

The logo for acstro, featuring the word in a bold, blue, sans-serif font. The background of the entire page is white with blue curved borders at the top and bottom.

# **Transport Statement**

**Penallta Road  
Ystrad Mynach**

**June 2025**

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Revision History

A	18 <sup>th</sup> December 2024	First Issue
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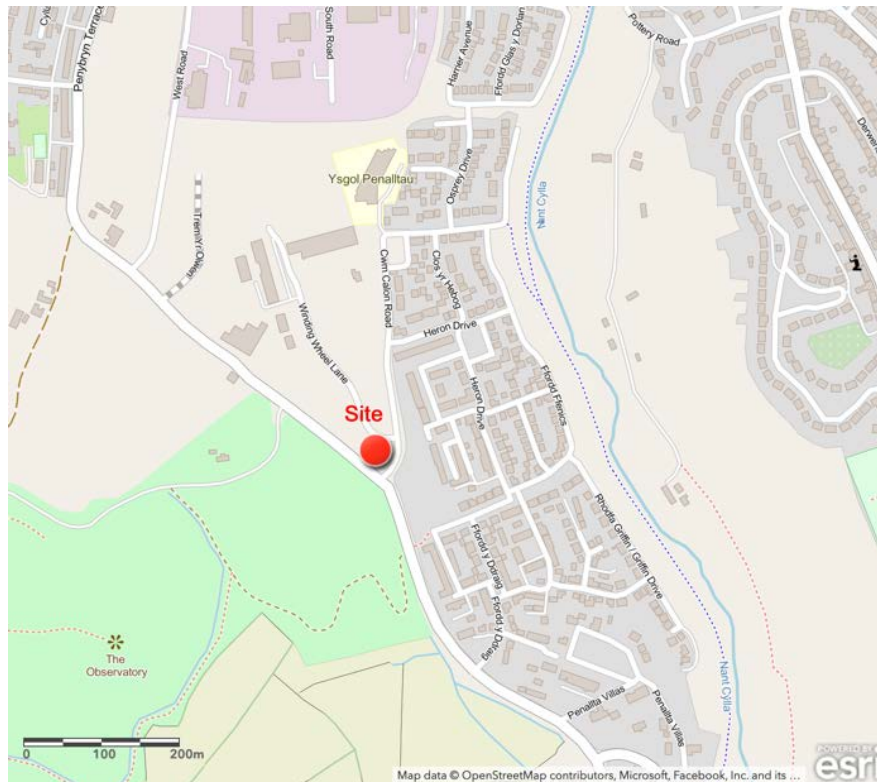
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## 1 Introduction

- 1.1 Acstro has been appointed by United Welsh Housing Association and Bluefield Land to prepare a Transport Statement to support a planning application for the development on land at Penallta Road, Ystrad Mynach. The general location of the site is shown in Figure 1.



**Figure 1 Location Plan**

- 1.2 The site is allocated for commercial development within the Council's adopted Local Development Plan. The proposal is to construct a retail unit and 33 affordable / social housing apartments, including 12 that will be restricted to over 55's.
- 1.3 This document considers the transport implications of the proposed development. It demonstrates that the site is in a sustainable location that is closely related to existing facilities and services and is accessible to pedestrians, cyclists and public transport users. It is also demonstrated that safe vehicular access to the site can be provided and adequate parking provision is made for the future occupiers and users of the site.
- 1.4 The structure of the Transport Statement is as follows:
- Section 2 describes the relevant planning policy context that is relevant in terms of transport issues;
  - Section 3 describes the site's proximity to services and facilities and its accessibility by all forms of transport.
  - Section 4 describes the proposed development and its access arrangements.
  - Section 5 provides a summary and conclusion.

## 2 Policy Context

### Future Wales - The National Plan 2040

- 2.1 This is the national development framework that sets out the direction for development in Wales to 2040.
- 2.2 Policies 11 and 12 relate to national and regional connectivity, respectively. These seek to encourage longer-distance trips to be made by public transport, while also making longer journeys possible by electric vehicles. In urban areas, to support sustainable growth and regeneration, the priorities are improving and integrating active travel and public transport. In rural areas the priorities are supporting the uptake of ultra-low emission vehicles and diversifying and sustaining local bus services. Active travel must be an essential and integral component of all new developments.
- 2.3 Planning authorities must act to reduce levels of car parking in urban areas, including supporting car-free developments in accessible locations and developments with car parking spaces that allow them to be converted to other uses over time. Where car parking is provided for new non-residential development, planning authorities should seek a minimum of 10% of car parking spaces to have electric vehicle charging points.

### Planning Policy Wales (12<sup>th</sup> Edition)

- 2.4 Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales.
- 2.5 In terms of transport related policies paragraph 4.1.1 states that “the planning system should enable people to access jobs and services through shorter, more efficient and sustainable journeys, by walking, cycling and public transport”.
- 2.6 Paragraph 4.1.10 states that “the planning system has a key role to play in reducing the need to travel and supporting sustainable transport, by facilitating developments which:
  - 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.”
- 2.7 PPW advocates a sustainable transport hierarchy for planning, the hierarchy being, from top to bottom:
  - Walking and Cycling
  - Public Transport
  - Ultra Low Emission Vehicles
  - Other Private Motor Vehicles
- 2.8 It is Welsh Government policy to require the use of a sustainable transport hierarchy in relation to new development, which prioritises walking, cycling and public transport ahead of the private motor vehicles.

- 2.9 The transport hierarchy recognises that Ultra Low Emission Vehicles (ULEV) also have an important role to play in the decarbonisation of transport, particularly in rural areas with limited public transport services. To this end the provision of ULEV charging points is encouraged within new developments.
- 2.10 PPW recommends (4.1.51) that “a design-led approach to the provision of car parking should be taken, which ensures an appropriate level of car parking is integrated in a way which does not dominate the development. Parking provision should be informed by the local context, including public transport accessibility, urban design principles and the objective of reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. Planning authorities must support schemes which keep parking levels down, especially off-street parking, when well designed”.

#### TAN18 Transportation

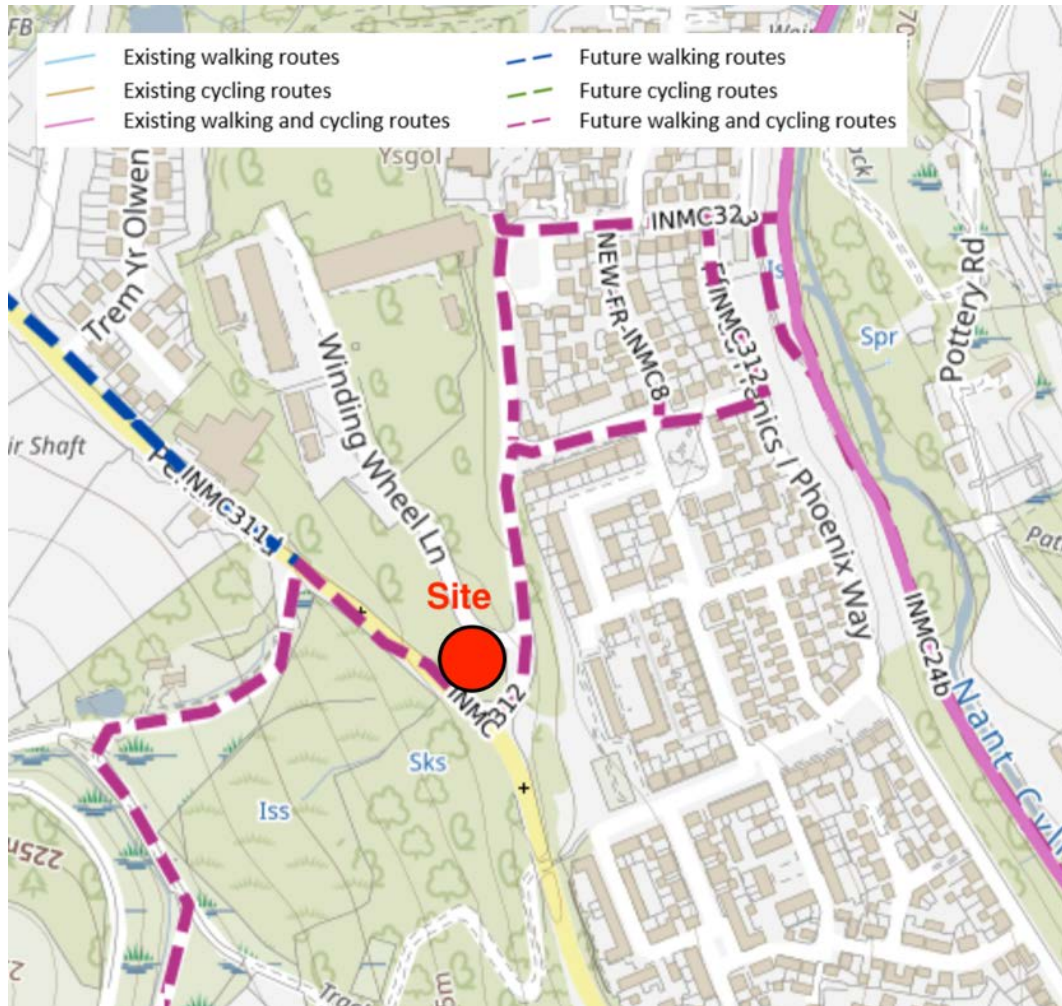
- 2.11 Planning Policy Wales Technical Advice Note 18 (TAN18) details the Welsh Government Government’s policies in terms of transportation and repeats the general principles advocated in PPW i.e. that development is encouraged in sustainable, accessible, locations that will reduce the need to travel by car. Its aim is to promote an efficient and sustainable transport system and to counter the negative impacts associated with road traffic growth, for example increased air pollution, green house gases and congestion (2.1). It sees the integration of transport and land use planning as key (2.3) in achieving the Welsh Government Governments’ sustainable development policy objectives by:
- promoting travel efficient settlement patterns;
  - ensuring new development is located where there is good access by public transport, walking and cycling thereby minimizing the need for travel and fostering social inclusion;
  - managing parking provision;
  - ensuring that new development includes appropriate provision for pedestrians, cycling, public transport, and traffic management and parking/servicing;
  - encouraging the location of development near other related uses to encourage multi-purpose trips; and
  - ensuring that transport infrastructure necessary to serve new development allows existing transport networks to continue to perform their identified functions.
- 2.12 The needs of walkers and cyclists must be taken into consideration and the use of these most sustainable forms of transport encouraged in all developments (TAN18 Chapter 6). Similarly, all development should be accessible by public transport (Chapter 7).

#### The Active Travel (Wales) Act 2013

- 2.13 The Active Travel (Wales) Act 2013 is Welsh Government legislation aimed to support an increase in the level of walking and cycling in Wales; to encourage a shift in travel behaviour to active travel modes, and to facilitate the building of walking and cycling infrastructure.
- 2.14 The Active Travel (Wales) Act 2013 requires local authorities in Wales to produce maps of walking and cycling networks in their local area, known as Active Travel Network Maps (ATNMs). These maps are designed to show two main things:



- **Existing routes** – those current walking and cycling routes that already meet Welsh Government active travel standards, meaning they can be readily used for everyday journeys, and
- **Future routes** – new routes that the local authority proposes to create in the future, as well as current routes that are planned for improvement to bring them up to the standards.



**Figure 2 Extract from Active Travel Network Map** (Source: DataMapWales)

- 2.15 Caerphilly's ATNM shows a future walking and cycling route (INMC312) passing the site, which links with the existing walking and cycling route (INMC24b) to the east. There is also a future walking route (INMC311) shown along Penallta Road, to the north of the site, that links to Penybryn and Gelligaer.

### Caerphilly Local Development Plan up to 2021

- 2.16 The application site forms part of the Penallta Colliery allocation for commercial development (retail / office) under policy CM4.6.
- 2.17 The following policies are considered relevant in terms of the access, highway and sustainable transport considerations for this development.
- 2.18 Policy SP19 relates to transport infrastructure improvements whilst SP20 sets out details of the County's road hierarchy.
- 2.19 Policy SP21 identifies various parking zones that relate to the implementation of the CSS Wales Parking Standards.
- 2.20 Policy CW1 seeks to minimise the number of car-borne trips generated by development by promoting other, more sustainable, modes of travel and promoting Green Travel Plans.
- 2.21 Policy CW3 relates to highway design considerations and requires that development proposals have regard to the safe and effective use of the transport network, provides for safe access onto the highway network and for safe movement within the development. Parking provision must be in accordance with Parking Standards.

### Caerphilly County Borough Supplementary Planning Guidance – Car Parking Standards (2017)

- 2.22 The Supplementary Planning Guidance (SPG) sets out the approach to be adopted in determining the appropriate level of parking provision within new development. The SPG is based on the CSS Wales – Wales Parking standards 2014, which sets out parking provision maxima based on the development type and location. The SPG describes six location types or zones of development, each with differing levels of accessibility to services and sustainable modes of travel. Maps of the County are provided showing the extent of each zone and the application site falls within a 'Zone 5 – countryside' location.
- 2.23 For developments in zone 5 locations, the following parking provision recommendations are relevant to this development.

Land Use	Car Parking	Disabled Parking	Cycle Parking (Minimum)
<b>Apartments</b>	1 space per bedroom (maximum requirement 3 spaces) & 1 visitor space per 5 units	Not Specified	1 stand per 5 bedrooms
<b>Self-contained elderly persons dwellings (not wardened)</b>	1 space per 2 - 4 units & 1 visitor space per 4 units	Not Specified	1 stand per 20 bed spaces
<b>Shops (201m<sup>2</sup> – 1000m<sup>2</sup>)</b>	1 space per 20m <sup>2</sup>	6% of total car park capacity	1 short stay & 1 long stay stand per 500m <sup>2</sup>

**Table 1 Adopted Car Parking Standards**

- 2.24 The adopted Parking Standards make no distinction between the type and tenure of housing but do allow for some flexibility in parking provision levels for residential developments where there is clear evidence that car ownership levels will be lower than normal.

- 2.25 There is compelling evidence that car ownership rates of households living in flats is significantly lower than those living in houses and that also lower for affordable/social housing compared to owner occupied housing. The differences are evident from a review of 2021 Census data for Caerphilly (authority area).
- 2.26 The Census data shows that only 45% of households living in flats<sup>1</sup> have access to a car or van whereas the comparable rate for households living in houses or bungalows almost twice this at 83%. Similarly, the car ownership rates for those living in social rented accommodation is significantly lower than for households of different types of tenure.

Accommodation Type	Total No of Households	No cars or vans in household		1 car or van in household		2 or more cars or vans in household	
Whole house or bungalow	69838	12010	17%	29365	42%	28463	41%
Flat, maisonette, apartment, caravan or other mobile or temporary structure	6417	3489	54%	2533	39%	395	6%

**Table 2 Car Ownership v Accommodation Type (Caerphilly Council Area) 2021 Census**

Tenure Type	Total No. of Households	No cars or vans in household		1 car or van in household		2 or more cars or vans in household	
Owned: Owns outright	27449	5072	18%	12904	47%	9473	35%
Owned: Owns with a mortgage or loan or shared ownership	24282	956	4%	8205	34%	15121	62%
Rented: Social rented	14325	6778	47%	5693	40%	1854	13%
Private rented or lives rent free	10204	2697	26%	5096	50%	2411	24%

**Table 3 Car Ownership v Tenure Type (Caerphilly Council Area) 2021 Census**

- 2.27 Only 53% of social rented households have access to a car. This compares to 74% for private rented households and 82% to 96% of owned households. Applying the 53% figure to the proposed development's 33 apartments would suggest that only some 18 of the development's households will have access to a car.

<sup>1</sup> Flats, maisonettes, apartments, caravans or other temporary structure



### 3 The Site

- 3.1 The application site's location and transport links are shown in context in Appendix 1.

*Appendix 1 Site Context*

- 3.2 The site was formerly part of the Penallta Colliery and is surrounded on three sides by Penallta Road, Cwm Calon Road and Winding Wheel Lane.

- 3.3 To the east of the site is a recent, sizeable, residential development.

#### Proximity to Services

- 3.4 The application site is located approximately 1.5km to the north of Ystrad Mynach's town centre, where a wide range of services and facilities can be accessed. The table below provides details of selected other amenities that are within a shorter walk from the application site than Ystrad Mynach's town centre.

Amenity	Location	Walk Distance
Bus Stops	Penallta Road	350m
School	Ysgol Gymraeg Penallta	350m
	Derwendeg Primary School	1400m
Community Facility	Penybryn Community Centre	850m
Food & Drink	Fox & Hounds, Penybryn	950m
Convenience Store	Magnum Stores, Cefn Hengoed	1400m
Leisure	Parc Penallta	900m




**Table 4 Walk Distances to Selected Amenities**

- 3.5 It is notable that there is no convenience store in close proximity to the site and the as a result it is likely that there are multiple trips generated from the nearby recent residential development areas to access the nearest stores, which are in Cefn Hengoed or Ystrad Mynach. A return trip to the nearest convenience store is of the order of 3km and therefore likely to be made by car rather than walked or cycled.

- 3.6 The proposed development includes a retail store, most suitable for use as a convenience store. This will benefit existing residents of nearby developments, reducing the distance that they need to travel to access existing comparable facilities and increasing the potential that trips can be made by more sustainable forms of transport.

#### Active Travel

- 3.7 Active travel is a term used to describe walking and cycling for purposeful journeys (also referred to as utility journeys) to a destination, or in combination with public transport. Whilst walking and cycling are in themselves healthy activities that are to be encouraged, it is when they displace car journeys that they deliver significant benefits. The Welsh Government's *Active Travel Act Guidance* (2021) suggests that many people will walk up to 2 miles (approximately 3km) or cycle up to 5 miles (approximately 8km) for utility journeys.

Mode	Less than 1 mile	Up to 2 miles	Up to 3 miles	Up to 4 miles	Up to 5 miles	Up to 7.5 miles	Up to 15 miles
	●	●	●	●	●	●	●
	●	●	●	●	●	●	●
e- 	●	●	●	●	●	●	●

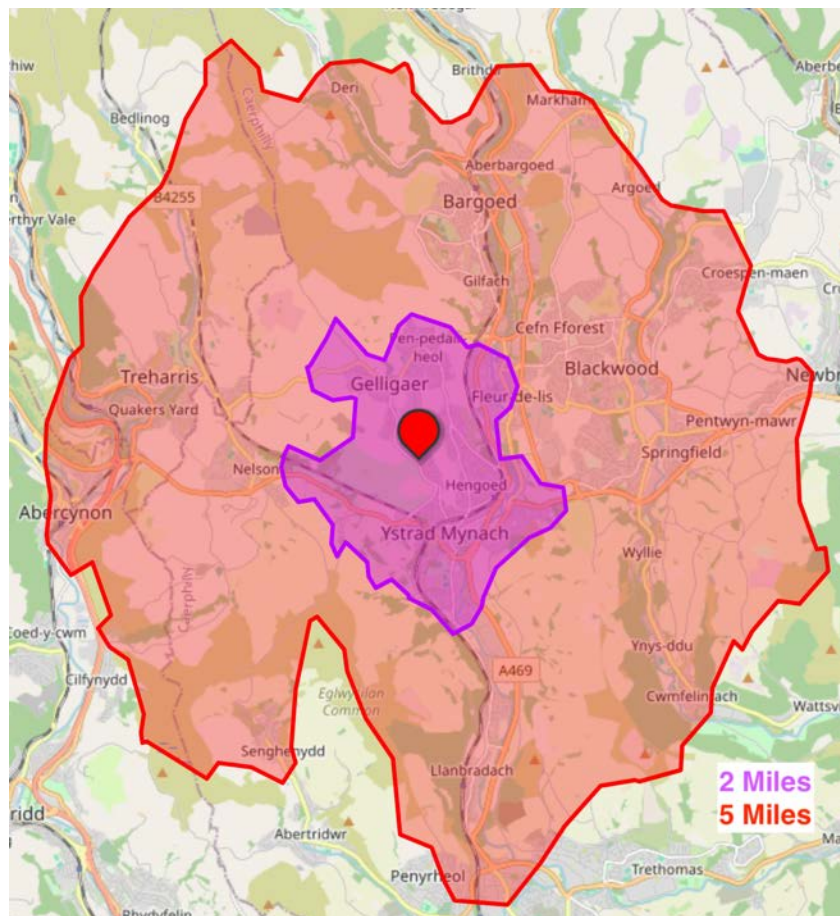
  

Colour	Average active user likelihood
●	Many users likely to travel this distance for utility journeys
●	Some users likely to travel this distance for utility journeys
●	Few or no users likely to travel this distance for utility journeys

**Figure 3 Typical Distance Range for Active Travel**

(Source: Active Travel Guidance Table 4.1)

- 3.8 Figure 4 shows the areas that are within 2 and 5 miles of the application site where utility journeys to and from the site may be viable on foot and by bike, respectively.



**Figure 4 2-Mile Walk Catchment**

- 3.9 It is evident therefore that there exists a wide range of destinations and services within walking and cycling distance that will meet the daily needs of the development's residents. As a result, people are more likely to travel by active modes to access those services and will not be reliant on the car. This delivers many benefits including a reduction in road congestion, improved air quality, improved physical and mental health and improved social interaction and sense of community.
- 3.10 The site is accessible to pedestrians from the footways that run along the site's boundaries with Penallta Road, Cwm Calon Road and Winding Wheel Lane. These connect with the wider pedestrian network that provide segregated routes to the local amenities described earlier, providing a safe environment for pedestrians.
- 3.11 As described in the previous chapter, Caerphilly's ATNM shows several future walking and cycling routes proposed in the vicinity of the site. These connect with an existing, largely traffic free, active travel route that to the east of the site that links Ystrad Mynach and Cefn Hengoed.

#### Public Transport

- 3.12 The nearest bus stops to the site are located on Penallta Road (Old Colliery stops), a 350m walk from the site. The services that can be accessed from these stops are described in the table below.

Service No.	Route	General Frequency
C16	Caerphilly - Nelson	Hourly
C17	Caerphilly - Bargoed	Hourly

**Table 5 Bus Services from Penallta Road Bus Stops**

- 3.13 Ystrad Mynach railway station is approximately 2km to the south of the site and provides access to regular rail services that run between Cardiff and Bargoed / Rhymney.

#### Highway Access

- 3.14 The site will be accessed from Winding Wheel Lane, which runs along its northern boundary. Winding Wheel Lane is a no-through road that also serves the former Penallta Colliery buildings. Winding Wheel Lane is accessed from Cwm Calon Road, which serves the adjacent residential development and connects to Penallta Road.
- 3.15 The local highway network operates safely with no injury collisions evident in a review of the latest 5-years of available records (2019 – 2023).

#### Summary

- 3.16 The site is in a sustainable and accessible location. The site is accessible to pedestrians, cyclists and public transport users. This increases the possibility that journeys generated by the development can be made by sustainable forms of transport.
- 3.17 There is a good range of services and facilities that cater for the day-to-day needs of future residents of the site available within reach by sustainable methods of travel. This reduces the need to travel by car and ensures that future residents without access to cars are not socially excluded.
- 3.18 The highway network serving the site operates safely.

## 4 Proposed Development

- 4.1 The proposed development comprises of a 372m<sup>2</sup> Retail unit and 33 affordable / social housing apartments, 12 of which will be for residents over 55.



**Figure 5 Proposed Development**

### Access

- 4.2 The proposed access arrangements are shown in Appendix 2.

#### *Appendix 2 Access Arrangement & Swept Path Analysis*

- 4.3 Access will be from Winding Wheel Lane, where a new junction will be formed. The development's access road will provide a 5.5m wide carriageway with 2m wide footways on both sides initially. After passing the access to the residential blocks A and B the footway on the western side of the estate road will terminate as there is no generator of pedestrian trips on this side of the street.
- 4.4 The development will be served by a cul-de-sac and a turning area capable of accommodating refuse collection vehicles and delivery lorries for the retail unit will be provided. A delivery bay is located near the access to the retail unit for its use. Swept path analysis has been undertaken to confirm the adequacy of the turning area and delivery bay arrangement.



### Parking

- 4.5 A total of 19 car parking spaces, including one accessible space for blue-badge holders, are provided for the retail unit, meeting the Parking Standard requirement for 1 space per 20m<sup>2</sup> of floor area.
- 4.6 The Parking Standards requirement for the 12 self-contained elderly persons units in Block B is for at least 3 car parking spaces to be provided (one space per 4 units).
- 4.7 A total of 29 car parking spaces is provided for the residents of the development. This allows for the 3 required for the elderly persons unit, leaving 26 spaces to serve the residents of the other 21 and any visitor parking demand that there may be.
- 4.8 It is considered that the parking provision is generous given the evidence of low car ownership rates amongst social rented and apartment households in Caerphilly County. This was outlined in Chapter 2 where 2021 Census data was provided showing that only 53% of social rented households have access to a car. This would equate to only 18 of the development's 33 households having access to a car.

### Trip Generation

- 4.9 The potential trip generation of the proposed development of the site has been estimated by reference to the TRICS trip rate database, a database of over 8,000 traffic surveys of various types of development throughout the UK and Ireland.
- 4.10 From the TRICS database evidence of the trip rates of developments of council / affordable flats in suburban, edge of town or neighbourhood area locations in mainland Britain (excluding Greater London) have been analysed. The detailed TRICS output is provided as Appendix 3 and summarised below.

#### *Appendix 3 TRICS Trip Rate Data – Residential*

Time Range	Trip Rate per Apartment			Trip Generation (33 Apartments)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
am peak Hour 08:00-09:00	0.03	0.129	0.159	1	4	5
pm Peak Hour 15:00-16:00	0.178	0.158	0.336	6	5	11

**Table 6 Vehicle Trip Rates & Proposed Development Trip Generation - Apartments**

- 4.11 The TRICS data suggests that the residential element of the proposed development will generate 5 to 11 peak hour vehicle movements.

- 4.12 For the retail store, evidence of the weekday trip rates of convenience store developments in suburban, edge of town or neighbourhood area locations in mainland Britain (excluding Greater London) have been analysed. The detailed TRICS output is provided as Appendix 4 and summarised below.

*Appendix 4 TRICS Trip Rate Data – Convenience Store*

Time Range	Trip Rate per 100m <sup>2</sup> GFA			Trip Attraction (372m <sup>2</sup> GFA)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
am peak Hour 08:00-09:00	7.288	7.319	14.607	27	27	54
pm Peak Hour 15:00-16:00	8.508	9.227	17.735	32	34	66

**Table 7 Vehicle Trip Rates & Proposed Development Trip Generation - Apartments**

- 4.13 The TRICS data suggests that the retail element of the proposed development will attract 54 to 66 peak hour vehicle movements.

Time Range	Residential			Retail			Total		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
am peak Hour 08:00-09:00	1	4	5	27	27	54	28	31	60*
pm Peak Hour 15:00-16:00	6	5	11	32	34	66	38	40*	77

\*apparent arithmetic error caused by rounding up

**Table 8 Total Development Trip Generation / Attraction**

- 4.14 Combining the residential and retail trip generation assessments results in a total of some 60 to 77 peak hour vehicle movements. This represents the number of vehicle movements moving to and from the development but is not representative of the development's impact on the surrounding highway network. This is because only a small proportion of trips attracted to the convenience store will be new to the highway network.
- 4.15 The majority of these trips will already be present on the surrounding transport network where a visit to the development will be incorporated into an existing pattern of travel behaviour. For example, there will be linked, pass-by, trips where people visit the development as part of an existing journey that passes the site or will divert their trip from existing similar retail / commercial offerings in the local area.
- 4.16 Research into the breakdown of trip types is provided in the TRICS Report 95-2 – Pass-by & Diverted Traffic. It states that primary or new trips account for only a small proportion, up to 8%, of traffic generated by a new retail development. It explains that *"the very low proportion of newly generated trips on the network suggested by all of the above research is not entirely surprising. People are unlikely to go shopping for food on a more frequent basis simply because a new store opens. It has even been suggested that new store openings can result in a decrease in total vehicle mileage on the network if the new store brings a shopping opportunity nearer to where an existing market is situated"* (TRICS Report 95-2 para. 3.8).



- 4.17 Based on this research we will take a robust approach and assume that new trips will account for no more than 10% of the development's retail trip attraction volume. On that basis the retail element of the development can be expected to only attract some 5 to 7 new peak hour vehicle movements.
- 4.18 This increase in traffic must be balanced by the possible reduction in traffic generation from the neighbouring residential development that will be brought about by the opening of the new convenience store. Residents will no longer have to make a 3km round trip to access the nearest comparable offering and for this reason, it is far more likely that these residents will walk, rather than drive when making these trips.
- 4.19 Overall therefore the impact of the development's traffic on surrounding highway conditions is unlikely to be significant.

## 5 Summary & Conclusion

5.1 In summary this Transport Statement has demonstrated that:

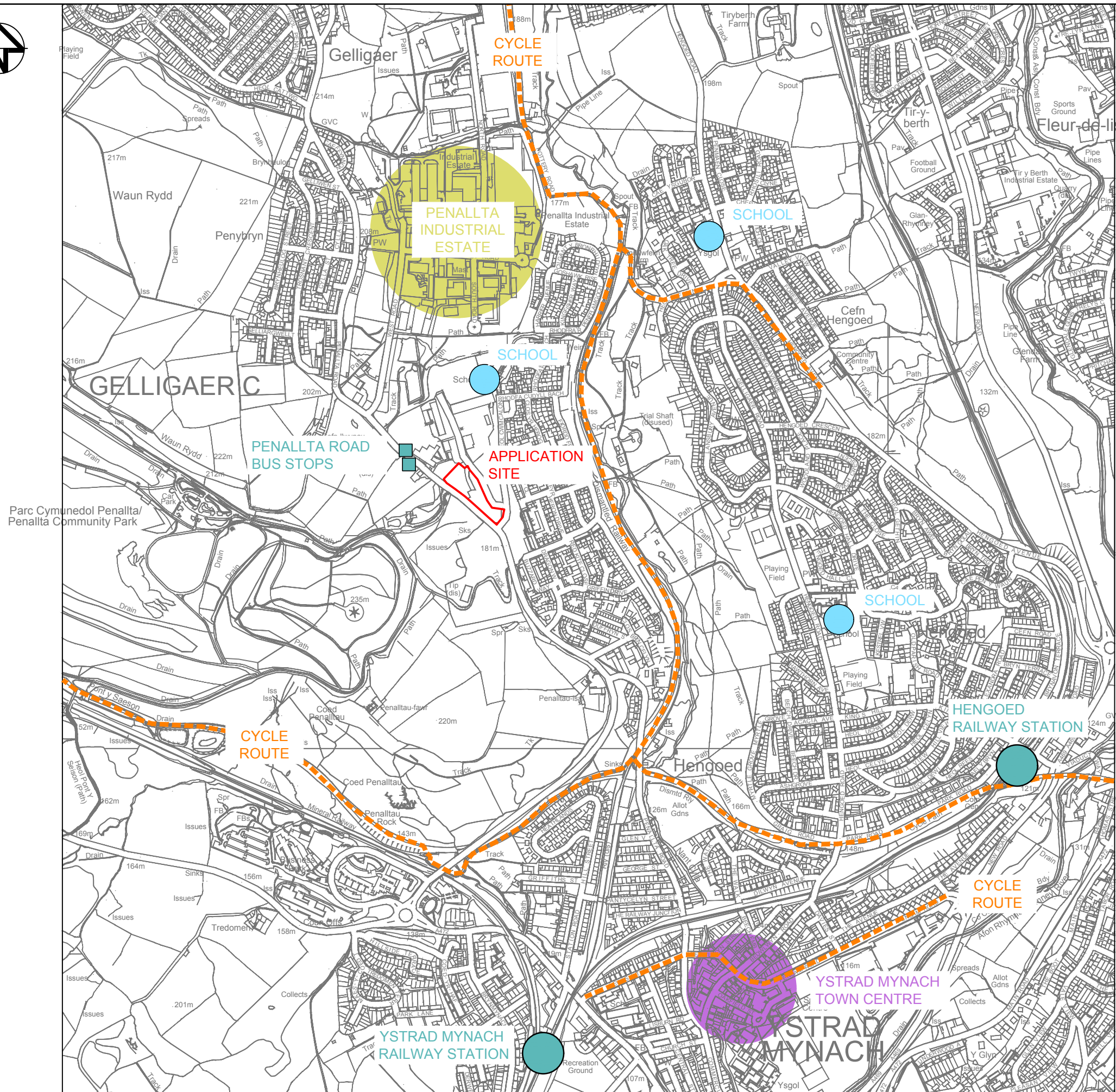
- The site is in a sustainable and accessible location. The site is accessible to pedestrians, cyclists and public transport users. This increases the possibility that journeys generated by the development can be made by sustainable forms of transport.
- There is a good range of services and facilities that cater for the day-to-day needs of future residents of the site available within reach by sustainable methods of travel. This reduces the need to travel by car and ensures that future residents without access to cars are not socially excluded.
- The site benefits from a safe means of access.
- The proposed development comprises of a 372m<sup>2</sup> retail unit and 33 affordable / social housing apartments, 12 of which will be for residents over 55.
- The delivery of a retail unit (convenience store) at this location supports the recent sizeable residential development in the area by providing an amenity that residents currently have to make a 3km round trip to access. It will result in fewer journeys by car from the existing residential development and more by foot or by bike as a result.
- The site will be served by an adoptable street.
- 19 off-street parking is provided for the retail unit and accords with the adopted Parking Standards.
- A total of 29 parking spaces is provided for the residential units. This allows for the 3 required for the elderly persons unit, leaving 26 spaces to serve the residents of the other 21 and any visitor parking demand that there may be.
- There is clear evidence of lower than average car ownership amongst social rented households. 2021 Census data shows that, in Caerphilly County, only 53% of social rented households have access to a car.
- The estimated traffic generation of the proposed development is insignificant and will cause no detrimental impact to the continued safe operation of the surrounding highway network.

5.2 As such it is considered that the application site meets planning policy requirements in terms of being in an appropriate location that is safely accessible by all forms of transport and that the impacts of the development on the continued operation and safety of the surrounding highway network would be acceptable.

5.3 It is concluded therefore that there are no transport related issues that should prevent planning permission for the proposed development from being granted.

## ***Appendix 1 Site Context***

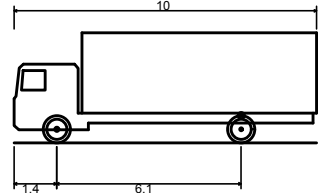
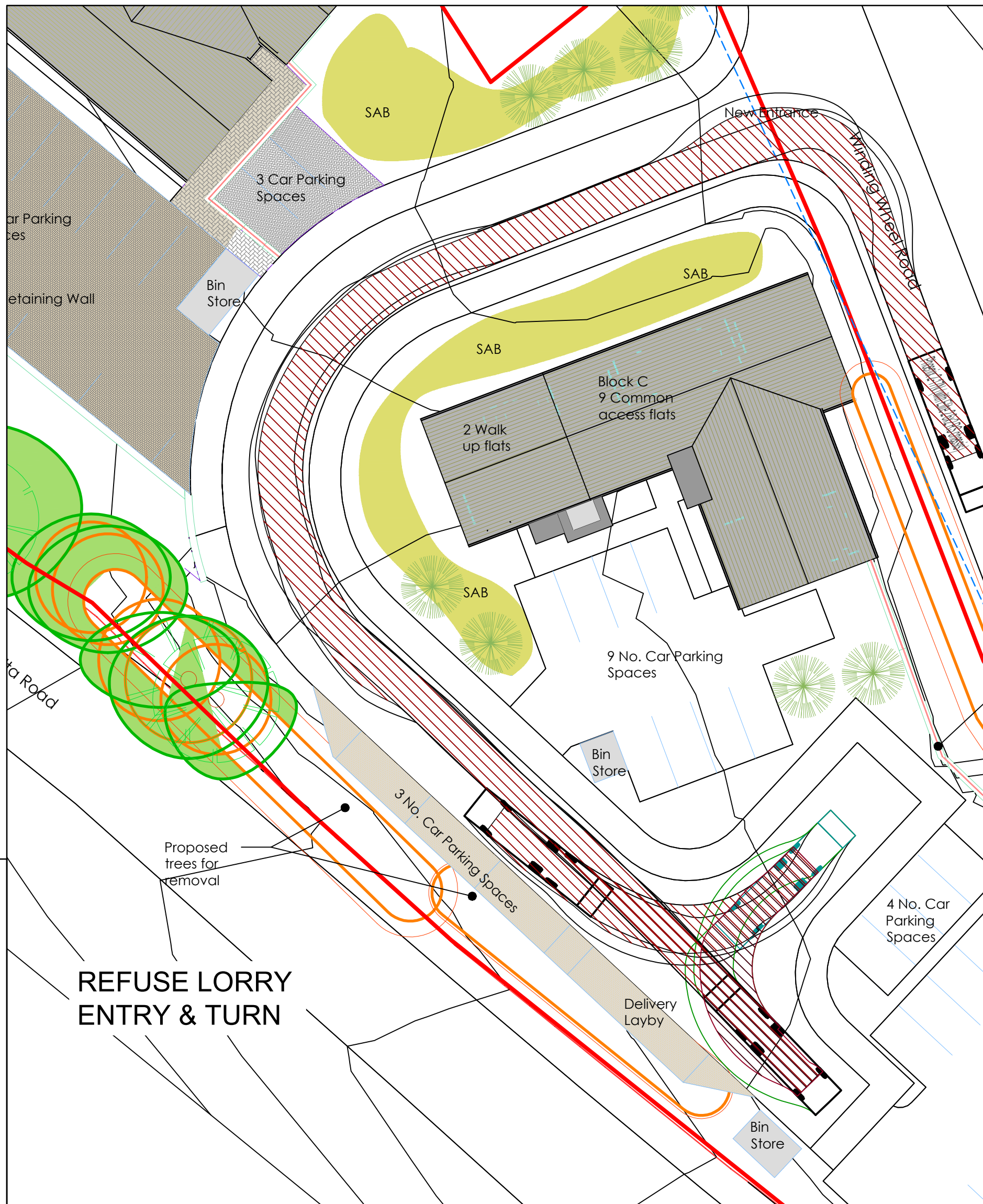
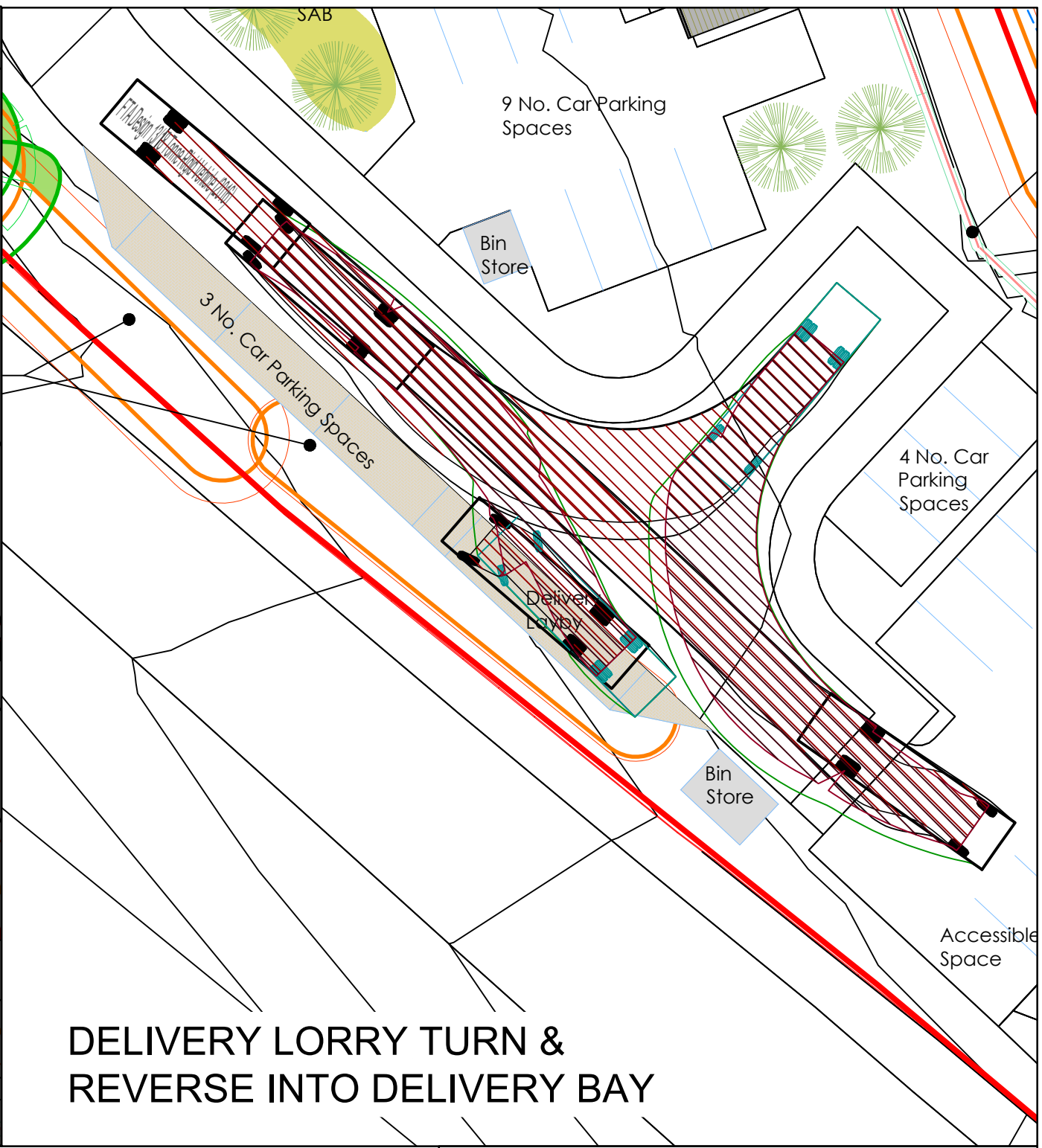
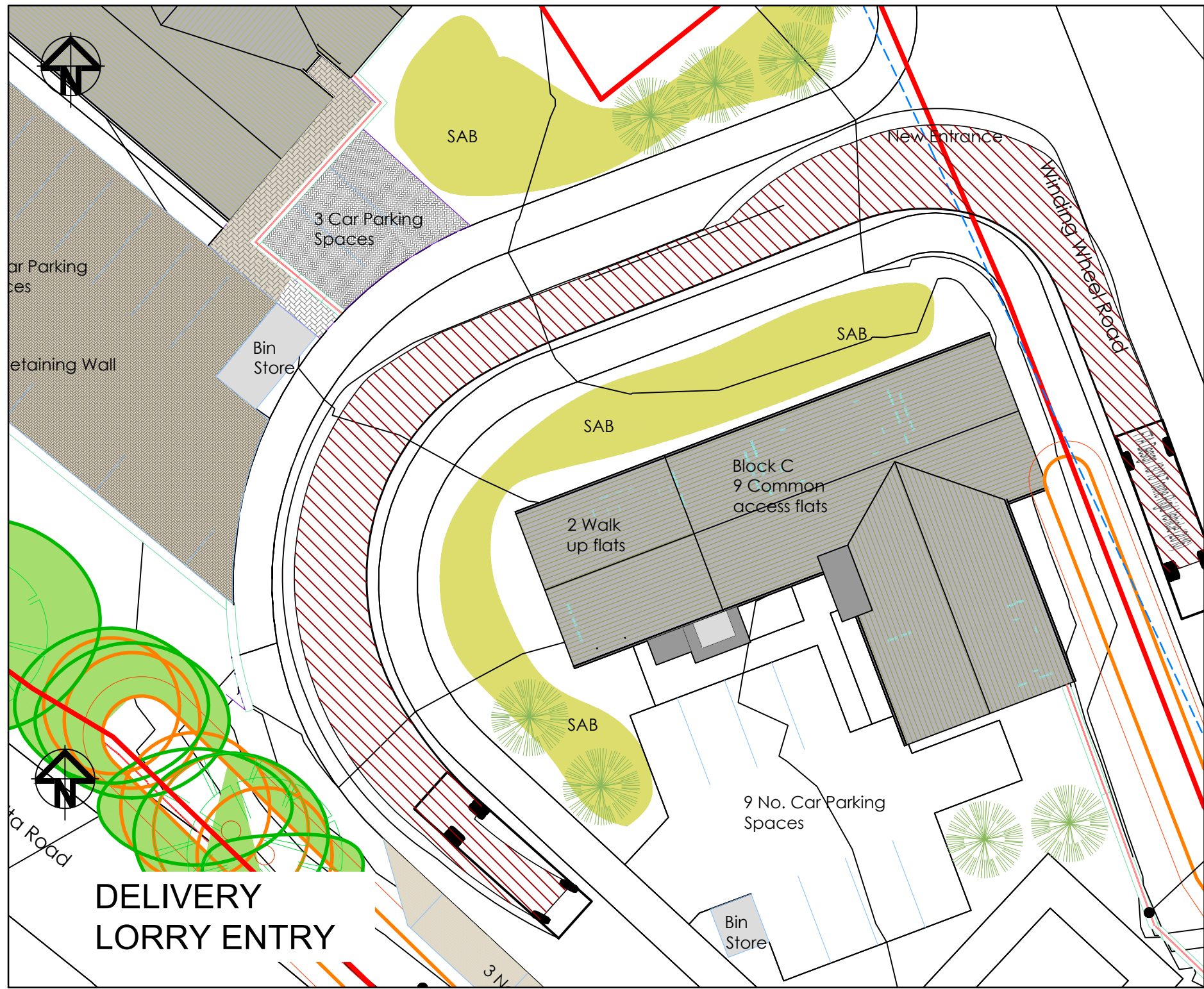




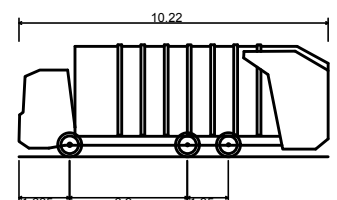
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Drawing	SITE CONTEXT	
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## ***Appendix 2 Access Arrangement & Swept Path Analysis***





FTA Design 13/18 Tonne Rigid Vehicle (2016)  
Overall Length 10.000m  
Overall Width 2.550m  
Overall Body Height 3.845m  
Min Body Ground Clearance 0.440m  
Track Width 2.470m  
Lock to lock time 3.00s  
Kerb to Kerb Turning Radius 11.000m



Phoenix 2-17N (with Elite 2 6x2 RS chassis)  
Overall Length 10.220m  
Overall Width 2.220m  
Overall Body Height 2.250m  
Min Body Ground Clearance 0.250m  
Track Width 2.250m  
Lock to lock time 4.00s  
Kerb to Kerb Turning Radius 7.900m

REFUSE LORRY  
ENTRY & TURN

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	First Issue	18-12-24
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## ***Appendix 3 TRICS Trip Rate Data – Residential***

Calculation Reference: AUDIT-648801-241218-1257

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
Category : D - AFFORDABLE/LOCAL AUTHORITY FLATS  
TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	GS GLOUCESTERSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	SE SHEFFIELD	1 days
10	WALES	
	CF CARDIFF	1 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*

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## Primary Filtering selection:

*This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.*

Parameter: No of Dwellings  
Actual Range: 10 to 40 (units: )  
Range Selected by User: 6 to 100 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 21/06/23

*This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.*

Selected survey days:

Wednesday 1 days  
Thursday 2 days  
Friday 1 days

*This data displays the number of selected surveys by day of the week.*

Selected survey types:

Manual count 4 days  
Directional ATC Count 0 days

*This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.*

Selected Locations:

Suburban Area (PPS6 Out of Centre) 3  
Neighbourhood Centre (PPS6 Local Centre) 1

*This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.*

Selected Location Sub Categories:

Residential Zone 4

*This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.*

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 4 days - Selected  
Servicing vehicles Excluded X days - Selected

## Secondary Filtering selection:

Use Class:

C3 4 days

*This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.*

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
25,001 to 50,000	3 days

*This data displays the number of selected surveys within stated 1-mile radii of population.*

Population within 5 miles:

125,001 to 250,000	2 days
250,001 to 500,000	2 days

*This data displays the number of selected surveys within stated 5-mile radii of population.*

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	3 days

*This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.*

Travel Plan:

No	4 days
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*This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.*

PTAL Rating:

No PTAL Present	4 days
-----------------	--------

*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	CF-03-D-01 TYN-Y-PARC ROAD CARDIFF WHITCHURCH Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings: <i>Survey date: FRIDAY</i>	BLOCKS OF FLATS      24 07/10/16	CARDIFF       <i>Survey Type: MANUAL</i>
2	GS-03-D-01 SAINT STEPHEN'S ROAD CHELTENHAM SPA  Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	BLOCKS OF FLATS      40 04/05/23	GLOUCESTERSHIRE       <i>Survey Type: MANUAL</i>
3	GS-03-D-02 PRINCESS ELIZABETH WAY CHELTENHAM SPA  Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	BLOCKS OF FLATS      27 04/05/23	GLOUCESTERSHIRE       <i>Survey Type: MANUAL</i>
4	SE-03-D-01 SAINT LAWRENCE ROAD SHEFFIELD  Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	BLOCK OF FLATS      10 21/06/23	SHEFFIELD       <i>Survey Type: MANUAL</i>

*This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.*

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	4	25	0.069	4	25	0.188	4	25	0.257
08:00 - 09:00	4	25	0.030	4	25	0.129	4	25	0.159
09:00 - 10:00	4	25	0.149	4	25	0.149	4	25	0.298
10:00 - 11:00	4	25	0.059	4	25	0.129	4	25	0.188
11:00 - 12:00	4	25	0.139	4	25	0.119	4	25	0.258
12:00 - 13:00	4	25	0.079	4	25	0.079	4	25	0.158
13:00 - 14:00	4	25	0.089	4	25	0.149	4	25	0.238
14:00 - 15:00	4	25	0.158	4	25	0.119	4	25	0.277
15:00 - 16:00	4	25	0.198	4	25	0.139	4	25	0.337
16:00 - 17:00	4	25	0.208	4	25	0.109	4	25	0.317
17:00 - 18:00	4	25	0.178	4	25	0.158	4	25	0.336
18:00 - 19:00	4	25	0.139	4	25	0.109	4	25	0.248
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.495			1.576			3.071

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.

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#### Parameter summary

Trip rate parameter range selected: 10 - 40 (units: )  
 Survey date range: 01/01/16 - 21/06/23  
 Number of weekdays (Monday-Friday): 4  
 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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



## ***Appendix 4 TRICS Trip Rate Data – Convenience Store***

Calculation Reference: AUDIT-648801-241218-1247

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL  
Category : 0 - CONVENIENCE STORE  
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	WS WEST SUSSEX	2 days
03	SOUTH WEST	
	SD SWINDON	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	CF CARDIFF	1 days
11	SCOTLAND	
	AS ABERDEENSHIRE	1 days
	GC GLASGOW CITY	1 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*

Primary Filtering selection:

*This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.*

Parameter: Gross floor area  
Actual Range: 275 to 500 (units: sqm)  
Range Selected by User: 200 to 500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 09/10/23

*This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.*

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	3 days
Thursday	1 days
Friday	3 days

*This data displays the number of selected surveys by day of the week.*

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

*This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.*

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	4

*This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.*

Selected Location Sub Categories:

Residential Zone	6
High Street	3

*This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.*

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	4 days - Selected
Servicing vehicles Excluded	5 days - Selected

Secondary Filtering selection:

Use Class:

E(a)	8 days
F2(a)	1 days

*This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.*

Population within 500m Range:

All Surveys Included

## Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	5 days

*This data displays the number of selected surveys within stated 1-mile radii of population.*

Population within 5 miles:

5,001 to 25,000	2 days
125,001 to 250,000	4 days
250,001 to 500,000	2 days
500,001 or More	1 days

*This data displays the number of selected surveys within stated 5-mile radii of population.*

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	5 days

*This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.*

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	9 days

*This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.*

Travel Plan:

No	9 days
----	--------

*This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.*

PTAL Rating:

No PTAL Present	9 days
-----------------	--------

*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	AS-01-O-01 REDCLOAK DRIVE STONEHAVEN	CO-OP	ABERDEENSHIRE
	Edge of Town Residential Zone Total Gross floor area:	275 sqm	
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL
2	CF-01-O-02 HEOL-Y-DERI CARDIFF RHIWBINA Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Gross floor area:	CO-OPERATIVE 350 sqm	CARDIFF
	Survey date: FRIDAY	07/10/16	Survey Type: MANUAL
3	GC-01-O-01 GREAT WESTERN ROAD GLASGOW WEST END Neighbourhood Centre (PPS6 Local Centre) High Street Total Gross floor area:	CO-OP 332 sqm	GLASGOW CITY
	Survey date: TUESDAY	25/04/23	Survey Type: MANUAL
4	NY-01-O-03 FOREST ROAD NORTHALLERTON	CO-OPERATIVE	NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area:	305 sqm	
	Survey date: MONDAY	19/09/16	Survey Type: MANUAL
5	SD-01-O-01 THE CIRCLE SWINDON	ONE STOP	SWINDON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area:	292 sqm	
	Survey date: FRIDAY	23/09/16	Survey Type: MANUAL
6	ST-01-O-01 STAFFORD ROAD CANNOCK	TESCO EXPRESS	STAFFORDSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area:	404 sqm	
	Survey date: WEDNESDAY	14/06/23	Survey Type: MANUAL
7	TW-01-O-02 ETHEL TERRACE SUNDERLAND CASTLETOWN Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area:	CO-OPERATIVE 330 sqm	TYNE & WEAR
	Survey date: FRIDAY	07/04/17	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	WS-01-O-01	CO-OP	WEST SUSSEX
	GORING ROAD		
	WORTHING		
	GORING-BY-SEA		
	Neighbourhood Centre (PPS6 Local Centre)		
	High Street		
	Total Gross floor area:		500 sqm
	Survey date: THURSDAY		12/05/22
			Survey Type: MANUAL
9	WS-01-O-02	SAINSBURY'S LOCAL	WEST SUSSEX
	GORING ROAD		
	WORTHING		
	GORING-BY-SEA		
	Neighbourhood Centre (PPS6 Local Centre)		
	High Street		
	Total Gross floor area:		409 sqm
	Survey date: WEDNESDAY		11/05/22
			Survey Type: MANUAL

*This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.*

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	2	416	0.841	2	416	0.481	2	416	1.322
06:00 - 07:00	6	383	1.565	6	383	1.478	6	383	3.043
07:00 - 08:00	9	355	5.693	9	355	5.474	9	355	11.167
08:00 - 09:00	9	355	7.288	9	355	7.319	9	355	14.607
09:00 - 10:00	9	355	6.318	9	355	5.849	9	355	12.167
10:00 - 11:00	9	355	5.630	9	355	5.380	9	355	11.010
11:00 - 12:00	9	355	6.381	9	355	6.318	9	355	12.699
12:00 - 13:00	9	355	7.507	9	355	7.226	9	355	14.733
13:00 - 14:00	9	355	5.974	9	355	6.006	9	355	11.980
14:00 - 15:00	9	355	6.819	9	355	6.756	9	355	13.575
15:00 - 16:00	9	355	7.757	9	355	7.382	9	355	15.139
16:00 - 17:00	9	355	8.571	9	355	7.726	9	355	16.297
17:00 - 18:00	9	355	8.508	9	355	9.227	9	355	17.735
18:00 - 19:00	9	355	8.039	9	355	8.101	9	355	16.140
19:00 - 20:00	9	355	6.662	9	355	6.506	9	355	13.168
20:00 - 21:00	8	363	3.787	8	363	4.372	8	363	8.159
21:00 - 22:00	7	376	2.890	7	376	3.270	7	376	6.160
22:00 - 23:00	4	411	1.337	4	411	1.398	4	411	2.735
23:00 - 24:00	4	411	0.122	4	411	0.304	4	411	0.426
Total Rates:			101.689			100.573			202.262

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.

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#### Parameter summary

Trip rate parameter range selected:	275 - 500 (units: sqm)
Survey date range:	01/01/16 - 09/10/23
Number of weekdays (Monday-Friday):	9
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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

The logo for Acstro, featuring the word "acstro" in a bold, blue, sans-serif font. The background of the entire page is white with blue curved borders at the top and bottom.

# acstro

Acstro Ltd., Yr Hen Farchnad, Unit 19, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6BJ

(01558) 824021  
[www.acstro.com](http://www.acstro.com)