

Awel Y Mor, St Dogmaels

Transport Statement

Client: Obsidian Developments Ltd

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REPORT DETAILS

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1. INTRODUCTION

1.1 Overview

- 1.1.1 Apex Transport Planning Ltd has been commissioned to produce a Transport Note (TS) in relation to a proposed residential development for 29 dwellings at Awel-Y-Mor, St Dogmaels.
- 1.1.2 The application site ('the site') is accessed from Awel-Y-Mor and currently comprises of agricultural land.
- 1.1.3 The TS considers the impacts of the proposals in relation to transport including the site connectivity, parking provision and access arrangements, road safety and vehicle trip generation. It has been produced to inform Pembrokeshire County Council (PCC) of the highways and transport implications of the proposals and demonstrate that this is a sustainable location for a residential site and can be safely and appropriately accessed.

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), the Active Travel Act (Wales – 2013), the PCC Local Development Plan (LDP) and Parking Standards SPG, as well as considering our previous experience of other similar sites.
- 1.2.2 The TS has been structured to include the following:
- a description of the existing conditions, including the local highway network and a review of road safety data within the vicinity of the site
 - a review of the relevant planning policies
 - a review of the connectivity of the site by sustainable modes including walking, cycling and public transport
 - a summary of the development proposals and parking strategy
 - forecasts of the network peak hour trip generation

2. EXISTING CONDITIONS

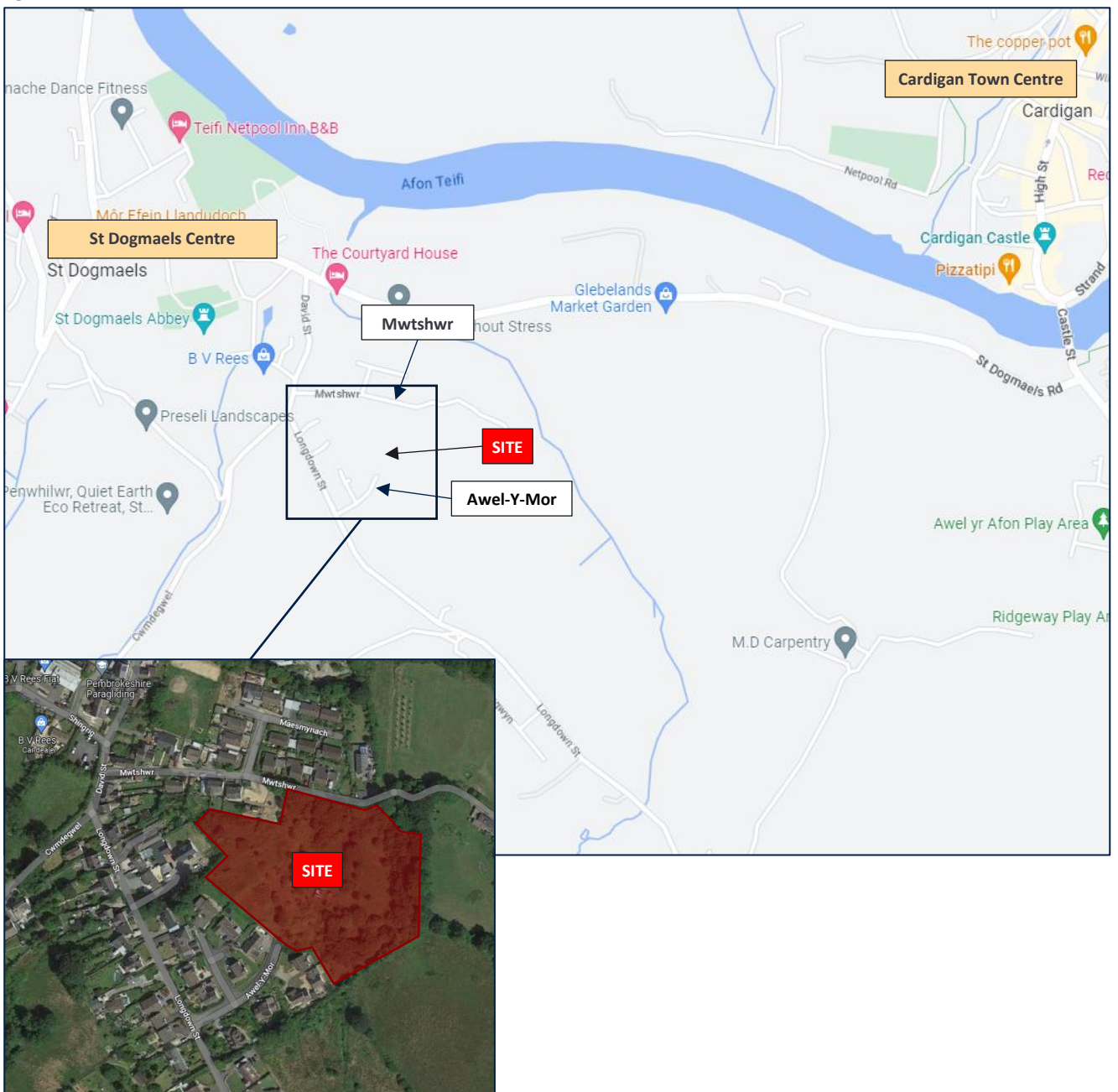
2.1 Site Location and Use

2.1.1 The application site is located towards the south of St Dogmaels, Cardigan, adjacent to Awel-Y-Mor on its western boundary. It also borders Mwtshwr on its northern side. The immediate surrounding area is primarily residential in nature. As such, movements associated with residential uses are firmly established in this area.

2.1.2 The site is currently undeveloped open space, with a potential highway connection onto Awel-y-Mor to the south with the end of the existing carriageway connecting to the site boundary.

2.1.3 The indicative location of the site in the context of the surrounding area is shown in Figure 2-1.

Figure 2-1: Indicative Site Location



Source: Google Maps

2.2 Relevant Planning Policies

Future Wales: The National Plan 2040

- 2.2.1 In relation to transport, Future Wales: The National Plan 2020 states on page 51 that *“Growth should be shaped around sustainable forms of transport and places that make us and the environment healthier”*. Page 55 continues to state that *“Development will focus on active travel and public transport, allied with a reduced reliance on private vehicles”*.
- 2.2.2 On page 84 it is stated that *“The Welsh Government’s aim is to reduce the need to travel, particularly by private vehicles, and support a modal shift to walking, cycling and public transport.”*
- 2.2.3 On page 174, supporting Policy 36, it is stated that *“Welsh Government wishes to see development built in sustainable locations that are supported by the active travel and public transport infrastructure and services needed to enable people to live active and healthy lives.”*
- 2.2.4 As such, the key themes are that development should be sited where it can benefit from active travel and public transport connections and reduce the need to travel by car. Facilities should be within easy walking distance.

Planning Policy Wales 11th Edition (PPW11)

- 2.2.5 Planning Policy Wales Edition 11 (PPW11) provides overarching Welsh Government policies. Transport policies are set out in Section 4.1. This states in paragraph 4.1.10 *“The planning system has a key role to play in reducing the need to travel, particularly by private car, and supporting sustainable transport, by facilitating developments which:*
- 2.2.6 ** are sited in the right locations, where they can be easily accessed by sustainable modes of travel and without the need for a car*
- 2.2.7 ** make it possible for all short journeys within and beyond the development to be easily made by walking and cycling.”*
- 2.2.8 PPW11 sets out a *“Sustainable Transport Hierarchy for Planning”* in Figure 9. This states in paragraph 4.1.12 *“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. The transport hierarchy recognises that Ultra Low Emission Vehicles also have an important role to play in the decarbonisation of transport, particularly in rural areas with limited public transport services.”*
- 2.2.9 It continues to state that *“The sustainable transport hierarchy should be used to reduce the need to travel [and] prevent car-dependent developments in unsustainable locations”*.
- 2.2.10 However, PPW11 recognises the differences between development in different areas and the need to consider local context, with paragraph 4.1.17 stating *“Different approaches to sustainable transport will be required in different parts of Wales, particularly in rural areas, and new development will need to reflect local circumstances.”*
- 2.2.11 PPW11 also states in paragraph 3.39 that *“For most rural areas the opportunities for reducing car use and increasing walking, cycling and use of public transport are more limited than in urban areas. In rural areas most new development should be located in settlements which have relatively good accessibility by non-car modes when compared to the rural area as a whole.”* Development should *“where possible, offer good active travel connections to the centres of settlements to reduce the need to travel by car for local journeys.”*

Technical Advice Note 18: Transport (TAN18)

- 2.2.12 The importance of walking and cycling in contributing towards sustainable travel patterns is detailed in the guidance contained within TAN18: Transport (March 2007). The guidance emphasises not only the role walking and cycling can have as main modes of transport for local journeys but also the considerable contribution they play in forming parts of longer journeys by public transport.
- 2.2.13 The importance of the location of a site in relation to encouraging sustainable travel is set out within paragraph 3.3 which states *“The location of new residential development has a significant influence on travel patterns as the majority of trips start or finish at home... It should be a key aim of development plans to identify residential sites that are accessible to jobs, shops and services by modes other than the car”*.
- 2.2.14 Paragraph 3.8 continues on to state that *“Locations that are highly accessible by a variety of travel modes offer significant opportunities to make travel patterns more sustainable.”*
- 2.2.15 As such it is recognised by TAN18 that the sustainable location of a site can assist in facilitating sustainable travel habits. The site is situated in a sustainable location accessible by walking and cycling to employment facilities, community uses, leisure uses, retail, schools and public transport stops, therefore fully in accordance with transport policies in TAN18.

PCC – Local Development Plan (LDP)

- 2.2.16 The LDP provides transportation policies in SP10 which state that *“Improvements to the existing transport infrastructure that will increase accessibility to employment, services and facilities, particularly by sustainable means, will be approved.”*
- 2.2.17 Policy SP1 relates to sustainable development and states that development proposals *“must demonstrate how positive economic, social and environmental impacts will be achieved and adverse impacts minimised”*.

2.3 Local Highway Network

- 2.3.1 The site is accessed from Awel-Y-Mor which is a single carriageway residential road approximately 5.5m in width and has footways on both sides. Awel-Y-Mor routes southwest from the site forming a priority junction with Longdown Street. Longdown Street routes in a north-south alignment and adjoins the A487 at its southern extent and David Street at its northern extent.
- 2.3.2 Mwtshwr runs adjacent to the northern boundary of the site in an east-west alignment connecting to David Street at its western extent. Within the vicinity of the site, Mwtshwr is around 3.5m in width widening to 4.5m towards David Street. Mwtshwr is a minor residential road which is lightly trafficked.
- 2.3.3 David Street adjoins the B4546 St Dogmaels Road as the minor arm of a priority junction at its northern extent. The B4546 St Dogmaels Road is a single carriageway road that routes through the centre of St Dogmaels. This key route leads to the east towards Cardigan, with the B4546 connecting to the A487 to the east at a four armed roundabout.

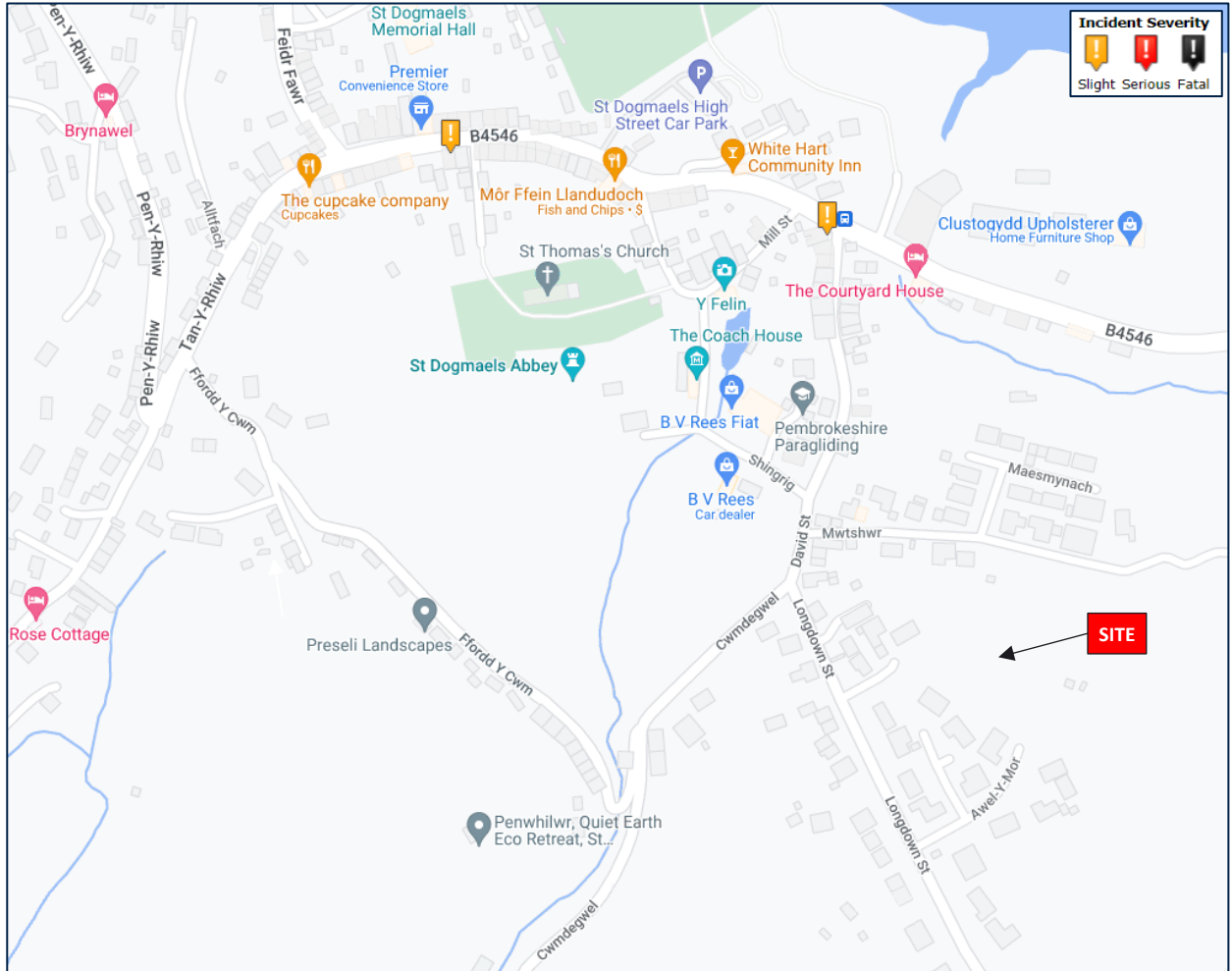
2.4 Road Safety

- 2.4.1 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. A total of seven years of data has therefore been reviewed.

2.4.2 The study area considered within the analysis covers the local highway network within the vicinity of the site, with the entire study area shown in in Figure 2-2.

Figure 2-2: Location of Recorded PIA's within vicinity of the site



Source: Crashmap.co.uk

- 2.4.3 Over the seven-year period there were a total of two PIA's within the entire study area. Both were classified as slight in severity and occurred a significant distance from the site on the B4546. No serious or fatal accidents occurred during this period.
- 2.4.4 No PIA's occurred adjacent to the site boundary along Awel-Y-Mor where the site will obtain vehicular access or along Mwtshwr.
- 2.4.5 One PIA involved a pedestrian, and one involved a cyclist. Two slight PIA's involving a pedestrian or cyclist over a seven-year period does not suggest a safety issue in relation to active travel movements, particularly considering the surrounding area accommodates for these movements.
- 2.4.6 There were no clusters of four or more PIA's occurring in the same location, therefore no evidence to suggest a re-occurring road safety issue.
- 2.4.7 Although all incidents are regrettable, the PIA's that occurred do not indicate a specific pattern or issue with the geometry of the highway that would be exacerbated by the proposed development. There is

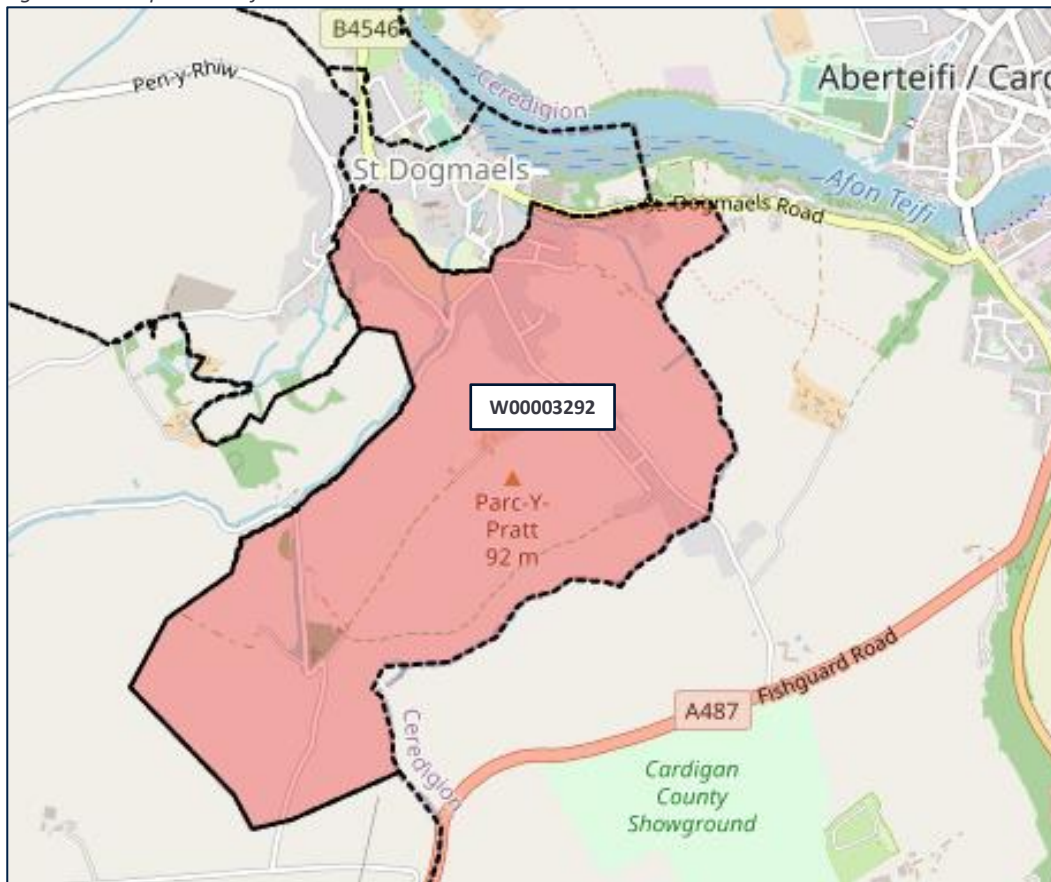
no evidence of a highway safety issue for access from the site to the local facilities, particularly for pedestrian movements.

2.5 Existing Travel Behaviour and Car Ownership

Modal Share

- 2.5.1 Based on the 2011 Census data, the site is located within output area W00003292. This covers a significant area, a large amount of which is rural and away from St Dogmaels, and as such, the travel behaviour may not be truly reflective of what could occur from the site. The output area is shown in Figure 2-3.

Figure 2-3: Output Area of the site



- 2.5.2 Table 2-1 shows how the existing residents of this output area currently travel to work, as well as providing a comparison with the entire of Pembrokeshire as obtained from 2011 Census data. The 2011 data is considered more appropriate than the 2021 data, due to the pandemic and restrictions on the day of the 2021 Census affecting movements to and from work and increasing levels of home working. As such, the 2011 data is considered more appropriate in relation to travel to work modal share information.

Table 2-1: Journey to Work Modal Split

Mode	W00003292 %	Pembrokeshire %
Public Transport	2%	4%
Car Driver	84%	74%
Motorcycle	0%	1%
Car Passenger	6%	7%
Bicycle	1%	1%
On Foot	6%	11%
Other	1%	1%
Total	100%	100%

- 2.5.3 The census data shows that 84% of residents living in the surrounding area and commuting to work travel as a car driver, with 6% walking, 2% travelling by public transport, 6% as a car passenger and 1% cycling.
- 2.5.4 These statistics have been adjusted to exclude working from home. If this was included, c.24% of residents currently in work, do so from home rather than commuting and this is likely to have significantly increased since 2011.
- 2.5.5 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 are likely to have higher levels of sustainable travel, particularly given local schools, retail and leisure opportunities are situated within suitable walking distances.
- 2.5.6 The data demonstrates that there is high potential for walking, public transport and to a lesser extent cycling trips to be made to and from the site and that these movements already occur in this area.

Car Ownership

- 2.5.7 The 2011 Census data has been reviewed for the surrounding area based on Output Area in which the site is situated (W00003292). This shows an average of 1.41 cars per household in the surrounding area and that 58% of households owned one car or less. This compares with an average of 1.35 cars per household across Pembrokeshire and 62% owning one car or less.
- 2.5.8 By way of comparison the 2021 data has also been reviewed, as this is considered appropriate for car ownership data. This shows that across the output area there is an average ownership of 1.63 cars per household (48% owning one car or less). This compares with an average of 1.45 cars per household across Pembrokeshire and 58% owning one car or less.
- 2.5.9 Based on this data, it is considered that potential future residents would be likely to own between 1 and 2 cars, although nearly half of existing residents own one car or less.

3. SUSTAINABLE CONNECTIVITY

3.1 Introduction

3.1.1 This section sets out the connectivity of the site to the surrounding area by sustainable modes of travel and demonstrates its proximity to public transport, facilities, services and leisure opportunities. The site location is demonstrated to be consistent with the aims of TAN18 and in accordance with sustainable transport policies in Future Wales and PPW11.

3.2 Walking and Cycling

3.2.1 At the top of the PPW11 hierarchy is the consideration of active travel (walking and cycling).

Walking

3.2.2 Walking is the most important mode of travel at a local level and offers the greatest potential to replace short car journeys.

3.2.3 The majority of local journeys are likely to be along David Street and to High Street to the north of the site. This offers a number of facilities and can be accessed from Awel-Y-Mor via Longdown Street. Awel-Y-Mor has footways adjacent to the carriageway of 1.8m in width with street lighting along its length. It also benefits from residential properties fronting onto Awel-Y-Mor providing natural surveillance.

3.2.4 There is also a potential pedestrian connection to the north of the site by Mwtshwr which is a lightly trafficked road conducive for walking.

3.2.5 Whilst Longdown Street and David Street do not have formal footways along their length, they are lightly trafficked roads with low speeds and good forward visibility. They range between 4m – 5.5m in width which allows a large car to pass a pedestrian without conflict. There are also a number of verges and driveways along the length of these routes for pedestrians to step off informally when needed. There is also the potential to walk via Shingrig then Church Lane, Church Street or Mill Lane, which are further shared routes which accommodates pedestrians and vehicles without evidence of a safety issue.

3.2.6 To the north, David Street connects to St Dogmaels Road, which links to Cardigan to the east. Footways are provided along both sides of St Dogmaels Road and these link to routes in the surrounding area. Cardigan is situated within 2km walk of the site and as such, the footways can be utilised for walking trips to and from the site to Cardigan town centre.

3.2.7 All pedestrian routes have street lighting, and the roads are subject to 20mph and 30mph speed restrictions, which are appropriate for pedestrian movements and for crossing. These routes already accommodate pedestrian movements associated with the existing surrounding residential areas, with no evidence of a road safety issue and should be suitable for accommodating movements associated with the site.

Cycling

3.2.8 There is limited cycling infrastructure within the vicinity of the site, although the gradients of the roads surrounding the site are relatively flat and these roads would have reasonably low traffic flows and are considered suitable for cycling. Paragraph 6.4.1 of Manual for Streets states that '*Cyclists should generally be accommodated on the carriageway. In areas with low traffic volumes and speeds, there*

should not be any need for dedicated cycle lanes on the street'. The geometry of the surrounding road would limit vehicle speeds, which would assist with cycling.

- 3.2.9 In addition, there is a signed cycle route, which forms part of the National Cycle Network (NCN) along St Dogmaels Road which routes south along Mill Street, Shingrig, David Street and Cwmdegwel. Locally this connects the site to Cardigan. This is NCN Route 82 within the vicinity of the site is shown within Figure 3-1.

Figure 3-1: National Cycle Network Route



Source: Sustrans

Public Rights of Way

- 3.2.10 There are a number of public rights of ways (PRoW) within the vicinity of the site. This includes a national trail footway route which runs from the eastern end of Mwtshwr to the eastern boundary of the site and connects to Longdown Street.
- 3.2.11 Another public footpath routes north from Mwtshwr which links to St Dogmaels Road. This provides an alternative off-carriageway route from the site to the closest facilities and services, if needed and the site can connect to this. There are also further routes within St Dogmaels which provide connections in all directions. The public rights of way within the vicinity of the site are shown in Figure 3-2.

Figure 3-2: Public Rights of Way within vicinity of the site



Source: Bing Maps

3.3 Distance 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 Guidance 2021: It is stated within paragraph 9.1.5 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 800 metres are considered to be within a ‘walkable neighbourhood’ and would be highly sustainable locations.

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. These facilities have been summarised based on approximate travel distances from the site access via appropriate routes, not straight-line distances. The location of these facilities in the context of the site are shown in Figure 3-3.

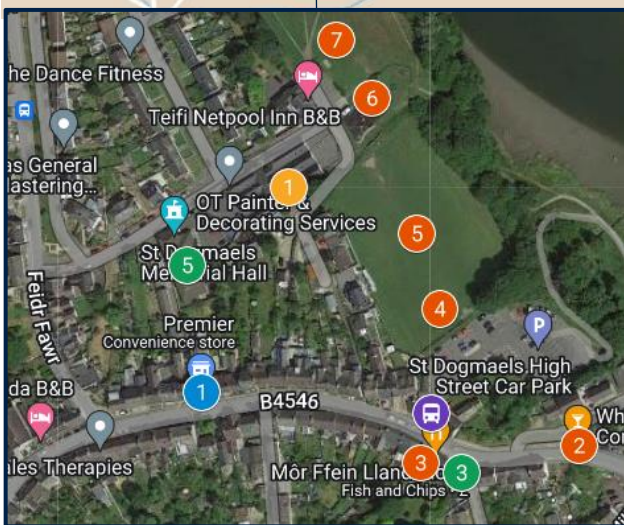
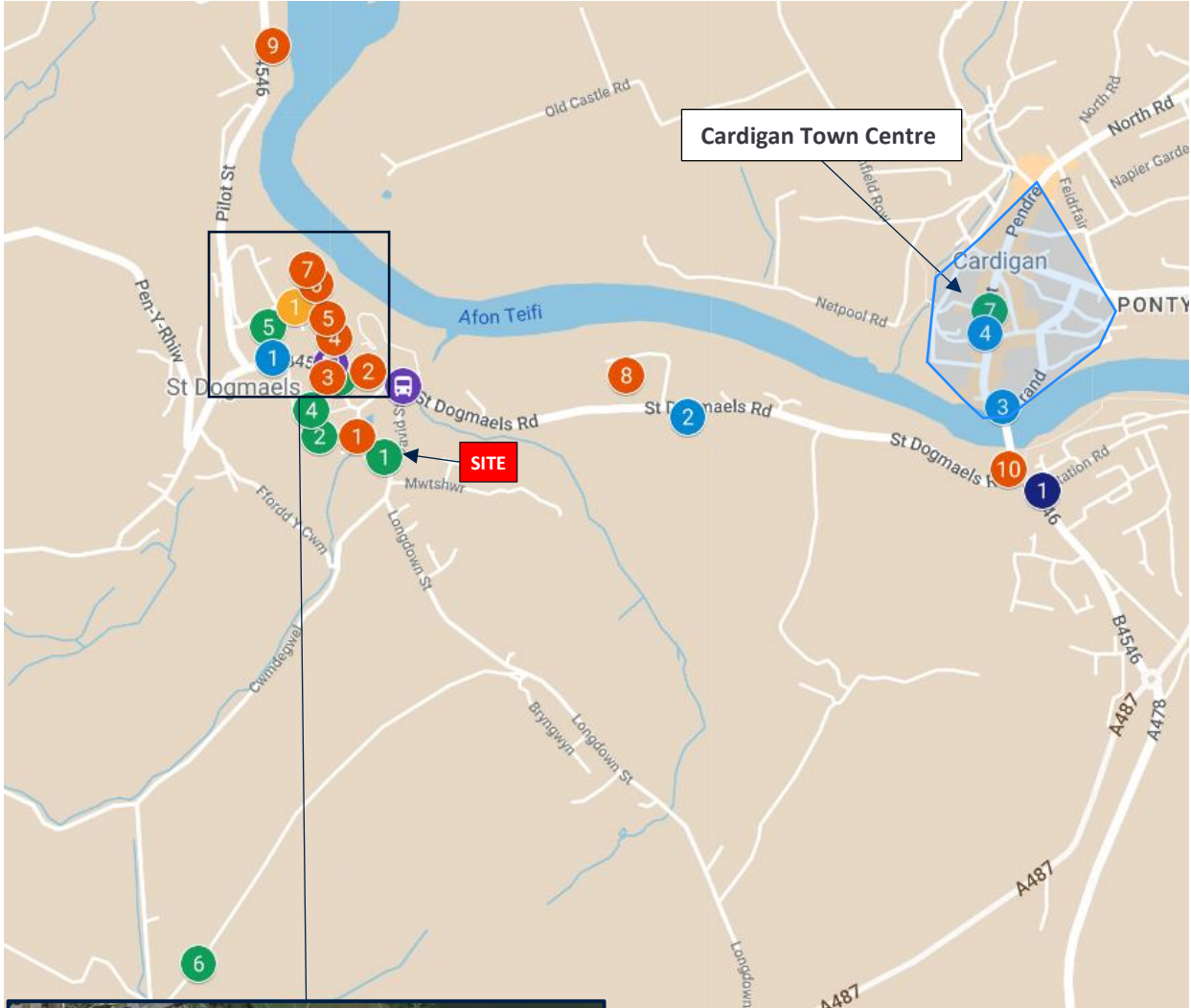
Table 3-1: Proximity of the site to local facilities and services

Facility / Amenity	Distance from site access (metres)	Walking Travel Time (minutes) *	Cycling Travel Time (minutes) *
Community Facilities			
1 Saint Dogmaels' Church Hall	340	4	1
2 St Dogmaels Abbey	520	7	2
3 Post Office	560	7	2
4 St Thomas's Church	570	7	2
5 St Dogmaels Memorial Hall	900	11	3
6 Blaenwaun Baptist Chapel	1270	16	4
7 High Street banks (Barclays / HSBC / Lloyds)	2000	25	6
Public Transport			
David Street	500	6	2
Post office	590	7	2
Retail			
1 Premier Convenience Store	700	9	2
2 Glebelands Market Garden Ltd	1060	13	3
3 Southern Edge of Cardigan	1880	24	6
4 Cardigan Town Centre (shops / restaurants/ cafes)	2000	25	6
Education			
1 St Dogmaels Community School	960	12	3
Leisure			
1 The Coach House café	430	5	1
2 White Hart Community Inn	560	7	2
3 Bowen's Fish & Chip Shop	580	7	2
4 Playing Fields	640	8	2
5 St Dogmaels FC	700	9	2
6 Playground	1020	13	3
7 Alexandra Gardens	1100	14	3
8 St Dogmaels Allotments	1200	15	4
9 The Ferry Inn	1420	18	4
10 Eagle Inn	1750	22	5
Employment			

Facility / Amenity	Distance from site access (metres)	Walking Travel Time (minutes) *	Cycling Travel Time (minutes) *
1 Pentood 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

The post office ("Green 2") is situated in the same location as the "Red 1" on this plan

- 3.3.5 Table 3-1 and Figure 3-3 show there are facilities and services situated within walking (and cycling) distances which can be accessed via suitable routes.
- 3.3.6 Within 800m are the closest bus stops, local shop, a post office, churches, playing fields, fish and chip shop, public house and church hall.
- 3.3.7 There are a number of further facilities within longer (but appropriate) walking distances as well as facilities within cycling distance. This includes a school and Cardigan Town Centre which provides a significant range and number of facilities. These can be accessed via suitable and continuous walking routes.
- 3.3.8 The site is therefore considered to be situated in a sustainable location, particularly given the sites semi-rural location, where local journeys for a variety of purposes can be made on foot (or by cycling). 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 located on St Dogmaels Road (B4546), approximately 500 metres to the north of the site. This bus stop provides eastbound services and provides a shelter and seating allowing users to wait undercover in inclement weather. For westbound services, future residents can access the Post Office bus stop within 590m, equivalent to a 7-minute walk. These are the key bus stops on the route to Cardigan.
- 3.4.2 These bus stops are served by bus services 405 and 408 which are operated by Richards Bros. and provide a combined four services a day between 07:57 and 18:13. Service number 405 operates from Monday to Friday and provides three services per day linking to Cardigan, and Newport. Service number 408 operates Monday to Friday and provides one service per day connecting St Dogmaels to Cardigan and Poppit Sands.

Table 3-2: Local Bus Services

Route No.	Stop	Operator and Route	Weekday			Sat	Sun
			First service	Frequency	Last service		
405	David Street	Newport – Cardigan via Moylgrove (Richard Bros)	10:58	3 per day	18:13	No service	No service
408	Post office	Poppit Sands – Cardigan (Richard Bros)	07:57	One service	07:57	No service	No service

- 3.4.3 These services provide a combined one service during the AM and PM peak hour and the journey time to Cardigan is approximately 7 minutes. As such, potential future residents of the site can access the bus services which could be used for commuting purposes to Cardigan. The bus services provide a feasible option for people working full time in this area. They can also be used for leisure, retail and health purposes as well as connecting to additional services from Cardigan.
- 3.4.4 It is considered that the site has reasonable accessibility by bus, particularly given the semi-rural location and this offers a realistic travel option for residents of the site. This will assist in minimising the vehicle trip generation in accordance with the aspirations of PPW11.

3.5 Summary

- 3.5.1 The site is situated in a location where journeys by sustainable modes are a realistic alternative to the private car, as would be expected for a site situated within an established residential area. The site benefits from being connected to existing walking, cycling and public transport routes as well as public rights of way.
- 3.5.2 Residents can walk or cycle to a number of everyday needs facilities (local shop, school, bus stop, church, playing fields) within appropriate distances, 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 Potential future residents would have a realistic choice of modes of travel for all journey purposes, which will assist in constraining the level of vehicle generation from the site and minimise the impact of the development.
- 3.5.4 The site location will therefore encourage and promote sustainable travel behaviour and is fully in accordance with transport policies in TAN18, PPW11, the LDP and the Active Travel Act.

4. PROPOSED DEVELOPMENT

4.1 Overview

4.1.1 The proposals are for a development of 29 residential dwellings. These would be a mix of detached and semi-detached houses. There would be 27 private dwellings and 2 affordable dwellings on the site. The composition of the houses would be as follows:

Private Dwellings

- 8no. three-bedroom dwellings
- 8no. four-bedroom dwellings
- 5no. four-bedroom dwellings
- 6no. five-bedroom dwellings

Affordable Dwellings

- 2no. two-bedroom dwellings

4.1.2 The site layout plans are provided in Appendix A.

4.1.3 The houses would be built to a high standard, which would encourage working from home in accordance with the aspirations of the Welsh Government. The construction will include high speed fibre broadband connections, WiFi and offices within all but the two-bedroom houses. Each house will be energy efficient to minimise the costs of running a home office, which will attract residents who wish to work from home. This will assist in constraining the level of vehicle generation from the site onto the local highway network.

4.2 Access and Layout

Site Layout

4.2.1 The site would be accessed from Awel-Y-Mor from the southern boundary through an extension of the existing carriageway. This provides a 5.5m wide access road which would serve as the main spine road and have frontage access to internal driveways. The internal site layout is designed to minimise the speeds of vehicular traffic and prioritise walking and cycling movements and includes a shared space area serving 12 properties. This is in accordance with the transport hierarchy in PPW11.

4.2.2 The site is designed to keep speeds to 20mph or below and suitable forward visibility is provided for 15-20mph speeds (15-25m). Two cars can pass along the main access road, including at bends. This is shown in swept path analysis in Appendix B. The access road would also be to adoptable standards with a maximum gradient of 1:12 along its length.

4.2.3 Footways are provided on either side of the carriageway along the main spine road and separate footpath routes are provided around the north and eastern areas of the site. These provide pedestrian access to Mwtshwr and link all parts of the site, as well as acting as a leisure route for the areas within the east of the site. As such there is continuous pedestrian infrastructure around the site.

4.2.4 Refuse vehicles are able to manoeuvre around the site safely and appropriately, with access road widths appropriate to accommodate these vehicles. Turning heads are provided within the site to enable all vehicles to turn appropriately. The turning movements are shown in swept path drawings provided in Appendix B.

4.2.5 As such, refuse vehicles and fire tenders are able to enter and exit the site in forward gear appropriately.

Pedestrian access

4.2.6 Footways with a width of 2m are provided into the site adjacent to the access road on both sides of the carriageway. This connects to the wider pedestrian network as detailed in Section 3. As such, the site would be highly permeable to the surrounding area and provide links to key pedestrian routes linking to facilities and services within the village.

4.3 Parking

Car Parking Provision

4.3.1 The car parking within the site has considered the LDP Supplementary Planning Guidance (SPG) *Parking Standards* as adopted in 2013.

4.3.2 In accordance with the SPG, the site is considered to be situated within a Zone 4 or Zone 5 location. The SPG provides maximum parking standards which require 2 spaces for Zone 2-4 residential houses and 3 spaces for Zone 5 locations.

4.3.3 The proposal shows a provision of 2-3 spaces per dwelling for all houses. This is consistent with the standards considering Zone 4 or 5 locations.

4.3.4 There is some parking within garages for 16 of the 29 dwellings, 60 on-plot parking spaces, two allocated on-street spaces and two visitor spaces across the site. This equates to a total of 80 parking spaces for 29 units, including garages, at a ratio of 2.7 spaces per household.

4.3.5 As set out in Section 2, the average level of car ownership is approximately 1.6 space per dwelling in the surrounding area. As such, the provision of at least two car parking spaces per dwelling is considered appropriate to accommodate the likely demand and would not lead to overspill off the site.

4.3.6 The site is connected by sustainable modes, with local journeys possible on foot, cycle and public transport, which reduces the requirement to own a car or to make journeys by car for everyday purposes, as shown in Section 3.

4.3.7 Given the sustainable site location, residents being aware of the parking situation prior to purchasing a property, and to encourage sustainable travel in accordance with PPW11 and PCC policies, the proposed provision of parking is considered appropriate.

Car Parking Layout

4.3.8 All parking spaces across the site would be accommodated on private driveways, allocated spaces or within garages and have dimensions of at least 2.4m x 4.8m, consistent with the PCC guidance. Vehicles can manoeuvre into and out of the spaces appropriately, as shown within the swept path analysis in Appendix B.

Cycle Parking

4.3.9 The SPG sets out the cycle parking standards but not specifically for dwellings. As these are residential dwellings, there will be sufficient space provided for on-plot cycle storage within the curtilage of each dwelling. This may be in the form of a shed or space within the dwelling or within a garage.

4.4 Servicing and Emergency Access

- 4.4.1 Servicing would mainly relate to refuse collection which would be undertaken on-street from the access road. Refuse vehicles are able to safely stop at the kerbside and swept paths have been shown in Appendix B demonstrating refuse vehicles turning appropriately and entering and exiting in forward gear.
- 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 and residents should not carry waste further than 35 metres. As collection can take place from kerbside, the arrangements are in line with Building Regulations (and MfS) and considered safe and appropriate.
- 4.4.3 A fire tender will also be able to get within 45 metres of all properties and turn at the turning head. As such, the layout is appropriate for access by emergency vehicles.

5. TRIP GENERATION

5.1 Introduction

- 5.1.1 This section sets out the forecast trip generation of the proposed development using the Trip Rate Information Computer System (TRICS). The TRICS database has been analysed for sites with similar characteristics in terms of use, scale, location, accessibility, and surrounding population.
- 5.1.2 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 estimated / forecast trip generation during peak hours on a weekday and over a daily period.
- 5.1.3 The residential dwellings can be built to encourage working from home in accordance with the aspirations of the Welsh Government for 30% of the workforce to work from home, or close to home. This will attract residents who wish to work from home and assist in constraining the level of vehicle generation from the site onto the local network. This could reduce future trip rates accordingly and as such, the obtained rates based on surveys of existing sites are considered robust.
- 5.1.4 The site is also well positioned to benefit from access to existing local facilities via appropriate routes, as set out in Section 3. As such, for a number of local journeys, walking and cycling would be realistic alternative modes, which would assist in constraining the forecast vehicle trips.

5.2 Proposed Trip Generation

- 5.2.1 The TRICS category '03 - RESIDENTIAL/A – HOUSES PRIVATELY OWNED' has been selected to derive trip rates for the potential residential development. The following parameters have been applied to the search criteria to obtain sites of a similar nature:
- Located in England and Wales (excluding London)
 - Vehicle Surveys
 - Sites between 15 and 75 dwellings
 - Suburban / Edge of Town / Neighbourhood Centre Location
 - From 2010 onwards
 - Removal of Surveys of Sites with over 250,000 population within five miles
 - Removal of sites in areas with car ownership less than 1 vehicle per household
 - Manual Removal of sites in major cities (not comparable)
- 5.2.2 The application of these parameters resulted in identifying 29 comparable sites. The resultant vehicle trip rates, and vehicle trip generation based upon the proposed 29 dwellings are summarised in Table 5-1. The full TRICS report is included in Appendix C.

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

Time Period	Trip Rates (per dwelling)			Trip Generation (29 dwellings)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (08:00-09:00)	0.141	0.371	0.512	4	11	15
PM Peak (17:00-18:00)	0.342	0.146	0.488	10	4	14
12 Hours (07:00-19:00)	2.271	2.317	4.588	66	67	133

- 5.2.3 Table 5-1 demonstrates that the proposed development is forecast to generate 15 two-way vehicular movements during the AM peak hour (0800 – 0900) and 14 two-way vehicle movements during the PM peak hour (1700 – 1800).

5.2.4 Over a 12 hour period, the proposed development is forecast to generate 133 two-way vehicle movements.

5.3 Traffic Impact

5.3.1 The 14-15 additional vehicle movements equate to an addition of approximately one vehicle on the local highway network every 4 minutes during the busiest hours. This will have a negligible impact on the capacity of the local highway network and on the operation of local junctions and on the operation of the surrounding streets for shared use with pedestrians and cycling. As such, no formal capacity analysis is deemed to be required at the surrounding junctions.

5.3.2 In addition, the dwellings will be designed to encourage and aid residents who choose to work from home, in accordance with the aspirations of Welsh Government. This will further assist in minimising the level of vehicle trips generated by the site.

5.3.3 As shown in Section 2 there is no evidence of an existing safety issue within the vicinity of the site. As such, the minimal increase in vehicle movements associated with the site would not have a material impact on road safety.

6. SUMMARY AND CONCLUSIONS

6.1 Summary

- 6.1.1 This Transport Statement (TS) has been provided in support of an application for a proposed residential development for 29 dwellings at Awel-Y-Mor, St Dogmaels.
- 6.1.2 This report has been prepared to provide the necessary information for the Local Highway and Planning Authorities to consider the merits of the proposals in terms of location, connectivity, highway safety, parking, access and the impact of on the local highway network.
- 6.1.3 The site is accessed from Awel-Y-Mor and currently comprises of undeveloped open space. The proposed development consists of 29 residential dwellings accessed via a continuation of Awel-Y-Mor. Car parking will be provided in accordance with standards with 2-3 spaces per dwelling and appropriate turning areas provided to accommodate refuse vehicle entering and exiting the site in forward gear.
- 6.1.4 The site is situated in a location where journeys by sustainable modes are a realistic alternative to the private car. The site offers the potential for access by walking, cycling and public transport. There are facilities, services, schools, and employment areas situated within suitable walking, cycling, and public transport distances via appropriate and safe routes, reducing the need to travel by car. The site is connected to Awel Y Mor to the south which provide suitable routes to the surrounding area.
- 6.1.5 The proposed parking provision of 2-3 spaces per dwelling is considered appropriate when considering the car ownership levels in the surrounding area and is in line with parking standards.
- 6.1.6 Obtained road safety data does not indicate an existing safety issue which would be exacerbated by the proposals and there is no accident issue on the key walking routes.
- 6.1.7 Trip generation analysis shows that the proposed residential use is forecast to generate a maximum of one vehicle on the local highway network every four minutes, on average, during peak hours. This would not have a material impact on the operation of the highway.

6.2 Conclusions

- 6.2.1 The site location will encourage and promote sustainable travel behaviour, attract residents who choose not to own a car or have low car ownership and is fully in accordance with transport policies in TAN18, PPW11, and the Active Travel Act.
- 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 and pedestrian routes will provide safe and suitable access for the proposed residential use.
- 6.2.3 The proposals will not have a material impact on the operation of the highway network and no mitigation is required.
- 6.2.4 The analysis presented within this TS allows the highway authority to provide a positive recommendation on the planning application.

Appendix A Site Layout Plan

Site Coverage								
Unit code	Type	Storey Height	Number	Percentage %	Floor area (sqm)	(sqft)	Total coverage (sqm)	(sqft)
Private								
Type A	5B	3 Storey	2	7	174	1,870	347	3,740
Type A (Custom)	5B	3 Storey	1	4	174	1,870	174	1,870
Type B	5B	3 Storey	3	11	176	1,894	528	5,682
Type C	4B	2 Storey	5	19	142	1,528	710	7,640
Type D - Split Level	3B	2/3 Storey	8	30	121	1,305	970	10,440
Type E - Split Level	3B	2/3 Storey	8	30	118	1,271	945	10,168
Total			27	100			3,673	39,540
Affordable 10%								
Type G	2B	2 Storey	2	100	84	899	167	1,798
Total			2	100			167	1,798
Total			29				3,840	41,338
					Net Developable (ha)	Net Developable (acres)	Site Coverage (sqft per acre)	
					0.901	2.228	18,554	







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Rev	Date	By	Chk	Description
P01	30.05.2023	SC	CG	First Issue
A	02.06.2023	SC	CG	Updated road to allow for refuse turning
B	21.06.2023	SC	CG	Developed design to suit landscape, engineering and level information
C	22.06.2023	SC	CG	Developed site plan, visitor spaces added and coloured added to site plan
D	27.06.2023	SC	CG	Amended to suit engineers feedback

-  Proposed trees - please see landscape strategy for further information
-  Indicative representation of existing tree - see tree survey for RPA and tree specific information
-  Red Line Boundary - TBC by client
-  Drainage Easement - 3.6m (Position tbc by engineer)

NOTE | Trees are indicative, tree survey to be provided

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Registered Office: England No. 06658029

Project Name
 St Dogmaels
 Cardigan
 Residential Development

Client Name
 Obsidian Homes

Drawing Title
 Proposed Site Plan

Scale
 1/500 - A2

Project No.
 10498

Status
 S1

Purpose Of Issue
 Issued for co-ordination

Project
 10498

Org
 RL

Vol
 XX

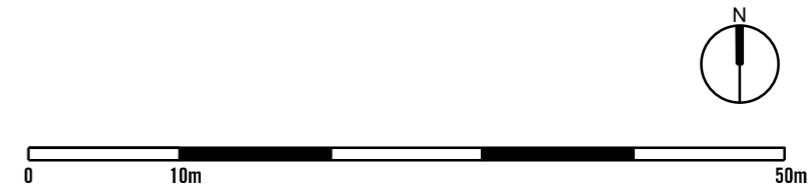
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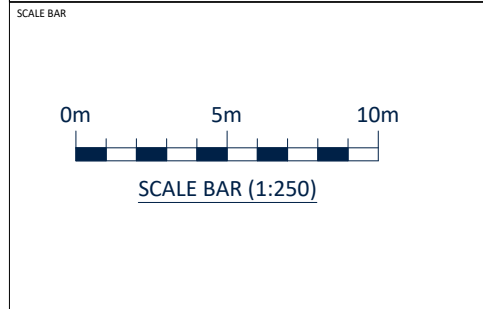
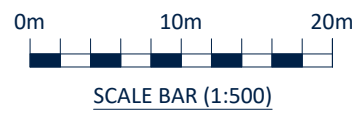
Role
 A

Number
 SCH03

Revision
 D



Appendix B Swept Path Analysis



KEY

2010 BMW 5-Series

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

FORWARD

REVERSE

REVISIONS (CONTINUED)

Rev	Date	Description	By	App

REVISIONS

PO2	Date	Description	SD	DC
27/06/23		Second Issue.		
13/06/23		First Issue.		

Apex
TRANSPORT PLANNING

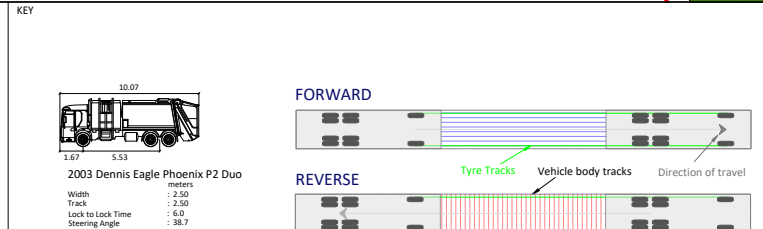
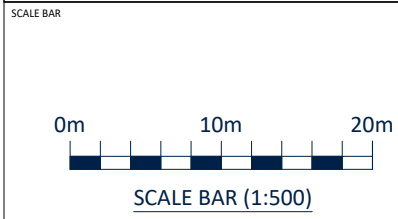
11-13 PENHILL ROAD
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e: info@apexp.co.uk

CLIENT
OBSDIAN DEVELOPMENT LTD

PROJECT
AWEL-Y-MOR, ST DOGMAELS

TITLE
SWEPT PATH ANALYSIS - LARGE CAR

PROJECT NO. C23-027	SCALE @ A3 1:250
STATUS DESCRIPTION INFORMATION	STATUS S2
DRAWING NO. C23027-ATP-DR-TP-002	



REVISIONS (CONTINUED)

Rev	Date	Description	By	App
P02	27/06/23	Second Issue.	SD	DC
P01	05/06/23	First Issue.	SD	DC

REVISIONS

Rev	Date	Description	By	App
P02	27/06/23	Second Issue.	SD	DC
P01	05/06/23	First Issue.	SD	DC

Apex
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CLIENT
 OBSIDIAN DEVELOPMENT LTD

PROJECT
 AWEL-Y-MOR, ST DOGMAELS

TITLE
 SWEEP PATH ANALYSIS - REFUSE VEHICLE

PROJECT NO. C23-027	SCALE @ A3 1:500
STATUS DESCRIPTION INFORMATION	STATUS S2
DRAWING NO. C23027-ATP-DR-TP-001	

Appendix C TRICS Outputs - Residential

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	HC HAMPSHIRE	3 days
	KC KENT	1 days
	SC SURREY	1 days
	WS WEST SUSSEX	2 days
03	SOUTH WEST	
	DV DEVON	2 days
	SM SOMERSET	3 days
04	EAST ANGLIA	
	NF NORFOLK	3 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	2 days
	ST STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	4 days
08	NORTH WEST	
	CH CHESHIRE	3 days
09	NORTH	
	DH DURHAM	1 days
10	WALES	
	PS POWYS	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: 16 to 71 (units:)
 Range Selected by User: 15 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 20/10/20

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	4 days
Tuesday	7 days
Wednesday	7 days
Thursday	8 days
Friday	3 days

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

Selected survey types:

Manual count	28 days
Directional ATC Count	1 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)	8
Edge of Town	17
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	23
Village	4
No Sub Category	2

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.

Secondary Filtering selection:

Use Class:

C3	29 days
----	---------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 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:

1,000 or Less	1 days
1,001 to 5,000	9 days
5,001 to 10,000	7 days
10,001 to 15,000	5 days
15,001 to 20,000	3 days
20,001 to 25,000	3 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	5 days
25,001 to 50,000	6 days
50,001 to 75,000	3 days
75,001 to 100,000	9 days
100,001 to 125,000	1 days
125,001 to 250,000	5 days

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

Car ownership within 5 miles:

1.1 to 1.5	28 days
1.6 to 2.0	1 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:

Yes	9 days
No	20 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	29 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	CH-03-A-09	TERRACED HOUSES		CHESHIRE
	GREYSTOKE ROAD			
	MACCLESFIELD			
	HURDSFIELD			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:		24	
	<i>Survey date: MONDAY</i>		<i>24/11/14</i>	<i>Survey Type: MANUAL</i>
2	CH-03-A-10	SEMI-DETACHED & TERRACED		CHESHIRE
	MEADOW DRIVE			
	NORTHWICH			
	BARNTON			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:		40	
	<i>Survey date: TUESDAY</i>		<i>04/06/19</i>	<i>Survey Type: MANUAL</i>
3	CH-03-A-11	TOWN HOUSES		CHESHIRE
	LONDON ROAD			
	NORTHWICH			
	LEFTWICH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:		24	
	<i>Survey date: THURSDAY</i>		<i>06/06/19</i>	<i>Survey Type: MANUAL</i>
4	DH-03-A-03	SEMI-DETACHED & TERRACED		DURHAM
	PILGRIMS WAY			
	DURHAM			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:		57	
	<i>Survey date: FRIDAY</i>		<i>19/10/18</i>	<i>Survey Type: MANUAL</i>
5	DV-03-A-01	TERRACED HOUSES		DEVON
	BRONSHILL ROAD			
	TORQUAY			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:		37	
	<i>Survey date: WEDNESDAY</i>		<i>30/09/15</i>	<i>Survey Type: MANUAL</i>
6	DV-03-A-03	TERRACED & SEMI DETACHED		DEVON
	LOWER BRAND LANE			
	HONITON			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total No of Dwellings:		70	
	<i>Survey date: MONDAY</i>		<i>28/09/15</i>	<i>Survey Type: MANUAL</i>
7	ES-03-A-02	PRIVATE HOUSING		EAST SUSSEX
	SOUTH COAST ROAD			
	PEACEHAVEN			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:		37	
	<i>Survey date: FRIDAY</i>		<i>18/11/11</i>	<i>Survey Type: MANUAL</i>
8	HC-03-A-21	TERRACED & SEMI-DETACHED		HAMPSHIRE
	PRIESTLEY ROAD			
	BASINGSTOKE			
	HOUNDMILLS			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:		39	
	<i>Survey date: TUESDAY</i>		<i>13/11/18</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	HC-03-A-22	MIXED HOUSES	HAMPSHIRE
	BOW LAKE GARDENS NEAR EASTLEIGH BISHOPSTOKE Edge of Town Residential Zone Total No of Dwellings: 40 <i>Survey date: WEDNESDAY 31/10/18</i>		
	<i>Survey Type: MANUAL</i>		
10	HC-03-A-23	HOUSES & FLATS	HAMPSHIRE
	CANADA WAY LIPHOOK Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 62 <i>Survey date: TUESDAY 19/11/19</i>		
	<i>Survey Type: MANUAL</i>		
11	KC-03-A-03	MIXED HOUSES & FLATS	KENT
	HYTHE ROAD ASHFORD WILLESBOROUGH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 51 <i>Survey date: THURSDAY 14/07/16</i>		
	<i>Survey Type: MANUAL</i>		
12	NF-03-A-04	MIXED HOUSES	NORFOLK
	NORTH WALSHAM ROAD NORTH WALSHAM Edge of Town Residential Zone Total No of Dwellings: 70 <i>Survey date: WEDNESDAY 18/09/19</i>		
	<i>Survey Type: MANUAL</i>		
13	NF-03-A-05	MIXED HOUSES	NORFOLK
	HEATH DRIVE HOLT Edge of Town Residential Zone Total No of Dwellings: 40 <i>Survey date: THURSDAY 19/09/19</i>		
	<i>Survey Type: MANUAL</i>		
14	NF-03-A-10	MIXED HOUSES & FLATS	NORFOLK
	HUNSTANTON ROAD HUNSTANTON Edge of Town Residential Zone Total No of Dwellings: 17 <i>Survey date: WEDNESDAY 12/09/18</i>		
	<i>Survey Type: DIRECTIONAL ATC COUNT</i>		
15	NY-03-A-07	DETACHED & SEMI DET.	NORTH YORKSHIRE
	CRAVEN WAY BOROUGHBRIDGE Edge of Town No Sub Category Total No of Dwellings: 23 <i>Survey date: TUESDAY 18/10/11</i>		
	<i>Survey Type: MANUAL</i>		
16	NY-03-A-09	MIXED HOUSING	NORTH YORKSHIRE
	GRAMMAR SCHOOL LANE NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 52 <i>Survey date: MONDAY 16/09/13</i>		
	<i>Survey Type: MANUAL</i>		

LIST OF SITES relevant to selection parameters (Cont.)

17	NY-03-A-10	HOUSES AND FLATS	NORTH YORKSHIRE
	BOROUGHBRIDGE ROAD RIPON		
	Edge of Town No Sub Category		
	Total No of Dwellings:	71	
	Survey date: TUESDAY	17/09/13	Survey Type: MANUAL
18	NY-03-A-11	PRIVATE HOUSING	NORTH YORKSHIRE
	HORSEFAIR BOROUGHBRIDGE		
	Edge of Town Residential Zone		
	Total No of Dwellings:	23	
	Survey date: WEDNESDAY	18/09/13	Survey Type: MANUAL
19	PS-03-A-02	DETACHED/SEMI-DETACHED	POWYS
	GUNROG ROAD WELSHPOOL		
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	28	
	Survey date: MONDAY	11/05/15	Survey Type: MANUAL
20	SC-03-A-04	DETACHED & TERRACED	SURREY
	HIGH ROAD BYFLEET		
	Edge of Town Residential Zone		
	Total No of Dwellings:	71	
	Survey date: THURSDAY	23/01/14	Survey Type: MANUAL
21	SF-03-A-06	DETACHED & SEMI-DETACHED	SUFFOLK
	BURY ROAD KENTFORD		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	38	
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL
22	SH-03-A-05	SEMI-DETACHED/TERRACED	SHROPSHIRE
	SANDCROFT TELFORD SUTTON HILL		
	Edge of Town Residential Zone		
	Total No of Dwellings:	54	
	Survey date: THURSDAY	24/10/13	Survey Type: MANUAL
23	SH-03-A-06	BUNGALOWS	SHROPSHIRE
	ELLESMERE ROAD SHREWSBURY		
	Edge of Town Residential Zone		
	Total No of Dwellings:	16	
	Survey date: THURSDAY	22/05/14	Survey Type: MANUAL
24	SM-03-A-01	DETACHED & SEMI	SOMERSET
	WEMBDON ROAD BRIDGWATER NORTHFIELD		
	Edge of Town Residential Zone		
	Total No of Dwellings:	33	
	Survey date: THURSDAY	24/09/15	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

25	SM-03-A-02	MIXED HOUSES	SOMERSET
	HYDE LANE NEAR TAUNTON CREECH SAINT MICHAEL Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 42 <i>Survey date: TUESDAY 25/09/18</i>		
	<i>Survey Type: MANUAL</i>		
26	SM-03-A-03	MIXED HOUSES	SOMERSET
	HYDE LANE NEAR TAUNTON CREECH ST MICHAEL Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 41 <i>Survey date: TUESDAY 25/09/18</i>		
	<i>Survey Type: MANUAL</i>		
27	ST-03-A-08	DETACHED HOUSES	STAFFORDSHIRE
	SILKMORE CRESCENT STAFFORD MEADOWCROFT PARK Edge of Town Residential Zone Total No of Dwellings: 26 <i>Survey date: WEDNESDAY 22/11/17</i>		
	<i>Survey Type: MANUAL</i>		
28	WS-03-A-05	TERRACED & FLATS	WEST SUSSEX
	UPPER SHOREHAM ROAD SHOREHAM BY SEA Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 48 <i>Survey date: WEDNESDAY 18/04/12</i>		
	<i>Survey Type: MANUAL</i>		
29	WS-03-A-07	BUNGALOWS	WEST SUSSEX
	EMMS LANE NEAR HORSHAM BROOKS GREEN Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 <i>Survey date: THURSDAY 19/10/17</i>		
	<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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BD-03-A-03	Covid
CA-03-A-05	not comparable location
NR-03-A-02	Covid
SF-03-A-07	not comparable location
WL-03-A-02	not comparable location
WY-03-A-01	not comparable location

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

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	29	42	0.080	29	42	0.323	29	42	0.403
08:00 - 09:00	29	42	0.141	29	42	0.371	29	42	0.512
09:00 - 10:00	29	42	0.166	29	42	0.196	29	42	0.362
10:00 - 11:00	29	42	0.133	29	42	0.162	29	42	0.295
11:00 - 12:00	29	42	0.149	29	42	0.167	29	42	0.316
12:00 - 13:00	29	42	0.155	29	42	0.155	29	42	0.310
13:00 - 14:00	29	42	0.164	29	42	0.167	29	42	0.331
14:00 - 15:00	29	42	0.151	29	42	0.183	29	42	0.334
15:00 - 16:00	29	42	0.253	29	42	0.171	29	42	0.424
16:00 - 17:00	29	42	0.292	29	42	0.157	29	42	0.449
17:00 - 18:00	29	42	0.342	29	42	0.146	29	42	0.488
18:00 - 19:00	29	42	0.245	29	42	0.119	29	42	0.364
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.271			2.317			4.588

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: 16 - 71 (units:)
 Survey date range: 01/01/10 - 20/10/20
 Number of weekdays (Monday-Friday): 29
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 4
 Surveys manually removed from selection: 6

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.