1 | 148 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:30 - 18:45 | 3 | 1 | 0 | 0 | 0 | 4 | 140 | 18 | 1 | 0 | 1 | 160 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:45 - 19:00 | 0 | 0 | 0 | 0 | 0 | 0 | 128 | 5 | 0 | 0 | 0 | 133 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **5** | **1** | **0** | **0** | **0** | **6** | **534** | **45** | **1** | **0** | **2** | **582** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Session Total** | **22** | **2** | **0** | **0** | **0** | **24** | **1759** | **161** | **9** | **1** | **12** | **1942** | **0** | **0** | **0** | **0** | **0** | **0** |

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Friday, 07 July 2017*

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caernarfon Road N / B - A4087 Caernarfon Road S / C - Toronnen

**Approach:** C - Toronnen

| | C to A | | | | | | C to B | | | | | | C to C | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 07:00 - 07:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 - 07:30 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 - 07:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 - 08:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **1** | **0** | **0** | **0** | **0** | **1** | **1** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **0** | **0** | **0** |
| 08:00 - 08:15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 - 08:30 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:30 - 08:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:45 - 09:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **0** | **0** | **0** | **0** | **0** | **0** | **2** | **1** | **0** | **0** | **0** | **3** | **0** | **0** | **0** | **0** | **0** | **0** |
| 09:00 - 09:15 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:15 - 09:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:30 - 09:45 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:45 - 10:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 |
| **Hourly Total** | **1** | **0** | **1** | **0** | **0** | **2** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Session Total** | **2** | **0** | **1** | **0** | **0** | **3** | **3** | **1** | **0** | **0** | **0** | **4** | **0** | **0** | **0** | **0** | **0** | **0** |
| 16:00 - 16:15 | 3 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:15 - 16:30 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 - 16:45 | 1 | 1 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 - 17:00 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **6** | **1** | **0** | **0** | **0** | **7** | **9** | **1** | **0** | **0** | **0** | 10 | **0** | **0** | **0** | **0** | **0** | **0** |
| 17:00 - 17:15 | 3 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 - 17:30 | 2 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 - 17:45 | 3 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 - 18:00 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **9** | **0** | **0** | **0** | **0** | **9** | **7** | **1** | **0** | **0** | **0** | **8** | **0** | **0** | **0** | **0** | **0** | **0** |
| 18:00 - 18:15 | 3 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 - 18:30 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:30 - 18:45 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:45 - 19:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **7** | **0** | **0** | **0** | **0** | **7** | **3** | **1** | **0** | **0** | **0** | **4** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Session Total** | **22** | **1** | **0** | **0** | **0** | **23** | **19** | **3** | **0** | **0** | **0** | **22** | **0** | **0** | **0** | **0** | **0** | **0** |

# Caerfarnon Road, Bangor - Manual Traffic Survey: Friday,

**Produced by Streetwise Services Ltd.**

**Junction:** **A - A4087 Caernarfon Road N / B - A4087 Caernarfon Road S / C**

**Vehicle Class:** All classes

**Start Time:** 07:00

**End Time:** 19:00

**Show Peak Times:** No

**Arm Destination**

| Arm Origin | A | B | C | Total |
|---|---|---|---|---|
| A | 0 | 3459 | 17 | **3476** |
| B | 3622 | 0 | 35 | **3657** |
| C | 26 | 26 | 0 | **52** |
| **Total** | **3648** | **3485** | **52** | |

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Friday, 07 July 2017*

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caenarfon Road N / B - A4087 Caernarfon Road S / C - Retail Entrance

**Approach:** A - A4087 Caenarfon Road N

| | A to B | | | | | | | A to C | | | | | | A to A | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | HR Total | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 07:00 - 07:15 | 36 | 11 | 1 | 1 | 0 | 49 | 231 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 - 07:30 | 41 | 10 | 2 | 0 | 2 | 55 | 273 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 - 07:45 | 53 | 9 | 4 | 0 | 0 | 66 | 316 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 - 08:00 | 47 | 13 | 0 | 1 | 0 | 61 | 385 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:00 - 08:15 | 76 | 11 | 2 | 1 | 1 | 91 | 486 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 - 08:30 | 76 | 17 | 4 | 0 | 1 | 98 | 496 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:30 - 08:45 | 109 | 20 | 4 | 1 | 1 | 135 | 503 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:45 - 09:00 | 131 | 24 | 4 | 0 | 3 | 162 | 493 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:00 - 09:15 | 85 | 13 | 2 | 1 | 0 | 101 | 467 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:15 - 09:30 | 86 | 14 | 4 | 0 | 1 | 105 | | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:30 - 09:45 | 93 | 25 | 7 | 0 | 0 | 125 | | 5 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 1 |
| 09:45 - 10:00 | 98 | 26 | 8 | 1 | 3 | 136 | | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:00 - 16:15 | 185 | 22 | 1 | 0 | 1 | 209 | 841 | 2 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:15 - 16:30 | 200 | 16 | 0 | 0 | 1 | 217 | 828 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 - 16:45 | 188 | 7 | 5 | 0 | 0 | 200 | 816 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 - 17:00 | 194 | 20 | 0 | 0 | 1 | 215 | 818 | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 - 17:15 | 180 | 15 | 0 | 0 | 1 | 196 | 769 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 - 17:30 | 185 | 19 | 0 | 0 | 1 | 205 | 742 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 - 17:45 | 189 | 13 | 0 | 0 | 0 | 202 | 721 | 2 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 - 18:00 | 161 | 5 | 0 | 0 | 0 | 166 | 645 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 - 18:15 | 157 | 12 | 0 | 0 | 0 | 169 | 597 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 - 18:30 | 167 | 16 | 0 | 0 | 1 | 184 | | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:30 - 18:45 | 119 | 6 | 0 | 0 | 1 | 126 | | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:45 - 19:00 | 113 | 4 | 1 | 0 | 0 | 118 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Friday, 07 July 2017*

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caenarfon Road N / B - A4087 Caernarfon Road S / C - Retail Entrance

**Approach:** B - A4087 Caernarfon Road S

| | B to C | | | | | | B to A | | | | | | | B to B | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | Hr Start | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 07:00 - 07:15 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 7 | 2 | 0 | 0 | 56 | 311 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 - 07:30 | 0 | 1 | 0 | 0 | 0 | 1 | 44 | 13 | 3 | 0 | 1 | 61 | 388 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 - 07:45 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 15 | 1 | 0 | 2 | 77 | 521 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 - 08:00 | 0 | 0 | 0 | 0 | 0 | 0 | 95 | 17 | 1 | 2 | 2 | 117 | 667 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:00 - 08:15 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 25 | 2 | 0 | 0 | 133 | 759 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 - 08:30 | 0 | 0 | 0 | 0 | 0 | 0 | 175 | 12 | 6 | 0 | 1 | 194 | 787 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:30 - 08:45 | 2 | 0 | 0 | 0 | 0 | 2 | 194 | 25 | 2 | 1 | 1 | 223 | 733 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:45 - 09:00 | 3 | 0 | 0 | 0 | 0 | 3 | 185 | 19 | 2 | 1 | 2 | 209 | 650 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:00 - 09:15 | 1 | 0 | 0 | 0 | 0 | 1 | 136 | 20 | 5 | 0 | 0 | 161 | 579 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:15 - 09:30 | 7 | 1 | 0 | 0 | 0 | 8 | 125 | 13 | 2 | 0 | 0 | 140 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:30 - 09:45 | 5 | 0 | 0 | 0 | 0 | 5 | 122 | 13 | 3 | 0 | 2 | 140 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:45 - 10:00 | 3 | 0 | 0 | 0 | 0 | 3 | 117 | 17 | 2 | 0 | 2 | 138 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:00 - 16:15 | 7 | 0 | 0 | 0 | 0 | 7 | 167 | 24 | 0 | 0 | 3 | 194 | 686 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:15 - 16:30 | 6 | 0 | 0 | 0 | 0 | 6 | 140 | 17 | 2 | 0 | 2 | 161 | 648 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 - 16:45 | 5 | 0 | 0 | 0 | 0 | 5 | 131 | 15 | 1 | 1 | 1 | 149 | 660 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 - 17:00 | 8 | 0 | 0 | 0 | 0 | 8 | 164 | 16 | 1 | 0 | 1 | 182 | 685 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 - 17:15 | 3 | 0 | 0 | 0 | 0 | 3 | 142 | 11 | 3 | 0 | 0 | 156 | 645 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 - 17:30 | 4 | 0 | 0 | 0 | 0 | 4 | 161 | 11 | 0 | 0 | 1 | 173 | 631 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 - 17:45 | 4 | 0 | 0 | 0 | 0 | 4 | 158 | 14 | 1 | 0 | 1 | 174 | 600 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 - 18:00 | 6 | 0 | 0 | 0 | 0 | 6 | 133 | 9 | 0 | 0 | 0 | 142 | 579 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 - 18:15 | 2 | 1 | 0 | 0 | 0 | 3 | 128 | 13 | 0 | 0 | 1 | 142 | 568 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 - 18:30 | 6 | 0 | 0 | 0 | 0 | 6 | 133 | 8 | 0 | 0 | 1 | 142 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:30 - 18:45 | 3 | 0 | 0 | 0 | 0 | 3 | 136 | 15 | 1 | 0 | 1 | 153 | | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:45 - 19:00 | 1 | 0 | 0 | 0 | 0 | 1 | 125 | 6 | 0 | 0 | 0 | 131 | | 0 | 0 | 0 | 0 | 0 | 0 |

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Friday, 07 July 2017*

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caenarfon Road N / B - A4087 Caernarfon Road S / C - Retail Entrance

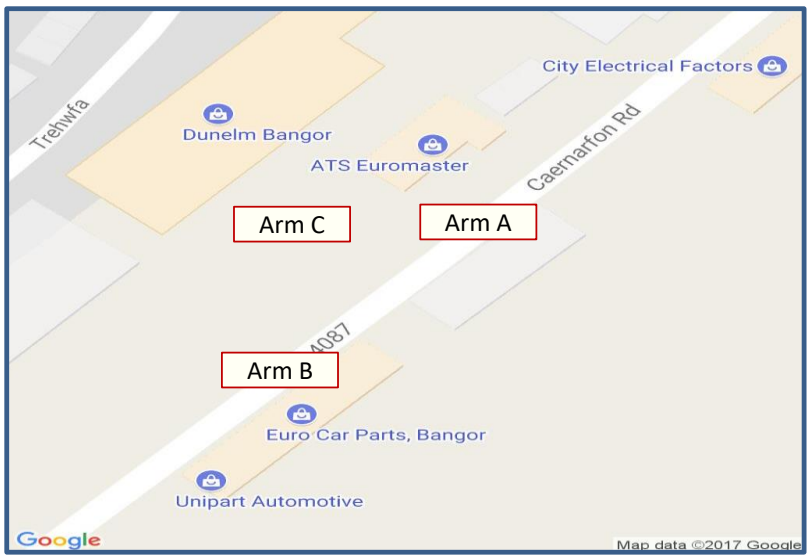
**Approach:** C - Retail Entrance

| | C to A | | | | | | C to B | | | | | | C to C | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 07:00 - 07:15 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 - 07:30 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 - 07:45 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 - 08:00 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:00 - 08:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 - 08:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:30 - 08:45 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:45 - 09:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:00 - 09:15 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:15 - 09:30 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:30 - 09:45 | 1 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:45 - 10:00 | 1 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:00 - 16:15 | 5 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:15 - 16:30 | 1 | 0 | 0 | 0 | 0 | 1 | 8 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 - 16:45 | 2 | 0 | 0 | 0 | 0 | 2 | 3 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 - 17:00 | 5 | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 - 17:15 | 4 | 0 | 0 | 0 | 0 | 4 | 11 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 - 17:30 | 2 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 - 17:45 | 4 | 0 | 0 | 0 | 0 | 4 | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 - 18:00 | 4 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 - 18:15 | 3 | 0 | 0 | 0 | 0 | 3 | 6 | 1 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 - 18:30 | 2 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:30 - 18:45 | 1 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:45 - 19:00 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |

# Caerfarnon Road, Bangor - Manual Traffic Survey: Friday, 07 July 2017

**Produced by Streetwise Services Ltd.**

**Junction:** **A - A4087 Caenarfon Road N / B - A4087 Caernarfon Road S / C - Retail Entrance**




**Vehicle Class:** All classes

**Start Time:** 07:00

**End Time:** 19:00

**Show Peak Times:** No

**Arm Destination**

| Arm Origin | A | B | C | Total |
|---|---|---|---|---|
| A | #VALUE! | #VALUE! | #VALUE! | **#VALUE!** |
| B | #VALUE! | #VALUE! | #VALUE! | **#VALUE!** |
| C | #VALUE! | #VALUE! | #VALUE! | **#VALUE!** |
| Total | **#VALUE!** | **#VALUE!** | **#VALUE!** | |

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Friday, 07 July 2017*

Produced by Streetwise Services Ltd.

**Junction:** A - A4087 Caernarfon Road N / B - Unnamed Road / C - A5087 Caernarfon Road S / D - Ffordd Coed Mawr

**Approach:** A - A4087 Caernarfon Road N

| | A to B | | | | | | A to C | | | | | | A to D | | | | | | A to A | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 07:00 - 07:15 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 10 | 1 | 1 | 0 | 44 | 3 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 1 |
| 07:15 - 07:30 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 6 | 1 | 0 | 1 | 41 | 7 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 0 | 0 | 1 |
| 07:30 - 07:45 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 4 | 4 | 0 | 0 | 47 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 - 08:00 | 1 | 0 | 0 | 0 | 0 | 1 | 37 | 7 | 1 | 0 | 0 | 45 | 4 | 2 | 1 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | 1 | 0 | 0 | 0 | 0 | 1 | 141 | 27 | 7 | 1 | 1 | 177 | 16 | 2 | 1 | 0 | 0 | 19 | 2 | 0 | 0 | 0 | 0 | 2 |
| 08:00 - 08:15 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 8 | 4 | 1 | 0 | 60 | 8 | 1 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 - 08:30 | 1 | 0 | 0 | 0 | 0 | 1 | 41 | 5 | 2 | 0 | 0 | 48 | 8 | 0 | 1 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:30 - 08:45 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 20 | 5 | 1 | 1 | 104 | 11 | 1 | 1 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:45 - 09:00 | 0 | 0 | 0 | 0 | 0 | 0 | 78 | 18 | 1 | 0 | 1 | 98 | 10 | 1 | 0 | 0 | 0 | 11 | 1 | 0 | 0 | 0 | 0 | 1 |
| **Hourly Total** | 1 | 0 | 0 | 0 | 0 | 1 | 243 | 51 | 12 | 2 | 2 | 310 | 37 | 3 | 2 | 0 | 0 | 42 | 1 | 0 | 0 | 0 | 0 | 1 |
| 09:00 - 09:15 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 7 | 3 | 1 | 0 | 67 | 7 | 0 | 1 | 0 | 0 | 8 | 2 | 0 | 0 | 0 | 0 | 2 |
| 09:15 - 09:30 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 12 | 2 | 0 | 0 | 95 | 11 | 4 | 0 | 0 | 0 | 15 | 2 | 0 | 0 | 0 | 0 | 2 |
| 09:30 - 09:45 | 0 | 1 | 0 | 0 | 0 | 1 | 83 | 17 | 6 | 0 | 0 | 106 | 10 | 2 | 1 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:45 - 10:00 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 22 | 6 | 1 | 2 | 108 | 9 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | 0 | 1 | 0 | 0 | 0 | 1 | 297 | 58 | 17 | 2 | 2 | 376 | 37 | 6 | 2 | 0 | 0 | 45 | 4 | 0 | 0 | 0 | 0 | 4 |
| **Session Total** | 2 | 1 | 0 | 0 | 0 | 3 | 681 | 136 | 36 | 5 | 5 | 863 | 90 | 11 | 5 | 0 | 0 | 106 | 7 | 0 | 0 | 0 | 0 | 7 |
| 16:00 - 16:15 | 0 | 0 | 0 | 0 | 0 | 0 | 156 | 16 | 1 | 0 | 0 | 173 | 17 | 1 | 0 | 0 | 0 | 18 | 1 | 0 | 0 | 0 | 0 | 1 |
| 16:15 - 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 149 | 10 | 0 | 0 | 1 | 160 | 10 | 1 | 0 | 0 | 0 | 11 | 1 | 0 | 0 | 0 | 0 | 1 |
| 16:30 - 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 158 | 5 | 5 | 0 | 0 | 168 | 7 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 - 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 148 | 15 | 0 | 0 | 1 | 164 | 17 | 1 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | 0 | 0 | 0 | 0 | 0 | 0 | 611 | 46 | 6 | 0 | 2 | 665 | 51 | 3 | 0 | 0 | 0 | 54 | 2 | 0 | 0 | 0 | 0 | 2 |
| 17:00 - 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 131 | 14 | 0 | 0 | 1 | 146 | 14 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 - 17:30 | 1 | 0 | 0 | 0 | 0 | 1 | 165 | 15 | 0 | 0 | 0 | 180 | 14 | 1 | 1 | 0 | 0 | 16 | 1 | 0 | 0 | 0 | 0 | 1 |
| 17:30 - 17:45 | 0 | 1 | 0 | 0 | 0 | 1 | 150 | 11 | 0 | 0 | 0 | 161 | 11 | 0 | 1 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 - 18:00 | 1 | 0 | 0 | 0 | 0 | 1 | 144 | 4 | 0 | 0 | 0 | 148 | 9 | 1 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | 2 | 1 | 0 | 0 | 0 | 3 | 590 | 44 | 0 | 0 | 1 | 635 | 48 | 2 | 2 | 0 | 0 | 52 | 1 | 0 | 0 | 0 | 0 | 1 |
| 18:00 - 18:15 | 1 | 0 | 0 | 0 | 0 | 1 | 132 | 11 | 0 | 0 | 0 | 143 | 11 | 1 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 - 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 138 | 11 | 0 | 0 | 1 | 150 | 14 | 0 | 0 | 0 | 0 | 14 | 1 | 0 | 0 | 0 | 0 | 1 |
| 18:30 - 18:45 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | 4 | 0 | 0 | 1 | 89 | 13 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:45 - 19:00 | 1 | 0 | 0 | 0 | 0 | 1 | 92 | 4 | 1 | 0 | 0 | 97 | 16 | 1 | 0 | 0 | 0 | 17 | 1 | 0 | 0 | 0 | 0 | 1 |
| **Hourly Total** | 2 | 0 | 0 | 0 | 0 | 2 | 446 | 30 | 1 | 0 | 2 | 479 | 54 | 2 | 0 | 0 | 0 | 56 | 2 | 0 | 0 | 0 | 0 | 2 |
| **Session Total** | 4 | 1 | 0 | 0 | 0 | 5 | 1647 | 120 | 7 | 0 | 5 | 1779 | 153 | 7 | 2 | 0 | 0 | 162 | 5 | 0 | 0 | 0 | 0 | 5 |

*Caerfarnon Road, Bangor - Manual Traffic Survey: Friday, 07 July 2017*

Produced by Streetwise Services Ltd.

**Junction:** A - A4087 Caernarfon Road N / B - Unnamed Road / C - A5087 Caernarfon Road S / D - Ffordd Coed Mawr

**Approach:** C - A5087 Caernarfon Road S

| | C to D | | | | | | C to A | | | | | | C to B | | | | | | C to C | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 07:00 - 07:15 | 2 | 1 | 0 | 0 | 0 | 3 | 44 | 9 | 2 | 0 | 0 | 55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 - 07:30 | 7 | 2 | 0 | 0 | 1 | 10 | 35 | 6 | 2 | 0 | 0 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 - 07:45 | 11 | 5 | 0 | 0 | 0 | 16 | 43 | 13 | 1 | 0 | 2 | 59 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 07:45 - 08:00 | 14 | 3 | 1 | 1 | 1 | 20 | 74 | 13 | 1 | 1 | 1 | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| **Hourly Total** | **34** | **11** | **1** | **1** | **2** | **49** | **196** | **41** | **6** | **1** | **3** | **247** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **1** | **0** | **0** | **0** | **2** |
| 08:00 - 08:15 | 17 | 4 | 0 | 0 | 0 | 21 | 80 | 16 | 2 | 0 | 0 | 98 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 - 08:30 | 30 | 4 | 0 | 0 | 0 | 34 | 133 | 6 | 6 | 0 | 1 | 146 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:30 - 08:45 | 44 | 2 | 1 | 0 | 1 | 48 | 152 | 15 | 0 | 0 | 0 | 167 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 08:45 - 09:00 | 29 | 1 | 0 | 0 | 0 | 30 | 145 | 16 | 3 | 1 | 2 | 167 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| **Hourly Total** | **120** | **11** | **1** | **0** | **1** | **133** | **510** | **53** | **11** | **1** | **3** | **578** | **0** | **0** | **0** | **0** | **0** | **0** | **6** | **0** | **0** | **0** | **0** | **6** |
| 09:00 - 09:15 | 12 | 4 | 1 | 0 | 0 | 17 | 117 | 14 | 4 | 0 | 0 | 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:15 - 09:30 | 14 | 1 | 1 | 0 | 0 | 16 | 114 | 12 | 1 | 0 | 0 | 127 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:30 - 09:45 | 14 | 1 | 0 | 0 | 0 | 15 | 103 | 11 | 2 | 0 | 2 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 09:45 - 10:00 | 9 | 4 | 1 | 0 | 0 | 14 | 106 | 13 | 1 | 0 | 2 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **49** | **10** | **3** | **0** | **0** | **62** | **440** | **50** | **8** | **0** | **4** | **502** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **0** | **1** |
| **Session Total** | **203** | **32** | **5** | **1** | **3** | **244** | **1146** | **144** | **25** | **2** | **10** | **1327** | **0** | **0** | **0** | **0** | **0** | **0** | **8** | **1** | **0** | **0** | **0** | **9** |
| 16:00 - 16:15 | 23 | 8 | 0 | 0 | 0 | 31 | 133 | 16 | 0 | 0 | 3 | 152 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 16:15 - 16:30 | 32 | 0 | 1 | 0 | 0 | 33 | 123 | 13 | 1 | 0 | 2 | 139 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 2 |
| 16:30 - 16:45 | 22 | 3 | 0 | 1 | 0 | 26 | 114 | 12 | 1 | 0 | 1 | 128 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 16:45 - 17:00 | 30 | 1 | 0 | 0 | 1 | 32 | 137 | 13 | 1 | 0 | 0 | 151 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| **Hourly Total** | **107** | **12** | **1** | **1** | **1** | **122** | **507** | **54** | **3** | **0** | **6** | **570** | **1** | **0** | **0** | **0** | **0** | **1** | **9** | **0** | **0** | **0** | **0** | **9** |
| 17:00 - 17:15 | 34 | 1 | 0 | 0 | 0 | 35 | 112 | 5 | 3 | 0 | 0 | 120 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 6 |
| 17:15 - 17:30 | 28 | 2 | 0 | 0 | 0 | 30 | 134 | 10 | 0 | 0 | 1 | 145 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 17:30 - 17:45 | 32 | 4 | 0 | 0 | 0 | 36 | 121 | 9 | 1 | 0 | 1 | 132 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 3 |
| 17:45 - 18:00 | 35 | 2 | 0 | 0 | 1 | 38 | 112 | 6 | 0 | 0 | 0 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| **Hourly Total** | **129** | **9** | **0** | **0** | **1** | **139** | **479** | **30** | **4** | **0** | **2** | **515** | **1** | **0** | **0** | **0** | **0** | **1** | **12** | **0** | **0** | **0** | **0** | **12** |
| 18:00 - 18:15 | 25 | 4 | 0 | 0 | 0 | 29 | 105 | 8 | 0 | 0 | 0 | 113 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| 18:15 - 18:30 | 22 | 1 | 0 | 0 | 1 | 24 | 102 | 7 | 0 | 0 | 0 | 109 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 18:30 - 18:45 | 31 | 2 | 0 | 0 | 0 | 33 | 113 | 12 | 1 | 0 | 1 | 127 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:45 - 19:00 | 24 | 0 | 0 | 0 | 0 | 24 | 98 | 5 | 0 | 0 | 0 | 103 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **102** | **7** | **0** | **0** | **1** | **110** | **418** | **32** | **1** | **0** | **1** | **452** | **0** | **1** | **0** | **0** | **0** | **1** | **2** | **0** | **0** | **0** | **0** | **2** |
| **Session Total** | **338** | **28** | **1** | **1** | **3** | **371** | **1404** | **116** | **8** | **0** | **9** | **1537** | **2** | **1** | **0** | **0** | **0** | **3** | **23** | **0** | **0** | **0** | **0** | **23** |

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Friday, 07 July 2017*

Produced by Streetwise Services Ltd.

**Junction:** A - A4087 Caernarfon Road N / B - Unnamed Road / C - A5087 Caernarfon Road S / D - Ffordd Coed Mawr

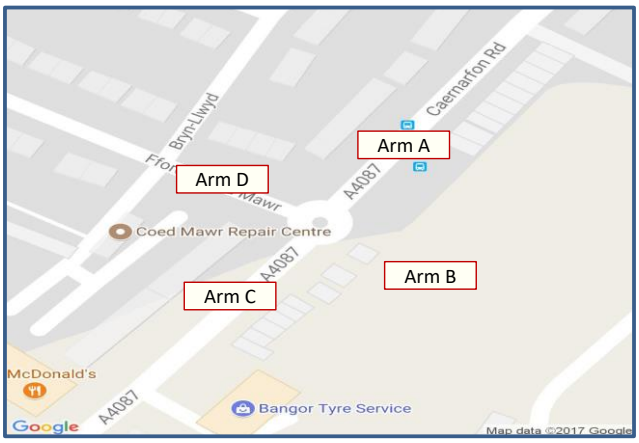
**Approach:** D - Ffordd Coed Mawr

| | D to A | | | | | | D to B | | | | | | D to C | | | | | | D to D | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 07:00 - 07:15 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 - 07:30 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 3 | 1 | 0 | 1 | 16 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 - 07:45 | 4 | 1 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 4 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 - 08:00 | 5 | 0 | 1 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 4 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **12** | **2** | **1** | **0** | **0** | **15** | **0** | **0** | **0** | **0** | **0** | **0** | **40** | **12** | **1** | **0** | **1** | **54** | **0** | **0** | **0** | **0** | **0** | **0** |
| 08:00 - 08:15 | 13 | 2 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 4 | 0 | 0 | 1 | 28 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:15 - 08:30 | 8 | 2 | 1 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 2 | 0 | 0 | 1 | 32 | 0 | 1 | 0 | 0 | 0 | 1 |
| 08:30 - 08:45 | 25 | 1 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 3 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 |
| 08:45 - 09:00 | 23 | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 2 | 1 | 0 | 2 | 48 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **69** | **5** | **1** | **0** | **0** | **75** | **0** | **0** | **0** | **0** | **0** | **0** | **128** | **11** | **1** | **0** | **4** | **144** | **0** | **1** | **0** | **0** | **0** | **1** |
| 09:00 - 09:15 | 15 | 3 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 3 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:15 - 09:30 | 10 | 4 | 1 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 4 | 1 | 0 | 1 | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:30 - 09:45 | 19 | 0 | 1 | 0 | 0 | 20 | 1 | 0 | 0 | 0 | 0 | 1 | 15 | 5 | 1 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
| 09:45 - 10:00 | 14 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 1 | 2 | 0 | 1 | 31 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **58** | **7** | **2** | **0** | **0** | **67** | **1** | **0** | **0** | **0** | **0** | **1** | **86** | **13** | **4** | **0** | **2** | **105** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Session Total** | **139** | **14** | **4** | **0** | **0** | **157** | **1** | **0** | **0** | **0** | **0** | **1** | **254** | **36** | **6** | **0** | **7** | **303** | **0** | **1** | **0** | **0** | **0** | **1** |
| 16:00 - 16:15 | 24 | 0 | 0 | 0 | 0 | 24 | 0 | 1 | 0 | 0 | 0 | 1 | 36 | 2 | 0 | 0 | 1 | 39 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:15 - 16:30 | 16 | 3 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 2 | 0 | 0 | 0 | 41 | 1 | 0 | 0 | 0 | 0 | 1 |
| 16:30 - 16:45 | 13 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 3 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 - 17:00 | 13 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **66** | **3** | **0** | **0** | **0** | **69** | **0** | **1** | **0** | **0** | **0** | **1** | **157** | **7** | **0** | **0** | **1** | **165** | **1** | **0** | **0** | **0** | **0** | **1** |
| 17:00 - 17:15 | 21 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 1 | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 - 17:30 | 18 | 1 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 4 | 0 | 0 | 1 | 30 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 - 17:45 | 16 | 1 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 3 | 0 | 0 | 0 | 39 | 1 | 0 | 0 | 0 | 0 | 1 |
| 17:45 - 18:00 | 16 | 1 | 0 | 0 | 0 | 17 | 1 | 0 | 0 | 0 | 0 | 1 | 17 | 1 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **71** | **3** | **0** | **0** | **0** | **74** | **1** | **0** | **0** | **0** | **0** | **1** | **114** | **9** | **0** | **0** | **1** | **124** | **1** | **0** | **0** | **0** | **0** | **1** |
| 18:00 - 18:15 | 17 | 0 | 0 | 0 | 0 | 17 | 1 | 0 | 0 | 0 | 0 | 1 | 20 | 2 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 - 18:30 | 16 | 1 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 2 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:30 - 18:45 | 13 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 1 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:45 - 19:00 | 15 | 2 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **61** | **3** | **0** | **0** | **0** | **64** | **1** | **0** | **0** | **0** | **0** | **1** | **84** | **5** | **0** | **0** | **0** | **89** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Session Total** | **198** | **9** | **0** | **0** | **0** | **207** | **2** | **1** | **0** | **0** | **0** | **3** | **355** | **21** | **0** | **0** | **2** | **378** | **2** | **0** | **0** | **0** | **0** | **2** |

# Caerfarnon Road, Bangor - Manual Traffic Survey: Friday, 07 July 2017

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caernarfon Road N / B - Unnamed Road / C - A5087 Caernarfon Road S / D - Ffordd Coed Mawr




**Vehicle Class:** All classes

**Start Time:** 07:00

**End Time:** 19:00

**Show Peak Times:** No

**Arm Destination**

| Arm Origin | A | B | C | D | Total |
|---|---|---|---|---|---|
| A | 12 | 8 | 2642 | 268 | **2930** |
| B | 4 | 0 | 7 | 2 | **13** |
| C | 2864 | 3 | 32 | 615 | **3514** |
| D | 364 | 4 | 681 | 3 | **1052** |
| Total | **3244** | **15** | **3362** | **888** | |

*Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday, 08 July 2017*

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caernarfon Road N / B - A4087 Caernarfon Road S / C - Toronnen

**Approach:** A - A4087 Caernarfon Road N

| | A to B | | | | | | A to C | | | | | | A to A | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 10:00 - 10:15 | 134 | 9 | 1 | 1 | 4 | **149** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:15 - 10:30 | 134 | 12 | 0 | 0 | 0 | **146** | 4 | 0 | 0 | 0 | 0 | **4** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:30 - 10:45 | 142 | 8 | 1 | 1 | 0 | **152** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:45 - 11:00 | 179 | 14 | 0 | 0 | 3 | **196** | 1 | 1 | 0 | 0 | 0 | **2** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **589** | **43** | **2** | **2** | **7** | **643** | **6** | **1** | **0** | **0** | **0** | **7** | **0** | **0** | **0** | **0** | **0** | **0** |
| 11:00 - 11:15 | 168 | 16 | 1 | 0 | 0 | **185** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:15 - 11:30 | 170 | 8 | 0 | 0 | 0 | **178** | 3 | 1 | 0 | 0 | 0 | **4** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:30 - 11:45 | 174 | 13 | 1 | 0 | 1 | **189** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:45 - 12:00 | 200 | 22 | 0 | 0 | 3 | **225** | 0 | 1 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **712** | **59** | **2** | **0** | **4** | **777** | **5** | **2** | **0** | **0** | **0** | **7** | **0** | **0** | **0** | **0** | **0** | **0** |
| 12:00 - 12:15 | 186 | 13 | 1 | 1 | 0 | **201** | 4 | 0 | 0 | 0 | 0 | **4** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:15 - 12:30 | 187 | 22 | 0 | 0 | 1 | **210** | 2 | 0 | 0 | 0 | 0 | **2** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:30 - 12:45 | 180 | 13 | 1 | 0 | 0 | **194** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:45 - 13:00 | 203 | 6 | 0 | 0 | 1 | **210** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **756** | **54** | **2** | **1** | **2** | **815** | **8** | **0** | **0** | **0** | **0** | **8** | **0** | **0** | **0** | **0** | **0** | **0** |
| 13:00 - 13:15 | 199 | 7 | 1 | 0 | 2 | **209** | 2 | 0 | 0 | 0 | 0 | **2** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:15 - 13:30 | 206 | 14 | 0 | 0 | 1 | **221** | 0 | 0 | 0 | 0 | 0 | **0** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:30 - 13:45 | 192 | 10 | 0 | 0 | 0 | **202** | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:45 - 14:00 | 177 | 12 | 2 | 0 | 2 | **193** | 4 | 0 | 0 | 0 | 0 | **4** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **774** | **43** | **3** | **0** | **5** | **825** | **7** | **0** | **0** | **0** | **0** | **7** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Session Total** | **2831** | **199** | **9** | **3** | **18** | **3060** | **26** | **3** | **0** | **0** | **0** | **29** | **0** | **0** | **0** | **0** | **0** | **0** |

*Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday, 08 July 2017*

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caernarfon Road N / B - A4087 Caernarfon Road S / C - Toronnen

**Approach:** B - A4087 Caernarfon Road S

| | B to C | | | | | | B to A | | | | | | B to B | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 10:00 - 10:15 | 2 | 0 | 0 | 0 | 0 | **2** | 150 | 8 | 1 | 0 | 2 | **161** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:15 - 10:30 | 1 | 1 | 0 | 0 | 0 | **2** | 140 | 12 | 0 | 0 | 0 | **152** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:30 - 10:45 | 1 | 0 | 0 | 0 | 0 | **1** | 166 | 10 | 0 | 0 | 1 | **177** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:45 - 11:00 | 2 | 0 | 0 | 0 | 0 | **2** | 164 | 13 | 0 | 0 | 3 | **180** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **6** | **1** | **0** | **0** | **0** | **7** | **620** | **43** | **1** | **0** | **6** | **670** | **0** | **0** | **0** | **0** | **0** | **0** |
| 11:00 - 11:15 | 0 | 0 | 0 | 0 | 0 | **0** | 167 | 10 | 0 | 0 | 1 | **178** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:15 - 11:30 | 3 | 0 | 0 | 0 | 0 | **3** | 161 | 10 | 1 | 0 | 0 | **172** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:30 - 11:45 | 5 | 0 | 0 | 0 | 0 | **5** | 176 | 14 | 0 | 0 | 1 | **191** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:45 - 12:00 | 3 | 0 | 0 | 0 | 0 | **3** | 175 | 7 | 0 | 0 | 4 | **186** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **11** | **0** | **0** | **0** | **0** | **11** | **679** | **41** | **1** | **0** | **6** | **727** | **0** | **0** | **0** | **0** | **0** | **0** |
| 12:00 - 12:15 | 4 | 0 | 0 | 0 | 0 | **4** | 169 | 19 | 0 | 1 | 0 | **189** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:15 - 12:30 | 2 | 1 | 0 | 0 | 0 | **3** | 171 | 11 | 1 | 0 | 1 | **184** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:30 - 12:45 | 4 | 0 | 0 | 0 | 0 | **4** | 177 | 16 | 1 | 0 | 1 | **195** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:45 - 13:00 | 2 | 0 | 0 | 0 | 0 | **2** | 170 | 14 | 0 | 0 | 0 | **184** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **12** | **1** | **0** | **0** | **0** | **13** | **687** | **60** | **2** | **1** | **2** | **752** | **0** | **0** | **0** | **0** | **0** | **0** |
| 13:00 - 13:15 | 3 | 0 | 0 | 0 | 0 | **3** | 159 | 11 | 0 | 0 | 2 | **172** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:15 - 13:30 | 5 | 0 | 0 | 0 | 0 | **5** | 169 | 15 | 1 | 0 | 1 | **186** | 0 | 1 | 0 | 0 | 0 | **1** |
| 13:30 - 13:45 | 1 | 0 | 0 | 0 | 0 | **1** | 141 | 15 | 2 | 0 | 1 | **159** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:45 - 14:00 | 6 | 0 | 0 | 0 | 0 | **6** | 154 | 9 | 0 | 0 | 0 | **163** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **15** | **0** | **0** | **0** | **0** | **15** | **623** | **50** | **3** | **0** | **4** | **680** | **0** | **1** | **0** | **0** | **0** | **1** |
| **Session Total** | **44** | **2** | **0** | **0** | **0** | **46** | **2609** | **194** | **7** | **1** | **18** | **2829** | **0** | **1** | **0** | **0** | **0** | **1** |

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday, 08 July 2017*

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caernarfon Road N / B - A4087 Caernarfon Road S / C - Toronnen

**Approach:** C - Toronnen

| | C to A | | | | | | C to B | | | | | | C to C | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 10:00 - 10:15 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 - 10:30 | 2 | 1 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 - 10:45 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 - 11:00 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **6** | **1** | **0** | **0** | **0** | **7** | **3** | **1** | **0** | **0** | **0** | **4** | **0** | **0** | **0** | **0** | **0** | **0** |
| 11:00 - 11:15 | 1 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 - 11:30 | 2 | 1 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 - 11:45 | 4 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 - 12:00 | 4 | 0 | 0 | 0 | 0 | 4 | 3 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **11** | **2** | **0** | **0** | **0** | **13** | **7** | **1** | **0** | **0** | **0** | **8** | **0** | **0** | **0** | **0** | **0** | **0** |
| 12:00 - 12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 - 12:30 | 5 | 0 | 0 | 0 | 0 | 5 | 3 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 - 12:45 | 5 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 - 13:00 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **11** | **0** | **0** | **0** | **0** | **11** | **9** | **1** | **0** | **0** | **0** | **10** | **0** | **0** | **0** | **0** | **0** | **0** |
| 13:00 - 13:15 | 3 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13:15 - 13:30 | 3 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13:30 - 13:45 | 3 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13:45 - 14:00 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **11** | **0** | **0** | **0** | **0** | **11** | **9** | **0** | **0** | **0** | **0** | **9** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Session Total** | **39** | **3** | **0** | **0** | **0** | **42** | **28** | **3** | **0** | **0** | **0** | **31** | **0** | **0** | **0** | **0** | **0** | **0** |

# Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday, 08 July 2017

**Produced by Streetwise Services Ltd.**

**Junction:** **A - A4087 Caernarfon Road N / B - A4087 Caernarfon Road S / C - Toronnen**

**Vehicle Class:** All classes

**Start Time:** 10:00

**End Time:** 14:00

**Show Peak Times:** No

**Arm Destination**

| Arm Origin | A | B | C | Total |
|---|---|---|---|---|
| A | 0 | 3060 | 29 | **3089** |
| B | 2829 | 1 | 46 | **2876** |
| C | 42 | 31 | 0 | **73** |
| **Total** | **2871** | **3092** | **75** | |

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday, 08 July 2017*

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caenarfon Road N / B - A4087 Caernarfon Road S / C - Retail Entrance

**Approach:** A - A4087 Caenarfon Road N

| | A to B | | | | | | A to C | | | | | | A to A | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 10:00 - 10:15 | 126 | 11 | 1 | 1 | 4 | **143** | 0 | 1 | 0 | 0 | 0 | **1** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:15 - 10:30 | 128 | 8 | 0 | 0 | 0 | **136** | 2 | 1 | 0 | 0 | 0 | **3** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:30 - 10:45 | 139 | 6 | 1 | 1 | 0 | **147** | 2 | 0 | 0 | 0 | 0 | **2** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:45 - 11:00 | 179 | 11 | 0 | 0 | 3 | **193** | 5 | 0 | 0 | 0 | 0 | **5** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **572** | **36** | **2** | **2** | **7** | **619** | **9** | **2** | **0** | **0** | **0** | **11** | **0** | **0** | **0** | **0** | **0** | **0** |
| 11:00 - 11:15 | 163 | 14 | 1 | 0 | 0 | **178** | 3 | 0 | 0 | 0 | 0 | **3** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:15 - 11:30 | 166 | 7 | 0 | 0 | 0 | **173** | 8 | 0 | 0 | 0 | 0 | **8** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:30 - 11:45 | 163 | 10 | 0 | 0 | 1 | **174** | 4 | 0 | 0 | 0 | 0 | **4** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:45 - 12:00 | 196 | 19 | 1 | 0 | 3 | **219** | 3 | 0 | 0 | 0 | 0 | **3** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **688** | **50** | **2** | **0** | **4** | **744** | **18** | **0** | **0** | **0** | **0** | **18** | **0** | **0** | **0** | **0** | **0** | **0** |
| 12:00 - 12:15 | 185 | 11 | 1 | 1 | 0 | **198** | 7 | 0 | 0 | 0 | 0 | **7** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:15 - 12:30 | 180 | 17 | 0 | 0 | 1 | **198** | 5 | 0 | 0 | 0 | 0 | **5** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:30 - 12:45 | 175 | 12 | 1 | 0 | 0 | **188** | 4 | 0 | 0 | 0 | 0 | **4** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:45 - 13:00 | 193 | 6 | 0 | 0 | 2 | **201** | 3 | 0 | 0 | 0 | 0 | **3** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **733** | **46** | **2** | **1** | **3** | **785** | **19** | **0** | **0** | **0** | **0** | **19** | **0** | **0** | **0** | **0** | **0** | **0** |
| 13:00 - 13:15 | 192 | 8 | 1 | 0 | 2 | **203** | 3 | 0 | 1 | 0 | 0 | **4** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:15 - 13:30 | 190 | 15 | 0 | 0 | 0 | **205** | 8 | 0 | 0 | 0 | 0 | **8** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:30 - 13:45 | 181 | 11 | 0 | 0 | 0 | **192** | 8 | 0 | 0 | 0 | 0 | **8** | 1 | 0 | 0 | 0 | 0 | **1** |
| 13:45 - 14:00 | 172 | 9 | 2 | 0 | 2 | **185** | 7 | 0 | 0 | 0 | 0 | **7** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **735** | **43** | **3** | **0** | **4** | **785** | **26** | **0** | **1** | **0** | **0** | **27** | **1** | **0** | **0** | **0** | **0** | **1** |
| **Session Total** | **2728** | **175** | **9** | **3** | **18** | **2933** | **72** | **2** | **1** | **0** | **0** | **75** | **1** | **0** | **0** | **0** | **0** | **1** |

*Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday, 08 July 2017*

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caenarfon Road N / B - A4087 Caernarfon Road S / C - Retail Entrance

**Approach:** B - A4087 Caernarfon Road S

| | B to C | | | | | | B to A | | | | | | B to B | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 10:00 - 10:15 | 3 | 0 | 0 | 0 | 0 | **3** | 146 | 8 | 1 | 0 | 2 | **157** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:15 - 10:30 | 6 | 0 | 0 | 0 | 0 | **6** | 135 | 12 | 0 | 0 | 0 | **147** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:30 - 10:45 | 8 | 0 | 0 | 0 | 0 | **8** | 160 | 7 | 0 | 0 | 1 | **168** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:45 - 11:00 | 8 | 0 | 0 | 0 | 0 | **8** | 155 | 13 | 0 | 0 | 3 | **171** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **25** | **0** | **0** | **0** | **0** | **25** | **596** | **40** | **1** | **0** | **6** | **643** | **0** | **0** | **0** | **0** | **0** | **0** |
| 11:00 - 11:15 | 14 | 1 | 0 | 0 | 0 | **15** | 154 | 11 | 0 | 0 | 1 | **166** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:15 - 11:30 | 11 | 0 | 0 | 0 | 0 | **11** | 151 | 11 | 1 | 0 | 0 | **163** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:30 - 11:45 | 11 | 3 | 0 | 0 | 0 | **14** | 166 | 10 | 0 | 0 | 1 | **177** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:45 - 12:00 | 11 | 0 | 0 | 0 | 0 | **11** | 166 | 9 | 0 | 0 | 4 | **179** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **47** | **4** | **0** | **0** | **0** | **51** | **637** | **41** | **1** | **0** | **6** | **685** | **0** | **0** | **0** | **0** | **0** | **0** |
| 12:00 - 12:15 | 8 | 0 | 0 | 0 | 0 | **8** | 160 | 18 | 0 | 1 | 0 | **179** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:15 - 12:30 | 12 | 0 | 0 | 0 | 0 | **12** | 164 | 12 | 1 | 0 | 1 | **178** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:30 - 12:45 | 15 | 1 | 0 | 0 | 0 | **16** | 166 | 13 | 1 | 0 | 1 | **181** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:45 - 13:00 | 10 | 1 | 0 | 0 | 0 | **11** | 156 | 13 | 0 | 0 | 0 | **169** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **45** | **2** | **0** | **0** | **0** | **47** | **646** | **56** | **2** | **1** | **2** | **707** | **0** | **0** | **0** | **0** | **0** | **0** |
| 13:00 - 13:15 | 4 | 0 | 0 | 0 | 0 | **4** | 159 | 10 | 0 | 0 | 2 | **171** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:15 - 13:30 | 14 | 0 | 0 | 0 | 0 | **14** | 156 | 12 | 1 | 0 | 1 | **170** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:30 - 13:45 | 9 | 1 | 0 | 0 | 0 | **10** | 139 | 9 | 2 | 0 | 1 | **151** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:45 - 14:00 | 8 | 0 | 0 | 0 | 0 | **8** | 147 | 9 | 0 | 0 | 0 | **156** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **35** | **1** | **0** | **0** | **0** | **36** | **601** | **40** | **3** | **0** | **4** | **648** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Session Total** | **152** | **7** | **0** | **0** | **0** | **159** | **2480** | **177** | **7** | **1** | **18** | **2683** | **0** | **0** | **0** | **0** | **0** | **0** |

*Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday, 08 July 2017*

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caenarfon Road N / B - A4087 Caernarfon Road S / C - Retail Entrance

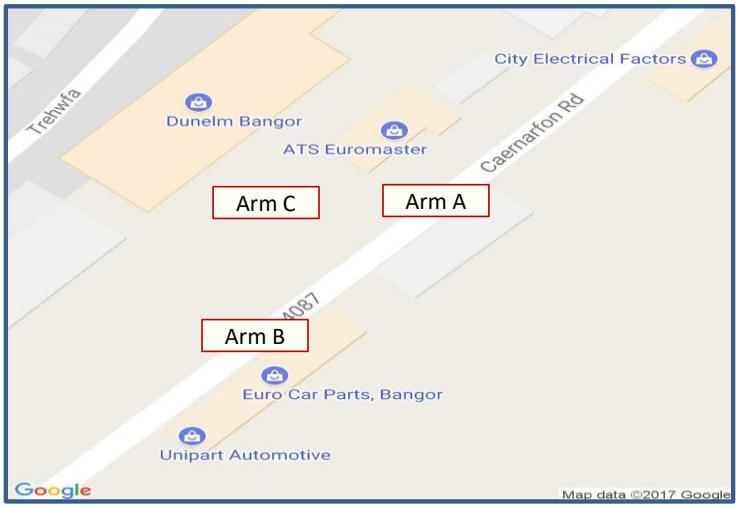
**Approach:** C - Retail Entrance

| | C to A | | | | | | C to B | | | | | | C to C | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 10:00 - 10:15 | 3 | 0 | 0 | 0 | 0 | **3** | 5 | 1 | 0 | 0 | 0 | **6** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:15 - 10:30 | 3 | 0 | 0 | 0 | 0 | **3** | 5 | 1 | 0 | 0 | 0 | **6** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:30 - 10:45 | 7 | 0 | 0 | 0 | 0 | **7** | 6 | 1 | 0 | 0 | 0 | **7** | 0 | 0 | 0 | 0 | 0 | **0** |
| 10:45 - 11:00 | 1 | 0 | 0 | 0 | 0 | **1** | 3 | 1 | 0 | 0 | 0 | **4** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **14** | **0** | **0** | **0** | **0** | **14** | **19** | **4** | **0** | **0** | **0** | **23** | **0** | **0** | **0** | **0** | **0** | **0** |
| 11:00 - 11:15 | 4 | 0 | 0 | 0 | 0 | **4** | 8 | 0 | 0 | 0 | 0 | **8** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:15 - 11:30 | 4 | 0 | 0 | 0 | 0 | **4** | 10 | 0 | 0 | 0 | 0 | **10** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:30 - 11:45 | 8 | 0 | 0 | 0 | 0 | **8** | 7 | 1 | 0 | 0 | 0 | **8** | 0 | 0 | 0 | 0 | 0 | **0** |
| 11:45 - 12:00 | 8 | 0 | 0 | 0 | 0 | **8** | 2 | 2 | 0 | 0 | 0 | **4** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **24** | **0** | **0** | **0** | **0** | **24** | **27** | **3** | **0** | **0** | **0** | **30** | **0** | **0** | **0** | **0** | **0** | **0** |
| 12:00 - 12:15 | 12 | 0 | 0 | 0 | 0 | **12** | 7 | 0 | 0 | 0 | 0 | **7** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:15 - 12:30 | 7 | 1 | 0 | 0 | 0 | **8** | 8 | 0 | 0 | 0 | 0 | **8** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:30 - 12:45 | 6 | 1 | 0 | 0 | 0 | **7** | 8 | 0 | 0 | 0 | 0 | **8** | 0 | 0 | 0 | 0 | 0 | **0** |
| 12:45 - 13:00 | 12 | 0 | 0 | 0 | 0 | **12** | 7 | 0 | 0 | 0 | 0 | **7** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **37** | **2** | **0** | **0** | **0** | **39** | **30** | **0** | **0** | **0** | **0** | **30** | **0** | **0** | **0** | **0** | **0** | **0** |
| 13:00 - 13:15 | 9 | 0 | 0 | 0 | 0 | **9** | 5 | 0 | 0 | 0 | 0 | **5** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:15 - 13:30 | 7 | 1 | 1 | 0 | 0 | **9** | 7 | 0 | 0 | 0 | 0 | **7** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:30 - 13:45 | 9 | 0 | 0 | 0 | 0 | **9** | 11 | 0 | 0 | 0 | 0 | **11** | 0 | 0 | 0 | 0 | 0 | **0** |
| 13:45 - 14:00 | 11 | 1 | 0 | 0 | 0 | **12** | 4 | 0 | 0 | 0 | 0 | **4** | 0 | 0 | 0 | 0 | 0 | **0** |
| **Hourly Total** | **36** | **2** | **1** | **0** | **0** | **39** | **27** | **0** | **0** | **0** | **0** | **27** | **0** | **0** | **0** | **0** | **0** | **0** |
| **Session Total** | **111** | **4** | **1** | **0** | **0** | **116** | **103** | **7** | **0** | **0** | **0** | **110** | **0** | **0** | **0** | **0** | **0** | **0** |

# Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday, 08 July 2017

**Produced by Streetwise Services Ltd.**

**Junction:** **A - A4087 Caenarfon Road N / B - A4087 Caernarfon Road S / C - Retail Entrance**




**Vehicle Class:** All classes

**Start Time:** 10:00

**End Time:** 14:00

**Show Peak Times:** No

**Arm Destination**

| Arm Origin | A | B | C | Total |
|---|---|---|---|---|
| A | 1 | 2933 | 75 | 3009 |
| B | 2683 | 0 | 159 | 2842 |
| C | 116 | 110 | 0 | 226 |
| Total | 2800 | 3043 | 234 | |

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday, 08 July 2017*

Produced by Streetwise Services Ltd.

**Junction:** A - A4087 Caernarfon Road N / B - Unnamed Road / C - A5087 Caernarfon Road S / D - Ffordd Coed Mawr

**Approach:** A - A4087 Caernarfon Road N

| | A to B | | | | | | A to C | | | | | | A to D | | | | | | A to A | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 10:00 - 10:15 | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 10 | 1 | 1 | 2 | 128 | 13 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 - 10:30 | 0 | 1 | 0 | 0 | 0 | 1 | 103 | 5 | 0 | 0 | 0 | 108 | 9 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 - 10:45 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 3 | 1 | 1 | 0 | 128 | 19 | 2 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 - 11:00 | 0 | 0 | 0 | 0 | 0 | 0 | 155 | 13 | 0 | 0 | 2 | 170 | 8 | 1 | 2 | 0 | 0 | 11 | 3 | 0 | 0 | 0 | 0 | 3 |
| Hourly Total | 0 | 1 | 0 | 0 | 0 | 1 | 495 | 31 | 2 | 2 | 4 | 534 | 49 | 3 | 2 | 0 | 0 | 54 | 3 | 0 | 0 | 0 | 0 | 3 |
| 11:00 - 11:15 | 0 | 0 | 0 | 0 | 0 | 0 | 141 | 13 | 0 | 0 | 0 | 154 | 10 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 - 11:30 | 0 | 0 | 0 | 0 | 0 | 0 | 155 | 7 | 0 | 0 | 0 | 162 | 9 | 1 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 - 11:45 | 1 | 0 | 0 | 0 | 0 | 1 | 156 | 7 | 0 | 0 | 0 | 163 | 6 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 2 |
| 11:45 - 12:00 | 0 | 0 | 0 | 0 | 0 | 0 | 161 | 18 | 1 | 0 | 3 | 183 | 19 | 0 | 0 | 0 | 0 | 19 | 1 | 0 | 0 | 0 | 0 | 1 |
| Hourly Total | 1 | 0 | 0 | 0 | 0 | 1 | 613 | 45 | 1 | 0 | 3 | 662 | 44 | 1 | 0 | 0 | 0 | 45 | 3 | 0 | 0 | 0 | 0 | 3 |
| 12:00 - 12:15 | 0 | 0 | 0 | 0 | 0 | 0 | 170 | 13 | 0 | 0 | 0 | 183 | 12 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 - 12:30 | 1 | 0 | 0 | 0 | 0 | 1 | 166 | 13 | 0 | 0 | 0 | 179 | 16 | 1 | 0 | 0 | 0 | 17 | 1 | 0 | 0 | 0 | 0 | 1 |
| 12:30 - 12:45 | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 7 | 1 | 0 | 0 | 158 | 18 | 0 | 1 | 0 | 0 | 19 | 1 | 0 | 0 | 0 | 0 | 1 |
| 12:45 - 13:00 | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 4 | 0 | 0 | 2 | 156 | 10 | 0 | 0 | 0 | 0 | 10 | 1 | 0 | 0 | 0 | 0 | 1 |
| Hourly Total | 1 | 0 | 0 | 0 | 0 | 1 | 636 | 37 | 1 | 0 | 2 | 676 | 56 | 1 | 1 | 0 | 0 | 58 | 3 | 0 | 0 | 0 | 0 | 3 |
| 13:00 - 13:15 | 0 | 0 | 0 | 0 | 0 | 0 | 168 | 7 | 2 | 0 | 1 | 178 | 20 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13:15 - 13:30 | 0 | 0 | 0 | 0 | 0 | 0 | 166 | 15 | 0 | 0 | 0 | 181 | 9 | 2 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13:30 - 13:45 | 0 | 0 | 0 | 0 | 0 | 0 | 156 | 12 | 0 | 0 | 0 | 168 | 17 | 2 | 0 | 0 | 0 | 19 | 1 | 0 | 0 | 0 | 0 | 1 |
| 13:45 - 14:00 | 0 | 0 | 0 | 0 | 0 | 0 | 132 | 8 | 1 | 0 | 2 | 143 | 8 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hourly Total | 0 | 0 | 0 | 0 | 0 | 0 | 622 | 42 | 3 | 0 | 3 | 670 | 54 | 4 | 0 | 0 | 0 | 58 | 1 | 0 | 0 | 0 | 0 | 1 |
| Session Total | 2 | 1 | 0 | 0 | 0 | 3 | 2366 | 155 | 7 | 2 | 12 | 2542 | 203 | 9 | 3 | 0 | 0 | 215 | 10 | 0 | 0 | 0 | 0 | 10 |

# Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday,

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caernarfon Road N / B - Unnamed Road / C - A5087 C

**Approach:** B - Unnamed Road

| | B to C | | | |
|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 |
| 10:00 - 10:15 | 0 | 0 | 0 | 0 |
| 10:15 - 10:30 | 0 | 0 | 0 | 0 |
| 10:30 - 10:45 | 0 | 0 | 0 | 0 |
| 10:45 - 11:00 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **0** | **0** | **0** | **0** |
| 11:00 - 11:15 | 0 | 0 | 0 | 0 |
| 11:15 - 11:30 | 0 | 0 | 0 | 0 |
| 11:30 - 11:45 | 0 | 0 | 0 | 0 |
| 11:45 - 12:00 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **0** | **0** | **0** | **0** |
| 12:00 - 12:15 | 0 | 0 | 0 | 0 |
| 12:15 - 12:30 | 1 | 0 | 0 | 0 |
| 12:30 - 12:45 | 0 | 0 | 0 | 0 |
| 12:45 - 13:00 | 1 | 0 | 0 | 0 |
| **Hourly Total** | **2** | **0** | **0** | **0** |
| 13:00 - 13:15 | 0 | 0 | 0 | 0 |
| 13:15 - 13:30 | 0 | 0 | 0 | 0 |
| 13:30 - 13:45 | 0 | 0 | 0 | 0 |
| 13:45 - 14:00 | 1 | 0 | 0 | 0 |
| **Hourly Total** | **1** | **0** | **0** | **0** |
| **Session Total** | **3** | **0** | **0** | **0** |

## *08 July 2017*

### aernarfon Road S / D - Ffordd Coed Mawr

| | | B to D | | |
|---|---|---|---|---|
| **BUS** | **TOTAL** | **CAR** | **LGV** | **OGV1** |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **0** | 0 | 0 | 0 |
| **0** | **0** | **0** | **0** | **0** |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **0** | 0 | 0 | 0 |
| **0** | **0** | **0** | **0** | **0** |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **1** | 1 | 0 | 0 |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **1** | 0 | 0 | 0 |
| **0** | **2** | **1** | **0** | **0** |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **1** | 0 | 0 | 0 |
| **0** | **1** | **0** | **0** | **0** |
| **0** | **3** | **1** | **0** | **0** |

| OGV2 | BUS | TOTAL | CAR | LGV |
|---|---|---|---|---|
| 0 | 0 | **0** | 0 | 0 |
| 0 | 0 | **0** | 0 | 0 |
| 0 | 0 | **0** | 0 | 0 |
| 0 | 0 | **0** | 0 | 1 |
| **0** | **0** | **0** | **0** | **1** |
| 0 | 0 | **0** | 0 | 0 |
| 0 | 0 | **0** | 2 | 0 |
| 0 | 0 | **0** | 0 | 0 |
| 0 | 0 | **0** | 0 | 0 |
| **0** | **0** | **0** | **2** | **0** |
| 0 | 0 | **0** | 0 | 0 |
| 0 | 0 | **1** | 0 | 0 |
| 0 | 0 | **0** | 1 | 0 |
| 0 | 0 | **0** | 0 | 0 |
| **0** | **0** | **1** | **1** | **0** |
| 0 | 0 | **0** | 0 | 0 |
| 0 | 0 | **0** | 1 | 0 |
| 0 | 0 | **0** | 0 | 0 |
| 0 | 0 | **0** | 0 | 0 |
| **0** | **0** | **0** | **1** | **0** |
| **0** | **0** | **1** | **4** | **1** |

| B to A | | | | |
|---|---|---|---|---|
| **OGV1** | **OGV2** | **BUS** | **TOTAL** | **CAR** |
| 0 | 0 | 0 | **0** | 0 |
| 0 | 0 | 0 | **0** | 0 |
| 0 | 0 | 0 | **0** | 0 |
| 0 | 0 | 0 | **1** | 0 |
| **0** | **0** | **0** | **1** | **0** |
| 0 | 0 | 0 | **0** | 0 |
| 0 | 0 | 0 | **2** | 0 |
| 0 | 0 | 0 | **0** | 0 |
| 0 | 0 | 0 | **0** | 0 |
| **0** | **0** | **0** | **2** | **0** |
| 0 | 0 | 0 | **0** | 0 |
| 0 | 0 | 0 | **0** | 0 |
| 0 | 0 | 0 | **1** | 0 |
| 0 | 0 | 0 | **0** | 0 |
| **0** | **0** | **0** | **1** | **0** |
| 0 | 0 | 0 | **0** | 0 |
| 0 | 0 | 0 | **1** | 0 |
| 0 | 0 | 0 | **0** | 0 |
| 0 | 0 | 0 | **0** | 0 |
| **0** | **0** | **0** | **1** | **0** |
| | | | | |
| **0** | **0** | **0** | **5** | **0** |

| B to B | | | | |
|---|---|---|---|---|
| **LGV** | **OGV1** | **OGV2** | **BUS** | **TOTAL** |
| 0 | 0 | 0 | 0 | **0** |
| 0 | 0 | 0 | 0 | **0** |
| 0 | 0 | 0 | 0 | **0** |
| 0 | 0 | 0 | 0 | **0** |
| **0** | **0** | **0** | **0** | **0** |
| 0 | 0 | 0 | 0 | **0** |
| 0 | 0 | 0 | 0 | **0** |
| 0 | 0 | 0 | 0 | **0** |
| 0 | 0 | 0 | 0 | **0** |
| **0** | **0** | **0** | **0** | **0** |
| 0 | 0 | 0 | 0 | **0** |
| 0 | 0 | 0 | 0 | **0** |
| 0 | 0 | 0 | 0 | **0** |
| 0 | 0 | 0 | 0 | **0** |
| **0** | **0** | **0** | **0** | **0** |
| 0 | 0 | 0 | 0 | **0** |
| 0 | 0 | 0 | 0 | **0** |
| 0 | 0 | 0 | 0 | **0** |
| 0 | 0 | 0 | 0 | **0** |
| **0** | **0** | **0** | **0** | **0** |

| | | | | |
|---|---|---|---|---|
| **0** | **0** | **0** | **0** | **0** |

| | From B | | | |
|---|---|---|---|---|
| **TIME** | **CAR** | **LGV** | **OGV1** | **OGV2** |
| 10:00 - 10:15 | 0 | 0 | 0 | 0 |
| 10:15 - 10:30 | 0 | 0 | 0 | 0 |
| 10:30 - 10:45 | 0 | 0 | 0 | 0 |
| 10:45 - 11:00 | 0 | 1 | 0 | 0 |
| **Hourly Total** | **0** | **1** | **0** | **0** |
| 11:00 - 11:15 | 0 | 0 | 0 | 0 |
| 11:15 - 11:30 | 2 | 0 | 0 | 0 |
| 11:30 - 11:45 | 0 | 0 | 0 | 0 |
| 11:45 - 12:00 | 0 | 0 | 0 | 0 |
| **Hourly Total** | **2** | **0** | **0** | **0** |
| 12:00 - 12:15 | 0 | 0 | 0 | 0 |
| 12:15 - 12:30 | 2 | 0 | 0 | 0 |
| 12:30 - 12:45 | 1 | 0 | 0 | 0 |
| 12:45 - 13:00 | 1 | 0 | 0 | 0 |
| **Hourly Total** | **4** | **0** | **0** | **0** |
| 13:00 - 13:15 | 0 | 0 | 0 | 0 |
| 13:15 - 13:30 | 1 | 0 | 0 | 0 |
| 13:30 - 13:45 | 0 | 0 | 0 | 0 |
| 13:45 - 14:00 | 1 | 0 | 0 | 0 |
| **Hourly Total** | **2** | **0** | **0** | **0** |
| | | | | |
| **Session Total** | **8** | **1** | **0** | **0** |

| | | To B | | |
|---|---|---|---|---|
| **BUS** | **TOTAL** | **CAR** | **LGV** | **OGV1** |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **0** | 0 | 1 | 0 |
| 0 | **0** | 1 | 1 | 0 |
| 0 | **1** | 0 | 0 | 0 |
| **0** | **1** | **1** | **2** | **0** |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **2** | 1 | 0 | 0 |
| 0 | **0** | 1 | 0 | 0 |
| 0 | **0** | 0 | 0 | 0 |
| **0** | **2** | **2** | **0** | **0** |
| 0 | **0** | 1 | 0 | 0 |
| 0 | **2** | 1 | 0 | 0 |
| 0 | **1** | 0 | 0 | 0 |
| 0 | **1** | 1 | 0 | 0 |
| **0** | **4** | **3** | **0** | **0** |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **1** | 0 | 0 | 0 |
| 0 | **0** | 0 | 0 | 0 |
| 0 | **1** | 0 | 0 | 0 |
| **0** | **2** | **0** | **0** | **0** |
| | | | | |
| **0** | **9** | **6** | **2** | **0** |

| OGV2 | BUS | TOTAL |
|---|---|---|
| 0 | 0 | **0** |
| 0 | 0 | **1** |
| 0 | 0 | **2** |
| 0 | 0 | **0** |
| **0** | **0** | **3** |
| 0 | 0 | **0** |
| 0 | 0 | **1** |
| 0 | 0 | **1** |
| 0 | 0 | **0** |
| **0** | **0** | **2** |
| 0 | 0 | **1** |
| 0 | 0 | **1** |
| 0 | 0 | **0** |
| 0 | 0 | **1** |
| **0** | **0** | **3** |
| 0 | 0 | **0** |
| 0 | 0 | **0** |
| 0 | 0 | **0** |
| 0 | 0 | **0** |
| **0** | **0** | **0** |

| | | |
|---|---|---|
| **0** | **0** | **8** |

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday, 08 July 2017*

Produced by Streetwise Services Ltd.

**Junction:** A - A4087 Caernarfon Road N / B - Unnamed Road / C - A5087 Caernarfon Road S / D - Ffordd Coed Mawr

**Approach:** C - A5087 Caernarfon Road S

| | C to D | | | | | | C to A | | | | | | C to B | | | | | | C to C | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 10:00 - 10:15 | 21 | 2 | 0 | 0 | 1 | 24 | 116 | 4 | 1 | 0 | 1 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 10:15 - 10:30 | 11 | 1 | 0 | 0 | 0 | 12 | 123 | 9 | 0 | 0 | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 - 10:45 | 9 | 1 | 0 | 0 | 0 | 10 | 155 | 6 | 0 | 0 | 1 | 162 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 4 |
| 10:45 - 11:00 | 12 | 1 | 0 | 0 | 1 | 14 | 143 | 11 | 0 | 0 | 2 | 156 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| Hourly Total | 53 | 5 | 0 | 0 | 2 | 60 | 537 | 30 | 1 | 0 | 4 | 572 | 1 | 0 | 0 | 0 | 0 | 1 | 7 | 1 | 0 | 0 | 0 | 8 |
| 11:00 - 11:15 | 15 | 1 | 0 | 0 | 0 | 16 | 144 | 9 | 0 | 0 | 1 | 154 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 11:15 - 11:30 | 17 | 0 | 0 | 0 | 0 | 17 | 124 | 11 | 0 | 0 | 0 | 135 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| 11:30 - 11:45 | 20 | 0 | 0 | 0 | 0 | 20 | 147 | 9 | 0 | 0 | 1 | 157 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 11:45 - 12:00 | 25 | 0 | 1 | 0 | 1 | 27 | 149 | 8 | 0 | 0 | 3 | 160 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| Hourly Total | 77 | 1 | 1 | 0 | 1 | 80 | 564 | 37 | 0 | 0 | 5 | 606 | 1 | 0 | 0 | 0 | 0 | 1 | 10 | 0 | 0 | 0 | 0 | 10 |
| 12:00 - 12:15 | 20 | 3 | 0 | 0 | 0 | 23 | 150 | 13 | 0 | 0 | 0 | 163 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 3 |
| 12:15 - 12:30 | 15 | 1 | 0 | 0 | 0 | 16 | 147 | 7 | 1 | 0 | 1 | 156 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| 12:30 - 12:45 | 32 | 4 | 0 | 0 | 0 | 36 | 129 | 10 | 1 | 0 | 1 | 141 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 12:45 - 13:00 | 23 | 1 | 0 | 0 | 0 | 24 | 151 | 9 | 0 | 0 | 0 | 160 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| Hourly Total | 90 | 9 | 0 | 0 | 0 | 99 | 577 | 39 | 2 | 0 | 2 | 620 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 2 | 0 | 1 | 0 | 15 |
| 13:00 - 13:15 | 23 | 0 | 0 | 0 | 1 | 24 | 143 | 9 | 0 | 0 | 1 | 153 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 13:15 - 13:30 | 27 | 0 | 1 | 0 | 0 | 28 | 137 | 11 | 1 | 0 | 1 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 13:30 - 13:45 | 19 | 0 | 0 | 0 | 0 | 19 | 129 | 9 | 1 | 0 | 1 | 140 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 13:45 - 14:00 | 25 | 0 | 0 | 0 | 0 | 25 | 133 | 10 | 0 | 0 | 0 | 143 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 7 |
| Hourly Total | 94 | 0 | 1 | 0 | 1 | 96 | 542 | 39 | 2 | 0 | 3 | 586 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 18 |
| Session Total | 314 | 15 | 2 | 0 | 4 | 335 | 2220 | 145 | 5 | 0 | 14 | 2384 | 2 | 0 | 0 | 0 | 0 | 2 | 47 | 3 | 0 | 1 | 0 | 51 |

streetwise

*Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday, 08 July 2017*

Produced by Streetwise Services Ltd.

**Junction:** A - A4087 Caernarfon Road N / B - Unnamed Road / C - A5087 Caernarfon Road S / D - Ffordd Coed Mawr

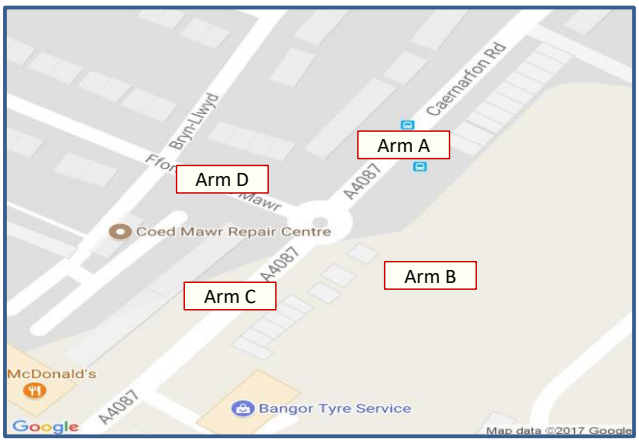
**Approach:** D - Ffordd Coed Mawr

| | D to A | | | | | | D to B | | | | | | D to C | | | | | | D to D | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TIME | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL | CAR | LGV | OGV1 | OGV2 | BUS | TOTAL |
| 10:00 - 10:15 | 14 | 1 | 1 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 2 | 0 | 0 | 1 | 23 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:15 - 10:30 | 14 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 2 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:30 - 10:45 | 11 | 2 | 0 | 0 | 0 | 13 | 0 | 1 | 0 | 0 | 0 | 1 | 19 | 0 | 0 | 0 | 1 | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:45 - 11:00 | 11 | 1 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 2 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hourly Total | 50 | 4 | 1 | 0 | 0 | 55 | 0 | 1 | 0 | 0 | 0 | 1 | 91 | 6 | 0 | 0 | 2 | 99 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:00 - 11:15 | 13 | 2 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 2 | 1 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 - 11:30 | 16 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 - 11:45 | 17 | 1 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 3 | 0 | 0 | 1 | 27 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 - 12:00 | 17 | 1 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 2 | 1 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hourly Total | 63 | 4 | 0 | 0 | 0 | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 7 | 2 | 0 | 1 | 110 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:00 - 12:15 | 29 | 0 | 0 | 0 | 0 | 29 | 1 | 0 | 0 | 0 | 0 | 1 | 21 | 1 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 - 12:30 | 14 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 1 | 23 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 - 12:45 | 5 | 1 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 3 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 - 13:00 | 14 | 0 | 0 | 0 | 0 | 14 | 1 | 0 | 0 | 0 | 0 | 1 | 37 | 1 | 0 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hourly Total | 62 | 1 | 0 | 0 | 0 | 63 | 2 | 0 | 0 | 0 | 0 | 2 | 101 | 5 | 0 | 0 | 1 | 107 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13:00 - 13:15 | 18 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 1 | 0 | 0 | 1 | 29 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13:15 - 13:30 | 16 | 1 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13:30 - 13:45 | 23 | 2 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13:45 - 14:00 | 8 | 1 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 1 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hourly Total | 65 | 4 | 0 | 0 | 0 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 105 | 2 | 0 | 0 | 1 | 108 | 0 | 0 | 0 | 0 | 0 | 0 |
| Session Total | 240 | 13 | 1 | 0 | 0 | 254 | 2 | 1 | 0 | 0 | 0 | 3 | 397 | 20 | 2 | 0 | 5 | 424 | 0 | 0 | 0 | 0 | 0 | 0 |

# Caerfarnon Road, Bangor - Manual Traffic Survey: Saturday, 08 July 2017

**Produced by Streetwise Services Ltd.**

**Junction:** A - A4087 Caernarfon Road N / B - Unnamed Road / C - A5087 Caernarfon Road S / D - Ffordd Coed Mawr




**Vehicle Class:** All classes

**Start Time:** 10:00

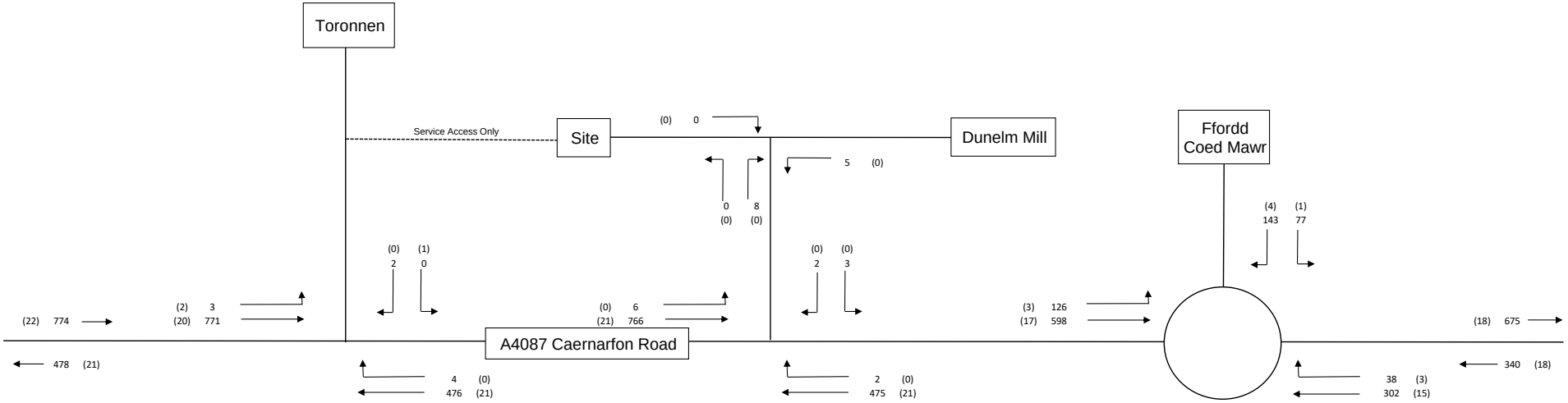
**End Time:** 14:00

**Show Peak Times:** No

**Arm Destination**

| Arm Origin | A | B | C | D | Total |
|---|---|---|---|---|---|
| A | 10 | 3 | 2542 | 215 | **2770** |
| B | 5 | 0 | 3 | 1 | **9** |
| C | 2384 | 2 | 51 | 335 | **2772** |
| D | 254 | 3 | 424 | 0 | **681** |
| Total | **2653** | **8** | **3020** | **551** | |

# Appendix 7

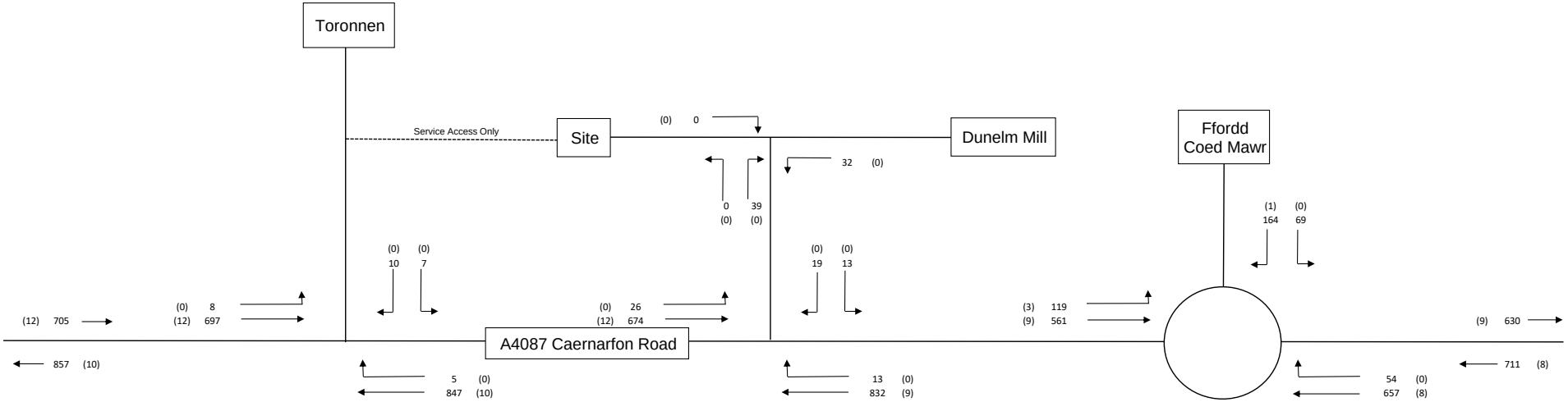



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**AM Peak (08:15-09:15)** **2017 Surveyed**

connect CONSULTANTS

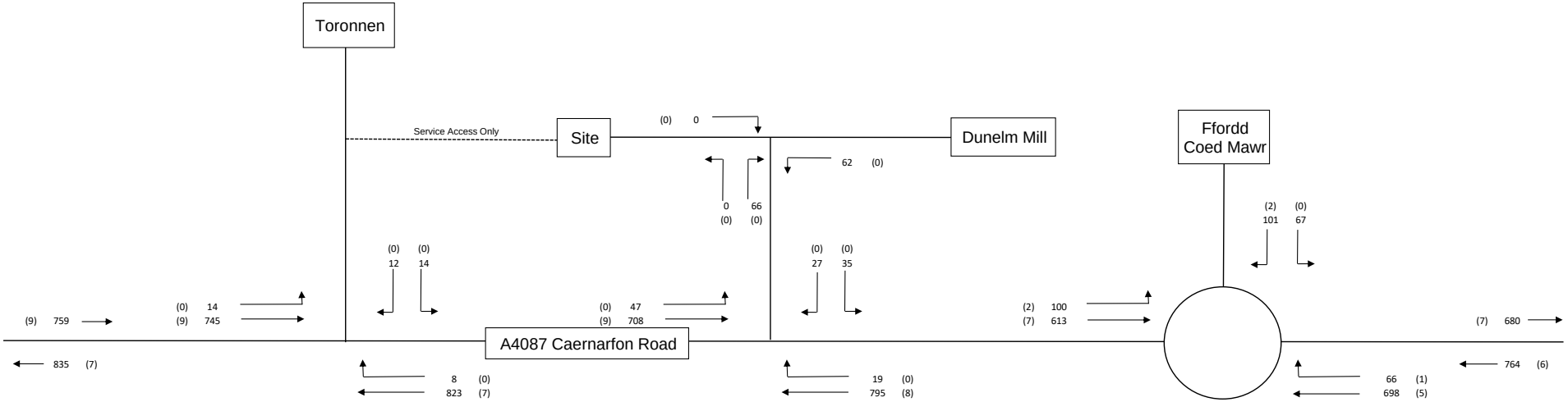



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

# Proposed Foodstore, Caernarfon Road, Bangor

**PM Peak (16:00-17:00)** **2017 Surveyed**

connect CONSULTANTS



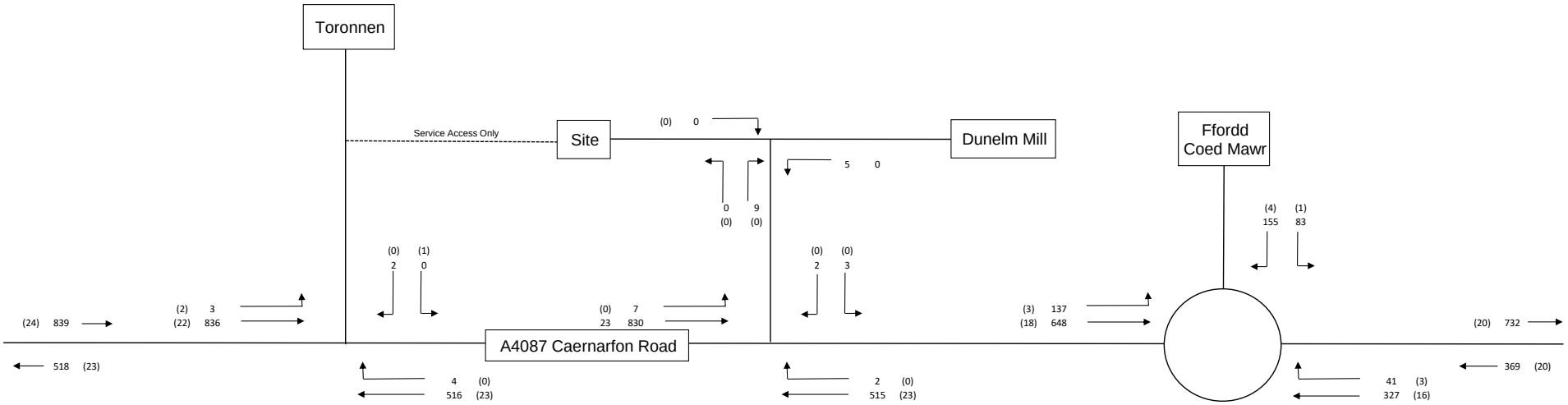

| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**SAT Peak (11:45-12:45)** **2017 Surveyed**

connect CONSULTANTS

# Appendix 8

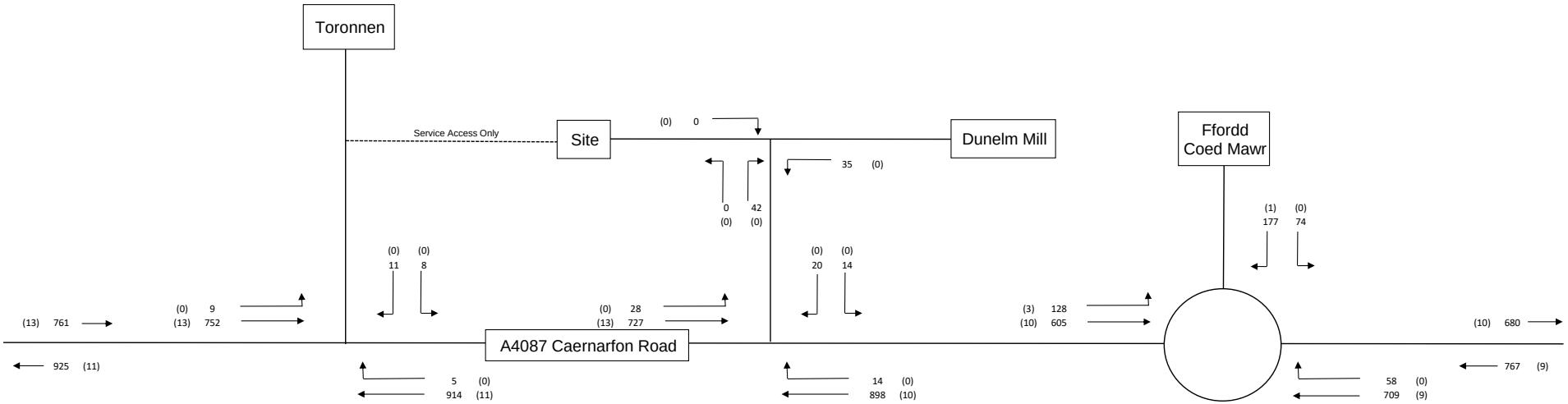



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**AM Peak (08:15-09:15)** **2024 Base**

connect CONSULTANTS

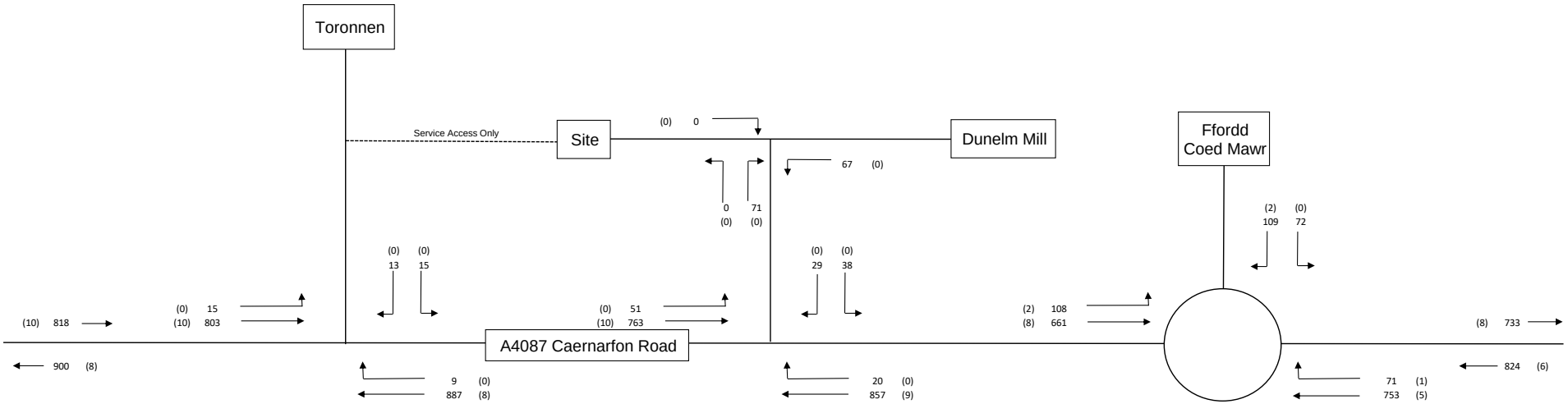



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**PM Peak (16:00-17:00)** **2024 Base**

connect CONSULTANTS




| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**SAT Peak (11:45-12:45)** **2024 Base**

connect CONSULTANTS

# Appendix 9

Connect Consultants 78 Broad Street Chipping Sodbury Licence No: 142301

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 14 | 2944 | 0.398 | 14 | 2944 | 0.126 | 14 | 2944 | 0.524 |
| 08:00 - 09:00 | 14 | 2944 | 0.444 | 14 | 2944 | 0.131 | 14 | 2944 | 0.575 |
| 09:00 - 10:00 | 14 | 2944 | 0.277 | 14 | 2944 | 0.167 | 14 | 2944 | 0.444 |
| 10:00 - 11:00 | 14 | 2944 | 0.211 | 14 | 2944 | 0.172 | 14 | 2944 | 0.383 |
| 11:00 - 12:00 | 14 | 2944 | 0.192 | 14 | 2944 | 0.187 | 14 | 2944 | 0.379 |
| 12:00 - 13:00 | 14 | 2944 | 0.243 | 14 | 2944 | 0.262 | 14 | 2944 | 0.505 |
| 13:00 - 14:00 | 14 | 2944 | 0.209 | 14 | 2944 | 0.262 | 14 | 2944 | 0.471 |
| 14:00 - 15:00 | 14 | 2944 | 0.201 | 14 | 2944 | 0.209 | 14 | 2944 | 0.410 |
| 15:00 - 16:00 | 14 | 2944 | 0.269 | 14 | 2944 | 0.352 | 14 | 2944 | 0.621 |
| 16:00 - 17:00 | 14 | 2944 | 0.099 | 14 | 2944 | 0.439 | 14 | 2944 | 0.538 |
| 17:00 - 18:00 | 14 | 2944 | 0.058 | 14 | 2944 | 0.291 | 14 | 2944 | 0.349 |
| 18:00 - 19:00 | 14 | 2944 | 0.049 | 14 | 2944 | 0.121 | 14 | 2944 | 0.170 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 2.650 | | | 2.719 | | | 5.369 |

*This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.*

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

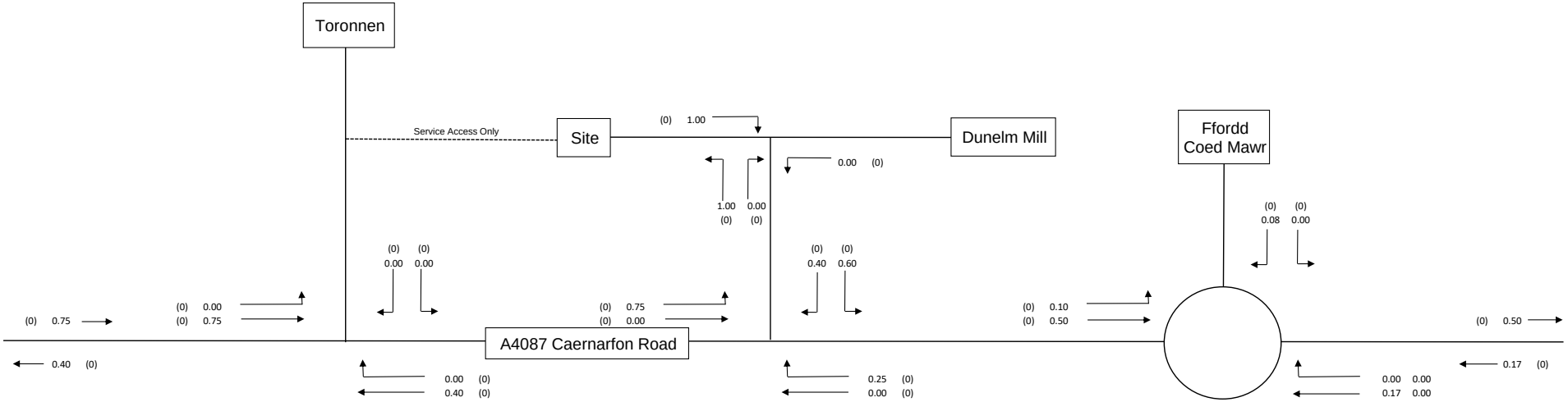
The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 1080 - 5600 (units: sqm) |
| Survey date date range: | 01/01/10 - 21/11/17 |
| Number of weekdays (Monday-Friday): | 14 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 1 |
| Surveys manually removed from selection: | 0 |

*This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.*

# Appendix 10

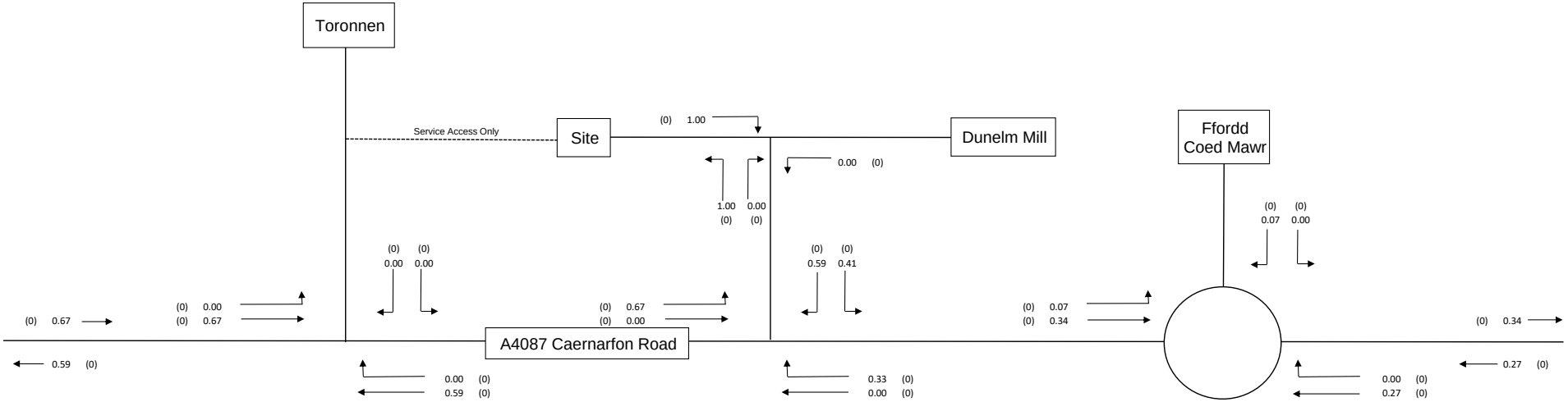



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

# Proposed Foodstore, Caernarfon Road, Bangor

**AM Peak (08:15-09:15)** **Industrial & New Foodstore Distribution**

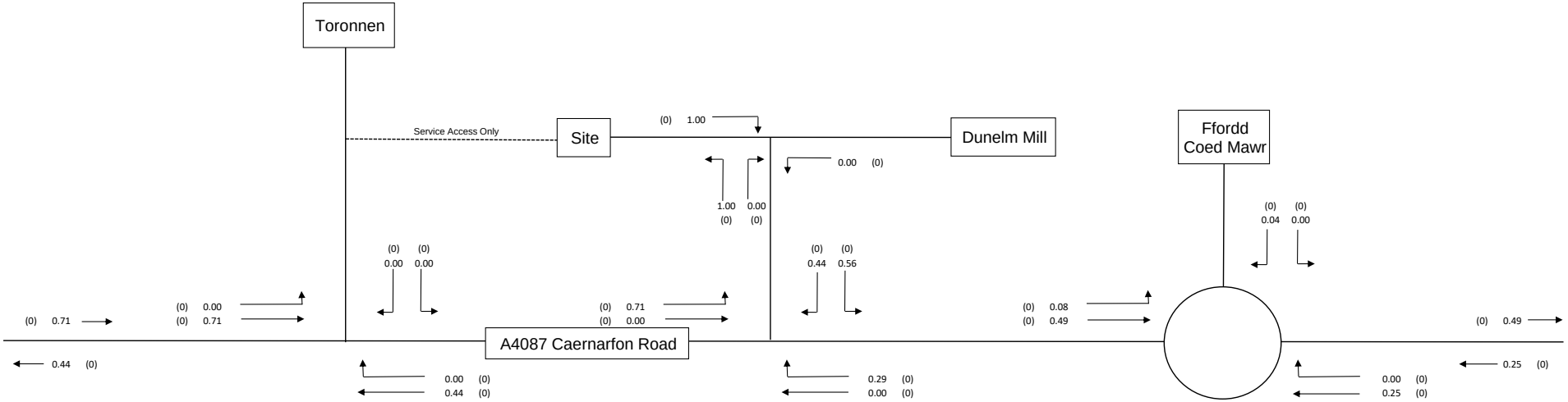
connect CONSULTANTS




# Proposed Foodstore, Caernarfon Road, Bangor

**PM Peak (16:00-17:00)** **Industrial & New Foodstore Distribution**

connect CONSULTANTS



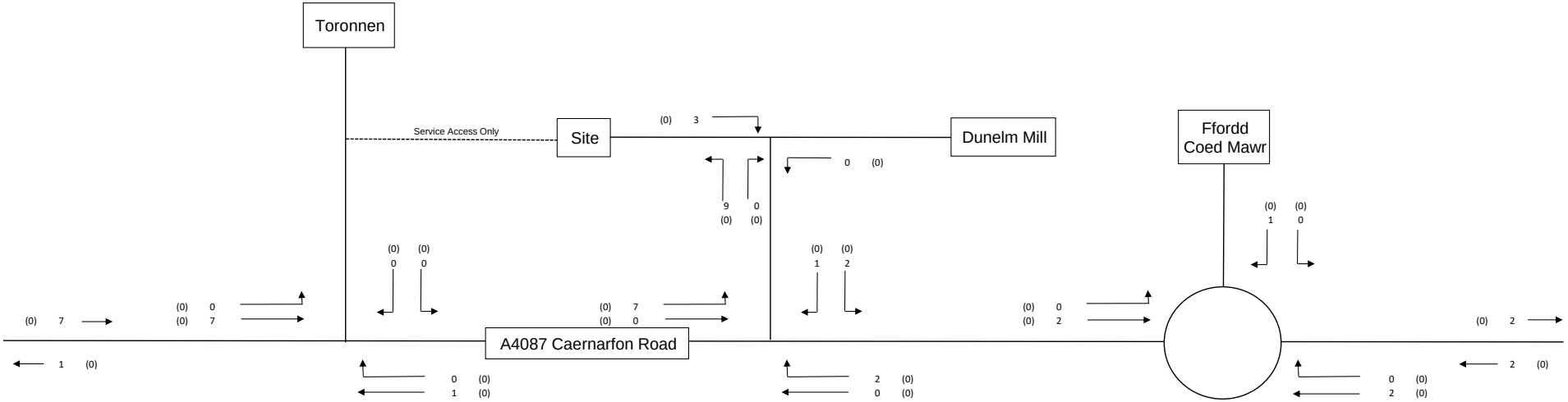

| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**SAT Peak (11:45-12:45)** **Industrial & New Foodstore Distribution**

connect CONSULTANTS

# Appendix 11

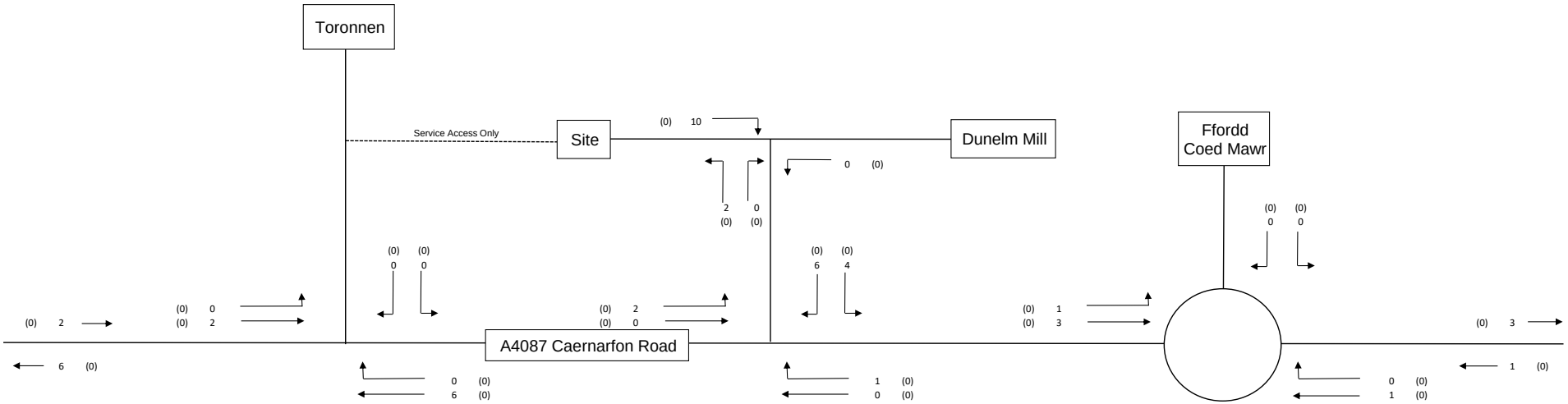



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**AM Peak (08:15-09:15)** **Employment Traffic**

connect CONSULTANTS

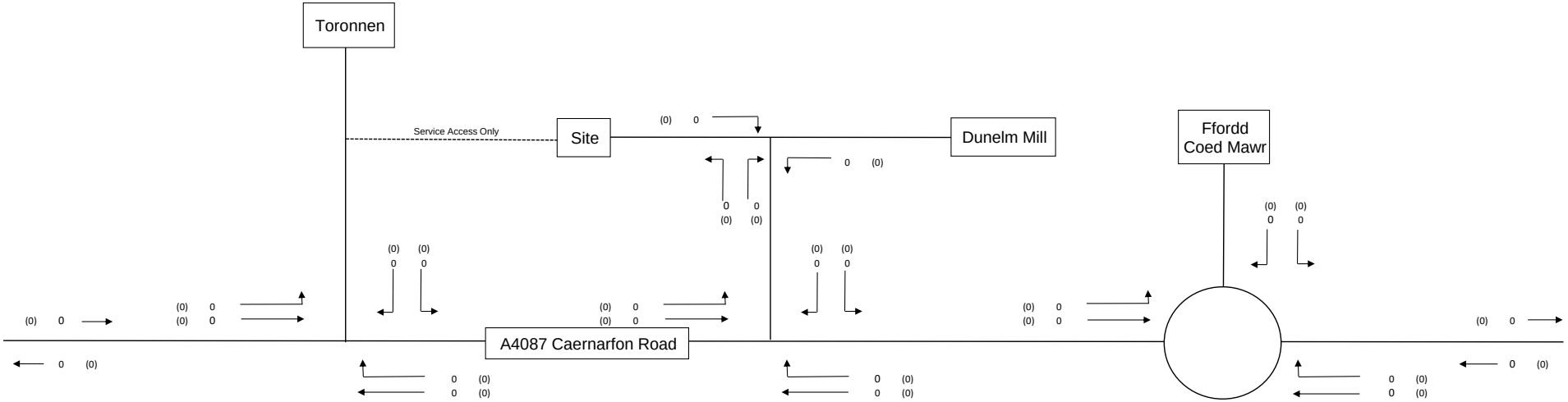



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

# Proposed Foodstore, Caernarfon Road, Bangor

**PM Peak (16:00-17:00)** **Employment Traffic**

connect CONSULTANTS




| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**SAT Peak (11:45-12:45)** **Employment Traffic**

connect CONSULTANTS

# Appendix 12

Connect Consultants 78 Broad Street Chipping Sodbury Licence No: 142301

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | 2 | 2511 | 0.159 | 2 | 2511 | 0.040 | 2 | 2511 | 0.199 |
| 07:00 - 08:00 | 13 | 1938 | 0.357 | 13 | 1938 | 0.119 | 13 | 1938 | 0.476 |
| 08:00 - 09:00 | 14 | 1909 | 2.354 | 14 | 1909 | 1.587 | 14 | 1909 | 3.941 |
| 09:00 - 10:00 | 14 | 1909 | 3.144 | 14 | 1909 | 2.650 | 14 | 1909 | 5.794 |
| 10:00 - 11:00 | 14 | 1909 | 3.488 | 14 | 1909 | 3.114 | 14 | 1909 | 6.602 |
| 11:00 - 12:00 | 14 | 1909 | 3.772 | 14 | 1909 | 3.623 | 14 | 1909 | 7.395 |
| 12:00 - 13:00 | 14 | 1909 | 3.682 | 14 | 1909 | 3.664 | 14 | 1909 | 7.346 |
| 13:00 - 14:00 | 14 | 1909 | 3.705 | 14 | 1909 | 4.109 | 14 | 1909 | 7.814 |
| 14:00 - 15:00 | 14 | 1909 | 4.296 | 14 | 1909 | 4.139 | 14 | 1909 | 8.435 |
| 15:00 - 16:00 | 14 | 1909 | 4.098 | 14 | 1909 | 4.072 | 14 | 1909 | 8.170 |
| 16:00 - 17:00 | 14 | 1909 | 3.948 | 14 | 1909 | 4.158 | 14 | 1909 | 8.106 |
| 17:00 - 18:00 | 14 | 1909 | 3.806 | 14 | 1909 | 3.937 | 14 | 1909 | 7.743 |
| 18:00 - 19:00 | 14 | 1909 | 3.342 | 14 | 1909 | 3.600 | 14 | 1909 | 6.942 |
| 19:00 - 20:00 | 14 | 1909 | 2.346 | 14 | 1909 | 2.709 | 14 | 1909 | 5.055 |
| 20:00 - 21:00 | 14 | 1909 | 1.482 | 14 | 1909 | 1.905 | 14 | 1909 | 3.387 |
| 21:00 - 22:00 | 13 | 1938 | 0.603 | 13 | 1938 | 1.000 | 13 | 1938 | 1.603 |
| 22:00 - 23:00 | 11 | 2099 | 0.026 | 11 | 2099 | 0.238 | 11 | 2099 | 0.264 |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 44.608 | | | 44.664 | | | 89.272 |

*This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.*

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 700 - 2624 (units: sqm) |
| Survey date date range: | 01/01/10 - 28/10/17 |
| Number of weekdays (Monday-Friday): | 14 |
| Number of Saturdays: | 0 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 0 |
| Surveys manually removed from selection: | 0 |

*This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.*

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

| | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---|---|---|---|---|---|---|---|---|---|
| Time Range | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate | No. Days | Ave. GFA | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | 2 | 2511 | 0.219 | 2 | 2511 | 0.080 | 2 | 2511 | 0.299 |
| 07:00 - 08:00 | 11 | 2276 | 0.519 | 11 | 2276 | 0.120 | 11 | 2276 | 0.639 |
| 08:00 - 09:00 | 11 | 2276 | 2.617 | 11 | 2276 | 1.866 | 11 | 2276 | 4.483 |
| 09:00 - 10:00 | 11 | 2276 | 3.595 | 11 | 2276 | 3.172 | 11 | 2276 | 6.767 |
| 10:00 - 11:00 | 11 | 2276 | 5.062 | 11 | 2276 | 4.458 | 11 | 2276 | 9.520 |
| 11:00 - 12:00 | 11 | 2276 | 6.236 | 11 | 2276 | 5.805 | 11 | 2276 | 12.041 |
| 12:00 - 13:00 | 11 | 2276 | 5.761 | 11 | 2276 | 6.340 | 11 | 2276 | 12.101 |
| 13:00 - 14:00 | 11 | 2276 | 5.745 | 11 | 2276 | 5.513 | 11 | 2276 | 11.258 |
| 14:00 - 15:00 | 11 | 2276 | 5.293 | 11 | 2276 | 5.261 | 11 | 2276 | 10.554 |
| 15:00 - 16:00 | 11 | 2276 | 5.309 | 11 | 2276 | 5.601 | 11 | 2276 | 10.910 |
| 16:00 - 17:00 | 11 | 2276 | 4.950 | 11 | 2276 | 5.185 | 11 | 2276 | 10.135 |
| 17:00 - 18:00 | 11 | 2276 | 4.143 | 11 | 2276 | 4.051 | 11 | 2276 | 8.194 |
| 18:00 - 19:00 | 11 | 2276 | 2.744 | 11 | 2276 | 3.392 | 11 | 2276 | 6.136 |
| 19:00 - 20:00 | 11 | 2276 | 1.997 | 11 | 2276 | 2.541 | 11 | 2276 | 4.538 |
| 20:00 - 21:00 | 11 | 2276 | 1.198 | 11 | 2276 | 1.386 | 11 | 2276 | 2.584 |
| 21:00 - 22:00 | 11 | 2276 | 0.631 | 11 | 2276 | 0.927 | 11 | 2276 | 1.558 |
| 22:00 - 23:00 | 11 | 2276 | 0.064 | 11 | 2276 | 0.232 | 11 | 2276 | 0.296 |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 56.083 | | | 55.930 | | | 112.013 |

*This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.*

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

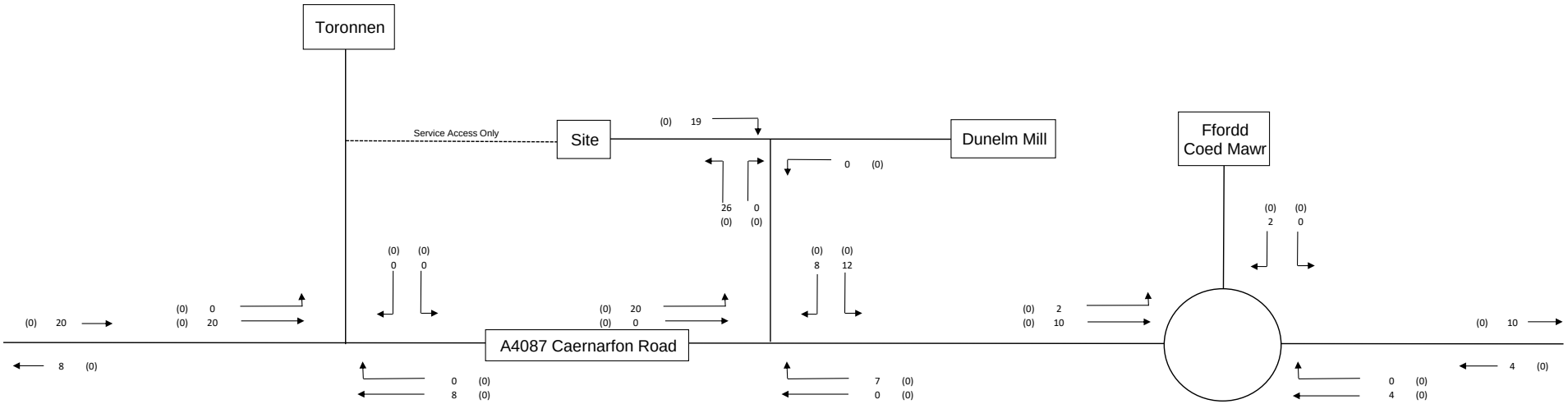
The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

| | |
|---|---|
| Trip rate parameter range selected: | 1485 - 2624 (units: sqm) |
| Survey date date range: | 01/01/10 - 28/10/17 |
| Number of weekdays (Monday-Friday): | 0 |
| Number of Saturdays: | 11 |
| Number of Sundays: | 0 |
| Surveys automatically removed from selection: | 0 |
| Surveys manually removed from selection: | 0 |

*This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.*

# Appendix 13

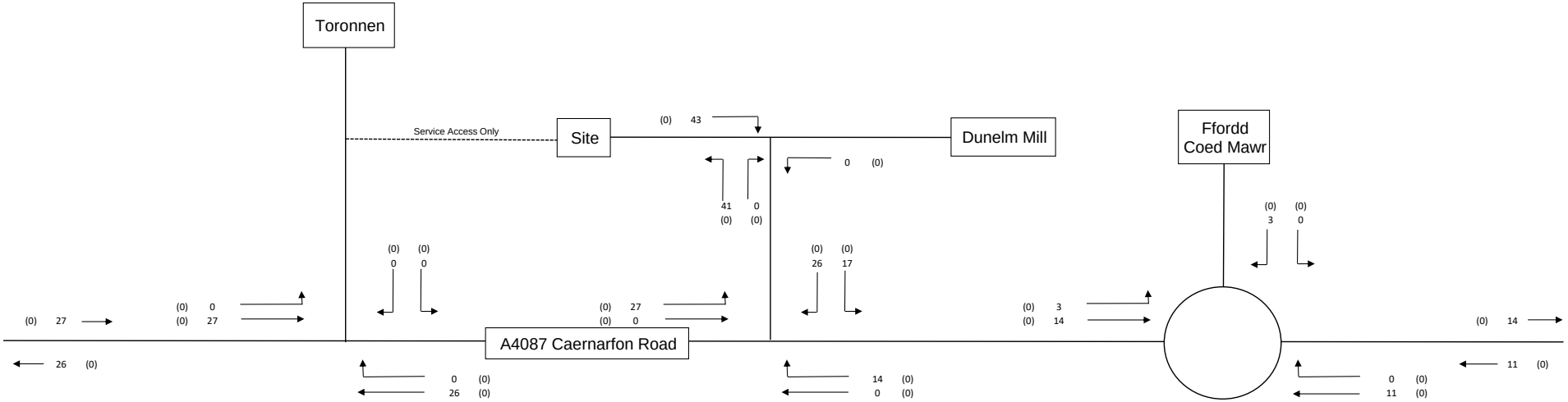



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

# Proposed Foodstore, Caernarfon Road, Bangor

**AM Peak (08:15-09:15)** **Foodstore New Traffic**

connect CONSULTANTS

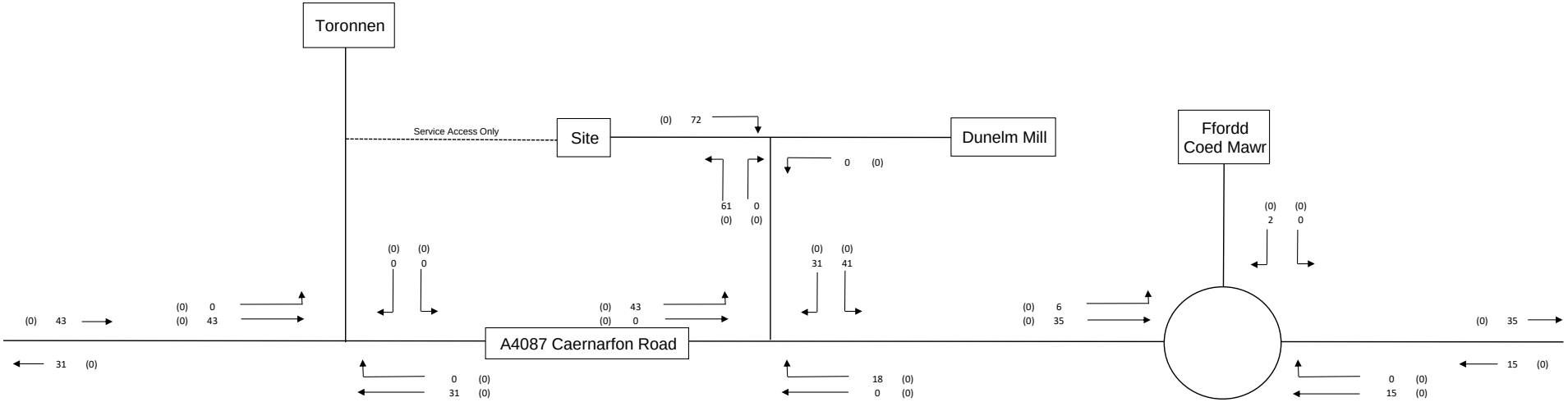



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

# Proposed Foodstore, Caernarfon Road, Bangor

**PM Peak (16:00-17:00)** **Foodstore New Traffic**

connect CONSULTANTS



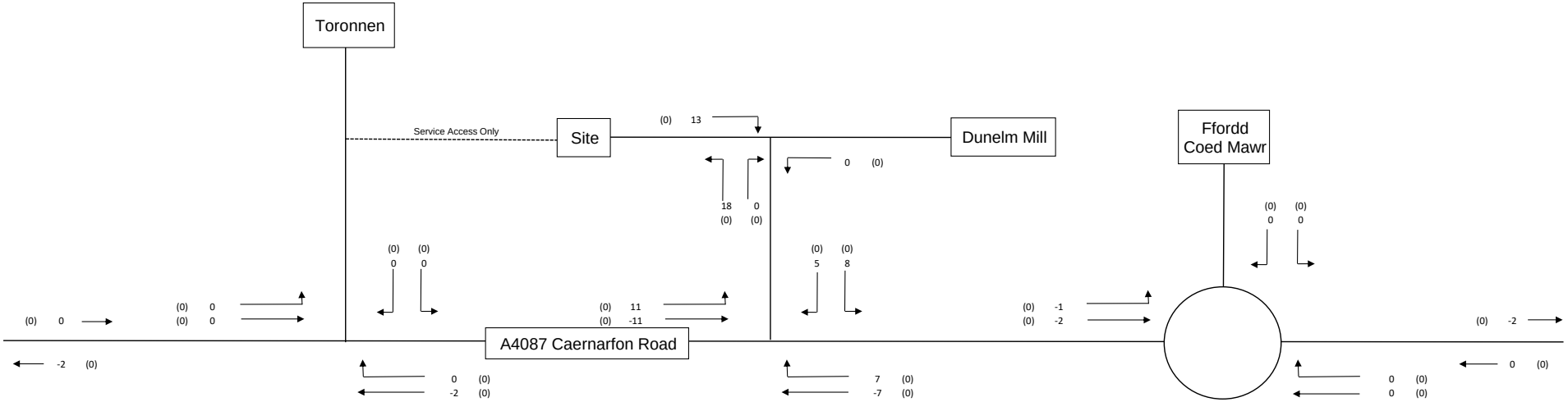

| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**SAT Peak (11:45-12:45)** **Foodstore New Traffic**

connect CONSULTANTS

# Appendix 14

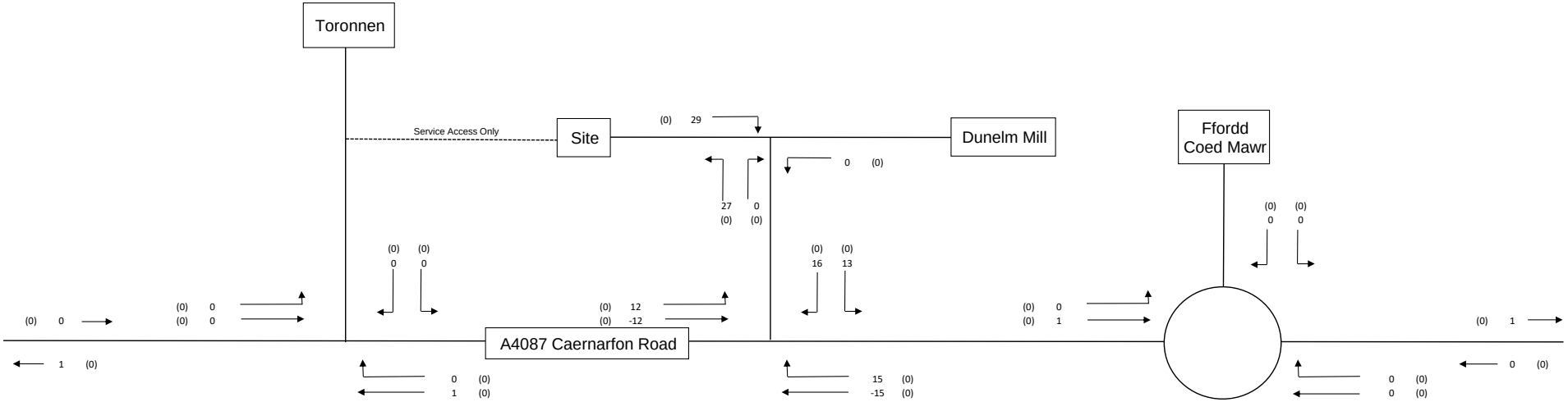



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**AM Peak (08:15-09:15)** **Foodstore Pass-by**

connect CONSULTANTS

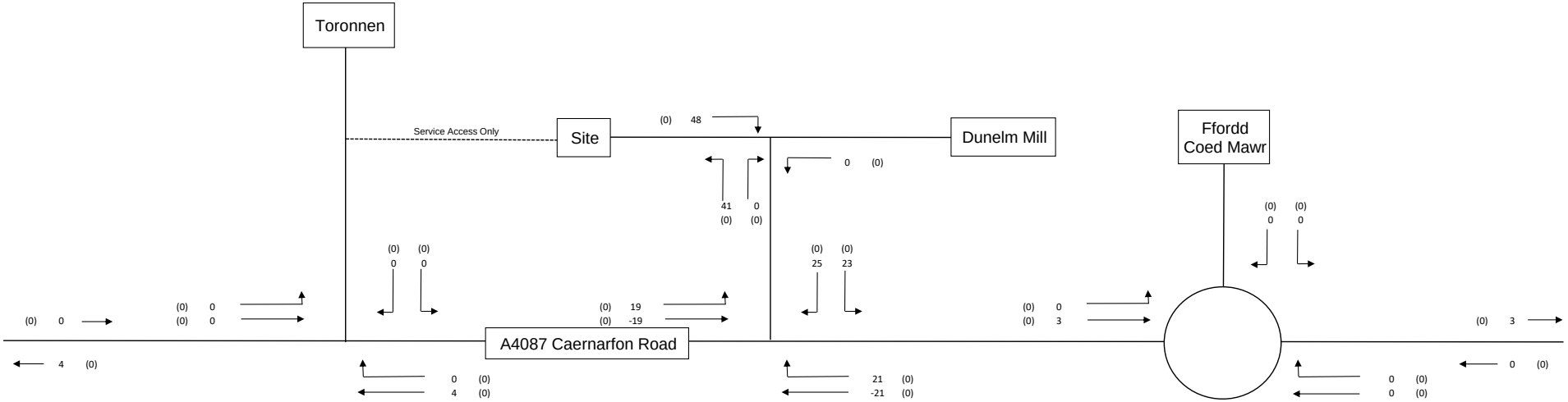



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**PM Peak (16:00-17:00)** **Foodstore Pass-by**

connect CONSULTANTS



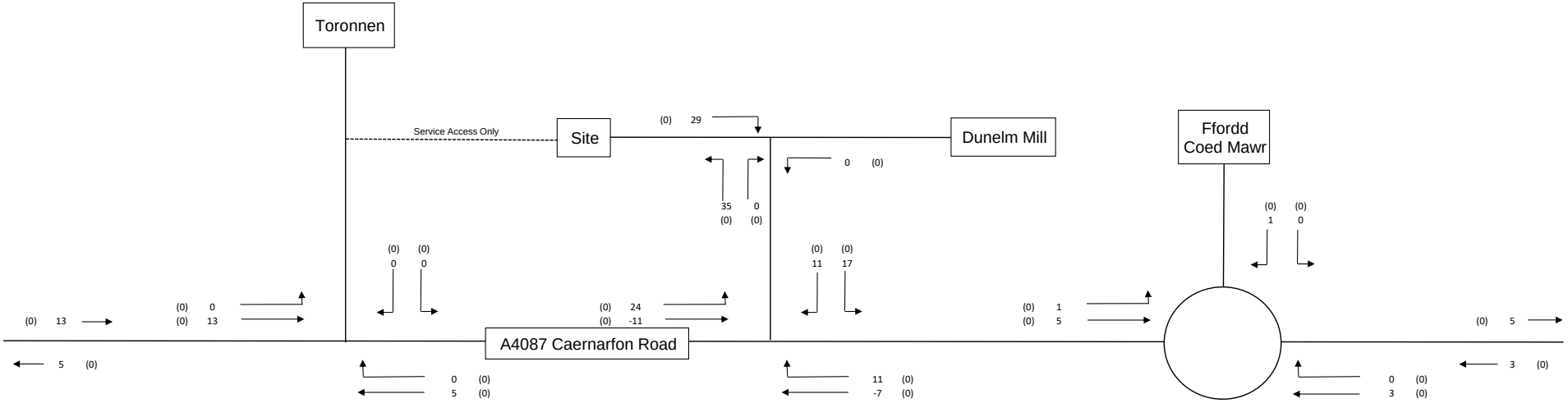

| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**SAT Peak (11:45-12:45)** **Foodstore Pass-by**

connect CONSULTANTS

# Appendix 15

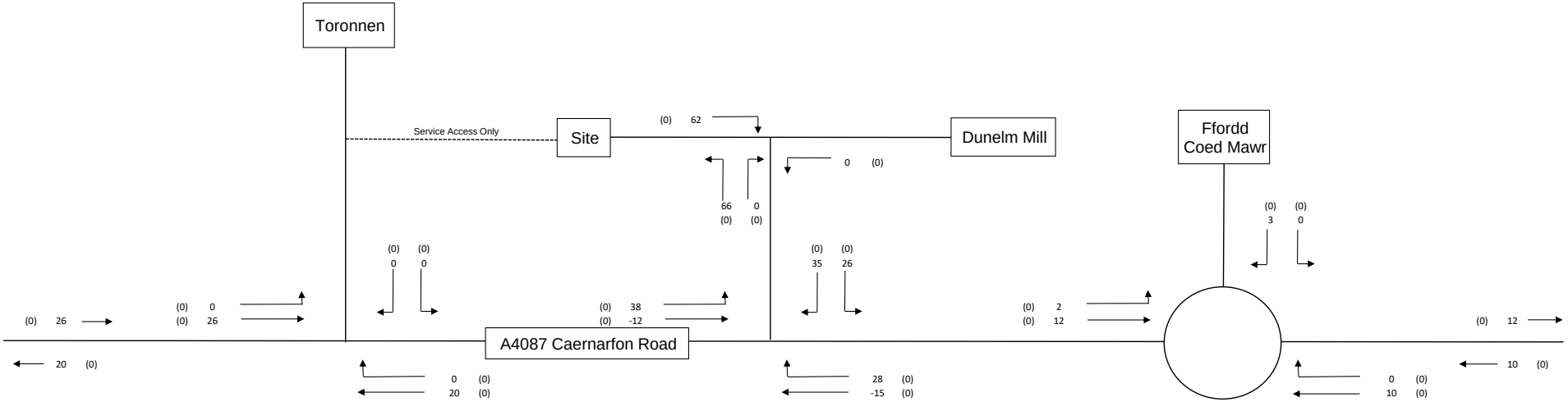



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**AM Peak (08:15-09:15)** **Net Traffic Effect**

connect CONSULTANTS

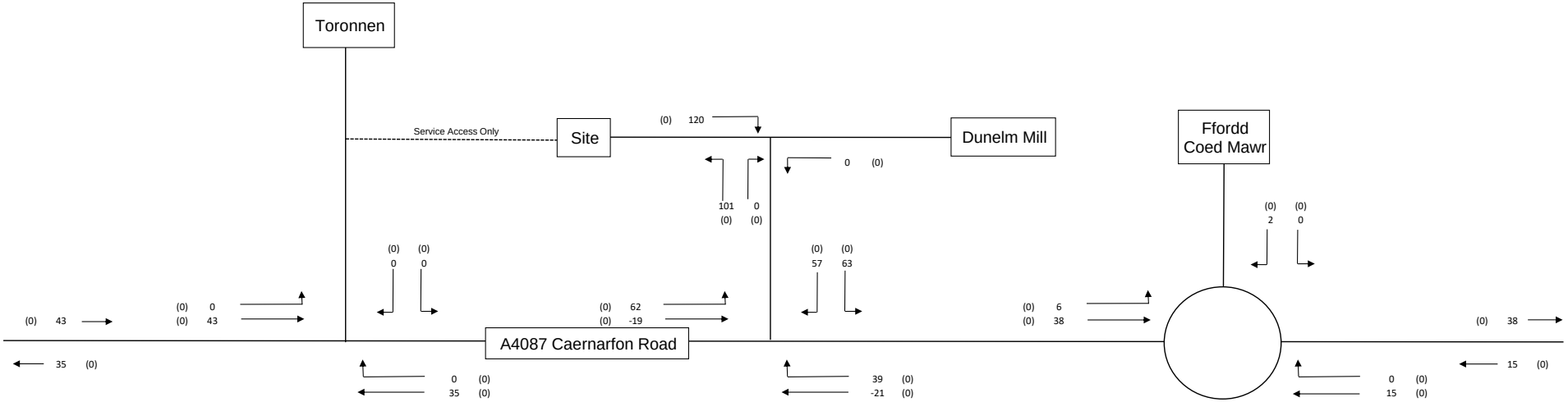



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**PM Peak (16:00-17:00)** **Net Traffic Effect**

connect CONSULTANTS



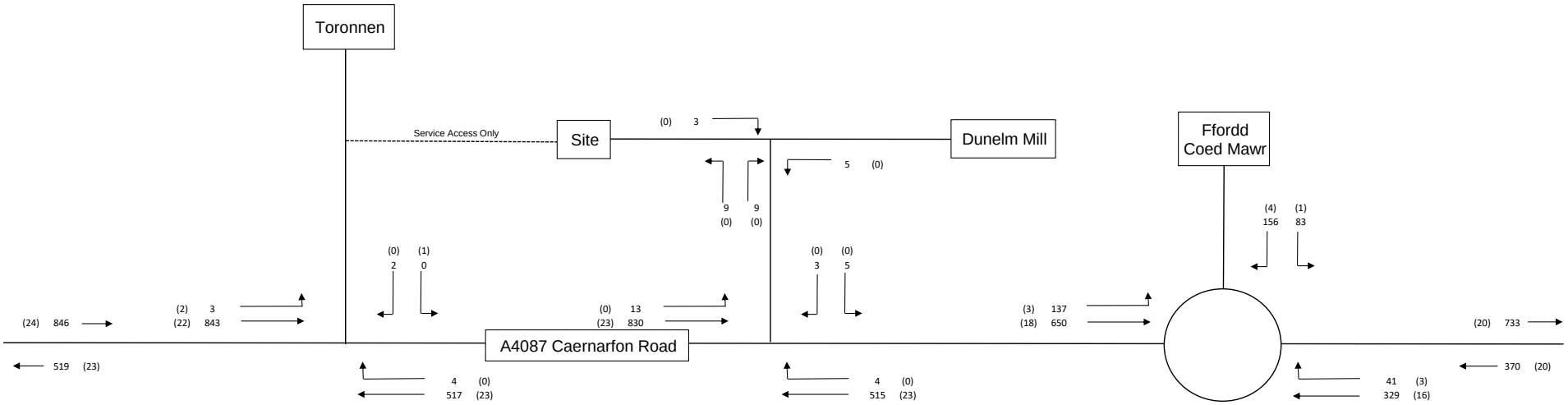

| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**SAT Peak (11:45-12:45)** **Net Traffic Effect**

connect CONSULTANTS

# Appendix 16

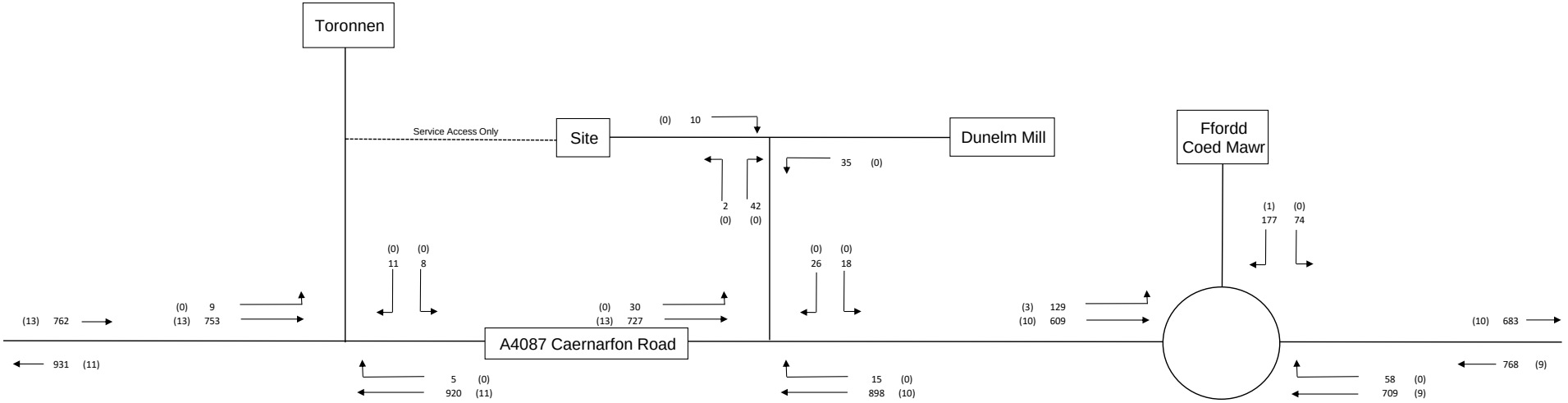



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

# Proposed Foodstore, Caernarfon Road, Bangor

**AM Peak (08:15-09:15)** **2024 Base + Industrial**

connect CONSULTANTS

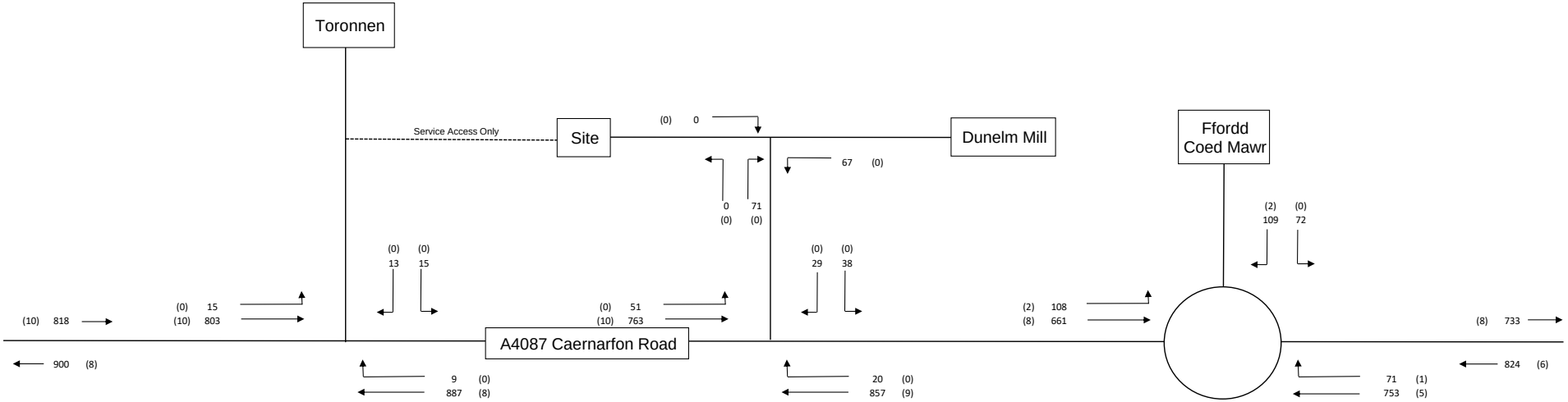



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**PM Peak (16:00-17:00)** **2024 Base + Industrial**

connect CONSULTANTS



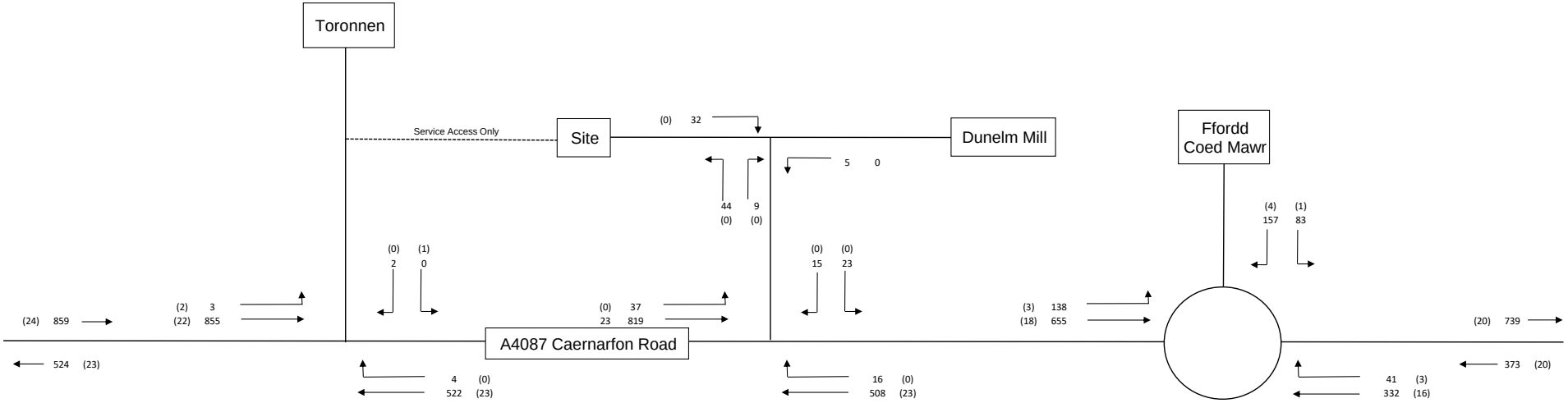

| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**SAT Peak (11:45-12:45)** **2024 Base + Industrial**

connect CONSULTANTS

# Appendix 17

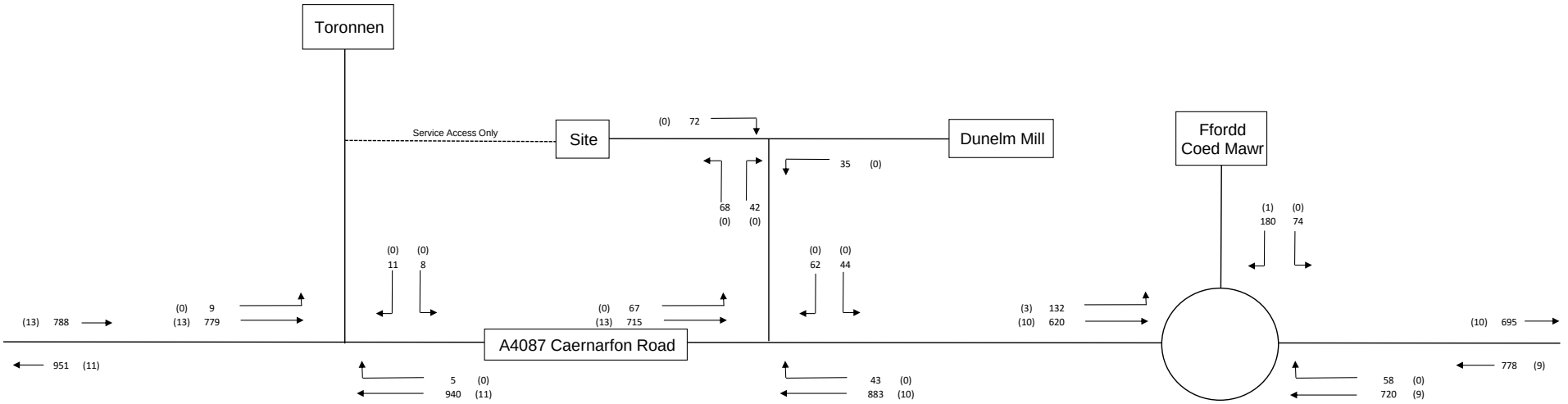



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**AM Peak (08:15-09:15)** **2024 Base + Foodstore**

connect CONSULTANTS

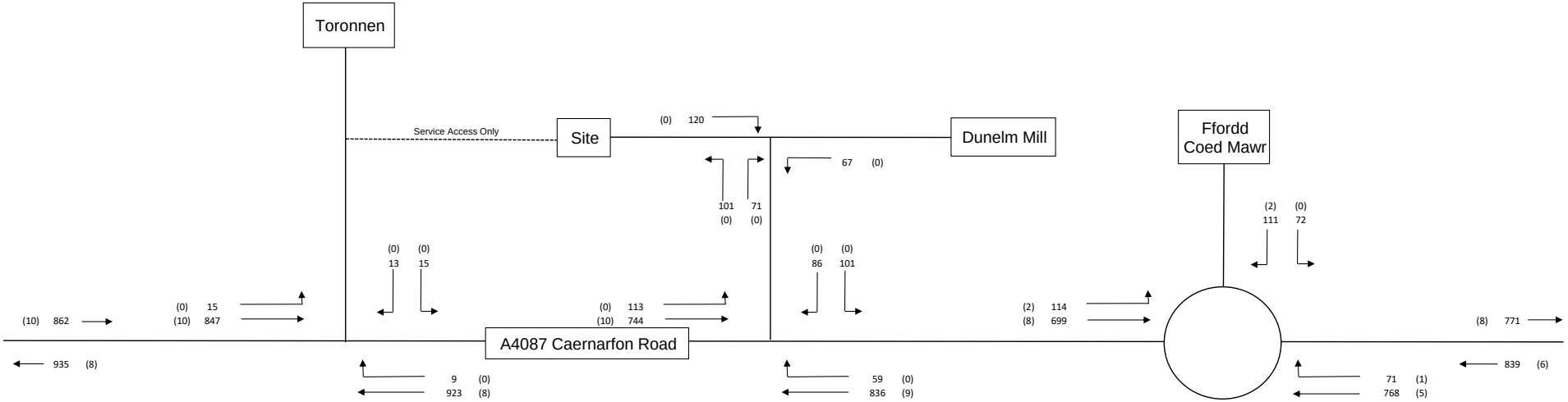



| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

# Proposed Foodstore, Caernarfon Road, Bangor

**PM Peak (16:00-17:00)** **2024 Base + Foodstore**

connect CONSULTANTS




| | |
|---|---|
| 123 | Light Vehicles |
| (123) | Heavy Vehicles |

**Proposed Foodstore, Caernarfon Road, Bangor**

**SAT Peak (11:45-12:45)** **2024 Base + Foodstore**

connect CONSULTANTS

# Appendix 18

# Junctions 9

## ARCADY 9 - Roundabout Module

Version: 9.5.0.6896
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** 20190117 Site access.j9
**Path:** K:\TPS\Bangor, Caernarfon Road\Calcs\Junction Modelling\ARCADY
**Report generation date:** 07/02/2019 10:03:32

---

»2024, AM With Dev
»2024, PM With Dev
»2024, SAT With Dev

### Summary of junction performance

| | AM With Dev | | | PM With Dev | | | SAT With Dev | | |
|---|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC |
| | 2024 | | | | | | | | |
| 1 - A4087 West | 4.8 | 19.55 | 0.83 | 3.1 | 13.85 | 0.75 | 4.7 | 19.61 | 0.83 |
| 2 - Site Access | 0.2 | 17.94 | 0.16 | 0.5 | 17.21 | 0.34 | 1.6 | 31.53 | 0.62 |
| 3 - A4087 East | 0.9 | 5.69 | 0.46 | 3.9 | 14.87 | 0.79 | 3.5 | 14.08 | 0.78 |

*There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.*

*Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

### File summary

#### File Description

| | |
|---|---|
| Title | |
| Location | |
| Site number | |
| Date | 16/01/2019 |
| Version | |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | |
| Enumerator | CCL\jcarver |
| Description | |

### Units

| Distance units | Speed units | Traffic units input | Traffic units results | Flow units | Average delay units | Total delay units | Rate of delay units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |

### Analysis Options

| Mini-roundabout model | Calculate Queue Percentiles | Calculate residual capacity | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) |
|---|---|---|---|---|---|
| JUNCTIONS 9 | | | 0.85 | 36.00 | 20.00 |

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) |
|---|---|---|---|---|---|---|---|
| D7 | 2024 | AM With Dev | FLAT | 08:00 | 09:30 | 90 | 15 |
| D8 | 2024 | PM With Dev | FLAT | 15:45 | 17:15 | 90 | 15 |
| D9 | 2024 | SAT With Dev | FLAT | 11:30 | 13:00 | 90 | 15 |

## Analysis Set Details

| ID | Network flow scaling factor (%) |
|---|---|
| A1 | 100.000 |

# 2024, AM With Dev

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Mini-roundabout | | Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 97% of the total flow for the roundabout for one or more time segments] |

## Junction Network

### Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | untitled | Mini-roundabout | | 1, 2, 3 | 14.28 | B |

### Junction Network Options

| Driving side | Lighting | Road surface | In London |
|---|---|---|---|
| Left | Normal/unknown | Normal/unknown | |

## Arms

### Arms

| Arm | Name | Description |
|---|---|---|
| 1 | A4087 West | |
| 2 | Site Access | |
| 3 | A4087 East | |

### Mini Roundabout Geometry

| Arm | Approach road half-width (m) | Minimum approach road half-width (m) | Entry width (m) | Effective flare length (m) | Distance to next arm (m) | Entry corner kerb line distance (m) | Gradient over 50m (%) | Kerbed central island |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 4.70 | 4.70 | 6.00 | 3.4 | 15.00 | 11.20 | 0.0 | |
| 2 - Site Access | 3.55 | 3.55 | 3.55 | 0.0 | 14.90 | 12.20 | 0.0 | |
| 3 - A4087 East | 4.70 | 4.70 | 4.70 | 0.0 | 18.00 | 18.60 | 0.0 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Final slope | Final intercept (PCU/hr) |
|---|---|---|
| 1 - A4087 West | 0.681 | 1102 |
| 2 - Site Access | 0.617 | 772 |
| 3 - A4087 East | 0.806 | 1239 |

*The slope and intercept shown above include any corrections and adjustments.*

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) |
|---|---|---|---|---|---|---|---|
| D7 | 2024 | AM With Dev | FLAT | 08:00 | 09:30 | 90 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|
| HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|
| 1 - A4087 West | | ✓ | 902 | 100.000 |
| 2 - Site Access | | ✓ | 38 | 100.000 |
| 3 - A4087 East | | ✓ | 570 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Site Access | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 37 | 865 |
| | 2 - Site Access | 15 | 0 | 23 |
| | 3 - A4087 East | 554 | 16 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Site Access | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 0 | 3 |
| | 2 - Site Access | 0 | 0 | 0 |
| | 3 - A4087 East | 4 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 - A4087 West | 0.83 | 19.55 | 4.8 | C |
| 2 - Site Access | 0.16 | 17.94 | 0.2 | C |
| 3 - A4087 East | 0.46 | 5.69 | 0.9 | A |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 902 | 16 | 1091 | 0.827 | 884 | 4.4 | 16.749 | C |
| 2 - Site Access | 38 | 848 | 249 | 0.153 | 37 | 0.2 | 16.950 | C |
| 3 - A4087 East | 570 | 15 | 1227 | 0.465 | 566 | 0.9 | 5.631 | A |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 902 | 16 | 1091 | 0.827 | 901 | 4.6 | 19.293 | C |
| 2 - Site Access | 38 | 864 | 239 | 0.159 | 38 | 0.2 | 17.891 | C |
| 3 - A4087 East | 570 | 15 | 1227 | 0.465 | 570 | 0.9 | 5.693 | A |

### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 902 | 16 | 1091 | 0.827 | 902 | 4.7 | 19.442 | C |
| 2 - Site Access | 38 | 865 | 239 | 0.159 | 38 | 0.2 | 17.927 | C |
| 3 - A4087 East | 570 | 15 | 1227 | 0.465 | 570 | 0.9 | 5.693 | A |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 902 | 16 | 1091 | 0.827 | 902 | 4.8 | 19.500 | C |
| 2 - Site Access | 38 | 865 | 239 | 0.159 | 38 | 0.2 | 17.937 | C |
| 3 - A4087 East | 570 | 15 | 1227 | 0.465 | 570 | 0.9 | 5.693 | A |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 902 | 16 | 1091 | 0.827 | 902 | 4.8 | 19.530 | C |
| 2 - Site Access | 38 | 865 | 239 | 0.159 | 38 | 0.2 | 17.941 | C |
| 3 - A4087 East | 570 | 15 | 1227 | 0.465 | 570 | 0.9 | 5.693 | A |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 902 | 16 | 1091 | 0.827 | 902 | 4.8 | 19.548 | C |
| 2 - Site Access | 38 | 865 | 239 | 0.159 | 38 | 0.2 | 17.943 | C |
| 3 - A4087 East | 570 | 15 | 1227 | 0.465 | 570 | 0.9 | 5.693 | A |

# 2024, PM With Dev

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Mini-roundabout | | Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 94% of the total flow for the roundabout for one or more time segments] |

## Junction Network

### Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | untitled | Mini-roundabout | | 1, 2, 3 | 14.56 | B |

### Junction Network Options

| Driving side | Lighting | Road surface | In London |
|---|---|---|---|
| Left | Normal/unknown | Normal/unknown | |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) |
|---|---|---|---|---|---|---|---|
| D8 | 2024 | PM With Dev | FLAT | 15:45 | 17:15 | 90 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|
| HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|
| 1 - A4087 West | | ✓ | 808 | 100.000 |
| 2 - Site Access | | ✓ | 106 | 100.000 |
| 3 - A4087 East | | ✓ | 945 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Site Access | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 67 | 741 |
| | 2 - Site Access | 62 | 0 | 44 |
| | 3 - A4087 East | 902 | 43 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Site Access | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 0 | 2 |
| | 2 - Site Access | 0 | 0 | 0 |
| | 3 - A4087 East | 1 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 - A4087 West | 0.75 | 13.85 | 3.1 | B |
| 2 - Site Access | 0.34 | 17.21 | 0.5 | C |
| 3 - A4087 East | 0.79 | 14.87 | 3.9 | B |

## Main Results for each time segment

### 15:45 - 16:00

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 808 | 42 | 1073 | 0.753 | 796 | 2.9 | 12.771 | B |
| 2 - Site Access | 106 | 730 | 322 | 0.329 | 104 | 0.5 | 16.405 | C |
| 3 - A4087 East | 945 | 61 | 1190 | 0.794 | 931 | 3.6 | 13.357 | B |

### 16:00 - 16:15

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 808 | 43 | 1072 | 0.754 | 808 | 3.0 | 13.802 | B |
| 2 - Site Access | 106 | 741 | 315 | 0.336 | 106 | 0.5 | 17.183 | C |
| 3 - A4087 East | 945 | 62 | 1189 | 0.795 | 944 | 3.8 | 14.775 | B |

### 16:15 - 16:30

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 808 | 43 | 1072 | 0.754 | 808 | 3.0 | 13.835 | B |
| 2 - Site Access | 106 | 741 | 315 | 0.336 | 106 | 0.5 | 17.205 | C |
| 3 - A4087 East | 945 | 62 | 1189 | 0.795 | 945 | 3.8 | 14.835 | B |

### 16:30 - 16:45

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 808 | 43 | 1072 | 0.754 | 808 | 3.1 | 13.846 | B |
| 2 - Site Access | 106 | 741 | 315 | 0.336 | 106 | 0.5 | 17.210 | C |
| 3 - A4087 East | 945 | 62 | 1189 | 0.795 | 945 | 3.8 | 14.856 | B |

### 16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 808 | 43 | 1072 | 0.754 | 808 | 3.1 | 13.852 | B |
| 2 - Site Access | 106 | 741 | 315 | 0.336 | 106 | 0.5 | 17.213 | C |
| 3 - A4087 East | 945 | 62 | 1189 | 0.795 | 945 | 3.8 | 14.864 | B |

### 17:00 - 17:15

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 808 | 43 | 1072 | 0.754 | 808 | 3.1 | 13.855 | B |
| 2 - Site Access | 106 | 741 | 315 | 0.336 | 106 | 0.5 | 17.213 | C |
| 3 - A4087 East | 945 | 62 | 1189 | 0.795 | 945 | 3.9 | 14.873 | B |

# 2024, SAT With Dev

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Mini-roundabout | | Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 90% of the total flow for the roundabout for one or more time segments] |

## Junction Network

### Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | untitled | Mini-roundabout | | 1, 2, 3 | 18.19 | C |

### Junction Network Options

| Driving side | Lighting | Road surface | In London |
|---|---|---|---|
| Left | Normal/unknown | Normal/unknown | |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) |
|---|---|---|---|---|---|---|---|
| D9 | 2024 | SAT With Dev | FLAT | 11:30 | 13:00 | 90 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|
| HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|
| 1 - A4087 West | | ✓ | 877 | 100.000 |
| 2 - Site Access | | ✓ | 187 | 100.000 |
| 3 - A4087 East | | ✓ | 912 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Site Access | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 113 | 764 |
| | 2 - Site Access | 86 | 0 | 101 |
| | 3 - A4087 East | 853 | 59 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Site Access | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 0 | 1 |
| | 2 - Site Access | 0 | 0 | 0 |
| | 3 - A4087 East | 1 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 - A4087 West | 0.83 | 19.61 | 4.7 | C |
| 2 - Site Access | 0.62 | 31.53 | 1.6 | D |
| 3 - A4087 East | 0.78 | 14.08 | 3.5 | B |

## Main Results for each time segment

### 11:30 - 11:45

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 877 | 58 | 1062 | 0.826 | 860 | 4.3 | 16.771 | C |
| 2 - Site Access | 187 | 749 | 310 | 0.603 | 181 | 1.4 | 26.929 | D |
| 3 - A4087 East | 912 | 83 | 1172 | 0.778 | 899 | 3.3 | 12.758 | B |

### 11:45 - 12:00

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 877 | 59 | 1061 | 0.826 | 876 | 4.5 | 19.346 | C |
| 2 - Site Access | 187 | 763 | 301 | 0.620 | 186 | 1.5 | 31.052 | D |
| 3 - A4087 East | 912 | 86 | 1170 | 0.780 | 912 | 3.4 | 13.999 | B |

### 12:00 - 12:15

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 877 | 59 | 1061 | 0.826 | 877 | 4.6 | 19.504 | C |
| 2 - Site Access | 187 | 764 | 301 | 0.621 | 187 | 1.6 | 31.377 | D |
| 3 - A4087 East | 912 | 86 | 1170 | 0.780 | 912 | 3.5 | 14.054 | B |

### 12:15 - 12:30

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 877 | 59 | 1061 | 0.826 | 877 | 4.7 | 19.562 | C |
| 2 - Site Access | 187 | 764 | 301 | 0.621 | 187 | 1.6 | 31.474 | D |
| 3 - A4087 East | 912 | 86 | 1170 | 0.780 | 912 | 3.5 | 14.072 | B |

### 12:30 - 12:45

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 877 | 59 | 1061 | 0.826 | 877 | 4.7 | 19.593 | C |
| 2 - Site Access | 187 | 764 | 301 | 0.621 | 187 | 1.6 | 31.508 | D |
| 3 - A4087 East | 912 | 86 | 1170 | 0.780 | 912 | 3.5 | 14.081 | B |

### 12:45 - 13:00

| Arm | Total Demand (PCU/hr) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 877 | 59 | 1061 | 0.826 | 877 | 4.7 | 19.610 | C |
| 2 - Site Access | 187 | 764 | 301 | 0.621 | 187 | 1.6 | 31.530 | D |
| 3 - A4087 East | 912 | 86 | 1170 | 0.780 | 912 | 3.5 | 14.084 | B |

# Junctions 9

## ARCADY 9 - Roundabout Module

Version: 9.5.0.6896
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** 20190220 Ffordd Coed Mawr.j9
**Path:** K:\TPS\Bangor, Caernarfon Road\Calcs\Junction Modelling\ARCADY
**Report generation date:** 20/02/2019 11:25:33

»2024 Base With Industrial, AM
»2024 Base With Industrial, PM
»2024 Base With Industrial, SAT
»2024 Base With Foodstore, AM
»2024 Base With Foodstore, PM
»2024 Base With Foodstore, SAT

### Summary of junction performance

| | AM | | | PM | | | SAT | | |
|---|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC |
| | 2024 Base With Industrial | | | | | | | | |
| 1 - A4087 West | 5.8 | 25.66 | 0.85 | 3.8 | 18.10 | 0.79 | 4.6 | 21.41 | 0.82 |
| 2 - Ffordd Coed Mawr | 1.6 | 23.15 | 0.61 | 1.3 | 18.83 | 0.57 | 0.8 | 15.79 | 0.45 |
| 3 - A4087 East | 0.8 | 7.15 | 0.44 | 5.3 | 25.00 | 0.84 | 6.0 | 26.27 | 0.86 |
| | 2024 Base With Foodstore | | | | | | | | |
| 1 - A4087 West | 6.1 | 26.93 | 0.86 | 4.1 | 19.39 | 0.80 | 6.5 | 28.68 | 0.87 |
| 2 - Ffordd Coed Mawr | 1.7 | 23.91 | 0.62 | 1.4 | 19.91 | 0.58 | 0.9 | 17.75 | 0.48 |
| 3 - A4087 East | 0.8 | 7.21 | 0.44 | 5.9 | 27.19 | 0.86 | 6.9 | 29.91 | 0.88 |

*There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.*

*Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

### File summary

#### File Description

| | |
|---|---|
| **Title** | |
| **Location** | |
| **Site number** | |
| **Date** | 17/01/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | CCL\jcarver |
| **Description** | |

## Units

| Distance units | Speed units | Traffic units input | Traffic units results | Flow units | Average delay units | Total delay units | Rate of delay units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |

## Analysis Options

| Mini-roundabout model | Vehicle length (m) | Calculate Queue Percentiles | Calculate detailed queueing delay | Calculate residual capacity | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) |
|---|---|---|---|---|---|---|---|
| JUNCTIONS 9 | 5.75 | | | | 10.00 | 36.00 | 20.00 |

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|---|
| D4 | 2024 Base With Industrial | AM | FLAT | 08:00 | 09:30 | 90 | 15 | ✓ |
| D5 | 2024 Base With Industrial | PM | FLAT | 15:45 | 17:15 | 90 | 15 | ✓ |
| D6 | 2024 Base With Industrial | SAT | FLAT | 11:30 | 13:00 | 90 | 15 | ✓ |
| D7 | 2024 Base With Foodstore | AM | FLAT | 08:00 | 09:30 | 90 | 15 | ✓ |
| D8 | 2024 Base With Foodstore | PM | FLAT | 15:45 | 17:15 | 90 | 15 | ✓ |
| D9 | 2024 Base With Foodstore | SAT | FLAT | 11:30 | 13:00 | 90 | 15 | ✓ |

## Analysis Set Details

| ID | Include in report | Network flow scaling factor (%) | Network capacity scaling factor (%) |
|---|---|---|---|
| A1 | ✓ | 100.000 | 100.000 |

# 2024 Base With Industrial, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Mini-roundabout | | Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 83% of the total flow for the roundabout for one or more time segments] |

## Junction Network

### Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | untitled | Mini-roundabout | | 1, 2, 3 | 20.15 | C |

### Junction Network Options

| Driving side | Lighting | Road surface | In London |
|---|---|---|---|
| Left | Normal/unknown | Normal/unknown | |

## Arms

### Arms

| Arm | Name | Description |
|---|---|---|
| 1 | A4087 West | |
| 2 | Ffordd Coed Mawr | |
| 3 | A4087 East | |

### Mini Roundabout Geometry

| Arm | Approach road half-width (m) | Minimum approach road half-width (m) | Entry width (m) | Effective flare length (m) | Distance to next arm (m) | Entry corner kerb line distance (m) | Gradient over 50m (%) | Kerbed central island |
|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 4.00 | 4.00 | 4.00 | 0.0 | 10.50 | 7.00 | 0.0 | |
| 2 - Ffordd Coed Mawr | 3.75 | 3.75 | 3.75 | 0.0 | 10.00 | 6.30 | 0.0 | |
| 3 - A4087 East | 3.90 | 3.90 | 3.90 | 0.0 | 16.00 | 16.00 | 0.0 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Final slope | Final intercept (PCU/hr) |
|---|---|---|
| 1 - A4087 West | 0.628 | 1003 |
| 2 - Ffordd Coed Mawr | 0.619 | 834 |
| 3 - A4087 East | 0.665 | 1048 |

*The slope and intercept shown above include any corrections and adjustments.*

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|---|
| D4 | 2024 Base With Industrial | AM | FLAT | 08:00 | 09:30 | 90 | 15 | ✓ |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|---|---|
| ✓ | ✓ | HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| 1 - A4087 West | | FLAT | ✓ | 830 | 100.000 |
| 2 - Ffordd Coed Mawr | | FLAT | ✓ | 250 | 100.000 |
| 3 - A4087 East | | FLAT | ✓ | 409 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Ffordd Coed Mawr | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 143 | 687 |
| | 2 - Ffordd Coed Mawr | 164 | 0 | 86 |
| | 3 - A4087 East | 361 | 48 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Ffordd Coed Mawr | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 2 | 3 |
| | 2 - Ffordd Coed Mawr | 3 | 0 | 1 |
| | 3 - A4087 East | 5 | 8 | 0 |

## Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| 1 - A4087 West | 0.85 | 25.66 | 5.8 | D | 830 | 1245 |
| 2 - Ffordd Coed Mawr | 0.61 | 23.15 | 1.6 | C | 250 | 375 |
| 3 - A4087 East | 0.44 | 7.15 | 0.8 | A | 409 | 614 |

### Main Results for each time segment

#### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 830 | 208 | 48 | 973 | 0.853 | 810 | 518 | 0.0 | 5.1 | 20.611 | C |
| 2 - Ffordd Coed Mawr | 250 | 63 | 670 | 419 | 0.596 | 244 | 187 | 0.0 | 1.4 | 20.445 | C |
| 3 - A4087 East | 409 | 102 | 160 | 942 | 0.434 | 406 | 754 | 0.0 | 0.8 | 7.037 | A |

#### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 830 | 208 | 48 | 973 | 0.853 | 828 | 525 | 5.1 | 5.5 | 24.992 | C |
| 2 - Ffordd Coed Mawr | 250 | 63 | 686 | 410 | 0.610 | 250 | 191 | 1.4 | 1.5 | 22.895 | C |
| 3 - A4087 East | 409 | 102 | 164 | 939 | 0.435 | 409 | 772 | 0.8 | 0.8 | 7.149 | A |

### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 830 | 208 | 48 | 973 | 0.853 | 829 | 525 | 5.5 | 5.6 | 25.372 | D |
| 2 - Ffordd Coed Mawr | 250 | 63 | 687 | 409 | 0.611 | 250 | 191 | 1.5 | 1.6 | 23.069 | C |
| 3 - A4087 East | 409 | 102 | 164 | 939 | 0.435 | 409 | 772 | 0.8 | 0.8 | 7.151 | A |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 830 | 208 | 48 | 973 | 0.853 | 830 | 525 | 5.6 | 5.7 | 25.523 | D |
| 2 - Ffordd Coed Mawr | 250 | 63 | 687 | 409 | 0.611 | 250 | 191 | 1.6 | 1.6 | 23.117 | C |
| 3 - A4087 East | 409 | 102 | 164 | 939 | 0.435 | 409 | 773 | 0.8 | 0.8 | 7.151 | A |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 830 | 208 | 48 | 973 | 0.853 | 830 | 525 | 5.7 | 5.7 | 25.607 | D |
| 2 - Ffordd Coed Mawr | 250 | 63 | 687 | 409 | 0.611 | 250 | 191 | 1.6 | 1.6 | 23.137 | C |
| 3 - A4087 East | 409 | 102 | 164 | 939 | 0.435 | 409 | 773 | 0.8 | 0.8 | 7.151 | A |

### 09:15 - 09:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 830 | 208 | 48 | 973 | 0.853 | 830 | 525 | 5.7 | 5.8 | 25.657 | D |
| 2 - Ffordd Coed Mawr | 250 | 63 | 687 | 409 | 0.611 | 250 | 191 | 1.6 | 1.6 | 23.149 | C |
| 3 - A4087 East | 409 | 102 | 164 | 939 | 0.435 | 409 | 773 | 0.8 | 0.8 | 7.151 | A |

# 2024 Base With Industrial, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Mini-roundabout | | Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 85% of the total flow for the roundabout for one or more time segments] |

## Junction Network

### Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | untitled | Mini-roundabout | | 1, 2, 3 | 21.21 | C |

### Junction Network Options

| Driving side | Lighting | Road surface | In London |
|---|---|---|---|
| Left | Normal/unknown | Normal/unknown | |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|---|
| D5 | 2024 Base With Industrial | PM | FLAT | 15:45 | 17:15 | 90 | 15 | ✓ |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|---|---|
| ✓ | ✓ | HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| 1 - A4087 West | | FLAT | ✓ | 764 | 100.000 |
| 2 - Ffordd Coed Mawr | | FLAT | ✓ | 253 | 100.000 |
| 3 - A4087 East | | FLAT | ✓ | 785 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Ffordd Coed Mawr | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 136 | 628 |
| | 2 - Ffordd Coed Mawr | 179 | 0 | 74 |
| | 3 - A4087 East | 727 | 58 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Ffordd Coed Mawr | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 3 | 2 |
| | 2 - Ffordd Coed Mawr | 1 | 0 | 0 |
| | 3 - A4087 East | 1 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| 1 - A4087 West | 0.79 | 18.10 | 3.8 | C | 764 | 1146 |
| 2 - Ffordd Coed Mawr | 0.57 | 18.83 | 1.3 | C | 253 | 380 |
| 3 - A4087 East | 0.84 | 25.00 | 5.3 | C | 785 | 1178 |

## Main Results for each time segment

### 15:45 - 16:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 764 | 191 | 57 | 968 | 0.790 | 750 | 885 | 0.0 | 3.5 | 16.005 | C |
| 2 - Ffordd Coed Mawr | 253 | 63 | 616 | 453 | 0.559 | 248 | 190 | 0.0 | 1.2 | 17.354 | C |
| 3 - A4087 East | 785 | 196 | 176 | 932 | 0.843 | 766 | 689 | 0.0 | 4.7 | 20.164 | C |

### 16:00 - 16:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 764 | 191 | 58 | 967 | 0.790 | 763 | 904 | 3.5 | 3.7 | 17.942 | C |
| 2 - Ffordd Coed Mawr | 253 | 63 | 627 | 446 | 0.568 | 253 | 194 | 1.2 | 1.3 | 18.746 | C |
| 3 - A4087 East | 785 | 196 | 179 | 929 | 0.845 | 784 | 701 | 4.7 | 5.0 | 24.363 | C |

### 16:15 - 16:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 764 | 191 | 58 | 967 | 0.790 | 764 | 905 | 3.7 | 3.7 | 18.038 | C |
| 2 - Ffordd Coed Mawr | 253 | 63 | 628 | 445 | 0.568 | 253 | 194 | 1.3 | 1.3 | 18.808 | C |
| 3 - A4087 East | 785 | 196 | 179 | 929 | 0.845 | 784 | 702 | 5.0 | 5.2 | 24.737 | C |

### 16:30 - 16:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 764 | 191 | 58 | 967 | 0.790 | 764 | 906 | 3.7 | 3.8 | 18.071 | C |
| 2 - Ffordd Coed Mawr | 253 | 63 | 628 | 445 | 0.568 | 253 | 194 | 1.3 | 1.3 | 18.824 | C |
| 3 - A4087 East | 785 | 196 | 179 | 929 | 0.845 | 785 | 702 | 5.2 | 5.3 | 24.877 | C |

### 16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 764 | 191 | 58 | 967 | 0.790 | 764 | 906 | 3.8 | 3.8 | 18.089 | C |
| 2 - Ffordd Coed Mawr | 253 | 63 | 628 | 445 | 0.568 | 253 | 194 | 1.3 | 1.3 | 18.830 | C |
| 3 - A4087 East | 785 | 196 | 179 | 929 | 0.845 | 785 | 702 | 5.3 | 5.3 | 24.952 | C |

**17:00 - 17:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1 - A4087 West** | 764 | 191 | 58 | 967 | 0.790 | 764 | 906 | 3.8 | 3.8 | 18.100 | C |
| **2 - Ffordd Coed Mawr** | 253 | 63 | 628 | 445 | 0.568 | 253 | 194 | 1.3 | 1.3 | 18.835 | C |
| **3 - A4087 East** | 785 | 196 | 179 | 929 | 0.845 | 785 | 702 | 5.3 | 5.3 | 24.999 | C |

# 2024 Base With Industrial, SAT

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Mini-roundabout | | Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 89% of the total flow for the roundabout for one or more time segments] |

## Junction Network

### Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | untitled | Mini-roundabout | | 1, 2, 3 | 23.08 | C |

### Junction Network Options

| Driving side | Lighting | Road surface | In London |
|---|---|---|---|
| Left | Normal/unknown | Normal/unknown | |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|---|
| D6 | 2024 Base With Industrial | SAT | FLAT | 11:30 | 13:00 | 90 | 15 | ✓ |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|---|---|
| ✓ | ✓ | HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| 1 - A4087 West | | FLAT | ✓ | 788 | 100.000 |
| 2 - Ffordd Coed Mawr | | FLAT | ✓ | 185 | 100.000 |
| 3 - A4087 East | | FLAT | ✓ | 836 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Ffordd Coed Mawr | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 112 | 676 |
| | 2 - Ffordd Coed Mawr | 113 | 0 | 72 |
| | 3 - A4087 East | 763 | 73 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Ffordd Coed Mawr | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 2 | 1 |
| | 2 - Ffordd Coed Mawr | 2 | 0 | 0 |
| | 3 - A4087 East | 1 | 2 | 0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| 1 - A4087 West | 0.82 | 21.41 | 4.6 | C | 788 | 1182 |
| 2 - Ffordd Coed Mawr | 0.45 | 15.79 | 0.8 | C | 185 | 278 |
| 3 - A4087 East | 0.86 | 26.27 | 6.0 | D | 836 | 1254 |

## Main Results for each time segment

### 11:30 - 11:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 788 | 197 | 71 | 958 | 0.822 | 771 | 855 | 0.0 | 4.2 | 18.120 | C |
| 2 - Ffordd Coed Mawr | 185 | 46 | 662 | 425 | 0.436 | 182 | 181 | 0.0 | 0.8 | 14.846 | B |
| 3 - A4087 East | 836 | 209 | 111 | 974 | 0.858 | 815 | 733 | 0.0 | 5.2 | 20.767 | C |

### 11:45 - 12:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 788 | 197 | 73 | 957 | 0.823 | 787 | 874 | 4.2 | 4.4 | 21.073 | C |
| 2 - Ffordd Coed Mawr | 185 | 46 | 675 | 416 | 0.445 | 185 | 185 | 0.8 | 0.8 | 15.736 | C |
| 3 - A4087 East | 836 | 209 | 113 | 973 | 0.859 | 834 | 747 | 5.2 | 5.6 | 25.487 | D |

### 12:00 - 12:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 788 | 197 | 73 | 957 | 0.823 | 788 | 875 | 4.4 | 4.5 | 21.269 | C |
| 2 - Ffordd Coed Mawr | 185 | 46 | 676 | 416 | 0.445 | 185 | 185 | 0.8 | 0.8 | 15.773 | C |
| 3 - A4087 East | 836 | 209 | 113 | 973 | 0.859 | 835 | 748 | 5.6 | 5.8 | 25.938 | D |

### 12:15 - 12:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 788 | 197 | 73 | 957 | 0.823 | 788 | 876 | 4.5 | 4.6 | 21.345 | C |
| 2 - Ffordd Coed Mawr | 185 | 46 | 676 | 416 | 0.445 | 185 | 185 | 0.8 | 0.8 | 15.785 | C |
| 3 - A4087 East | 836 | 209 | 113 | 973 | 0.859 | 836 | 748 | 5.8 | 5.9 | 26.118 | D |

### 12:30 - 12:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 788 | 197 | 73 | 957 | 0.823 | 788 | 876 | 4.6 | 4.6 | 21.384 | C |
| 2 - Ffordd Coed Mawr | 185 | 46 | 676 | 416 | 0.445 | 185 | 185 | 0.8 | 0.8 | 15.789 | C |
| 3 - A4087 East | 836 | 209 | 113 | 973 | 0.859 | 836 | 748 | 5.9 | 5.9 | 26.214 | D |

**12:45 - 13:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1 - A4087 West** | 788 | 197 | 73 | 957 | 0.823 | 788 | 876 | 4.6 | 4.6 | 21.407 | C |
| **2 - Ffordd Coed Mawr** | 185 | 46 | 676 | 416 | 0.445 | 185 | 185 | 0.8 | 0.8 | 15.789 | C |
| **3 - A4087 East** | 836 | 209 | 113 | 973 | 0.859 | 836 | 748 | 5.9 | 6.0 | 26.274 | D |

# 2024 Base With Foodstore, AM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Mini-roundabout | | Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 83% of the total flow for the roundabout for one or more time segments] |

## Junction Network

### Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | untitled | Mini-roundabout | | 1, 2, 3 | 21.01 | C |

### Junction Network Options

| Driving side | Lighting | Road surface | In London |
|---|---|---|---|
| Left | Normal/unknown | Normal/unknown | |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|---|
| D7 | 2024 Base With Foodstore | AM | FLAT | 08:00 | 09:30 | 90 | 15 | ✓ |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|---|---|
| ✓ | ✓ | HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| 1 - A4087 West | | FLAT | ✓ | 837 | 100.000 |
| 2 - Ffordd Coed Mawr | | FLAT | ✓ | 252 | 100.000 |
| 3 - A4087 East | | FLAT | ✓ | 412 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Ffordd Coed Mawr | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 145 | 692 |
| | 2 - Ffordd Coed Mawr | 166 | 0 | 86 |
| | 3 - A4087 East | 364 | 48 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Ffordd Coed Mawr | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 2 | 3 |
| | 2 - Ffordd Coed Mawr | 3 | 0 | 1 |
| | 3 - A4087 East | 5 | 8 | 0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| 1 - A4087 West | 0.86 | 26.93 | 6.1 | D | 837 | 1256 |
| 2 - Ffordd Coed Mawr | 0.62 | 23.91 | 1.7 | C | 252 | 378 |
| 3 - A4087 East | 0.44 | 7.21 | 0.8 | A | 412 | 618 |

## Main Results for each time segment

### 08:00 - 08:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 837 | 209 | 48 | 973 | 0.860 | 816 | 523 | 0.0 | 5.3 | 21.271 | C |
| 2 - Ffordd Coed Mawr | 252 | 63 | 674 | 417 | 0.605 | 246 | 189 | 0.0 | 1.5 | 20.944 | C |
| 3 - A4087 East | 412 | 103 | 162 | 940 | 0.438 | 409 | 758 | 0.0 | 0.8 | 7.091 | A |

### 08:15 - 08:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 837 | 209 | 48 | 973 | 0.860 | 835 | 530 | 5.3 | 5.8 | 26.123 | D |
| 2 - Ffordd Coed Mawr | 252 | 63 | 691 | 407 | 0.620 | 252 | 193 | 1.5 | 1.6 | 23.613 | C |
| 3 - A4087 East | 412 | 103 | 166 | 938 | 0.439 | 412 | 776 | 0.8 | 0.8 | 7.207 | A |

### 08:30 - 08:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 837 | 209 | 48 | 973 | 0.860 | 836 | 530 | 5.8 | 5.9 | 26.581 | D |
| 2 - Ffordd Coed Mawr | 252 | 63 | 691 | 406 | 0.621 | 252 | 193 | 1.6 | 1.6 | 23.815 | C |
| 3 - A4087 East | 412 | 103 | 166 | 938 | 0.439 | 412 | 777 | 0.8 | 0.8 | 7.209 | A |

### 08:45 - 09:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 837 | 209 | 48 | 973 | 0.860 | 837 | 530 | 5.9 | 6.0 | 26.767 | D |
| 2 - Ffordd Coed Mawr | 252 | 63 | 692 | 406 | 0.621 | 252 | 193 | 1.6 | 1.6 | 23.873 | C |
| 3 - A4087 East | 412 | 103 | 166 | 938 | 0.439 | 412 | 778 | 0.8 | 0.8 | 7.210 | A |

### 09:00 - 09:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 837 | 209 | 48 | 973 | 0.860 | 837 | 530 | 6.0 | 6.1 | 26.868 | D |
| 2 - Ffordd Coed Mawr | 252 | 63 | 692 | 406 | 0.621 | 252 | 193 | 1.6 | 1.6 | 23.898 | C |
| 3 - A4087 East | 412 | 103 | 166 | 938 | 0.439 | 412 | 778 | 0.8 | 0.8 | 7.210 | A |

**09:15 - 09:30**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1 - A4087 West** | 837 | 209 | 48 | 973 | 0.860 | 837 | 530 | 6.1 | 6.1 | 26.932 | D |
| **2 - Ffordd Coed Mawr** | 252 | 63 | 692 | 406 | 0.621 | 252 | 193 | 1.6 | 1.7 | 23.913 | C |
| **3 - A4087 East** | 412 | 103 | 166 | 938 | 0.439 | 412 | 778 | 0.8 | 0.8 | 7.210 | A |

# 2024 Base With Foodstore, PM

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Mini-roundabout | | Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 86% of the total flow for the roundabout for one or more time segments] |

## Junction Network

### Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | untitled | Mini-roundabout | | 1, 2, 3 | 22.86 | C |

### Junction Network Options

| Driving side | Lighting | Road surface | In London |
|---|---|---|---|
| Left | Normal/unknown | Normal/unknown | |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|---|
| D8 | 2024 Base With Foodstore | PM | FLAT | 15:45 | 17:15 | 90 | 15 | ✓ |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|---|---|
| ✓ | ✓ | HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| 1 - A4087 West | | FLAT | ✓ | 778 | 100.000 |
| 2 - Ffordd Coed Mawr | | FLAT | ✓ | 256 | 100.000 |
| 3 - A4087 East | | FLAT | ✓ | 795 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Ffordd Coed Mawr | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 138 | 640 |
| | 2 - Ffordd Coed Mawr | 182 | 0 | 74 |
| | 3 - A4087 East | 737 | 58 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Ffordd Coed Mawr | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 2 | 2 |
| | 2 - Ffordd Coed Mawr | 1 | 0 | 0 |
| | 3 - A4087 East | 1 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| 1 - A4087 West | 0.80 | 19.39 | 4.1 | C | 778 | 1167 |
| 2 - Ffordd Coed Mawr | 0.58 | 19.91 | 1.4 | C | 256 | 384 |
| 3 - A4087 East | 0.86 | 27.19 | 5.9 | D | 795 | 1193 |

## Main Results for each time segment

### 15:45 - 16:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 778 | 195 | 57 | 968 | 0.804 | 763 | 897 | 0.0 | 3.8 | 16.863 | C |
| 2 - Ffordd Coed Mawr | 256 | 64 | 628 | 446 | 0.574 | 251 | 192 | 0.0 | 1.3 | 18.164 | C |
| 3 - A4087 East | 795 | 199 | 178 | 930 | 0.855 | 775 | 700 | 0.0 | 5.0 | 21.297 | C |

### 16:00 - 16:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 778 | 195 | 58 | 967 | 0.805 | 777 | 917 | 3.8 | 4.0 | 19.177 | C |
| 2 - Ffordd Coed Mawr | 256 | 64 | 639 | 438 | 0.584 | 256 | 196 | 1.3 | 1.4 | 19.794 | C |
| 3 - A4087 East | 795 | 199 | 182 | 927 | 0.857 | 793 | 713 | 5.0 | 5.5 | 26.307 | D |

### 16:15 - 16:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 778 | 195 | 58 | 967 | 0.805 | 778 | 918 | 4.0 | 4.1 | 19.308 | C |
| 2 - Ffordd Coed Mawr | 256 | 64 | 640 | 438 | 0.584 | 256 | 196 | 1.4 | 1.4 | 19.875 | C |
| 3 - A4087 East | 795 | 199 | 182 | 927 | 0.857 | 794 | 714 | 5.5 | 5.7 | 26.821 | D |

### 16:30 - 16:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 778 | 195 | 58 | 967 | 0.805 | 778 | 919 | 4.1 | 4.1 | 19.355 | C |
| 2 - Ffordd Coed Mawr | 256 | 64 | 640 | 438 | 0.584 | 256 | 196 | 1.4 | 1.4 | 19.893 | C |
| 3 - A4087 East | 795 | 199 | 182 | 927 | 0.857 | 795 | 714 | 5.7 | 5.8 | 27.021 | D |

### 16:45 - 17:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 778 | 195 | 58 | 967 | 0.805 | 778 | 919 | 4.1 | 4.1 | 19.380 | C |
| 2 - Ffordd Coed Mawr | 256 | 64 | 640 | 438 | 0.585 | 256 | 196 | 1.4 | 1.4 | 19.907 | C |
| 3 - A4087 East | 795 | 199 | 182 | 927 | 0.857 | 795 | 714 | 5.8 | 5.8 | 27.127 | D |

**17:00 - 17:15**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1 - A4087 West** | 778 | 195 | 58 | 967 | 0.805 | 778 | 919 | 4.1 | 4.1 | 19.394 | C |
| **2 - Ffordd Coed Mawr** | 256 | 64 | 640 | 438 | 0.585 | 256 | 196 | 1.4 | 1.4 | 19.912 | C |
| **3 - A4087 East** | 795 | 199 | 182 | 927 | 0.857 | 795 | 714 | 5.8 | 5.9 | 27.192 | D |

# 2024 Base With Foodstore, SAT

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Mini-roundabout | | Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 90% of the total flow for the roundabout for one or more time segments] |

## Junction Network

### Junctions

| Junction | Name | Junction type | Use circulating lanes | Arm order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | untitled | Mini-roundabout | | 1, 2, 3 | 28.14 | D |

### Junction Network Options

| Driving side | Lighting | Road surface | In London |
|---|---|---|---|
| Left | Normal/unknown | Normal/unknown | |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|---|---|---|---|---|---|---|---|---|
| D9 | 2024 Base With Foodstore | SAT | FLAT | 11:30 | 13:00 | 90 | 15 | ✓ |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|---|---|
| ✓ | ✓ | HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|---|
| 1 - A4087 West | | FLAT | ✓ | 832 | 100.000 |
| 2 - Ffordd Coed Mawr | | FLAT | ✓ | 187 | 100.000 |
| 3 - A4087 East | | FLAT | ✓ | 852 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Ffordd Coed Mawr | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 118 | 714 |
| | 2 - Ffordd Coed Mawr | 115 | 0 | 72 |
| | 3 - A4087 East | 779 | 73 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | 1 - A4087 West | 2 - Ffordd Coed Mawr | 3 - A4087 East |
| From | 1 - A4087 West | 0 | 2 | 1 |
| | 2 - Ffordd Coed Mawr | 2 | 0 | 0 |
| | 3 - A4087 East | 1 | 2 | 0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|---|---|---|---|---|---|---|
| 1 - A4087 West | 0.87 | 28.68 | 6.5 | D | 832 | 1248 |
| 2 - Ffordd Coed Mawr | 0.48 | 17.75 | 0.9 | C | 187 | 281 |
| 3 - A4087 East | 0.88 | 29.91 | 6.9 | D | 852 | 1278 |

## Main Results for each time segment

### 11:30 - 11:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 832 | 208 | 71 | 959 | 0.868 | 810 | 871 | 0.0 | 5.5 | 22.018 | C |
| 2 - Ffordd Coed Mawr | 187 | 47 | 695 | 404 | 0.463 | 184 | 186 | 0.0 | 0.8 | 16.313 | C |
| 3 - A4087 East | 852 | 213 | 113 | 973 | 0.875 | 829 | 766 | 0.0 | 5.8 | 22.497 | C |

### 11:45 - 12:00

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 832 | 208 | 73 | 957 | 0.869 | 830 | 892 | 5.5 | 6.0 | 27.596 | D |
| 2 - Ffordd Coed Mawr | 187 | 47 | 712 | 393 | 0.476 | 187 | 191 | 0.8 | 0.9 | 17.623 | C |
| 3 - A4087 East | 852 | 213 | 115 | 972 | 0.877 | 850 | 784 | 5.8 | 6.4 | 28.614 | D |

### 12:00 - 12:15

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 832 | 208 | 73 | 957 | 0.869 | 831 | 893 | 6.0 | 6.2 | 28.202 | D |
| 2 - Ffordd Coed Mawr | 187 | 47 | 713 | 393 | 0.476 | 187 | 191 | 0.9 | 0.9 | 17.709 | C |
| 3 - A4087 East | 852 | 213 | 115 | 972 | 0.877 | 851 | 785 | 6.4 | 6.6 | 29.335 | D |

### 12:15 - 12:30

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 832 | 208 | 73 | 957 | 0.869 | 832 | 894 | 6.2 | 6.3 | 28.454 | D |
| 2 - Ffordd Coed Mawr | 187 | 47 | 714 | 392 | 0.477 | 187 | 191 | 0.9 | 0.9 | 17.733 | C |
| 3 - A4087 East | 852 | 213 | 115 | 972 | 0.877 | 851 | 786 | 6.6 | 6.7 | 29.637 | D |

### 12:30 - 12:45

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - A4087 West | 832 | 208 | 73 | 957 | 0.869 | 832 | 894 | 6.3 | 6.4 | 28.590 | D |
| 2 - Ffordd Coed Mawr | 187 | 47 | 714 | 392 | 0.477 | 187 | 191 | 0.9 | 0.9 | 17.743 | C |
| 3 - A4087 East | 852 | 213 | 115 | 972 | 0.877 | 852 | 786 | 6.7 | 6.8 | 29.801 | D |

**12:45 - 13:00**

| Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1 - A4087 West** | 832 | 208 | 73 | 957 | 0.869 | 832 | 894 | 6.4 | 6.5 | 28.676 | D |
| **2 - Ffordd Coed Mawr** | 187 | 47 | 714 | 392 | 0.477 | 187 | 191 | 0.9 | 0.9 | 17.748 | C |
| **3 - A4087 East** | 852 | 213 | 115 | 972 | 0.877 | 852 | 786 | 6.8 | 6.9 | 29.905 | D |

# Junctions 9

## PICADY 9 - Priority Intersection Module

Version: 9.5.0.6896
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** 20190116 Toronnen-A4087.j9
**Path:** K:\TPS\Bangor, Caernarfon Road\Calcs\Junction Modelling\PICADY
**Report generation date:** 16/01/2019 14:10:17

»2024, AM
»2024, PM
»2024, SAT

### Summary of junction performance

| | AM | | | | PM | | | | SAT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| | 2024 | | | | | | | | | | | |
| Stream B-AC | 0.0 | 0.00 | 0.00 | A | 0.1 | 13.92 | 0.07 | B | 0.1 | 13.88 | 0.11 | B |
| Stream C-AB | 0.0 | 8.46 | 0.01 | A | 0.0 | 7.96 | 0.01 | A | 0.0 | 8.13 | 0.02 | A |

*Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

### File summary

#### File Description

| | |
|---|---|
| **Title** | |
| **Location** | |
| **Site number** | |
| **Date** | 16/01/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | CCL\jcarver |
| **Description** | |

### Units

| Distance units | Speed units | Traffic units input | Traffic units results | Flow units | Average delay units | Total delay units | Rate of delay units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |

### Analysis Options

| Calculate Queue Percentiles | Calculate residual capacity | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) |
|---|---|---|---|---|
| | | 0.85 | 36.00 | 20.00 |

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|---|---|---|---|---|---|---|
| D1 | 2024 | AM | ONE HOUR | 08:00 | 09:30 | 15 |
| D2 | 2024 | PM | ONE HOUR | 15:45 | 17:15 | 15 |
| D3 | 2024 | SAT | ONE HOUR | 11:30 | 13:00 | 15 |

## Analysis Set Details

| ID | Network flow scaling factor (%) |
|---|---|
| A1 | 100.000 |

# 2024, AM

### Data Errors and Warnings

*No errors or warnings*

## Junction Network

### Junctions

| Junction | Name | Junction type | Major road direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | Toronnen/A4087 Caernarfon Rd | T-Junction | Two-way | | 0.02 | A |

### Junction Network Options

| Driving side | Lighting |
|---|---|
| Left | Normal/unknown |

## Arms

### Arms

| Arm | Name | Description | Arm type |
|---|---|---|---|
| A | A4087 - West | | Major |
| B | Toronnen | | Minor |
| C | A4087 East | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Has right turn bay | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|---|---|---|---|---|---|---|
| C - A4087 East | 9.40 | | | 100.0 | ✓ | 1.00 |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor arm type | Lane width (m) | Visibility to left (m) | Visibility to right (m) |
|---|---|---|---|---|
| B - Toronnen | One lane | 4.00 | 34 | 22 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 549 | 0.085 | 0.216 | 0.136 | 0.308 |
| 1 | B-C | 702 | 0.092 | 0.232 | - | - |
| 1 | C-B | 632 | 0.209 | 0.209 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|---|---|---|---|---|---|---|
| D1 | 2024 | AM | ONE HOUR | 08:00 | 09:30 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|
| HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|
| A - A4087 - West | | ✓ | 907 | 100.000 |
| B - Toronnen | | ✓ | 4 | 100.000 |
| C - A4087 East | | ✓ | 571 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - A4087 - West | B - Toronnen | C - A4087 East |
| From | A - A4087 - West | 0 | 8 | 899 |
| | B - Toronnen | 2 | 0 | 2 |
| | C - A4087 East | 567 | 4 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - A4087 - West | B - Toronnen | C - A4087 East |
| From | A - A4087 - West | 0 | 67 | 3 |
| | B - Toronnen | 0 | 0 | 0 |
| | C - A4087 East | 4 | 0 | 0 |

## Results

### Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.00 | 0.00 | 0.0 | A |
| C-AB | 0.01 | 8.46 | 0.0 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

### Main Results for each time segment

#### 08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 0 | 422 | 0.000 | 0 | 0.0 | 0.000 | A |
| C-AB | 3 | 492 | 0.006 | 3 | 0.0 | 7.362 | A |
| C-A | 427 | | | 427 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 677 | | | 677 | | | |

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 0 | 382 | 0.000 | 0 | 0.0 | 0.000 | A |
| C-AB | 4 | 466 | 0.008 | 4 | 0.0 | 7.792 | A |
| C-A | 510 | | | 510 | | | |
| A-B | 7 | | | 7 | | | |
| A-C | 808 | | | 808 | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 0 | 326 | 0.000 | 0 | 0.0 | 0.000 | A |
| C-AB | 4 | 430 | 0.010 | 4 | 0.0 | 8.463 | A |
| C-A | 624 | | | 624 | | | |
| A-B | 9 | | | 9 | | | |
| A-C | 990 | | | 990 | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 0 | 326 | 0.000 | 0 | 0.0 | 0.000 | A |
| C-AB | 4 | 430 | 0.010 | 4 | 0.0 | 8.463 | A |
| C-A | 624 | | | 624 | | | |
| A-B | 9 | | | 9 | | | |
| A-C | 990 | | | 990 | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 0 | 382 | 0.000 | 0 | 0.0 | 0.000 | A |
| C-AB | 4 | 466 | 0.008 | 4 | 0.0 | 7.794 | A |
| C-A | 510 | | | 510 | | | |
| A-B | 7 | | | 7 | | | |
| A-C | 808 | | | 808 | | | |

### 09:15 - 09:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 0 | 422 | 0.000 | 0 | 0.0 | 0.000 | A |
| C-AB | 3 | 492 | 0.006 | 3 | 0.0 | 7.365 | A |
| C-A | 427 | | | 427 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 677 | | | 677 | | | |

# 2024, PM

### Data Errors and Warnings

*No errors or warnings*

## Junction Network

### Junctions

| Junction | Name | Junction type | Major road direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | Toronnen/A4087 Caernarfon Rd | T-Junction | Two-way | | 0.17 | A |

### Junction Network Options

| Driving side | Lighting |
|---|---|
| Left | Normal/unknown |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|---|---|---|---|---|---|---|
| D2 | 2024 | PM | ONE HOUR | 15:45 | 17:15 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|
| HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|
| A - A4087 - West | | ✓ | 814 | 100.000 |
| B - Toronnen | | ✓ | 19 | 100.000 |
| C - A4087 East | | ✓ | 967 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - A4087 - West | B - Toronnen | C - A4087 East |
| From | A - A4087 - West | 0 | 9 | 805 |
| | B - Toronnen | 11 | 0 | 8 |
| | C - A4087 East | 962 | 5 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - A4087 - West | B - Toronnen | C - A4087 East |
| From | A - A4087 - West | 0 | 0 | 2 |
| | B - Toronnen | 0 | 0 | 0 |
| | C - A4087 East | 1 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.07 | 13.92 | 0.1 | B |
| C-AB | 0.01 | 7.96 | 0.0 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

## Main Results for each time segment

### 15:45 - 16:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 14 | 390 | 0.037 | 14 | 0.0 | 9.580 | A |
| C-AB | 4 | 509 | 0.007 | 4 | 0.0 | 7.119 | A |
| C-A | 724 | | | 724 | | | |
| A-B | 7 | | | 7 | | | |
| A-C | 606 | | | 606 | | | |

### 16:00 - 16:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 17 | 345 | 0.050 | 17 | 0.1 | 10.987 | B |
| C-AB | 5 | 487 | 0.009 | 5 | 0.0 | 7.457 | A |
| C-A | 865 | | | 865 | | | |
| A-B | 8 | | | 8 | | | |
| A-C | 724 | | | 724 | | | |

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 21 | 280 | 0.075 | 21 | 0.1 | 13.909 | B |
| C-AB | 6 | 458 | 0.012 | 6 | 0.0 | 7.960 | A |
| C-A | 1059 | | | 1059 | | | |
| A-B | 10 | | | 10 | | | |
| A-C | 886 | | | 886 | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 21 | 280 | 0.075 | 21 | 0.1 | 13.920 | B |
| C-AB | 6 | 458 | 0.012 | 6 | 0.0 | 7.960 | A |
| C-A | 1059 | | | 1059 | | | |
| A-B | 10 | | | 10 | | | |
| A-C | 886 | | | 886 | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 17 | 345 | 0.050 | 17 | 0.1 | 10.996 | B |
| C-AB | 5 | 487 | 0.009 | 5 | 0.0 | 7.460 | A |
| C-A | 865 | | | 865 | | | |
| A-B | 8 | | | 8 | | | |
| A-C | 724 | | | 724 | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 14 | 390 | 0.037 | 14 | 0.0 | 9.595 | A |
| C-AB | 4 | 509 | 0.007 | 4 | 0.0 | 7.122 | A |
| C-A | 724 | | | 724 | | | |
| A-B | 7 | | | 7 | | | |
| A-C | 606 | | | 606 | | | |

# 2024, SAT

### Data Errors and Warnings

*No errors or warnings*

## Junction Network

### Junctions

| Junction | Name | Junction type | Major road direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | Toronnen/A4087 Caernarfon Rd | T-Junction | Two-way | | 0.25 | A |

### Junction Network Options

| Driving side | Lighting |
|---|---|
| Left | Normal/unknown |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|---|---|---|---|---|---|---|
| D3 | 2024 | SAT | ONE HOUR | 11:30 | 13:00 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|
| HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|
| A - A4087 - West | | ✓ | 881 | 100.000 |
| B - Toronnen | | ✓ | 28 | 100.000 |
| C - A4087 East | | ✓ | 947 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - A4087 - West | B - Toronnen | C - A4087 East |
| From | A - A4087 - West | 0 | 15 | 866 |
| | B - Toronnen | 13 | 0 | 15 |
| | C - A4087 East | 938 | 9 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - A4087 - West | B - Toronnen | C - A4087 East |
| From | A - A4087 - West | 0 | 0 | 1 |
| | B - Toronnen | 0 | 0 | 0 |
| | C - A4087 East | 1 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.11 | 13.88 | 0.1 | B |
| C-AB | 0.02 | 8.13 | 0.0 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

## Main Results for each time segment

### 11:30 - 11:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 21 | 405 | 0.052 | 21 | 0.1 | 9.377 | A |
| C-AB | 7 | 503 | 0.014 | 7 | 0.0 | 7.254 | A |
| C-A | 706 | | | 706 | | | |
| A-B | 11 | | | 11 | | | |
| A-C | 652 | | | 652 | | | |

### 11:45 - 12:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 25 | 358 | 0.070 | 25 | 0.1 | 10.801 | B |
| C-AB | 8 | 481 | 0.017 | 8 | 0.0 | 7.613 | A |
| C-A | 843 | | | 843 | | | |
| A-B | 13 | | | 13 | | | |
| A-C | 779 | | | 779 | | | |

### 12:00 - 12:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 31 | 290 | 0.106 | 31 | 0.1 | 13.861 | B |
| C-AB | 10 | 453 | 0.023 | 10 | 0.0 | 8.132 | A |
| C-A | 1032 | | | 1032 | | | |
| A-B | 17 | | | 17 | | | |
| A-C | 953 | | | 953 | | | |

### 12:15 - 12:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 31 | 290 | 0.106 | 31 | 0.1 | 13.878 | B |
| C-AB | 10 | 453 | 0.023 | 10 | 0.0 | 8.132 | A |
| C-A | 1032 | | | 1032 | | | |
| A-B | 17 | | | 17 | | | |
| A-C | 953 | | | 953 | | | |

### 12:30 - 12:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 25 | 358 | 0.070 | 25 | 0.1 | 10.816 | B |
| C-AB | 8 | 481 | 0.017 | 8 | 0.0 | 7.614 | A |
| C-A | 843 | | | 843 | | | |
| A-B | 13 | | | 13 | | | |
| A-C | 779 | | | 779 | | | |

### 12:45 - 13:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 21 | 405 | 0.052 | 21 | 0.1 | 9.391 | A |
| C-AB | 7 | 503 | 0.014 | 7 | 0.0 | 7.254 | A |
| C-A | 706 | | | 706 | | | |
| A-B | 11 | | | 11 | | | |
| A-C | 652 | | | 652 | | | |

# Junctions 9

## PICADY 9 - Priority Intersection Module

Version: 9.5.0.6896
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** 20190118 Turn to Dunelm.j9
**Path:** K:\TPS\Bangor, Caernarfon Road\Calcs\Junction Modelling\PICADY
**Report generation date:** 07/02/2019 11:44:55

---

»2024, AM With Foodstore
»2024, PM With Foodstore
»2024, SAT With Foodstore

### Summary of junction performance

| | AM With Foodstore | | | PM With Foodstore | | | SAT With Foodstore | | |
|---|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC |
| | 2024 | | | | | | | | |
| Stream B-AC | 0.0 | 5.14 | 0.01 | 0.1 | 5.49 | 0.06 | 0.1 | 5.94 | 0.11 |
| Stream C-AB | 0.0 | 6.26 | 0.02 | 0.1 | 6.75 | 0.08 | 0.2 | 7.23 | 0.14 |

*There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.*

*Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

### File summary

#### File Description

| | |
|---|---|
| Title | |
| Location | |
| Site number | |
| Date | 18/01/2019 |
| Version | |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | |
| Enumerator | CCL\jcarver |
| Description | |

### Units

| Distance units | Speed units | Traffic units input | Traffic units results | Flow units | Average delay units | Total delay units | Rate of delay units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |

### Analysis Options

| Calculate Queue Percentiles | Calculate residual capacity | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) |
|---|---|---|---|---|
| | | 0.85 | 36.00 | 20.00 |

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|---|---|---|---|---|---|---|
| D1 | 2024 | AM With Foodstore | ONE HOUR | 08:00 | 09:30 | 15 |
| D2 | 2024 | PM With Foodstore | ONE HOUR | 15:45 | 17:15 | 15 |
| D3 | 2024 | SAT With Foodstore | ONE HOUR | 11:30 | 13:00 | 15 |

## Analysis Set Details

| ID | Network flow scaling factor (%) |
|---|---|
| A1 | 100.000 |

# 2024, AM With Foodstore

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name | Junction type | Major road direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | | 0.91 | A |

### Junction Network Options

| Driving side | Lighting |
|---|---|
| Left | Normal/unknown |

## Arms

### Arms

| Arm | Name | Description | Arm type |
|---|---|---|---|
| A | Aldi Arm | | Major |
| B | Dunelm Mill | | Minor |
| C | Access Rd | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Has right turn bay | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|---|---|---|---|---|---|---|
| C - Access Rd | 7.00 | | | 30.0 | ✓ | 1.00 |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor arm type | Lane width (m) | Visibility to left (m) | Visibility to right (m) |
|---|---|---|---|---|
| B - Dunelm Mill | One lane | 3.50 | 30 | 90 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 558 | 0.097 | 0.246 | 0.155 | 0.351 |
| 1 | B-C | 715 | 0.105 | 0.265 | - | - |
| 1 | C-B | 591 | 0.219 | 0.219 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Demand

## Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|---|---|---|---|---|---|---|
| D1 | 2024 | AM With Foodstore | ONE HOUR | 08:00 | 09:30 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|
| HV Percentages | 2.00 |

## Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|
| A - Aldi Arm | | ✓ | 32 | 100.000 |
| B - Dunelm Mill | | ✓ | 5 | 100.000 |
| C - Access Rd | | ✓ | 53 | 100.000 |

# Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Aldi Arm | B - Dunelm Mill | C - Access Rd |
| From | A - Aldi Arm | 0 | 0 | 32 |
| | B - Dunelm Mill | 0 | 0 | 5 |
| | C - Access Rd | 44 | 9 | 0 |

# Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Aldi Arm | B - Dunelm Mill | C - Access Rd |
| From | A - Aldi Arm | 0 | 0 | 0 |
| | B - Dunelm Mill | 0 | 0 | 0 |
| | C - Access Rd | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.01 | 5.14 | 0.0 | A |
| C-AB | 0.02 | 6.26 | 0.0 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

## Main Results for each time segment

### 08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 4 | 708 | 0.005 | 4 | 0.0 | 5.109 | A |
| C-AB | 7 | 586 | 0.012 | 7 | 0.0 | 6.209 | A |
| C-A | 33 | | | 33 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 24 | | | 24 | | | |

### 08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 4 | 707 | 0.006 | 4 | 0.0 | 5.123 | A |
| C-AB | 8 | 586 | 0.014 | 8 | 0.0 | 6.233 | A |
| C-A | 40 | | | 40 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 29 | | | 29 | | | |

### 08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 6 | 705 | 0.008 | 5 | 0.0 | 5.143 | A |
| C-AB | 10 | 584 | 0.017 | 10 | 0.0 | 6.265 | A |
| C-A | 48 | | | 48 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 35 | | | 35 | | | |

### 08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 6 | 705 | 0.008 | 6 | 0.0 | 5.143 | A |
| C-AB | 10 | 584 | 0.017 | 10 | 0.0 | 6.265 | A |
| C-A | 48 | | | 48 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 35 | | | 35 | | | |

### 09:00 - 09:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 4 | 707 | 0.006 | 5 | 0.0 | 5.125 | A |
| C-AB | 8 | 586 | 0.014 | 8 | 0.0 | 6.235 | A |
| C-A | 40 | | | 40 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 29 | | | 29 | | | |

### 09:15 - 09:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 4 | 708 | 0.005 | 4 | 0.0 | 5.109 | A |
| C-AB | 7 | 586 | 0.012 | 7 | 0.0 | 6.210 | A |
| C-A | 33 | | | 33 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 24 | | | 24 | | | |

# 2024, PM With Foodstore

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name | Junction type | Major road direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | | 2.20 | A |

### Junction Network Options

| Driving side | Lighting |
|---|---|
| Left | Normal/unknown |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|---|---|---|---|---|---|---|
| D2 | 2024 | PM With Foodstore | ONE HOUR | 15:45 | 17:15 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|
| HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|
| A - Aldi Arm | | ✓ | 72 | 100.000 |
| B - Dunelm Mill | | ✓ | 35 | 100.000 |
| C - Access Rd | | ✓ | 110 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Aldi Arm | B - Dunelm Mill | C - Access Rd |
| From | A - Aldi Arm | 0 | 0 | 72 |
| | B - Dunelm Mill | 0 | 0 | 35 |
| | C - Access Rd | 68 | 42 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Aldi Arm | B - Dunelm Mill | C - Access Rd |
| From | A - Aldi Arm | 0 | 0 | 0 |
| | B - Dunelm Mill | 0 | 0 | 0 |
| | C - Access Rd | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.06 | 5.49 | 0.1 | A |
| C-AB | 0.08 | 6.75 | 0.1 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

## Main Results for each time segment

### 15:45 - 16:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 26 | 700 | 0.038 | 26 | 0.0 | 5.338 | A |
| C-AB | 32 | 582 | 0.055 | 32 | 0.1 | 6.533 | A |
| C-A | 51 | | | 51 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 54 | | | 54 | | | |

### 16:00 - 16:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 31 | 698 | 0.045 | 31 | 0.0 | 5.404 | A |
| C-AB | 38 | 581 | 0.065 | 38 | 0.1 | 6.627 | A |
| C-A | 61 | | | 61 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 65 | | | 65 | | | |

### 16:15 - 16:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 39 | 694 | 0.056 | 38 | 0.1 | 5.494 | A |
| C-AB | 47 | 580 | 0.081 | 47 | 0.1 | 6.750 | A |
| C-A | 74 | | | 74 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 79 | | | 79 | | | |

### 16:30 - 16:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 39 | 694 | 0.056 | 39 | 0.1 | 5.494 | A |
| C-AB | 47 | 580 | 0.081 | 47 | 0.1 | 6.752 | A |
| C-A | 74 | | | 74 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 79 | | | 79 | | | |

### 16:45 - 17:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 31 | 698 | 0.045 | 32 | 0.0 | 5.407 | A |
| C-AB | 38 | 581 | 0.065 | 38 | 0.1 | 6.629 | A |
| C-A | 61 | | | 61 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 65 | | | 65 | | | |

### 17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 26 | 700 | 0.038 | 26 | 0.0 | 5.343 | A |
| C-AB | 32 | 582 | 0.055 | 32 | 0.1 | 6.540 | A |
| C-A | 51 | | | 51 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 54 | | | 54 | | | |

# 2024, SAT With Foodstore

### Data Errors and Warnings

| Severity | Area | Item | Description |
|---|---|---|---|
| Warning | Vehicle Mix | | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name | Junction type | Major road direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | untitled | T-Junction | Two-way | | 2.57 | A |

### Junction Network Options

| Driving side | Lighting |
|---|---|
| Left | Normal/unknown |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|---|---|---|---|---|---|---|
| D3 | 2024 | SAT With Foodstore | ONE HOUR | 11:30 | 13:00 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|---|---|
| HV Percentages | 2.00 |

### Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|---|---|---|---|---|
| A - Aldi Arm | | ✓ | 120 | 100.000 |
| B - Dunelm Mill | | ✓ | 67 | 100.000 |
| C - Access Rd | | ✓ | 172 | 100.000 |

## Origin-Destination Data

### Demand (PCU/hr)

| | | To | | |
|---|---|---|---|---|
| | | A - Aldi Arm | B - Dunelm Mill | C - Access Rd |
| From | A - Aldi Arm | 0 | 0 | 120 |
| | B - Dunelm Mill | 0 | 0 | 67 |
| | C - Access Rd | 101 | 71 | 0 |

## Vehicle Mix

### Heavy Vehicle Percentages

| | | To | | |
|---|---|---|---|---|
| | | A - Aldi Arm | B - Dunelm Mill | C - Access Rd |
| From | A - Aldi Arm | 0 | 0 | 0 |
| | B - Dunelm Mill | 0 | 0 | 0 |
| | C - Access Rd | 0 | 0 | 0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.11 | 5.94 | 0.1 | A |
| C-AB | 0.14 | 7.23 | 0.2 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

## Main Results for each time segment

### 11:30 - 11:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 50 | 691 | 0.073 | 50 | 0.1 | 5.617 | A |
| C-AB | 54 | 579 | 0.094 | 54 | 0.1 | 6.858 | A |
| C-A | 75 | | | 75 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 90 | | | 90 | | | |

### 11:45 - 12:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 60 | 686 | 0.088 | 60 | 0.1 | 5.751 | A |
| C-AB | 65 | 578 | 0.112 | 65 | 0.1 | 7.017 | A |
| C-A | 90 | | | 90 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 108 | | | 108 | | | |

### 12:00 - 12:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 74 | 680 | 0.109 | 74 | 0.1 | 5.940 | A |
| C-AB | 80 | 578 | 0.139 | 80 | 0.2 | 7.232 | A |
| C-A | 109 | | | 109 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 132 | | | 132 | | | |

### 12:15 - 12:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 74 | 680 | 0.109 | 74 | 0.1 | 5.940 | A |
| C-AB | 80 | 578 | 0.139 | 80 | 0.2 | 7.235 | A |
| C-A | 109 | | | 109 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 132 | | | 132 | | | |

### 12:30 - 12:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 60 | 686 | 0.088 | 60 | 0.1 | 5.753 | A |
| C-AB | 65 | 578 | 0.112 | 65 | 0.1 | 7.021 | A |
| C-A | 90 | | | 90 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 108 | | | 108 | | | |

### 12:45 - 13:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|---|---|---|---|---|---|---|---|
| B-AC | 50 | 691 | 0.073 | 51 | 0.1 | 5.625 | A |
| C-AB | 54 | 579 | 0.094 | 54 | 0.1 | 6.865 | A |
| C-A | 75 | | | 75 | | | |
| A-B | 0 | | | 0 | | | |
| A-C | 90 | | | 90 | | | |