Apex TRANSPORT PLANNING

Syr Dafydd Avenue, Oakdale

Transport Statement

Client: **Castell Group**

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REPORT DETAILS

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1. INTRODUCTION

1.1 Background

1.1.1 Apex Transport Planning Ltd has been commissioned to produce a Transport Statement (TS) to support a planning application for a proposed affordable residential development scheme on land north of Syr Dafydd Avenue, Oakdale, Blackwood.

1.1.2 The proposals are to demolish the existing building on the site, which was previously a public house, and construct two buildings accommodating 26 residential apartments, comprising 20no. 1 bedroom apartments and 6no. 2 bedroom apartments. Vehicular and pedestrian access will be gained via a new priority junction, in the location of the existing dropped kerb access arrangement onto Syr Dafydd Avenue.

1.1.3 The TS considers the impacts of the proposals in relation to transport including the connectivity by active travel and public transport, parking provision and access arrangements, road safety and vehicle trip generation. It has been produced to inform Caerphilly County Borough Council (CCBC) of the highways and transport implications of the proposals.

1.1.4 Initial pre-application discussions were held with CCBC in relation to the scheme, with officers particularly focussed on parking provision and the sustainable connectivity of the site. As such, this TS ensures that these have been fully considered.

1.2 Scope of Report

1.2.1 The scope of work has considered policies and advice set out in Planning Policy Wales 11 (PPW11), Technical Advice Note 18: Transport (TAN18), Future Wales - the National Plan 2040, the Active Travel Act (Wales – 2013), the CCBC Local Development Plan (LDP), Car Parking Standards LDP5 SPG, as well as considering experience of other similar sites.

1.2.2 The TS has been structured to include the following:

- A description of the existing conditions including, site location and use, access, road safety analysis and existing travel behaviour in the surrounding area
- Overview of highway network and vehicular connections to the site
- A review of the connectivity of the site by sustainable modes including walking, cycling and public transport
- Description of the development proposals, demonstrating safe and appropriate access by all modes, car and cycle parking and servicing and delivery arrangements
- Forecast vehicle trip generation in the peak hours and comparison to existing site use
- Consideration of the acceptability of the parking provision in terms of likely demand and sustainable location of the site
- Consideration of the impact of the proposals on the local highway network

2. EXISTING CONDITIONS

2.1 Site Location, Use and Access

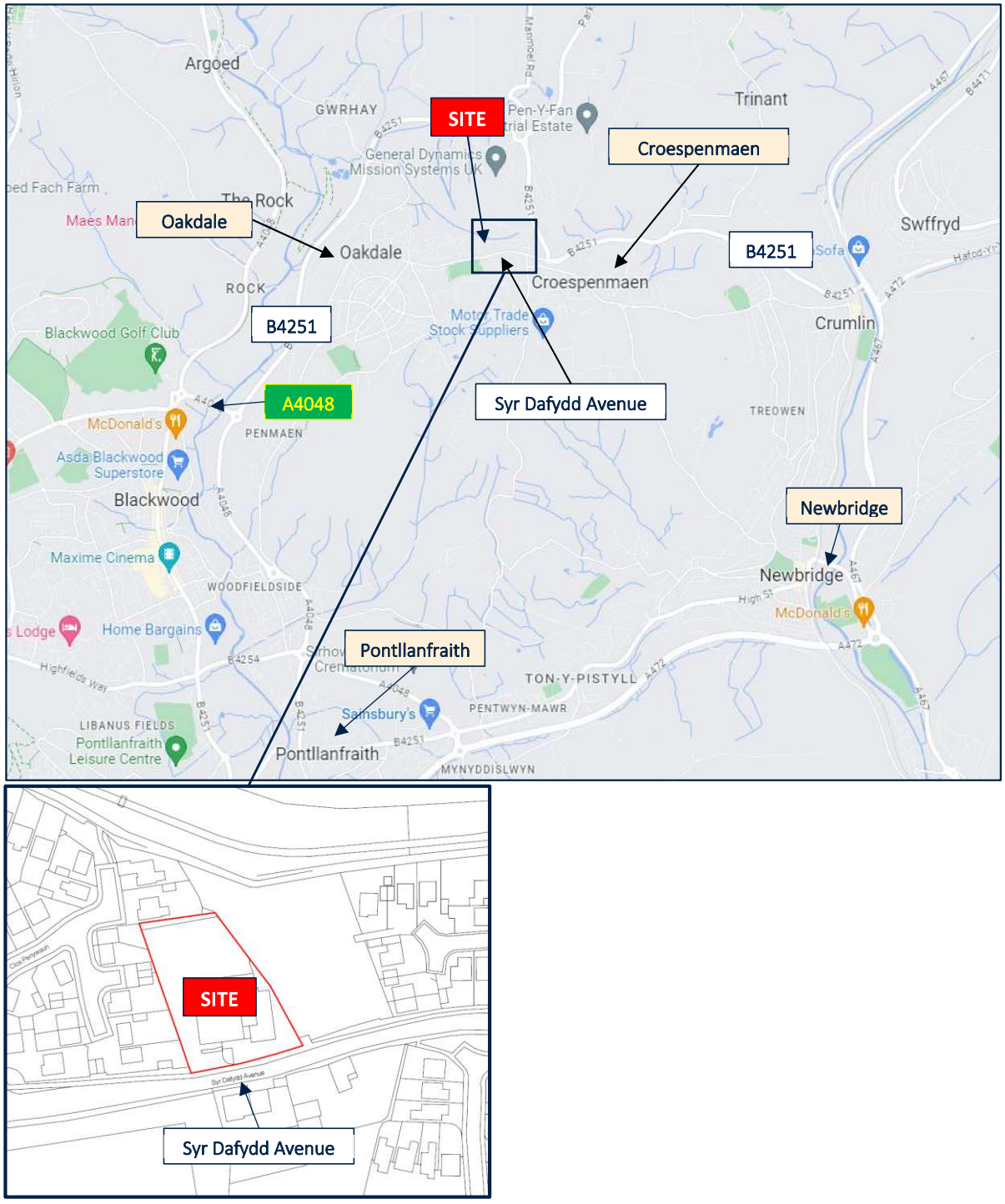
2.1.1 The site is located within the residential area of Oakdale, south of Fern Close Pen-Y-Fan Industrial Estate, approximately 1.7km northeast of Pontllanfraith Town Centre and 1.5km northwest of Newbridge Rail Station. The site lies in the eastern area of Oakdale and adjacent to the western extent of Croespenmaen which provide the nearest key facilities. Also within the vicinity of the site is Oakdale Business Park to the north.

2.1.2 The site comprises of an existing building which was previously used for a public house and is surrounded by primarily residential uses. As such, the extant use of the site is for a public house. It has an existing car park which can accommodate approximately 36 vehicles.

2.1.3 Bordering the western boundary of the site is Penywaun Close and to the east is a playing field linking to Oakdale common bridle path bridge. The site will be accessed from Syr-Dafydd Avenue via a new priority junction on the southern boundary of the site.

2.1.4 The indicative location of the site, in its local context, is shown in Figure 2-1.

Figure 2-1: Indicative Site Location



Source: Google Maps

2.2 Local Highway Network

2.2.1 Syr-Dafydd Avenue is a single carriageway road which routes in a broadly south to north then east to west alignment from Oakdale Terrace at its southern extent, to Kendon Road (B4251) at its western extent. Syr-Dafydd Avenue serves as a spine road within Oakdale as it forms the major arm of junctions with a number of residential streets, including Blacksmith Close, Penmaen Avenue, and Maesygarn Road.

2.2.2 Syr-Dafydd Avenue is primarily bordered by residential dwellings to the north and residential, education and leisure facilities to the south. Street lighting is present and occurs intermittently along the length of the street. Within the vicinity of the site frontage, the carriageway measures approximately 6.5 metres in width and has footways on at least one side. Within the vicinity of the site, there are no parking restrictions and it is subject to a 30 mph speed limit. This becomes 20mph as it routes towards central Oakdale.

2.2.3 To the east, the B4251 connects to the A467 which provides the key route to Llanhilleth to the north and Newbridge to the south. The B4251 also routes north from Kendon Road through the centre of Fern Close Pen-Y-Fan Industrial Estate and Oakdale Business Park and then routes south connecting to the A4048.

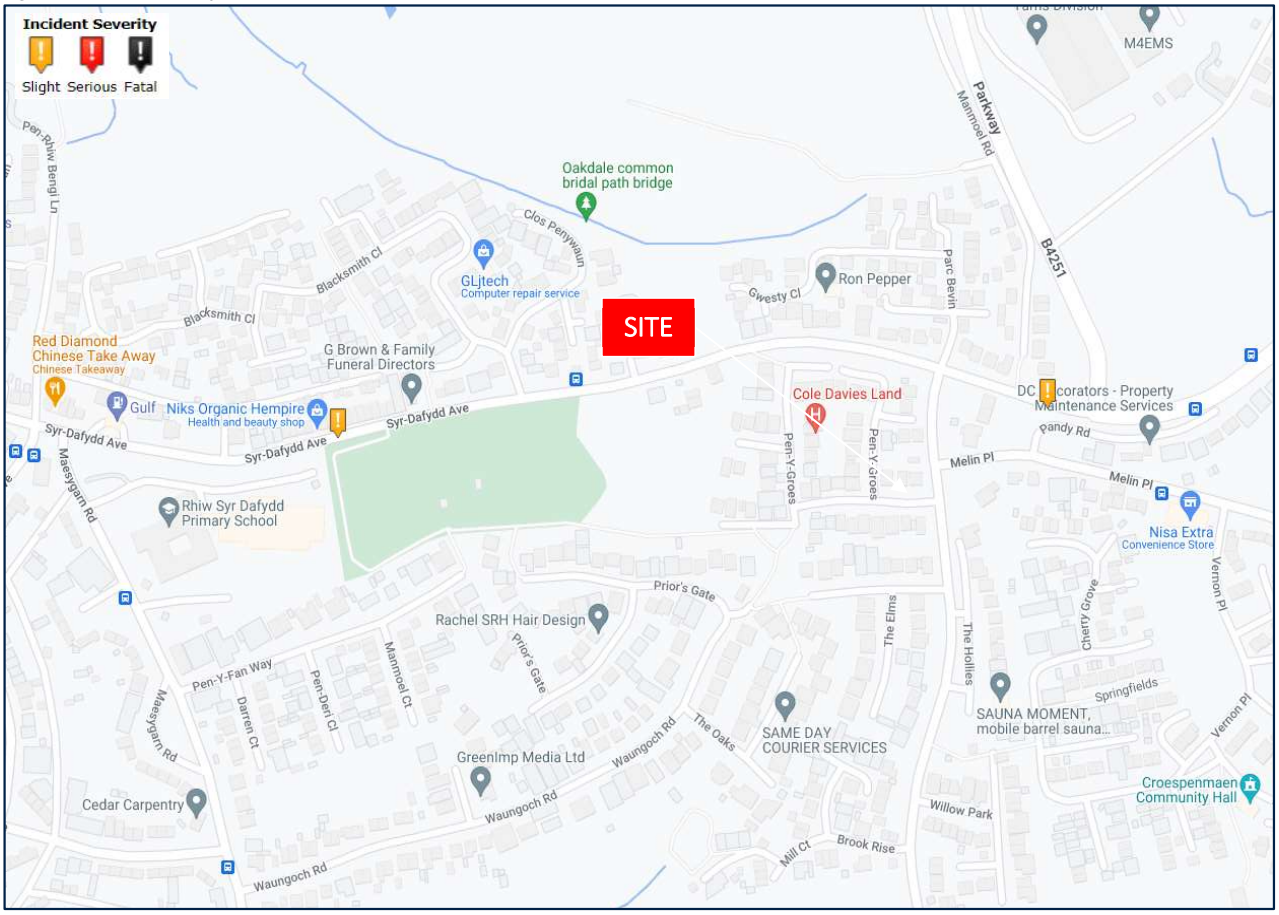
2.2.4 To the west, Syr-Dafydd Avenue forms a priority junction with Penmaen Avenue, which is a single carriageway road with footways on both sides on the carriageway. Penmaen Avenue forms part of the key route to the facilities within Oakdale.

2.3 Road Safety

2.3.1 Personal Injury Accident (PIA) data has been obtained from road safety data published annually by the Department for Transport (DfT). The statistics provide PIA data which has been recorded using the STATS19 accident reporting form. The most recently available five-year dataset, prior to the pandemic therefore covering a position with typical traffic flows, covers between 1st January 2015 and 31st December 2019. The review has also considered the data in 2020 and 2021 (the most recently available). A total of seven years of data has therefore been reviewed.

2.3.2 The study area considered within the analysis covers the local highway network within the vicinity of the site and the routes to the closest bus stops and nearest school, with the entire study area shown in Figure 2-2.

Figure 2-2: Location of Recorded PIA's



Source: Crashmap

2.3.3 Over the seven year period, two serious PIAs occurred, one on Syr-Dafydd Avenue and one on Kendon Road. There were no serious or fatal PIAs.

2.3.4 One PIA involved a pedestrian and car which occurred on Kendon Road resulting in one slight casualty. There were no further incidents involving walking or cycling movements.

2.3.5 There were no incidents recorded along the site frontage or within the visibility splays. As such, there is no evidence of an issue for movements from the existing site access onto Syr-Dafydd Avenue.

2.3.6 There were no clusters of four or more PIAs occurring in the same location, therefore no evidence to suggest a re-occurring road safety issue.

2.3.7 Although all incidents are regrettable, the PIAs that occurred do not indicate a specific pattern of issue with the geometry of the highway that would be exacerbated by the proposed development, particularly given this location accommodates movements associated with the existing residential area.

2.4 Existing Modal Share

2.4.1 The site is located within output area (OA) W00009919. Table 2-1 shows how the existing residents of this OA currently travel to work, which has been compared with the entire of CCBC as obtained from 2011 Census data. Although 2021 census data is available, this is considered to be unrepresentative of actual travel conditions as the survey was conducted during the Covid-19 pandemic. 2011 data is therefore considered to be more robust for use in this regard.

Table 2-1: Journey to Work Mode Split (Census 2011)

Mode	OA W00009919	CCBC %
Public Transport	3%	8%
Car Driver	89%	74%
Motorcycle	0%	1%
Car Passenger	5%	8%
Bicycle	1%	1%
On Foot	3%	8%
Other	0%	1%
Total	**100%**	**100%**

2.4.2 The census data shows that an average of 89% of residents living in the area surrounding the site and commuting to work travel as a car driver, with 3% walking, 1% cycling, 3% travelling by public transport and 5% as a car passenger.

2.4.3 These statistics have been adjusted to exclude working from home. If this was included, c.8% of residents currently in work, do so from home rather than commuting and this is likely to have significantly increased since 2011, particularly following the pandemic.

2.4.4 It is noted that travelling to work is only one journey purpose during peak hours from a residential site. A significant proportion of journeys will also be for education, leisure, and retail purposes and these may have higher levels of sustainable travel, particularly given the site's proximity to local schools and surrounding retail and leisure opportunities within suitable walking and cycling distances.

2.4.5 The data demonstrates that there is potential for walking and cycling trips to be made to and from the site and that these movements already occur in this area.

2.5 Car Ownership

Census Analysis - Overall

2.5.1 The 2021 Census data has been reviewed for the average car ownership in the OA within which the site is situated - W00009919.

2.5.2 This shows an average of 2.01 cars per household across the OA, based on 251 cars across 125 households (2021 census data doesn't provide a total sum of all cars or vans in the area, so based on analysis of household data across the entire of Wales for the 2011 data, it has been assumed that households with 3 or more cars have an average of 3.38 cars). It is also shown that 29% of households owned one car or less.

Census Analysis - Dwelling Type

2.5.3 As the overall Census data includes all house and tenure types, car ownership levels by dwelling type in the W00009919 output area have been reviewed, as the proposals are for an affordable apartment scheme.

2.5.4 Data has been analysed in Nomis Table *"RM001 - Accommodation type by car or van availability by number of usual residents aged 17 years or over in household".* This data separates car ownership into two categories – firstly houses and secondly flats / maisonettes / apartments. Within the W00009919 output area, there are no flats, which could explain the higher level of car ownership data in this OA. As this provides no data, the middle layer super output area (MSOA) in which the site is situated has also been reviewed (Caerphilly 006). Within this MSOA there were 146 flats of which 55% had no car ownership and 90% owned one car or less. The average car ownership for flats was 0.55 per household. The lower layer super output area (LSOA) - Caerphilly 006E also only had 5 flats and an

ownership of 0.4 cars per household, so the MSOA was considered more appropriate for consideration.

2.5.5 The MSOA ownership for flats is approximately 40% of the car ownership for houses across the same Caerphilly 006 MSOA which showed 1.35 cars per household. This demonstrates that flats typically have significantly lower car ownership than houses, although within the local output area the significant majority of accommodation is houses.

Census Analysis - Tenure Type

2.5.6 Data has been analysed in Nomis Table *"RM131 - Tenure by car or van availability by number of usual residents aged 17 or over in household".* This data separates car ownership into three categories – Owned / shared ownership, Social rented and Private rented / living rent free.

2.5.7 There were only two affordable houses within the output area within which the site is situated. As such the Caerphilly 006 MSOA has also been considered within this analysis.

2.5.8 Within Caerphilly 006 there are a total of 561 social rented households, with an average ownership of 0.85 cars per household. This includes 41% of socially rented households who do not own a car and 81% owning one car or less. As such, on average, social rented households in Caerphilly 006 have low car ownership, at around half of owner accommodation, which has a car ownership of 1.65 per household.

2.5.9 On this basis, there is evidence that both flats and affordable housing have significantly lower than average car ownership and the proposed car parking provision has therefore considered this in Section 4.

3. CONNECTIVITY BY SUSTAINABLE MODES OF TRAVEL

3.1 Introduction

3.1.1 This section describes the opportunities to make everyday trips by non-car modes. It considers the likelihood of trips being made on foot, by cycle, bus and rail.

3.2 Walking and Cycling

3.2.1 Walking and cycling (collectively known as active travel) are the most important mode of travel at a local level and offer the greatest potential to replace short car journeys.

Walking Infrastructure and Routes

3.2.2 The site is well situated to benefit from existing walking routes. Suitable footways and crossings are provided along key routes and in the vicinity of the site, as would be expected in an existing residential area. The majority of local streets have footways on both sides of the carriageway and benefit from streetlighting, providing links between the site and the surrounding facilities.

3.2.3 The site connects to the footway on the northern side of Syr-Dafydd Avenue which runs along the site frontage. Syr-Dafydd Avenue spans east and west from the site and provides footways on both sides of the carriageway to the east and on the northern side of the carriageway to the west. For the majority of its length, the footways on Syr-Dafydd Avenue are c. 2m in width. Syr-Dafydd Avenue links to further residential streets which also provide footways and streetlighting.

3.2.4 Approximately 370m the west of the site, a footway also commences on the south side of the Syr-Dafydd Avenue carriageway which is connected to the northern footway by a dropped kerb crossing with tactile paving. This footway connects to the footways on Maesygarn Road and Penmaen Avenue which provide the main pedestrian routes to the centre of Oakdale and the facilities within.

3.2.5 To the east of the site, at the Syr-Dafydd Avenue / Kendon Road / Parc Bevin junction, there is a signalised crossing providing a pedestrian connection to the southern footway on Syr-Dafydd Avenue. There are also dropped kerbs with tactile paving on all arms providing pedestrian connection to the facilities within Croespenmaen. Additionally, where Kendon Road meets the B4251, there is a signal crossing from the northern footway to the southern footway linking to Pandy Road bus stop which provides the closest westbound bus services to the site.

3.2.6 Overall, the surrounding network and associated infrastructure is considered to be of good quality. The local area appropriately accommodates existing pedestrian movements, including for pupils travelling to the nearby schools and the infrastructure would be attractive to potential future residents walking to and from the site.

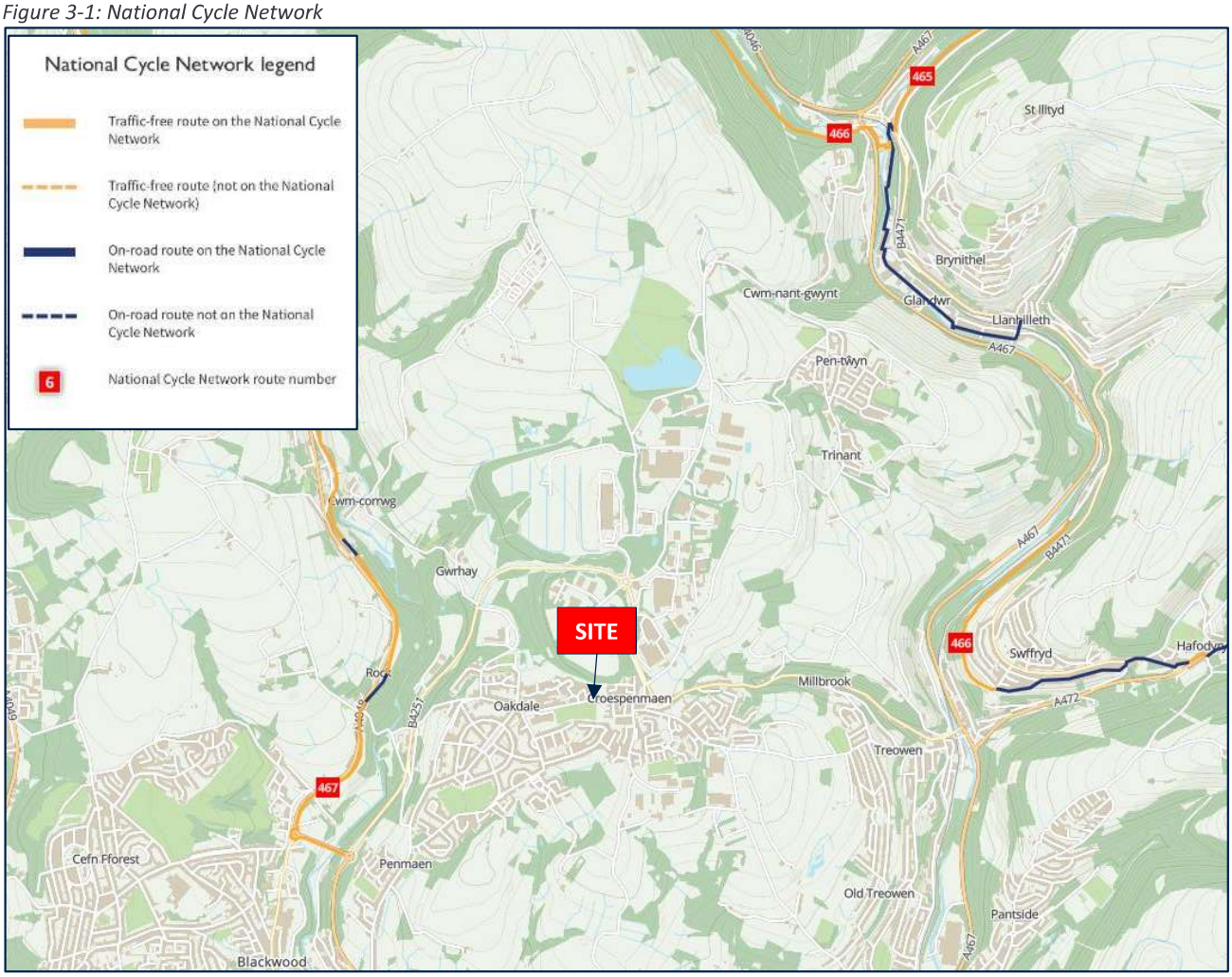
Cycling Infrastructure and Routes

3.2.7 The streets within the vicinity of the site are considered conducive to cycling, encouraged by 20 - 30mph speed limits (which are likely to reduce to 20mph from September as part of new legislation). The surrounding highway network is provided with street lighting, which encourages pedestrian and cycle trips to occur during hours of darkness.

3.2.8 The closest National Cycle Network (NCN) Route to the site is NCN 467 which is approximately 1.9km to the southwest on the A4048. NCN 467 provides a connection to Cwm-Corrwg, Argoed, Markham and Hollybush to the north. This can be accessed via a 1.1km cycle on carriageway on Syr-Dafydd Avenue and then a 0.9km cycle on the shared footway / cycleway along the B4251.

3.2.9 The NCN cycle routes within the vicinity of the site are shown in Figure 3-1.

Figure 3-1: National Cycle Network



Source: Sustrans

Active Travel Network Maps

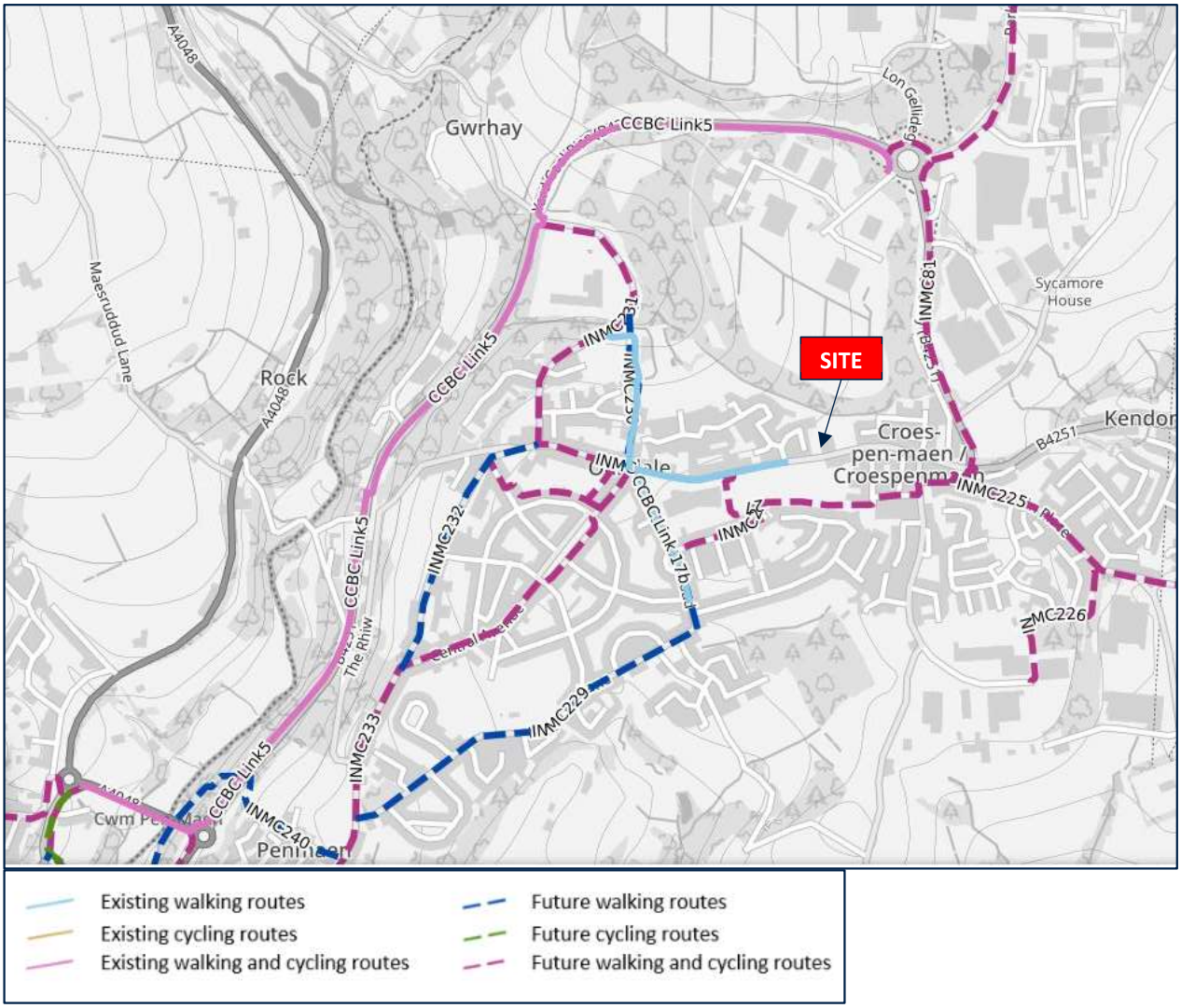
3.2.10 The Welsh Government DataMap Wales shows the Active Travel Network Maps (ATNM) across all authorities, including CCBC. This shows existing walking routes and where upgrades or new routes are anticipated to be provided.

3.2.11 A review of the ATNMs within the vicinity of the site shows that an existing walking route runs along Syr-Dafydd Avenue which starts approximately 80m west of the site access (Ref: CCBC. Link 17a). This is proposed to be extended along Maesygarn Road and Llwyn on Cres which is labelled as a future walking route INMC229. Walking route link 17a will also be extended west along Syr-Dafydd Avenue where it is proposed as a future walking and cycling route (Ref: IMMC228).

3.2.12 Within the vicinity of the site there is also a proposed walking and cycling route that runs north on the B4251 (Ref: INMC81). This can be accessed by a 350m walk or cycle to the east of the site. Route INMC81 provides walking and cycle connections to Oakdale Business Park and to Fern Close Pen-Y-Fan Industrial Estate. This route also connects to existing walking and cycle route CCBC Link 15 that is a shared footway / cycleway that runs adjacent to the carriageway along Yard Coal Rise (B4251). The CCBC Link 15 also connects to NCN 467 where the B4251 meets the A4048.

3.2.13 The ATNM showing the existing and proposed routes within the vicinity of the site has been reproduced in Figure 3-2.

Figure 3-2: Active Travel Network Map - within vicinity of the site



Source: Welsh Government Active Travel Map

3.2.14 As such, the site is well positioned to benefit from existing routes and potential future high quality walking and cycling links, which connect to further routes in the wider area and improve links to key local facilities and services. The site would therefore encourage and promote walking and cycling movements for potential future residents.

3.3 Distances to Facilities

3.3.1 There are a number of publications which suggest guidance for appropriate and acceptable walking and cycling distances to facilities. For reference, these have been summarised as follows.

- Welsh Government - Active Travel (Wales) Act 2021: It is stated within paragraph 4.1.5 that *"Walking is most suitable for journeys of less than two miles whilst cycling is also convenient for longer journeys, typically up to five miles for regular utility journeys"*. This equates to distances for walking of up to 3.2km and cycling of up to 8km.
- This also states in paragraph 9.5.3 that *"Walkable neighbourhoods also referred to as 'low-traffic neighbourhoods', or 'active neighbourhoods', (see figure 9.6) are characterised by having a*

range of facilities within 20 minutes' walking distance which people may access comfortably on foot." This would equate to c. 1.6km.

- Department for Transport (DfT) – Manual for Streets (2007): MfS states that *'walkable neighbourhoods'* are typically characterised by having a range of facilities within 10 minutes walking distance (c. 800 metres). MfS also acknowledges that this is not an upper limit and references previous planning policy guidance in that it is generally acknowledged that walking offers the greatest potential to replace short car trips, particularly under 2km.
- CIHT (2015) – Planning for Walking: In relation to shorter trips in particular, (section 2.1) states that across Britain about '*80% of journeys shorter than 1 mile (1.6km) are made wholly on foot*'.
- CIHT - Guidelines for Providing for Journeys on Foot (2000): suggests preferred maximum distances for commuting journeys are up to 2km.
- DfT – LTN1/20 Cycle Infrastructure Design (paragraph 2.2.2) – states that *"Two out of every three personal trips are less than five miles in length, an achievable distance to cycle for most people"* (c.8km).

3.3.2 As such, based on guidance, it is considered that suitable walking distances are up to 3.2km, but journeys within 2km have a greater potential to be made on foot. A 2km distance equates to around a 25-minute walk travelling at 3mph (4.8kph). A 3.2km distance equates to around a 40 minute walk. Sites with a range of facilities within 1.6km are considered to be within a 'walkable neighbourhood'.

3.3.3 It is considered that journeys of up to 8km are within a suitable cycling distance. A cycling journey of 8km would equate to approximately a 25-minute travel time.

3.3.4 To demonstrate the site's connectivity, facilities within appropriate distances which are accessed via suitable and established routes have been summarised in Table 3-1. The location of the facilities in the context of the site are shown in Figure 3-3. These facilities have been summarised based on approximate travel distances from the site access via appropriate routes, not straight-line distances.

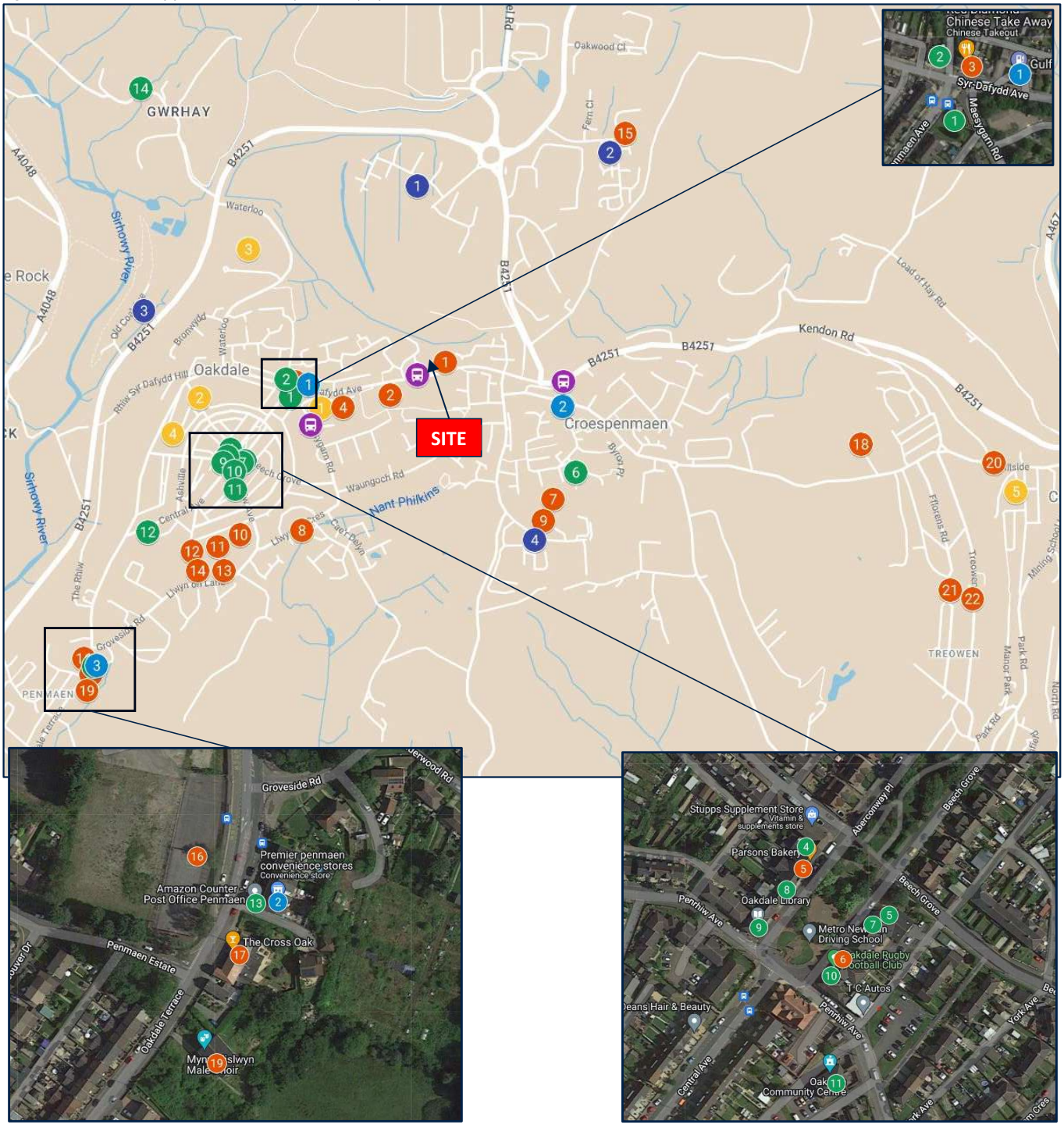
Table 3-1: Proximity of the site to local facilities and services

Facility / Amenity		Distance from site access (metres)	Walking Travel Time (minutes) *	Cycling Travel Time (minutes) *
Community Facilities				
1	Oakdale Presbyterian Church	440	6	1
2	L & S Hair & Beauty	450	6	1
3	Amazon Counter - Post Office Croespenmaen	490	6	2
4	Pharmacy	720	9	2
5	Oakdale medical centre	730	9	2
6	Croespenmaen Community Hall	740	9	2
7	The Dental Centre	740	9	2
8	Jake's Gentlemen's Barbers	740	9	2
9	Oakdale Library	770	10	2
10	Ghost hair	780	10	2
11	Oakdale Community Centre	850	11	3
12	Saint David's Church Penmaen	1100	14	3
13	Amazon Counter - Post Office Penmaen	1590	20	5
14	Saint Davids Church	1700	21	5
Public Transport				
	Blacksmith Close	50	1	<1
	Pandy Road	400	5	1
	Rhiw Syr Dafydd Primary School	550	7	2
	Newbridge Rail Station	2800	35	9
Retail				
1	Gulf garage shop	390	5	1
2	Nisa Extra	480	6	2

Facility / Amenity		Distance from site access (metres)	Walking Travel Time (minutes) *	Cycling Travel Time (minutes) *
3	Premier Penmaen convenience stores	1580	20	5
Education				
1	Rhiw Syr Dafydd Primary School	500	6	2
2	Ysgol Gymraeg Cwm Derwen	800	10	3
3	Islwyn High School	880	11	3
4	Penrhiw Nursery School	930	12	3
5	Crumlin High Level Primary School	2000	25	6
Leisure				
1	Playing field	30	<1	<1
2	Athletic Field	200	3	1
3	Red Diamond Chinese Take Away	430	5	1
4	Taekwon-do-Wales / Oakdale	600	8	2
5	Cafes / Takeaways	730	9	2
6	Oakdale Rugby Football Club	760	10	2
7	Playing field	780	10	2
8	New Bungalow Club music venue	910	11	3
9	Valleys Gymnastic Academy	920	12	3
10	Playing courts	960	12	3
11	Oakdale Rugby pitch	1040	13	3
12	Oakdale Skatepark	1140	14	4
13	Bowling green	1160	15	4
14	Park	1210	15	4
15	The Devils Lair - Kickboxing Club	1420	18	4
16	Playing Courts	1580	20	5
17	The Cross Oak public house	1620	20	5
18	Crumlin Cricket Club	1620	20	5
19	Mynyddislwyn Male Choir	1660	21	5
20	The Bridgend Inn public house	1900	24	6
21	Treowen Park	2000	25	6
22	Treowen Skatepark	2000	25	6
Employment				
1	Oakdale Business Park	1200	15	4
2	Fern Close Pen-Y-Fan Industrial Estate	1350	17	4
3	Old Coal Avenue employment area	1500	19	5
4	Croespenmaen Industrial Estate	1800	23	6

** Based on walking speeds of 80 metres per minute and Cycling Speeds of 320 metres per minute*

Figure 3-3: Location of facilities within proximity of the site



Source: Google Maps
Note: Numbers and colours correlate to Table 3-1

3.3.5 Table 3-1 and Figure 3-3 show there are an extensive number and range of facilities and services situated within comfortable walking and cycling distances which can be accessed via suitable active travel routes. All facilities are within Welsh Government guidance walking and cycling distances.

3.3.6 Within an 800m walk, residents would be able to access the closest bus stops, the local convenience store, two schools, a post office, a community hall, a dentist, a medical centre, a pharmacy, a library, hairdressers, and leisure facilities.

3.3.7 A number of additional facilities are within further, but suitable walkable distances include three more schools, a food store, four employment areas, and a number of leisure facilities including sports clubs. This is a significant number of services / facilities within a short walking distance, which can be utilised for everyday needs purposes, demonstrating that the site is situated within a walkable neighbourhood consistent with the Active Travel Act guidance.

3.3.8 The site is situated in a highly sustainable location, as would be expected for a site in an existing and established residential area. This will encourage walking and cycling and reduce the reliance on the private car, consistent with relevant policies and guidance, including sustainable transport policies in Future Wales, PPW11 and TAN18.

3.4 Public Transport

Bus

3.4.1 The closest bus stop to the site is Blacksmith Close situated adjacent to the site on the north side of Syr-Dafydd Avenue. This bus stop provides eastbound services and benefits from a bus flag and timetable information. Westbound services are provided from Pandy Road bus stop approximately 400m from the site (5 minutes). An additional service is provided at Rhiw Syr Dafydd Primary School.

3.4.2 These stops are served by bus services 5 and 5A which are operated by Stagecoach South Wales and CCBC. These combined services provide link to Blackwood, Newbridge, and Croespenmaen. Hourly services commence from 07:12 and run until 23:08 from Monday to Saturday with an increased frequency between 09:28 to 13:58 Monday to Friday. The journey time to Newbridge High Street is approximately 16 minutes and the journey time to Blackwood Bus Station is approximately 20 minutes.

3.4.3 A summary of the local bus services is provided in Table 3-2.

Table 3-2: Local Bus Services

Route No.	Stop	Operator and Route	Frequency				
			Mon-Fri Peaks	Mon-Fri Daytime	Mon-Fri Evening	Sat	Sun
5	Blacksmith Close (eastbound)	Blackwood – Pant Estate via Oakdale, Croespenmaen, and Newbridge *(Stagecoach South Wales)*	Hourly	Hourly (07:27 – 22:32)	Hourly until 22:32	Hourly (07:27 – 22:32)	No service
	Pandy Road (westbound)	Pant Estate – Blackwood via Newbridge, Croespenmaen, and Oakdale *(Stagecoach South Wales)*	Hourly	Hourly (07:12 – 23:08)	Hourly until 23:08	Hourly (07:12 – 23:08)	No service
5a	Rhiw Syr Dafydd Primary School	Oakdale – Blackwood *(CCBC)*	No service	Hourly (09:28 – 13:58)	No service	No service	No service

3.4.4 The bus services provide a reasonable frequency of service connecting to the key local centres of Blackwood and Newbridge and run throughout the day. As such, the journey times to Blackwood and Newbridge, combined with the times of operation, offer a viable option for commuting purposes. They can also be used to access destinations for leisure, retail and education purposes.

3.4.5 Given the close proximity of the bus routes, the site has good accessibility by bus which offers a realistic travel option for potential future residents of the site. This will assist in minimising the vehicle trip generation from the site and reduce the need for residents to own a car.

Rail

3.4.6 The nearest railway station is located approximately a 2.8km (9 minute) cycle south from the site through Croespenmaen. There are four cycle spaces available at Newbridge Rail Station which are monitored by CCTV, and therefore this offers the potential of a combined cycle then train journey.

3.4.7 In addition, bus service 5 routes from Blacksmith Close bus stop and stops adjacent to the footbridge leading to Newbridge Rail Station and has a journey time of 16 minutes. As such, future residents also have the option of taking a combined bus then rail journey.

3.4.8 Trains stopping at Newbridge Rail Station are operated by Transport for Wales and provide hourly services in each direction, travelling to Cardiff Central and Ebbw Vale Town. The journey time to Cardiff Central is approximately 40 minutes and the journey time to Ebbw vale Town is approximately 21 minutes.

3.4.9 As such, it is feasible to use the rail services for commuting purposes as part of a multi-modal journey, particularly to locations such as Cardiff, although rail is also likely to be attractive for other journey purposes such as leisure, retail, or business journeys. A combined bus or cycle and then rail journey has some potential for replacing car journeys and further reducing the requirement for owning or travelling by car.

3.5 Summary

3.5.1 The site is situated in a sustainable location which benefits from being well connected to existing walking and cycling infrastructure, and public transport routes.

3.5.2 Potential future residents can walk or cycle to a number and range of facilities and services within appropriate distances via good quality routes, reducing the need to own a car. In this regard, the site location is consistent with the sustainable transport policies in PPW11 (in particular paras 4.1.10 – 4.1.17).

3.5.3 The site also has good public transport links, which provide a suitable, attractive and realistic alternative to travelling by car.

3.5.4 Potential future residents would have a realistic choice of modes of travel for all journey purposes. This will minimise the impact of the development and reduce the parking demand on the site.

3.5.5 The site location will encourage and promote sustainable travel behaviour, be attractive to residents who do not own a car or have low car ownership and is fully in accordance with transport policies in TAN18, PPW11 and Future Wales.

4. DEVELOPMENT PROPOSALS

4.1 Overview

4.1.1 The proposals are for a development of 26 affordable apartments consisting of:

- 20no. one-bedroom apartments
- 6no. two-bedroom apartments

4.1.2 These will be provided in two blocks situated in the eastern and southern parts of the site. A car park will be provided within the western part of the site, with access obtained broadly from the existing location. The access junction will be upgraded to a priority junction which provide footways on each side of the carriageway.

4.1.3 The site also provides landscaping and amenity space surrounding the buildings.

4.1.4 The proposed site layout is provided in Appendix A.

4.2 Site Access and Layout

Vehicular Access

4.2.1 The site will be accessed from Syr-Dafydd Avenue from the southern boundary via a new priority junction, which will be an upgrade on the existing dropped kerb arrangements. The junction provides a 6m radius on both sides together with a 5.5m width on the internal access road. A width of 5.5m enables two cars to pass each other throughout the site and is considered appropriate to accommodate all traffic associated with the site. The junction would provide an improved pedestrian environment along the site frontage in comparison to the existing dropped kerb arrangements. The existing access extends over a greater distance of the site frontage than the proposed access, as it links to the car park as well as providing direct frontage access to three disabled bays.

4.2.2 Visibility is provided at 2.4m x 25m to the nearside kerb in each direction which is appropriate for 20mph speeds in accordance with guidance in TAN18 and MfS. Syr-Dafydd Avenue is subject to a 20mph speed limit and as such, this is considered appropriate. This is also an existing access location with no evidence of a safety issue, and as such the visibility has been appropriate for an extended period of time.

4.2.3 The visibility splays would be maintained between a height of 0.6m and 2m along their length. All land for the junction and the visibility splays is within the control of the applicant or in the adopted highway and as such the visibility splays can be maintained appropriately.

4.2.4 In addition, forward visibility is available for vehicles approaching the access at similar levels or above those achievable from the junction in each direction.

4.2.5 The design provides footways on each side which link to the existing footway along the northern side of Syr-Dafydd Avenue and will provide dropped kerb crossings for existing pedestrians crossing at the junction mouth.

4.2.6 A general arrangement drawing of the site access and visibility splays is provided in Appendix B.

4.2.7 Swept path analysis of the proposed access junction has been undertaken which shows two large cars can access and egress the junction in both directions at the same time, as well as providing suitable geometry for refuse vehicles to turn into and out of the site. This is provided in Appendix C.

Pedestrian Access

4.2.8 Pedestrians can access the site via the footways adjacent to both sides of the proposed access junction which connect to those on Syr-Dafydd Avenue. A dropped kerb crossing and tactile paving will be provided at the site access to enable safe crossing. The arrangements are considered safe and suitable to accommodate the level of pedestrian movement within the site and along the existing footway on Syr-Dafydd Avenue.

Layout

4.2.9 The internal access road accommodates a turning head towards the northern end of the site. The car parking is obtained from the internal access road along its length. The parking spaces are 2.6m in width and 4.8m in length and cars can enter and exit all spaces appropriately, as shown in swept path analysis in Appendix C. There are footpaths linking from the car parking spaces to the entrance of the dwellings to ensure pedestrians can access each building appropriately past parked cars.

4.2.10 The two blocks of flats will have bin and cycle stores located in close proximity to the buildings. The bin stores would be located a short distance from the access road, to enable refuse collection to take place appropriately, and the cycle stores will provide secure and covered cycle parking.

4.3 Parking

Car Parking

4.3.1 The car parking provision will be in accordance with CCBC's Supplementary Planning Guidance (SPG) LDP5 - Car Parking Standards Revision 2, as adopted in January 2017 ('the Parking SPG'). This sets out the guidance on car parking provision for new developments and is based on the CSS Wales Parking Standards 2014.

4.3.2 The maximum parking standards for residential houses and apartments are 1 space per bedroom with a maximum of 3 spaces per dwelling. In addition, there is a requirement for 1 visitor space per 5 units.

4.3.3 Based on the proposals, this would equate to a maximum requirement of 32 spaces and 5 spaces for visitors (37 spaces in total). The site layout shows a total of 26 spaces within the car park. This equates to one space per unit.

4.3.4 This is within the maximum levels and as such considered to be in accordance with the CCBC parking standards. This provision is also considered to be in accordance with the aspirations of Future Wales for minimising car parking on new developments.

Parking reduction

4.3.5 To consider a reduction in parking, there is a sustainability calculation criteria set out in Schedule 6 of the SPG which provides a scoring system to apply a reduction in parking requirements based on a points score. The SPG specifically states that *"Award of these sustainability points **will** result in a reduction in parking requirement"* and then sets out the criteria against which a development will be assessed. This allows a reduction in the number of spaces per dwelling for residential uses, dependent on the sustainability score.

4.3.6 A sustainability points calculation has been undertaken using the criteria in Schedule 6 of the SPG. The resultant calculations and sustainability points score for the site have been summarised in Table 4-1.

Table 4-1: Parking Sustainability Points Calculation

Sustainability Criteria	Maximum Walking Distance	Single Sustainability Points	Notes	Points
Local Facilities				
Local facilities include a foodstore, post office, health facility, school etc. *Access to two of these within the same walking distance will score single points, whereas access to more than two of these will double the points score.*	200m	3		
	400m	2	Oakdale garage shop, Oakdale Church	
	800m	**1**	**Rhiw Syr Dafydd School, Nisa Extra Food Store and Post Office, Croespenmaen Community Hall**	**2**
Public Transport				
Access to bus stop or railway station	**300m**	**3**	**Blacksmith Close bus stop**	**3**
	400m	2		
	800m	1		
Cycle Route				
Access to a cycle route	200m	1	Cycle Route on B4251 is approximately 800m from the site	
Frequency of Public Transport	**Frequency**			
Bus or rail service within 800m walking distance which operates consistently between 7am and 7 pm. Deduct one point for service which does not extend to these times.	5 minutes	3		
	20 minutes	2		
	30 minutes	**1**	**Bus Service 5 provides an hourly service**	
			Total	5

4.3.7 As shown in Table 4-1 the site location scores five sustainability points which is below the seven point threshold for reducing car parking provision and as such a reduction in accordance with the sustainable criteria calculation is not applicable.

4.3.8 However, based on the car ownership for affordable tenure or flats, as set out in Section 2, the level of parking demand on the site is likely to be significantly below that for private houses, which is not reflected in the parking standards. As shown, the average car ownership for flats in the area in which the site is located is 0.55 per unit and the average for social rented accommodation is 0.85 per unit. On this basis, the likely demand for parking for this proposed development is likely to be one car or less, per unit. On this basis, providing car parking in accordance with the maximum levels would be a significant overprovision. A provision of one space per unit is considered more appropriate and would still exceed the likely demand, which would also enable visitor parking to be accommodated appropriately. The provision of parking is therefore considered appropriate to accommodate the likely demand without resulting in an overspill onto the highway network.

4.3.9 As a further comparison, a planning application was recently approved at Austin Grange in Caerphilly for Harmoni Homes (App Ref: 21/1090/RM). Whilst recognising this is in a different location, for the social rented apartments, this provided parking at 1 space per two-bedroom apartment and 0.6 spaces per one-bed apartment. The application was accompanied by a Transport Note produced by Apex and this also included surveys at seven other United Welsh affordable housing sites around Caerphilly and Llanbradach. These were a mixture of houses and apartments, but across the seven sites, there was an average parking demand of 0.8 spaces per unit. As such, this is considered to further demonstrate that the demand for parking for the proposed scheme is likely to be low, as affordable housing has significantly lower demand for parking than private dwellings. This conclusion and the provision was accepted for that site through the granting of planning approval. The proposals site is providing higher

levels of parking than the Austin Grange site, at 1 space per unit, including for all one-bedroom units, and as such the provision is considered appropriate and would accommodate the likely demand.

4.3.10 Potential residents will also likely be in an informed position on a variety of matters, including the availability of parking and alternative travel modes prior to moving into a property. If they perceive parking to be an issue, they would be likely to amend their behaviour accordingly (i.e. only own one vehicle per dwelling).

4.3.11 A reduced level of parking provision from the maximum standards is considered to be in accordance with the Welsh Government overarching planning policy Future Wales: The National Plan 2040 which states on page 86 that *"Planning authorities should promote car-free and low car developments in accessible locations."*

4.3.12 Policy 12 also states that *"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."*

4.3.13 There would be some demand for parking from visitors to the development. It is unlikely that every resident would be occupying a space at all times (indeed it is likely that a high number of residents may not own a car) and therefore a significant proportion of the visitor demand (if not all of it) is likely to be accommodated within the on-site provision. As such, the proposed parking provision is appropriate for accommodating the demand for both residents and visitors, whilst encouraging travel by other more sustainable modes through not overproviding spaces.

4.3.14 Parking for the site would be unallocated which ensures the most efficient use of the spaces and ensures that bays are not left empty for spaces allocated to units where residents do not own a car. Based on Census analysis and the surveys of other sites within the Austin Grange application, the total provision can accommodate the likely demand (as well as visitor parking) and as such, providing unallocated spaces would be appropriate.

4.3.15 If needed, it can be stipulated within the tenancy agreements that residents will not be allowed to bring more than one car onto the site. This will ensure that parking can be used efficiently and flexibly, therefore minimising the potential for overspill parking.

4.3.16 The housing association will manage and monitor this through their standard processes and although the parking will be unallocated, if needed, a permit could be provided for each allocated house to use to ensure that the parking is only used by residents (who could also have time limited visitor passes).

4.3.17 On this basis, the parking provision is considered appropriate for the proposals, providing a suitable level of parking to accommodate the likely demand, below the maximum standards, whilst not overproviding parking encouraging car use.

4.3.18 The provision will also enable a less car dominated development with more green space, improving the quality of the scheme.

Cycle Parking

4.3.19 The SPG provides a minimum standard of one stand per five bedrooms for residential apartments which would equate to 6 stands if applied to the 32 bedrooms within the proposed scheme. This level of provision will be provided in the cycle store located adjacent to the apartment block. The cycle shelter is secure and covered, and would provide suitable dimensions for manoeuvring and parking.

4.4 Servicing and Deliveries

4.4.1 Servicing would mainly relate to refuse collection which would be undertaken from the access road within the site. The bin storage areas are located within 25m of the access road to enable refuse to be collected appropriately. A 10.25m long refuse vehicle is able to stop and wait on the access road and can turn using the turning area. Swept path analysis of a refuse vehicle turning is shown in Appendix C.

4.4.2 MfS states Building Regulations on refuse collection distances in that waste collection vehicles should be able to get within 25 metres of the storage points. As collection can take place from within the site from this distance, the arrangements are in line with Building Regulations (and MfS) and considered safe and appropriate.

4.4.3 Delivery vehicles can park on-street within the site as these would be waiting for a short-time. The internal layout is of sufficient width for vehicles to pass any other vehicle parked on-street. This is considered appropriate.

4.4.4 A fire tender will also be able to get within 45 metres of all buildings on the site and turn using the turning head. As such, the layout is appropriate for access by emergency vehicles.

5. TRIP GENERATION AND TRAFFIC IMPACTS

5.1 Introduction

5.1.1 This section sets out the forecast vehicle trip generation of the proposals. The existing site use for a public house would also generate movements on the network, but for robustness within this report, these have not been considered. The existing use also has a larger car park which can accommodate additional vehicles compared to the proposals, as well as an extended dropped kerb access, which is not ideal for pedestrians passing the site.

5.1.2 The trip generation has been calculated using the Trip Rate Information Computer System (TRICS). The TRICS database has been analysed for sites with similar characteristics in terms of scale, location, accessibility, and surrounding population numbers.

5.1.3 The TRICS database predicts the likely numbers of arrivals and departures by utilising surveys of existing sites. Trip rates have been obtained and applied to establish the forecast trip generation during network peak hours on a weekday and over a daily period. The weekday network peak hours have been assumed as 08:00 to 09:00 and 17:00 to 18:00.

5.2 Proposed Trip Generation

5.2.1 The TRICS category '03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY FLATS' has been selected to derive trip rates for the proposed scheme. The following parameters have been applied to the search criteria to obtain sites of a similar nature:

- Located in England, Scotland and Wales (Excluding Greater London)
- Vehicle Surveys
- Sites of up to 75 dwellings
- Edge of town, suburban area and neighbourhood centre locations
- Weekday surveys
- From 2010 onwards
- Removed sites with populations over 250,000 within 5 miles

5.2.2 The application of these parameters resulted in identifying 7 comparable sites. The resultant vehicle trip rates, and vehicle trip generation based upon the proposed 26 units are summarised in Table 5-1. The full TRICS report is included in Appendix D.

Table 5-1: Proposed Development - Vehicle Trip Rates and Trip Generation

Time Period	Trip Rates (per unit)			Trip Generation (26 units)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (08:00-09:00)	0.118	0.124	0.242	3	3	6
PM Peak (17:00-18:00)	0.146	0.112	0.258	4	3	7
12 Hours (07:00-19:00)	1.804	1.732	3.536	47	45	92

5.2.3 Table 5-1 demonstrates that the proposed development is forecast to generate between 6 to 7 two-way vehicular movements during the AM and PM peak hours. Over a 12 hour period, the scheme is forecast to generate 92 two-way vehicle movements.

5.2.4 This equates to one vehicle every c.8-9 minutes in the busiest peak hour, on average. This forecast level of trip generation would not have a material impact on traffic flows or congestion on the highway network, particularly given the existing site use would generate movements on the network and has a larger car park than that proposed.

5.2.5 The scheme would also not have an unacceptable impact on safety, with footways and footpaths within the site separating pedestrians from vehicles, and the access arrangements being formalised and improved in comparison to the existing dropped kerb which extends over a larger width of the site frontage. There is no evidence of a safety issue in relation to the existing site use and access, and the proposed improvements to the access, and minimal vehicle movements generated by the scheme would therefore not lead to an unacceptable impact on safety.

6. SUMMARY AND CONCLUSIONS

6.1 Summary

6.1.1 This Transport Statement (TS) supports a planning application for a proposed affordable residential development scheme on land north of Syr Dafydd Avenue, Oakdale, Blackwood.

6.1.2 The TS has been produced to inform Caerphilly County Borough Council (CCBC) of the highways and transport implications of the proposals.

6.1.3 The existing site comprises of a public house with a large car park and the site is surrounded by primarily residential uses.

6.1.4 The proposals are to demolish the existing building on the site, which was previously a public house, and construct two buildings accommodating 26 residential apartments, comprising 20no. 1 bedroom apartments and 6no. 2 bedroom apartments.

6.1.5 The site is situated in a sustainable location. Potential future residents can walk or cycle to a number and range of facilities, services and schools within appropriate distances via good quality routes, reducing the need to own a car.

6.1.6 There are continual and suitable active travel links from the site to the surrounding area, and CCBC propose to provide an improved active travel link within the vicinity of the site. There are also footways on one or both sides of the carriageway and well-lit streets within the surrounding area. Walking would therefore be an attractive mode of transport for potential future residents.

6.1.7 The site also has good public transport links, which provide a suitable and realistic alternative to travelling by car. This will assist in constraining vehicle generation and reduce the need for residents to own a car. It will also benefit and attract residents that would prefer to travel by public transport.

6.1.8 The site will be accessed from a new priority junction, in the location of the existing dropped kerb access arrangement onto Syr Dafydd Avenue. The junction provides a 6m radius on both sides together with a 5.5m width on the internal access road. Suitable visibility and geometry will be provided to enable access without conflict between vehicles.

6.1.9 The junction would provide an improved pedestrian environment along the site frontage in comparison to the existing dropped kerb arrangements. The existing access extends over a greater distance of the site frontage than the proposed access, as it links to the car park as well as providing direct frontage access to three disabled bays.

6.1.10 Pedestrians can access the site via the footways adjacent to both sides of the proposed access junction which connect to those on Syr-Dafydd Avenue. A dropped kerb crossing and tactile paving will be provided at the site access to enable safe crossing.

6.1.11 Obtained road safety data does not indicate an existing safety issue which would be exacerbated by the proposals, with no incidents recorded within the vicinity of the site boundary.

6.1.12 Parking is provided at an appropriate level (one space per unit) considering the likely demand for an affordable apartment scheme and is in accordance with the maximum parking standards. The provision can accommodate the forecast demand (between 0.55 and 0.85 vehicles per unit), as well as accommodate visitors. The provision is also in line with the aspirations of Future Wales in relation to minimising parking.

6.1.13 Parking for the site would be unallocated which ensures the most efficient use of the spaces and ensures that bays are not left empty for spaces allocated to units where residents do not own a car. If needed, it can be stipulated within the tenancy agreements that residents will not be allowed to bring more than one car onto the site. This will ensure that parking can be used efficiently and flexibly, therefore minimising the potential for overspill parking.

6.1.14 The parking provision enables a less car dominated development to be provided with more green space, improving the quality of the scheme.

6.1.15 Refuse will be collected from the internal access road with vehicles being able to stop within suitable distances of the bin stores and turn using the turning head within the site. Access for fire tenders is also appropriate.

6.1.16 The trip generation analysis shows that the proposals are forecast to generate 6 two-way movements during the AM Peak and 7 two-way movements during the PM Peak. This is a minimal level of movements and would not have a material impact on the operation of the highway or an unacceptable impact on safety, particularly given the existing public house use would have generated movements on the network.

6.2 Conclusions

6.2.1 The site location will encourage and promote sustainable travel behaviour, including providing suitable mitigation and enhancements to the pedestrian environment, in accordance with transport policies in Future Wales, PPW11, TAN18 and the LDP.

6.2.2 Data does not indicate a road safety issue which would be exacerbated by the proposals. The development would not have an unacceptable impact on road safety and the access arrangements onto the highway would be safe and suitable.

6.2.3 The proposals will not have a material impact on the operation of the highway network and as such no mitigation is considered to be required in relation to highway capacity.

6.2.4 It is therefore considered that there are no reasons relating to transport or highways for objecting to the application.

Appendix A Site Layout Plan

Revisions

A	13.12.23	Updated to planning stage

Site plan
1 : 200

Hard & Soft landscpaing key

- Permeable tarmac to internal road / parking - exact style to be agreed
- Paving to internal paths - exact style to be agreed
- Indicates grassed areas - Provide topsoil and turfing as section Q30 and D20
- Indicates tarmac Road to adoptable standards
- **Indicates proposed street trees;** Species to be agreed

NB Refer to landscaping layout for details of planting

Boundary treatments

- Indicates new 2.1m high closeboarded timber fence to Eastern boundary
  NB, Fencelineto Northern / Western boundaries to remain.
- Indicates 1100mm Black painted metal vertical bar railings

Block 1 - Accommodation schedule

Plot number	Type	Area (GIA)
PLOT 1	2B3P	59,0 m²
PLOT 2	1B2P	49,0 m²
PLOT 3	1B2P	49,0 m²
PLOT 4	2B3P	58,5 m²
PLOT 5	1B2P	50,0 m²
PLOT 6	1B2P	50,0 m²
PLOT 7	2B3P	59,0 m²
PLOT 8	1B2P	49,0 m²
PLOT 9	1B2P	49,0 m²
PLOT 10	2B3P	58,5 m²
PLOT 11	1B2P	50,0 m²
PLOT 12	1B2P	49,5 m²
PLOT 13	1B2P	48,0 m²
PLOT 14	1B2P	47,5 m²
PLOT 15	1B2P	47,5 m²
PLOT 16	1B2P	47,5 m²
PLOT 17	1B2P	48,5 m²
PLOT 18	1B2P	47,5 m²

Block 2 - Accommodation schedule

Plot number	Type	Area (GIA)
PLOT 19	1B2P	49,5 m²
PLOT 20	1B2P	50,0 m²
PLOT 21	2B3P	59,0 m²
PLOT 22	1B2P	49,5 m²
PLOT 23	1B2P	50,0 m²
PLOT 24	2B3P	59,0 m²
PLOT 25	1B2P	47,5 m²
PLOT 26	1B2P	48,0 m²

North

2 0 2 4 6 8 10 m
1:200

Notes

Do not scale from this drawing. Use figured dimensions only, which are displayed in millimeters unless stated otherwise. The contractor is requested to check all dimensions before work is put in hand. Any discrepancies within the drawing should be reported prior to commencement of works.

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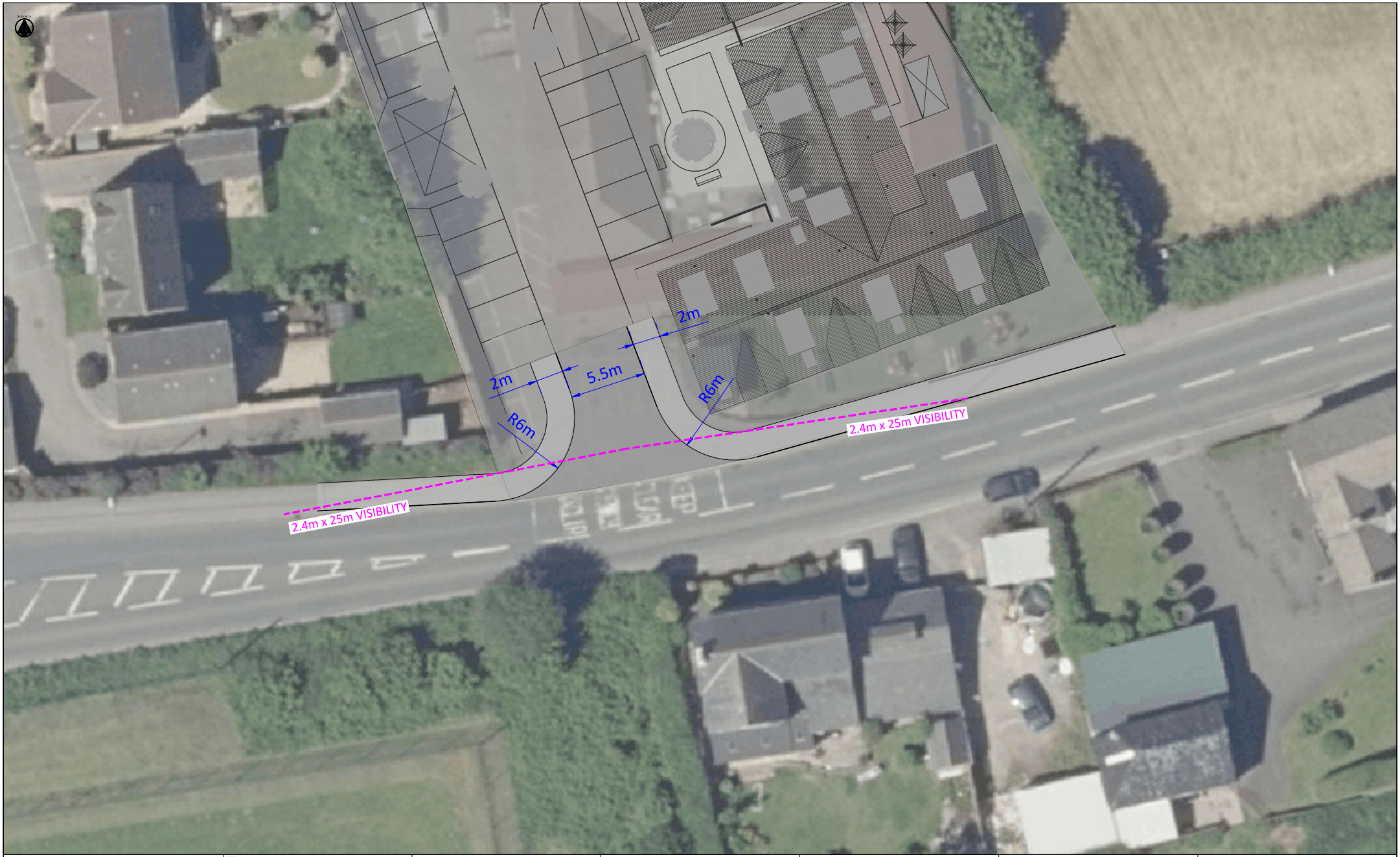
Project	Land off Sir Dafydd Avenue	Oakdale
Project number	N469 / 2
Client	Castell Group
Title	Proposed Site layout
Drawing number	A102
Scale	1 : 200 at A1
Revision	A
Status	PLANING
Drawn	MM
Date	31.10.2023

Appendix B Proposed Site Access Arrangements



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KEY

NOTES

1. General arrangement drawing suitable for planning purposes only. This drawing is not suitable for construction.
2. The content of this drawing is subject to detailed design considerations such as ground conditions, utilities, drainage and signage.
3. Drawing is based on topo survey data provided by others, as well as OS mapping data, supplemented by aerial mapping (c) Getmapping plc 2023. Ordnance Survey, (c) Crown Copyright 2023. All rights reserved. Licence number 100022432.
4. Please do not scale from this drawing.

REVISIONS *(CONTINUED)*

REVISIONS

Rev	Date	Description	By	App
P02	14/12/23	Second Issue	SD	DC
P01	20/09/23	First Issue	SD	DC

Apex TRANSPORT PLANNING
11-13 PENHILL ROAD CARDIFF CF11 9PQ t: 02920 618 361 e: info@apextp.co.uk
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CLIENT
CASTELL GROUP

PROJECT
SYR-DAFYDD AVENUE, OAKDALE

TITLE
GENERAL ARRANGEMENT OF PROPOSED SITE ACCESS

PROJECT NO.
C23-093

SCALE @ A3
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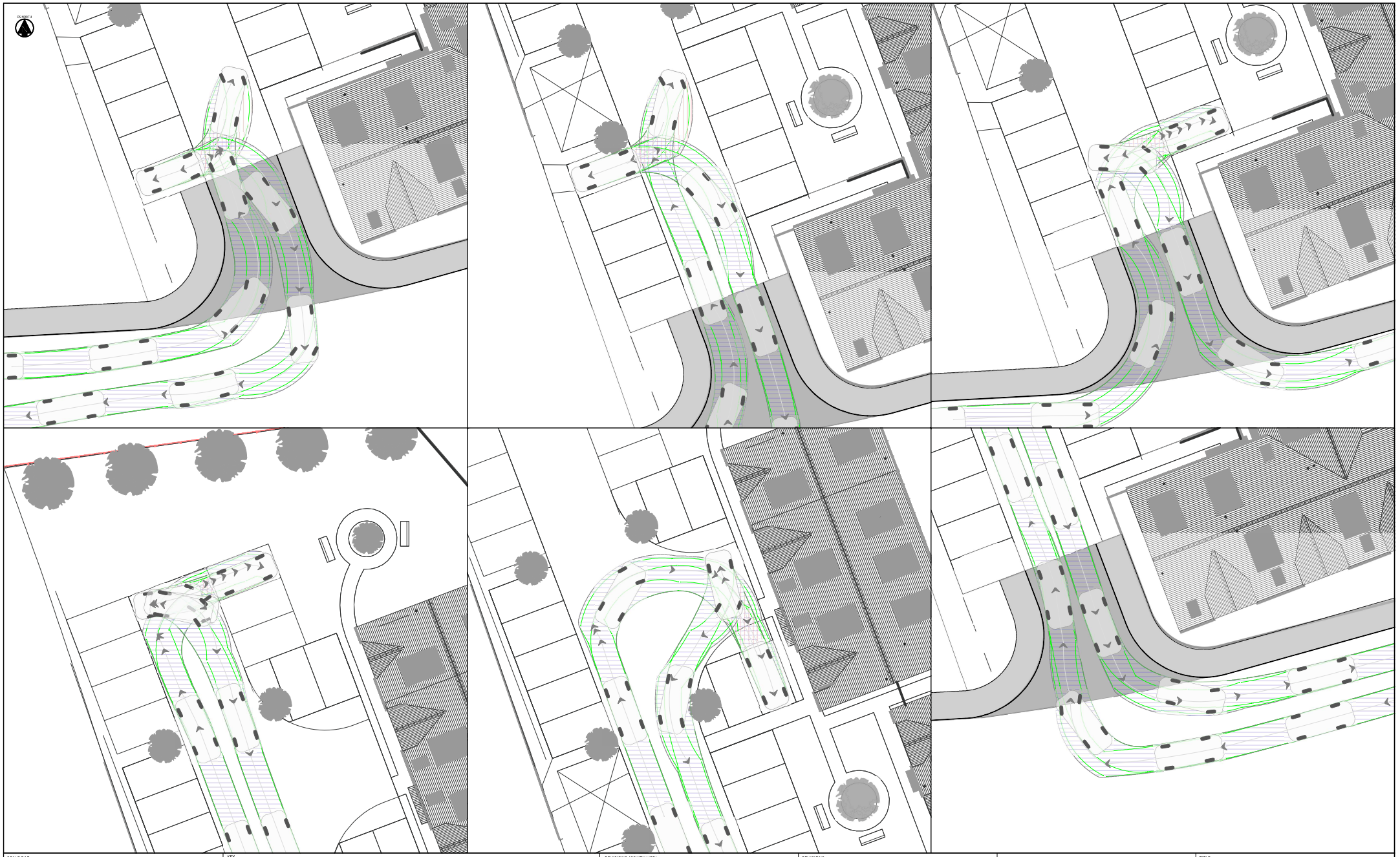
STATUS DESCRIPTION
INFORMATION

STATUS
S2

DRAWING NO.
C23097-ATP-DR-TP-003

Appendix C Swept Path Analysis



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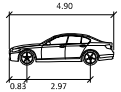
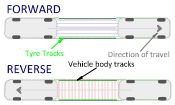
KEY



2010 BMW 5-Series

	metres
Width	: 1.86
Track	: 1.85
Lock to Lock Time	: 6.0
Steering Angle	: 36.9



REVISIONS (CONTINUED)

REVISIONS

Rev	Date	Description	By	App
P02	14/12/23	Second Issue	SD	DC
P01	29/08/23	First Issue	SD	DC

Apex TRANSPORT PLANNING

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CLIENT
CASTELL GROUP

PROJECT
SYR-DAFYDD AVENUE, OAKDALE

TITLE
SWEPT PATH ANALYSIS - LARGE CAR

PROJECT NO.
C23-093

SCALE @ A3
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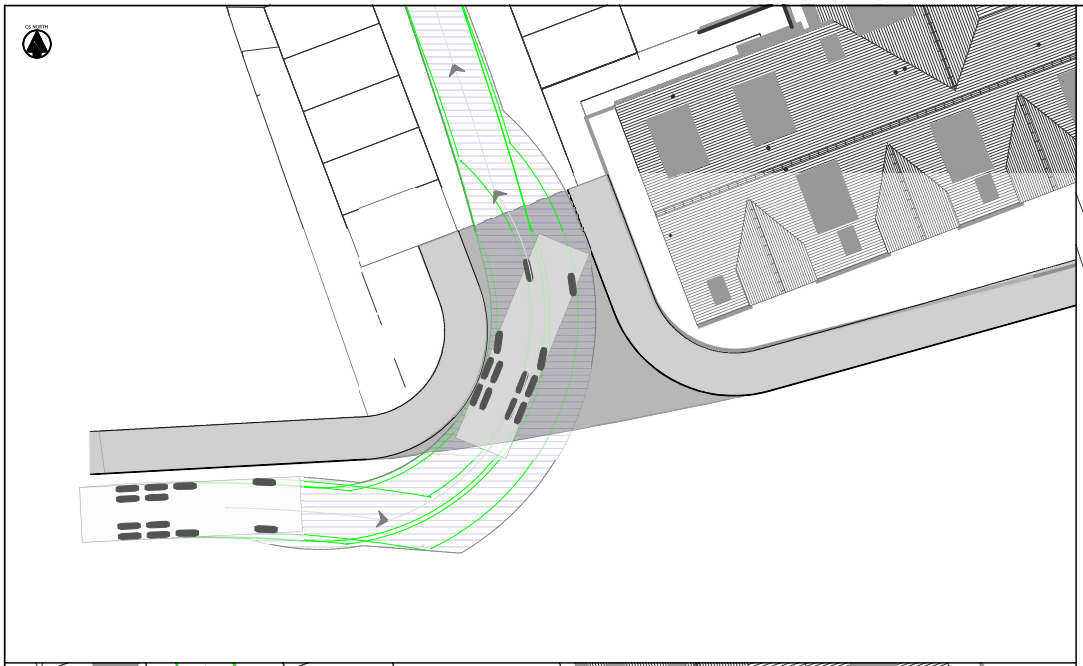
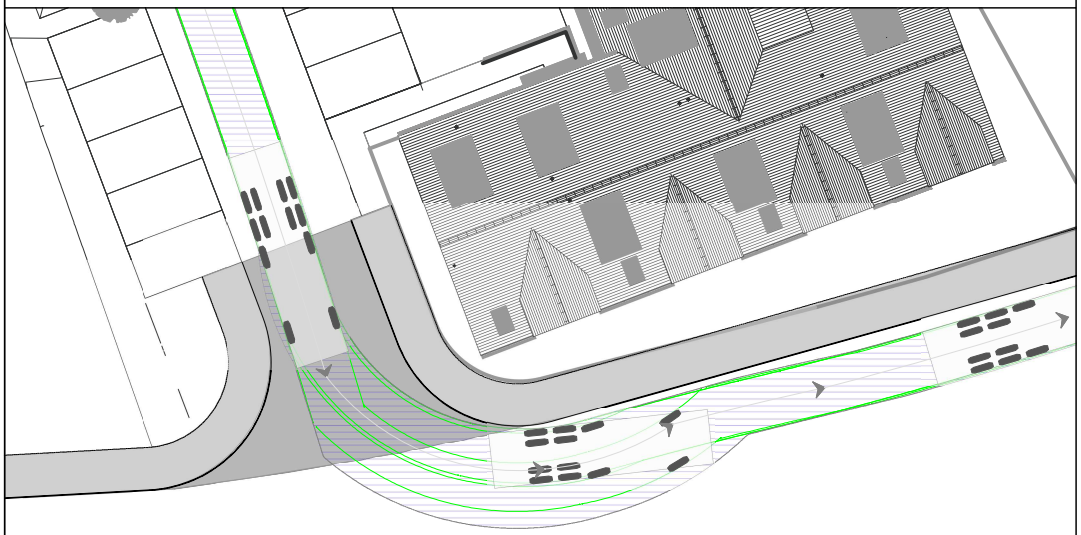
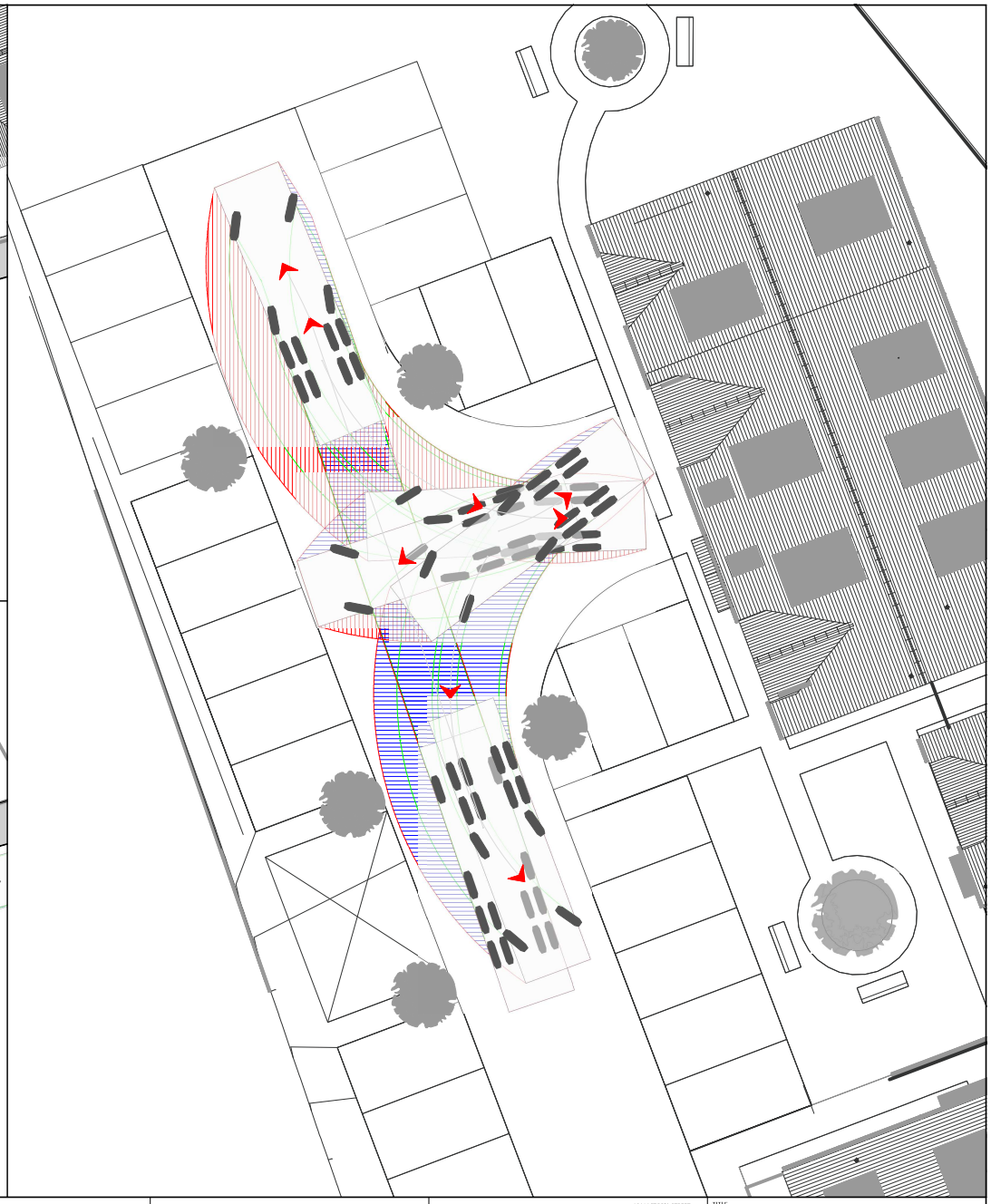
STATUS DESCRIPTION
INFORMATION

STATUS
S2

DRAWING NO.
C23097-ATP-DR-TP-001







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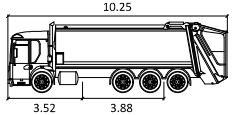
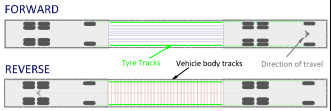


Dennis Eagle OL 27W 2013

	meters
Width	: 2.53
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 22.7



REVISIONS *(CONTINUED)*

Rev	Date	Description	By	App
P02	15/12/23	Second Issue	SD	DC
P01	29/08/23	First Issue	SD	DC

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CLIENT
CASTELL GROUP

PROJECT
SYR-DAFYDD AVENUE, OAKDALE

TITLE
SWEPT PATH ANALYSIS - REFUSE VEHICLE

PROJECT NO.	SCALE @ A3
C23-093	1:250

STATUS DESCRIPTION	STATUS
INFORMATION	S2

DRAWING NO.
C23097-ATP-DR-TP-002

Appendix D TRICS outputs – Affordable Residential

Filtering Summary

Land Use	03/D	RESIDENTIAL/AFFORDABLE/LOCAL AUTHORITY FLATS
Selected Trip Rate Calculation Parameter Range	6-75 DWELLS	
Actual Trip Rate Calculation Parameter Range	6-56 DWELLS	
Date Range	Minimum: 01/01/10	Maximum: 07/10/16
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	
Days of the week selected	Monday	1
	Tuesday	1
	Wednesday	1
	Thursday	3
	Friday	1
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	4
	Edge of Town	2
	Neighbourhood Centre (PPS6 Local Centre)	1
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	1 - Selected
	Servicing vehicles Excluded	10 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	3
	5,001 to 10,000	1
	15,001 to 20,000	1
	20,001 to 25,000	1
	25,001 to 50,000	1
Population <5 Mile ranges selected	5,001 to 25,000	2
	100,001 to 125,000	1
	125,001 to 250,000	4
Car Ownership <5 Mile ranges selected	0.6 to 1.0	3
	1.1 to 1.5	4
PTAL Rating	No PTAL Present	7

Calculation Reference: AUDIT-502501-230823-0802

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	**SOUTH EAST**		
	HC	HAMPSHIRE	1 days
	OX	OXFORDSHIRE	1 days
05	**EAST MIDLANDS**		
	LN	LINCOLNSHIRE	1 days
06	**WEST MIDLANDS**		
	WO	WORCESTERSHIRE	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	KS	KIRKLEES	1 days
08	**NORTH WEST**		
	AC	CHESHIRE WEST & CHESTER	1 days
11	**SCOTLAND**		
	DU	DUNDEE 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: No of Dwellings
Actual Range: 6 to 56 (units:)
Range Selected by User: 6 to 75 (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: 01/01/10 to 07/10/16

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	1 days
Thursday	3 days
Friday	1 days

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

Selected survey types:

Manual count	7 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 undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4
Edge of Town	2
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:

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	1 days - Selected
Servicing vehicles Excluded	10 days - Selected

Secondary Filtering selection:

Use Class:

C3	7 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

Population within 1 mile:

1,001 to 5,000	3 days
5,001 to 10,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	1 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
100,001 to 125,000	1 days
125,001 to 250,000	4 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	3 days
1.1 to 1.5	4 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	7 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	7 days

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

LIST OF SITES relevant to selection parameters

Site(1):	AC-03-D-01	Site area:	0.20 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	30
Location:	CHESTER	Housing density:	150
Postcode:	CH3 5SW	Total Bedrooms:	57
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	24/05/12
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	12
Site(2):	DU-03-D-01	Site area:	0.35 hect
Development Name:	FLATS IN HOUSES	No of Dwellings:	17
Location:	NEAR DUNDEE	Housing density:	142
Postcode:	DD8 2XD	Total Bedrooms:	17
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	06/05/11
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	10
Site(3):	HC-03-D-05	Site area:	0.23 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	29
Location:	BASINGSTOKE	Housing density:	290
Postcode:	RG21 8YU	Total Bedrooms:	29
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/10/10
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	18
Site(4):	KS-03-D-01	Site area:	0.52 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	56
Location:	HECKMONDWIKE	Housing density:	509
Postcode:	WF15 6EE	Total Bedrooms:	90
Main Location Type:	Edge of Town	Survey Date:	01/05/14
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	47
Site(5):	LN-03-D-02	Site area:	0.31 hect
Development Name:	FLATS	No of Dwellings:	22
Location:	LINCOLN	Housing density:	105
Postcode:	LN2 4NR	Total Bedrooms:	22
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	01/07/15
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	20
Site(6):	OX-03-D-01	Site area:	0.11 hect
Development Name:	FLATS	No of Dwellings:	6
Location:	OXFORD	Housing density:	
Postcode:	OX2 8AR	Total Bedrooms:	12
Main Location Type:	Edge of Town	Survey Date:	05/10/10
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	8
Site(7):	WO-03-D-02	Site area:	0.15 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	18
Location:	WORCESTER	Housing density:	225
Postcode:	WR4 9PJ	Total Bedrooms:	30
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	22/05/14
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	8

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

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	25	0.045	7	25	0.067	7	25	0.112
08:00 - 09:00	7	25	0.118	7	25	0.124	7	25	0.242
09:00 - 10:00	7	25	0.101	7	25	0.118	7	25	0.219
10:00 - 11:00	7	25	0.146	7	25	0.146	7	25	0.292
11:00 - 12:00	7	25	0.073	7	25	0.096	7	25	0.169
12:00 - 13:00	7	25	0.140	7	25	0.118	7	25	0.258
13:00 - 14:00	7	25	0.146	7	25	0.112	7	25	0.258
14:00 - 15:00	7	25	0.135	7	25	0.135	7	25	0.270
15:00 - 16:00	7	25	0.084	7	25	0.090	7	25	0.174
16:00 - 17:00	7	25	0.124	7	25	0.090	7	25	0.214
17:00 - 18:00	7	25	0.146	7	25	0.112	7	25	0.258
18:00 - 19:00	7	25	0.146	7	25	0.152	7	25	0.298
19:00 - 20:00	2	18	0.114	2	18	0.086	2	18	0.200
20:00 - 21:00	**2**	**18**	**0.200**	**2**	**18**	**0.200**	**2**	**18**	**0.400**
21:00 - 22:00	2	18	0.086	2	18	0.086	2	18	0.172
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.804			1.732			3.536

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.*

Parameter summary

Trip rate parameter range selected:	6 - 56 (units:)
Survey date date range:	01/01/10 - 07/10/16
Number of weekdays (Monday-Friday):	7
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 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS

TAXIS

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	7	25	0.000	7	25	0.000	7	25	0.000
08:00 - 09:00	**7**	**25**	**0.017**	7	25	0.017	7	25	0.034
09:00 - 10:00	7	25	0.000	7	25	0.000	7	25	0.000
10:00 - 11:00	7	25	0.006	7	25	0.006	7	25	0.012
11:00 - 12:00	7	25	0.000	7	25	0.000	7	25	0.000
12:00 - 13:00	7	25	0.011	7	25	0.006	7	25	0.017
13:00 - 14:00	7	25	0.017	7	25	0.011	7	25	0.028
14:00 - 15:00	7	25	0.011	7	25	0.017	7	25	0.028
15:00 - 16:00	7	25	0.006	7	25	0.011	7	25	0.017
16:00 - 17:00	7	25	0.006	7	25	0.006	7	25	0.012
17:00 - 18:00	7	25	0.011	7	25	0.000	7	25	0.011
18:00 - 19:00	7	25	0.017	**7**	**25**	**0.028**	**7**	**25**	**0.045**
19:00 - 20:00	2	18	0.000	2	18	0.000	2	18	0.000
20:00 - 21:00	2	18	0.000	2	18	0.000	2	18	0.000
21:00 - 22:00	2	18	0.000	2	18	0.000	2	18	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.102			0.102			0.204

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.*

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

OGVS

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	7	25	0.000	7	25	0.000	7	25	0.000
08:00 - 09:00	**7**	**25**	**0.011**	7	25	0.000	7	25	0.011
09:00 - 10:00	7	25	0.000	**7**	**25**	**0.011**	7	25	0.011
10:00 - 11:00	7	25	0.006	7	25	0.006	**7**	**25**	**0.012**
11:00 - 12:00	7	25	0.000	7	25	0.000	7	25	0.000
12:00 - 13:00	7	25	0.000	7	25	0.000	7	25	0.000
13:00 - 14:00	7	25	0.000	7	25	0.000	7	25	0.000
14:00 - 15:00	7	25	0.000	7	25	0.000	7	25	0.000
15:00 - 16:00	7	25	0.000	7	25	0.000	7	25	0.000
16:00 - 17:00	7	25	0.000	7	25	0.000	7	25	0.000
17:00 - 18:00	7	25	0.006	7	25	0.006	7	25	0.012
18:00 - 19:00	7	25	0.000	7	25	0.000	7	25	0.000
19:00 - 20:00	2	18	0.000	2	18	0.000	2	18	0.000
20:00 - 21:00	2	18	0.000	2	18	0.000	2	18	0.000
21:00 - 22:00	2	18	0.000	2	18	0.000	2	18	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.023			0.023			0.046

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.*

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

PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	25	0.000	7	25	0.000	7	25	0.000
08:00 - 09:00	7	25	0.000	7	25	0.000	7	25	0.000
09:00 - 10:00	7	25	0.000	7	25	0.000	7	25	0.000
10:00 - 11:00	7	25	0.000	7	25	0.000	7	25	0.000
11:00 - 12:00	7	25	0.000	7	25	0.000	7	25	0.000
12:00 - 13:00	7	25	0.006	7	25	0.006	7	25	0.012
13:00 - 14:00	7	25	0.006	7	25	0.006	7	25	0.012
14:00 - 15:00	7	25	0.006	7	25	0.006	7	25	0.012
15:00 - 16:00	7	25	0.000	7	25	0.000	7	25	0.000
16:00 - 17:00	**7**	**25**	**0.011**	**7**	**25**	**0.011**	**7**	**25**	**0.022**
17:00 - 18:00	7	25	0.006	7	25	0.006	7	25	0.012
18:00 - 19:00	7	25	0.000	7	25	0.000	7	25	0.000
19:00 - 20:00	2	18	0.000	2	18	0.000	2	18	0.000
20:00 - 21:00	2	18	0.000	2	18	0.000	2	18	0.000
21:00 - 22:00	2	18	0.000	2	18	0.000	2	18	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.035			0.035			0.070

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.*

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

CYCLISTS

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	7	25	0.000	7	25	0.006	7	25	0.006
08:00 - 09:00	7	25	0.006	**7**	**25**	**0.017**	**7**	**25**	**0.023**
09:00 - 10:00	7	25	0.000	7	25	0.006	7	25	0.006
10:00 - 11:00	7	25	0.006	7	25	0.000	7	25	0.006
11:00 - 12:00	7	25	0.006	7	25	0.000	7	25	0.006
12:00 - 13:00	7	25	0.000	7	25	0.000	7	25	0.000
13:00 - 14:00	7	25	0.000	7	25	0.000	7	25	0.000
14:00 - 15:00	7	25	0.000	7	25	0.000	7	25	0.000
15:00 - 16:00	7	25	0.006	7	25	0.000	7	25	0.006
16:00 - 17:00	7	25	0.000	7	25	0.006	7	25	0.006
17:00 - 18:00	**7**	**25**	**0.011**	7	25	0.000	7	25	0.011
18:00 - 19:00	7	25	0.000	7	25	0.000	7	25	0.000
19:00 - 20:00	2	18	0.000	2	18	0.000	2	18	0.000
20:00 - 21:00	2	18	0.000	2	18	0.000	2	18	0.000
21:00 - 22:00	2	18	0.000	2	18	0.000	2	18	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.035			0.035			0.070

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.*