

High Street, Pontarddulais

Transport Assessment

Client: Walters Land Limited

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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 Assessment (TA) to support an outline planning application for a proposed redevelopment of a brownfield site to the north of High Street, Pontarddulais.
- 1.1.2 The proposals are for the redevelopment of the site for up to 150 new residential dwellings and the report has considered the scheme on this basis, for robustness. The vehicular access would be obtained from High Street via an upgraded priority junction from an existing access point, with a secondary access point provided onto Woodville Street from the eastern boundary of the site.
- 1.1.3 The site is allocated within the Swansea Local Development Plan as part of a wider allocation covering two plots under SD A: South of Glannffrwd Road, Pontarddulais. The site is the smaller of the two plots which make up the overall allocation.
- 1.1.4 The TA 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 Swansea Council of the highways and transport implications of the proposals.
- 1.1.5 A separate Travel Plan has also been produced which provides measures to facilitate and encourage sustainable transport to and from the site.

1.2 Scope of Report

- 1.2.1 The scope of work has considered policies and advice set out in Future Wales, Planning Policy Wales 11 (PPW11), Technical Advice Note 18: Transport (TAN18), the Active Travel Act (Wales – 2013), the Swansea Council Local Development Plan (LDP) and Parking Standards Supplementary Planning Guidance (SPG), as well as considering experience of other similar sites.
- 1.2.2 A Scoping Note was produced and issued to the highway authority on 10 July 2023, although no response has been received as of the date of this report. Two pre-application meetings were also held with Swansea Council, and discussions from these meetings have been incorporated within this report and the design of the scheme.
- 1.2.3 As such, the TA has been structured to include the following:
- A description of the existing conditions including, site location, highway network, road safety analysis and existing travel behaviour in the surrounding area
 - Consideration of planning context
 - Overview of highway network
 - Details of existing traffic flow conditions and consideration of future year conditions
 - Review of the connectivity of the site by sustainable modes of travel - 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 distribution / assignment onto the surrounding network
 - Consideration of the impact of the proposals on the local highway network

2. PLANNING POLICY REVIEW

2.1 Future Wales: The National Plan 2040

- 2.1.1 This is the national development framework, setting the direction for development in Wales to 2040. It provides an overarching development plan with a strategy for addressing key national priorities through the planning system. Planning decisions at every level of the planning system in Wales must be taken in accordance with the development plan as a whole.
- 2.1.2 In relation to transport, it is stated 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 on to state that “Development will focus on active travel and public transport, allied with a reduced reliance on private vehicles”.
- 2.1.3 In the supporting text for Policy 2 - Shaping Urban Growth and Regeneration – Strategic Placemaking, it is stated that “To enable active and healthy lives, people should be able to easily walk to local facilities and public transport.”
- 2.1.4 Policy 11 sets out National Connectivity, this states that “Our priorities are to encourage longer distance trips to be made by public transport, while also making longer journeys possible by electric vehicles.”
- 2.1.5 Policy 12 sets out Regional Connectivity. This states that “in urban areas our priorities are improving and integrating active travel and public transport.”
- 2.1.6 In relation to Active Travel and developments it is stated that “Active travel must be an essential and integral component of all new developments, large and small.”
- 2.1.7 In relation to travelling in Wales, 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.”
- 2.1.8 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.”
- 2.1.9 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.
- 2.1.10 The site is situated close to a town centre within a short walking distance to public transport links, key facilities and employment areas. Existing active travel connections connect to the site which encourages walking and cycling for local journeys. The site is also well situated to benefit from public transport services.
- 2.1.11 The site location is consistent with the policies and aims of Future Wales and is exactly in accordance with the Welsh Government aspirations for where development should be focused. Full details of the sustainable connectivity are set out within Section 4.

2.2 Planning Policy Wales 11th Edition (PPW11)

- 2.2.1 PPW11 provides overarching Welsh Government policies with transport policies 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:

** are sited in the right locations, where they can be easily accessed by sustainable modes of travel and without the need for a car*

** make it possible for all short journeys within and beyond the development to be easily made by walking and cycling."*

- 2.2.2 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."
- 2.2.3 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".
- 2.2.4 PPW11 also states in paragraph 3.39 that 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."
- 2.2.5 The site is situated in a location which is highly accessible by walking, cycling and public transport, with active travel links to a town centre, which is fully compliant with PPW11.
- 2.3 Technical Advice Note 18: Transport (TAN18)**
- 2.3.1 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.
- 2.3.2 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".
- 2.3.3 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."
- 2.3.4 As such it is recognised by TAN18 that the sustainable location of a site, such as the application site close to a town centre, has a significant influence in engraining sustainable travel habits.
- 2.4 Swansea Council – Local Development Plan (LDP) 2010 - 2025**
- 2.4.1 Section 1.4 outlines key themes within the plan. With reference to sustainable, cohesive and connected communities, paragraph 1.4.6 outlines that "New developments will need to be at locations well served by public transport and accessible by cycling and walking to provide people with a realistic choice of using more sustainable and active travel modes and ensure that connectivity is provided for all users".
- 2.4.2 The existing LDP provides transportation policies under T1. T1 point 4 aims to "Reduce reliance on car use by maximising the potential of movement to/ from the development by public transport".

- 2.4.3 T1 point 7 outlines the aim to “Ensure developments are served by appropriate parking provision and circulation area, including adequate road widths to allow access for service vehicles”.
- 2.4.4 Within the LDP, paragraph 2.3.9 refers to sustainable placemaking and ‘walkable neighbourhoods’ and outlines that “this encourages a reduction in the need to travel by car and helps form a coherent and healthy communities”.
- 2.4.5 Policy PS 1 relates to sustainable places and states that “Development to be directed to the most sustainable locations within the defined settlement boundaries of the urban area and Key Villages”.
- 2.4.6 The proposed scheme is consistent with the LDP as there are alternative modes of travel available which will help reduce the reliance on private car use and is positioned in a location to benefit from a significant number and range of existing facilities and public transport.
- 2.4.7 Details of the planning allocation are provided in Section 3.

3. EXISTING CONDITIONS

3.1 Site Location, Use and Access

- 3.1.1 The site is located within Pontarddulais, Swansea approximately 180m north of Pontarddulais Rail Station. The site is predominantly bounded by residential areas to the east and the south. To the north is an industrial / employment area. This comprises mainly local independent occupiers including DGHeath Timber Products, Trade Services Direct, A&P Electrical Supplies and Tate Refrigeration Ltd. The western boundary is bordered by a railway line.
- 3.1.2 The site is a broadly level and rectangular with an area of approximately 12.67 acres (5.13 hectares). The site comprises a self-contained and fenced industrial/factory building of steel frame construction made up warehouse, lower height warehouse/production area, internal storage and office. There is also an adjoining two storey office building, along with some single height 'lean-to' storage. In total, the buildings on site comprise approximately 96,400 sq ft (8,956 sqm) with site coverage of approximately 30%.
- 3.1.3 The site was formally occupied by Tata Steelworks and has historically generated movements onto the network for industrial purposes, including from HGVs. The site has two main accesses from the south onto High Street / Station Road, with two minor accesses onto Woodville Street on the eastern boundary. All accesses are informal priority junction type arrangements.
- 3.1.4 The indicative location of the site in its local context is provided in Figure 3-1.

Figure 3-1: Indicative Site Location



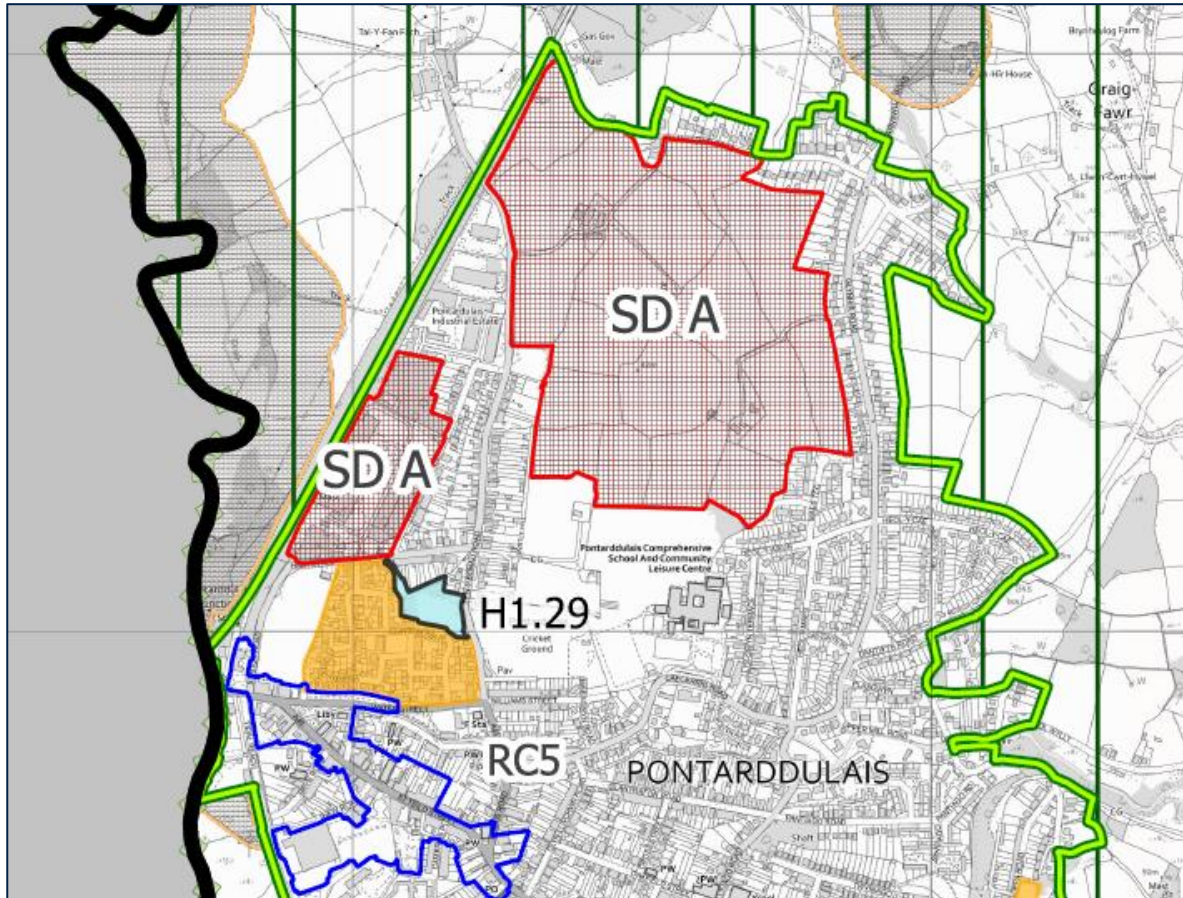
Source: Google Maps

3.2 Planning Allocation and Relevant Applications

Site Allocation

- 3.2.1 The site is allocated within the Swansea Local Development Plan as part of a wider allocation under SD A: South of Glanffrwd Road, Pontarddulais. SD A is allocated for a total of c. 486 residential units, incorporating a primary school, leisure and recreation facilities, public open spaces and other commercial uses.
- 3.2.2 The allocation has been shown in Figure 3-2, with the site forming the smaller parcel of SD A to the southwest, with the larger parcel of SD A to the northeast.

Figure 3-2: Extract of Site Allocation Map from LDP



Source: Swansea LDP

3.2.3 Key requirements in relation to this overall allocation relate to the following:

- Deliver internal spine street and associated junctions, to run broadly North East to South West through the development from Glanffrwd Road to Tyn y Bonau Road and Station Road.
- Contribute towards improvements to Pontarddulais Railway Station.
- Off-site highway improvements having regard to the requirements arising from the necessary Transport Assessment and as identified in the Transport Measures Priority Schedule.
- On and off-site measures to provide good quality, attractive, legible, safe and accessible pedestrian and cycle linkages in accordance with Active Travel design including the linkages identified in the Transport Measures Priority Schedule references AT1, AT2 and AT3, to the school and Railway Station to the West of the District Centre, and along the East-West Green corridor and linear park.

3.2.4 As such, the delivery of the site will consider these points. The supporting text in relation to the spine road states the following:

“Due to highway infrastructure constraints north of the town centre, a new spine street will form an integral part of the development. The alignment of the street will facilitate the redirection of HGV movements away from the existing residential streets of Glynhir Road and the network surrounding the comprehensive school. The spine street alignment from Glanffrwd Road, across the greenfield land to Tyn y Bonau Road will provide a westerly dedicated transport route for the existing urban traffic (and the additional traffic generated by the development) which will significantly improve the environmental quality of large residential areas of Pontarddulais. Upon exiting the greenfield land on Tyn y Bonau Road, the new link road can connect with the

brownfield opportunities to the south, before continuing its alignment southwards towards the town centre junction with Water Street.”

3.2.5 As such, the key requirements of the policy relate to the delivery of the section of the route between Glanffrwd Road to Tyn y Bonau Road, with the remainder of the policy stating that the new link road can connect with brownfield opportunities to the south. This relates to the industrial areas north of the application site, which do not form part of the application and are outside of the control of the applicant. As such, the delivery of the site does not provide the ability to deliver a link road to connect to Tyn y Bonau Road, although how a link road could be safeguarded has been considered within this TA.

Persimmon Pre-Application Consultation (PAC) submission for Larger SD.A parcel

3.2.6 The larger parcel of land which forms SD.A is subject of a separate planning application being submitted by Persimmon Homes West Wales. A Pre-Application Consultation (PAC) submission has been made in relation to the site and this included a full detailed Transport Assessment, produced by Corun Associates (September 2023, the “Corun TA”).

3.2.7 The PAC submission shows a full application for a proposed development of 516 dwellings and a community facility. It also includes an outline application for a new primary school. Two vehicular access points are proposed into the site, connecting with Tyn Y Bonau Road in the west, and Glanffrwd Road in the east. These accesses will be adjoined by a Spine Street which will be developed through the site.

3.2.8 A bus gate is proposed along the Spine Street preventing non-bus vehicle through movements along the road. With the bus gate in operation, the site will be effectively split into two separate parcels. The eastern parcel will accommodate approximately 20% of the proposed dwellings, and will be accessible via Glanffrwd Road only. The western parcel will accommodate approximately 80% of the proposed dwellings, and the primary school, and will be accessible via Tyn Y Bonau Road only.

3.2.9 As such, the Spine Road will not accommodate HGVs or other through vehicle movements and will not divert vehicle movements from Glanffrwd Road through to Tyn Y Bonau Road. The spine street is proposed with a 6.5m wide carriageway, a 4.0m wide verge and a 3.0m wide shared footway / cycleway along either side of the carriageway.

3.2.10 The Corun TA considered a development of 550 dwellings for robustness, trip generation was based on TRICS analysis with forecast vehicle trip rates of 0.526 per household in the AM Peak hour (289 vehicle movements) and 0.496 trips per household in the PM Peak hour (273 vehicle movements). These movements were distributed onto the network based on different arrival and departure profiles, in each of the AM and PM peak hours to four different zones. This is presented in Appendix F of the Corun TA.

3.2.11 Traffic impact analysis or junction modelling was undertaken at a number of locations, namely the Iscoed Road / A48 / Water Street mini-roundabout junction, Station Road / Water Street / Tidal Reach signalised junction, Alltiago Road / A48 / Pentre Road / St Teilo Street signalised junction, and M4 Junction 48 (Hendy Interchange). Assessments were undertaken in a 2030 assessment year, based on traffic flows provided by Swansea Council for a 2025 future year scenario.

3.2.12 The assessments showed that the scheme would have a potential impact at the two signal junction and as such a contribution towards the implementation of MOVA control, via S106 agreement at the junctions has been proposed.

- 3.2.13 The impact at the M4 Junction 48 was shown as being negligible and the Iscoed Road / A48 / Water Street mini-roundabout continued to operate within capacity. No improvements are proposed at either junction.
- 3.2.14 The development proposes S106 contributions towards active travel improvements and bus diversions (at a level to be agreed, against to be confirmed improvement schemes). In addition, as part of the scheme, car clubs and e-bike hire are proposed on the site.

3.3 Local Highway Network

- 3.3.1 To the south of the site is High Street which forms as the minor arm of a priority junction with Tyn Y Bonau at its eastern extent and continues as Station Road at its western extent. High Street is a single carriageway road with a width of approximately 7m which is subject to a 20mph speed limit. High Street provides frontage access to residential development on at least one side, as well as connecting to the site.
- 3.3.2 Adjacent to the eastern site boundary of the site is Woodville Street, which is also a single carriageway road, subject to a 20mph speed restriction, with a width of c.7m adjacent to the site. To the north of the site boundary it narrows slightly to a minimum width of c. 5.5m, over a short section, which is suitable for two-way HGV movements in accordance with guidance in Manual for Streets (Figure 7.1). It provides frontage access to residential dwellings on at least one side, as well as providing access to the sites eastern boundary. Woodville Street routes in an east to north-south alignment from Tyn Y Bonau Road to High Street. At its northern end it also connects to the industrial area to the north of the site, and provides a right angled bend which then connects to Tyn Y Bonau Road at a priority junction. HGV movements travel along both Woodville Street and Tyn Y Bonau Road, and these bends and junctions can accommodate these movements.
- 3.3.3 Station Road links to High Street and the southwestern edge of the site, this runs north to south and connects to Water Street at its southern end at a four armed signal controlled junction. It is approximately 7m wide along its length.
- 3.3.4 Water Street is a key route through the centre of Pontarddulais which connects to Dulais Road and onto the A48. It connects to a number of residential roads within the local area, as well as linking to the A4138 and A48 to the west at a mini-roundabout junction.
- 3.3.5 The A48 (St Teilo Street) in Pontarddulais centre serves a number of local facilities and continues north linking to Cross Hands.

3.4 Existing Traffic Flows

- 3.4.1 To establish a baseline traffic position on the network against which the development proposals can be assessed, a turning count and queue length survey was undertaken at the Station Road / Water Street / Tidal Reach signalised junction, in addition to three automatic traffic count (ATC) surveys being obtained on High Street, Water Street and Tyn Y Bonau Road.
- 3.4.2 All surveys were undertaken by independent traffic survey specialists, Severnside Transportation Data Collection. The full traffic survey and queue length data is included within Appendix A.
- 3.4.3 The turning count survey was carried out on Thursday 20th July 2023 between the hours of 0700 – 1000 and 1500 – 1900. The ATC's collected traffic speeds and flows for seven continuous days between Thursday 20th July 2023 and Wednesday 26th July 2023. The location of the ATC's are also provided in Appendix A. The ATC data on all streets, as well as the turning count survey showed the highest level of total flows occurred between 08:00 – 09:00 in the AM and 17:00 – 18:00 in the PM. As

such, these have been used as the network peak hours against which to assess the impact of the proposed development. The peak hour turning count traffic flows are included in traffic flow diagrams within Appendix B.

- 3.4.4 A summary of the ATC survey results, in terms of the AM and PM peak hours, as well as across a weekday on all routes is set out in Table 3-1 and Table 3-2.

Table 3-1: 2023 Weekday Average Two-Way Vehicle Flows

Period	High Street	Woodville Street	Tyn Y Bonau Road
Weekday AM Peak hour (08:00-09:00)	83	45	53
Weekday PM Peak Hour (17:00-18:00)	118	56	67
Average Weekday	1,203	587	756

Table 3-2: 2023 Weekday Average Two-Way HGV Flows

Period	High Street	Woodville Street	Tyn Y Bonau Road
Weekday AM Peak hour (08:00-09:00)	3	1	4
Weekday PM Peak Hour (16:00-17:00)	0	1	0
Average Weekday	27	20	28

- 3.4.5 A summary of the 85th percentile speeds recorded across the entire seven day period (unadjusted for wet weather) are set out in Table 3-3.

Table 3-3: 85th Percentile Traffic Speeds (7-day average)

Direction	High Street (mph)	Woodville Street	Tyn Y Bonau Road
Eastbound / Northbound	26.4	33.1	26.6
Westbound / Southbound	29.4	25.9	25.7

- 3.4.6 The speed surveys were obtained when all streets were subject to 30mph speed limits, which have since reduced to 20mph. The 85th percentile speeds were already below the previous 30mph limits on the majority of surveys (except northbound on Woodville Street) and the reduction in speed limit is likely to have further reduced speeds from these recorded levels.

3.5 Road Safety

- 3.5.1 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.
- 3.5.2 The study area considered within the analysis covers the local highway network within the vicinity of the site access, as well as routes to the nearest bus stops, key pedestrian routes, and routes to key facilities as shown in Figure 3-3.

Figure 3-3: Location of Recorded PIAs within the vicinity of the site



Source: Crashmap.co.uk

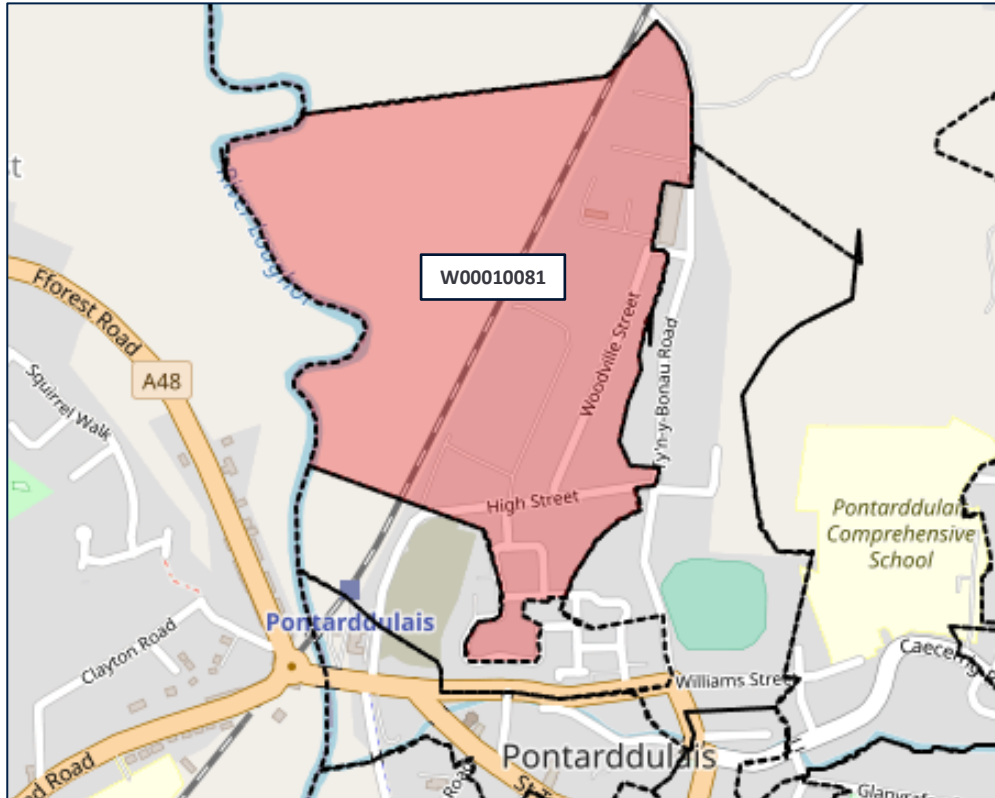
- 3.5.3 Over the study period, six PIA's occurred within the study area. One of these resulted in a fatal injury and five resulted in slight injuries. No serious accidents were recorded.
- 3.5.4 The fatal PIA occurred along Water Street, just to the east of the junction with St Michael's Avenue. This involved a single motorcycle colliding with a tree, during hours of darkness, although street lights are present and were lit. As such, there is no evidence to suggest an issue with the geometry of the highway in this location.
- 3.5.5 One PIA involved a cyclist at the Station Road / Water Street / Tidal Reach junction and resulted in slight injuries and no incidents involved a pedestrian over the seven year period. One isolated incident does not indicate a specific cyclist road safety issue. As such the evidence does not suggest a specific active travel safety issue within the vicinity of the site or linking to the town centre.
- 3.5.6 A PIA occurred on High Street within the vicinity of the Woodville Street junction. This involved three vehicles, during daylight hours with a vehicle turning right, causing an oncoming vehicle to collide into a parked vehicle. The obtained data shows that vehicle speeds were below 30mph on High Street and the speed limit reduction should assist with reducing these further. As such, an isolated incident, when the speed limit was higher than currently, does not indicate a specific safety issue at this junction.
- 3.5.7 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.
- 3.5.8 Although all incidents are regrettable, the PIAs that occurred do not indicate a specific pattern or issue with the geometry of the highway that would be exacerbated by the proposed development.

3.6 Existing Travel Behaviour and Car Ownership

Modal Share

3.6.1 Based on the 2011 Census data, the site is located within output area (OA) W00010081. The output area is shown in Figure 3-4.

Figure 3-4: Output Areas within vicinity of the site.



3.6.2 Table 3-4 shows how the existing residents of this output area currently travel to work, as well as providing a comparison with the entire of Swansea, as obtained from 2011 Census data. The 2011 data is considered more appropriate than the 2021 data, due to the pandemic and lockdowns on the day of the 2021 Census affecting the modes of travel 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 information.

Table 3-4: Journey to Work Modal Split

Mode	Swansea	OA W00010081
Public Transport	7%	4%
Car Driver	71%	73%
Motorcycle	1%	1%
Car Passenger	8%	11%
Bicycle	2%	1%
On Foot	11%	10%
Other	1%	1%
Total	100%	100%

3.6.3 The census data shows that 73% of residents living in the surrounding area and commuting to work travel as a car driver, with 10% walking, 4% travelling by public transport, 11% as a car passenger and 1% cycling. This is broadly similar to travel behaviour across the entire of Swansea.

- 3.6.4 These statistics have been adjusted to exclude working from home. If this was included, c.4% of residents currently in work, do so from home rather than commuting and this is likely to have significantly increased since 2011.
- 3.6.5 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.
- 3.6.6 The data demonstrates that there is high potential for walking, cycling, and public transport trips to be made to and from the site and that these movements already occur in this area.

Car Ownership

- 3.6.7 The 2021 Census data has been reviewed for the surrounding area based on the Output Area in which the site is situated (W00010081). This shows an average of 1.52 per household in the surrounding area and that 59% of households owned one car or less. This compares with an average of 1.25 cars per household across Swansea and 65% owning one car or less.
- 3.6.8 Based on this data, it is considered that potential future residents would be likely to not own 1-2 cars, although affordable tenure dwellings are likely to have lower ownership.

4. CONNECTIVITY BY SUSTAINABLE MODES OF TRAVEL

4.1 Introduction

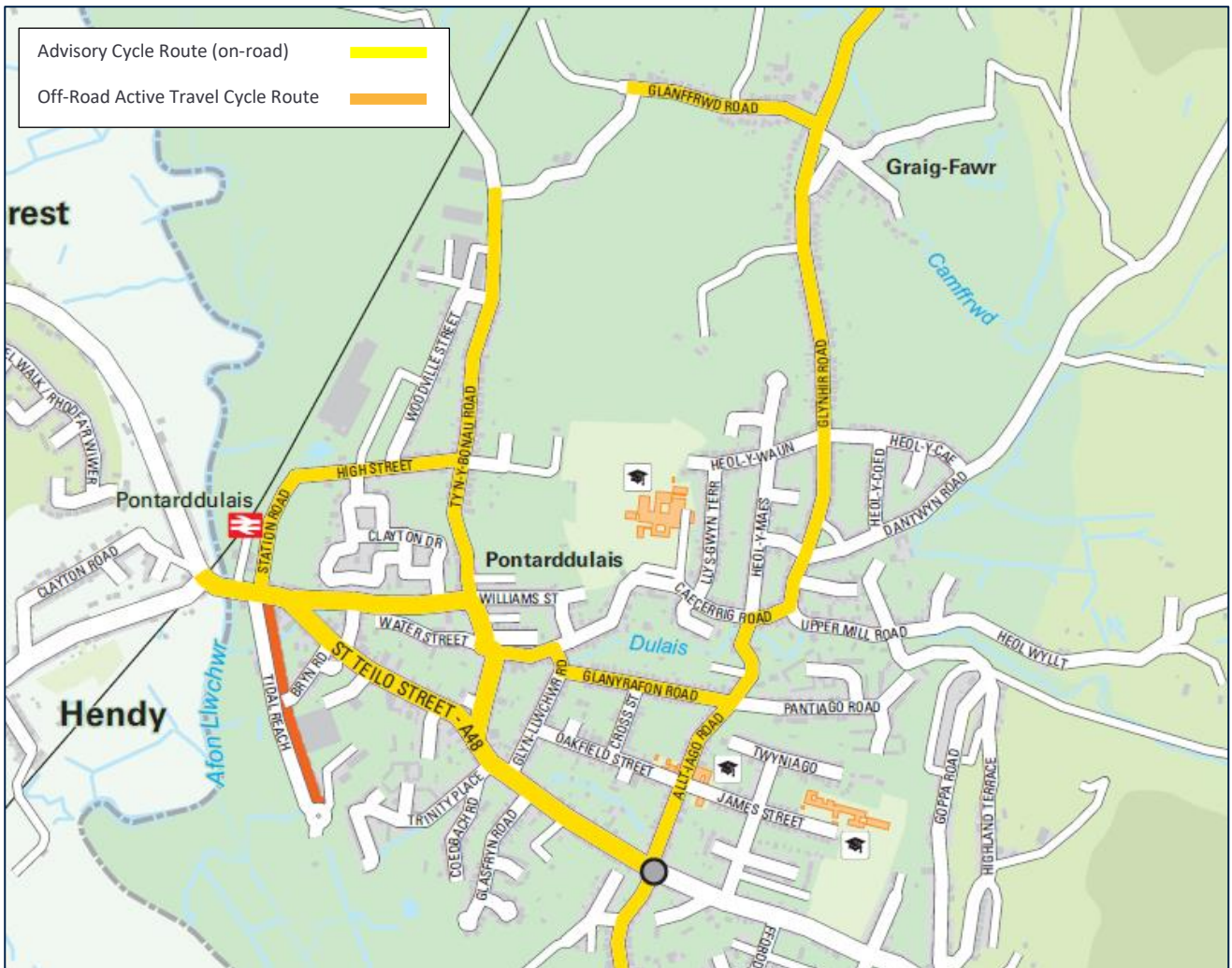
- 4.1.1 This section describes the opportunities to make everyday trips by non-car modes. It considers the likelihood of trips being made on foot, by cycle, bus, and rail. The site location is demonstrated to be consistent with the aims of TAN18 and in accordance with sustainable transport policies in Future Wales, PPW11 and the LDP.
- 4.1.2 The site is allocated for residential use and as such has been considered suitable by Swansea Council for this use. However, this section of the TA provides a full appraisal of active travel infrastructure and public transport connectivity.

4.2 Walking and Cycling

- 4.2.1 Walking and cycling (collectively known as active travel) are the most important modes of travel at a local level and offer the greatest potential to replace short car journeys.
- 4.2.2 The site is well situated to benefit from existing walking and cycling routes. Suitable footways and crossings are provided throughout the local area, as would be expected within an existing and established urban area. The majority of streets have footways on one or both sides of the carriageway, providing links between the site and the surrounding facilities.
- 4.2.3 Pedestrian access is gained from both High Street to the south of the site, as well as Woodville Street to the east of the site. There are footways of c.2m in width along the southern side of High Street and the eastern side of Woodville Street which can be accessed via new pedestrian dropped kerb crossings which are proposed as part of the development. Both streets have street lighting.
- 4.2.4 The footway on High Street connects to the footway on Station Road which is a key route to Pontarddulais Rail Station and Water Street. At the Station Road / Water Street junction there are signal controlled crossings on both the west and east side of the junction, providing pedestrian connections to the southern side of Water Street. There is also a dropped kerb crossing on Station Road which connects the footway on Station Road to the footway on Water Street providing a continuous route to Pontarddulais Rail Station. To the east of the junction, the footway and dropped kerb crossings provide a continuous pedestrian connection to the closest bus stops on Water Street.
- 4.2.5 Water Street has good quality footways on both sides of the carriageway and street lighting along its length. These footways connect to those on St Teilo Street (A48) which accommodates high levels of pedestrian movements relating to the key facilities located in the town centre.
- 4.2.6 Nant Dawel and Ffordd Cambria provide an alternative pedestrian route to access facilities to the south, with a connection linking the southwestern end of Ffordd Cambria to a short spur connecting to Water Street. This provides an alternative and similar length route from the main site access to Water Street and St Teilo Street, as well as the closest bus stops. Ffordd Cambria is a residential road with footways on both sides of the carriageway. It benefits from street lighting and natural surveillance from properties fronting onto the carriageway.
- 4.2.7 As shown in Section 2.3, there is no existing safety issue for pedestrians within the vicinity of the site, and the surrounding area already accommodates existing pedestrian movements associated with residential use, as well as the adjacent employment uses. As such the infrastructure would be attractive to potential future residents who prefer to walk to and from the site and would encourage walking to key everyday facilities, as well as the closest bus stops and rail station.

Cycle Routes and Infrastructure

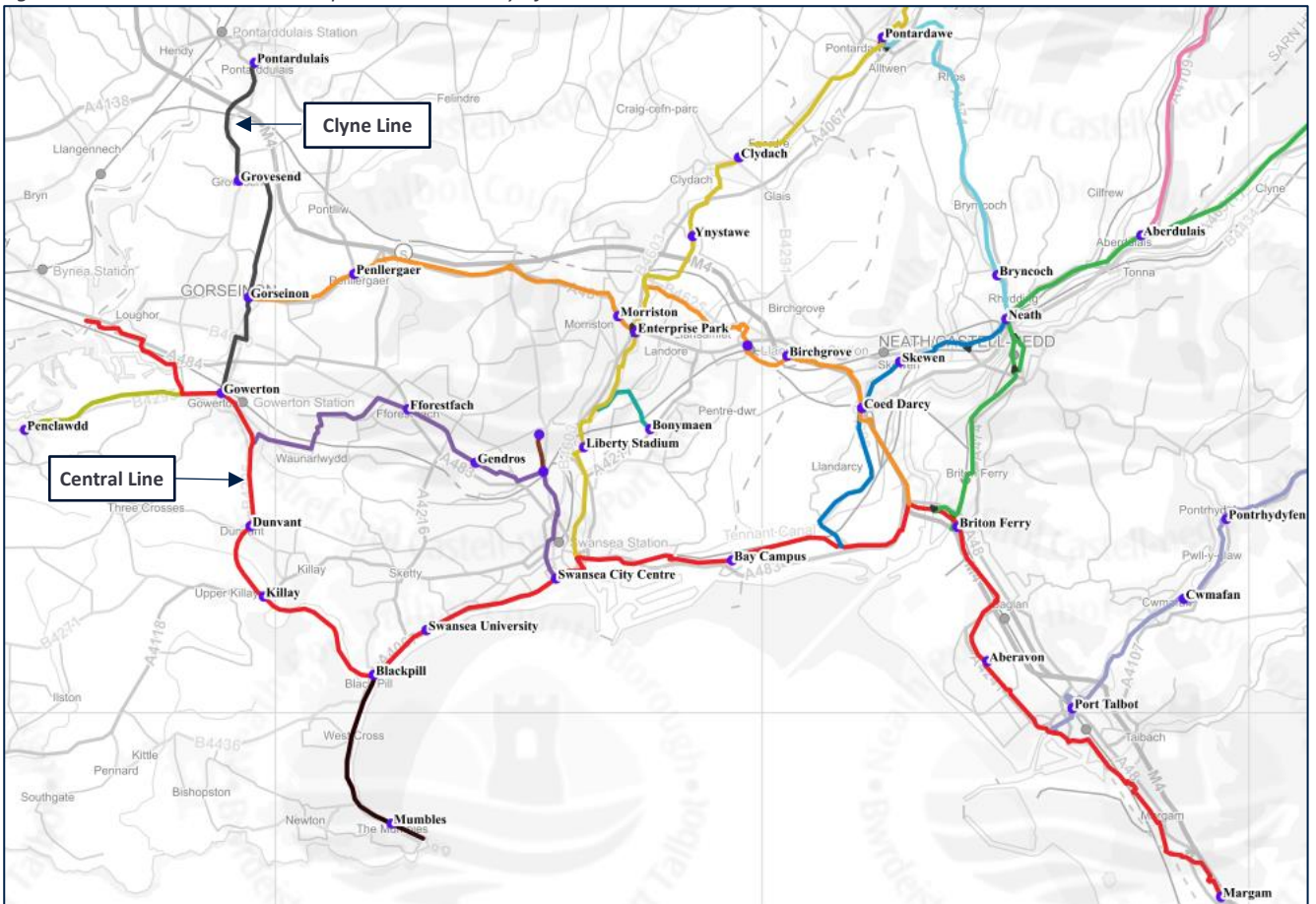
- 4.2.8 The existing alignment / geometry and 20mph speed limit along the surrounding streets are considered suitable to accommodate some cyclists on the carriageway and the network of street lighting offers a low-risk environment for both pedestrian and cycle trips to occur during hours of darkness.
- 4.2.9 The Swansea Bay Cycle Map provides a detailed map of cycle routes and shared use paths, although this was produced in 2018 so does not include newer active travel maps. This shows advisory cycle routes (on-road) as well as on-road and off-road active travel cycle routes.



Source: Swansea Council

- 4.2.10 The on-road cycle routes running along the A48 connect to further routes within Pontarddulais, which form part of the wider Cycle Swansea Bay routes. Over the region, these are shown on the interactive Swansea cycle map, which has been reproduced in Figure 4-1. The closest route to the site is the Clyne Line which commences from the A48 / Allt-Iago Road junction, approximately 1.2km to the south of the site, and this routes south towards Grovesend and Gorseion. The Clyne Line is mix of both off and on-carriageway route.

Figure 4-1: Active Travel Route Map within the vicinity of the site



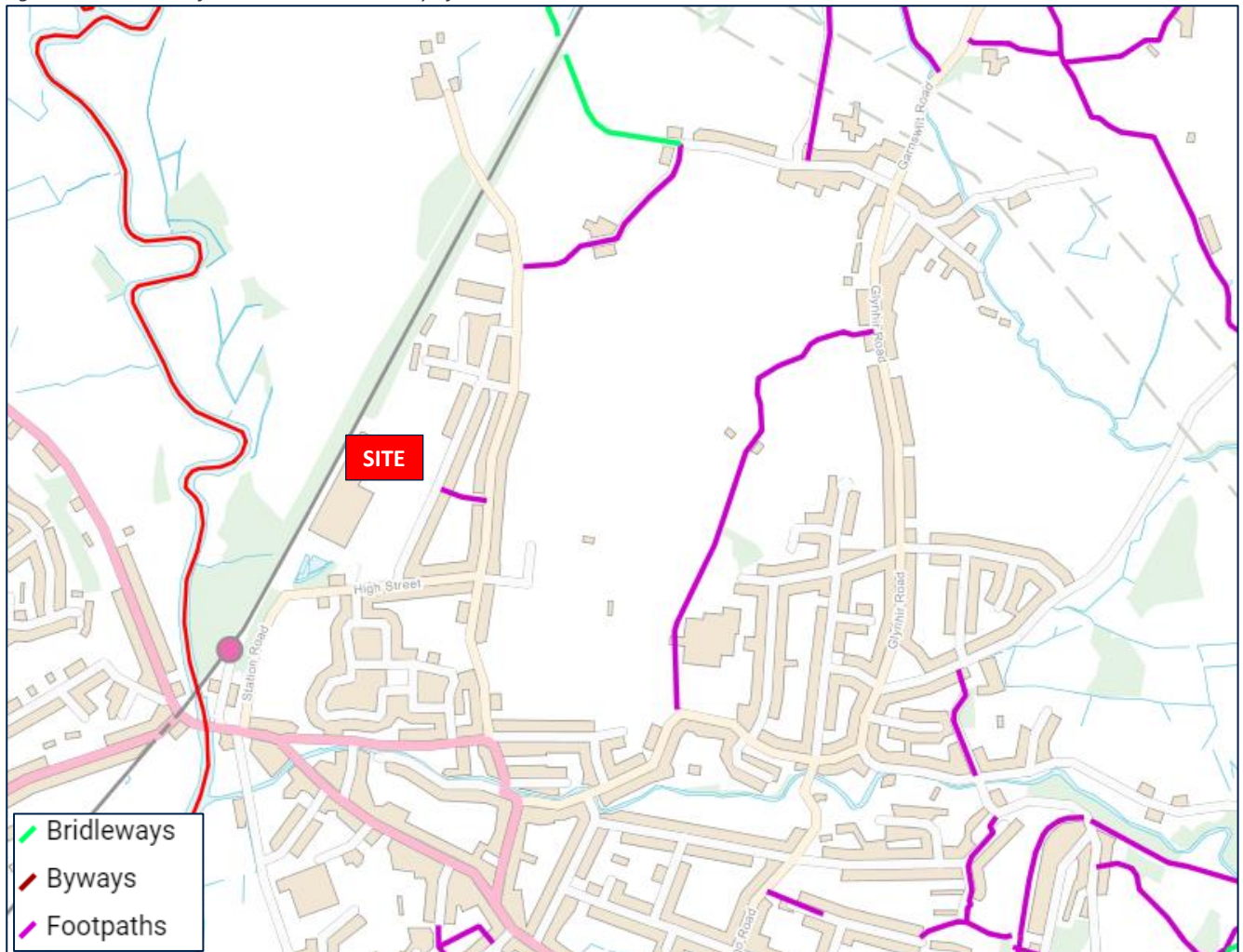
Source: <http://maps.npt.gov.uk/cycleswanseabay/index.html>

4.2.11 The cycle routes surrounding the site, therefore provide an opportunity for potential future residents to travel via cycle to and from the site. There is no evidence of a safety issue for cyclists on the surrounding streets and there is some existing cyclist activity for journeys to work, as shown in the Census data. As such, it is considered these routes are suitable for potential future users.

Public Rights of Way

4.2.12 There are some public rights of ways within the vicinity of the site, from which residents can benefit from further alternative routes for walking. A key route would be the public footpath which connects Woodville Street to Tyn y Bonau Road, this would be linked into the site via a crossing and a footway / cycleway through the site to a new Active Travel Route on the western boundary. As such, this would enhance this route for existing residents connecting to the Rail Station and other facilities to the west. The public rights of way within the vicinity of the site are shown in Figure 4-2.

Figure 4-2: Location of PRoW within the vicinity of the site



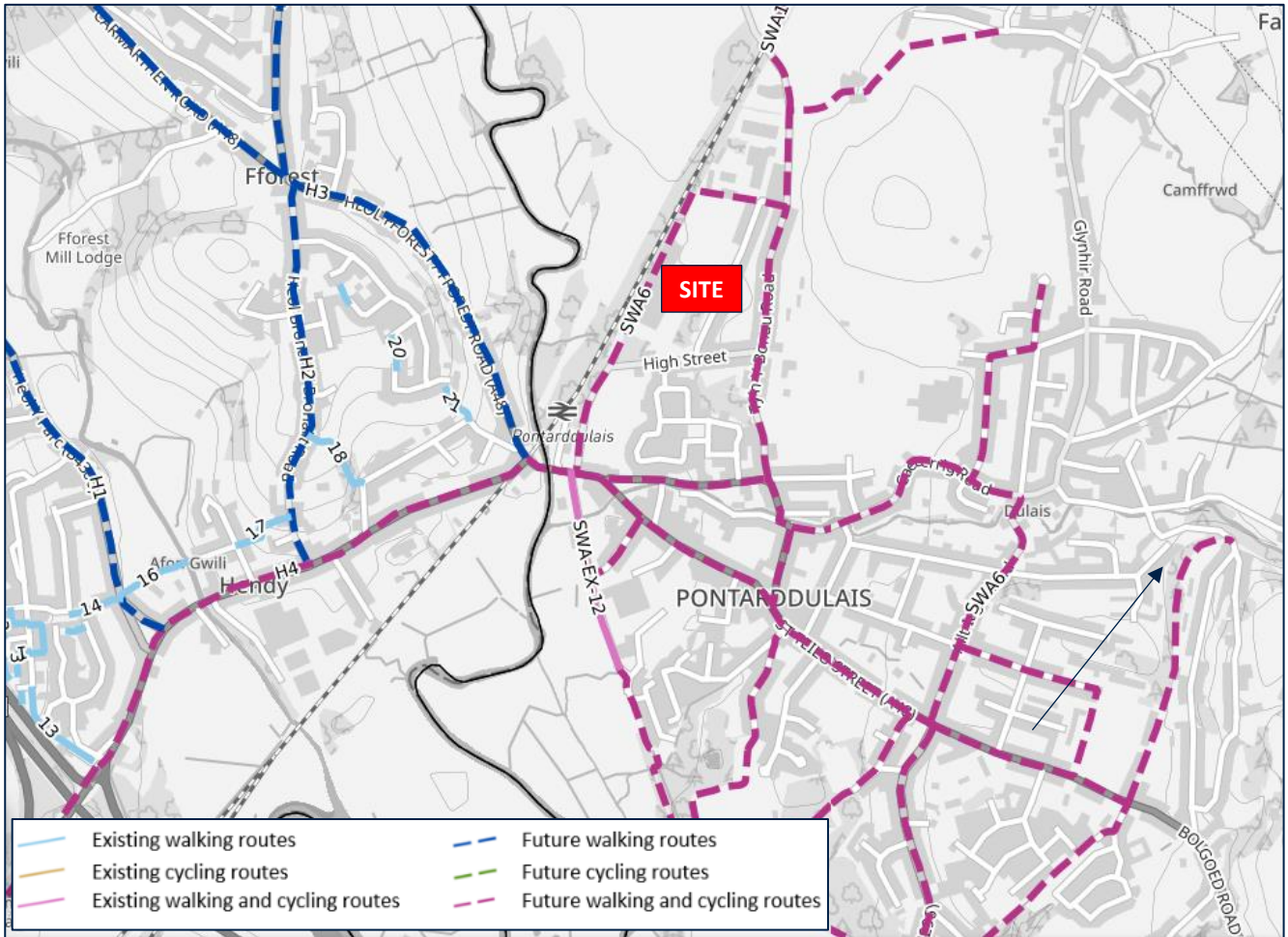
Source: Swansea City County Council

4.3 Future Active Travel Improvements

- 4.3.1 The Welsh Government DataMap Wales shows the Active Travel Network Maps (ATNM) across all authorities, including Swansea Council. This shows existing walking routes and where upgrades or new routes are anticipated to be provided for the next 15 years.
- 4.3.2 This shows a proposed improvement to a route that runs adjacent to the western boundary of the site. Route SWA6 is a future walking and cycling route which runs southbound connecting to Station Road and running south to Water Street. Route SWA6 also routes along Water Street and St Teilo Street (A48). This route would also connect to an existing route along Tidal Reach.
- 4.3.3 The proposed development would provide a section of the proposed route within the western boundary of the site, connecting to the north. It will also provide additional routes within the site to further improve active travel movements.
- 4.3.4 The proposals would also provide a proportionate contribution (to be agreed) towards the proposed active travel route along Station Road. This will be subject to wider discussions with the Council regarding Section 106 contributions that are considered necessary and directly related to the development.

4.3.5 The Welsh Government ATNM showing these and other routes within the vicinity of the site has been reproduced in Figure 4-3.

Figure 4-3: Active Travel Map



Source: Datamap.gov.wales

4.3.6 The plan demonstrates that the site is situated within a short distance of a number of existing and proposed future walking and cycling routes, which are considered appropriate for use by Swansea Council, which further demonstrates the suitability of the location for encouraging sustainable travel.

4.4 Distances to Facilities

4.4.1 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).

4.4.2 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’ and would be highly sustainable locations.

4.4.3 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.

4.4.4 To demonstrate the site’s connectivity, facilities within appropriate distances which are accessed via suitable and established routes have been summarised in Table 4-1. The location of the facilities in the context of the site are shown in Figure 4-4. These facilities have been summarised based on approximate travel distances from the site access via appropriate routes, not straight-line distances.

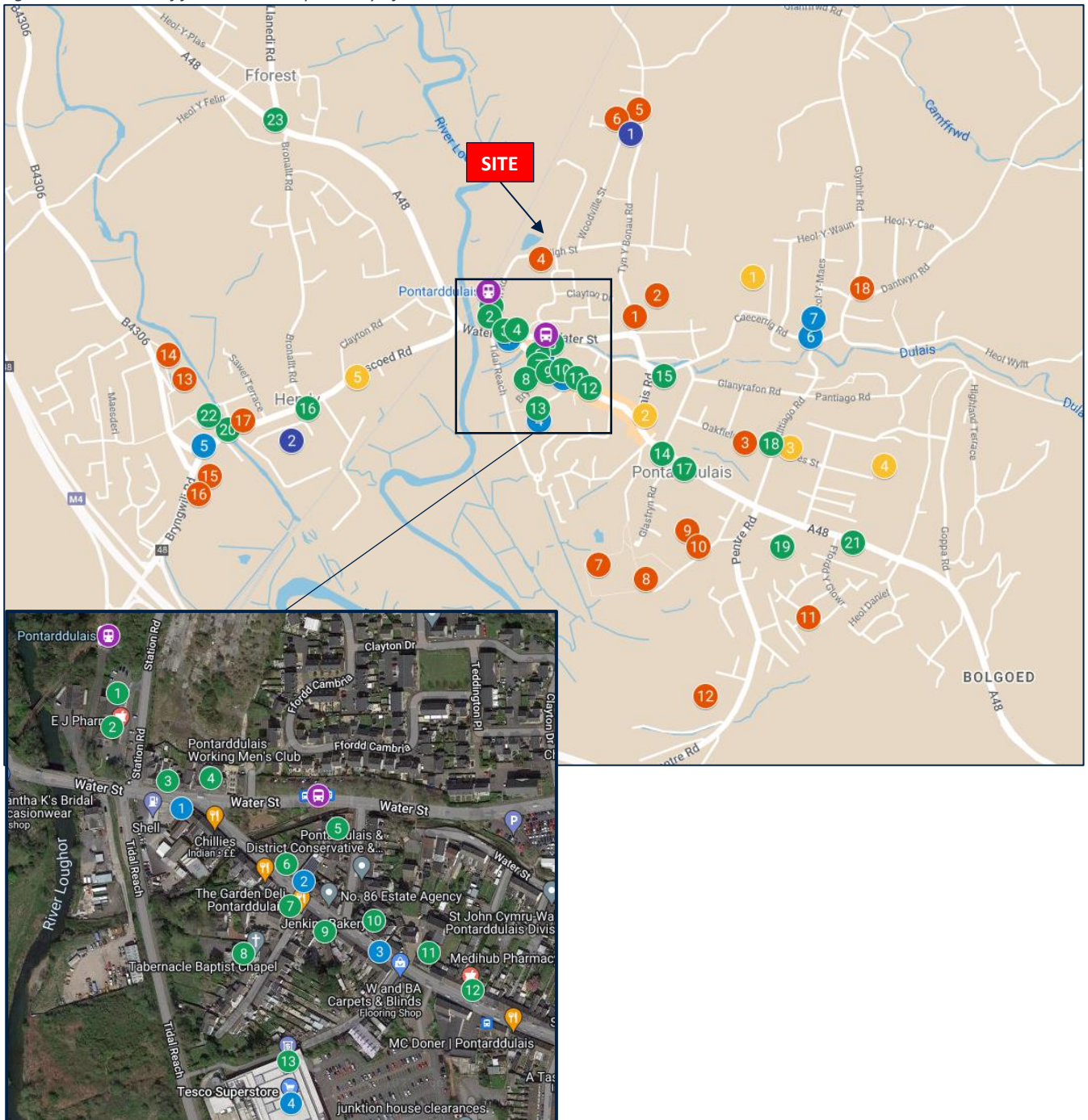
Table 4-1: Proximity of the site to local facilities and services

Facility / Amenity	Distance from site access (metres)	Walking Travel Time (minutes) *	Cycling Travel Time (minutes) *
Community Facilities			
1 Tal-Y-Bont Surgery	300	4	1
2 Station Road Pharmacy	330	4	1
3 Lloyds Pharmacy	400	5	1
4 Working Mens Club	400	5	1
5 Llyfrgell Pontarddulais Library	410	5	1
6 St Michael & All Angels Church	440	6	1
7 Pontarddulais Post Office	470	6	1
8 Arwels Hairdressers	500	6	2
9 Mechanics Institute community centre	530	7	2
10 Tabernacle Baptist Chapel	540	7	2
11 Capel Hope Siloh	580	7	2
12 Canolfan Y Bont community centre	600	8	2
13 Medihub Pharmacy	630	8	2
14 Tesco Bank Cash Machine	680	9	2
15 Dental Health Practice	840	11	3
16 Methodist Church	910	11	3
17 Hendy Post Office	1000	13	3
18 Bont Elim Community Church	1130	14	4
19 Hendy Pharmacy (MWPhillips Chemist)	1220	15	4
20 Chapel	1250	16	4
21 Fforest Post Office and Stores	1350	17	4
22 St Teilo Church	1360	17	4
23 Hair by Danielle	1460	18	5
Public Transport			
 Pontarddulais Bus Station	400	6	1
 Pontarddulais Rail Station	400	5	1

Facility / Amenity		Distance from site access (metres)	Walking Travel Time (minutes) *	Cycling Travel Time (minutes) *
Retail				
1	The Store	400	5	1
2	Family Shopper	460	6	1
3	St Teilo Street (A48) shops/ takeaways/ cafes	550	7	2
4	Tesco Superstore	700	9	2
5	The Corner Shop	1120	14	4
6	Lifestyle Express Pontarddulais	1200	15	4
7	Hendy Convenience Stores	1300	16	4
Education				
1	Pitter Patter Day Nursery Ltd	700	9	2
2	Hendy County Primary School	830	10	3
3	Pontarddulais Comprehensive School	1050	13	3
4	Ysgol Gynradd Gymraeg Bryniago	1150	14	4
5	Pontarddulais Primary School	1400	18	4
Leisure				
1	Pontarddulais Town Band	70	1	0
2	Pontarddulais Park	320	4	1
3	Pontarddulais Cricket Club	400	5	1
4	F.I.T Pontarddulais	440	6	1
5	Wales Karate Association	480	6	2
6	Pontarddulais Rugby Football Club Limited	1100	14	3
7	Hendy Rugby Club	1100	14	3
8	Coed Bach Park	1110	14	3
9	Pontarddulais Football Pitch	1190	15	4
10	Dantwyn park	1260	16	4
11	Tennis courts	1330	17	4
12	Coed Bach Bowls Club	1400	18	4
13	Hendy Nature Trail	1400	18	4
14	Hendy Cricket Club	1450	18	5
15	Parc St Teilo - Playground	1640	21	5
16	Hendy Park	1680	21	5
17	Basketball/ football courts	1700	21	5
18	Pontarddulais Show Park	1760	22	6
Employment				
1	Woodville Street employment area	410	5	1
2	Iscoed Road employment area	1300	16	4

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

Figure 4-4: Location of facilities within proximity of the site



Source: Google Maps

Note: Numbers and colours correlate to Table 4-1

4.4.5 Table 4-1 and Figure 4-4 show there are a significant number and range of facilities and services situated within comfortable walking and cycling distances which can be accessed via suitable active travel routes, as outlined previously. All facilities are within Welsh Government guidance walking and cycling distances, with numerous facilities within a ‘walkable neighbourhood’ distance. This demonstrates the highly sustainable location of the site.

4.4.6 Within an 800m walk, residents can access shops, a Tesco Superstore, a nursery, hairdressers, a post office, a park, a pharmacy, a gym, a community centre, and an employment area, as well as the rail station and bus station. This is a significant number of facilities within less than a 10-minute walk, which can be utilised for everyday needs purposes. As such, the site is situated in a ‘walkable

neighbourhood’ consistent with the Welsh Government and MfS guidance and is therefore considered to be situated in a highly sustainable location.

- 4.4.7 There is also another large employment location and numerous other facilities within appropriate walking or cycling distance within 2km of the site. This includes a number of schools, sports clubs, a dentist, food stores, as well as other leisure and education facilities.
- 4.4.8 The site is situated in a highly sustainable location, as would be expected for a site in an existing and established residential area close by to a town centre. 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.

4.5 Public Transport

Bus

- 4.5.1 The closest bus stops to the site are located on Water Street at the Pontarddulais bus station within a 400m walk (5 minutes). The bus station benefits from bus cage markings (for three buses), raised kerb, bus flags, two shelters (both with seating) and real time passenger information.
- 4.5.2 The bus station is serviced by the 16, L3, and X13 Cymru Clipper. These combined services provide a good frequency connecting to a number of locations including Swansea, Llanelli, Gowerton, Gorseinon, Tycroes and Fforestfach. The journey times from Pontarddulais to Swansea bus station are approximately 40 minutes, and from Pontarddulais to Llanelli are approximately 50 minutes.
- 4.5.3 A summary of the services is set out in Table 4-2.

Table 4-2: Local Bus Services

Route No.	Route	Frequency				
		Mon-Fri Peak Hours	Mon-Fri Daytime	Mon-Fri Evening	Sat	Sun
16	Swansea – Pontarddulais via Gowerton, Gorseinon	Hourly from 08:44	Hourly	Hourly until 23:13	Hourly (08:44 – 23:13)	No service
L3	Pontarddulais – Llanelli	Every 1.5 hours from 07:21	Every 1.5 hours	Every 1.5 hours until 17:51	Every 1.5 hours (07:21 – 17:51)	No service
X13 Cymru Clipper	Llandeilo – Swansea via Pontarddulais, Tycroes, Fforestfach	Every 30 minutes from 06:21	Every 30 minutes	Every 30 minutes until 22:28	Every 30 minutes (06:21 – 22:28)	No service

- 4.5.4 During the peak hours there are four services per hour, or one service every 15 minutes on average. The services start from 06:21 so are suitable for those commuting, particularly into Swansea (using the X13 Cymru Clipper).
- 4.5.5 Services also extend to Saturday, enabling access to buses six days a week ensuring these are a viable and realistic alternative to the car for residents. Saturday bus services run from 06:21 to 22:28.
- 4.5.6 Potential future residents of the site can access a good frequency of bus services, linking to a variety of destinations including local destinations. The bus services within walking distance from the site provide a feasible and attractive option for work related journeys. They can also be used to access destinations for leisure, retail and education purposes. As such, the bus provides a realistic alternative to car.

Rail

- 4.5.7 The closest rail station is Pontarddulais Rail Station which is located approximately a 400m walk to the south of the site. This can be accessed within a five-minute walk. The station consists of one platform and a car park with 20 spaces.
- 4.5.8 Trains departing from Pontarddulais Rail Station are operated by Transport for Wales, and provide connections to Swansea, Shrewsbury, Llandovery and Llanelli.
- 4.5.9 There is a journey time of c.40-50 minutes for journeys to Swansea, c.14 minutes to Llanelli, as well as c.25 minutes to Gowerton and 11 minutes to Ammanford. There are 12 train services departing from Pontarddulais per day on average and services run from 06:21 to 23:29.
- 4.5.10 Services to Swansea and Llanelli in the morning peak depart at 07:15 and 08:51 and return in the evening peak at 18:19. As such, it is feasible and attractive to use the rail services for commuting purposes, particularly to Swansea and Llanelli, although rail is also likely to be attractive for other journey purposes such as leisure, retail, or business journeys. A return journey via bus would also be attractive if residents needed to return at an earlier time.
- 4.5.11 A combined walk and rail (or bus) journey would therefore be attractive for replacing car journeys and further reducing the requirement for owning or travelling by car.

4.6 Summary

- 4.6.1 The site is situated in a highly sustainable location. Potential future residents can walk or cycle to a number and range of facilities, services and employment 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).
- 4.6.2 The site also has good public transport links, which provide a suitable, attractive and realistic alternative to travelling by car. This will assist in constraining vehicle generation and reduce the need for residents to travel by or own a car. It will also benefit and attract residents that would prefer to travel by public transport.
- 4.6.3 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.
- 4.6.4 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.

5. DEVELOPMENT PROPOSALS

5.1 Overview

- 5.1.1 The proposals are for an outline application for a residential development of up to 150 new homes with a mix of house types and street layouts with internal open space and landscaped areas.
- 5.1.2 The illustrative site layout is shown in Appendix C.

5.2 Access and Layout

Vehicle Access

- 5.2.1 The site will be accessed from two locations via new priority junctions.
- 5.2.2 The main access would be from a new priority junction provided onto High Street, broadly in the location of an existing site access location. A general arrangement design of a potential priority junction onto High Street is included in Appendix D.
- 5.2.3 The access road at this location is proposed to have a carriageway width of 5.5m with 6m radii provided onto High Street, which is considered appropriate to serve a development of up to 150 dwellings. A footway of 2m will be provided on each side of the access road. A 5.5m wide access width enables two large vehicles to pass on a straight section and is considered appropriate to accommodate all traffic associated with the residential scheme.
- 5.2.4 The junction is provided with visibility splays of 2.4m x 43m in each direction which is appropriate for 30mph speeds based on guidance within TAN18 and MfS. The road has a speed limit of 20mph and speed data indicated that prior to the 20mph speed limit coming into force, 85th percentile speeds were lower than 30mph. As such, the visibility from the access is considered robust and appropriate. In addition, forward visibility is available for vehicles approaching the access in excess of the recommended distances for 20mph speeds.
- 5.2.5 The junction also has a centre line separation from the adjacent junction of 43m and the opposite junction of 25m. This is appropriate separation from an adjacent junction for speeds of 30mph, and the opposite junction spacing is suitable and based on the 20mph speed limit whilst allowing a refuse vehicle to safely turn between both accesses. Vehicles waiting at either adjacent junction would not have an impact on visibility splays.
- 5.2.6 This is in accordance with Manual for Streets which states *“The spacing of junctions should be determined by the type and size of urban blocks appropriate for the development. Research in the preparation of MfS demonstrated that more frequent (and hence less busy) junctions need not lead to higher numbers of accidents (para 7.3.17 and 7.3.18).”*
- 5.2.7 In addition, Manual for Streets 2 states in Section 9_2 that *“In the past, guidance on minimum junction spacing has often been based on recommended stopping sight distances (SSD) for 85th percentile speeds. The reductions in SSD compared to previous practice means that junction spacing criteria determined on this basis should be reduced. However, in any event there appears to be little evidence that spacing criteria based on SSD are justified on safety or other grounds.”*
- 5.2.8 As such, there is no relevant design guidance which suggests that junction spacing is required in excess of visibility splay distances, and even if junctions were closer than this, there is no evidence this leads to increased safety issues, subject to more detailed consideration of the junctions and specific location. In this location, there is an existing access point into the site which is slightly further to the

west and closer to the opposite junction. As such, the realignment slightly to the east is considered appropriate to safely accommodate the site.

- 5.2.9 The site access also incorporates dropped kerb crossings over the mouth of the junction connecting the 3m wide route running around the site boundary. In addition, a further pedestrian crossing is shown on High Street which enables pedestrians to cross to Nant Dawel on a key desire line.
- 5.2.10 A second priority junction access is proposed onto Woodville Street towards the northern end of the site. A general arrangement design of a potential priority junction onto Woodville Street is included in Appendix D.
- 5.2.11 The junction is proposed with 10m radii and a 6.1m carriageway width on the access road. The junction is provided with visibility splays of 2.4m x 43m in each direction, as for the junction on High Street. This is appropriate for this location based on guidance within TAN18 and MfS.
- 5.2.12 This junction arrangement has also incorporated dropped kerb crossings at the mouth of the junction, as well as slightly to the north of the junction on Woodville Street enabling a connection with the footway running along the eastern side of Woodville Street, which in turn connects with the industrial area north of the site.
- 5.2.13 The visibility splays at each junction 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 delivered appropriately.
- 5.2.14 The arrangements are considered to follow the principles of Manual for Streets and PPW11, by creating a user hierarchy with pedestrians at the top through the provision of footways into the site and dropped kerbs at the mouth of the junctions to enable safe crossing.
- 5.2.15 The proposed junction arrangements would enable a large refuse vehicle to successfully access and egress the junction in a forward gear as well as allow for two-way vehicular movements without conflict. Swept path analysis has been undertaken demonstrating that the proposed accesses can accommodate a large refuse vehicle turning in and out and this is shown in Appendix E.
- 5.2.16 The access proposals demonstrate that the site can be safely accessed from the highway network via a priority junction. The access arrangements are considered to be appropriate in terms of geometry, visibility, and deliverability.

Pedestrian and Cyclist access

- 5.2.17 Pedestrian access will be gained from a number of locations including the footways running adjacent to the site access connecting to High Street and from the active travel route being provided along the western boundary (forming part of Active Travel Route SWA6) connecting north from Woodville Street to Station Road in the south. There will also be active travel connections linking to the eastern boundary of the site onto Woodville Street.
- 5.2.18 Dropped kerb crossings will be provided at the vehicular accesses to ensure pedestrians can cross the access safely.
- 5.2.19 A shared footway / cycleway is proposed along the site frontage on High Street and Woodville Street to accommodate pedestrians and cyclists and improve the existing active travel environment. This would be separated from the carriageway via verge to further enhance the attractiveness of this route. This will connect to Station Road and dropped kerb crossings will be provided to connect with the existing footway on the southern side of High Street and along Station Road. A proportionate S106

contribution can be provided towards the delivery of the Swansea Council identified Active Travel Route along Station Road, to connect south to Water Street.

- 5.2.20 A dropped kerb crossing will also be provided opposite the public footpath connecting Woodville Street to Tyn y Bonau Road, this will link to an active travel route through the site from west to east, which connects to the route running within the western edge of the site (forming part of SWA6).
- 5.2.21 The extensive active travel routes and dropped kerb crossings will provide an enhancement to the existing active travel facilities in this area, as well as facilitate the delivery of part of a Swansea Council proposed future active travel route.
- 5.2.22 The internal arrangements are considered safe and suitable for this site which will also have a low-speed environment and the design of the site and multiple connections points will encourage walking and cycling movements.
- 5.2.23 The site is well connected to its surrounds, and enhances the existing facilities available to residents. As such, this ensures a fully permeable development consistent with the requirements in PPW11.

Site Layout

- 5.2.24 There will be a network of streets within the site, which will include a Spine Street (further details set out in Section 5.3), primary streets, secondary streets and tertiary streets. The full details of the street and movement hierarchy are provided in Appendix F.
- 5.2.25 The primary street running through the site will have a width of 5.5m and can serve dwellings along its frontage and enable access to internal driveways and shared space areas. This will also provide 2m wide footways on each side and have a semi-formal landscaped verge on one side.
- 5.2.26 The primary street will link to both secondary streets, which would be of a similar standard, and tertiary streets which would more of an informal shared surface type layout with low kerb upstands for pedestrian movements. These would be on the quieter streets within the site.
- 5.2.27 The internal site layout will be designed to minimise the speeds of vehicular traffic and prioritise walking and cycling movements and will include the provision of shared surfaces, where appropriate. This is in accordance with the transport hierarchy in PPW11. Details of the internal roads will be agreed as part of the reserved matters approval.
- 5.2.28 The site will be designed to keep speeds to 20mph or below and suitable forward visibility around bends would be provided for 15-20mph speeds (15-25m). Two large vehicles will be able to pass along the primary road, including at bends. The access road would be designed to adoptable standards with a maximum gradient of 1:12 along its length.
- 5.2.29 Refuse vehicles can manoeuvre around the site safely and appropriately, with access road widths appropriate to accommodate these vehicles. Where required, turning heads can be provided within the site, and these are shown in the illustrative masterplan. As such, refuse vehicles will be able to enter and exit the site in forward gear.
- 5.2.30 The site layout would therefore be designed to be safe and suitable for a residential development of up to 150 dwellings and accommodate all vehicles likely to use the site.

5.3 Spine Street

- 5.3.1 As set out in Section 3.2 the site is allocated within the LDP under SD A. This sets out a requirement to deliver an internal Spine Street as part of the overall development. Specifically, the supporting text for

the Spine Street states that *“The alignment of the street will facilitate the redirection of HGV movements away from the existing residential streets of Glynhir Road and the network surrounding the comprehensive school.”*

- 5.3.2 The policy also states that *“the alignment from Glanffrwd Road, across the greenfield land to Tyn y Bonau Road will provide a westerly dedicated transport route for existing urban traffic.”*
- 5.3.3 It follows on that *“Upon exiting the greenfield land on Tyn y Bonau Road, the new link road can connect with the brownfield opportunities to the south, before continuing its alignment southwards towards the town centre junction with Water Street.”*
- 5.3.4 As such, the requirement for the Spine Street is specifically stated to redirect HGV movements away from Glynhir Road. In addition, it is to provide a route for urban traffic away from Glanffrwd Road. From Tyn y Bonau Road, the route cannot continue within the overall allocation, as there is an employment site between the two parcels of land which comprise SD A.
- 5.3.5 In addition, as shown in Section 3.2, the Persimmon site is not proposing to provide a through route along the Spine Road for all vehicles, with a bus gate provided along the link allowing only bus movements. On this basis, the requirement for a Spine Road to accommodate HGVs and existing vehicle movements is not being proposed and cannot be delivered by the High Street site forming part of this application.
- 5.3.6 As set out in the supporting text for LDP Policy T5 *“Whilst Spine Streets will not have the character of a typical ‘A road’ bypass, they can deliver benefits across the transport network in terms of providing an alternative diversionary route for journeys that do not begin or end at a location near the Spine Street.”*
- 5.3.7 Indeed, in Appendix 5, the route relating to the allocation is referred to as the “Northern Access Relief Road (NALR)”. As such, the description of the Spine Street throughout the LDP sounds similar to a bypass type road, in that this is being delivered to carry traffic away from existing routes and improve access for vehicles.
- 5.3.8 This is contrary to the current position of the Welsh Government, as set out in ‘The Welsh Government’s response to the Roads Review’ (14 February 2023). This is in response to a report submitted to Welsh Government by the Roads Review Panel.
- 5.3.9 The review was commissioned due to concerns that some road investment schemes were no longer consistent with Welsh Government’s policies, particularly the declaration of a climate and nature emergency.
- 5.3.10 The response identified a new approach to road building projects in Wales, with priority for modal shift to more sustainable modes, rather than increasing highway capacity.
- 5.3.11 The response sets out a number of future road building tests, with the Welsh Government continuing to consider road investment in roads (both new and existing) in the following circumstances:
1. To support modal shift and reduce carbon emissions.
 2. To improve safety through small-scale changes.
 3. To adapt to the impacts of climate change.
 4. To provide access and connectivity to jobs and centres of economic activity in a way that supports modal shift.

- 5.3.12 In particular it is specifically stated that “All new roads need to contribute towards achieving modal shift.” The number of references to modal shift could not be clearer and this ties into policies in the Wales Transport Strategy and Net Zero Wales.
- 5.3.13 The key points from the overall summary of the Welsh Government Response have been set out as follows:
- ‘We will still invest in roads: we will still need to provide connections to support sustainable social and economic development, but this must be consistent with Welsh Government policy to prioritise public transport and active travel as well as support decarbonisation, modal shift and improve safety, recognising that needs vary across different parts of Wales.*
- Reducing and re-prioritising our investment on new road schemes and increasing our investment in sustainable modes will assist modal shift, but it will also deliver wider benefits. These include less air pollution, more successful town and neighbourhood centres and a transport system that is accessible and fair for all. We recognise that this is a big and difficult change, that it won't happen overnight, and it requires us to work collaboratively, across government and beyond.’*
- 5.3.14 As such, the delivery of the Spine Street as “an alternative diversionary route for journeys” or “to provide a route for urban traffic away from Glanffrwd Road” is considered to offer improvements for vehicular access, which effectively acts as a bypass for existing journeys. This is contrary to the position of the Welsh Government and would not lead to a modal shift to more sustainable modes.
- 5.3.15 As shown in the survey information in Section 2, the ATCs show that there is already HGV movements using Woodville Street, High Street and Tyn y Bonau Road, so these are suitable for accommodating these movements without evidence of a safety issue. However, the number of movements are relatively low, with a weekday average of 20-28 HGVs on each route over a daily period. Assuming these occur over 12 hours, this equates to an average of c. 2-3 movements per hour. It is not considered that there should be a requirement for a wide spine road to accommodate this level of HGV movements, particularly given the evidence does not suggest that these movements result in an existing road safety issue.
- 5.3.16 The provision of a Spine Street through the centre of the site would cause a viability issue for the delivery of this brownfield site and would lead to a poor quality, vehicle dominated environment, with a wide highway through its centre, leading to faster speeds or unnecessary traffic calming. This is contrary to the latest position from the Welsh Government. As such, it is considered that the delivery of the numerous active travel improvements as a result of the scheme, as well as the highly sustainable location of the site itself would be in accordance with the latest Welsh Government policies, be of the most benefit to existing residents, and the delivery of a Spine Street should no longer be a requirement for this site.
- 5.3.17 However, regardless of this, the site design as shown has allowed for two options for the delivery of a Spine Street within a part of the site, as well as utilising the existing highway. This utilises High Street and Woodville Street along the site boundary, as these have c. 7m wide carriageways. A verge is provided adjacent to the carriageway within the site, followed by the shared footway / cycleway. As such, the principles of a Spine Street would be in place along these two routes. At the Woodville Street site access, this is provided with 10m radii, and a 6.1m wide access road width. This 6.1m wide access road is continued within the site and then can connect to the northern boundary adjacent to the industrial site. Widening has been shown at the bend to enable two-way HGV movements to pass without conflict. As such, this delivers a Spine Street within the site, connecting to the third party land directly to the north.

- 5.3.18 As an alternative option, the Spine Street can continue north on Woodville Street beyond the site, as this is an existing HGV route connecting to the industrial site to the north. HGVs can also turn around the bend to connect to Tyn y Bonau Road. This route is also identified as the preferred route to and from the Persimmon site and as such is considered suitable by Persimmon to accommodate traffic to and from the other part of the allocation.
- 5.3.19 On this basis, the proposed section of Spine Street within the site, in addition to High Street and Woodville Street are considered to deliver on the policy requirements of the site allocation within the LDP. The site cannot deliver the Spine Street on third party land beyond this point, as they can only deliver this within the boundary of the application site which is in their control. However, this proposed route provides options for Swansea Council to deliver the link connecting to the Persimmon site. The Spine Street is not needed to deliver the application site, as this has a direct access onto High Street (then Station Road) and mitigation is not therefore required to accommodate these vehicle movements on the narrower Tyn y Bonau Road or northern end of Woodville Street.

5.4 Parking

- 5.4.1 As this is an outline application and the masterplan is illustrative, all details of parking can be agreed as part of a reserved matters application. However this section sets out the standards which would be applicable to the scheme.

Car Parking Standards

- 5.4.2 The Swansea Parking Standards SPG sets out the guidance on car parking provision for new developments. According to the descriptions within The City and County of Swansea Parking Standards SPG, the site would lie in Parking Zone 4 – Suburban or Near Urban as the local centre is within 400m walking distance, as well as other basic amenities including a doctor’s surgery. The car parking standards for residential parking in Zones 2 to 6 is one space per bedroom (maximum three spaces per unit) with one space per five units for visitors. This is the same for apartments and houses.
- 5.4.3 The SPG allows for reductions to be applied to the maximum standards based on both the sustainable location of the site and potential car ownership levels. Within paragraph 6.1 it states, *“flexibility in the standards allows local circumstances to be taken into account.”*

Car Parking Reduction

- 5.4.4 To consider a reduction in parking, there is a sustainability calculation criteria set out in Appendix 5 of the SPG. The sustainability calculation criteria 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”*. This allows a reduction in the number of spaces per dwelling for residential uses dependent on the sustainability score achieved.
- 5.4.5 A sustainability points calculation has been undertaken with the resultant calculations and sustainability points score for the site summarised in Table 5-1.

Table 5-1: 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	Tal-Y-Bont Surgery (300m), Station Road Pharmacy (330m), Lloyds Pharmacy (400m), the Store (400m)	4
	800m	1	Pontarddulais Library (410m), Family Shopper (460m), Post office (470m), Medihub Pharmacy (630m), Tesco Bank ATM (680m) Tesco superstore (700m), Nursery (700m)	
Public Transport				
Access to bus stop or railway station	300m	3		
	400m	2	Pontarddulais Rail Station (400m), Water Street Bus Station 400m	2
	800m	1		
Cycle Route				
Access to a cycle route	200m		Shared Route on Tidal Reach - 380m (there will also be an active travel route delivered along the western boundary of the site, but for robustness this has not been included)	0
Frequency of Public Transport				
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	The combined bus service numbers 16/L3/X13 run every 15 to 20 minutes from 06:21am to 10:20pm from the closest bus stops. Also rail services run c. one per hour.	2
	30 minutes	1		
Total				8

- 5.4.6 As shown in Table 5-1 the site location scores 8 sustainability points which equates to an allowable reduction of up to 1 space per unit for residential use.
- 5.4.7 As such, this reduction in parking can be applied to the proposed development, although it is also recognised that the standards state that this should not result in less than one space remaining for residential use. It is assumed that this means one space per unit, and as such this will be the minimum level of parking provided for all residential units.
- 5.4.8 In relation to visitors spaces, it is considered that the provision of a high number of visitor spaces across the site would not encourage and promote sustainable travel and would not provide the most efficient use of space for amenity purposes. Visitors will be able to park on-street in some locations across the site and would also be able to park within the residents spaces on-site, where these are not being used. Given the sustainable location of the site, it is also well connected for visitors to travel by walking, cycling and public transport (particularly with active travel improvements delivered by the scheme). As such, a reduction in visitor parking is considered appropriate to apply to this site, where required. On this basis, it is considered that one formal dedicated visitor space per 10 residential dwellings would be appropriate.
- 5.4.9 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.”

5.4.10 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.”*

5.4.11 As such, the Swansea standards would be applied to proposals, although a reduction from the maximum levels should be appropriate on this site and would be in line with policies to reduce car use in Future Wales and PPW11.

Cycle Parking

5.4.12 The Swansea Parking Standards SPG sets out the cycle parking standards in Appendix 3. For any residential apartments, there is a requirement for 1 stand per 5 bedrooms. These would be provided in secure and covered cycle parking shelters.

5.4.13 All houses will be provided with secure cycle parking within the curtilage of each individual dwelling, in line with the Swansea Council guidance.

5.4.14 As such the proposals can provide an appropriate level of cycle parking in accordance with the guidance and the full details of this will be agreed as part of a reserved matters application.

5.5 Servicing and Emergency Access

5.5.1 Servicing would mainly relate to refuse collection which would be undertaken internally within the site. Swept path analysis has been undertaken using a large refuse vehicle to show these vehicles turning in and out of each access. This is shown in Appendix E and demonstrates that both site accesses can accommodate a refuse vehicle appropriately. As the proposals are for an outline application, the full swept path analysis for the site layout will be undertaken as part of a reserved matters application.

5.5.2 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. The site will be designed to ensure it is in line with Building Regulations (and MfS) in this regard.

5.5.3 A fire tender will also be able to get within 45 metres of all properties and turn within the site, as needed. As such, the layout agreed as part of the reserved matters application will be appropriate for access by emergency vehicles.

5.6 Construction Vehicles

5.6.1 The details of the construction of the site are yet to be finalised. The impacts of construction would be short term and temporary in nature.

5.6.2 The applicant can produce a CTMP to be agreed prior to commencement of construction and would agree to this as a condition of any forthcoming planning application.

5.6.3 The purpose of a CTMP is to identify appropriate measures to reduce any interruption and ensure that the impacts of construction traffic in the vicinity of the site and on the surrounding highway network are kept to a minimum. This could include restrictions on vehicle sizes accessing the site, if required, to ensure vehicles can be accommodated on the highway appropriately. Vehicles will, as far as possible, be accommodated on the site and would not block the surrounding highway network.

5.6.4 The CTMP could include restrictions on the timings of construction vehicles, so that movements could be avoided/minimised during the start and end of the school day. It will also include measures to minimise the spread of dust and dirt on the network.

6. TRIP GENERATION AND TRAFFIC IMPACTS

6.1 Introduction

- 6.1.1 This section sets out the forecast trip generation associated with the proposals for up to 150 residential dwellings. For the purposes of this assessment and for robustness, it has been assumed c.10% of the dwellings would be affordable housing (15 dwellings) and the remainder would be for private housing (135 dwellings). These movements have been compared to the existing industrial use of the site to consider the net change in vehicle movements to and from the site during network peak hours (08:00 to 09:00 and 17:00 to 18:00, as set out in Section 3).
- 6.1.2 The vehicle trip generation has been undertaken using the Trip Rate Information Computer System (TRICS). The TRICS database predicts the likely numbers of arrivals and departures by utilising surveys of existing sites. The database has been analysed for sites with similar characteristics in terms of use, scale, location and accessibility. Trip rates have been obtained and applied to forecast trip generation during network peak hours and over a daily period.
- 6.1.3 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.
- 6.1.4 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.

6.2 Existing Vehicle Trip Generation

- 6.2.1 The site was most recently occupied by Tata Steel and consists of warehouse and production areas, as well as offices and internal storage and has a floorspace totalling 8,956 sqm. As such, to forecast the level of generation from this site and within the existing planning use class, the most appropriate category is considered to be the 02 - EMPLOYMENT C - INDUSTRIAL UNIT.
- 6.2.2 The following search criteria have been applied to this category in TRICS to obtain surveys of similar uses:
- Located in England and Wales (excluding London)
 - Vehicle surveys carried out since 2010
 - Surveys from Monday to Friday
 - Sites with a floorspace of between 2,500 and 12,500 sqm
 - Edge of Town Centre, Edge of Town and Suburban Area locations
 - Population of less than 250,000 within five miles
 - Removal of surveys undertaken during Covid restrictions
- 6.2.3 The above search criteria resulted in the identification of five similar sites. The estimated vehicle trip rates per 100sqm and trip generation for the existing site use are set out in Table 6-1. The full TRICS reports are provided in Appendix G.

Table 6-1: Existing Industrial Site Use: Vehicle Trip Rates and Generation

Time Period	Trip Rates (per sqm)			Trip Generation (8,956 sqm)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
08:00-09:00	0.361	0.067	0.428	32	6	38
17:00-18:00	0.058	0.290	0.348	5	26	31
12 Hour (07:00-19:00)	1.874	1.832	3.706	168	164	332

6.2.4 Based on the trip rates for the comparable sites, the existing industrial use is estimated to generate approximately 31 two-way vehicle movements in the AM network peak hour and 28 two-way vehicle movements in the PM network peak hour. Over a 12 hour period, the existing industrial use is estimated to generate 255 two-way movements.

6.2.5 It should be noted that the existing industrial use would also generate HGV movements. The TRICS analysis showed that across a daily period a total of 62 HGV movements could be generated by the existing site use. This is c. 19% of the total vehicle movements to and from the site. All these HGV movements would be generated directly onto the network at Station Road (or possibly via the other existing access points onto Woodville Street or High Street).

6.3 Proposed Vehicle Generation

Private dwellings

6.3.1 The TRICS category '03 - RESIDENTIAL/A – HOUSES PRIVATELY OWNED' has been selected to derive trip rates for the privately owned homes of proposed development. The following search criteria have therefore been applied in TRICS to obtain surveys of similar uses:

- Vehicle Surveys
- Located in England and Wales (excluding London)
- Sites between 50 and 250 dwellings
- Surveys from Monday to Friday
- Edge of Town Centre, Edge of Town and Suburban locations
- From 2010 onwards
- Population of up to 250,000 within 5 miles
- Removal of sites in areas of car ownership of less than 1 per household
- Manual removal of surveys undertaken during the Covid pandemic
- Removal of sites with non-comparable locations or public transport

6.3.2 The application of these parameters resulted in a total of 37 surveys of similar sites. A summary of the forecast vehicle trip rates and trip generation associated with the proposed development is shown in Table 6-2. The proposed 135 private dwellings have been considered. The full outputs of the TRICS analysis including the sites used can be found in Appendix H.

Table 6-2: Proposed Private Housing - Vehicle Trip Rates and Generation

Time Period	Trip Rates (per unit)			Trip Generation (135 units)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (08:00-09:00)	0.138	0.357	0.495	19	48	67
PM Peak (17:00-18:00)	0.336	0.163	0.499	45	22	67
12 Hours (07:00-19:00)	2.246	2.297	4.543	303	310	613

6.3.3 The proposed private dwellings are forecast to generate approximately 67 two-way vehicular movements during the AM and PM network peak hours. They are forecast to generate 613 two-way vehicular movements over a 12-hour period.

Affordable dwellings

6.3.4 The TRICS category for affordable dwellings has been used to obtain vehicle trip rates which would be comparable to the proposed 15 affordable units on the site. The following parameters have been applied to the search criteria to obtain surveys of sites which are as similar as possible to the site:

- Vehicle Surveys
- Located in England and Wales (excluding London)
- Sites up to 100 dwellings
- Surveys from Monday to Friday
- Edge of Town Centre, Edge of Town, Suburban and Neighbourhood Centre locations
- From 2010 onwards
- Population of up to 250,000 within 5 miles
- Manual removal of surveys undertaken during the Covid pandemic

6.3.5 The application of these parameters resulted in a total of 12 surveys of similar sites. A summary of the forecast vehicle trip rates and trip generation associated with the 15 affordable dwellings is shown in Table 6-3. The full outputs of the TRICS analysis including the sites used can be found in Appendix I.

Table 6-3: Proposed Affordable Housing - Vehicle Trip Rates and Generation

Time Period	Trip Rates (per unit)			Trip Generation (15 units)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
AM Peak (08:00-09:00)	0.153	0.276	0.429	2	4	6
PM Peak (17:00-18:00)	0.247	0.182	0.429	4	3	7
12 Hours (07:00-19:00)	2.080	2.109	4.189	31	32	63

6.3.6 The affordable dwellings are forecast to generate approximately 6 two-way vehicular movements during the AM peak hour and 7 two-way movements during the PM network peak hour. They are forecast to generate 63 two-way vehicular movements over a 12-hour period.

Total dwellings

6.3.7 Overall, the proposed development of up to 150 dwellings is forecast to generate the total level of vehicle movements as shown in Table 6-4 outlines the total trips generated from the overall site.

Table 6-4: Proposed Development – Total Vehicle Generation

Time Period	Private Dwellings (135 units)			Affordable Dwellings (15 units)			Total Movements (150 units)		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
AM Peak (08:00-09:00)	19	48	67	2	4	6	21	52	73
PM Peak (17:00-18:00)	45	22	67	4	3	7	49	25	74
12 Hours (07:00-19:00)	303	310	613	31	32	63	334	342	676

6.3.8 The proposed development is forecast to generate approximately 73 two-way vehicular movements during the AM peak hour and 74 two-way movements during the PM network peak hour. It is forecast to generate 676 two-way vehicular movements over a 12-hour period.

6.3.9 The proposed scheme is therefore forecast to generate approximately one vehicle movement every c.50 seconds, on average, on the network during the busiest hours.

6.4 Net Change and Impacts

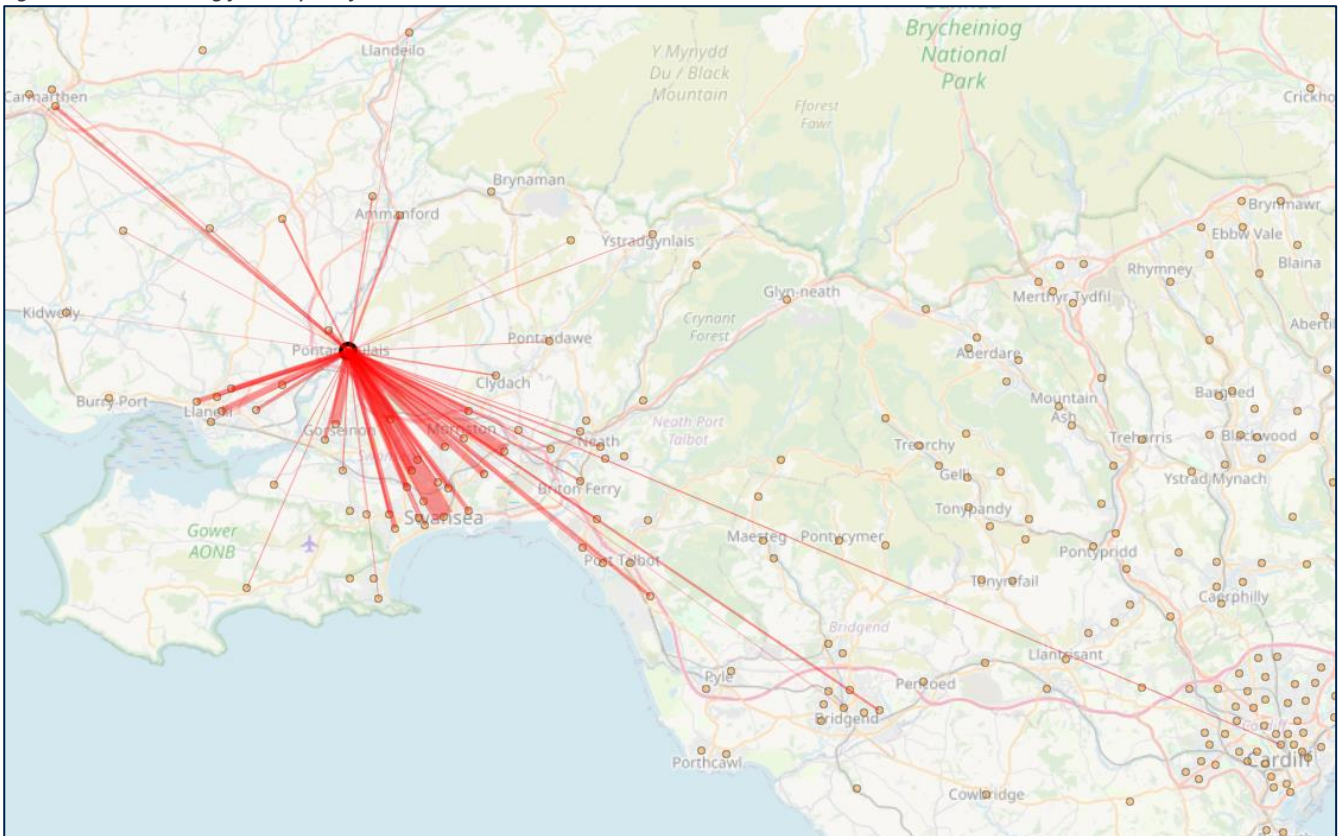
6.4.1 Based on the trip generation analysis, the forecast net change in vehicle generation resulting from the proposed redevelopment of the existing industrial site use for a residential use is set out in Table 6-5.

Table 6-5: Net Change in Vehicle Generation

Time Period	Existing Industrial Use			Proposed Residential Use			Net Change		
	In	Out	Two-way	In	Out	Two-way	In	Out	Two-way
AM Peak (08:00-09:00)	32	6	38	21	52	73	-11	46	35
PM Peak (17:00-18:00)	5	26	31	49	25	74	44	-1	43
12 Hour (07:00-19:00)	168	164	332	334	342	676	166	178	344

- 6.4.2 The TRICS analysis shows that the proposals are forecast to generate a slight increase of 35 to 43 vehicle movements in the network AM and PM peak hours. This equates to an increase of up to approximately one vehicle every c.1 minute 25 seconds on the highway network, on average, during peak hours.
- 6.4.3 As such, the forecast level of movements on the network is considered unlikely to have an unacceptable impact on road safety or a material impact on highway capacity.
- 6.4.4 However, the distribution and assignment of vehicles, as well as the likely impacts will be considered over the following sections.
- 6.4.5 The proposals would also significantly reduce the level of HGV movements that could be generated by the existing industrial use onto the surrounding network. The proposed residential use would generate a minimal level of HGV movements, whereas the existing site use was forecast to generate 62 movements per day. This is a significant benefit of the redevelopment of this brownfield site for residential use.
- 6.5 Trip Distribution and Assignment**
- 6.5.1 Trip distribution and assignment analysis has been undertaken to demonstrate the number of vehicle movements on the network at the key local junctions.
- 6.5.2 To consider the vehicle distribution, the 2011 Census origin-destination data has been analysed for all journeys to work from Middle Layer Super Output Area (MSOA) Swansea 001 (in which the site is situated). The directions of travel for commuting journeys by car are shown in Figure 6-1 obtained from the Datashine website. The thickness of the line indicates the number of people travelling to the MSOA in which they work from Swansea 001. This shows that there are car journeys in all directions from the site as such, vehicles are likely to disperse across the network, minimising the impacts of the development generated traffic.

Figure 6-1: Commuting flows by car from Swansea 001



Source: <https://commute.datashine.org.uk>

6.5.3 The Datashine website provides a table of the number of journeys from Swansea 001 into other MSOA's using the 2011 Census data. This has been utilised to determine the percentage of journeys on each route from the site. The journey to work data is not currently available from the 2021 data, but the 2011 information is considered appropriate to use in this regard. Journeys have been distributed based on the most likely routes from the site to their employment MSOA's. The route choices and calculation of the distribution on the local highway network is shown in Appendix J.

6.5.4 A summary of the overall distribution from the site access is set out as follows:

- A4138 (towards M4 Junction 48) – 53.8%
- A48 North (towards M4 Junction 49) – 8.3%
- A48 South (towards M4 Junction 47) – 28.2%
- Internal within Swansea 001 (assumed as split across Town Centre, areas around Tesco supermarket, and industrial areas to the north and north east) – 9.8%

6.5.5 These have been shown as percentage turning movements on the network, with the percentages by movement at key junctions shown within the traffic flow diagrams in Appendix B.

6.5.6 The majority of movements will travel west from the site access through the Station Road / Water Street signal controlled junction, although a high proportion of movements (particularly leaving the site) will travel east and via Tyn y Bonau Road and Dulais Road to access the A48 southeast.

6.5.7 The resultant assigned traffic associated with the proposed development has been provided in the traffic flow diagrams in Appendix B. For robustness, the movements generated by the existing site use have not been deducted from the proposed development flows.

6.6 Traffic Impacts

- 6.6.1 Based on the assignment of vehicles on the network, it is forecast that the development would send a maximum of 65 vehicles through the Station Road / Water Street / Tidal Reach junction in any peak hour. This is approximately one vehicle movement per minute, across all arms of the junction. This does not consider the offsetting of the movements which could be generated by the existing site use. Assuming the same distribution on the network, the existing site use could generate a maximum of 35 movements through the junction. As such, the proposals are forecast to increase movements through this junction in comparison to the existing use by approximately 30 vehicles, in the peak hour.
- 6.6.2 The entire junction accommodates a total of 1,191 vehicle movements in the 2023 AM Base peak hour and 1,494 vehicle movements in the 2023 Base PM peak hour. An increase of 30 movements through the junction would equate to between a 2.0% and 2.5% percent increase in all movements during the network peak hours. This would not have a material impact on the operational capacity of the network and is well within the 5% threshold levels stated within TAN18.
- 6.6.3 Beyond this junction, the increases would be lower as vehicles dissipate across the network, so there would be significantly less than a 30 vehicle increase at all other junctions. As such, it is not considered that the development would have a material impact on the operation of the wider network.
- 6.6.4 However, for robustness, an assessment of the Station Road / Water Street / Tidal Reach signal controlled junction has been undertaken.
- 6.6.5 No further junction assessments on the wider network are considered to be required.

7. FUTURE YEAR TRAFFIC FLOWS

7.1 Overview

7.1.1 This section outlines the future year traffic flows against which the impact of the development has been considered. This includes consideration of committed developments and TEMPRO growth factors.

7.2 Committed Development

7.2.1 A review of planning applications in the surrounding area has not identified any specific developments which should be considered within the assessment, which currently have planning permission but have not yet been built out.

7.3 Future Year Baseline Traffic Flows

7.3.1 In addition to a base year assessment, a future year of 2028 has been assessed. The assessment of 2032 is five years after the date of the registration of the planning application.

7.3.2 To take account of background traffic growth on the local highway network within the vicinity of the site between 2023 and 2028, growth factors have been applied to the obtained 2023 base flow data. These growth factors have been calculated using the TEMPRO v8.1 computer programme which considers growth in population, employment, and car ownership based on information derived from the National Trip Ends Model (NTEM).

7.3.3 The growth has been considered using the 'Core Scenario'. The Core Scenario provides a consistent, common comparator scenario for decision-making, to assess all projects and options against. A description of the Core Scenario is set out in the DfT - Transport Analysis Guidance (TAG) Unit M4, Forecasting and Uncertainty (paragraph 3.1.3):

"The core scenario represents a world in which future deviation from historic trends in the key drivers of demand and current government policies is minimal; not a world that is necessarily desirable. It does not represent a statistical 'expected value', but one possible outcome amongst many."

7.3.4 As such, the Core Scenario may not be a desirable outcome nor an expected one, but is based on historical trends in behaviour. An alternative assumption with modal shift and technological advances may see significantly lower growth rates, and that would be equally valid, but the Core Scenario is considered to be the most robust position for this assessment.

7.3.5 Growth rates within Swansea 001 have been considered based on all road types using the Core Scenario. The growth rates used in the AM and PM peak hours are summarised as follows:

- 2023-2028 – AM Peak: 1.046
- 2023-2028 – PM Peak: 1.045

7.3.6 TEMPRO guidance specifies that the growth factors for individual areas are derived from forecasts at a local authority level which are informed by allocated housing and employment sites within the associated local development plans. As the site is allocated for residential use itself, there would be an element of double counting in the factored background traffic flows through the application of growth rates in addition to the distribution of development traffic.

7.3.7 For robustness, the growth rates have not been adjusted for the households created by the proposed development.

7.3.8 In addition, the long term effects of the pandemic on travel behaviour, particularly for commuting are not yet known. There is likely to be an increase in homeworking and reduction in peak hour vehicle movements into the future, particularly with technological and infrastructure improvements and efficiencies. A significant increase in homeworking would also be in accordance with the aspirations of Welsh Government.

7.3.9 As such, the application of unfettered growth rates based on traffic projections (particularly those in the Core Scenario), is considered a robust method of obtaining future year traffic flows and no further committed development traffic has been applied.

7.4 Sensitivity Analysis

7.4.1 For robustness, the traffic flows associated with the other parcel forming the overall site allocation have been considered within a sensitivity analysis. The Corun TA accompanying the PAC submission shows the distribution of the forecast vehicle movements on the network in Appendix F of that report. These flows have been reproduced in the AM and PM peak hours and set out in the Traffic Flow Diagrams in Appendix B. It is noted that the inclusion of these flows within an assessment represents an extremely robust analysis as the entire allocation would be included within the growth rates.

7.5 Future Year Traffic Flows and Assessment Scenarios

7.5.1 The 2023 base traffic flows have been factored by the calculated growth rates. The resultant future year base, future year base plus development and future year base plus development traffic flow diagrams in the AM and PM peak hours are set out within the traffic flow diagrams in Appendix B. These are summarised as follows:

- 2028 Future Base – AM Peak (0800-0900)
- 2028 Future Base – PM Peak (1700-1800)
- 2028 Future Base plus development – AM Peak (0800-0900)
- 2028 Future Base plus development – PM Peak (1700-1800)
- 2028 Future Base plus development, sensitivity (wider allocation site) – AM Peak (0800-0900)
- 2028 Future Base plus development, sensitivity (wider allocation site) – PM Peak (1700-1800)

8. OPERATIONAL ASSESSMENTS

8.1 Overview

8.1.1 This section sets out the extent of the highway network over which the impact of the proposed development has been assessed, the assessment scenarios and details of the operational assessments of key junctions.

8.2 Extent of Assessment

8.2.1 The study area considers the impact of the development at the Station Road / Water Street / Tidal Reach junction.

8.3 Assessment Scenarios

8.3.1 Assessments have been undertaken during the network AM (0800 - 0900) and PM (1700 - 1800) peak hours. The scenarios which have been assessed within this TA are summarised as follows:

- 2023 Base – AM Peak (0800-0900)
- 2023 Base – PM Peak (1700-1800)
- 2028 Future Base – AM Peak (0800-0900)
- 2028 Future Base – PM Peak (1700-1800)
- 2028 Future Base plus development – AM Peak (0800-0900)
- 2028 Future Base plus development – PM Peak (1700-1800)
- 2028 Future Base plus development, sensitivity (wider allocation site) – AM Peak (0800-0900)
- 2028 Future Base plus development, sensitivity (wider allocation site) – PM Peak (1700-1800)

8.4 Model Inputs

8.4.1 The operational assessment of the Station Road / Water Street / Tidal Reach junction has been undertaken using the JCT software LinSig V3.

8.4.2 Modelling for the signal controlled junction has been undertaken using passenger car units (PCUs) with a value of two PCU's being applied to all bus and HGV movements. All other movements, including motorcycles and cycles have been assumed as one PCU.

8.4.3 The saturation flows, cycle time, minimum green times, phasing, staging, intergreens and right turn give-way data have been based on the model provided by Swansea Council to Persimmon for use in the TA produced by Corun. Further comments were also provided in relation to the methodology by Swansea Council, as set out in paragraph 8.4.5 of the Corun TA. All parameters included in the model are provided in the detailed outputs in Appendix H of the Corun TA and all data has been sense checked against geometric parameters to ensure this is appropriate.

8.4.4 Based on a review of the Corun TA model, a minor amendment has been made to the give-way parameters to ensure that the two right turns from Water Street, are not opposed, but are opposed to the through vehicle movements and left turns. It is noted that the saturation flow on the Water Street east arm has been manually reduced from the geometric parameter RR67 calculation of 1,882 passenger car units (PCU) per hour to 1,500 PCU/hour. This was based on discussions between Corun and Swansea Council, although the reasons for this reduction are unclear and this has a significant impact on the capacity on this arm (in the model). However, this has been included for robustness.

8.4.5 The cycle time is 240 seconds, as the pedestrian and garage stages at the junction do not run every cycle, so the traffic stages have been double cycled and the pedestrian and garage stages run once in

every 240 second cycle. The first sequence include the garage stage, and the second sequence includes an all pedestrian stage.

8.4.6 The Water Street west arm has an Excess Queue Limit of 18 PCUs (to reflect the total queue storage in both lanes) and a Degree of Saturation Weighting of 100% applied to try and prevent (as far as possible) queues forming on this arm, which would block back to the mini roundabout junction to the west.

8.4.7 A comparison of the 2023 base modelled queue lengths against the surveyed queue lengths has also been made to assist with model validation and to consider whether the model represents observed conditions. It is noted that the queue lengths in both the model and from the surveys represent average conditions on one day and that there are typical daily fluctuations in queues and flows, however, it is considered that this is an appropriate method to enable the impact of the development to be considered at the junction. This also verifies that the model, as provided by Swansea Council is appropriate and robust.

8.5 Model Reporting Outputs

8.5.1 LinSig provides a number of measures of junction capacity and operation, being traffic intensity (Degree of Saturation – DoS and Practical Reserve Capacity – PRC) as well as queue lengths and delays.

8.5.2 Within LinSig the PRC (practical reserve capacity) provides a measure of overall capacity, and this is reported for the junction as a whole as a positive or negative value. A Degree of Saturation (DoS) is reported for each junction arm, with a value of less than 90% generally considered acceptable. A value of 100% indicates that traffic demand is equal to capacity.

8.5.3 Queue lengths provide an indication of how the overall junction performance may affect adjacent junctions on the highway network. The queue lengths are presented as Mean Maximum Queues (MMQ) over an hourly period. These can be compared with the obtained queue length data to verify that the model is broadly similar to the observed operation of the junction. Changes in queue lengths provide a useful indicator as to a development’s impact on the operation of a junction, and whether this will impact upstream junctions.

8.5.4 The total delay in PCU/hour is provided within the LinSig outputs. This provides another useful indicator as to the impact of development generated traffic on the operation of junctions through the change in delay for individual vehicles and the network as a whole.

8.5.5 When considering the change in the operation of the junction all of these factors will be considered to form a view as to whether the impact of development generated traffic or the amendment to the site access arm would result in a severe impact on the network.

8.5.6 The full LinSig outputs for all scenarios are included in Appendix K.

8.6 Operational Assessment Results Summary - Station Road / Water Street / Tidal Reach

2023 Base Scenario

8.6.1 The results of the 2023 base assessment are summarised in Table 8-1.

Table 8-1: 2023 Base LinSig summary – Station Road / Water Street / Tidal Reach

Arm / Lane	AM Peak (0800 - 0900)			PM Peak (1700 - 1800)		
	Queue (PCU)	Total Delay (PCU / Hr)	DoS	Queue (PCU)	Total Delay (PCU / Hr)	DoS
1/1 - Station Road: Left Ahead Right	4.2	2.7	74.7%	6.2	4.1	85.2%

Arm / Lane	AM Peak (0800 - 0900)			PM Peak (1700 - 1800)		
	Queue (PCU)	Total Delay (PCU / Hr)	DoS	Queue (PCU)	Total Delay (PCU / Hr)	DoS
2/1 - Water Street (east): Left Ahead Right	17.8	6.2	80.0%	18.7	7.9	87.3%
3/2 + 3/1 - Tidal Reach: Right Left Ahead	3.1	2.8 (1.4+1.5)	61.2 : 61.2%	8.5	6.8 (3.9+2.9)	85.4 : 85.4%
4/1 + 4/2 - Water Street (west): Ahead Right Left	8.9	3.5 (2.3+1.2)	57.0 : 57.0%	16.1	7.5 (5.0+2.5)	84.5 : 84.5%
Overall PRC	12.5%			3.1%		
Total Delay	15.28 PCU / Hr			26.24 PCU / Hr		
Cycle Time	240 seconds (double cycled)			240 seconds (double cycled)		

8.6.2 Table 8-1 demonstrates that the Station Road / Water Street / Tidal Reach junction within its maximum theoretical capacity (DoS of 100%) with a maximum DoS of 87.3% reported in the PM peak on the Station Road arm. The queue lengths do not extend back to upstream junctions, as the queue on Water Street (west) would be accommodated across two lanes, with a storage of approximately 19 vehicles in total.

8.6.3 The base model has been reviewed to ensure, as far as possible, that it reasonably represents the observed operation of the junction. This process has been informed by queue length surveys, although it is recognised these are a snapshot of one specific day. Table 8-2 provides a comparison between the modelled queue length outputs shown in Table 8-1 and the queue survey data.

Table 8-2: Maximum average queue length comparison – Station Road / Water Street / Tidal Reach

Arm	AM Peak (0700 - 0800)			PM Peak (1630 - 1730)		
	Observed (vehicles)	Model (vehicles)	+ / -	Observed (vehicles)	Model (vehicles)	+ / -
Station Road	3.8	4.2	+0.4	5.4	6.2	+0.8
Water Street East *	9+	17.8	0	9+	18.7	0
Tidal Reach	7.0	3.1	-3.9	13.7	8.5	-5.2
Water Street West	8.6	8.9	-0.3	14.3	16.1	+2.8

* The queue on Water Street East extended back beyond the camera, but was at more than 9 vehicles throughout the survey period

8.6.4 It is considered that the queue length analysis demonstrates that the modelled and observed queues are within typical daily variations and broadly comparable. Therefore given all the parameters used in the model are robust and given the parameters and model was provided by Swansea Council, this further verifies that the base model appropriately reflects the existing operation of the junction and is therefore valid and acceptable to assess future year conditions.

2028 Future Year Base

8.6.5 The results of the 2028 future year base assessment are summarised in Table 8-3.

Table 8-3: 2028 Future Base LinSig summary – Station Road / Water Street / Tidal Reach

Arm / Lane	AM Peak (0800 - 0900)			PM Peak (1700 - 1800)		
	Queue (PCU)	Total Delay (PCU / Hr)	DoS	Queue (PCU)	Total Delay (PCU / Hr)	DoS
1/1 - Station Road: Left Ahead Right	4.6	3.0	78.0%	7.0	4.7	88.9%
2/1 - Water Street (east): Left Ahead Right	19.6	7.1	83.8%	19.9	9.0	90.2%
3/2 + 3/1 - Tidal Reach: Right Left Ahead	3.2	3.0 (1.5+1.6)	63.8 : 63.8%	10.4	8.4 (4.8+3.6)	91.1 : 91.1%
4/1 + 4/2 - Water Street (west): Ahead Right Left	9.6	3.7 (2.5+1.2)	59.4 : 59.4%	17.0	8.8 (5.9+2.9)	88.6 : 88.6%
Overall PRC	7.4%			-1.2%		

Arm / Lane	AM Peak (0800 - 0900)			PM Peak (1700 - 1800)		
	Queue (PCU)	Total Delay (PCU / Hr)	DoS	Queue (PCU)	Total Delay (PCU / Hr)	DoS
Total Delay	16.83 PCU / Hr			30.96 PCU / Hr		
Cycle Time	240 seconds (double cycled)			240 seconds (double cycled)		

8.6.6 Table 8-3 demonstrates that the junction operates at a DoS exceeding 90% in the PM peak on the Water Street east and Tidal Reach. The queue lengths remain within the available capacity on the Water Street west arm without blocking back to the upstream roundabout.

2028 Future Year Base + Development

8.6.7 The results of the 2028 future year base plus development assessment are in Table 8-4.

Table 8-4: 2028 Future Base + Development LinSig summary – Station Road / Water Street / Tidal Reach

Arm / Lane	AM Peak (0800 - 0900)			PM Peak (1700 - 1800)		
	Queue (PCU)	Total Delay (PCU / Hr)	DoS	Queue (PCU)	Total Delay (PCU / Hr)	DoS
1/1 - Station Road: Left Ahead Right	6.8	4.3	85.3%	8.2	5.6	91.5%
2/1 - Water Street (east): Left Ahead Right	20.8	8.4	88.2%	22.7	11.3	94.2%
3/2 + 3/1 - Tidal Reach: Right Left Ahead	3.3	3.0 (1.5+1.6)	63.8 : 63.8%	11.9	9.7 (5.5+4.2)	94.2 : 94.2%
4/1 + 4/2 - Water Street (west): Ahead Right Left	10.0	3.9 (2.7+1.2)	57.8 : 59.4%	18.6	9.1 (6.3+2.9)	88.6 : 88.6%
Overall PRC	2.0%			-4.7%		
Total Delay	19.65 PCU / Hr			35.67 PCU / Hr		
Cycle Time	240 seconds (double cycled)			240 seconds (double cycled)		

8.6.8 Table 8-4 demonstrates that with the addition of all development traffic, the junction would remain operating below a DoS of 100% on all arms, with a minimal change in operation at the junction. This is a robust assessment as there is no consideration of the net reduction or offsetting of the existing site use movements. The proposals have been considered as entirely net new movements on the network, but the site has an existing use which could generate movements on the network without the requirement for planning permission. In addition, the application of growth factors, together with the site traffic itself has an element of double counting, given the site is allocated and would be included in the calculation of the growth factors.

8.6.9 As such, it is not considered that the proposed redevelopment of the site would have a material impact on the operation of this junction and no improvements are considered to be required.

2028 Future Year Base + Development – Sensitivity

8.6.10 The results of the 2028 future year base plus development sensitivity assessment are summarised in Table 8-5. The sensitivity development scenario includes the flows from the other parcel forming the overall SD A allocation, which is being brought forwards by Persimmon Homes. As such these flows are not ‘committed’ in that they do not have planning permission, but for robustness in a sensitivity analysis, these have been considered together with the proposals.

Table 8-5: 2028 Future Base + Development – Sensitivity LinSig summary – Station Road / Water Street / Tidal Reach

Arm / Lane	AM Peak (0800 - 0900)			PM Peak (1700 - 1800)		
	Queue (PCU)	Total Delay (PCU / Hr)	DoS	Queue (PCU)	Total Delay (PCU / Hr)	DoS
1/1 - Station Road: Left Ahead Right	13.2	9.0	97.2%	21.4	16.8	106.4%
2/1 - Water Street (east): Left Ahead Right	32.8	18.8	100.3%	45.9	33.7	106.9%
3/2 + 3/1 - Tidal Reach: Right Left Ahead	3.4	3.1 (1.5+1.6)	63.8 : 63.8%	21.5	19.1 (11.0+8.0)	104.2 : 104.2%
4/1 + 4/2 - Water Street (west): Ahead Right Left	11.5	4.3 (3.1+1.2)	54.0 : 59.4%	21.1	9.0 (6.2+2.8)	82.7 : 88.6%
Overall PRC	-11.5%			-18.7%		
Total Delay	35.08 PCU / Hr			78.52 PCU / Hr		
Cycle Time	240 seconds (double cycled)			240 seconds (double cycled)		

- 8.6.11 Table 8-5 demonstrates that with the addition of the additional traffic generated by the entire allocation, the junction would operate over capacity, particularly in the PM peak. As shown in Table 8-4 the proposals alone would not cause the junction to operate over capacity.
- 8.6.12 The Persimmon application has suggested the implementation of MOVA control at this junction to improve the efficiency of the operation. Given the site forms a part of the overall allocation, the applicant is willing to provide a proportionate contribution towards the implementation of this. This would provide a suitable mitigation to accommodate both sites and should enable the junction to operate within a 100% DoS, given the efficiency benefits that MOVA provides.
- 8.6.13 In addition, the unfettered growth assumes that all movements generated currently would remain travelling with the same behaviour. If this junction is operating over capacity, people would choose to travel by alternative modes, via different routes or travel at different times. As such, the level of operation as shown in Table 8-5 is unlikely to occur. On this basis, the capacity constraint at the junction can assist with encouraging users to travel by more sustainable modes which is in line with the aspirations of Welsh Government as set out in the response to the Roads Review. Physical works to provide further capacity, for example through amended geometry and increased queue storage or additional flare lanes are therefore not considered to be required or desirable and would not encourage a modal shift. A contribution towards MOVA control at this junction is therefore considered to provide suitable highway capacity mitigation for the proposals.

9. TRANSPORT IMPLEMENTATION STRATEGY

9.1 Overview

9.1.1 The objective of the Transport Implementation Strategy (TIS) is to promote sustainable modes including walking, cycling and public transport and set out mitigation required to accommodate the development on the highway network. This has been considered against the transport hierarchy and sustainable transport policies in PPW11 to reflect the WG commitment to reduce reliance on the private car.

9.2 Active Travel

Walking

9.2.1 Walking has the potential of providing an alternative mode of transport to undertake shorter journeys typically under 2km in distance, although the Active Travel Act suggests journeys of up to 3.2km are acceptable.

9.2.2 The benefits of walking include that it is free, convenient, good for health and environmentally friendly.

9.2.3 The proposed development will facilitate journeys on foot through the extensive network of footways / footpaths (and shared footway / cycleways) running within the site which connect to the existing active travel network, including the footways on Woodville Street, High Street and Station Road, as well as connecting to the public footpath linking Woodville Street and Tyn y Bonau Road. Dropped kerb crossings will be provided across High Street and Woodville Street to connect the proposed routes within the site to the existing infrastructure. The location and form of these crossings can be agreed with Swansea Council as part of the detailed S278 technical approval, but the indicative locations which capture movements on desire lines are shown in the drawing in Appendix L.

9.2.4 Three of the six crossings have been shown in more detail, with the crossing at the southwestern end of the site at the corner of Station Road and High Street positioned to ensure that at least 35m visibility can be achieved in each direction. This is well above the speed limit of 20mph, which would equate to 43m. However, as part of the detailed design of the site layout during a reserved matters application, as well as any S278 technical approval, the final locations of crossings can be agreed with Swansea Council to ensure these provide a fully connected and permeable site.

9.2.5 In addition, the proposals will provide a section of the Swansea Council proposed active travel route within the site (SWA6) enabling the delivery of this key infrastructure. This will link Station Road to the site boundary and Woodville Street, and this route can be continued to the north of the site by Swansea Council, as needed on land outside the control of the applicant.

9.2.6 In addition, the proposals can provide a contribution (at a level to be agreed) towards the continuation of the SWA6 active travel route along Station Road connecting to Water Street. This will further enhance the sustainable connections from the site, as well as for existing residents in the surrounding area.

9.2.7 Footways and shared surface areas will also be provided within the site to encourage walking. This reflects the user hierarchy as set out in PPW11 and Manual for Streets guidance.

Cycling

- 9.2.8 Secure and covered cycle parking will be provided on the site in accordance with the Swansea Council guidance. This will be set out and shown within the reserved matters application.
- 9.2.9 Cycling has the potential of providing an alternative mode of transport to undertaken journeys up to a distance of approximately 8km. The site benefits from being situated within close proximity to cycle routes which can be accessed via quiet on-street routes.
- 9.2.10 A number of cycle routes will be provided within the site which will provide east to west and north to south routes. These will connect to Woodville Street and High Street / Station Road and facilitate the delivery of the Swansea Council identified SWA6 active travel route. Part of this route will be delivered within the site and the development can provide a proportional contribution towards the delivery of the route along Station Road connecting to Water Street. This will in turn connect to the existing route along Tidal Reach, as well as provide a suitable active travel route connecting to the Rail Station, including for existing residents, who can utilise the routes through the site.
- 9.2.11 The site is therefore highly permeable by sustainable modes of travel and encourages walking and cycling movements appropriately, as well as providing improved opportunities for existing residents to travel by sustainable modes.
- 9.2.12 A Travel Plan has also been produced which provides measures to encourage cycling, such as information on cycling routes and cycling clubs.

Consideration of PPW11

- 9.2.13 The development is in a location which is not car dependent as it is possible to walk or cycle to a significant number of facilities and services via suitable routes within appropriate distances in accordance with the transport hierarchy in PPW11.

9.3 Public Transport

- 9.3.1 Public transport provides an opportunity to replace car trips with it being possible to access existing bus stops and routes. The development is accessed by footways and public footpaths and will be linked to footways which connect to the Pontarddulais Bus and Rail Stations, both within a 400m walking distance of the site, at the Pontarddulais Bus Station.
- 9.3.2 The stops are served by three routes with a good frequency of service (combined average frequency of 15 minutes during network peak hours), with two services to Swansea and one to Llanelli. Pontarddulais Rail Station is also within 400m walking distance and provides services linking to Swansea and Llanelli. Potential future residents of the site could therefore use bus or rail services as an attractive alternative to travelling by car.
- 9.3.3 Walking distances to stops are also only on part of the overall journey by public transport and therefore only one aspect to encourage travel via bus and rail. CIHT guidance "*Planning for public transport in developments*" suggests that as important as the walking distance to a stop are information on services available (for example real time information and timetable information), waiting time at stops (which can be influenced by the provision of real time information or phone apps linked to GPS bus data), the directness and quality of the walking route to stops and the directness and journey time of the bus journey itself.

- 9.3.4 The routes from the site are convenient, direct, of good quality and flat and the good frequency of services will reduce waiting times for buses and trains. As such, the good quality walking routes to the bus and rail stations will encourage residents to use the services.
- 9.3.5 The Travel Plan ensures that the services are fully promoted to residents. Any websites or mobile applications at the time of occupation which provide real time information will be promoted. This will ensure that the wait time at the stops will be minimised as residents can leave the site at the correct time to meet their preferred service, which reduces dwell time at stops. This will reduce the overall travel time from the origin to the end destination. Real time information is also provided at the bus stops.
- 9.3.6 The closest stops are served by buses providing an average frequency of one service every 15 minutes during network peak hours. In addition, the rail station provides additional services connecting to Swansea. As such these offer direct and convenient routes.
- 9.3.7 A public transport journey should be considered in the context of the entire journey. The walk to the stops will be via direct and high quality routes and be well lit, real time information websites will be promoted to residents and the services provide a direct journey into Llanelli and Swansea. As such, residents are more likely to walk from the site to use the bus and rail services.
- 9.3.8 Based on the three strands of a journey (walking, waiting and on-board travel) and allowing for the promotion of public transport and real-time information, bus and rail travel are considered to provide realistic and attractive alternative modes of travel to and from the site. The site location is appropriate for public transport use which is in accordance with the sustainable transport policies in PPW11.
- 9.3.9 The site layout itself also provides the opportunity for buses to travel through the site, if needed and there is a desire to divert services from existing routes. However, given the proximity to the bus station this is not considered to be required for this site, and operators are unlikely to divert from existing routes to serve a site of this scale, given the proximity of the site to the key bus stops (and rail station) in Pontarddulais.

9.4 Vehicular Access and Site Layout

- 9.4.1 The vehicular access for the site will be provided via new priority junctions onto High Street and Woodville Street which will connect to the internal access road network. The access arrangements are safe and suitable and can accommodate the vehicle movements generated by the site appropriately.
- 9.4.2 In addition, the Woodville Street access can deliver on the aspirations for a Spine Street, if needed, albeit this is considered contrary to the position of the Welsh Government in relation to the construction of new roads, and a modal shift to more sustainable modes.
- 9.4.3 The junction modelling and traffic impact analysis has demonstrated that the proposed redevelopment of the site would not have a material impact on the operational capacity of the highway network. There would be a minimal increase in vehicle movements in comparison with the existing site use, and the proposals would generate a significant reduction in HGVs to and from the site.
- 9.4.4 However, a reasonable and proportionate contribution towards MOVA control being implemented at the Station Road / Water Street / Tidal Reach signal controlled junction is proposed and would be agreed with Swansea Council. No further highway improvements are considered to be required in relation to operational capacity, and this will assist in encouraging a modal shift to more sustainable modes of travel, in accordance with the current policy position of Welsh Government.

9.5 Travel Plan

9.5.1 A Framework Travel Plan has been produced which sets out measures to further minimise the impact of the development on the network and encourage a modal shift. This will be produced in full prior to occupation and measures implemented accordingly.

9.6 Summary of Mitigation and Improvements

9.6.1 It is proposed to deliver the following improvements and mitigation as part of the proposals:

- Active Travel Routes within and around the boundary of the site adjacent to Woodville Street and High Street
- Delivery of the SA6 Active Travel Route within the site
- New dropped kerb crossings on High Street and Woodville Street connecting the new infrastructure to the existing infrastructure
- Proportional contribution via S106 towards the delivery of the SA6 Active Travel Route along Station Road, connecting to Water Street. The level of contribution required to be discussed and agreed with Swansea Council.
- Layout which facilitates the delivery of a Spine Street within the site, if needed (it is not considered that this is required and is contrary to Welsh Government policies on road building)
- Proportional contribution via S106 towards the delivery of MOVA control at the Station Road / Water Street / Tidal Reach signal controlled junction. The level of contribution required to be discussed and agreed with Swansea Council.

9.6.2 The nature/scale of any necessary contributions will be subject to wider discussions with the Council regarding Section 106 contributions and would need to ensure viability, given this is a brownfield site requiring remediation.

10. SUMMARY AND CONCLUSIONS

10.1 Summary

- 10.1.1 This Transport Assessment (TA) has been provided in support of an outline planning application for a proposed redevelopment of a brownfield site to the north of High Street, Pontarddulais.
- 10.1.2 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 on the local highway network.
- 10.1.3 The proposals are for the redevelopment of the site for up to 150 new residential dwellings. The site is allocated within the Swansea Local Development Plan as part of a wider allocation covering two plots under SD A: South of Glannffrwd Road, Pontarddulais. The site is the smaller of the two plots which make up the overall allocation, with the larger site being brought forwards as part of a separate planning application by Persimmon Homes.
- 10.1.4 The vehicular access would be obtained from two locations onto High Street and Woodville Street via new priority junctions. This would reduce the number of junctions from the site in comparison to the existing situation. Pedestrian and cyclist access will be gained from the same locations, as well as via crossings which link to proposed routes within and on the boundary of the site.
- 10.1.5 The proposed parking provision will be fully in accordance with the Swansea Council parking standards, as well as the objectives for encouraging sustainable travel and reducing car use as set out in PPW11 and Future Wales. The site also meets the criteria for a reduction in parking provision, given its sustainable location.
- 10.1.6 The proposals will be able to accommodate service and delivery vehicles appropriately and these vehicles can enter and exit the site appropriately at each access point.
- 10.1.7 The site is situated in a highly sustainable location. Potential future residents can walk or cycle to a number and range of facilities, services, educational and employment locations within appropriate distances via good quality routes, reducing the need to own or travel by car. The site will also deliver active travel routes throughout, which would connect to the surrounding area, as well as deliver a section of the Swansea Council proposed SWA6 active travel route within the site boundary.
- 10.1.8 The site also has good public transport links, which provide a suitable, attractive and realistic alternative to travelling by car. This includes the local bus and rail stations being within a 400m walk of the site and offering routes connecting to Swansea and Llanelli. 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.
- 10.1.9 In addition, the proposals can provide a proportionate contribution (at a level to be agreed) towards further active travel route improvements proposed by Swansea Council (SWA6) along Station Road connecting the site to Water Street. This will further enhance the sustainable connections from the site. The nature/scale of any necessary contribution will be subject to wider discussions with the Council regarding Section 106 contributions.
- 10.1.10 Road safety data has been analysed and there is no evidence of a highway safety issue within the vicinity of the site which would be exacerbated by the proposals, and no evidence of an existing issue in relation to active travel for movements to and from the key local facilities and the town centre.

- 10.1.11 Trip generation analysis forecasts that the proposals would generate a slight increase of 35 to 43 vehicle movements in the network peak hours in comparison to the existing industrial site use. These movements would disperse in different directions from the site accesses, although the majority of movements are likely to route via the Station Road / Water Street signal controlled junction.
- 10.1.12 It is forecast that the proposal would increase movements through this junction in comparison to the existing use by approximately 30 vehicles, in the peak hours. This would equate to between a 2.0% and 2.5% percentage increase in all movements during the network peak hours. This would not have a material impact on the operational capacity of the network and is well within the 5% threshold levels stated within TAN18.
- 10.1.13 Beyond this junction, the increases would be lower as vehicles dissipate across the network, so there would be significantly less than a 30 vehicle increase at all other junctions. As such, it is not considered that the development would have a material impact on the operation of the wider network.
- 10.1.14 However, for robustness, an operational assessment of the Station Road / Water Street / Tidal Reach signal controlled junction was undertaken using LinSig. The assessment is robust and has been undertaken in a 2028 future year considering unfettered traffic growth (which may not occur) and no offsetting for the existing site traffic generation. The assessment demonstrated that the development generated traffic would generate a minimal change in operation at the junction.
- 10.1.15 A further sensitivity analysis was undertaken including the other parcel forming the overall SD A allocation, which is being brought forwards by Persimmon Homes. With the addition of the additional traffic generated by the entire allocation, the junction would operate over capacity, particularly in the PM peak. The Persimmon application has suggested the implementation of MOVA control at this junction to improve the efficiency of the operation. As such, Walters Group would be willing to provide a proportionate contribution (at a level to be agreed) towards the implementation of this improvement. Physical works to provide further capacity, for example through amended geometry and increased queue storage or additional flare lanes are therefore not considered to be required or desirable and would not encourage a modal shift in accordance with Welsh Government policies. A contribution towards MOVA control at this junction is therefore considered to provide suitable highway capacity mitigation for the proposals.
- 10.1.16 A Framework Travel Plan has been produced which sets out measures to further minimise the impact of the development on the network and encourage a modal shift. This will be produced in full prior to occupation and measures implemented accordingly.

10.2 Conclusions

- 10.2.1 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 Future Wales, PPW11, and TAN18.
- 10.2.2 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 / cycle routes will provide safe and suitable access for the proposed residential use.
- 10.2.3 The proposals will not have a material impact on the operation of the highway network, particularly with the proposals for a contribution towards MOVA control at the Station Road / Water Street / Tidal Reach signal controlled junction. No further mitigation is required in relation to highway capacity.

10.2.4 The analysis presented within this TA allows the highway authority to provide a positive recommendation on the planning application.

Appendix A Traffic Survey Data

Job Number & Title: SS1195 Pontarddulais

Site Location: High Street

Survey Date: 20 July 2023

Site Location Plan



SS1195 Pontarddlais																		
JULY 2023																		
Site	Location	Lat / Long	Direction	Start Date	End Date	Posted Speed Limit (PSL)	Total Vehicles	5 Day Ave.	7 Day Ave.	Posted Speed Limit (PSL)		110%(PSL) + 2 (SL1)		DfT PSL+15 (SL2)		Mean Speed	85%ile Speed	
										>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%			
1	High Street	51.718111, -4.041977	Eastbound	20 July 2023	26 July 2023	30	3760	622	537	196	5.2	42	1.1	2	0.1	19.8	26.4	
			Westbound	20 July 2023	26 July 2023		3621	581	517	459	12.7	102	2.8	12	0.3	21.5	29.4	
			Two-Way	20 July 2023	26 July 2023		7381	1203	1054	655	9	144	2	14	0	21	28	



SS1195 Pontarddulais					Site	1		Location	High Street (51.718111, -4.041977)						
20 July 2023		to			26 July 2023		Direction	Eastbound							
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
20 July 2023															
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0600	16	0	13	3	0	0	0	0	0	0	0	0	0	0	
0700	36	0	20	15	1	0	0	0	0	0	0	0	0	0	
0800	35	0	22	13	0	0	0	0	0	0	0	0	0	0	
0900	44	1	30	12	0	0	1	0	0	0	0	0	0	0	
1000	36	0	28	7	0	1	0	0	0	0	0	0	0	0	
1100	56	2	45	7	0	2	0	0	0	0	0	0	0	0	
1200	33	0	29	4	0	0	0	0	0	0	0	0	0	0	
1300	38	0	33	4	0	0	0	0	0	0	1	0	0	0	
1400	43	0	35	7	0	1	0	0	0	0	0	0	0	0	
1500	43	1	33	8	0	0	1	0	0	0	0	0	0	0	
1600	46	1	34	10	0	0	0	0	1	0	0	0	0	0	
1700	76	0	71	5	0	0	0	0	0	0	0	0	0	0	
1800	37	1	35	1	0	0	0	0	0	0	0	0	0	0	
1900	23	1	22	0	0	0	0	0	0	0	0	0	0	0	
2000	20	0	20	0	0	0	0	0	0	0	0	0	0	0	
2100	18	0	18	0	0	0	0	0	0	0	0	0	0	0	
2200	6	0	6	0	0	0	0	0	0	0	0	0	0	0	
2300	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
07-19	523	6	415	93	1	4	2	0	1	0	1	0	0	0	
06-22	600	7	488	96	1	4	2	0	1	0	1	0	0	0	
06-00	608	7	496	96	1	4	2	0	1	0	1	0	0	0	
00-00	611	7	498	97	1	4	2	0	1	0	1	0	0	0	

SS1195 Pontarddulais		Site	1	Location	High Street (51.718111, -4.041977)										
20 July 2023		to	26 July 2023	Direction	Eastbound										
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
24 July 2023															
0000	3	0	3	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0600	10	0	8	1	0	0	1	0	0	0	0	0	0	0	
0700	42	0	25	16	0	0	0	0	0	0	1	0	0	0	
0800	19	0	13	6	0	0	0	0	0	0	0	0	0	0	
0900	38	1	27	10	0	0	0	0	0	0	0	0	0	0	
1000	29	2	23	3	0	1	0	0	0	0	0	0	0	0	
1100	53	0	39	11	1	1	0	0	1	0	0	0	0	0	
1200	42	0	35	5	0	2	0	0	0	0	0	0	0	0	
1300	43	0	32	10	0	1	0	0	0	0	0	0	0	0	
1400	33	0	26	7	0	0	0	0	0	0	0	0	0	0	
1500	44	0	32	11	0	1	0	0	0	0	0	0	0	0	
1600	50	0	42	7	0	1	0	0	0	0	0	0	0	0	
1700	52	1	45	6	0	0	0	0	0	0	0	0	0	0	
1800	32	1	30	1	0	0	0	0	0	0	0	0	0	0	
1900	22	0	22	0	0	0	0	0	0	0	0	0	0	0	
2000	19	1	18	0	0	0	0	0	0	0	0	0	0	0	
2100	10	0	10	0	0	0	0	0	0	0	0	0	0	0	
2200	6	0	6	0	0	0	0	0	0	0	0	0	0	0	
2300	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
07-19	477	5	369	93	1	7	0	0	1	0	1	0	0	0	
06-22	538	6	427	94	1	7	1	0	1	0	1	0	0	0	
06-00	546	6	435	94	1	7	1	0	1	0	1	0	0	0	
00-00	550	6	439	94	1	7	1	0	1	0	1	0	0	0	

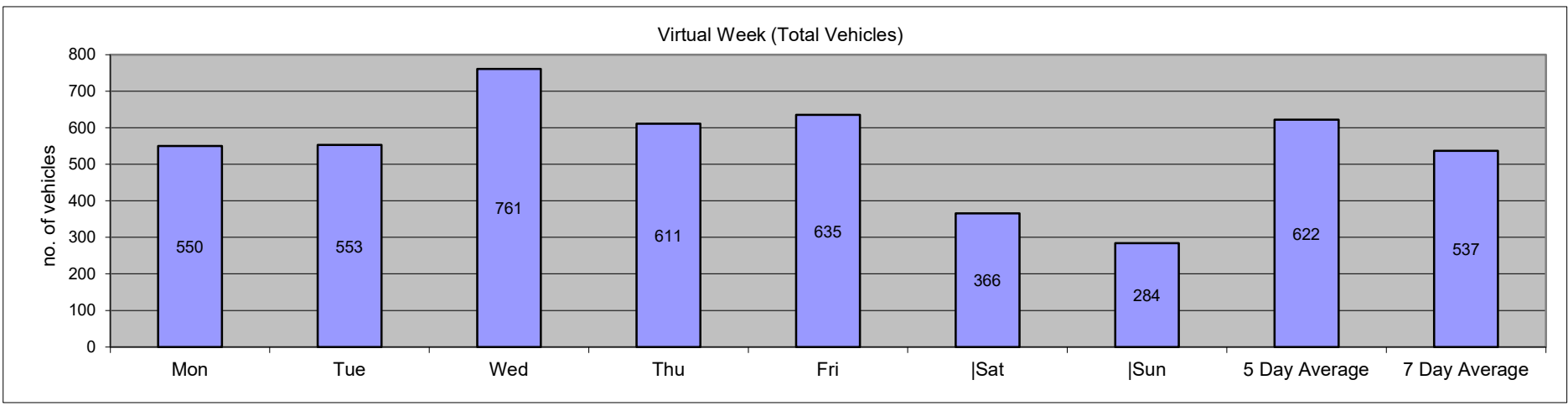
SS1195 Pontarddulais						Site	1	Location	High Street (51.718111, -4.041977)						
20 July 2023		to				26 July 2023		Direction	Eastbound						
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
25 July 2023															
0000	3	0	3	0	0	0	0	0	0	0	0	0	0	0	
0100	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0600	13	1	9	2	0	0	1	0	0	0	0	0	0	0	
0700	37	0	25	12	0	0	0	0	0	0	0	0	0	0	
0800	30	1	18	9	0	1	0	0	1	0	0	0	0	0	
0900	37	1	27	6	1	2	0	0	0	0	0	0	0	0	
1000	45	1	35	6	0	2	0	0	0	0	0	1	0	0	
1100	37	1	27	7	0	1	1	0	0	0	0	0	0	0	
1200	44	2	29	13	0	0	0	0	0	0	0	0	0	0	
1300	33	1	23	7	1	1	0	0	0	0	0	0	0	0	
1400	39	1	30	8	0	0	0	0	0	0	0	0	0	0	
1500	30	0	22	6	0	2	0	0	0	0	0	0	0	0	
1600	63	0	53	8	0	0	2	0	0	0	0	0	0	0	
1700	52	1	46	5	0	0	0	0	0	0	0	0	0	0	
1800	37	0	34	3	0	0	0	0	0	0	0	0	0	0	
1900	23	0	23	0	0	0	0	0	0	0	0	0	0	0	
2000	12	1	10	0	0	0	0	0	1	0	0	0	0	0	
2100	11	0	11	0	0	0	0	0	0	0	0	0	0	0	
2200	4	0	4	0	0	0	0	0	0	0	0	0	0	0	
2300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
07-19	484	9	369	90	2	9	3	0	1	0	0	1	0	0	
06-22	543	11	422	92	2	9	4	0	2	0	0	1	0	0	
06-00	548	11	427	92	2	9	4	0	2	0	0	1	0	0	
00-00	553	11	430	94	2	9	4	0	2	0	0	1	0	0	

SS1195 Pontarddulais		Site	1		Location	High Street (51.718111, -4.041977)									
20 July 2023		to	26 July 2023		Direction	Eastbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
26 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0600	15	0	13	2	0	0	0	0	0	0	0	0	0	0	
0700	37	0	26	9	0	2	0	0	0	0	0	0	0	0	
0800	31	1	19	10	0	0	0	0	0	0	0	1	0	0	
0900	36	1	26	8	0	1	0	0	0	0	0	0	0	0	
1000	38	1	29	7	0	0	1	0	0	0	0	0	0	0	
1100	38	1	29	7	1	0	0	0	0	0	0	0	0	0	
1200	56	0	40	13	0	3	0	0	0	0	0	0	0	0	
1300	41	0	31	8	0	0	2	0	0	0	0	0	0	0	
1400	51	0	40	10	0	1	0	0	0	0	0	0	0	0	
1500	44	0	37	6	0	0	1	0	0	0	0	0	0	0	
1600	73	1	58	13	0	1	0	0	0	0	0	0	0	0	
1700	77	0	69	7	0	0	0	0	0	0	0	1	0	0	
1800	71	0	67	4	0	0	0	0	0	0	0	0	0	0	
1900	41	1	37	3	0	0	0	0	0	0	0	0	0	0	
2000	43	0	41	2	0	0	0	0	0	0	0	0	0	0	
2100	56	0	51	5	0	0	0	0	0	0	0	0	0	0	
2200	5	0	5	0	0	0	0	0	0	0	0	0	0	0	
2300	6	0	4	2	0	0	0	0	0	0	0	0	0	0	
07-19	593	5	471	102	1	8	4	0	0	0	0	2	0	0	
06-22	748	6	613	114	1	8	4	0	0	0	0	2	0	0	
06-00	759	6	622	116	1	8	4	0	0	0	0	2	0	0	
00-00	761	6	624	116	1	8	4	0	0	0	0	2	0	0	

SS1195 Pontarddulais					Site	1		Location	High Street (51.718111, -4.041977)						
20 July 2023			to		26 July 2023		Direction	Eastbound							
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
Average Day															
0000	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
0100	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0600	10	0	8	2	0	0	0	0	0	0	0	0	0	0	
0700	30	0	19	10	0	0	0	0	0	0	0	0	0	0	
0800	25	0	17	7	0	0	0	0	0	0	0	0	0	0	
0900	33	1	24	7	0	0	0	0	0	0	0	0	0	0	
1000	36	1	27	7	0	1	0	0	0	0	0	0	0	0	
1100	38	1	30	6	0	1	0	0	0	0	0	0	0	0	
1200	41	0	33	7	0	1	0	0	0	0	0	0	0	0	
1300	36	0	29	6	0	1	0	0	0	0	0	0	0	0	
1400	38	0	31	6	0	1	0	0	0	0	0	0	0	0	
1500	38	0	30	7	0	1	0	0	0	0	0	0	0	0	
1600	47	0	40	7	0	0	0	0	0	0	0	0	0	0	
1700	54	1	49	4	0	0	0	0	0	0	0	0	0	0	
1800	36	1	34	2	0	0	0	0	0	0	0	0	0	0	
1900	24	0	23	1	0	0	0	0	0	0	0	0	0	0	
2000	19	0	18	1	0	0	0	0	0	0	0	0	0	0	
2100	17	0	16	1	0	0	0	0	0	0	0	0	0	0	
2200	6	0	6	0	0	0	0	0	0	0	0	0	0	0	
2300	3	0	2	0	0	0	0	0	0	0	0	0	0	0	
07-19	453	5	362	76	1	5	2	0	0	0	0	0	0	0	
06-22	523	6	428	80	1	5	2	0	1	0	0	0	0	0	
06-00	532	6	436	80	1	5	2	0	1	0	0	0	0	0	
00-00	537	6	440	81	1	5	2	0	1	0	0	0	0	0	

SS1195 Pontarddulais Site 1 Location High Street (51.718111, -4.041977)
 20 July 2023 to 26 July 2023 Direction Eastbound

TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC
Virtual Week														
Mon	550	6	439	94	1	7	1	0	1	0	1	0	0	0
Tue	553	11	430	94	2	9	4	0	2	0	0	1	0	0
Wed	761	6	624	116	1	8	4	0	0	0	0	2	0	0
Thu	611	7	498	97	1	4	2	0	1	0	1	0	0	0
Fri	635	7	510	103	3	9	3	0	0	0	0	0	0	0
Sat	366	1	325	39	0	1	0	0	0	0	0	0	0	0
Sun	284	5	254	25	0	0	0	0	0	0	0	0	0	0
5 Day Average														
[--]	622	7	500	101	2	7	3	0	1	0	0	1	0	0
7 Day Average														
[--]	537	6	440	81	1	5	2	0	1	0	0	0	0	0
Total Vehicles														
[--]	3760	43	3080	568	8	38	14	0	4	0	2	3	0	0



SS1195 Pontarddulais					Site	1		Location	High Street (51.718111, -4.041977)						
20 July 2023		to 26 July 2023			Direction	Westbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
20 July 2023															
0000	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
0100	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0500	10	0	9	1	0	0	0	0	0	0	0	0	0	0	
0600	22	0	17	4	0	0	0	0	0	0	1	0	0	0	
0700	36	1	24	10	0	1	0	0	0	0	0	0	0	0	
0800	54	0	31	20	0	1	2	0	0	0	0	0	0	0	
0900	50	1	32	15	0	1	1	0	0	0	0	0	0	0	
1000	41	0	30	9	0	2	0	0	0	0	0	0	0	0	
1100	34	1	24	7	0	0	2	0	0	0	0	0	0	0	
1200	36	0	28	8	0	0	0	0	0	0	0	0	0	0	
1300	29	0	23	5	0	0	1	0	0	0	0	0	0	0	
1400	44	1	30	12	0	0	0	0	0	0	0	1	0	0	
1500	41	2	30	7	0	1	1	0	0	0	0	0	0	0	
1600	61	1	50	10	0	0	0	0	0	0	0	0	0	0	
1700	70	1	59	9	0	0	1	0	0	0	0	0	0	0	
1800	24	0	19	5	0	0	0	0	0	0	0	0	0	0	
1900	37	1	33	3	0	0	0	0	0	0	0	0	0	0	
2000	21	0	19	2	0	0	0	0	0	0	0	0	0	0	
2100	20	0	20	0	0	0	0	0	0	0	0	0	0	0	
2200	5	0	5	0	0	0	0	0	0	0	0	0	0	0	
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07-19	520	8	380	117	0	6	8	0	0	0	0	1	0	0	
06-22	620	9	469	126	0	6	8	0	0	0	1	1	0	0	
06-00	625	9	474	126	0	6	8	0	0	0	1	1	0	0	
00-00	641	9	488	128	0	6	8	0	0	0	1	1	0	0	

SS1195 Pontarddulais					Site	1		Location	High Street (51.718111, -4.041977)						
20 July 2023		to			26 July 2023		Direction	Westbound							
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
21 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	2	0	1	1	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0400	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
0500	11	0	11	0	0	0	0	0	0	0	0	0	0	0	
0600	24	0	19	5	0	0	0	0	0	0	0	0	0	0	
0700	35	0	23	11	0	1	0	0	0	0	0	0	0	0	
0800	58	1	36	17	1	2	1	0	0	0	0	0	0	0	
0900	41	1	26	10	2	0	2	0	0	0	0	0	0	0	
1000	52	1	37	11	1	1	1	0	0	0	0	0	0	0	
1100	30	1	23	6	0	0	0	0	0	0	0	0	0	0	
1200	37	0	33	2	0	1	1	0	0	0	0	0	0	0	
1300	41	0	35	5	0	0	1	0	0	0	0	0	0	0	
1400	44	2	31	9	0	1	1	0	0	0	0	0	0	0	
1500	44	0	39	4	0	0	1	0	0	0	0	0	0	0	
1600	53	2	37	14	0	0	0	0	0	0	0	0	0	0	
1700	41	0	39	2	0	0	0	0	0	0	0	0	0	0	
1800	30	0	27	3	0	0	0	0	0	0	0	0	0	0	
1900	48	0	42	6	0	0	0	0	0	0	0	0	0	0	
2000	18	0	17	1	0	0	0	0	0	0	0	0	0	0	
2100	10	1	8	1	0	0	0	0	0	0	0	0	0	0	
2200	8	0	8	0	0	0	0	0	0	0	0	0	0	0	
2300	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
07-19	506	8	386	94	4	6	8	0	0	0	0	0	0	0	
06-22	606	9	472	107	4	6	8	0	0	0	0	0	0	0	
06-00	616	9	482	107	4	6	8	0	0	0	0	0	0	0	
00-00	633	9	498	108	4	6	8	0	0	0	0	0	0	0	

SS1195 Pontarddulais		Site	1	Location	High Street (51.718111, -4.041977)											
20 July 2023		to	26 July 2023		Direction	Westbound										
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC		
22 July 2023																
0000	3	0	3	0	0	0	0	0	0	0	0	0	0	0		
0100	1	0	1	0	0	0	0	0	0	0	0	0	0	0		
0200	1	0	1	0	0	0	0	0	0	0	0	0	0	0		
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	0		
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0500	2	0	2	0	0	0	0	0	0	0	0	0	0	0		
0600	5	0	5	0	0	0	0	0	0	0	0	0	0	0		
0700	14	0	11	3	0	0	0	0	0	0	0	0	0	0		
0800	21	1	17	3	0	0	0	0	0	0	0	0	0	0		
0900	34	0	25	9	0	0	0	0	0	0	0	0	0	0		
1000	57	0	49	6	0	1	1	0	0	0	0	0	0	0		
1100	42	0	31	11	0	0	0	0	0	0	0	0	0	0		
1200	32	0	28	4	0	0	0	0	0	0	0	0	0	0		
1300	54	0	48	5	0	1	0	0	0	0	0	0	0	0		
1400	18	0	17	1	0	0	0	0	0	0	0	0	0	0		
1500	38	0	32	6	0	0	0	0	0	0	0	0	0	0		
1600	15	0	14	1	0	0	0	0	0	0	0	0	0	0		
1700	20	0	20	0	0	0	0	0	0	0	0	0	0	0		
1800	16	0	16	0	0	0	0	0	0	0	0	0	0	0		
1900	11	0	9	2	0	0	0	0	0	0	0	0	0	0		
2000	19	0	18	1	0	0	0	0	0	0	0	0	0	0		
2100	2	0	2	0	0	0	0	0	0	0	0	0	0	0		
2200	9	0	9	0	0	0	0	0	0	0	0	0	0	0		
2300	6	0	6	0	0	0	0	0	0	0	0	0	0	0		
07-19	361	1	308	49	0	2	1	0	0	0	0	0	0	0		
06-22	398	1	342	52	0	2	1	0	0	0	0	0	0	0		
06-00	413	1	357	52	0	2	1	0	0	0	0	0	0	0		
00-00	421	1	365	52	0	2	1	0	0	0	0	0	0	0		

SS1195 Pontarddulais						Site	1	Location	High Street (51.718111, -4.041977)						
20 July 2023		to				26 July 2023		Direction	Westbound						
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
23 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	3	0	3	0	0	0	0	0	0	0	0	0	0	0	
0200	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0500	2	1	0	1	0	0	0	0	0	0	0	0	0	0	
0600	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0700	5	0	3	2	0	0	0	0	0	0	0	0	0	0	
0800	9	0	8	1	0	0	0	0	0	0	0	0	0	0	
0900	11	1	10	0	0	0	0	0	0	0	0	0	0	0	
1000	28	0	26	2	0	0	0	0	0	0	0	0	0	0	
1100	31	1	27	3	0	0	0	0	0	0	0	0	0	0	
1200	28	0	27	0	0	0	0	0	1	0	0	0	0	0	
1300	31	0	28	3	0	0	0	0	0	0	0	0	0	0	
1400	18	0	17	1	0	0	0	0	0	0	0	0	0	0	
1500	29	1	23	4	0	0	1	0	0	0	0	0	0	0	
1600	18	1	16	1	0	0	0	0	0	0	0	0	0	0	
1700	20	1	18	1	0	0	0	0	0	0	0	0	0	0	
1800	11	1	9	1	0	0	0	0	0	0	0	0	0	0	
1900	20	0	20	0	0	0	0	0	0	0	0	0	0	0	
2000	12	0	12	0	0	0	0	0	0	0	0	0	0	0	
2100	8	0	7	1	0	0	0	0	0	0	0	0	0	0	
2200	5	0	4	1	0	0	0	0	0	0	0	0	0	0	
2300	3	0	3	0	0	0	0	0	0	0	0	0	0	0	
07-19	239	6	212	19	0	0	1	0	1	0	0	0	0	0	
06-22	280	6	252	20	0	0	1	0	1	0	0	0	0	0	
06-00	288	6	259	21	0	0	1	0	1	0	0	0	0	0	
00-00	295	7	264	22	0	0	1	0	1	0	0	0	0	0	

SS1195 Pontarddulais						Site	1	Location	High Street (51.718111, -4.041977)						
20 July 2023		to				26 July 2023		Direction	Westbound						
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
24 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0400	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
0500	6	0	6	0	0	0	0	0	0	0	0	0	0	0	
0600	15	0	13	0	0	0	2	0	0	0	0	0	0	0	
0700	34	0	24	9	0	0	1	0	0	0	0	0	0	0	
0800	51	1	32	17	0	1	0	0	0	0	0	0	0	0	
0900	30	0	22	8	0	0	0	0	0	0	0	0	0	0	
1000	47	0	41	6	0	0	0	0	0	0	0	0	0	0	
1100	43	0	30	11	1	1	0	0	0	0	0	0	0	0	
1200	34	0	31	3	0	0	0	0	0	0	0	0	0	0	
1300	47	1	33	13	0	0	0	0	0	0	0	0	0	0	
1400	33	0	26	7	0	0	0	0	0	0	0	0	0	0	
1500	42	0	32	10	0	0	0	0	0	0	0	0	0	0	
1600	53	1	41	11	0	0	0	0	0	0	0	0	0	0	
1700	48	1	42	5	0	0	0	0	0	0	0	0	0	0	
1800	32	1	24	7	0	0	0	0	0	0	0	0	0	0	
1900	12	0	12	0	0	0	0	0	0	0	0	0	0	0	
2000	15	0	13	2	0	0	0	0	0	0	0	0	0	0	
2100	4	0	4	0	0	0	0	0	0	0	0	0	0	0	
2200	7	0	7	0	0	0	0	0	0	0	0	0	0	0	
2300	3	0	3	0	0	0	0	0	0	0	0	0	0	0	
07-19	494	5	378	107	1	2	1	0	0	0	0	0	0	0	
06-22	540	5	420	109	1	2	3	0	0	0	0	0	0	0	
06-00	550	5	430	109	1	2	3	0	0	0	0	0	0	0	
00-00	561	5	441	109	1	2	3	0	0	0	0	0	0	0	

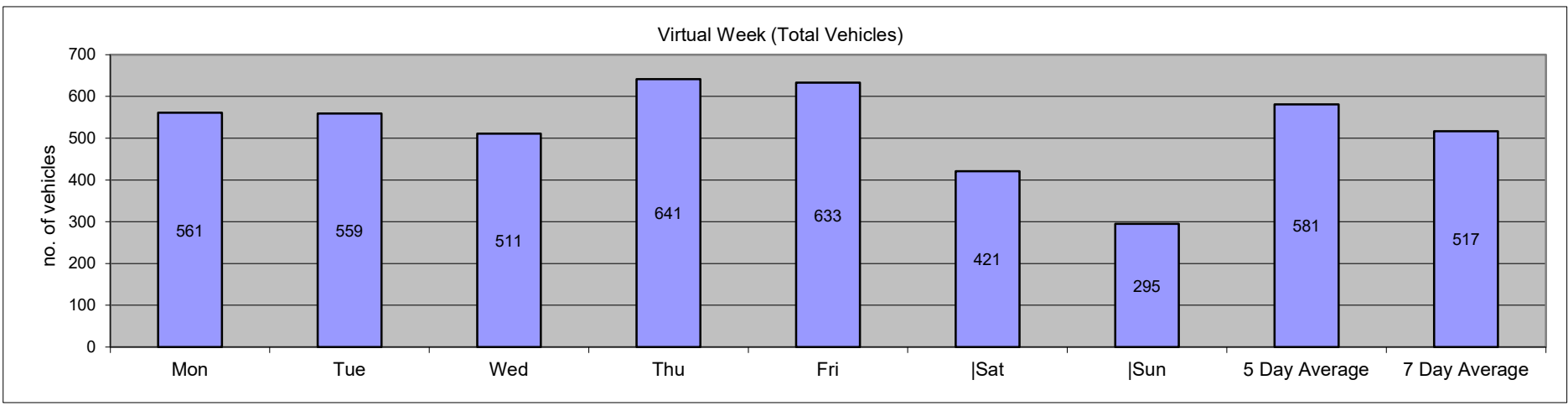
SS1195 Pontarddulais		Site	1	Location	High Street (51.718111, -4.041977)										
20 July 2023		to	26 July 2023	Direction	Westbound										
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
25 July 2023															
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0100	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0500	7	0	7	0	0	0	0	0	0	0	0	0	0	0	
0600	18	0	16	2	0	0	0	0	0	0	0	0	0	0	
0700	40	0	34	5	0	0	1	0	0	0	0	0	0	0	
0800	52	2	27	21	0	2	0	0	0	0	0	0	0	0	
0900	33	0	26	6	0	1	0	0	0	0	0	0	0	0	
1000	50	0	40	8	0	1	0	0	0	0	0	1	0	0	
1100	30	0	25	4	0	1	0	0	0	0	0	0	0	0	
1200	29	0	22	7	0	0	0	0	0	0	0	0	0	0	
1300	45	1	31	11	1	0	1	0	0	0	0	0	0	0	
1400	32	0	28	4	0	0	0	0	0	0	0	0	0	0	
1500	29	0	22	7	0	0	0	0	0	0	0	0	0	0	
1600	49	3	37	9	0	0	0	0	0	0	0	0	0	0	
1700	56	2	47	7	0	0	0	0	0	0	0	0	0	0	
1800	33	0	29	4	0	0	0	0	0	0	0	0	0	0	
1900	31	0	30	1	0	0	0	0	0	0	0	0	0	0	
2000	7	0	6	1	0	0	0	0	0	0	0	0	0	0	
2100	9	1	7	0	0	0	1	0	0	0	0	0	0	0	
2200	4	0	4	0	0	0	0	0	0	0	0	0	0	0	
2300	3	0	3	0	0	0	0	0	0	0	0	0	0	0	
07-19	478	8	368	93	1	5	2	0	0	0	0	1	0	0	
06-22	543	9	427	97	1	5	3	0	0	0	0	1	0	0	
06-00	550	9	434	97	1	5	3	0	0	0	0	1	0	0	
00-00	559	9	442	98	1	5	3	0	0	0	0	1	0	0	

SS1195 Pontarddulais		Site	1		Location	High Street (51.718111, -4.041977)									
20 July 2023		to	26 July 2023		Direction	Westbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
26 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0500	9	0	8	1	0	0	0	0	0	0	0	0	0	0	
0600	15	0	13	2	0	0	0	0	0	0	0	0	0	0	
0700	31	0	26	4	0	1	0	0	0	0	0	0	0	0	
0800	47	1	30	14	0	2	0	0	0	0	0	0	0	0	
0900	39	1	27	9	0	1	0	0	0	0	0	1	0	0	
1000	37	0	27	9	0	1	0	0	0	0	0	0	0	0	
1100	34	0	30	3	1	0	0	0	0	0	0	0	0	0	
1200	36	0	27	6	0	2	1	0	0	0	0	0	0	0	
1300	29	0	25	3	0	1	0	0	0	0	0	0	0	0	
1400	35	0	30	4	0	0	1	0	0	0	0	0	0	0	
1500	39	0	32	5	0	1	1	0	0	0	0	0	0	0	
1600	33	3	24	5	0	0	1	0	0	0	0	0	0	0	
1700	49	0	44	5	0	0	0	0	0	0	0	0	0	0	
1800	25	0	21	4	0	0	0	0	0	0	0	0	0	0	
1900	14	0	14	0	0	0	0	0	0	0	0	0	0	0	
2000	16	0	16	0	0	0	0	0	0	0	0	0	0	0	
2100	8	0	7	1	0	0	0	0	0	0	0	0	0	0	
2200	8	0	8	0	0	0	0	0	0	0	0	0	0	0	
2300	4	0	4	0	0	0	0	0	0	0	0	0	0	0	
07-19	434	5	343	71	1	9	4	0	0	0	0	1	0	0	
06-22	487	5	393	74	1	9	4	0	0	0	0	1	0	0	
06-00	499	5	405	74	1	9	4	0	0	0	0	1	0	0	
00-00	511	5	416	75	1	9	4	0	0	0	0	1	0	0	

SS1195 Pontarddulais					Site	1		Location	High Street (51.718111, -4.041977)						
20 July 2023		to			26 July 2023		Direction	Westbound							
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
Average Day															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0500	7	0	6	0	0	0	0	0	0	0	0	0	0	0	
0600	14	0	12	2	0	0	0	0	0	0	0	0	0	0	
0700	28	0	21	6	0	0	0	0	0	0	0	0	0	0	
0800	42	1	26	13	0	1	0	0	0	0	0	0	0	0	
0900	34	1	24	8	0	0	0	0	0	0	0	0	0	0	
1000	45	0	36	7	0	1	0	0	0	0	0	0	0	0	
1100	35	0	27	6	0	0	0	0	0	0	0	0	0	0	
1200	33	0	28	4	0	0	0	0	0	0	0	0	0	0	
1300	39	0	32	6	0	0	0	0	0	0	0	0	0	0	
1400	32	0	26	5	0	0	0	0	0	0	0	0	0	0	
1500	37	0	30	6	0	0	1	0	0	0	0	0	0	0	
1600	40	2	31	7	0	0	0	0	0	0	0	0	0	0	
1700	43	1	38	4	0	0	0	0	0	0	0	0	0	0	
1800	24	0	21	3	0	0	0	0	0	0	0	0	0	0	
1900	25	0	23	2	0	0	0	0	0	0	0	0	0	0	
2000	15	0	14	1	0	0	0	0	0	0	0	0	0	0	
2100	9	0	8	0	0	0	0	0	0	0	0	0	0	0	
2200	7	0	6	0	0	0	0	0	0	0	0	0	0	0	
2300	3	0	3	0	0	0	0	0	0	0	0	0	0	0	
07-19	433	6	339	79	1	4	4	0	0	0	0	0	0	0	
06-22	496	6	396	84	1	4	4	0	0	0	0	0	0	0	
06-00	506	6	406	84	1	4	4	0	0	0	0	0	0	0	
00-00	517	6	416	85	1	4	4	0	0	0	0	0	0	0	

SS1195 Pontarddulais Site 1 Location High Street (51.718111, -4.041977)
 20 July 2023 to 26 July 2023 Direction Westbound

TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC
Virtual Week														
Mon	561	5	441	109	1	2	3	0	0	0	0	0	0	0
Tue	559	9	442	98	1	5	3	0	0	0	0	1	0	0
Wed	511	5	416	75	1	9	4	0	0	0	0	1	0	0
Thu	641	9	488	128	0	6	8	0	0	0	1	1	0	0
Fri	633	9	498	108	4	6	8	0	0	0	0	0	0	0
Sat	421	1	365	52	0	2	1	0	0	0	0	0	0	0
Sun	295	7	264	22	0	0	1	0	1	0	0	0	0	0
5 Day Average														
[--]	581	7	457	104	1	6	5	0	0	0	0	1	0	0
7 Day Average														
[--]	517	6	416	85	1	4	4	0	0	0	0	0	0	0
Total Vehicles														
[--]	3621	45	2914	592	7	30	28	0	1	0	1	3	0	0



Job Number & Title: SS1195 Pontarddulais

Site Location: Woodville Street

Survey Date: 20 July 2023

Site Location Plan



SS1195 Pontarddulais																		
JULY 2023																		
Site	Location	Lat / Long	Direction	Start Date	End Date	Posted Speed Limit (PSL)	Total Vehicles	5 Day Ave.	7 Day Ave.	Posted Speed Limit (PSL)		110%(PSL) + 2 (SL1)		DfT PSL+15 (SL2)		Mean Speed	85%ile Speed	
										>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%			
2	Woodville Street	51.719411, -4.040676	Northbound	20 July 2023	26 July 2023	30	1901	307	272	585	30.8	162	8.5	13	0.7	26.4	33.1	
			Southbound	20 July 2023	26 July 2023		1770	281	253	49	2.8	12	0.7	0	0.0	20.9	25.9	
			Two-Way	20 July 2023	26 July 2023		3671	587	524	634	17	174	5	13	0	24	31	



SS1195 Pontarddulais					Site	2	Location	Woodville Street (51.719411, -4.040676)							
20 July 2023		to 26 July 2023			Direction	Northbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
20 July 2023															
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0500	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0600	9	0	7	2	0	0	0	0	0	0	0	0	0	0	
0700	30	0	14	16	0	0	0	0	0	0	0	0	0	0	
0800	26	0	14	12	0	0	0	0	0	0	0	0	0	0	
0900	25	1	13	10	0	0	0	0	0	0	0	1	0	0	
1000	18	0	12	6	0	0	0	0	0	0	0	0	0	0	
1100	33	2	20	11	0	0	0	0	0	0	0	0	0	0	
1200	18	0	15	3	0	0	0	0	0	0	0	0	0	0	
1300	20	0	16	4	0	0	0	0	0	0	0	0	0	0	
1400	18	1	7	9	0	1	0	0	0	0	0	0	0	0	
1500	18	2	11	4	0	0	0	0	0	0	0	1	0	0	
1600	21	1	7	12	0	1	0	0	0	0	0	0	0	0	
1700	45	0	34	9	0	0	2	0	0	0	0	0	0	0	
1800	28	0	20	7	0	0	1	0	0	0	0	0	0	0	
1900	13	0	11	1	0	0	1	0	0	0	0	0	0	0	
2000	12	1	9	2	0	0	0	0	0	0	0	0	0	0	
2100	6	0	5	1	0	0	0	0	0	0	0	0	0	0	
2200	4	0	4	0	0	0	0	0	0	0	0	0	0	0	
2300	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
07-19	300	7	183	103	0	2	3	0	0	0	0	2	0	0	
06-22	340	8	215	109	0	2	4	0	0	0	0	2	0	0	
06-00	346	8	221	109	0	2	4	0	0	0	0	2	0	0	
00-00	349	8	222	111	0	2	4	0	0	0	0	2	0	0	

SS1195 Pontarddulais					Site	2	Location	Woodville Street (51.719411, -4.040676)								
20 July 2023		to			26 July 2023			Direction	Northbound							
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC		
21 July 2023																
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0200	1	0	0	1	0	0	0	0	0	0	0	0	0	0		
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0		
0600	9	1	5	2	0	0	1	0	0	0	0	0	0	0		
0700	30	0	16	14	0	0	0	0	0	0	0	0	0	0		
0800	16	0	5	9	2	0	0	0	0	0	0	0	0	0		
0900	15	1	8	5	0	0	0	0	0	0	1	0	0	0		
1000	22	0	9	11	1	1	0	0	0	0	0	0	0	0		
1100	13	0	9	2	0	2	0	0	0	0	0	0	0	0		
1200	28	0	15	11	0	2	0	0	0	0	0	0	0	0		
1300	22	0	15	6	0	1	0	0	0	0	0	0	0	0		
1400	20	1	12	5	0	2	0	0	0	0	0	0	0	0		
1500	24	1	15	5	1	2	0	0	0	0	0	0	0	0		
1600	21	0	17	3	0	0	1	0	0	0	0	0	0	0		
1700	34	0	29	5	0	0	0	0	0	0	0	0	0	0		
1800	17	0	12	5	0	0	0	0	0	0	0	0	0	0		
1900	15	0	13	2	0	0	0	0	0	0	0	0	0	0		
2000	11	0	10	1	0	0	0	0	0	0	0	0	0	0		
2100	5	0	5	0	0	0	0	0	0	0	0	0	0	0		
2200	5	1	3	1	0	0	0	0	0	0	0	0	0	0		
2300	2	1	1	0	0	0	0	0	0	0	0	0	0	0		
07-19	262	3	162	81	4	10	1	0	0	0	1	0	0	0		
06-22	302	4	195	86	4	10	2	0	0	0	1	0	0	0		
06-00	309	6	199	87	4	10	2	0	0	0	1	0	0	0		
00-00	311	6	200	88	4	10	2	0	0	0	1	0	0	0		

SS1195 Pontarddulais					Site	2	Location	Woodville Street (51.719411, -4.040676)							
20 July 2023		to 26 July 2023			Direction	Northbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
22 July 2023															
0000	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0500	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0600	5	0	4	1	0	0	0	0	0	0	0	0	0	0	
0700	8	0	3	3	0	2	0	0	0	0	0	0	0	0	
0800	13	0	10	3	0	0	0	0	0	0	0	0	0	0	
0900	25	0	15	10	0	0	0	0	0	0	0	0	0	0	
1000	24	0	18	5	0	1	0	0	0	0	0	0	0	0	
1100	14	0	6	5	0	3	0	0	0	0	0	0	0	0	
1200	23	0	13	7	0	1	2	0	0	0	0	0	0	0	
1300	16	1	10	3	0	1	1	0	0	0	0	0	0	0	
1400	13	0	10	3	0	0	0	0	0	0	0	0	0	0	
1500	13	0	11	2	0	0	0	0	0	0	0	0	0	0	
1600	10	0	6	2	0	1	1	0	0	0	0	0	0	0	
1700	8	0	7	1	0	0	0	0	0	0	0	0	0	0	
1800	12	0	11	1	0	0	0	0	0	0	0	0	0	0	
1900	11	0	10	1	0	0	0	0	0	0	0	0	0	0	
2000	5	0	4	1	0	0	0	0	0	0	0	0	0	0	
2100	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
2200	4	0	4	0	0	0	0	0	0	0	0	0	0	0	
2300	3	0	1	1	0	0	1	0	0	0	0	0	0	0	
07-19	179	1	120	45	0	9	4	0	0	0	0	0	0	0	
06-22	201	1	139	48	0	9	4	0	0	0	0	0	0	0	
06-00	208	1	144	49	0	9	5	0	0	0	0	0	0	0	
00-00	212	1	147	50	0	9	5	0	0	0	0	0	0	0	

SS1195 Pontarddulais					Site	2	Location	Woodville Street (51.719411, -4.040676)							
20 July 2023		to 26 July 2023			Direction	Northbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
23 July 2023															
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0600	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0700	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0800	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0900	6	0	4	2	0	0	0	0	0	0	0	0	0	0	
1000	9	0	7	2	0	0	0	0	0	0	0	0	0	0	
1100	17	0	12	2	0	0	3	0	0	0	0	0	0	0	
1200	13	0	9	3	0	0	1	0	0	0	0	0	0	0	
1300	18	1	14	3	0	0	0	0	0	0	0	0	0	0	
1400	9	0	6	3	0	0	0	0	0	0	0	0	0	0	
1500	19	2	10	6	0	0	1	0	0	0	0	0	0	0	
1600	15	0	12	2	0	0	1	0	0	0	0	0	0	0	
1700	18	2	13	3	0	0	0	0	0	0	0	0	0	0	
1800	9	1	4	4	0	0	0	0	0	0	0	0	0	0	
1900	3	0	3	0	0	0	0	0	0	0	0	0	0	0	
2000	7	0	6	1	0	0	0	0	0	0	0	0	0	0	
2100	4	0	3	0	0	0	1	0	0	0	0	0	0	0	
2200	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
2300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
07-19	135	6	92	31	0	0	6	0	0	0	0	0	0	0	
06-22	150	6	105	32	0	0	7	0	0	0	0	0	0	0	
06-00	152	6	107	32	0	0	7	0	0	0	0	0	0	0	
00-00	156	6	111	32	0	0	7	0	0	0	0	0	0	0	

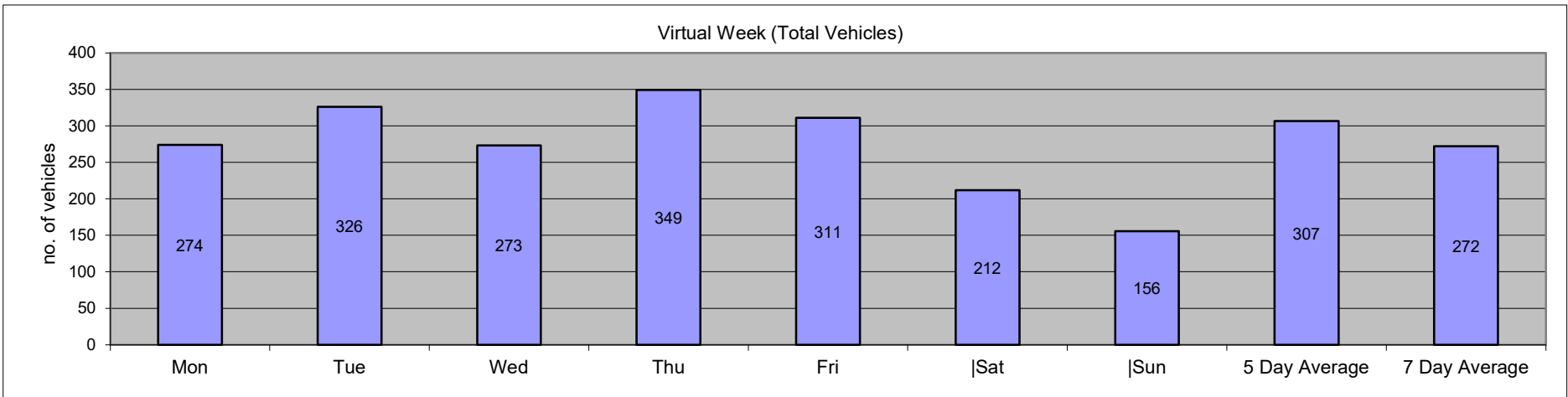
SS1195 Pontarddulais					Site	2	Location	Woodville Street (51.719411, -4.040676)							
20 July 2023		to 26 July 2023			Direction	Northbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
24 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
0200	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0600	8	1	6	0	0	0	1	0	0	0	0	0	0	0	
0700	30	0	14	16	0	0	0	0	0	0	0	0	0	0	
0800	13	0	5	8	0	0	0	0	0	0	0	0	0	0	
0900	23	0	15	7	0	0	1	0	0	0	0	0	0	0	
1000	11	0	7	2	0	0	1	0	1	0	0	0	0	0	
1100	22	0	10	10	1	1	0	0	0	0	0	0	0	0	
1200	21	0	14	6	0	0	1	0	0	0	0	0	0	0	
1300	21	0	13	6	0	2	0	0	0	0	0	0	0	0	
1400	15	0	9	6	0	0	0	0	0	0	0	0	0	0	
1500	17	0	10	6	0	1	0	0	0	0	0	0	0	0	
1600	25	0	20	4	0	1	0	0	0	0	0	0	0	0	
1700	23	2	16	5	0	0	0	0	0	0	0	0	0	0	
1800	12	1	6	4	0	0	1	0	0	0	0	0	0	0	
1900	13	0	13	0	0	0	0	0	0	0	0	0	0	0	
2000	6	1	4	1	0	0	0	0	0	0	0	0	0	0	
2100	5	1	4	0	0	0	0	0	0	0	0	0	0	0	
2200	5	0	4	0	0	0	1	0	0	0	0	0	0	0	
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07-19	233	3	139	80	1	5	4	0	1	0	0	0	0	0	
06-22	265	6	166	81	1	5	5	0	1	0	0	0	0	0	
06-00	270	6	170	81	1	5	6	0	1	0	0	0	0	0	
00-00	274	8	172	81	1	5	6	0	1	0	0	0	0	0	

SS1195 Pontarddulais					Site	2	Location	Woodville Street (51.719411, -4.040676)							
20 July 2023		to 26 July 2023			Direction	Northbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
25 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0600	10	1	7	1	0	1	0	0	0	0	0	0	0	0	
0700	28	0	13	15	0	0	0	0	0	0	0	0	0	0	
0800	22	2	8	10	0	2	0	0	0	0	0	0	0	0	
0900	21	0	13	4	1	2	1	0	0	0	0	0	0	0	
1000	25	1	16	7	0	1	0	0	0	0	0	0	0	0	
1100	21	0	12	6	0	3	0	0	0	0	0	0	0	0	
1200	29	1	18	10	0	0	0	0	0	0	0	0	0	0	
1300	15	0	10	2	0	3	0	0	0	0	0	0	0	0	
1400	21	0	15	6	0	0	0	0	0	0	0	0	0	0	
1500	11	0	6	3	0	2	0	0	0	0	0	0	0	0	
1600	37	0	27	8	0	1	1	0	0	0	0	0	0	0	
1700	35	1	28	6	0	0	0	0	0	0	0	0	0	0	
1800	21	0	16	5	0	0	0	0	0	0	0	0	0	0	
1900	11	0	11	0	0	0	0	0	0	0	0	0	0	0	
2000	6	1	4	0	0	0	0	0	1	0	0	0	0	0	
2100	8	0	8	0	0	0	0	0	0	0	0	0	0	0	
2200	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
2300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
07-19	286	5	182	82	1	14	2	0	0	0	0	0	0	0	
06-22	321	7	212	83	1	15	2	0	1	0	0	0	0	0	
06-00	323	7	214	83	1	15	2	0	1	0	0	0	0	0	
00-00	326	7	215	85	1	15	2	0	1	0	0	0	0	0	

SS1195 Pontarddulais Site 2 Location Woodville Street (51.719411, -4.040676)
 20 July 2023 to 26 July 2023 Direction Northbound

TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	FIVE OR LESS AXLE									
						TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC		
26 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	8	1	5	1	0	0	1	0	0	0	0	0	0	0	0
0700	28	0	15	11	0	2	0	0	0	0	0	0	0	0	0
0800	21	1	11	8	0	1	0	0	0	0	0	0	0	0	0
0900	21	1	12	7	0	0	1	0	0	0	0	0	0	0	0
1000	17	1	13	2	0	0	0	0	0	0	0	1	0	0	0
1100	19	0	11	6	0	0	1	0	0	0	1	0	0	0	0
1200	35	0	18	13	0	2	2	0	0	0	0	0	0	0	0
1300	14	0	10	3	0	0	0	0	0	0	1	0	0	0	0
1400	18	0	11	5	0	1	1	0	0	0	0	0	0	0	0
1500	11	0	5	4	0	0	2	0	0	0	0	0	0	0	0
1600	19	1	12	4	0	1	1	0	0	0	0	0	0	0	0
1700	14	0	10	3	0	1	0	0	0	0	0	0	0	0	0
1800	18	0	15	3	0	0	0	0	0	0	0	0	0	0	0
1900	6	1	5	0	0	0	0	0	0	0	0	0	0	0	0
2000	8	0	7	1	0	0	0	0	0	0	0	0	0	0	0
2100	9	0	5	4	0	0	0	0	0	0	0	0	0	0	0
2200	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0
2300	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
07-19	235	4	143	69	0	8	8	0	0	0	2	1	0	0	0
06-22	266	6	165	75	0	8	9	0	0	0	2	1	0	0	0
06-00	272	6	170	76	0	8	9	0	0	0	2	1	0	0	0
00-00	273	6	171	76	0	8	9	0	0	0	2	1	0	0	0

SS1195 Pontarddulais		Site	2	Location	Woodville Street (51.719411, -4.040676)									
20 July 2023		to	26 July 2023	Direction	Northbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC
Virtual Week														
Mon	274	8	172	81	1	5	6	0	1	0	0	0	0	0
Tue	326	7	215	85	1	15	2	0	1	0	0	0	0	0
Wed	273	6	171	76	0	8	9	0	0	0	2	1	0	0
Thu	349	8	222	111	0	2	4	0	0	0	0	2	0	0
Fri	311	6	200	88	4	10	2	0	0	0	1	0	0	0
Sat	212	1	147	50	0	9	5	0	0	0	0	0	0	0
Sun	156	6	111	32	0	0	7	0	0	0	0	0	0	0
5 Day Average														
[--]	307	7	196	88	1	8	5	0	0	0	1	1	0	0
7 Day Average														
[--]	272	6	177	75	1	7	5	0	0	0	0	0	0	0
Total Vehicles														
[--]	1901	42	1238	523	6	49	35	0	2	0	3	3	0	0



SS1195 Pontarddulais					Site	2	Location	Woodville Street (51.719411, -4.040676)							
20 July 2023		to 26 July 2023			Direction	Southbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
20 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0500	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
0600	11	2	8	1	0	0	0	0	0	0	0	0	0	0	
0700	14	0	13	1	0	0	0	0	0	0	0	0	0	0	
0800	26	0	16	10	0	0	0	0	0	0	0	0	0	0	
0900	28	0	18	8	0	1	0	1	0	0	0	0	0	0	
1000	22	1	18	3	0	0	0	0	0	0	0	0	0	0	
1100	26	1	21	4	0	0	0	0	0	0	0	0	0	0	
1200	17	0	15	2	0	0	0	0	0	0	0	0	0	0	
1300	13	0	11	2	0	0	0	0	0	0	0	0	0	0	
1400	21	1	14	6	0	0	0	0	0	0	0	0	0	0	
1500	17	0	13	3	0	0	0	0	0	0	0	1	0	0	
1600	36	1	29	6	0	0	0	0	0	0	0	0	0	0	
1700	24	0	21	3	0	0	0	0	0	0	0	0	0	0	
1800	9	0	9	0	0	0	0	0	0	0	0	0	0	0	
1900	35	1	33	1	0	0	0	0	0	0	0	0	0	0	
2000	7	0	7	0	0	0	0	0	0	0	0	0	0	0	
2100	10	0	10	0	0	0	0	0	0	0	0	0	0	0	
2200	3	0	3	0	0	0	0	0	0	0	0	0	0	0	
2300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
07-19	253	4	198	48	0	1	0	1	0	0	0	1	0	0	
06-22	316	7	256	50	0	1	0	1	0	0	0	1	0	0	
06-00	320	7	260	50	0	1	0	1	0	0	0	1	0	0	
00-00	324	7	264	50	0	1	0	1	0	0	0	1	0	0	

SS1195 Pontarddulais					Site	2	Location	Woodville Street (51.719411, -4.040676)							
20 July 2023		to 26 July 2023			Direction	Southbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
21 July 2023															
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
0600	16	1	13	2	0	0	0	0	0	0	0	0	0	0	0
0700	16	0	10	6	0	0	0	0	0	0	0	0	0	0	0
0800	25	0	15	10	0	0	0	0	0	0	0	0	0	0	0
0900	17	0	12	4	0	0	0	0	0	0	0	1	0	0	0
1000	24	1	18	4	1	0	0	0	0	0	0	0	0	0	0
1100	11	0	7	4	0	0	0	0	0	0	0	0	0	0	0
1200	21	0	19	2	0	0	0	0	0	0	0	0	0	0	0
1300	29	0	22	7	0	0	0	0	0	0	0	0	0	0	0
1400	22	1	19	1	0	1	0	0	0	0	0	0	0	0	0
1500	26	0	23	2	0	0	0	0	0	0	0	1	0	0	0
1600	26	0	17	9	0	0	0	0	0	0	0	0	0	0	0
1700	20	0	19	1	0	0	0	0	0	0	0	0	0	0	0
1800	11	0	10	1	0	0	0	0	0	0	0	0	0	0	0
1900	22	0	20	2	0	0	0	0	0	0	0	0	0	0	0
2000	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0
2100	4	1	2	1	0	0	0	0	0	0	0	0	0	0	0
2200	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	248	2	191	51	1	1	0	0	0	0	0	2	0	0	0
06-22	299	4	235	56	1	1	0	0	0	0	0	2	0	0	0
06-00	301	4	237	56	1	1	0	0	0	0	0	2	0	0	0
00-00	304	4	240	56	1	1	0	0	0	0	0	2	0	0	0

SS1195 Pontarddulais						Site	2	Location	Woodville Street (51.719411, -4.040676)						
20 July 2023		to				26 July 2023		Direction	Southbound						
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
24 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0500	4	0	4	0	0	0	0	0	0	0	0	0	0	0	
0600	7	0	6	0	0	0	1	0	0	0	0	0	0	0	
0700	12	0	10	2	0	0	0	0	0	0	0	0	0	0	
0800	31	0	16	14	0	1	0	0	0	0	0	0	0	0	
0900	11	0	9	2	0	0	0	0	0	0	0	0	0	0	
1000	14	0	14	0	0	0	0	0	0	0	0	0	0	0	
1100	27	0	23	4	0	0	0	0	0	0	0	0	0	0	
1200	17	0	14	2	0	0	1	0	0	0	0	0	0	0	
1300	20	1	15	4	0	0	0	0	0	0	0	0	0	0	
1400	17	1	13	3	0	0	0	0	0	0	0	0	0	0	
1500	18	0	15	3	0	0	0	0	0	0	0	0	0	0	
1600	31	0	25	6	0	0	0	0	0	0	0	0	0	0	
1700	25	1	21	3	0	0	0	0	0	0	0	0	0	0	
1800	14	2	12	0	0	0	0	0	0	0	0	0	0	0	
1900	7	0	7	0	0	0	0	0	0	0	0	0	0	0	
2000	8	0	8	0	0	0	0	0	0	0	0	0	0	0	
2100	4	0	4	0	0	0	0	0	0	0	0	0	0	0	
2200	4	0	4	0	0	0	0	0	0	0	0	0	0	0	
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07-19	237	5	187	43	0	1	1	0	0	0	0	0	0	0	
06-22	263	5	212	43	0	1	2	0	0	0	0	0	0	0	
06-00	267	5	216	43	0	1	2	0	0	0	0	0	0	0	
00-00	273	6	221	43	0	1	2	0	0	0	0	0	0	0	

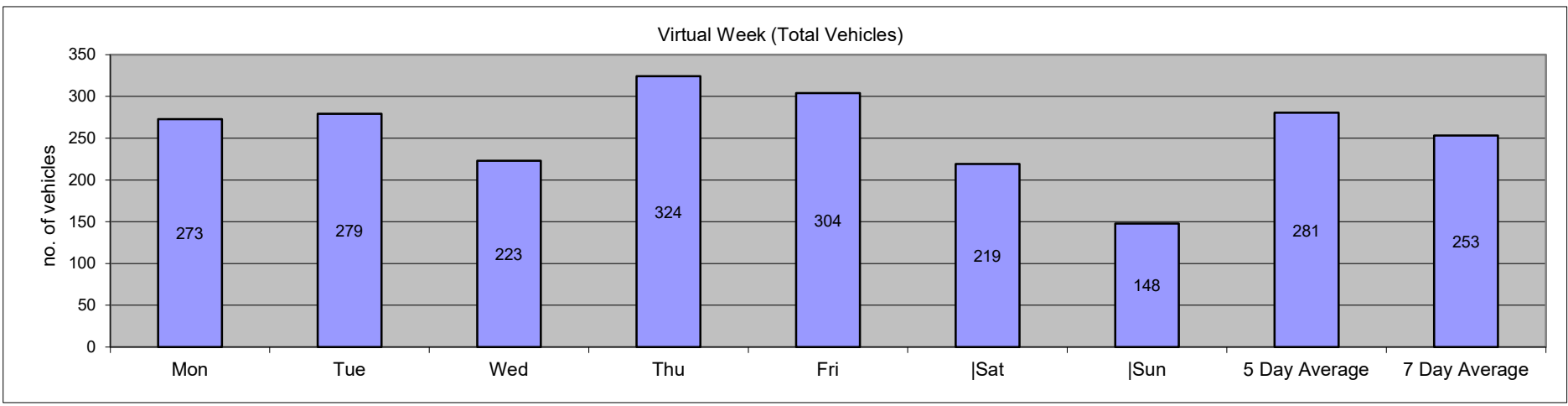
SS1195 Pontarddulais		Site	2	Location	Woodville Street (51.719411, -4.040676)										
20 July 2023		to	26 July 2023	Direction	Southbound										
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE			
												MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
25 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
0600	5	0	4	1	0	0	0	0	0	0	0	0	0	0	0
0700	14	0	11	3	0	0	0	0	0	0	0	0	0	0	0
0800	26	3	13	9	0	0	1	0	0	0	0	0	0	0	0
0900	16	0	11	2	0	2	1	0	0	0	0	0	0	0	0
1000	17	0	14	2	0	0	1	0	0	0	0	0	0	0	0
1100	12	0	9	3	0	0	0	0	0	0	0	0	0	0	0
1200	12	0	10	2	0	0	0	0	0	0	0	0	0	0	0
1300	21	1	12	7	0	0	0	0	1	0	0	0	0	0	0
1400	18	0	16	2	0	0	0	0	0	0	0	0	0	0	0
1500	16	0	13	3	0	0	0	0	0	0	0	0	0	0	0
1600	29	1	22	5	0	0	0	1	0	0	0	0	0	0	0
1700	33	1	29	3	0	0	0	0	0	0	0	0	0	0	0
1800	23	0	23	0	0	0	0	0	0	0	0	0	0	0	0
1900	26	0	26	0	0	0	0	0	0	0	0	0	0	0	0
2000	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0
2100	4	0	3	0	0	0	0	0	0	1	0	0	0	0	0
2200	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	237	6	183	41	0	2	3	1	1	0	0	0	0	0	0
06-22	275	6	218	43	0	2	3	1	1	1	0	0	0	0	0
06-00	276	6	219	43	0	2	3	1	1	1	0	0	0	0	0
00-00	279	6	222	43	0	2	3	1	1	1	0	0	0	0	0

SS1195 Pontarddulais					Site	2	Location	Woodville Street (51.719411, -4.040676)								
20 July 2023		to			26 July 2023			Direction	Southbound							
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC		
26 July 2023																
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0500	2	0	2	0	0	0	0	0	0	0	0	0	0	0		
0600	7	0	7	0	0	0	0	0	0	0	0	0	0	0		
0700	8	0	7	0	0	1	0	0	0	0	0	0	0	0		
0800	18	0	10	8	0	0	0	0	0	0	0	0	0	0		
0900	15	0	11	3	0	0	0	0	1	0	0	0	0	0		
1000	18	0	15	3	0	0	0	0	0	0	0	0	0	0		
1100	19	0	18	1	0	0	0	0	0	0	0	0	0	0		
1200	23	0	19	4	0	0	0	0	0	0	0	0	0	0		
1300	16	0	13	3	0	0	0	0	0	0	0	0	0	0		
1400	13	0	8	4	0	0	0	0	0	0	0	1	0	0		
1500	12	0	11	1	0	0	0	0	0	0	0	0	0	0		
1600	13	1	11	1	0	0	0	0	0	0	0	0	0	0		
1700	25	0	23	2	0	0	0	0	0	0	0	0	0	0		
1800	12	0	11	1	0	0	0	0	0	0	0	0	0	0		
1900	4	0	4	0	0	0	0	0	0	0	0	0	0	0		
2000	9	0	8	0	0	0	0	0	1	0	0	0	0	0		
2100	5	0	4	1	0	0	0	0	0	0	0	0	0	0		
2200	1	0	1	0	0	0	0	0	0	0	0	0	0	0		
2300	3	0	3	0	0	0	0	0	0	0	0	0	0	0		
07-19	192	1	157	31	0	1	0	0	1	0	0	1	0	0		
06-22	217	1	180	32	0	1	0	0	2	0	0	1	0	0		
06-00	221	1	184	32	0	1	0	0	2	0	0	1	0	0		
00-00	223	1	186	32	0	1	0	0	2	0	0	1	0	0		

SS1195 Pontarddulais					Site	2	Location	Woodville Street (51.719411, -4.040676)							
20 July 2023		to 26 July 2023			Direction	Southbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
Average Day															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0500	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
0600	7	1	6	1	0	0	0	0	0	0	0	0	0	0	
0700	10	0	7	2	0	0	0	0	0	0	0	0	0	0	
0800	20	0	12	7	0	0	0	0	0	0	0	0	0	0	
0900	15	0	11	3	0	0	0	0	0	0	0	0	0	0	
1000	20	0	17	2	0	0	0	0	0	0	0	0	0	0	
1100	18	0	16	3	0	0	0	0	0	0	0	0	0	0	
1200	17	0	15	2	0	0	0	0	0	0	0	0	0	0	
1300	18	0	14	4	0	0	0	0	0	0	0	0	0	0	
1400	16	0	13	2	0	0	0	0	0	0	0	0	0	0	
1500	19	0	16	3	0	0	0	0	0	0	0	0	0	0	
1600	22	1	17	4	0	0	0	0	0	0	0	0	0	0	
1700	21	0	19	2	0	0	0	0	0	0	0	0	0	0	
1800	12	0	11	0	0	0	0	0	0	0	0	0	0	0	
1900	16	0	15	0	0	0	0	0	0	0	0	0	0	0	
2000	7	0	7	0	0	0	0	0	0	0	0	0	0	0	
2100	5	0	4	0	0	0	0	0	0	0	0	0	0	0	
2200	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
2300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
07-19	210	3	170	34	0	1	1	0	0	0	0	1	0	0	
06-22	245	4	202	36	0	1	1	0	0	0	0	1	0	0	
06-00	248	4	206	36	0	1	1	0	0	0	0	1	0	0	
00-00	253	4	210	36	0	1	1	0	0	0	0	1	0	0	

SS1195 Pontarddulais Site 2 Location Woodville Street (51.719411, -4.040676)
 20 July 2023 to 26 July 2023 Direction Southbound

TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC
Virtual Week														
Mon	273	6	221	43	0	1	2	0	0	0	0	0	0	0
Tue	279	6	222	43	0	2	3	1	1	1	0	0	0	0
Wed	223	1	186	32	0	1	0	0	2	0	0	1	0	0
Thu	324	7	264	50	0	1	0	1	0	0	0	1	0	0
Fri	304	4	240	56	1	1	0	0	0	0	0	2	0	0
Sat	219	1	198	20	0	0	0	0	0	0	0	0	0	0
Sun	148	2	138	8	0	0	0	0	0	0	0	0	0	0
5 Day Average														
[--]	281	5	227	45	0	1	1	0	1	0	0	1	0	0
7 Day Average														
[--]	253	4	210	36	0	1	1	0	0	0	0	1	0	0
Total Vehicles														
[--]	1770	27	1469	252	1	6	5	2	3	1	0	4	0	0



Job Number & Title: SS1195 Pontarddulais

Site Location: Tyn-y-Bonau Road

Survey Date: 20 July 2023

Site Location Plan



SS1195 Pontarddlais																		
JULY 2023																		
Site	Location	Lat / Long	Direction	Start Date	End Date	Posted Speed Limit (PSL)	Total Vehicles	5 Day Ave.	7 Day Ave.	Posted Speed Limit (PSL)		110%(PSL) + 2 (SL1)		DfT PSL+15 (SL2)		Mean Speed	85%ile Speed	
										>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%			
3	Tyn-y-Bonau Road	51.718680, -4.039376	Northbound	20 July 2023	26 July 2023	30	2173	362	310	92	4.2	10	0.5	1	0.0	21.0	26.6	
			Southbound	20 July 2023	26 July 2023		2328	393	333	74	3.2	9	0.4	2	0.1	20.8	25.7	
			Two-Way	20 July 2023	26 July 2023		4501	756	643	166	4	19	0	3	0	21	26	



SS1195 Pontarddulais		Site	3	Location	Tyn-y-Bonau Road (51.718680, -4.039376)										
20 July 2023		to	26 July 2023		Direction	Northbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
20 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0600	14	2	8	3	0	0	0	0	0	0	1	0	0	0	
0700	20	0	11	9	0	0	0	0	0	0	0	0	0	0	
0800	31	2	19	10	0	0	0	0	0	0	0	0	0	0	
0900	33	0	24	7	0	1	1	0	0	0	0	0	0	0	
1000	26	0	18	6	0	2	0	0	0	0	0	0	0	0	
1100	25	0	14	8	0	2	0	0	0	0	1	0	0	0	
1200	26	2	18	5	0	0	0	0	0	0	1	0	0	0	
1300	27	0	17	8	0	0	2	0	0	0	0	0	0	0	
1400	29	0	22	6	0	1	0	0	0	0	0	0	0	0	
1500	42	2	31	8	0	0	1	0	0	0	0	0	0	0	
1600	32	2	22	6	0	2	0	0	0	0	0	0	0	0	
1700	28	0	24	3	0	0	0	0	1	0	0	0	0	0	
1800	22	0	20	2	0	0	0	0	0	0	0	0	0	0	
1900	17	0	15	1	0	0	0	0	0	0	1	0	0	0	
2000	14	1	11	2	0	0	0	0	0	0	0	0	0	0	
2100	8	0	8	0	0	0	0	0	0	0	0	0	0	0	
2200	5	0	5	0	0	0	0	0	0	0	0	0	0	0	
2300	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
07-19	341	8	240	78	0	8	4	0	1	0	2	0	0	0	
06-22	394	11	282	84	0	8	4	0	1	0	4	0	0	0	
06-00	401	11	289	84	0	8	4	0	1	0	4	0	0	0	
00-00	404	11	292	84	0	8	4	0	1	0	4	0	0	0	

SS1195 Pontarddulais					Site	3	Location									Tyn-y-Bonau Road (51.718680, -4.039376)	
20 July 2023		to			26 July 2023		Direction									Northbound	
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC			SEVEN OR MORE AXLE ARTIC		
												SIX AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC			
21 July 2023																	
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0100	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0300	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		
0400	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		
0500	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0		
0600	13	1	9	3	0	0	0	0	0	0	0	0	0	0	0		
0700	15	0	10	5	0	0	0	0	0	0	0	0	0	0	0		
0800	30	1	19	8	0	0	2	0	0	0	0	0	0	0	0		
0900	27	1	15	8	0	2	1	0	0	0	0	0	0	0	0		
1000	31	0	22	9	0	0	0	0	0	0	0	0	0	0	0		
1100	25	0	22	3	0	0	0	0	0	0	0	0	0	0	0		
1200	30	1	20	7	0	2	0	0	0	0	0	0	0	0	0		
1300	28	1	15	9	0	3	0	0	0	0	0	0	0	0	0		
1400	35	0	29	5	0	1	0	0	0	0	0	0	0	0	0		
1500	32	0	27	5	0	0	0	0	0	0	0	0	0	0	0		
1600	25	1	18	6	0	0	0	0	0	0	0	0	0	0	0		
1700	35	0	32	3	0	0	0	0	0	0	0	0	0	0	0		
1800	17	0	15	2	0	0	0	0	0	0	0	0	0	0	0		
1900	13	0	9	3	0	0	0	0	1	0	0	0	0	0	0		
2000	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0		
2100	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0		
2200	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		
2300	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		
07-19	330	5	244	70	0	8	3	0	0	0	0	0	0	0	0		
06-22	372	6	278	76	0	8	3	0	1	0	0	0	0	0	0		
06-00	376	6	282	76	0	8	3	0	1	0	0	0	0	0	0		
00-00	385	6	291	76	0	8	3	0	1	0	0	0	0	0	0		

SS1195 Pontarddulais		Site	3	Location	Tyn-y-Bonau Road (51.718680, -4.039376)										
20 July 2023		to	26 July 2023	Direction	Northbound										
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
23 July 2023															
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0100	4	0	3	1	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0700	4	0	3	1	0	0	0	0	0	0	0	0	0	0	
0800	7	0	5	2	0	0	0	0	0	0	0	0	0	0	
0900	8	0	8	0	0	0	0	0	0	0	0	0	0	0	
1000	19	0	14	5	0	0	0	0	0	0	0	0	0	0	
1100	20	0	18	1	0	0	1	0	0	0	0	0	0	0	
1200	17	0	17	0	0	0	0	0	0	0	0	0	0	0	
1300	17	0	14	3	0	0	0	0	0	0	0	0	0	0	
1400	10	0	9	1	0	0	0	0	0	0	0	0	0	0	
1500	19	0	16	3	0	0	0	0	0	0	0	0	0	0	
1600	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07-19	123	0	106	16	0	0	1	0	0	0	0	0	0	0	
06-22	123	0	106	16	0	0	1	0	0	0	0	0	0	0	
06-00	123	0	106	16	0	0	1	0	0	0	0	0	0	0	
00-00	128	0	110	17	0	0	1	0	0	0	0	0	0	0	

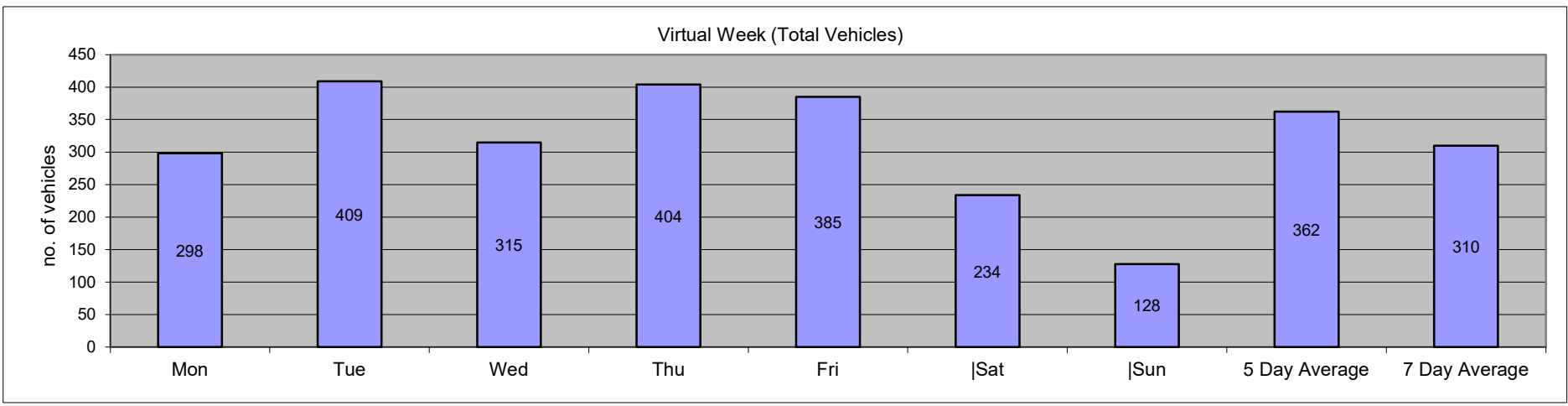
SS1195 Pontarddulais					Site	3	Location	Tyn-y-Bonau Road (51.718680, -4.039376)							
20 July 2023		to 26 July 2023			Direction	Northbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
24 July 2023															
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	17	0	12	5	0	0	0	0	0	0	0	0	0	0	0
1100	39	0	31	8	0	0	0	0	0	0	0	0	0	0	0
1200	26	0	20	3	0	3	0	0	0	0	0	0	0	0	0
1300	35	0	26	8	0	0	0	0	1	0	0	0	0	0	0
1400	24	0	17	7	0	0	0	0	0	0	0	0	0	0	0
1500	30	1	18	11	0	0	0	0	0	0	0	0	0	0	0
1600	32	2	27	3	0	0	0	0	0	0	0	0	0	0	0
1700	33	0	24	9	0	0	0	0	0	0	0	0	0	0	0
1800	24	1	22	1	0	0	0	0	0	0	0	0	0	0	0
1900	18	0	17	1	0	0	0	0	0	0	0	0	0	0	0
2000	10	0	7	3	0	0	0	0	0	0	0	0	0	0	0
2100	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0
2200	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
2300	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
07-19	260	4	197	55	0	3	0	0	1	0	0	0	0	0	0
06-22	294	4	227	59	0	3	0	0	1	0	0	0	0	0	0
06-00	298	4	231	59	0	3	0	0	1	0	0	0	0	0	0
00-00	298	4	231	59	0	3	0	0	1	0	0	0	0	0	0

SS1195 Pontarddulais		Site	3	Location	Tyn-y-Bonau Road (51.718680, -4.039376)										
20 July 2023		to	26 July 2023	Direction	Northbound										
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
25 July 2023															
0000	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	3	0	3	0	0	0	0	0	0	0	0	0	0	0	
0500	3	0	2	1	0	0	0	0	0	0	0	0	0	0	
0600	8	1	6	0	0	0	1	0	0	0	0	0	0	0	
0700	22	0	16	6	0	0	0	0	0	0	0	0	0	0	
0800	34	1	20	10	0	0	3	0	0	0	0	0	0	0	
0900	28	1	14	9	0	3	1	0	0	0	0	0	0	0	
1000	44	1	35	6	0	0	1	0	0	0	0	1	0	0	
1100	25	1	15	6	0	2	1	0	0	0	0	0	0	0	
1200	28	2	18	6	0	1	1	0	0	0	0	0	0	0	
1300	20	1	14	3	1	0	1	0	0	0	0	0	0	0	
1400	28	1	19	7	0	1	0	0	0	0	0	0	0	0	
1500	33	2	21	8	0	1	0	0	0	0	1	0	0	0	
1600	39	2	29	8	0	0	0	0	0	0	0	0	0	0	
1700	44	0	40	4	0	0	0	0	0	0	0	0	0	0	
1800	7	0	6	1	0	0	0	0	0	0	0	0	0	0	
1900	19	0	17	2	0	0	0	0	0	0	0	0	0	0	
2000	8	0	7	1	0	0	0	0	0	0	0	0	0	0	
2100	7	1	5	1	0	0	0	0	0	0	0	0	0	0	
2200	5	0	5	0	0	0	0	0	0	0	0	0	0	0	
2300	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
07-19	352	12	247	74	1	8	8	0	0	0	1	1	0	0	
06-22	394	14	282	78	1	8	9	0	0	0	1	1	0	0	
06-00	401	14	289	78	1	8	9	0	0	0	1	1	0	0	
00-00	409	14	296	79	1	8	9	0	0	0	1	1	0	0	

SS1195 Pontarddulais					Site	3	Location	Tyn-y-Bonau Road (51.718680, -4.039376)							
20 July 2023		to			26 July 2023		Direction	Northbound							
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
26 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0500	4	0	3	1	0	0	0	0	0	0	0	0	0	0	
0600	9	0	7	2	0	0	0	0	0	0	0	0	0	0	
0700	19	0	12	7	0	0	0	0	0	0	0	0	0	0	
0800	24	0	18	4	1	0	0	0	0	0	0	1	0	0	
0900	26	1	17	5	0	3	0	0	0	0	0	0	0	0	
1000	29	0	18	9	0	1	0	0	0	0	0	1	0	0	
1100	17	0	12	3	1	1	0	0	0	0	0	0	0	0	
1200	24	0	14	8	0	2	0	0	0	0	0	0	0	0	
1300	33	0	25	8	0	0	0	0	0	0	0	0	0	0	
1400	23	0	19	3	0	1	0	0	0	0	0	0	0	0	
1500	30	0	24	5	0	0	1	0	0	0	0	0	0	0	
1600	31	0	21	8	0	1	0	0	1	0	0	0	0	0	
1700	26	0	23	3	0	0	0	0	0	0	0	0	0	0	
1800	18	0	16	2	0	0	0	0	0	0	0	0	0	0	
1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07-19	300	1	219	65	2	9	1	0	1	0	0	2	0	0	
06-22	309	1	226	67	2	9	1	0	1	0	0	2	0	0	
06-00	309	1	226	67	2	9	1	0	1	0	0	2	0	0	
00-00	315	1	231	68	2	9	1	0	1	0	0	2	0	0	

SS1195 Pontarddulais Site 3 Location Tyn-y-Bonau Road (51.718680, -4.039376)
 20 July 2023 to 26 July 2023 Direction Northbound

TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC
Virtual Week														
Mon	298	4	231	59	0	3	0	0	1	0	0	0	0	0
Tue	409	14	296	79	1	8	9	0	0	0	1	1	0	0
Wed	315	1	231	68	2	9	1	0	1	0	0	2	0	0
Thu	404	11	292	84	0	8	4	0	1	0	4	0	0	0
Fri	385	6	291	76	0	8	3	0	1	0	0	0	0	0
Sat	234	0	202	32	0	0	0	0	0	0	0	0	0	0
Sun	128	0	110	17	0	0	1	0	0	0	0	0	0	0
5 Day Average														
[--]	362	7	268	73	1	7	3	0	1	0	1	1	0	0
7 Day Average														
[--]	310	5	236	59	0	5	3	0	1	0	1	0	0	0
Total Vehicles														
[--]	2173	36	1653	415	3	36	18	0	4	0	5	3	0	0



SS1195 Pontarddulais					Site	3	Location	Tyn-y-Bonau Road (51.718680, -4.039376)							
20 July 2023		to 26 July 2023			Direction	Southbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
20 July 2023															
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0100	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	2	0	1	1	0	0	0	0	0	0	0	0	0	0	
0500	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
0600	10	0	6	3	0	0	0	0	0	0	1	0	0	0	
0700	25	1	17	6	0	1	0	0	0	0	0	0	0	0	
0800	36	1	16	18	0	1	0	0	0	0	0	0	0	0	
0900	33	1	19	12	0	1	0	0	0	0	0	0	0	0	
1000	30	0	20	9	0	1	0	0	0	0	0	0	0	0	
1100	16	3	10	3	0	0	0	0	0	0	0	0	0	0	
1200	38	1	20	13	0	3	0	0	0	0	1	0	0	0	
1300	29	0	22	6	0	0	0	0	0	0	1	0	0	0	
1400	25	0	17	5	0	1	0	0	1	0	0	1	0	0	
1500	30	3	17	8	0	1	1	0	0	0	0	0	0	0	
1600	32	0	23	9	0	0	0	0	0	0	0	0	0	0	
1700	38	2	29	7	0	0	0	0	0	0	0	0	0	0	
1800	33	1	25	7	0	0	0	0	0	0	0	0	0	0	
1900	24	0	21	3	0	0	0	0	0	0	0	0	0	0	
2000	13	0	11	2	0	0	0	0	0	0	0	0	0	0	
2100	6	0	5	1	0	0	0	0	0	0	0	0	0	0	
2200	3	0	3	0	0	0	0	0	0	0	0	0	0	0	
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07-19	365	13	235	103	0	9	1	0	1	0	2	1	0	0	
06-22	418	13	278	112	0	9	1	0	1	0	3	1	0	0	
06-00	421	13	281	112	0	9	1	0	1	0	3	1	0	0	
00-00	426	13	285	113	0	9	1	0	1	0	3	1	0	0	

SS1195 Pontarddulais		Site	3	Location	Tyn-y-Bonau Road (51.718680, -4.039376)										
20 July 2023		to	26 July 2023	Direction	Southbound										
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
21 July 2023															
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0100	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0200	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0500	4	0	4	0	0	0	0	0	0	0	0	0	0	0	
0600	11	0	9	2	0	0	0	0	0	0	0	0	0	0	
0700	18	0	10	7	0	1	0	0	0	0	0	0	0	0	
0800	40	1	21	16	1	0	1	0	0	0	0	0	0	0	
0900	22	0	8	8	2	2	2	0	0	0	0	0	0	0	
1000	35	0	25	9	0	1	0	0	0	0	0	0	0	0	
1100	30	1	24	5	0	0	0	0	0	0	0	0	0	0	
1200	32	1	21	9	0	1	0	0	0	0	0	0	0	0	
1300	22	0	13	5	2	2	0	0	0	0	0	0	0	0	
1400	36	0	27	8	0	1	0	0	0	0	0	0	0	0	
1500	40	1	29	10	0	0	0	0	0	0	0	0	0	0	
1600	24	1	18	5	0	0	0	0	0	0	0	0	0	0	
1700	28	1	24	3	0	0	0	0	0	0	0	0	0	0	
1800	27	0	23	4	0	0	0	0	0	0	0	0	0	0	
1900	20	0	18	2	0	0	0	0	0	0	0	0	0	0	
2000	9	0	9	0	0	0	0	0	0	0	0	0	0	0	
2100	7	0	7	0	0	0	0	0	0	0	0	0	0	0	
2200	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
2300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
07-19	354	6	243	89	5	8	3	0	0	0	0	0	0	0	
06-22	401	6	286	93	5	8	3	0	0	0	0	0	0	0	
06-00	404	6	289	93	5	8	3	0	0	0	0	0	0	0	
00-00	412	6	296	94	5	8	3	0	0	0	0	0	0	0	

SS1195 Pontarddulais					Site	3	Location	Tyn-y-Bonau Road (51.718680, -4.039376)								
20 July 2023		to			26 July 2023			Direction	Southbound							
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC		
23 July 2023																
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0600	1	0	1	0	0	0	0	0	0	0	0	0	0	0		
0700	2	0	2	0	0	0	0	0	0	0	0	0	0	0		
0800	7	0	6	1	0	0	0	0	0	0	0	0	0	0		
0900	9	0	7	2	0	0	0	0	0	0	0	0	0	0		
1000	17	0	15	2	0	0	0	0	0	0	0	0	0	0		
1100	16	0	9	5	0	0	1	0	1	0	0	0	0	0		
1200	29	0	23	6	0	0	0	0	0	0	0	0	0	0		
1300	16	0	12	4	0	0	0	0	0	0	0	0	0	0		
1400	14	0	12	1	0	1	0	0	0	0	0	0	0	0		
1500	11	1	8	2	0	0	0	0	0	0	0	0	0	0		
1600	1	0	1	0	0	0	0	0	0	0	0	0	0	0		
1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07-19	122	1	95	23	0	1	1	0	1	0	0	0	0	0		
06-22	123	1	96	23	0	1	1	0	1	0	0	0	0	0		
06-00	123	1	96	23	0	1	1	0	1	0	0	0	0	0		
00-00	123	1	96	23	0	1	1	0	1	0	0	0	0	0		

SS1195 Pontarddulais		Site	3	Location	Tyn-y-Bonau Road (51.718680, -4.039376)										
20 July 2023		to	26 July 2023	Direction	Southbound										
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
24 July 2023															
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1000	17	0	11	5	0	1	0	0	0	0	0	0	0	0	
1100	31	2	13	15	1	0	0	0	0	0	0	0	0	0	
1200	36	1	29	5	1	0	0	0	0	0	0	0	0	0	
1300	38	0	28	8	0	2	0	0	0	0	0	0	0	0	
1400	24	0	17	6	0	0	0	0	1	0	0	0	0	0	
1500	29	1	20	8	0	0	0	0	0	0	0	0	0	0	
1600	37	0	28	9	0	0	0	0	0	0	0	0	0	0	
1700	31	3	24	4	0	0	0	0	0	0	0	0	0	0	
1800	25	0	16	8	0	1	0	0	0	0	0	0	0	0	
1900	18	0	17	1	0	0	0	0	0	0	0	0	0	0	
2000	13	0	11	2	0	0	0	0	0	0	0	0	0	0	
2100	7	0	5	2	0	0	0	0	0	0	0	0	0	0	
2200	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
2300	2	0	2	0	0	0	0	0	0	0	0	0	0	0	
07-19	268	7	186	68	2	4	0	0	1	0	0	0	0	0	
06-22	306	7	219	73	2	4	0	0	1	0	0	0	0	0	
06-00	310	7	223	73	2	4	0	0	1	0	0	0	0	0	
00-00	310	7	223	73	2	4	0	0	1	0	0	0	0	0	

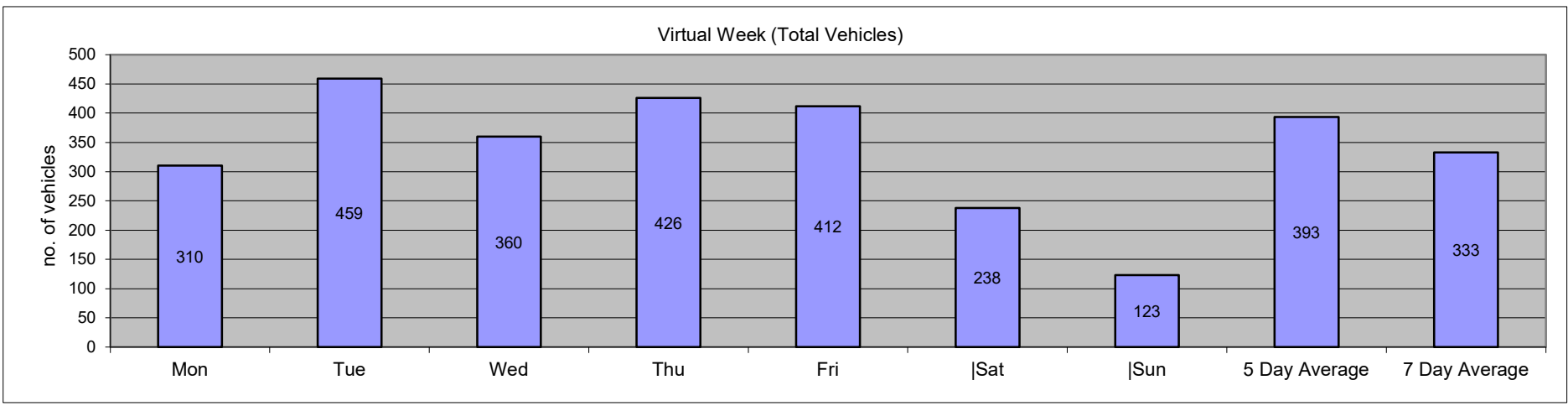
SS1195 Pontarddulais		Site	3	Location	Tyn-y-Bonau Road (51.718680, -4.039376)											
20 July 2023		to	26 July 2023		Direction	Southbound										
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC		
25 July 2023																
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0		
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0200	1	0	0	1	0	0	0	0	0	0	0	0	0	0		
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0400	2	0	1	1	0	0	0	0	0	0	0	0	0	0		
0500	5	0	5	0	0	0	0	0	0	0	0	0	0	0		
0600	8	0	8	0	0	0	0	0	0	0	0	0	0	0		
0700	26	1	15	9	0	0	1	0	0	0	0	0	0	0		
0800	36	0	11	20	0	4	1	0	0	0	0	0	0	0		
0900	27	0	16	10	0	1	0	0	0	0	0	0	0	0		
1000	50	0	37	10	0	2	0	0	0	0	0	1	0	0		
1100	44	1	31	9	0	3	0	0	0	0	0	0	0	0		
1200	37	2	23	11	1	0	0	0	0	0	0	0	0	0		
1300	36	3	25	5	1	1	1	0	0	0	0	0	0	0		
1400	25	1	13	10	0	1	0	0	0	0	0	0	0	0		
1500	19	1	13	5	0	0	0	0	0	0	0	0	0	0		
1600	39	1	29	9	0	0	0	0	0	0	0	0	0	0		
1700	43	3	32	7	0	0	0	0	0	0	0	1	0	0		
1800	20	0	17	3	0	0	0	0	0	0	0	0	0	0		
1900	19	0	15	4	0	0	0	0	0	0	0	0	0	0		
2000	12	0	11	1	0	0	0	0	0	0	0	0	0	0		
2100	4	0	4	0	0	0	0	0	0	0	0	0	0	0		
2200	2	0	2	0	0	0	0	0	0	0	0	0	0	0		
2300	3	0	3	0	0	0	0	0	0	0	0	0	0	0		
07-19	402	13	262	108	2	12	3	0	0	0	0	2	0	0		
06-22	445	13	300	113	2	12	3	0	0	0	0	2	0	0		
06-00	450	13	305	113	2	12	3	0	0	0	0	2	0	0		
00-00	459	13	312	115	2	12	3	0	0	0	0	2	0	0		

SS1195 Pontarddulais		Site	3	Location	Tyn-y-Bonau Road (51.718680, -4.039376)										
20 July 2023		to	26 July 2023	Direction	Southbound										
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
26 July 2023															
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0500	5	0	4	1	0	0	0	0	0	0	0	0	0	0	
0600	8	0	6	2	0	0	0	0	0	0	0	0	0	0	
0700	23	1	18	4	0	0	0	0	0	0	0	0	0	0	
0800	34	2	12	17	0	3	0	0	0	0	0	0	0	0	
0900	36	1	23	10	1	0	0	0	0	0	0	1	0	0	
1000	29	0	19	7	0	2	0	0	0	0	0	1	0	0	
1100	23	0	16	6	1	0	0	0	0	0	0	0	0	0	
1200	35	0	23	10	0	2	0	0	0	0	0	0	0	0	
1300	27	0	19	7	0	1	0	0	0	0	0	0	0	0	
1400	35	0	24	11	0	0	0	0	0	0	0	0	0	0	
1500	28	2	19	6	0	0	1	0	0	0	0	0	0	0	
1600	33	2	16	15	0	0	0	0	0	0	0	0	0	0	
1700	28	0	24	4	0	0	0	0	0	0	0	0	0	0	
1800	14	0	10	4	0	0	0	0	0	0	0	0	0	0	
1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07-19	345	8	223	101	2	8	1	0	0	0	0	2	0	0	
06-22	353	8	229	103	2	8	1	0	0	0	0	2	0	0	
06-00	353	8	229	103	2	8	1	0	0	0	0	2	0	0	
00-00	360	8	235	104	2	8	1	0	0	0	0	2	0	0	

SS1195 Pontarddulais		Site	3	Location	Tyn-y-Bonau Road (51.718680, -4.039376)										
20 July 2023		to	26 July 2023	Direction	Southbound										
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC	
Average Day															
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
0500	3	0	2	0	0	0	0	0	0	0	0	0	0	0	
0600	6	0	4	1	0	0	0	0	0	0	0	0	0	0	
0700	15	0	10	4	0	0	0	0	0	0	0	0	0	0	
0800	24	1	11	11	0	1	0	0	0	0	0	0	0	0	
0900	22	0	13	8	0	1	0	0	0	0	0	0	0	0	
1000	29	0	21	7	0	1	0	0	0	0	0	0	0	0	
1100	29	1	18	9	0	0	0	0	0	0	0	0	0	0	
1200	33	1	23	8	0	1	0	0	0	0	0	0	0	0	
1300	25	0	18	5	0	1	0	0	0	0	0	0	0	0	
1400	24	0	17	6	0	1	0	0	0	0	0	0	0	0	
1500	24	1	17	6	0	0	0	0	0	0	0	0	0	0	
1600	25	1	18	7	0	0	0	0	0	0	0	0	0	0	
1700	26	1	21	4	0	0	0	0	0	0	0	0	0	0	
1800	18	0	14	4	0	0	0	0	0	0	0	0	0	0	
1900	13	0	11	2	0	0	0	0	0	0	0	0	0	0	
2000	8	0	7	1	0	0	0	0	0	0	0	0	0	0	
2100	4	0	3	0	0	0	0	0	0	0	0	0	0	0	
2200	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
2300	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
07-19	294	7	199	78	2	6	1	0	0	0	0	1	0	0	
06-22	325	7	226	82	2	6	1	0	0	0	0	1	0	0	
06-00	328	7	228	82	2	6	1	0	0	0	0	1	0	0	
00-00	333	7	232	83	2	6	1	0	0	0	0	1	0	0	

SS1195 Pontarddulais Site 3 Location Tyn-y-Bonau Road (51.718680, -4.039376)
 20 July 2023 to 26 July 2023 Direction Southbound

TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	CARS OR CAR-BASED LGV	LIGHT GOODS VEHICLES	BUSES	TWO AXLE, SIX TYRE, RIGID	THREE AXLE RIGID	FOUR OR MORE AXLE RIGID	FOUR OR LESS AXLE ARTIC	FIVE AXLE ARTIC	SIX OR MORE AXLE ARTIC	FIVE OR LESS AXLE MULTI-TRAILER ARTIC	SIX AXLE MULTI-TRAILER ARTIC	SEVEN OR MORE AXLE ARTIC
Virtual Week														
Mon	310	7	223	73	2	4	0	0	1	0	0	0	0	0
Tue	459	13	312	115	2	12	3	0	0	0	0	2	0	0
Wed	360	8	235	104	2	8	1	0	0	0	0	2	0	0
Thu	426	13	285	113	0	9	1	0	1	0	3	1	0	0
Fri	412	6	296	94	5	8	3	0	0	0	0	0	0	0
Sat	238	0	178	58	0	2	0	0	0	0	0	0	0	0
Sun	123	1	96	23	0	1	1	0	1	0	0	0	0	0
5 Day Average														
[--]	393	9	270	100	2	8	2	0	0	0	1	1	0	0
7 Day Average														
[--]	333	7	232	83	2	6	1	0	0	0	0	1	0	0
Total Vehicles														
[--]	2328	48	1625	580	11	44	9	0	3	0	3	5	0	0





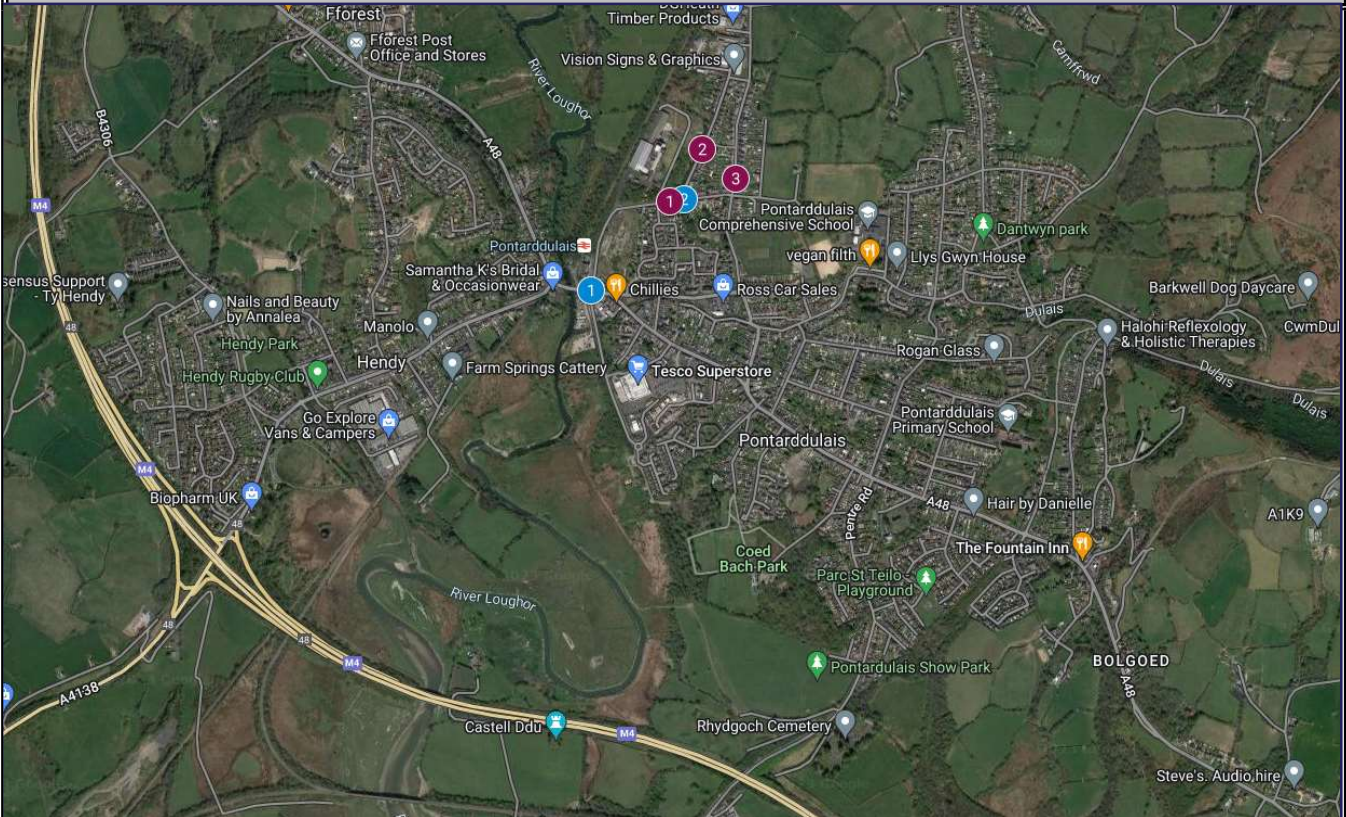
THE SEVERNSIDE GROUP
Transportation Data Collection
Traffic Management
Inductive Loop Cutting
Fabrication

Head Office: 73 Porth-Y-Castell, Barry, Vale of Glam CF62 6QE
Office: Unit 17, Atlantic Business Park, Hayes Lane, Barry, Vale of Glam CF64 5XU
Severnside Transportation Data Collection is registered Ltd Company
Company Registration Number: 11503589
VAT Number: 306 4112 48

Survey Overview

Job No'/Job Name	SS1195 Pontarddulais
Date	Thursday 20 July 2023
Time	0700-1000 & 1500-1900
Survey Type	Classified JTC & Maximum queue Lengths
Weather Conditions	

Overview Map



Comments

3 Hour Totals (am)	41	2	0	0	1	0	0	44
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1500-1515	6	0	0	0	0	0	0	6
1515-1530	2	0	0	0	0	0	0	2
1530-1545	5	0	0	0	0	0	0	5
1545-1500	5	0	0	0	1	0	0	6

Hourly Total	18	0	0	0	1	0	0	19
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1600-1615	5	0	0	0	0	0	0	5
1615-1630	3	0	0	0	0	1	0	4
1630-1645	3	0	0	0	0	0	0	3
1645-1700	1	1	0	0	0	0	0	2

Hourly Total	12	1	0	0	0	1	0	14
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1700-1715	2	0	0	0	0	0	0	2
1715-1730	8	0	0	0	0	0	0	8
1730-1745	4	0	0	0	0	0	0	4
1745-1800	2	0	0	0	0	0	0	2

Hourly Total	16	0	0	0	0	0	0	16
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1800-1815	3	0	0	0	0	0	0	3
1815-1830	2	0	0	0	0	0	0	2
1830-1845	2	0	0	0	0	0	0	2
1845-1900	1	0	0	0	0	0	0	1

Hourly Total	8	0	0	0	0	0	0	8
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4 Hour Totals (pm)	54	1	0	0	1	1	0	57
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Day Total	95	3	0	0	2	1	0	101
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Arm C - Arm A								
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
0700-0715	0	0	0	0	0	0	0	0
0715-0730	0	0	0	0	0	0	0	0
0730-0745	1	2	0	0	0	0	0	3
0745-0800	4	1	0	0	0	0	0	5
Hourly Total	5	3	0	0	0	0	0	8
0800-0815	1	0	0	0	0	0	0	1
0815-0830	2	0	0	0	0	0	0	2
0830-0845	2	0	0	0	0	0	0	2
0845-0900	2	0	0	0	0	0	0	2
Hourly Total	7	0	0	0	0	0	0	7
0900-0915	2	1	0	0	0	0	0	3
0915-0930	2	0	0	0	0	0	0	2
0930-0945	4	0	0	0	0	0	0	4
0945-1000	1	0	0	0	0	0	0	1
Hourly Total	9	1	0	0	0	0	0	10

3 Hour Totals (am)	21	4	0	0	0	0	0	25
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1500-1515	0	0	0	0	0	0	0	0
1515-1530	2	0	0	0	0	0	0	2
1530-1545	3	0	0	0	0	0	0	3
1545-1500	6	0	0	0	0	0	0	6

Hourly Total	11	0	0	0	0	0	0	11
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1600-1615	3	0	0	0	0	0	0	3
1615-1630	5	0	0	0	0	0	0	5
1630-1645	3	0	0	0	0	0	0	3
1645-1700	4	0	0	0	0	0	0	4

Hourly Total	15	0	0	0	0	0	0	15
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1700-1715	9	1	0	0	0	0	0	10
1715-1730	5	0	0	0	0	0	0	5
1730-1745	6	0	0	0	0	0	0	6
1745-1800	8	1	0	0	0	0	0	9

Hourly Total	28	2	0	0	0	0	0	30
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1800-1815	3	0	0	0	0	0	0	3
1815-1830	5	0	0	0	0	0	0	5
1830-1845	4	1	0	0	0	0	0	5
1845-1900	2	0	0	0	0	0	0	2

Hourly Total	14	1	0	0	0	0	0	15
4 Hour Totals (pm)	68	3	0	0	0	0	0	71

Day Total	89	7	0	0	0	0	0	96
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	Arm D - Arm A							Total
	Car	LGV	OGV1	OGV2	PSV	MC	PC	
0700-0715	1	2	0	0	0	0	0	3
0715-0730	4	2	1	0	0	0	0	7
0730-0745	5	3	0	0	0	0	0	8
0745-0800	6	7	0	0	0	0	0	13
Hourly Total	16	14	1	0	0	0	0	31
0800-0815	7	3	0	0	0	0	0	10
0815-0830	4	0	0	0	0	0	0	4
0830-0845	4	3	0	0	0	0	0	7
0845-0900	11	4	1	0	0	0	0	16
Hourly Total	26	10	1	0	0	0	0	37
0900-0915	3	2	1	0	0	0	0	6
0915-0930	11	2	0	0	0	0	0	13
0930-0945	8	0	0	0	0	0	0	8
0945-1000	6	4	0	1	0	0	0	11
Hourly Total	28	8	1	1	0	0	0	38

3 Hour Totals (am)	70	32	3	1	0	0	0	106
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1500-1515	7	1	1	0	0	0	0	9
1515-1530	15	3	0	0	0	0	0	18
1530-1545	5	4	0	0	0	1	0	10
1545-1500	12	2	0	1	0	0	0	15
Hourly Total	39	10	1	1	0	1	0	52
1600-1615	9	2	0	0	0	0	0	11
1615-1630	12	2	0	0	0	0	0	14
1630-1645	9	4	0	0	0	0	0	13
1645-1700	10	4	1	0	0	0	0	15
Hourly Total	40	12	1	0	0	0	0	53
1700-1715	8	0	0	1	0	0	0	9
1715-1730	16	1	1	0	0	0	0	18
1730-1745	12	2	0	0	0	0	0	14
1745-1800	13	2	0	0	0	0	0	15
Hourly Total	49	5	1	1	0	0	0	56
1800-1815	11	0	0	0	0	0	0	11
1815-1830	8	0	0	0	0	0	0	8
1830-1845	4	0	0	0	0	0	0	4
1845-1900	6	0	0	0	0	0	0	6
Hourly Total	29	0	0	0	0	0	0	29

4 Hour Totals (pm)	157	27	3	2	0	1	0	190
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Day Total	227	59	6	3	0	1	0	296
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	Origin - Arm A							Total
	Car	LGV	OGV1	OGV2	PSV	MC	PC	
0700-0715	13	1	0	0	0	0	0	14
0715-0730	10	3	0	0	0	0	0	13
0730-0745	16	3	0	0	0	0	0	19
0745-0800	11	7	1	0	0	0	0	19
Hourly Total	50	14	1	0	0	0	0	65
0800-0815	16	10	0	0	0	0	0	26
0815-0830	18	0	0	0	0	0	0	18
0830-0845	17	9	1	0	0	0	0	27
0845-0900	11	2	2	0	0	0	0	15
Hourly Total	62	21	3	0	0	0	0	86
0900-0915	10	3	0	0	0	0	0	13
0915-0930	17	6	3	1	0	0	0	27

0930-0945	19	6	0	0	0	0	0	25
0945-1000	11	1	0	0	0	1	0	13
Hourly Total	57	16	3	1	0	1	0	78

3 Hour Totals (am)	169	51	7	1	0	1	0	229
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1500-1515	13	1	2	0	0	0	0	16
1515-1530	14	3	0	1	0	0	0	18
1530-1545	16	2	0	0	0	0	0	18
1545-1500	12	1	0	0	0	0	0	13

Hourly Total	55	7	2	1	0	0	0	65
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1600-1615	23	2	0	0	0	0	0	25
1615-1630	10	3	1	0	0	0	0	14
1630-1645	28	4	0	0	0	0	0	32
1645-1700	16	4	0	0	0	1	0	21

Hourly Total	77	13	1	0	0	1	0	92
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1700-1715	25	4	0	0	0	0	0	29
1715-1730	25	4	0	0	0	0	0	29
1730-1745	25	7	0	0	0	0	0	32
1745-1800	22	3	0	0	0	0	0	25

Hourly Total	97	18	0	0	0	0	0	115
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1800-1815	23	1	0	0	0	0	0	24
1815-1830	11	1	0	0	0	0	0	12
1830-1845	12	0	0	0	0	0	0	12
1845-1900	5	1	0	0	0	0	0	6

Hourly Total	51	3	0	0	0	0	0	54
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4 Hour Totals (pm)	280	41	3	1	0	1	0	326
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Day Total	449	92	10	2	0	2	0	555
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	Destination - Arm A							Total
	Car	LGV	OGV1	OGV2	PSV	MC	PC	
0700-0715	1	2	0	0	0	0	0	3
0715-0730	6	2	1	0	0	0	0	9
0730-0745	7	5	0	0	0	0	0	12
0745-0800	14	8	0	0	1	0	0	23
Hourly Total	28	17	1	0	1	0	0	47
0800-0815	9	3	0	0	0	0	0	12
0815-0830	11	0	0	0	0	0	0	11
0830-0845	10	3	0	0	0	0	0	13
0845-0900	20	5	1	0	0	0	0	26
Hourly Total	50	11	1	0	0	0	0	62
0900-0915	10	3	1	0	0	0	0	14
0915-0930	15	3	0	0	0	0	0	18
0930-0945	17	0	0	0	0	0	0	17
0945-1000	12	4	0	1	0	0	0	17
Hourly Total	54	10	1	1	0	0	0	66

3 Hour Totals (am)	132	38	3	1	1	0	0	175
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1500-1515	13	1	1	0	0	0	0	15
1515-1530	19	3	0	0	0	0	0	22
1530-1545	13	4	0	0	0	1	0	18
1545-1500	23	2	0	1	1	0	0	27

Hourly Total	68	10	1	1	1	1	0	82
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1600-1615	17	2	0	0	0	0	0	19
1615-1630	20	2	0	0	0	1	0	23
1630-1645	15	4	0	0	0	0	0	19
1645-1700	15	5	1	0	0	0	0	21

Hourly Total	67	13	1	0	0	1	0	82
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1700-1715	19	1	0	1	0	0	0	21
1715-1730	29	1	1	0	0	0	0	31
1730-1745	22	2	0	0	0	0	0	24
1745-1800	23	3	0	0	0	0	0	26

Hourly Total	93	7	1	1	0	0	0	102
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1800-1815	17	0	0	0	0	0	0	17
1815-1830	15	0	0	0	0	0	0	15
1830-1845	10	1	0	0	0	0	0	11
1845-1900	9	0	0	0	0	0	0	9
Hourly Total	51	1	0	0	0	0	0	52

4 Hour Totals (pm)	279	31	3	2	1	2	0	318
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Day Total	411	69	6	3	2	2	0	493
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0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0
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Arm C - Arm B							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
2	0	0	0	0	0	0	2
4	1	0	0	0	0	0	5
10	1	0	0	0	0	0	11
12	2	0	1	0	0	0	15
28	4	0	1	0	0	0	33
9	2	0	0	0	0	0	11
17	2	0	0	0	0	0	19
7	3	0	0	1	0	0	11
15	2	0	0	0	0	0	17
48	9	0	0	1	0	0	58
11	1	0	0	0	0	0	12
12	1	0	0	0	0	0	13
19	1	0	0	0	0	0	20
13	1	0	0	0	0	0	14
55	4	0	0	0	0	0	59

131	17	0	1	1	0	0	150
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27	0	0	0	0	0	0	27
19	0	0	0	0	0	0	19
21	1	0	0	0	0	0	22
21	1	0	0	0	0	0	22
88	2	0	0	0	0	0	90
24	1	0	0	0	0	0	25
23	1	0	0	0	0	0	24
30	3	0	0	0	0	0	33
26	2	0	0	0	0	0	28
103	7	0	0	0	0	0	110
40	0	0	0	0	1	0	41
28	0	0	0	0	0	0	28
30	2	0	0	0	0	0	32
33	1	0	0	0	1	0	35
131	3	0	0	0	2	0	136
29	0	0	0	0	0	0	29
23	0	0	0	0	0	0	23
15	2	0	0	0	0	0	17
18	1	0	0	0	0	0	19

85	3	0	0	0	0	0	88
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407	15	0	0	0	2	0	424
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538	32	0	1	1	2	0	574
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Arm D - Arm B							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
14	4	0	0	0	1	0	19
28	7	0	0	2	2	0	39
44	10	2	0	2	1	0	59
56	8	1	1	3	0	0	69
142	29	3	1	7	4	0	186
73	14	4	0	1	0	1	93
74	13	0	1	1	0	0	89
83	9	2	1	0	0	0	95
57	15	4	0	1	0	0	77
287	51	10	2	3	0	1	354
53	8	2	0	1	0	1	65
51	8	4	1	0	1	0	65
28	11	2	1	1	1	0	44
36	15	0	0	0	0	0	51
168	42	8	2	2	2	1	225

597	122	21	5	12	6	2	765
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102	12	1	0	1	0	0	116
68	8	4	0	0	1	0	81
85	13	1	2	1	2	0	104
81	13	2	1	0	0	0	97
336	46	8	3	2	3	0	398
67	14	1	0	1	0	0	83
84	18	2	0	1	0	0	105
91	13	1	1	1	3	0	110
89	11	0	0	0	0	0	100
331	56	4	1	3	3	0	398
89	14	0	0	1	0	0	104
96	11	0	0	0	1	0	108
96	9	0	0	0	1	1	107
100	10	1	1	2	0	0	114
381	44	1	1	3	2	1	433
90	7	1	1	0	2	0	101
89	6	0	0	0	2	0	97
76	9	0	0	0	1	0	86
71	5	0	0	1	1	0	78
326	27	1	1	1	6	0	362

1374	173	14	6	9	14	1	1591
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1971	295	35	11	21	20	3	2356
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Origin - Arm B							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
40	19	0	0	0	0	0	59
71	20	2	0	0	1	0	94
91	21	3	1	2	0	0	118
80	14	0	1	2	1	0	98
282	74	5	2	4	2	0	369
122	9	1	0	2	1	0	135
107	18	2	0	3	0	0	130
89	17	2	0	0	0	0	108
114	18	2	1	2	0	0	137
432	62	7	1	7	1	0	510
99	20	2	1	4	1	0	127
76	11	2	0	1	1	0	91

62	7	6	1	1	0	0	77
72	13	2	1	1	1	0	90
309	51	12	3	7	3	0	385

1023	187	24	6	18	6	0	1264
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108	13	1	1	3	1	0	127
115	15	2	0	1	0	0	133
107	10	2	1	0	1	0	121
111	20	2	0	3	0	0	136
441	58	7	2	7	2	0	517
101	15	2	2	1	0	1	122
106	20	0	1	1	3	0	131
94	23	1	0	1	0	0	119
93	13	1	1	1	3	0	112
394	71	4	4	4	6	1	484
85	11	0	3	0	2	0	101
113	11	0	0	1	4	1	130
115	14	0	0	0	4	1	134
98	9	1	0	1	0	0	109
411	45	1	3	2	10	2	474
96	7	0	0	1	2	0	106
82	5	0	0	1	0	0	88
83	7	0	0	1	0	0	91
70	8	0	0	0	0	0	78
331	27	0	0	3	2	0	363

1577	201	12	9	16	20	3	1838
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2600	388	36	15	34	26	3	3102
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Destination - Arm B							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
17	4	0	0	0	1	0	22
33	8	0	0	2	2	0	45
55	11	2	0	2	1	0	71
70	10	1	2	3	0	0	86
175	33	3	2	7	4	0	224
83	17	4	0	1	0	1	106
92	15	0	1	1	0	0	109
92	13	2	1	1	0	0	109
73	18	4	0	1	0	0	96
340	63	10	2	4	0	1	420
65	9	2	0	1	0	1	78
66	10	4	1	0	1	0	82
49	13	2	1	1	1	0	67
51	16	0	0	0	0	0	67
231	48	8	2	2	2	1	294

746	144	21	6	13	6	2	938
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132	12	1	0	1	0	0	146
92	9	4	0	0	1	0	106
111	14	1	2	1	2	0	131
105	14	2	1	0	0	0	122
440	49	8	3	2	3	0	505
97	15	1	0	1	0	0	114
108	19	2	0	1	0	0	130
126	16	1	1	1	3	0	148
117	13	0	0	0	0	0	130
448	63	4	1	3	3	0	522
133	14	0	0	1	1	0	149
125	11	0	0	0	1	0	137
128	12	0	0	0	1	1	142
138	11	1	1	2	1	0	154
524	48	1	1	3	4	1	582

125	7	1	1	0	2	0	136
112	6	0	0	0	2	0	120
92	11	0	0	0	1	0	104
90	6	0	0	1	1	0	98
419	30	1	1	1	6	0	458

1831	190	14	6	9	16	1	2067
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2577	334	35	12	22	22	3	3005
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SS1195 Pontarddulais
 Thursday 20 July 2023
 700-1000 & 1500-1900
 Site 1

Arm A - Arm C							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
3	0	0	0	0	0	0	3
2	0	0	0	0	0	0	2
3	1	0	0	0	0	0	4
2	0	0	0	0	0	0	2
10	1	0	0	0	0	0	11
2	1	0	0	0	0	0	3
2	0	0	0	0	0	0	2
2	0	1	0	0	0	0	3
3	0	0	0	0	0	0	3
9	1	1	0	0	0	0	11
4	1	0	0	0	0	0	5
4	1	0	0	0	0	0	5
5	0	0	0	0	0	0	5
2	0	0	0	0	0	0	2
15	2	0	0	0	0	0	17

34	4	1	0	0	0	0	39
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2	0	0	0	0	0	0	2
2	0	0	0	0	0	0	2
3	1	0	0	0	0	0	4
4	0	0	0	0	0	0	4
11	1	0	0	0	0	0	12
6	0	0	0	0	0	0	6
3	0	0	0	0	0	0	3
3	0	0	0	0	0	0	3
3	0	0	0	0	0	0	3
15	0	0	0	0	0	0	15
6	0	0	0	0	0	0	6
7	0	0	0	0	0	0	7
8	3	0	0	0	0	0	11
1	1	0	0	0	0	0	2
22	4	0	0	0	0	0	26
5	0	0	0	0	0	0	5
1	1	0	0	0	0	0	2
7	0	0	0	0	0	0	7
1	0	0	0	0	0	0	1
14	1	0	0	0	0	0	15

62	6	0	0	0	0	0	68
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96	10	1	0	0	0	0	107
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Arm B - Arm C							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
9	1	0	0	0	0	0	10
11	1	0	0	0	0	0	12
10	4	1	0	0	0	0	15
15	1	0	0	0	0	0	16
45	7	1	0	0	0	0	53
11	1	0	0	1	0	0	13
14	3	0	0	1	0	0	18
12	1	0	0	0	0	0	13
25	1	0	0	0	0	0	26
62	6	0	0	2	0	0	70
19	0	0	0	0	0	0	19
21	1	1	0	0	0	0	23
16	1	0	0	0	0	0	17
22	1	0	0	0	0	0	23
78	3	1	0	0	0	0	82

0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0
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Arm D - Arm C							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
10	1	0	0	0	0	0	11
10	1	0	0	0	0	0	11
13	6	0	1	0	0	0	20
13	3	0	0	0	0	0	16
46	11	0	1	0	0	0	58
17	1	0	0	0	0	0	18
19	1	0	0	0	0	0	20
10	2	1	0	0	0	0	13
17	2	0	0	0	0	0	19
63	6	1	0	0	0	0	70
15	2	0	0	0	0	0	17
17	0	1	0	0	0	0	18
8	1	1	0	0	0	0	10
12	2	0	0	0	0	0	14
52	5	2	0	0	0	0	59

161	22	3	1	0	0	0	187
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22	0	0	0	0	0	0	22
29	4	0	0	0	0	0	33
26	1	0	0	0	0	0	27
22	1	0	0	0	0	0	23
99	6	0	0	0	0	0	105
19	2	0	0	0	0	0	21
33	2	0	0	0	0	0	35
28	2	0	0	0	0	0	30
24	0	0	0	0	1	0	25
104	6	0	0	0	1	0	111
30	1	0	0	0	0	0	31
27	0	0	0	0	0	0	27
31	1	0	0	0	0	0	32
33	0	0	1	0	0	0	34
121	2	0	1	0	0	0	124
21	4	0	0	0	0	0	25
19	1	0	0	0	0	0	20
19	3	0	0	0	0	0	22
19	1	0	0	0	0	0	20
78	9	0	0	0	0	0	87

402	23	0	1	0	1	0	427
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563	45	3	2	0	1	0	614
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Origin - Arm C							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
8	1	0	0	0	0	0	9
21	3	0	0	0	0	0	24
27	5	0	0	0	0	0	32
31	6	1	1	0	0	0	39
87	15	1	1	0	0	0	104
26	8	0	0	0	0	0	34
32	3	0	0	1	0	0	36
25	6	0	0	1	0	0	32
27	4	1	0	0	0	0	32
110	21	1	0	2	0	0	134
21	3	1	0	0	0	0	25
35	1	1	0	0	0	0	37

35	3	2	0	0	0	0	40
25	2	0	0	0	0	0	27
116	9	4	0	0	0	0	129

313	45	6	1	2	0	0	367
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37	0	0	0	0	0	0	37
37	3	0	0	0	0	0	40
49	4	0	0	0	0	0	53
52	3	0	0	0	0	0	55
175	10	0	0	0	0	0	185
50	1	0	0	0	0	0	51
43	2	0	0	0	1	0	46
56	4	0	0	0	0	0	60
72	3	0	0	0	0	0	75
221	10	0	0	0	1	0	232
82	2	0	0	0	2	0	86
60	2	0	0	0	0	0	62
56	3	0	0	0	0	0	59
82	2	0	0	0	1	0	85
280	9	0	0	0	3	0	292
61	0	0	1	0	0	0	62
68	5	0	0	0	0	0	73
40	6	0	0	0	0	0	46
42	4	0	0	0	0	0	46
211	15	0	1	0	0	0	227

887	44	0	1	0	4	0	936
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1200	89	6	2	2	4	0	1303
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Destination - Arm C							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
22	2	0	0	0	0	0	24
23	2	0	0	0	0	0	25
26	11	1	1	0	0	0	39
30	4	0	0	0	0	0	34
101	19	1	1	0	0	0	122
30	3	0	0	1	0	0	34
35	4	0	0	1	0	0	40
24	3	2	0	0	0	0	29
45	3	0	0	0	0	0	48
134	13	2	0	2	0	0	151
38	3	0	0	0	0	0	41
42	2	2	0	0	0	0	46
29	2	1	0	0	0	0	32
36	3	0	0	0	0	0	39
145	10	3	0	0	0	0	158

380	42	6	1	2	0	0	431
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39	0	0	0	0	0	0	39
51	6	0	0	0	0	0	57
60	2	0	0	0	0	0	62
53	2	0	0	0	0	0	55
203	10	0	0	0	0	0	213
46	4	0	0	0	0	0	50
66	3	0	0	0	0	0	69
67	3	0	0	0	0	0	70
56	1	0	0	0	1	0	58
235	11	0	0	0	1	0	247
60	2	0	0	0	0	0	62
58	1	0	0	0	0	0	59
65	4	0	0	0	1	0	70
60	2	0	1	0	0	0	63
243	9	0	1	0	1	0	254

46	4	0	0	0	0	0	50
38	3	0	0	0	0	0	41
46	4	0	0	0	0	0	50
38	1	0	0	0	0	0	39
168	12	0	0	0	0	0	180

849	42	0	1	0	2	0	894
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1229	84	6	2	2	2	0	1325
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Arm A - Arm D							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
9	1	0	0	0	0	0	10
7	3	0	0	0	0	0	10
12	2	0	0	0	0	0	14
7	7	1	0	0	0	0	15
35	13	1	0	0	0	0	49
13	8	0	0	0	0	0	21
15	0	0	0	0	0	0	15
13	8	0	0	0	0	0	21
7	1	2	0	0	0	0	10
48	17	2	0	0	0	0	67
5	2	0	0	0	0	0	7
10	4	3	1	0	0	0	18
12	5	0	0	0	0	0	17
7	1	0	0	0	1	0	9
34	12	3	1	0	1	0	51

Arm Total
14
13
19
19
65
26
18
27
15
86
13
27
25
13
78

117	42	6	1	0	1	0	167
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229

8	1	2	0	0	0	0	11
7	2	0	1	0	0	0	10
8	1	0	0	0	0	0	9
5	1	0	0	0	0	0	6
28	5	2	1	0	0	0	36
11	2	0	0	0	0	0	13
6	3	1	0	0	0	0	10
20	4	0	0	0	0	0	24
11	4	0	0	0	1	0	16
48	13	1	0	0	1	0	63
15	4	0	0	0	0	0	19
17	4	0	0	0	0	0	21
15	3	0	0	0	0	0	18
16	2	0	0	0	0	0	18
63	13	0	0	0	0	0	76
12	1	0	0	0	0	0	13
10	0	0	0	0	0	0	10
4	0	0	0	0	0	0	4
3	1	0	0	0	0	0	4
29	2	0	0	0	0	0	31

16
18
18
13
65
25
14
32
21
92
29
29
32
25
115
24
12
12
6
54

168	33	3	1	0	1	0	206
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326

285	75	9	2	0	2	0	373
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555

Arm B - Arm D							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
31	18	0	0	0	0	0	49
58	19	2	0	0	1	0	80
80	17	2	1	2	0	0	102
61	13	0	1	1	1	0	77
230	67	4	2	3	2	0	308
110	8	1	0	1	1	0	121
88	15	2	0	2	0	0	107
73	16	2	0	0	0	0	91
82	16	2	1	2	0	0	103
353	55	7	1	5	1	0	422
75	20	2	1	4	1	0	103
53	9	1	0	1	1	0	65
41	6	6	1	1	0	0	55
45	12	2	1	1	1	0	62
214	47	11	3	7	3	0	285

Arm Total
59
94
118
98
369
135
130
108
137
510
127
91
77
90
385

797	169	22	6	15	6	0	1015
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1264

87	13	1	1	3	1	0	106
93	13	2	0	1	0	0	109
71	10	2	1	0	1	0	85
79	19	2	0	2	0	0	102
330	55	7	2	6	2	0	402
75	13	2	2	1	0	1	94
73	19	0	1	1	2	0	96
55	22	1	0	1	0	0	79
63	11	1	1	1	3	0	80
266	65	4	4	4	5	1	349
59	10	0	3	0	2	0	74
81	10	0	0	1	4	1	97
85	14	0	0	0	3	1	103
70	8	1	0	1	0	0	80
295	42	1	3	2	9	2	354
73	7	0	0	1	2	0	83
62	4	0	0	1	0	0	67
61	6	0	0	1	0	0	68
51	8	0	0	0	0	0	59
247	25	0	0	3	2	0	277

127
133
121
136
517
122
131
119
112
484
101
130
134
109
474
106
88
91
78
363

1138	187	12	9	15	18	3	1382
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1838

1935	356	34	15	30	24	3	2397
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3102

Arm C - Arm D							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
6	1	0	0	0	0	0	7
17	2	0	0	0	0	0	19
16	2	0	0	0	0	0	18
15	3	1	0	0	0	0	19
54	8	1	0	0	0	0	63
16	6	0	0	0	0	0	22
13	1	0	0	1	0	0	15
16	3	0	0	0	0	0	19
10	2	1	0	0	0	0	13
55	12	1	0	1	0	0	69
8	1	1	0	0	0	0	10
21	0	1	0	0	0	0	22
12	2	2	0	0	0	0	16
11	1	0	0	0	0	0	12
52	4	4	0	0	0	0	60

Arm Total
9
24
32
39
104
34
36
32
32
134
25
37
40
27
129

161	24	6	0	1	0	0	192
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367

10	0	0	0	0	0	0	10
16	3	0	0	0	0	0	19
25	3	0	0	0	0	0	28
25	2	0	0	0	0	0	27
76	8	0	0	0	0	0	84
23	0	0	0	0	0	0	23
15	1	0	0	0	1	0	17
23	1	0	0	0	0	0	24
42	1	0	0	0	0	0	43
103	3	0	0	0	1	0	107
33	1	0	0	0	1	0	35
27	2	0	0	0	0	0	29
20	1	0	0	0	0	0	21
41	0	0	0	0	0	0	41
121	4	0	0	0	1	0	126
29	0	0	1	0	0	0	30
40	5	0	0	0	0	0	45
21	3	0	0	0	0	0	24
22	3	0	0	0	0	0	25

37
40
53
55
185
51
46
60
75
232
86
62
59
85
292
62
73
46
46

44	12	3	1	1	1	0	62
54	21	0	1	0	0	0	76
248	55	11	3	2	2	1	322

204
206
914

828	176	27	7	12	6	2	1058
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2918

131	13	2	0	1	0	0	147
112	15	4	0	0	1	0	132
116	18	1	2	1	3	0	141
115	16	2	2	0	0	0	135
474	62	9	4	2	4	0	555
95	18	1	0	1	0	0	115
129	22	2	0	1	0	0	154
128	19	1	1	1	3	0	153
123	15	1	0	0	1	0	140
475	74	5	1	3	4	0	562
127	15	0	1	1	0	0	144
139	12	1	0	0	1	0	153
139	12	0	0	0	1	1	153
146	12	1	2	2	0	0	163
551	51	2	3	3	2	1	613
122	11	1	1	0	2	0	137
116	7	0	0	0	2	0	125
99	12	0	0	0	1	0	112
96	6	0	0	1	1	0	104
433	36	1	1	1	6	0	478

327
323
333
339
1322
313
345
364
348
1370
360
374
378
382
1494
329
298
261
234
1122

1933	223	17	9	9	16	1	2208
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5308

2761	399	44	16	21	22	3	3266
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8226

Destination - Arm D							
Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
46	20	0	0	0	0	0	66
82	24	2	0	0	1	0	109
108	21	2	1	2	0	0	134
83	23	2	1	1	1	0	111
319	88	6	2	3	2	0	420
139	22	1	0	1	1	0	164
116	16	2	0	3	0	0	137
102	27	2	0	0	0	0	131
99	19	5	1	2	0	0	126
456	84	10	1	6	1	0	558
88	23	3	1	4	1	0	120
84	13	5	1	1	1	0	105
65	13	8	1	1	0	0	88
63	14	2	1	1	2	0	83
300	63	18	4	7	4	0	396

Arm Total
115
188
256
254
813
316
297
282
296
1191
253
251
204
206
914

1075	235	34	7	16	7	0	1374
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2918

105	14	3	1	3	1	0	127
116	18	2	1	1	0	0	138
104	14	2	1	0	1	0	122
109	22	2	0	2	0	0	135
434	68	9	3	6	2	0	522
109	15	2	2	1	0	1	130
94	23	1	1	1	3	0	123
98	27	1	0	1	0	0	127
116	16	1	1	1	4	0	139
417	81	5	4	4	7	1	519
107	15	0	3	0	3	0	128
125	16	0	0	1	4	1	147
120	18	0	0	0	3	1	142
127	10	1	0	1	0	0	139
479	59	1	3	2	10	2	556

327
323
333
339
1322
313
345
364
348
1370
360
374
378
382
1494

114	8	0	1	1	2	0	126
112	9	0	0	1	0	0	122
86	9	0	0	1	0	0	96
76	12	0	0	0	0	0	88
388	38	0	1	3	2	0	432

329
298
261
234
1122

1718	246	15	11	15	21	3	2029
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5308

2793	481	49	18	31	28	3	3403
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8226

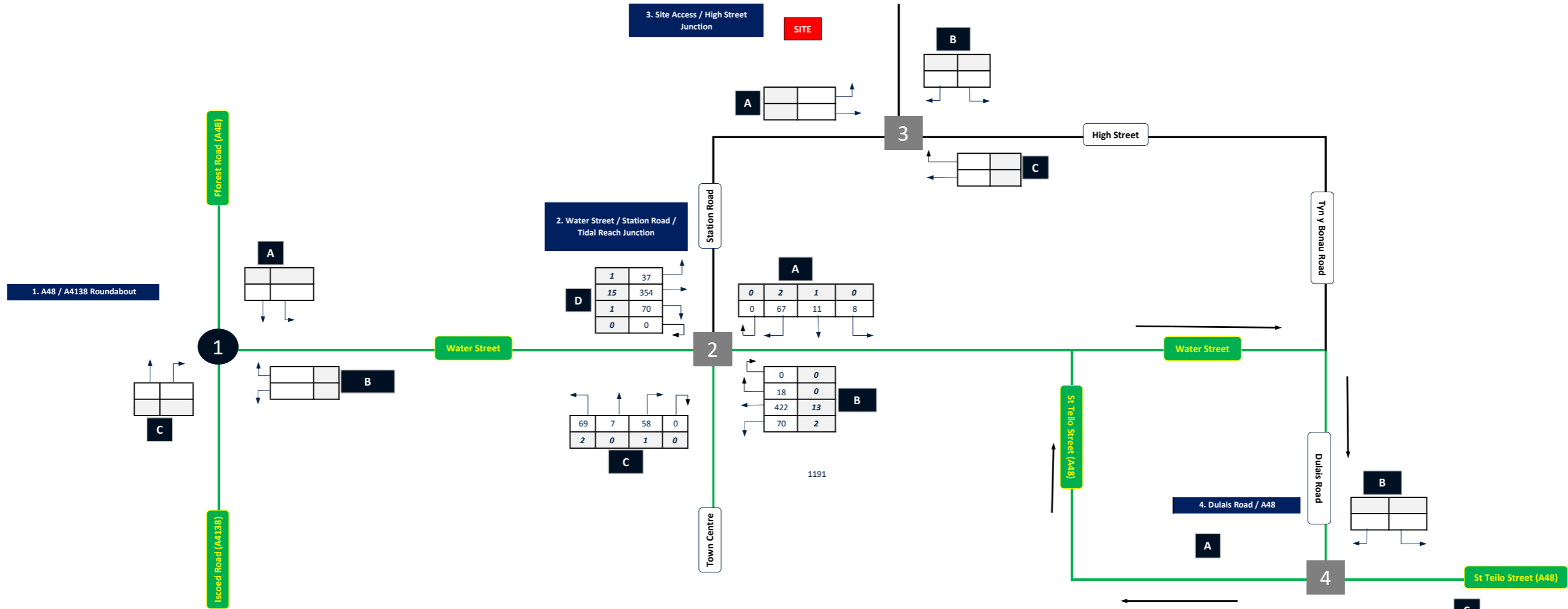


SS1195 Pontarddulais
 Thursday 20 July 2023
 0700-1000 & 1500-1900
 Site 1

	Arm A		Arm B		Arm C		Arm D			Arm A		Arm B		Arm C		Arm D	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2		Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
0700-0705	3		4		1	0	1	1	1500-1505	2	9+	3	6	8+	3		
0705-0710	3		4		1	1	1	2	1505-1510	4	9+	2	4	8+	4		
0710-0715	2		7+		2	1	2	1	1510-1515	2	9+	4	5	8+	7+		
0715-0720	2		6		2	0	4	2	1515-1520	2	9+	3	2	6	7		
0720-0725	2		8+		5	0	2	1	1520-1525	2	9+	4	5	8+	8		
0725-0730	2		8+		4	2	4	2	1525-1530	4	9+	1	4	8+	4		
0730-0735	3		8+		5	3	2	4	1530-1535	4	8+	5	4	8+	7		
0735-0740	6		7+		3	5	8	2	1535-1540	4	9+	5	7	8+	1		
0740-0745	2		8+		6	3	6	3	1540-1545	3	8+	7	5	5	8+		
0745-0750	3		6		6	2	7+	2	1545-1550	3	9+	3	5	6+	3		
0750-0755	2		7+		3	6	7+	3	1550-1555	2	9+	6	7	8+	4		
0755-0800	2		9+		3	5	1	3	1555-1600	3	8+	7	5	8+	4		
0800-0805	4		8+		3	3	4	4	1600-1605	4	8+	5	8	8+	4		
0805-0810	3		8+		7	2	8+	3	1605-1610	8	8+	5	3	7+	4		
0810-0815	4		8+		5	2	6	3	1610-1615	3	7+	3	4	8+	4		
0815-0820	4		9+		7	5	7+	2	1615-1620	2	9+	4	7	8+	8+		
0820-0825	4		9+		4	2	5	3	1620-1625	4	8+	3	8	8+	5		
0825-0830	3		8+		3	4	7+	2	1625-1630	4	7+	4	5	8+	6		
0830-0835	7		8+		2	2	7+	5	1630-1635	9	9+	5	6	7+	7		
0835-0840	6		8+		2	5	6	2	1635-1640	6	9+	2	5	8+	4		
0840-0845	3		7+		5	1	8+	1	1640-1645	4	9+	5	5	8+	2		
0845-0850	2		8+		2	2	8+	5	1645-1650	3	8+	6	3	8+	6		
0850-0855	3		9+		2	4	8+	4	1650-1655	4	8+	7	8	8+	5		
0855-0900	3		8+		3	7	7	2	1655-1700	4	7+	4	6	8+	6		
0900-0905	2		8+		2	6	8+	2	1700-1705	4	8+	4	8	8+	6		
0905-0910	1		9+		4	5	5	4	1705-1710	7	8+	6	11	7+	5		
0910-0915	4		8+		1	2	8+	3	1710-1715	8	8+	4	15	8+	4		
0915-0920	5		8+		3	2	8+	4	1715-1720	4	8+	4	12	7+	8		
0920-0925	3		8+		3	2	8+	2	1720-1725	6	9+	3	4	8+	7		
0925-0930	4		9+		3	1	7+	5	1725-1730	5	8+	5	7	8+	4		
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0940-0945	2		9+		3	4	6	1	1740-1745	7	8+	4	7	7+	8		
0945-0950	3		7+		1	4	7	2	1745-1750	6	9+	6	14	7+	6		
0950-0955	3		8+		3	2	3	4	1750-1755	4	8+	3	15	8+	7		
0955-1000	2		5		3	5	5	1	1755-1800	2	8+	4	4	8+	7		
1800-1805	6								1800-1805	6	7+	3	6	7+	3		
1805-1810	2								1805-1810	2	8+	7	5	6+	5		
1810-1815	4								1810-1815	4	8+	5	10	8+	8		
1815-1820	3								1815-1820	3	8+	6	3	7+	6		
1820-1825	3								1820-1825	3	8+	6	4	8+	4		
1825-1830	1								1825-1830	1	8+	4	5	7+	4		
1830-1835	2								1830-1835	2	9+	3	3	8	3		
1835-1840	2								1835-1840	2	8+	4	4	7+	3		
1840-1845	1								1840-1845	1	7+	4	1	7	2		
1845-1850	1								1845-1850	1	8+	4	4	7	3		
1850-1855	0								1850-1855	0	6	3	4	2	4		
1855-1900	2								1855-1900	2	7+	4	2	6	4		

Appendix B Traffic Flow Diagrams

KEY	
12	Total Vehicles
12	HGVs



NOTES:



PROJECT:

High Street, Pontarddulais

TIME PERIOD:

AM Peak Hour (08:00-09:00)

DATE:

October 2023

JOB NUMBER:

C23025

PLAN TITLE:

Traffic Figure Diagrams

2023 Base Flows

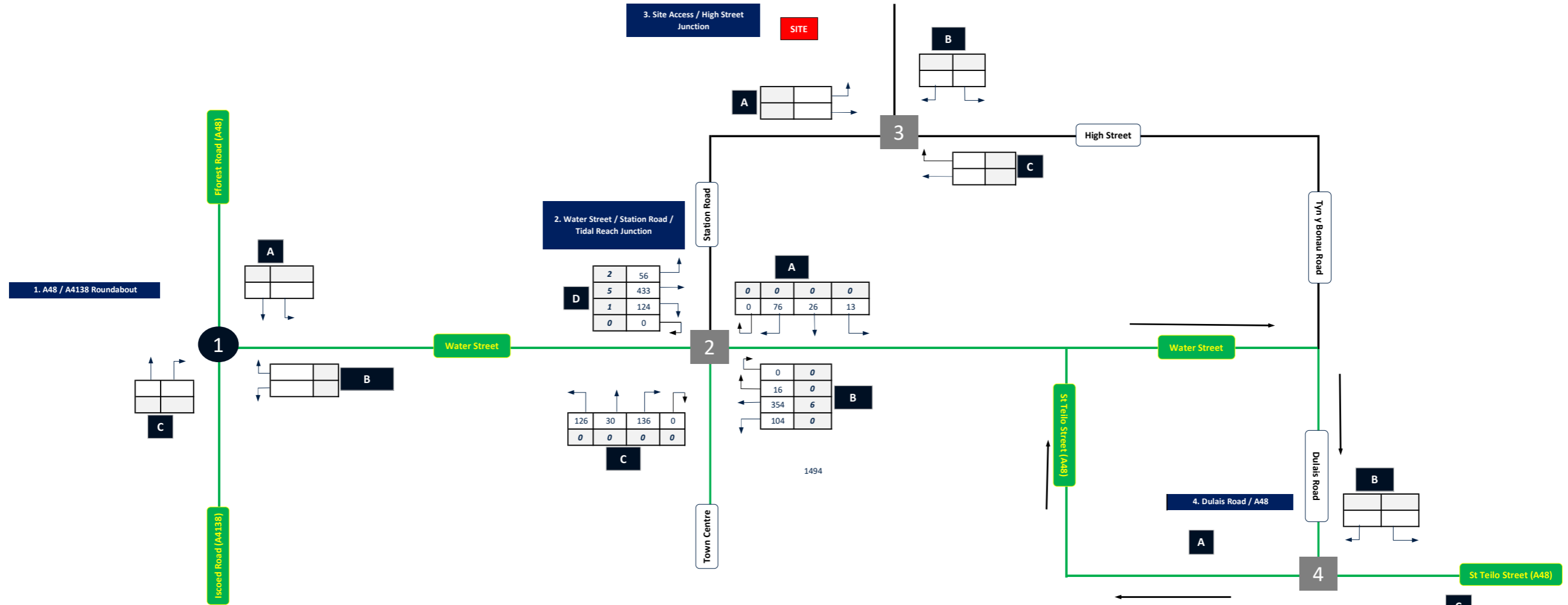
DRAWN BY:

DC

FIGURE:

TFD1

12	Total Vehicles
12	HGVs



NOTES:



PROJECT:

High Street, Pontarddulais

TIME PERIOD:

PM Peak Hour (17:00-18:00)

DATE:

October 2023

JOB NUMBER:

C23025

PLAN TITLE:

Traffic Figure Diagrams

2023 Base Flows

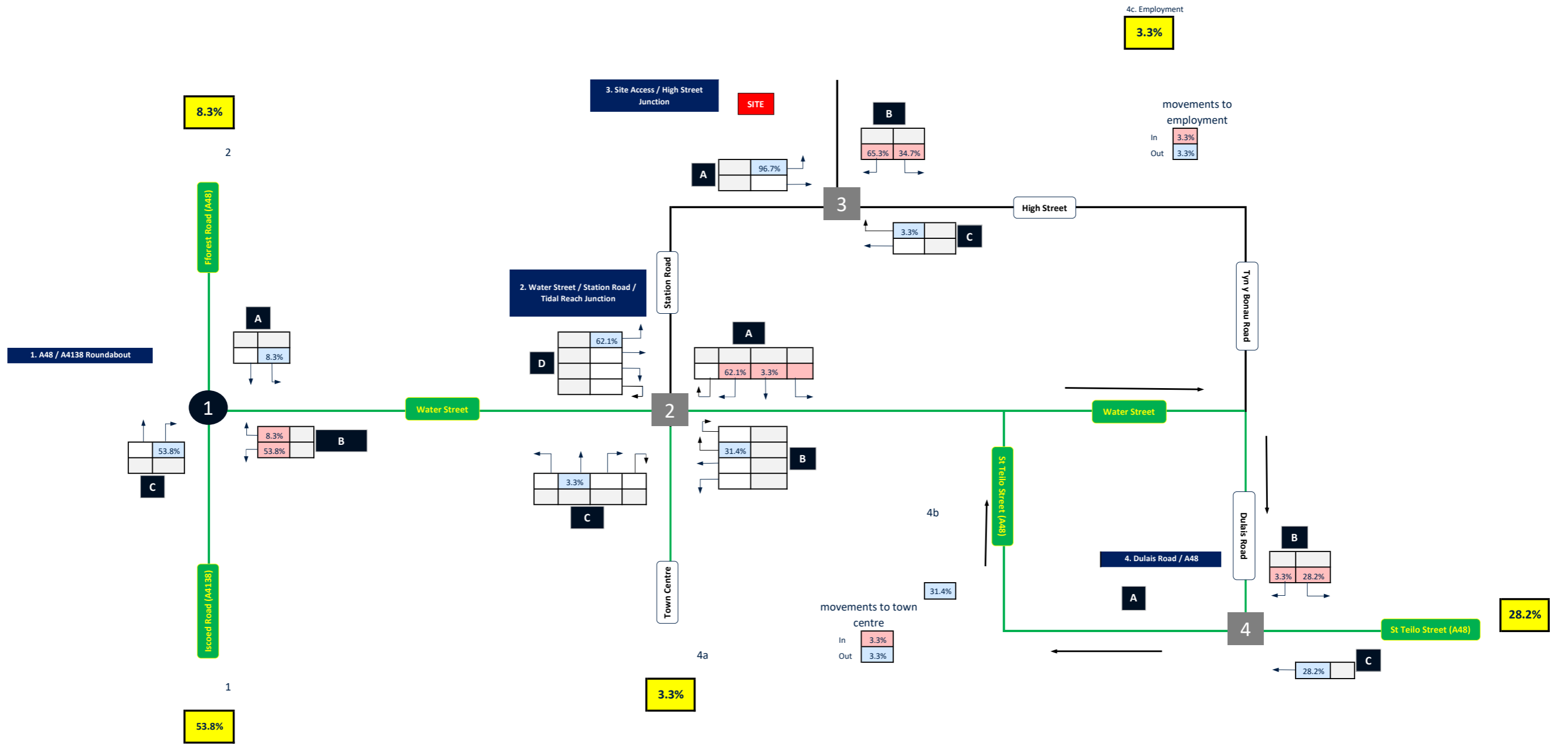
DRAWN BY:

DC

FIGURE:

TFD2

12	Total Vehicles
12	HGVs



NOTES:

A4138	53.8%
FR A48	8.3%
STS A48	28.2%
Swansea 001	9.8%



PROJECT:

High Street, Pontarddulais

TIME PERIOD:

All Times

DATE:

July 2023

JOB NUMBER:

C23025

PLAN TITLE:

Traffic Figure Diagrams
Trip Distribution Percentages

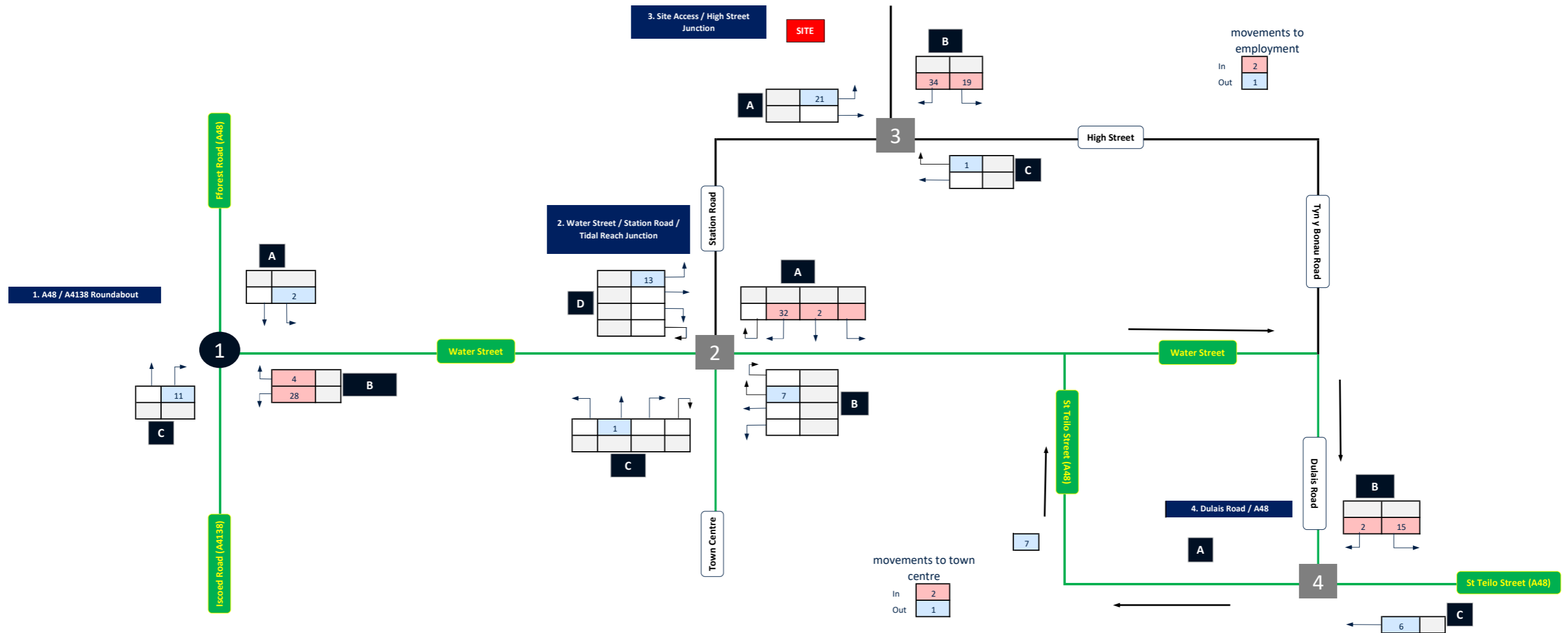
DRAWN BY:

SD

FIGURE:

TFD3

KEY	
12	Total Vehicles
12	HGVs



NOTES:

	Arrivals	Departure
AM peak	21	52

Differences due to rounding

PROJECT:

High Street, Pontarddulais

TIME PERIOD:

AM Peak Hour (08:00-09:00)

DATE:

July 2023

JOB NUMBER:

C23025

PLAN TITLE:

Traffic Figure Diagrams

Development Vehicle Assignment

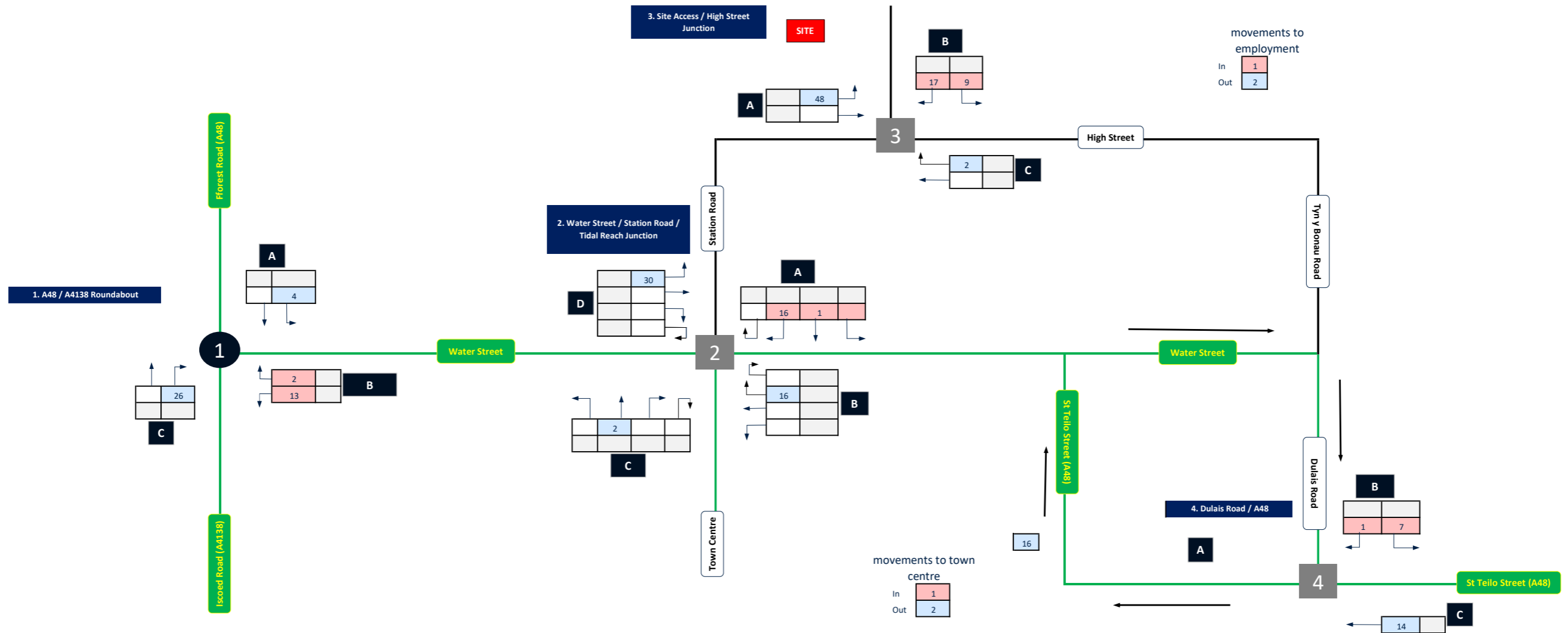
DRAWN BY:

SD

FIGURE:

TFD4

KEY	
12	Total Vehicles
12	HGVs



NOTES:

	Arrivals	Departure
PM peak	49	25

Differences due to rounding

PROJECT:

High Street, Pontarddulais

TIME PERIOD:

PM Peak Hour (17:00-18:00)

DATE:

July 2023

JOB NUMBER:

C23025

PLAN TITLE:

Traffic Figure Diagrams

Development Vehicle Assignment

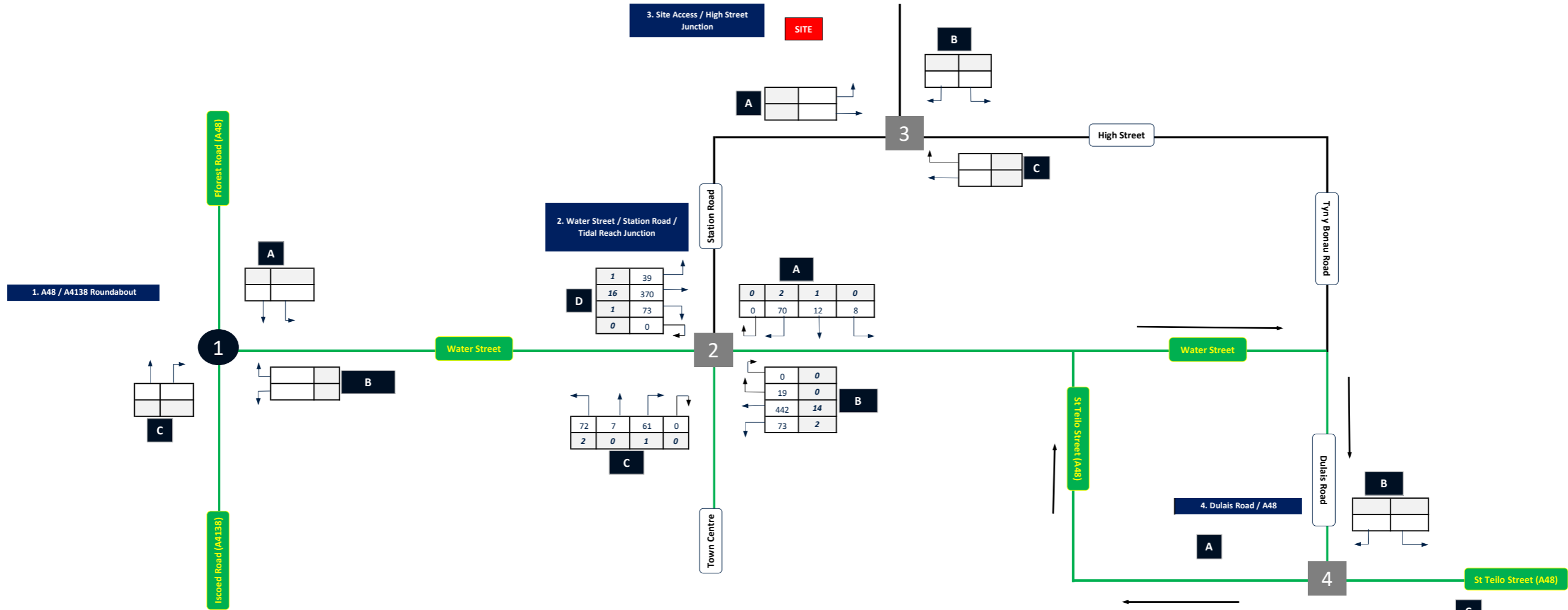
DRAWN BY:

SD

FIGURE:

TFD5

KEY	
12	Total Vehicles
12	HGVs



NOTES:

Growth Rate 1.046
 Swansea 001
 Core Scenario
 AM Peak Period
 All Road Types

PROJECT:

High Street, Pontarddulais

TIME PERIOD:

AM Peak Hour (08:00-09:00)

DATE:

October 2023

JOB NUMBER:

C23025

PLAN TITLE:

Traffic Figure Diagrams

2028 Future Year Base

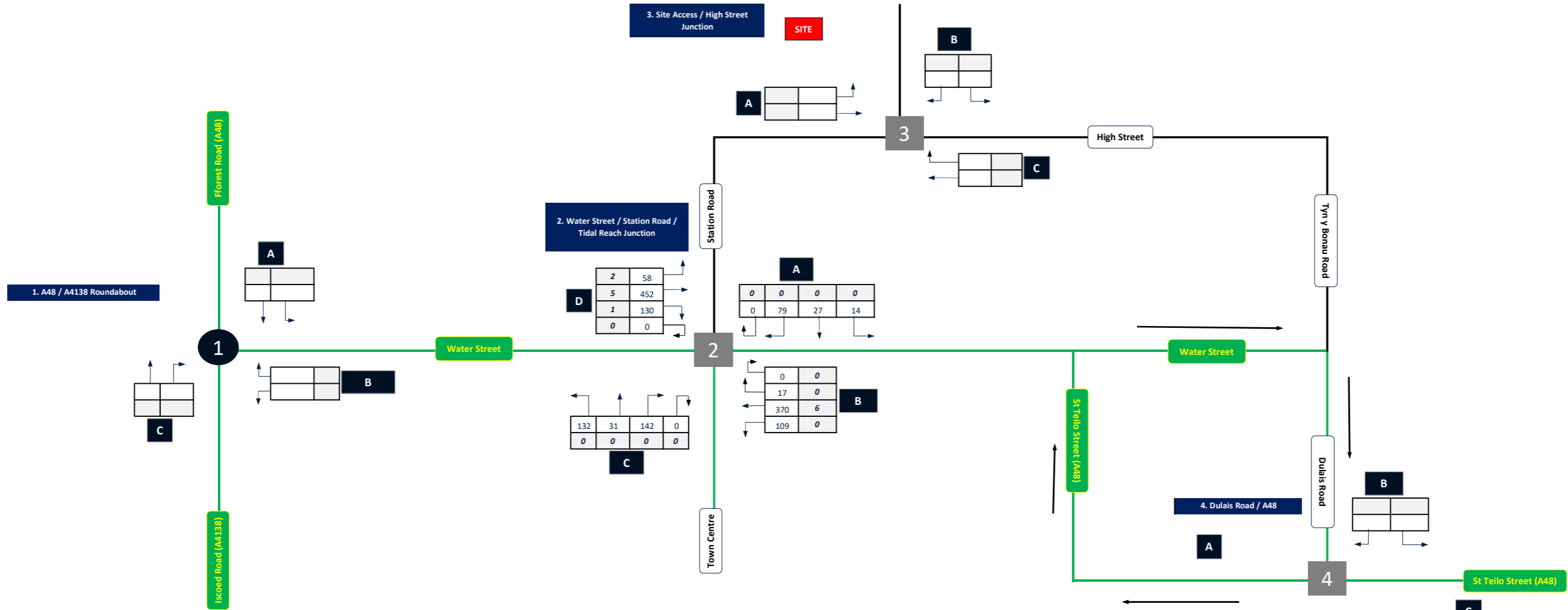
DRAWN BY:

DC

FIGURE:

TFD6

12	Total Vehicles
12	HGVs



NOTES:

Growth Rate 1.045
 Swansea 001
 Core Scenario
 PM Peak Period
 All Road Types

PROJECT:

High Street, Pontarddulais

TIME PERIOD:

PM Peak Hour (17:00-18:00)

DATE:

October 2023

JOB NUMBER:

C23025

PLAN TITLE:

Traffic Figure Diagrams

2028 Future Year Base

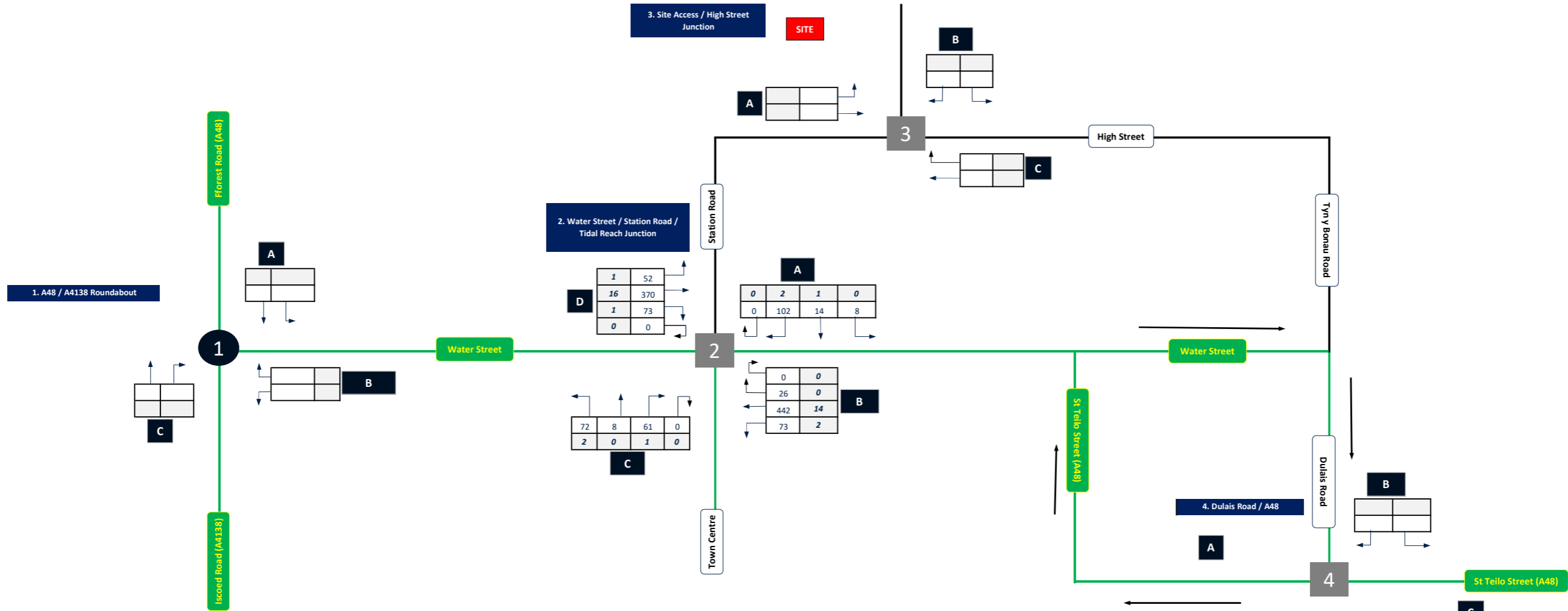
DRAWN BY:

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FIGURE:

TFD7

12	Total Vehicles
12	HGVs



NOTES:



PROJECT:

High Street, Pontarddulais

TIME PERIOD:

AM Peak Hour (08:00-09:00)

DATE:

October 2023

JOB NUMBER:

C23025

PLAN TITLE:

Traffic Figure Diagrams

2028 Future Year Base + Development

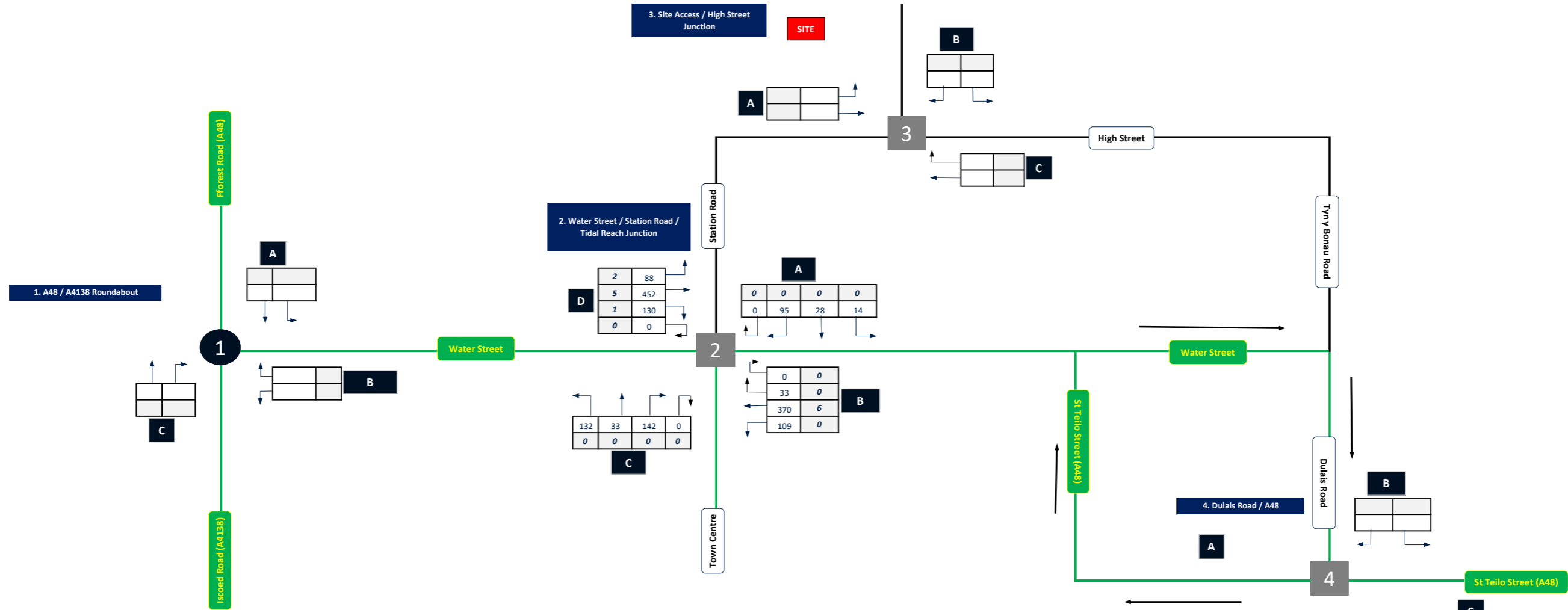
DRAWN BY:

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FIGURE:

TFD8

KEY	
12	Total Vehicles
12	HGVs



NOTES:



PROJECT:

High Street, Pontarddulais

TIME PERIOD:

PM Peak Hour (17:00-18:00)

DATE:

October 2023

JOB NUMBER:

C23025

PLAN TITLE:

Traffic Figure Diagrams

2028 Future Year Base + Development

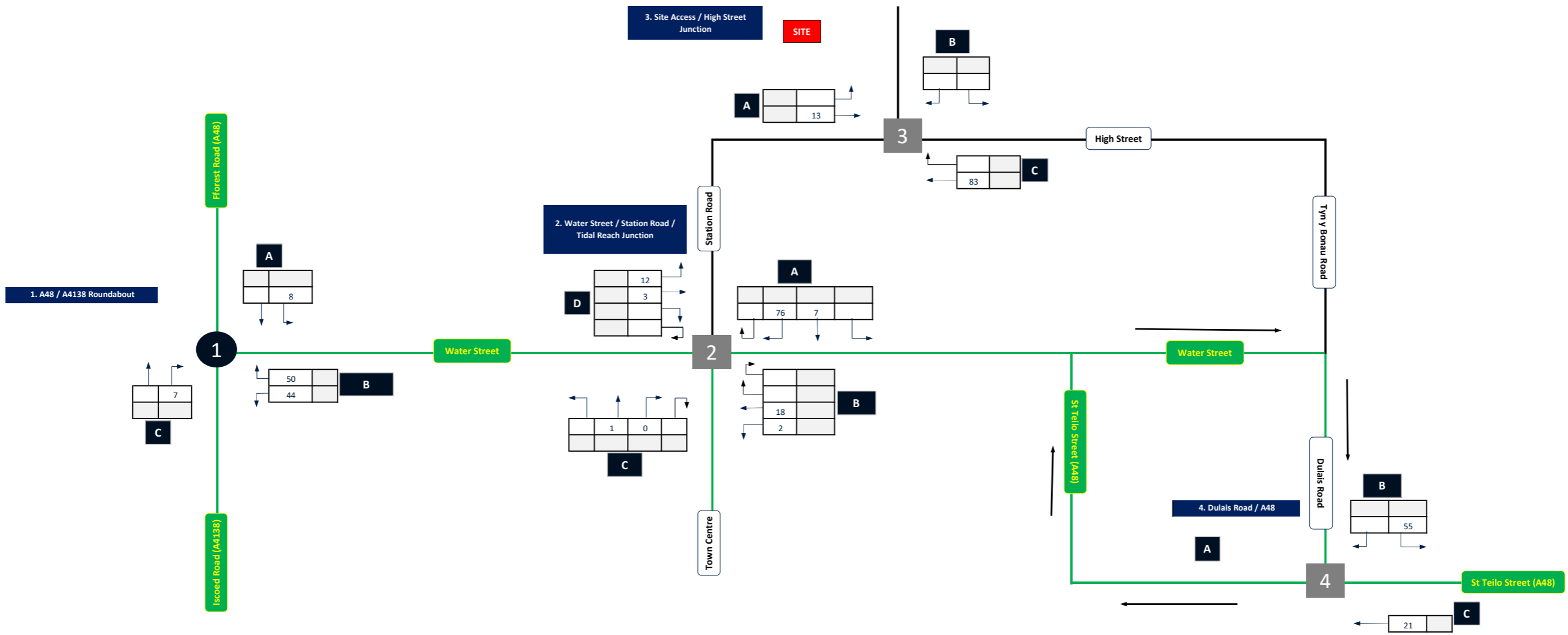
DRAWN BY:

DC

FIGURE:

TFD9

KEY	
12	Total Vehicles
12	HGVs



NOTES:

Persimmon Application Flows (Representing remaining site allocation)
Obtained from Corun Transport Assessment - Appendix F



PROJECT:

High Street, Pontarddulais

TIME PERIOD:

AM Peak Hour (08:00-09:00)

DATE:

October 2023

JOB NUMBER:

C23025

PLAN TITLE:

Traffic Figure Diagrams

Sensitivity - Persimmon Allocated Site Flows

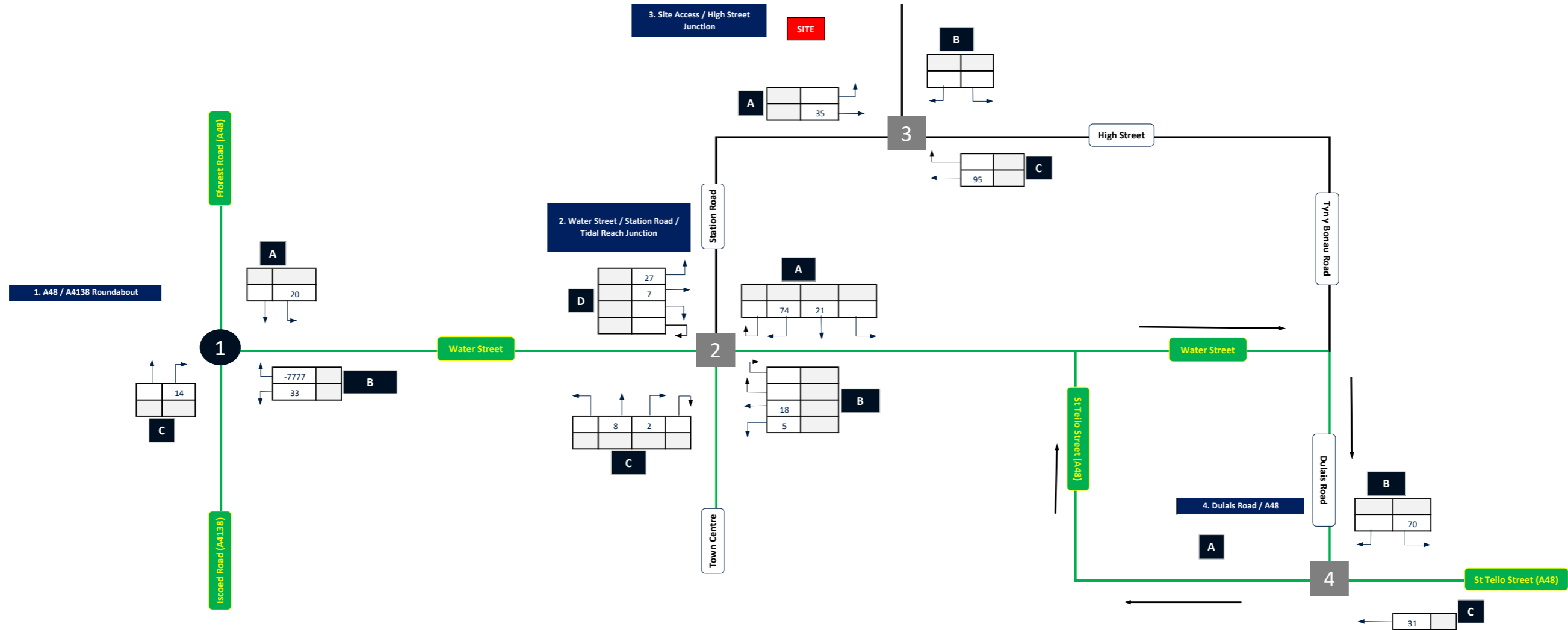
DRAWN BY:

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FIGURE:

TFD10

KEY	
12	Total Vehicles
12	HGVs

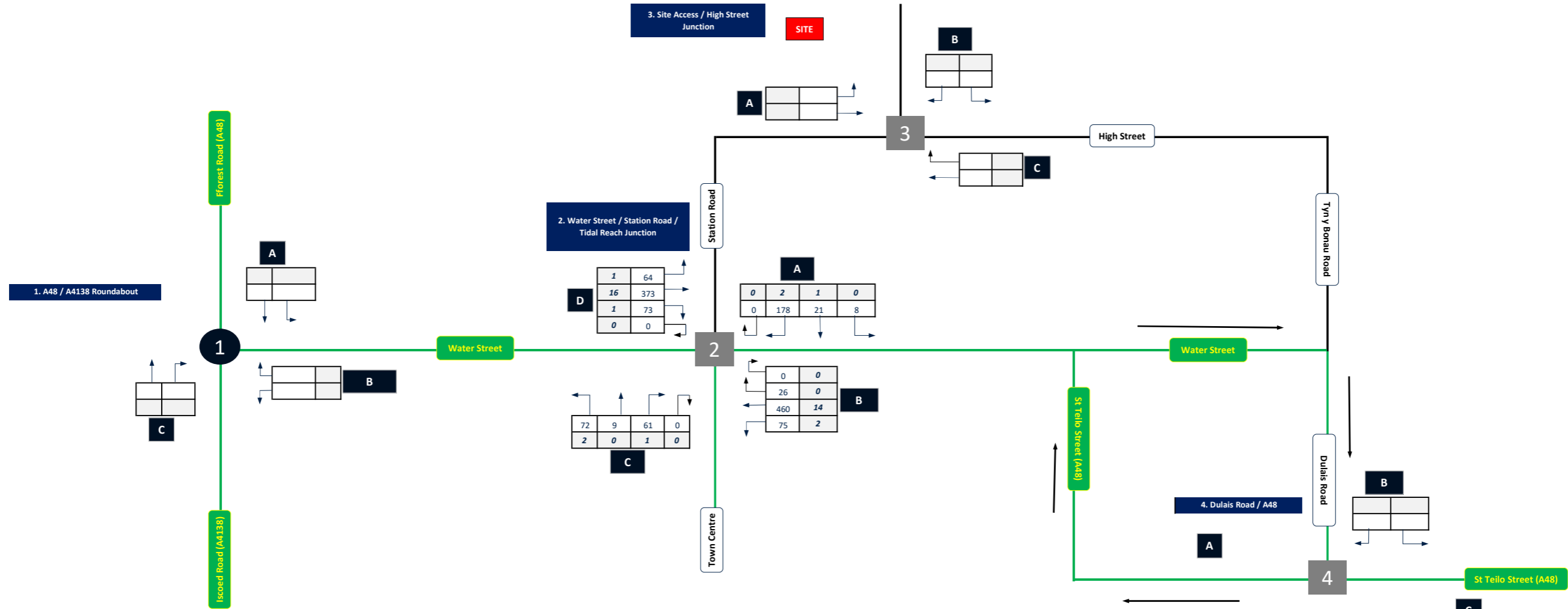


NOTES:
 Persimmon Application Flows (Representing remaining site allocation)
 Obtained from Corun Transport Assessment - Appendix F

PROJECT:
 High Street, Pontarddulais
 TIME PERIOD:
 PM Peak Hour (17:00-18:00)
 DATE:
 October 2023
 JOB NUMBER:
 C23025

PLAN TITLE:
 Traffic Figure Diagrams
 Sensitivity - Persimmon Allocated Site Flows
 DRAWN BY:
 DC
 FIGURE:
 TFD11

KEY	
12	Total Vehicles
12	HGVs



NOTES:



PROJECT:

High Street, Pontarddulais

TIME PERIOD:

AM Peak Hour (08:00-09:00)

DATE:

October 2023

JOB NUMBER:

C23025

PLAN TITLE:

Traffic Figure Diagrams

2028 Future Year Base + Development - Sensitivity

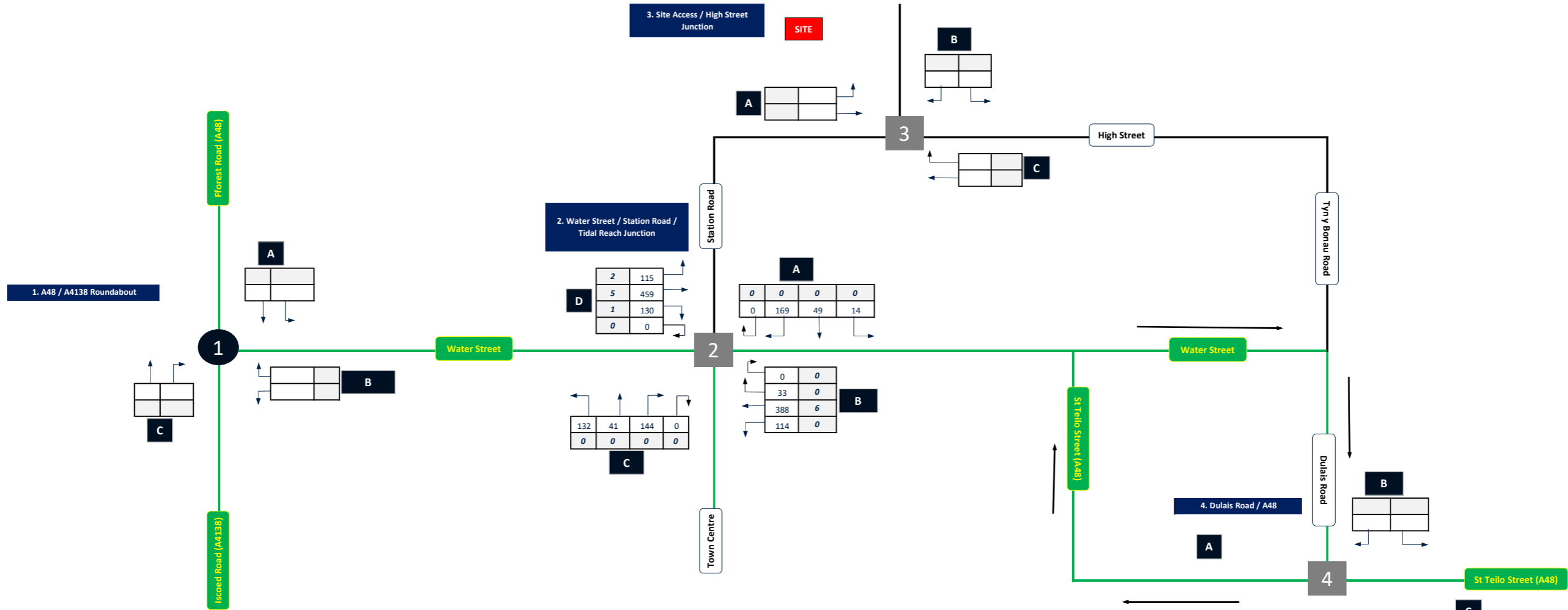
DRAWN BY:

DC

FIGURE:

TFD12

KEY	
12	Total Vehicles
12	HGVs



NOTES:



PROJECT:

High Street, Pontarddulais

TIME PERIOD:

PM Peak Hour (17:00-18:00)

DATE:

October 2023

JOB NUMBER:

C23025

PLAN TITLE:

Traffic Figure Diagrams

2028 Future Year Base + Development - Sensitivity

DRAWN BY:

DC

FIGURE:

TFD13

Appendix C Illustrative Site Layout



Scale 1:500
0 10 20 30



REV.	DESCRIPTION	DATE
A	Revised Layout - Northern SS link	05.10.23

CLIENT
Walters
JOB TITLE
Tata Steel Pontardulais
DRAWING TITLE
Illustrative Masterplan

SCALE @ A1	DATE	DRAWN BY
1:500	Sept '23	PC
JOB NO.	DRAWING NO.	REVISION
2360	IM-01	A

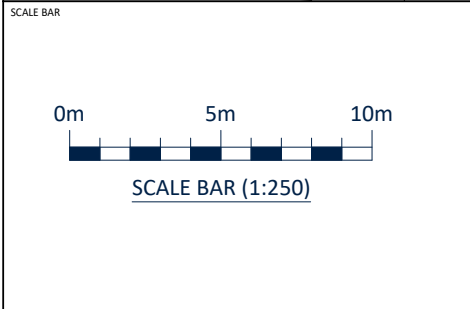
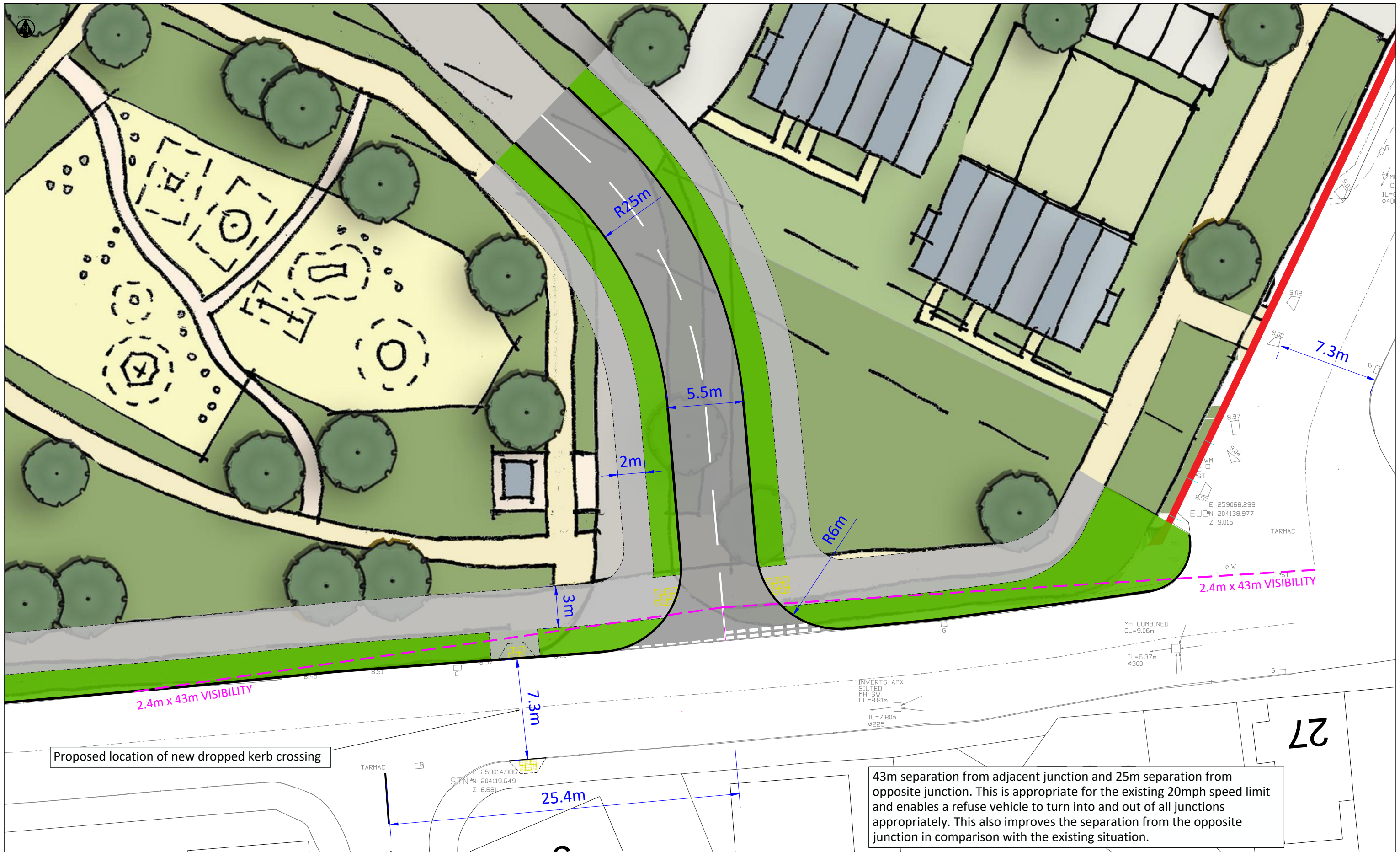


10 Gold Tops
Newport
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www.hammond-ltd.co.uk

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Figured dimensions must be taken in preference to scaled dimensions and any discrepancies are to be referred to Hammond Architectural Ltd. Contractors, subcontractors and suppliers must verify all dimensions on site before commencing any work or making any workshop drawings.

Appendix D General Arrangement of Proposed Site Accesses



KEY

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- 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 topographical survey data, supplemented with OS mapping data. Ordnance Survey, (c) Crown Copyright 2023. All rights reserved. Licence number 100022432
 4. Extent of adopted highway has been considered based on the Swansea online mapping.
 5. Drawing overlaid onto concept masterplan produced by Hammonds Architects.
 5. Please do not scale from this drawing.

REVISIONS (CONTINUED)

Rev	Date	Description	By	App

REVISIONS

Rev	Date	Description	By	App
PO1	18/10/23	First Issue	DC	DC

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CARDIFF
CF11 9PQ
t: 02920 619 361
e: info@apexp.co.uk

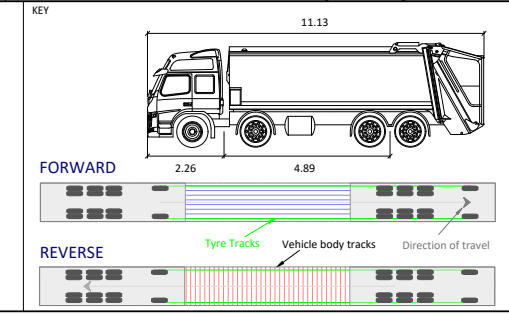
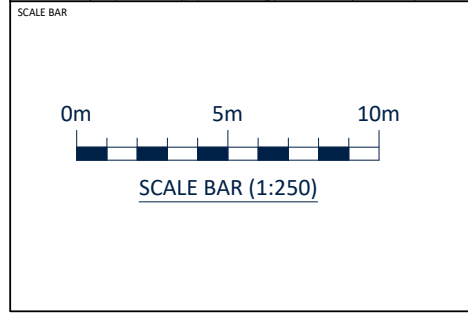
CLIENT
WALTERS GROUP

PROJECT
HIGH STREET, PONTARDDULAI

TITLE
GENERAL ARRANGEMENT OF PROPOSED SITE ACCESS JUNCTION ON HIGH STREET

PROJECT NO. C23-025	SCALE @ A3 1:250
STATUS DESCRIPTION INFORMATION	STATUS S2
DRAWING NO. C23025-ATP-DR-TP-005	

Appendix E Swept Path Analysis



Volvo FM 12 Phoenix 2 (2006)

Width	: 2.53
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 32.4

REVISIONS (CONTINUED)

Rev	Date	Description	By	App
PO1	18/10/23	First Issue	DC	DC

REVISIONS

Rev	Date	Description	By	App
PO1	18/10/23	First Issue	DC	DC

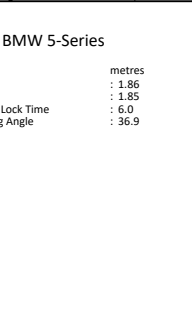
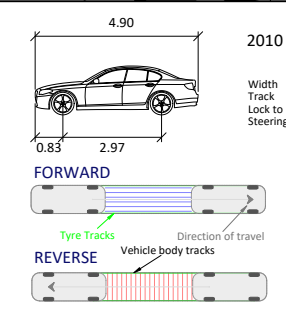
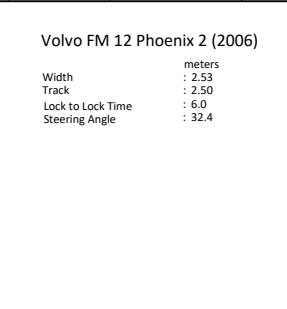
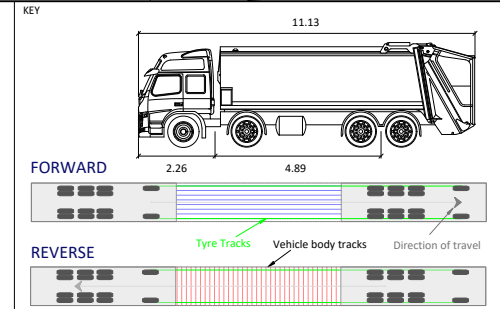
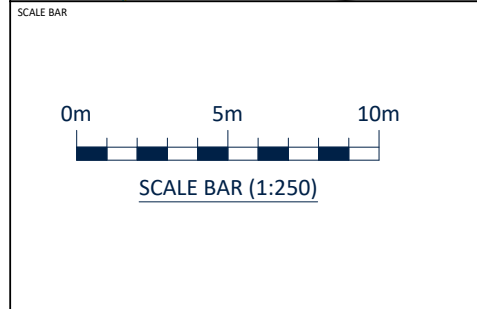
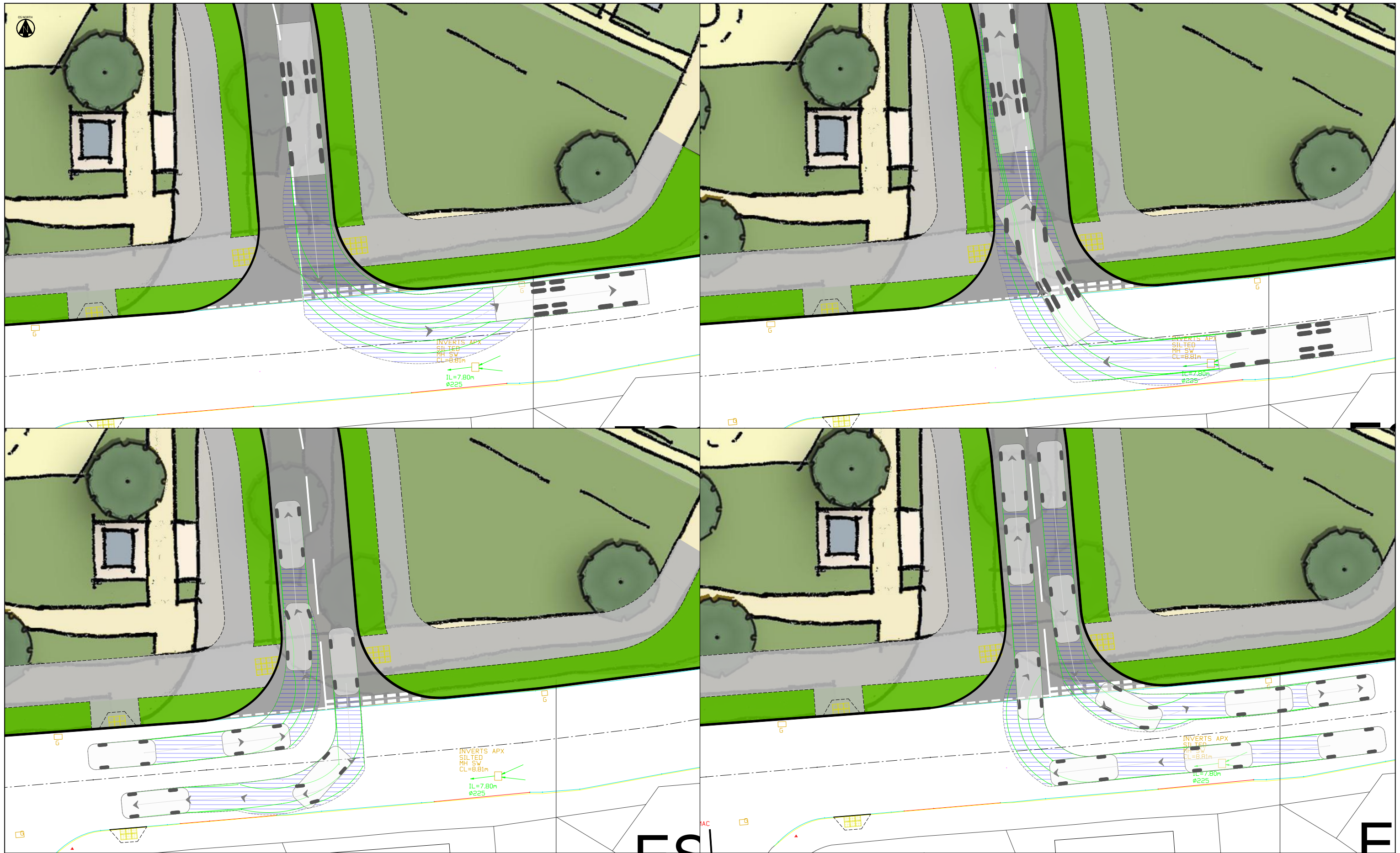
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TRANSPORT PLANNING

11-13 PENHILL ROAD
CARDIFF
CF11 9PQ
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e: info@apexp.co.uk

CLIENT
WALTERS GROUP

PROJECT
HIGH STREET, PONTARDDULAIS

TITLE PROPOSED HIGH STREET SITE ACCESS - SWEEP PATH ANALYSIS REFUSE VEHICLE	
PROJECT NO. C23-025	SCALE @ A3 1:250
STATUS DESCRIPTION INFORMATION	STATUS S2
DRAWING NO. C23025-ATP-DR-TP-008	



REVISIONS

Rev	Date	Description	By	App
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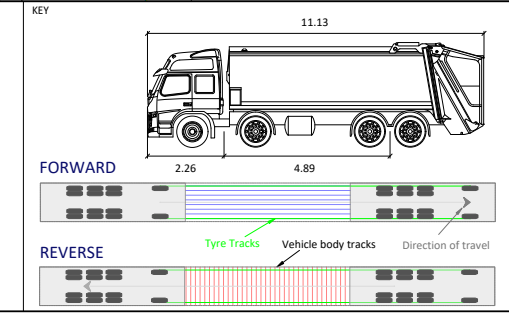
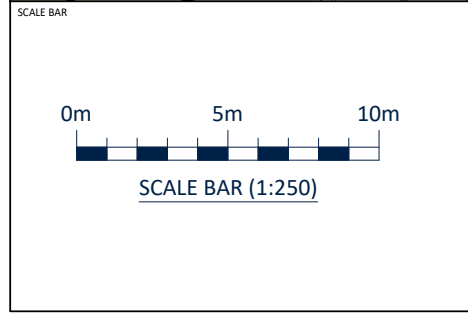
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CLIENT
WALTERS GROUP

PROJECT
HIGH STREET, PONTARDDULAI

TITLE PROPOSED HIGH STREET SITE ACCESS - SWEEP PATH ANALYSIS REFUSE VEHICLE AND LARGE CAR	
PROJECT NO. C23-025	SCALE @ A3 1:250
STATUS DESCRIPTION INFORMATION	STATUS S2
DRAWING NO. C23025-ATP-DR-TP-009	



Volvo FM 12 Phoenix 2 (2006)

Width	2.53
Track	2.50
Lock to Lock Time	6.0
Steering Angle	32.4

REVISIONS (CONTINUED)

Rev	Date	Description	By	App
PO1	18/10/23	First Issue	DC	DC

REVISIONS

Rev	Date	Description	By	App
PO1	18/10/23	First Issue	DC	DC

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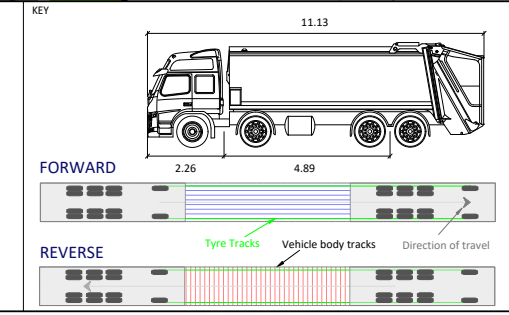
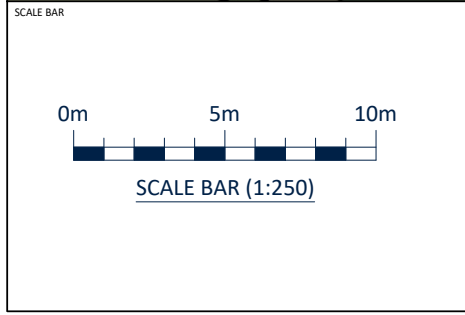
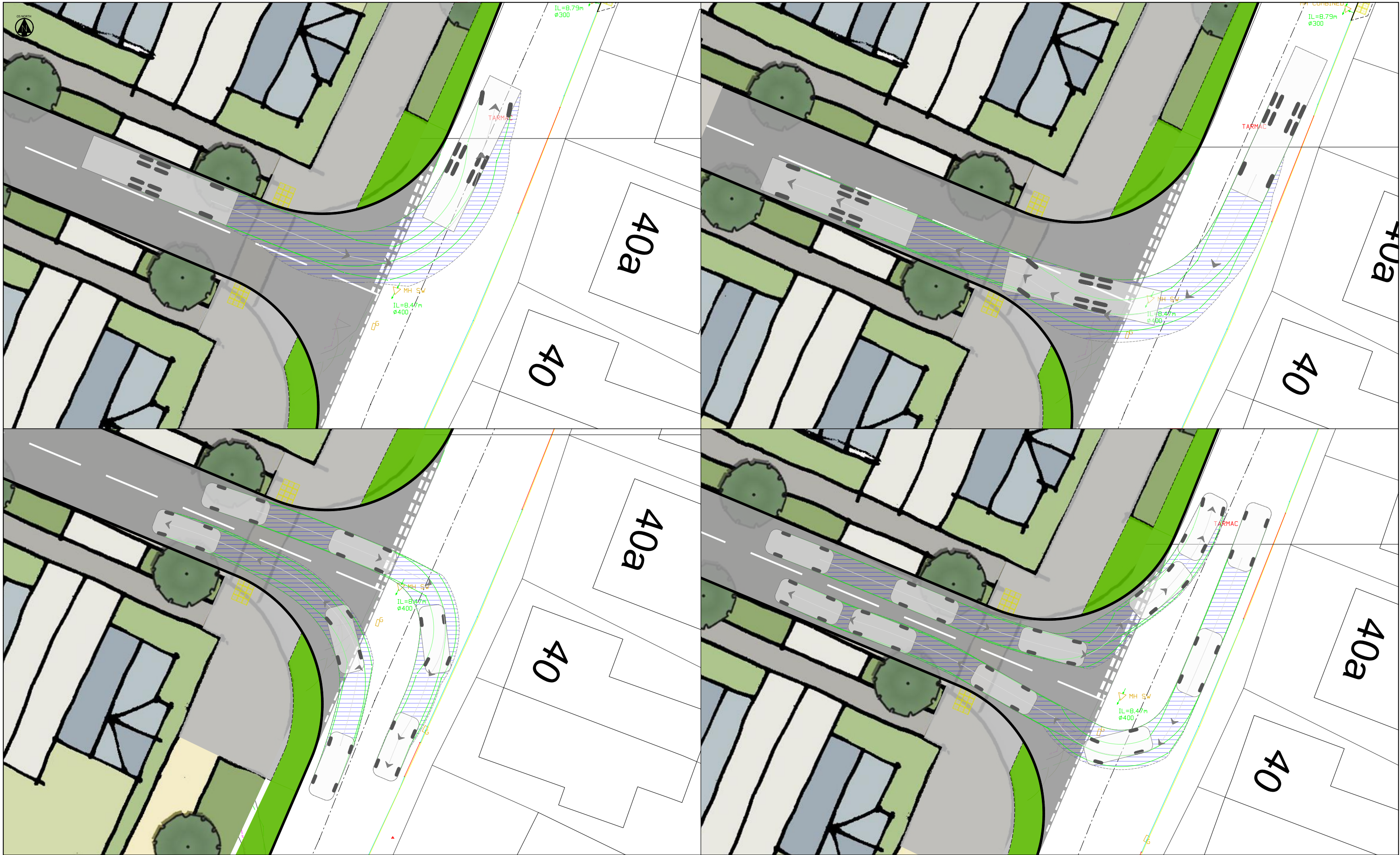
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CLIENT
WALTERS GROUP

PROJECT
HIGH STREET, PONTARDDULAI

TITLE
PROPOSED WOODVILLE STREET SITE
ACCESS - SWEEP PATH ANALYSIS REFUSE
VEHICLE

PROJECT NO. C23-025	SCALE @ A3 1:250
STATUS DESCRIPTION INFORMATION	STATUS S2
DRAWING NO. C23025-ATP-DR-TP-010	



Volvo FM 12 Phoenix 2 (2006)

Width	11.13
Track	2.53
Lock to Lock Time	2.50
Steering Angle	6.0
	32.4

2010 BMW 5-Series

Width	4.90
Track	1.86
Lock to Lock Time	1.85
Steering Angle	6.0
	36.9

REVISIONS

PO1	18/10/23	First Issue	DC	DC
Rev	Date	Description	By	App

Apex
TRANSPORT PLANNING

11-13 PENHILL ROAD
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CF11 9PQ
t: 02920 619 361
e: info@apexp.co.uk

CLIENT
WALTERS GROUP






PROJECT
HIGH STREET, PONTARDDULAIS

PROJECT NO.	C23-025	SCALE @ A3	1:250
STATUS DESCRIPTION	INFORMATION	STATUS	S2
DRAWING NO.	C23025-ATP-DR-TP-011		

TITLE
PROPOSED WOODVILLE STREET SITE
ACCESS - SWEEP PATH ANALYSIS REFUSE
VEHICLE AND LARGE CAR

Appendix F Street and Movement Hierarchy

Street & Movement Hierarchy

-  **Spine Street:**
Woodville Street
 - ~6.1m carriageway
 - New 3m shared foot / cycle path and formal landscape verge to development side
 - Street trees
 - Existing 2m footpath retained. Potential to retrofit green infrastructure to other side whilst retaining on street parking for existing residents.
 - 2-3 storey homes fronting the street
- Secondary Access / Potential Northern Link**
 - ~6.1m carriageway
 - Landscape verge to both sides, street trees
 - Northerly Shared foot / cycle path connection linking to Tertiary Street & Woodland Trail.
-  **Spine Street infrastructure (future extension)**
-  **Primary Street:**
 - 5.5m carriageway
 - 2m footpath to both sides
 - Formal landscape verge with street trees to both sides
 - 2-3 storey homes fronting the street
 - On plot and on street parking where appropriate
-  **Secondary Street**
 - 5.5m carriageway
 - 2m footpath to both sides
 - Semi-formal landscaped verge to one side with street trees
 - Typically 2 storey homes
 - Typically on plot & on street parking
-  **Tertiary Streets (Lanes, Mews)**
 - Informal layout, low kerb upstand to allow walking in carriageway / 2m safe walking route to one side
 - Incidental GI buildouts and trees
 - 2 storey homes
 - Typically on plot & on street parking
-  Private drives / Courtyard
-  Formal 3m shared foot/ cycle path
-  Recreational ATR connections



Appendix G TRICS Outputs – Existing Industrial Use

Apex Transport Planning Ltd 11-13 Penhill Road Cardiff

Licence No: 502501

Filtering Summary

Land Use	02/C	EMPLOYMENT/INDUSTRIAL UNIT
Selected Trip Rate Calculation Parameter Range	2500-12500 sqm GFA	
Actual Trip Rate Calculation Parameter Range	2950-9216 sqm GFA	
Date Range	Minimum: 01/01/10	Maximum: 10/11/21
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday	1
	Tuesday	2
	Wednesday	2
	Thursday	3
Main Location Types selected	Edge of Town Centre	1
	Suburban Area (PPS6 Out of Centre)	1
	Edge of Town	6
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	5,001 to 10,000	3
	10,001 to 15,000	2
	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	1
	50,001 to 75,000	1
	75,001 to 100,000	1
	100,001 to 125,000	1
	125,001 to 250,000	4
Car Ownership <5 Mile ranges selected	0.6 to 1.0	2
	1.1 to 1.5	6
PTAL Rating	No PTAL Present	8
Filter by Site Operations Breakdown	All Surveys Included	

Calculation Reference: AUDIT-502501-231016-1015

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : C - INDUSTRIAL UNIT
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
03	SOUTH WEST	
	DV DEVON	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
	WM WEST MIDLANDS	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
	EC CHESHIRE EAST	1 days
	LC LANCASHIRE	1 days
09	NORTH	
	FU WESTMORLAND & FURNESS	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 2950 to 9216 (units: sqm)
Range Selected by User: 2500 to 12500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 10/11/21

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	2 days
Wednesday	2 days
Thursday	3 days

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

Selected survey types:

Manual count	8 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	1
Edge of Town	6

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:

Industrial Zone	7
Development Zone	1

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:

Not Known	8 days
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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®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	3 days
10,001 to 15,000	2 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	1 days
50,001 to 75,000	1 days
75,001 to 100,000	1 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	2 days
1.1 to 1.5	6 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	8 days
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This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	8 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	AC-02-C-02	INDUSTRIAL MATERIALS	CHESHIRE WEST & CHESTER
	JUPITER DRIVE		
	CHESTER		
	CHESTER W. EMP. PARK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	8100 sqm	
	Survey date: WEDNESDAY	19/11/14	Survey Type: MANUAL
2	DV-02-C-02	ENERGY RECOVERY FACILITY	DEVON
	GRACE ROAD SOUTH		
	EXETER		
	MARSH BARTON TRAD. EST.		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	3513 sqm	
	Survey date: THURSDAY	06/07/17	Survey Type: MANUAL
3	EC-02-C-01	OFFICE FURNITURE	CHESHIRE EAST
	BRUNEL ROAD		
	MACCLESFIELD		
	LYME GREEN BUS. PARK		
	Edge of Town		
	Development Zone		
	Total Gross floor area:	6658 sqm	
	Survey date: MONDAY	19/09/16	Survey Type: MANUAL
4	FU-02-C-01	DOMINO'S PIZZA	WESTMORLAND & FURNESS
	COWPER ROAD		
	PENRITH		
	GILWILLY IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	2950 sqm	
	Survey date: TUESDAY	10/06/14	Survey Type: MANUAL
5	HC-02-C-01	ENGINEERING COMPANY	HAMPSHIRE
	JAYS CLOSE		
	BASINGSTOKE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3000 sqm	
	Survey date: THURSDAY	16/06/16	Survey Type: MANUAL
6	LC-02-C-02	RECYCLING CO.	LANCASHIRE
	ESSEX STREET		
	PRESTON		
	RED SCAR IND ESTATE		
	Edge of Town Centre		
	Industrial Zone		
	Total Gross floor area:	8000 sqm	
	Survey date: THURSDAY	10/05/12	Survey Type: MANUAL
7	WK-02-C-01	MACHINE ENGINEERING	WARWICKSHIRE
	CASTLE MOUND WAY		
	RUGBY		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	9216 sqm	
	Survey date: WEDNESDAY	10/11/21	Survey Type: MANUAL
8	WM-02-C-03	INDUSTRIAL GLASS	WEST MIDLANDS
	DOWNING STREET		
	SMETHWICK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	5070 sqm	
	Survey date: TUESDAY	06/11/12	Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
EC-02-C-02	covid

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	6083	0.099	2	6083	0.000	2	6083	0.099
06:00 - 07:00	2	6083	0.041	2	6083	0.008	2	6083	0.049
07:00 - 08:00	8	5813	0.314	8	5813	0.054	8	5813	0.368
08:00 - 09:00	8	5813	0.361	8	5813	0.067	8	5813	0.428
09:00 - 10:00	8	5813	0.221	8	5813	0.114	8	5813	0.335
10:00 - 11:00	8	5813	0.131	8	5813	0.101	8	5813	0.232
11:00 - 12:00	8	5813	0.073	8	5813	0.099	8	5813	0.172
12:00 - 13:00	8	5813	0.131	8	5813	0.153	8	5813	0.284
13:00 - 14:00	8	5813	0.148	8	5813	0.187	8	5813	0.335
14:00 - 15:00	8	5813	0.084	8	5813	0.112	8	5813	0.196
15:00 - 16:00	8	5813	0.065	8	5813	0.131	8	5813	0.196
16:00 - 17:00	8	5813	0.052	8	5813	0.273	8	5813	0.325
17:00 - 18:00	8	5813	0.058	8	5813	0.290	8	5813	0.348
18:00 - 19:00	8	5813	0.022	8	5813	0.161	8	5813	0.183
19:00 - 20:00	2	6083	0.049	2	6083	0.049	2	6083	0.098
20:00 - 21:00	2	6083	0.025	2	6083	0.033	2	6083	0.058
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.874			1.832			3.706

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:	2950 - 9216 (units: sqm)
Survey date range:	01/01/10 - 10/11/21
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	1

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.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
06:00 - 07:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
07:00 - 08:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
08:00 - 09:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
09:00 - 10:00	8	5813	0.002	8	5813	0.002	8	5813	0.004
10:00 - 11:00	8	5813	0.004	8	5813	0.004	8	5813	0.008
11:00 - 12:00	8	5813	0.004	8	5813	0.004	8	5813	0.008
12:00 - 13:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
13:00 - 14:00	8	5813	0.002	8	5813	0.002	8	5813	0.004
14:00 - 15:00	8	5813	0.002	8	5813	0.002	8	5813	0.004
15:00 - 16:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
16:00 - 17:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
17:00 - 18:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
18:00 - 19:00	8	5813	0.002	8	5813	0.002	8	5813	0.004
19:00 - 20:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
20:00 - 21:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.016			0.032

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 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
06:00 - 07:00	2	6083	0.016	2	6083	0.000	2	6083	0.016
07:00 - 08:00	8	5813	0.024	8	5813	0.022	8	5813	0.046
08:00 - 09:00	8	5813	0.047	8	5813	0.028	8	5813	0.075
09:00 - 10:00	8	5813	0.041	8	5813	0.034	8	5813	0.075
10:00 - 11:00	8	5813	0.032	8	5813	0.028	8	5813	0.060
11:00 - 12:00	8	5813	0.034	8	5813	0.039	8	5813	0.073
12:00 - 13:00	8	5813	0.043	8	5813	0.058	8	5813	0.101
13:00 - 14:00	8	5813	0.043	8	5813	0.030	8	5813	0.073
14:00 - 15:00	8	5813	0.013	8	5813	0.011	8	5813	0.024
15:00 - 16:00	8	5813	0.017	8	5813	0.019	8	5813	0.036
16:00 - 17:00	8	5813	0.009	8	5813	0.017	8	5813	0.026
17:00 - 18:00	8	5813	0.002	8	5813	0.002	8	5813	0.004
18:00 - 19:00	8	5813	0.000	8	5813	0.002	8	5813	0.002
19:00 - 20:00	2	6083	0.000	2	6083	0.049	2	6083	0.049
20:00 - 21:00	2	6083	0.000	2	6083	0.025	2	6083	0.025
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.321			0.364			0.685

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 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
06:00 - 07:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
07:00 - 08:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
08:00 - 09:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
09:00 - 10:00	8	5813	0.002	8	5813	0.002	8	5813	0.004
10:00 - 11:00	8	5813	0.002	8	5813	0.000	8	5813	0.002
11:00 - 12:00	8	5813	0.000	8	5813	0.002	8	5813	0.002
12:00 - 13:00	8	5813	0.002	8	5813	0.002	8	5813	0.004
13:00 - 14:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
14:00 - 15:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
15:00 - 16:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
16:00 - 17:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
17:00 - 18:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
18:00 - 19:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
19:00 - 20:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
20:00 - 21:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.006			0.012

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 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
06:00 - 07:00	2	6083	0.016	2	6083	0.000	2	6083	0.016
07:00 - 08:00	8	5813	0.017	8	5813	0.000	8	5813	0.017
08:00 - 09:00	8	5813	0.006	8	5813	0.000	8	5813	0.006
09:00 - 10:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
10:00 - 11:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
11:00 - 12:00	8	5813	0.000	8	5813	0.000	8	5813	0.000
12:00 - 13:00	8	5813	0.000	8	5813	0.002	8	5813	0.002
13:00 - 14:00	8	5813	0.004	8	5813	0.004	8	5813	0.008
14:00 - 15:00	8	5813	0.000	8	5813	0.006	8	5813	0.006
15:00 - 16:00	8	5813	0.000	8	5813	0.002	8	5813	0.002
16:00 - 17:00	8	5813	0.000	8	5813	0.015	8	5813	0.015
17:00 - 18:00	8	5813	0.000	8	5813	0.015	8	5813	0.015
18:00 - 19:00	8	5813	0.000	8	5813	0.004	8	5813	0.004
19:00 - 20:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
20:00 - 21:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.043			0.048			0.091

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.*

Appendix H TRICS Outputs – Proposed Private Housing

Apex Transport Planning Ltd 11-13 Penhill Road Cardiff

Licence No: 502501

Filtering Summary

Land Use	03/A	RESIDENTIAL/HOUSES PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	50-250 DWELLS	
Actual Trip Rate Calculation Parameter Range	50-248 DWELLS	
Date Range	Minimum: 01/01/10	Maximum: 01/03/23
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	7
	Tuesday	8
	Wednesday	7
	Thursday	10
	Friday	5
Main Location Types selected	Edge of Town Centre	2
	Suburban Area (PPS6 Out of Centre)	7
	Edge of Town	28
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	14 - Selected
	Servicing vehicles Excluded	53 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	8
	5,001 to 10,000	11
	10,001 to 15,000	12
	15,001 to 20,000	4
	20,001 to 25,000	2
Population <5 Mile ranges selected	5,001 to 25,000	11
	25,001 to 50,000	6
	50,001 to 75,000	2
	75,001 to 100,000	6
	100,001 to 125,000	2
	125,001 to 250,000	10
Car Ownership <5 Mile ranges selected	1.1 to 1.5	35
	1.6 to 2.0	2
PTAL Rating	No PTAL Present	37

Calculation Reference: AUDIT-502501-230708-0738

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	4 days
	HC HAMPSHIRE	3 days
	HF HERTFORDSHIRE	1 days
	KC KENT	1 days
	SC SURREY	2 days
	WB WEST BERKSHIRE	1 days
	WS WEST SUSSEX	4 days
03	SOUTH WEST	
	DC DORSET	1 days
	DV DEVON	2 days
04	EAST ANGLIA	
	NF NORFOLK	10 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
	TE TELFORD & WREKIN	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
	NY NORTH YORKSHIRE	3 days
09	NORTH	
	DH DURHAM	1 days
	FU WESTMORLAND & FURNESS	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: 50 to 248 (units:)
 Range Selected by User: 50 to 250 (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 01/03/23

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

Selected survey days:

Monday	7 days
Tuesday	8 days
Wednesday	7 days
Thursday	10 days
Friday	5 days

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

Selected survey types:

Manual count	33 days
Directional ATC Count	4 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:

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	32
Out of Town	2
No Sub Category	3

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	14 days - Selected
Servicing vehicles Excluded	53 days - Selected

Secondary Filtering selection:

Use Class:

C3	37 days
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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	8 days
5,001 to 10,000	11 days
10,001 to 15,000	12 days
15,001 to 20,000	4 days
20,001 to 25,000	2 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	11 days
25,001 to 50,000	6 days
50,001 to 75,000	2 days
75,001 to 100,000	6 days
100,001 to 125,000	2 days
125,001 to 250,000	10 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	35 days
1.6 to 2.0	2 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	22 days
No	15 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	37 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	DC-03-A-09 A350 SHAFTESBURY	MIXED HOUSES	DORSET
	Edge of Town No Sub Category Total No of Dwellings: 50 <i>Survey date: FRIDAY 19/11/21</i>		<i>Survey Type: MANUAL</i>
2	DH-03-A-03 PILGRIMS WAY DURHAM	SEMI-DETACHED & TERRACED	DURHAM
	Edge of Town Residential Zone Total No of Dwellings: 57 <i>Survey date: FRIDAY 19/10/18</i>		<i>Survey Type: MANUAL</i>
3	DV-03-A-02 MILLHEAD ROAD HONITON	HOUSES & BUNGALOWS	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 116 <i>Survey date: FRIDAY 25/09/15</i>		<i>Survey Type: MANUAL</i>
4	DV-03-A-03 LOWER BRAND LANE HONITON	TERRACED & SEMI DETACHED	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 70 <i>Survey date: MONDAY 28/09/15</i>		<i>Survey Type: MANUAL</i>
5	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 212 <i>Survey date: MONDAY 11/07/16</i>		<i>Survey Type: MANUAL</i>
6	ES-03-A-05 RATTLE ROAD NEAR EASTBOURNE STONE CROSS	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 99 <i>Survey date: WEDNESDAY 05/06/19</i>		<i>Survey Type: MANUAL</i>
7	ES-03-A-07 NEW ROAD HAILSHAM HELLINGLY	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 91 <i>Survey date: THURSDAY 07/11/19</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

8	ES-03-A-08 WRESTWOOD ROAD BEXHILL	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 110 <i>Survey date: WEDNESDAY 12/10/22</i>		<i>Survey Type: MANUAL</i>
9	FU-03-A-02 MACADAM WAY PENRITH	DETACHED/TERRACED HOUSING	WESTMORLAND & FURNESS
	Edge of Town Centre Residential Zone Total No of Dwellings: 50 <i>Survey date: TUESDAY 21/06/16</i>		<i>Survey Type: MANUAL</i>
10	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	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	HC-03-A-27 DAIRY ROAD ANDOVER	MIXED HOUSES	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 73 <i>Survey date: TUESDAY 16/11/21</i>		<i>Survey Type: MANUAL</i>
12	HC-03-A-28 EAGLE AVENUE WATERLOOVILLE LOVEDEAN	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 125 <i>Survey date: MONDAY 08/11/21</i>		<i>Survey Type: MANUAL</i>
13	HF-03-A-03 HARE STREET ROAD BUNTINGFORD	MIXED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 160 <i>Survey date: MONDAY 08/07/19</i>		<i>Survey Type: MANUAL</i>
14	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH	MIXED HOUSES & FLATS	KENT
	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>
15	NE-03-A-03 STATION ROAD SCUNTHORPE	PRIVATE HOUSES	NORTH EAST LINCOLNSHIRE
	Edge of Town Centre Residential Zone Total No of Dwellings: 180 <i>Survey date: TUESDAY 20/05/14</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

16	NF-03-A-02 DEREHAM ROAD NORWICH	HOUSES & FLATS		NORFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 98 <i>Survey date: MONDAY 22/10/12</i>			
	<i>Survey Type: MANUAL</i>			
17	NF-03-A-15 SILFIELD ROAD WYMONDHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Out of Town Total No of Dwellings: 235 <i>Survey date: THURSDAY 20/09/18</i>			
	<i>Survey Type: DIRECTIONAL ATC COUNT</i>			
18	NF-03-A-16 NORWICH COMMON WYMONDHAM	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 138 <i>Survey date: TUESDAY 20/10/15</i>			
	<i>Survey Type: DIRECTIONAL ATC COUNT</i>			
19	NF-03-A-32 HUNSTANTON ROAD HUNSTANTON	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 164 <i>Survey date: WEDNESDAY 21/09/22</i>			
	<i>Survey Type: DIRECTIONAL ATC COUNT</i>			
20	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 143 <i>Survey date: THURSDAY 29/09/22</i>			
	<i>Survey Type: MANUAL</i>			
21	NF-03-A-34 NORWICH ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Out of Town Total No of Dwellings: 80 <i>Survey date: TUESDAY 27/09/22</i>			
	<i>Survey Type: MANUAL</i>			
22	NF-03-A-35 REPTON AVENUE NORWICH	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 116 <i>Survey date: WEDNESDAY 28/09/22</i>			
	<i>Survey Type: MANUAL</i>			
23	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category Total No of Dwellings: 75 <i>Survey date: THURSDAY 29/09/22</i>			
	<i>Survey Type: MANUAL</i>			

LIST OF SITES relevant to selection parameters (Cont.)

24	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:		212	
	<i>Survey date: TUESDAY</i>		<i>27/09/22</i>	<i>Survey Type: MANUAL</i>
25	NF-03-A-48 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:		181	
	<i>Survey date: THURSDAY</i>		<i>19/09/19</i>	<i>Survey Type: DIRECTIONAL ATC COUNT</i>
26	NY-03-A-06 HORSEFAIR BOROUGHBRIDGE	BUNGALOWS & SEMI DET.		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:		115	
	<i>Survey date: FRIDAY</i>		<i>14/10/11</i>	<i>Survey Type: MANUAL</i>
27	NY-03-A-09 GRAMMAR SCHOOL LANE NORTHALLERTON	MIXED HOUSING		NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:		52	
	<i>Survey date: MONDAY</i>		<i>16/09/13</i>	<i>Survey Type: MANUAL</i>
28	NY-03-A-10 BOROUGHBRIDGE ROAD RIPON	HOUSES AND FLATS		NORTH YORKSHIRE
	Edge of Town No Sub Category Total No of Dwellings:		71	
	<i>Survey date: TUESDAY</i>		<i>17/09/13</i>	<i>Survey Type: MANUAL</i>
29	SC-03-A-04 HIGH ROAD BYFLEET	DETACHED & TERRACED		SURREY
	Edge of Town Residential Zone Total No of Dwellings:		71	
	<i>Survey date: THURSDAY</i>		<i>23/01/14</i>	<i>Survey Type: MANUAL</i>
30	SC-03-A-05 REIGATE ROAD HORLEY	MIXED HOUSES		SURREY
	Edge of Town Residential Zone Total No of Dwellings:		207	
	<i>Survey date: MONDAY</i>		<i>01/04/19</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

31	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone Total No of Dwellings: 248 <i>Survey date: WEDNESDAY 22/11/17</i>	DETACHED & SEMI -DETACHED	STAFFORDSHIRE	<i>Survey Type: MANUAL</i>
32	TE-03-A-03 SANDCROFT TELFORD SUTTON HILL Edge of Town Residential Zone Total No of Dwellings: 54 <i>Survey date: THURSDAY 24/10/13</i>	SEMI -DETACHED/TERRACED	TELFORD & WREKIN	<i>Survey Type: MANUAL</i>
33	WB-03-A-03 DORKING WAY READING CALCOT Edge of Town Residential Zone Total No of Dwellings: 108 <i>Survey date: FRIDAY 09/09/22</i>	MIXED HOUSES	WEST BERKSHIRE	<i>Survey Type: MANUAL</i>
34	WS-03-A-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH Edge of Town Residential Zone Total No of Dwellings: 151 <i>Survey date: THURSDAY 11/12/14</i>	MIXED HOUSES	WEST SUSSEX	<i>Survey Type: MANUAL</i>
35	WS-03-A-08 ROUNDSTONE LANE ANGMERING Edge of Town Residential Zone Total No of Dwellings: 180 <i>Survey date: THURSDAY 19/04/18</i>	MIXED HOUSES	WEST SUSSEX	<i>Survey Type: MANUAL</i>
36	WS-03-A-14 TODDINGTON LANE LITTLEHAMPTON WICK Edge of Town Residential Zone Total No of Dwellings: 117 <i>Survey date: WEDNESDAY 20/10/21</i>	MIXED HOUSES	WEST SUSSEX	<i>Survey Type: MANUAL</i>
37	WS-03-A-17 SHOPWHYKE ROAD CHICHESTER Edge of Town Residential Zone Total No of Dwellings: 86 <i>Survey date: WEDNESDAY 01/03/23</i>	MIXED HOUSES & FLATS	WEST SUSSEX	<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
SF-03-A-09	Covid
SF-03-A-10	Covid
WS-03-A-13	Covid

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	37	119	0.089	37	119	0.293	37	119	0.382
08:00 - 09:00	37	119	0.138	37	119	0.357	37	119	0.495
09:00 - 10:00	37	119	0.151	37	119	0.162	37	119	0.313
10:00 - 11:00	37	119	0.130	37	119	0.161	37	119	0.291
11:00 - 12:00	37	119	0.143	37	119	0.148	37	119	0.291
12:00 - 13:00	37	119	0.158	37	119	0.156	37	119	0.314
13:00 - 14:00	37	119	0.162	37	119	0.165	37	119	0.327
14:00 - 15:00	37	119	0.165	37	119	0.189	37	119	0.354
15:00 - 16:00	37	119	0.247	37	119	0.174	37	119	0.421
16:00 - 17:00	37	119	0.264	37	119	0.174	37	119	0.438
17:00 - 18:00	37	119	0.336	37	119	0.163	37	119	0.499
18:00 - 19:00	37	119	0.263	37	119	0.155	37	119	0.418
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.246			2.297			4.543

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:	50 - 248 (units:)
Survey date range:	01/01/10 - 01/03/23
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	10
Surveys manually removed from selection:	3

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

Appendix I TRICS Outputs – Proposed Affordable Housing

Apex Transport Planning Ltd 11-13 Penhill Road Cardiff

Licence No: 502501

Filtering Summary

Land Use	03/B	RESIDENTIAL/AFFORDABLE/LOCAL AUTHORITY HOUS
Selected Trip Rate Calculation Parameter Range	14-100 DWELLS	
Actual Trip Rate Calculation Parameter Range	15-97 DWELLS	
Date Range	Minimum: 01/01/10	Maximum: 13/05/22
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	4
	Tuesday	3
	Wednesday	2
	Thursday	1
	Friday	2
Main Location Types selected	Edge of Town Centre	2
	Suburban Area (PPS6 Out of Centre)	3
	Edge of Town	5
	Neighbourhood Centre (PPS6 Local Centre)	2
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	X - Selected
	Servicing vehicles Excluded	16 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	2
	5,001 to 10,000	4
	10,001 to 15,000	1
	15,001 to 20,000	1
	25,001 to 50,000	4
Population <5 Mile ranges selected	5,000 or Less	1
	5,001 to 25,000	1
	25,001 to 50,000	1
	50,001 to 75,000	1
	75,001 to 100,000	3
	125,001 to 250,000	5
Car Ownership <5 Mile ranges selected	0.6 to 1.0	6
	1.1 to 1.5	6
PTAL Rating	No PTAL Present	12

Calculation Reference: AUDIT-502501-230708-0704

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : B - AFFORDABLE/LOCAL AUTHORITY HOUSES
 TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
05	EAST MIDLANDS	
	NN NORTH NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS	
	WO WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	KS KIRKLEES	2 days
	LS LEEDS	1 days
08	NORTH WEST	
	AC CHESHIRE WEST & CHESTER	1 days
	BB BLACKBURN WITH DARWEN	1 days
	MS MERSEYSIDE	1 days
09	NORTH	
	FU WESTMORLAND & FURNESS	1 days
	NB NORTHUMBERLAND	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: 15 to 97 (units:)
 Range Selected by User: 14 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 13/05/22

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	3 days
Wednesday	2 days
Thursday	1 days
Friday	2 days

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

Selected survey types:

Manual count	12 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	2
Suburban Area (PPS6 Out of Centre)	3
Edge of Town	5
Neighbourhood Centre (PPS6 Local Centre)	2

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	10
Built-Up Zone	1
Village	1

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	X days - Selected
Servicing vehicles Excluded	16 days - Selected

Secondary Filtering selection:

Use Class:

C3	12 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	2 days
5,001 to 10,000	4 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	4 days

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

Population within 5 miles:

5,000 or Less	1 days
5,001 to 25,000	1 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	3 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:

0.6 to 1.0	6 days
1.1 to 1.5	6 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	12 days
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This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	12 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	AC-03-B-01	HOUSES & FLATS		CHESHIRE WEST & CHESTER
		WORDSWORTH CRES.		
		CHESTER		
		BLACON		
		Edge of Town		
		Residential Zone		
		Total No of Dwellings:	80	
		<i>Survey date: MONDAY</i>	<i>17/11/14</i>	<i>Survey Type: MANUAL</i>
2	BB-03-B-01	SEMI DETACHED/TERRACED		BLACKBURN WITH DARWEN
		BILLINGE STREET		
		BLACKBURN		
		Edge of Town Centre		
		Residential Zone		
		Total No of Dwellings:	15	
		<i>Survey date: MONDAY</i>	<i>10/06/13</i>	<i>Survey Type: MANUAL</i>
3	FU-03-B-01	SEMI DETACHED & TERRACED		WESTMORLAND & FURNESS
		PENNINE WAY		
		ALSTON		
		Neighbourhood Centre (PPS6 Local Centre)		
		Village		
		Total No of Dwellings:	66	
		<i>Survey date: FRIDAY</i>	<i>13/05/22</i>	<i>Survey Type: MANUAL</i>
4	KS-03-B-01	MIXED HOUSES		KIRKLEES
		WHITEACRE STREET		
		HUDDERSFIELD		
		DEIGHTON		
		Edge of Town		
		Residential Zone		
		Total No of Dwellings:	54	
		<i>Survey date: TUESDAY</i>	<i>17/09/13</i>	<i>Survey Type: MANUAL</i>
5	KS-03-B-02	TERRACED HOUSES		KIRKLEES
		SYKES CLOSE		
		BATLEY		
		Edge of Town		
		Residential Zone		
		Total No of Dwellings:	17	
		<i>Survey date: FRIDAY</i>	<i>19/10/18</i>	<i>Survey Type: MANUAL</i>
6	LS-03-B-02	TERRACED HOUSES		LEEDS
		LINCOLN GREEN ROAD		
		LEEDS		
		Suburban Area (PPS6 Out of Centre)		
		Built-Up Zone		
		Total No of Dwellings:	29	
		<i>Survey date: THURSDAY</i>	<i>19/09/13</i>	<i>Survey Type: MANUAL</i>
7	MS-03-B-01	TERRACED		MERSEYSIDE
		TARBOCK ROAD		
		LIVERPOOL		
		SPEKE		
		Edge of Town		
		Residential Zone		
		Total No of Dwellings:	16	
		<i>Survey date: TUESDAY</i>	<i>18/06/13</i>	<i>Survey Type: MANUAL</i>
8	NB-03-B-01	SEMI DET. & TERRACED		NORTHUMBERLAND
		WESTLEA		
		BEDLINGTON		
		Edge of Town		
		Residential Zone		
		Total No of Dwellings:	97	
		<i>Survey date: MONDAY</i>	<i>19/11/12</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	NF-03-B-01 NELSON ROAD NORTH GREAT YARMOUTH	TERRACED HOUSES		NORFOLK
	Edge of Town Centre Residential Zone Total No of Dwellings:		45	
	<i>Survey date: WEDNESDAY</i>		<i>13/09/17</i>	<i>Survey Type: MANUAL</i>
10	NN-03-B-01 OCCUPATION ROAD CORBY	SEMI -DETACHED HOUSES		NORTH NORTHAMPTONSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:		21	
	<i>Survey date: WEDNESDAY</i>		<i>13/10/21</i>	<i>Survey Type: MANUAL</i>
11	WL-03-B-01 BUTTERFIELD DRIVE AMESBURY	TERRACED HOUSES		WILTSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:		54	
	<i>Survey date: TUESDAY</i>		<i>18/09/18</i>	<i>Survey Type: MANUAL</i>
12	WO-03-B-02 GOODREST WALK WORCESTER MERRIMANS HILL	TERRACED HOUSES		WORCESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings:		16	
	<i>Survey date: MONDAY</i>		<i>14/11/16</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.

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

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	12	43	0.063	12	43	0.186	12	43	0.249
08:00 - 09:00	12	43	0.153	12	43	0.276	12	43	0.429
09:00 - 10:00	12	43	0.161	12	43	0.237	12	43	0.398
10:00 - 11:00	12	43	0.135	12	43	0.169	12	43	0.304
11:00 - 12:00	12	43	0.139	12	43	0.131	12	43	0.270
12:00 - 13:00	12	43	0.165	12	43	0.133	12	43	0.298
13:00 - 14:00	12	43	0.167	12	43	0.133	12	43	0.300
14:00 - 15:00	12	43	0.176	12	43	0.194	12	43	0.370
15:00 - 16:00	12	43	0.231	12	43	0.182	12	43	0.413
16:00 - 17:00	12	43	0.255	12	43	0.147	12	43	0.402
17:00 - 18:00	12	43	0.247	12	43	0.182	12	43	0.429
18:00 - 19:00	12	43	0.188	12	43	0.139	12	43	0.327
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.080			2.109			4.189

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:	15 - 97 (units:)
Survey date range:	01/01/10 - 13/05/22
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

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	12	43	0.008	12	43	0.008	12	43	0.016
08:00 - 09:00	12	43	0.008	12	43	0.006	12	43	0.014
09:00 - 10:00	12	43	0.020	12	43	0.018	12	43	0.038
10:00 - 11:00	12	43	0.016	12	43	0.022	12	43	0.038
11:00 - 12:00	12	43	0.014	12	43	0.014	12	43	0.028
12:00 - 13:00	12	43	0.014	12	43	0.012	12	43	0.026
13:00 - 14:00	12	43	0.004	12	43	0.006	12	43	0.010
14:00 - 15:00	12	43	0.010	12	43	0.008	12	43	0.018
15:00 - 16:00	12	43	0.018	12	43	0.020	12	43	0.038
16:00 - 17:00	12	43	0.006	12	43	0.004	12	43	0.010
17:00 - 18:00	12	43	0.008	12	43	0.008	12	43	0.016
18:00 - 19:00	12	43	0.010	12	43	0.008	12	43	0.018
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.136			0.134			0.270

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/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

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	12	43	0.000	12	43	0.000	12	43	0.000
08:00 - 09:00	12	43	0.002	12	43	0.002	12	43	0.004
09:00 - 10:00	12	43	0.004	12	43	0.002	12	43	0.006
10:00 - 11:00	12	43	0.000	12	43	0.002	12	43	0.002
11:00 - 12:00	12	43	0.002	12	43	0.002	12	43	0.004
12:00 - 13:00	12	43	0.004	12	43	0.004	12	43	0.008
13:00 - 14:00	12	43	0.002	12	43	0.002	12	43	0.004
14:00 - 15:00	12	43	0.000	12	43	0.000	12	43	0.000
15:00 - 16:00	12	43	0.000	12	43	0.000	12	43	0.000
16:00 - 17:00	12	43	0.000	12	43	0.000	12	43	0.000
17:00 - 18:00	12	43	0.000	12	43	0.000	12	43	0.000
18:00 - 19:00	12	43	0.000	12	43	0.000	12	43	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.014			0.014			0.028

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/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

PSVS

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	12	43	0.002	12	43	0.002	12	43	0.004
08:00 - 09:00	12	43	0.000	12	43	0.000	12	43	0.000
09:00 - 10:00	12	43	0.000	12	43	0.000	12	43	0.000
10:00 - 11:00	12	43	0.002	12	43	0.002	12	43	0.004
11:00 - 12:00	12	43	0.000	12	43	0.000	12	43	0.000
12:00 - 13:00	12	43	0.000	12	43	0.000	12	43	0.000
13:00 - 14:00	12	43	0.000	12	43	0.000	12	43	0.000
14:00 - 15:00	12	43	0.000	12	43	0.000	12	43	0.000
15:00 - 16:00	12	43	0.002	12	43	0.002	12	43	0.004
16:00 - 17:00	12	43	0.000	12	43	0.000	12	43	0.000
17:00 - 18:00	12	43	0.000	12	43	0.000	12	43	0.000
18:00 - 19:00	12	43	0.000	12	43	0.000	12	43	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.006			0.012

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/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

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	12	43	0.002	12	43	0.004	12	43	0.006
08:00 - 09:00	12	43	0.004	12	43	0.014	12	43	0.018
09:00 - 10:00	12	43	0.008	12	43	0.008	12	43	0.016
10:00 - 11:00	12	43	0.004	12	43	0.002	12	43	0.006
11:00 - 12:00	12	43	0.002	12	43	0.002	12	43	0.004
12:00 - 13:00	12	43	0.000	12	43	0.000	12	43	0.000
13:00 - 14:00	12	43	0.002	12	43	0.000	12	43	0.002
14:00 - 15:00	12	43	0.002	12	43	0.002	12	43	0.004
15:00 - 16:00	12	43	0.012	12	43	0.004	12	43	0.016
16:00 - 17:00	12	43	0.010	12	43	0.010	12	43	0.020
17:00 - 18:00	12	43	0.002	12	43	0.002	12	43	0.004
18:00 - 19:00	12	43	0.008	12	43	0.000	12	43	0.008
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.056			0.048			0.104

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.

Appendix J Traffic Distribution Analysis

Home	Work	Number	% Routing				Movements			
			1. A4138	2. A48 North	3. A48 South	4. Internal / Town Centre	1. A4138	2. A48 North	3. A48 South	4. Internal / Town Centre
Swansea 001	Bridgend 015	23	70%		30%		16	0	7	0
Swansea 001	Cardiff 032	10	70%		30%		7	0	3	0
Swansea 001	Carmarthenshire 006	8		100%			0	8	0	0
Swansea 001	Carmarthenshire 007	6		100%			0	6	0	0
Swansea 001	Carmarthenshire 008	32		100%			0	32	0	0
Swansea 001	Carmarthenshire 011	19		100%			0	19	0	0
Swansea 001	Carmarthenshire 012	7		100%			0	7	0	0
Swansea 001	Carmarthenshire 013	25		100%			0	25	0	0
Swansea 001	Carmarthenshire 015	20		100%			0	20	0	0
Swansea 001	Carmarthenshire 016	8		100%			0	8	0	0
Swansea 001	Carmarthenshire 017	23	40%	60%			9	14	0	0
Swansea 001	Carmarthenshire 019	13	60%	40%			8	5	0	0
Swansea 001	Carmarthenshire 020	43	100%				43	0	0	0
Swansea 001	Carmarthenshire 022	6	100%				6	0	0	0
Swansea 001	Carmarthenshire 023	44	100%				44	0	0	0
Swansea 001	Carmarthenshire 024	61	100%				61	0	0	0
Swansea 001	Carmarthenshire 025	32	100%				32	0	0	0
Swansea 001	Carmarthenshire 026	8	100%				8	0	0	0
Swansea 001	Neath Port Talbot 004	9	70%		30%		6	0	3	0
Swansea 001	Neath Port Talbot 007	11	70%		30%		8	0	3	0
Swansea 001	Neath Port Talbot 008	19	70%		30%		13	0	6	0
Swansea 001	Neath Port Talbot 010	14	70%		30%		10	0	4	0
Swansea 001	Neath Port Talbot 013	16	70%		30%		11	0	5	0
Swansea 001	Neath Port Talbot 015	8	70%		30%		6	0	2	0
Swansea 001	Neath Port Talbot 017	11	70%		30%		8	0	3	0
Swansea 001	Neath Port Talbot 019	35	70%		30%		25	0	11	0
Swansea 001	Neath Port Talbot 020	6	50%	50%			3	3	0	0
Swansea 001	Powys 021	8	70%		30%		6	0	2	0
Swansea 001	Swansea 001	173				100%	0	0	0	173
Swansea 001	Swansea 002	19	70%		30%		13	0	6	0
Swansea 001	Swansea 003	64	70%		30%		45	0	19	0
Swansea 001	Swansea 004	83	30%		70%		25	0	58	0
Swansea 001	Swansea 005	73			100%		0	0	73	0
Swansea 001	Swansea 007	30			100%		0	0	30	0
Swansea 001	Swansea 008	25	70%		30%		18	0	8	0
Swansea 001	Swansea 009	72	70%		30%		50	0	22	0
Swansea 001	Swansea 010	119	70%		30%		83	0	36	0
Swansea 001	Swansea 011	13	70%		30%		9	0	4	0
Swansea 001	Swansea 012	15			100%		0	0	15	0
Swansea 001	Swansea 013	52	70%		30%		36	0	16	0
Swansea 001	Swansea 014	62	70%		30%		43	0	19	0
Swansea 001	Swansea 015	21	70%		30%		15	0	6	0
Swansea 001	Swansea 016	35	70%		30%		25	0	11	0
Swansea 001	Swansea 017	51	70%		30%		36	0	15	0
Swansea 001	Swansea 018	9			100%		0	0	9	0
Swansea 001	Swansea 019	7	70%		30%		5	0	2	0
Swansea 001	Swansea 021	34	70%		30%		24	0	10	0
Swansea 001	Swansea 022	28	70%		30%		20	0	8	0
Swansea 001	Swansea 023	6	70%		30%		4	0	2	0
Swansea 001	Swansea 024	20	70%		30%		14	0	6	0
Swansea 001	Swansea 025	154	70%		30%		108	0	46	0
Swansea 001	Swansea 026	17	70%		30%		12	0	5	0
Swansea 001	Swansea 027	50	70%		30%		35	0	15	0
Swansea 001	Swansea 030	8			100%		0	0	8	0
Swansea 001	Swansea 031	6	70%		30%		4	0	2	0
							952.2	147	499	173

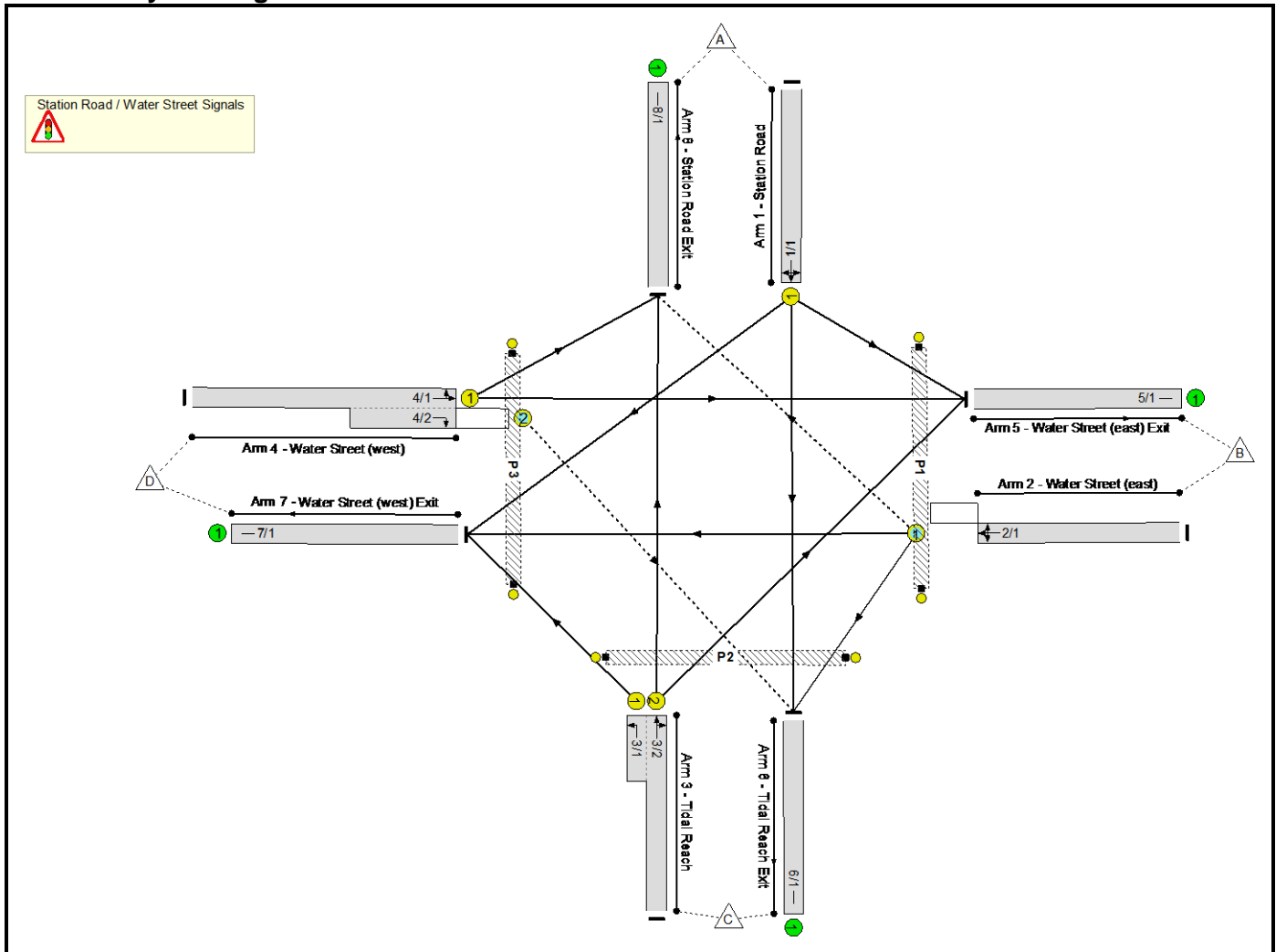
Appendix K LinSig Outputs - Station Road / Water Street / Tidal Reach

Full Input Data And Results
Full Input Data And Results

User and Project Details

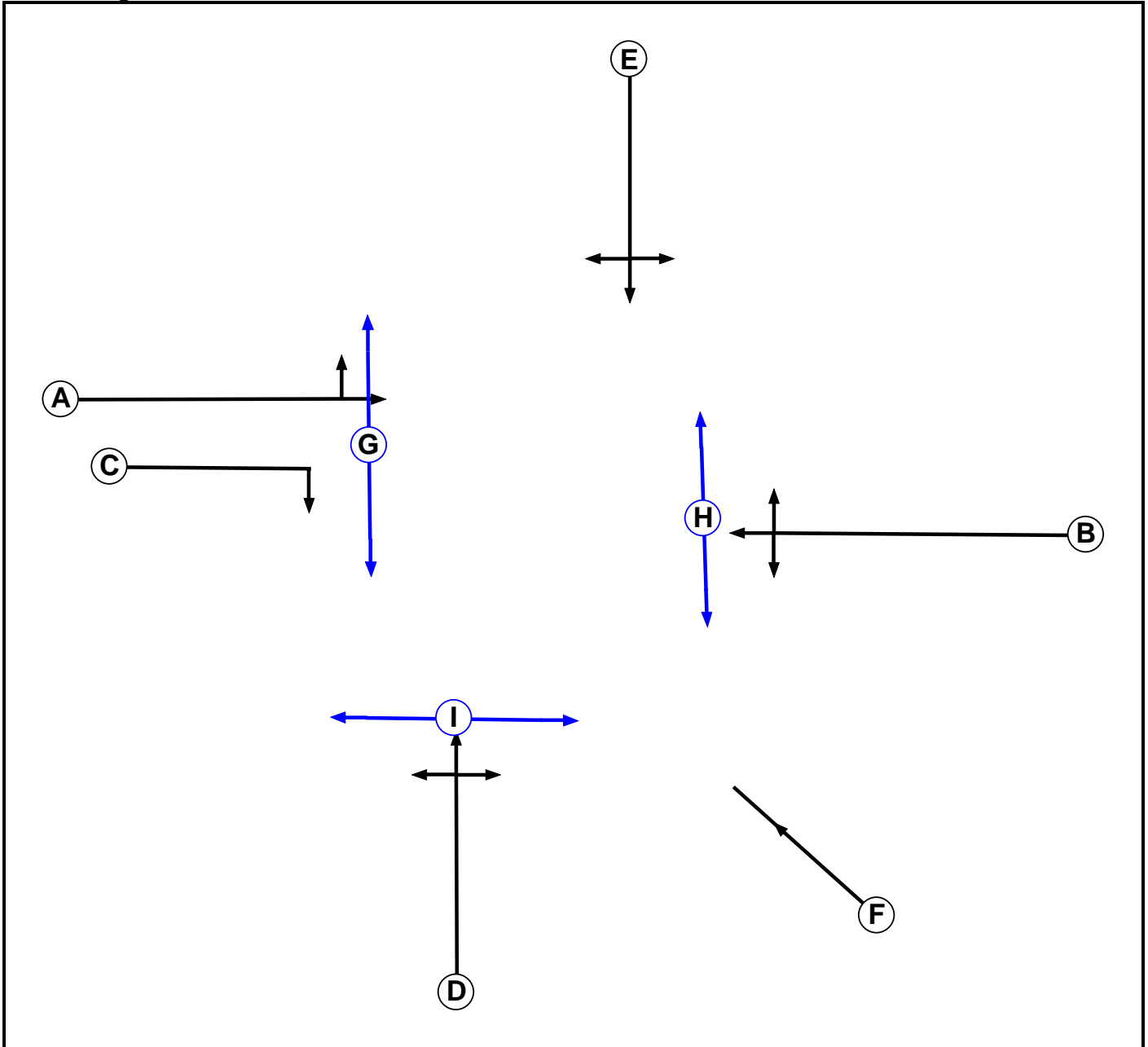
Project:	High Street, Pontarddulais
Title:	Station Road / Water Street / Tidal Reach Signal Junction
Location:	
Client:	Walters Group
Additional detail:	
File name:	Station Road_Water Street Signal Jct.lsg3x
Author:	DC
Company:	Apex Transport Planning Ltd
Address:	11-13 Penhill Road, Cardiff

Network Layout Diagram



Scenario 1: '2023 Base AM' (FG1: '2023 Base AM', Plan 1: 'Network Control Plan 1')

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Pedestrian		6	6
H	Pedestrian		6	6
I	Pedestrian		6	6

Full Input Data And Results

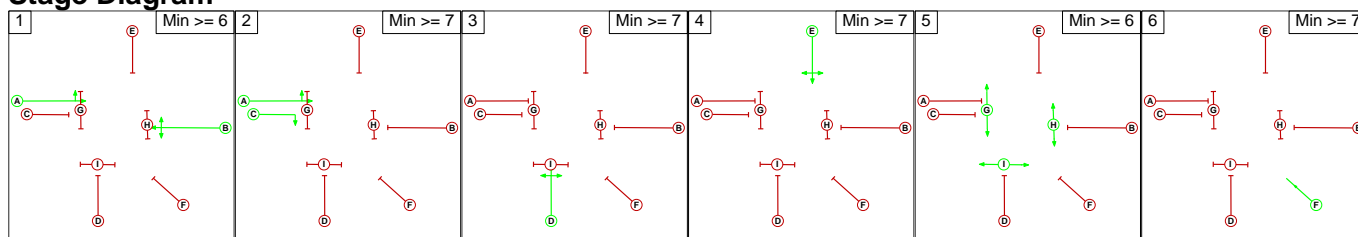
Phase Intergrens Matrix

Terminating Phase	Starting Phase									
		A	B	C	D	E	F	G	H	I
	A		-	-	8	10	11	8	14	12
	B	-		7	8	7	7	12	6	12
	C	-	7		7	7	8	8	14	12
	D	7	7	7		8	10	11	13	7
	E	7	7	7	7		8	11	11	11
	F	7	6	7	7	7		10	7	10
	G	11	11	11	11	11	11		-	-
	H	11	11	11	11	11	11	-		-
I	11	11	11	11	11	11	-	-		

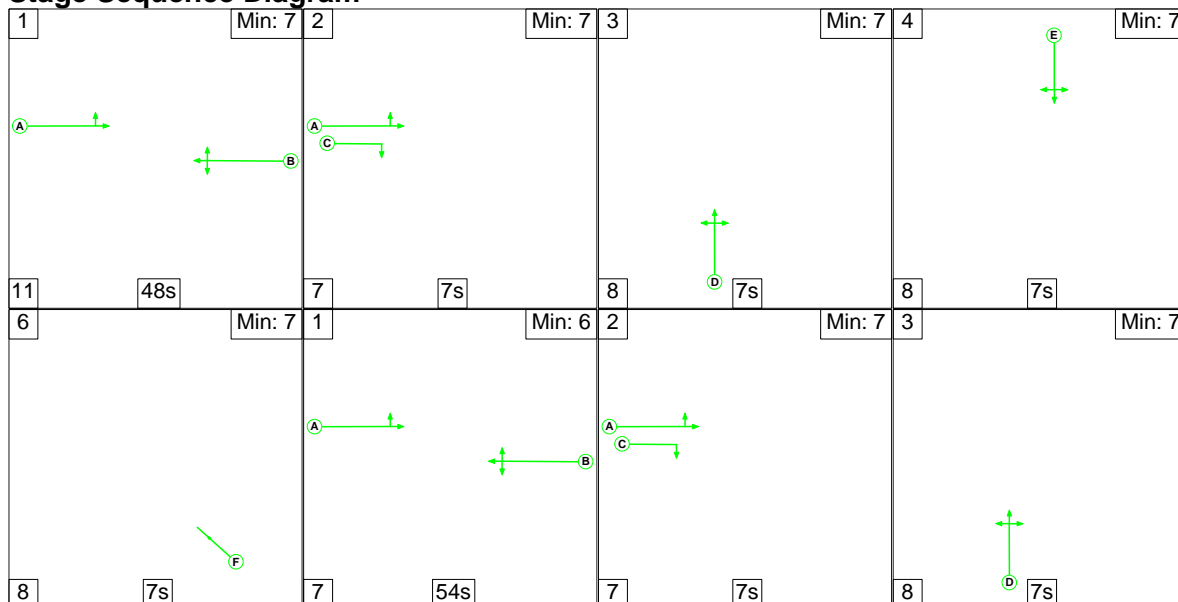
Phases in Stage

Stage No.	Phases in Stage
1	A B
2	A C
3	D
4	E
5	G H I
6	F

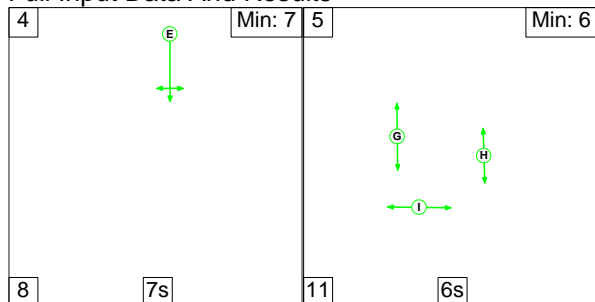
Stage Diagram



Stage Sequence Diagram



Full Input Data And Results



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Lane Input Data

Junction: Station Road / Water Street Signals												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Station Road)	U	E	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Left	8.00
											Arm 6 Ahead	Inf
											Arm 7 Right	14.00
2/1 (Water Street east)	O	B	2	3	60.0	User	1500	-	-	-	-	-
3/1 (Tidal Reach)	U	D	2	3	5.0	Geom	-	3.00	0.00	Y	Arm 7 Left	15.00
3/2 (Tidal Reach)	U	D	2	3	60.0	Geom	-	3.65	0.00	N	Arm 5 Right	20.00
											Arm 8 Ahead	Inf
4/1 (Water Street west)	U	A	2	3	10.4	Geom	-	3.00	0.00	Y	Arm 5 Ahead	Inf
											Arm 8 Left	15.00
4/2 (Water Street west)	O	C	2	3	8.0	Geom	-	3.00	0.00	N	Arm 6 Right	15.00
5/1 (Water Street east) Exit	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Tidal Reach Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Water Street west) Exit	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Station Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 Base AM'	08:00	09:00	01:00	
2: '2023 Base PM'	17:00	18:00	01:00	
3: '2028 Future Base AM'	08:00	09:00	01:00	
4: '2028 Future Base PM'	17:00	18:00	01:00	
5: '2028 Future Base + Development AM'	08:00	09:00	01:00	
6: '2028 Future Base + Development PM'	17:00	18:00	01:00	
7: '2028 Future Base + Development - Sens AM'	08:00	09:00	01:00	
8: '2028 Future Base + Development - Sens PM'	17:00	18:00	01:00	

Traffic Flows, Desired

Scenario 1: '2023 Base AM' (FG1: '2023 Base AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	8	12	69	89
	B	18	0	72	435	525
	C	7	59	0	71	137
	D	38	369	71	0	478
	Tot.	63	436	155	575	1229

Scenario 2: '2023 Base PM' (FG2: '2023 Base PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	13	26	76	115
	B	16	0	104	360	480
	C	30	136	0	126	292
	D	58	438	125	0	621
	Tot.	104	587	255	562	1508

Full Input Data And Results

Scenario 3: '2028 Future Base AM' (FG3: '2028 Future Base AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	8	13	72	93
	B	19	0	75	456	550
	C	7	62	0	74	143
	D	40	386	74	0	500
	Tot.	66	456	162	602	1286

Scenario 4: '2028 Future Base PM' (FG4: '2028 Future Base PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	14	27	79	120
	B	17	0	109	376	502
	C	31	142	0	132	305
	D	60	457	131	0	648
	Tot.	108	613	267	587	1575

Scenario 5: '2028 Future Base + Development AM' (FG5: '2028 Future Base + Development AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	8	15	104	127
	B	26	0	75	456	557
	C	8	62	0	74	144
	D	53	386	74	0	513
	Tot.	87	456	164	634	1341

Scenario 6: '2028 Future Base + Development PM' (FG6: '2028 Future Base + Development PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	14	28	95	137
	B	33	0	109	376	518
	C	33	142	0	132	307
	D	90	457	131	0	678
	Tot.	156	613	268	603	1640

Full Input Data And Results

Scenario 7: '2028 Future Base + Development - Sensitivity AM' (FG7: '2028 Future Base + Development - Sens AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	8	22	180	210
	B	26	0	77	474	577
	C	9	62	0	74	145
	D	65	389	74	0	528
	Tot.	100	459	173	728	1460

Scenario 8: '2028 Future Base + Development - Sensitivity PM' (FG8: '2028 Future Base + Development - Sens PM', Plan 1: 'Network Control Plan 1')

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	14	49	169	232
	B	33	0	114	394	541
	C	41	144	0	132	317
	D	117	464	131	0	712
	Tot.	191	622	294	695	1802

Full Input Data And Results

Network Results

Scenario 1: '2023 Base AM' (FG1: '2023 Base AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Mean Max Queue (pcu)	Total Delay (pcuHr)	Deg Sat (%)
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	-	-	-	-	-	-	-	-	15.3	80.0%
Station Road / Water Street Signals	-	-	-	-	-	-	-	-	-	-	15.3	80.0%
1/1	Station Road Left Ahead Right	U	E	2	14	-	89	1786	119	4.2	2.7	74.7%
2/1	Water Street (east) Left Ahead Right	O	B	2	103	-	525	1500	656	17.8	6.2	80.0%
3/2+3/1	Tidal Reach Right Left Ahead	U	D	2	14	-	137	1987:1741	108+116	3.1	2.8 (1.4+1.5)	61.2 : 61.2%
4/1+4/2	Water Street (west) Ahead Right Left	U+O	A C	2	130:14	-	478	1897:1868	714+125	8.9	3.5 (2.3+1.2)	57.0 : 57.0%
Ped Link: P1	Water Street East	-	H	1	6	-	0	-	0	-	-	0.0%
Ped Link: P2	Tidal Reach Pedestrian	-	I	1	6	-	0	-	0	-	-	0.0%
Ped Link: P3	Water Street West Pedestrian	-	H	1	6	-	0	-	0	-	-	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)															
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	18	48	23	10.5	4.7	0.0	-	-	-															
Station Road / Water Street Signals	-	-	18	48	23	10.5	4.7	0.0	-	-	-															
1/1	89	89	-	-	-	1.4	1.4	-	109.9	2.9	1.4															
2/1	525	525	18	0	0	4.3	1.9	0.0	42.7	15.9	1.9															
3/2+3/1	137	137	-	-	-	2.1	0.8	-	74.6 (74.4:74.8)	2.3	0.8															
4/1+4/2	478	478	0	48	23	2.8	0.7	0.0	26.4 (20.5:60.0)	8.3	0.7															
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-															
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-															
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-															
<table style="width:100%; border:none;"> <tr> <td style="width:20%;">C1</td> <td style="width:20%;">PRC for Signalled Lanes (%):</td> <td style="width:10%;">12.5</td> <td style="width:20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width:10%;">15.28</td> <td style="width:20%;">Cycle Time (s):</td> <td style="width:10%;">240</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>12.5</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>15.28</td> <td></td> <td></td> </tr> </table>													C1	PRC for Signalled Lanes (%):	12.5	Total Delay for Signalled Lanes (pcuHr):	15.28	Cycle Time (s):	240		PRC Over All Lanes (%):	12.5	Total Delay Over All Lanes(pcuHr):	15.28		
C1	PRC for Signalled Lanes (%):	12.5	Total Delay for Signalled Lanes (pcuHr):	15.28	Cycle Time (s):	240																				
	PRC Over All Lanes (%):	12.5	Total Delay Over All Lanes(pcuHr):	15.28																						

Full Input Data And Results

Scenario 2: '2023 Base PM' (FG2: '2023 Base PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Mean Max Queue (pcu)	Total Delay (pcuHr)	Deg Sat (%)
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	-	-	-	-	-	-	-	-	26.2	87.3%
Station Road / Water Street Signals	-	-	-	-	-	-	-	-	-	-	26.2	87.3%
1/1	Station Road Left Ahead Right	U	E	2	16	-	115	1799	135	6.2	4.1	85.2%
2/1	Water Street (east) Left Ahead Right	O	B	2	86	-	480	1500	550	18.7	7.9	87.3%
3/2+3/1	Tidal Reach Right Left Ahead	U	D	2	26	-	292	1997:1741	194+148	8.5	6.8 (3.9+2.9)	85.4 : 85.4%
4/1+4/2	Water Street (west) Ahead Right Left	U+O	A C	2	116:17	-	621	1893:1868	587+148	16.1	7.5 (5.0+2.5)	84.5 : 84.5%
Ped Link: P1	Water Street East	-	H	1	6	-	0	-	0	-	-	0.0%
Ped Link: P2	Tidal Reach Pedestrian	-	I	1	6	-	0	-	0	-	-	0.0%
Ped Link: P3	Water Street West Pedestrian	-	H	1	6	-	0	-	0	-	-	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)															
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	16	66	59	15.4	10.7	0.1	-	-	-															
Station Road / Water Street Signals	-	-	16	66	59	15.4	10.7	0.1	-	-	-															
1/1	115	115	-	-	-	1.8	2.3	-	128.0	3.8	2.3															
2/1	480	480	16	0	0	4.7	3.1	0.0	59.3	15.6	3.1															
3/2+3/1	292	292	-	-	-	4.1	2.6	-	83.4 (83.6:83.2)	5.9	2.6															
4/1+4/2	621	621	0	66	59	4.8	2.6	0.0	43.3 (36.4:70.9)	13.5	2.6															
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-															
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-															
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-															
<table style="width:100%; border:none;"> <tr> <td style="width:15%;">C1</td> <td style="width:15%;">PRC for Signalled Lanes (%):</td> <td style="width:15%;">3.1</td> <td style="width:15%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width:15%;">26.24</td> <td style="width:15%;">Cycle Time (s):</td> <td style="width:15%;">240</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>3.1</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>26.24</td> <td></td> <td></td> </tr> </table>													C1	PRC for Signalled Lanes (%):	3.1	Total Delay for Signalled Lanes (pcuHr):	26.24	Cycle Time (s):	240		PRC Over All Lanes (%):	3.1	Total Delay Over All Lanes(pcuHr):	26.24		
C1	PRC for Signalled Lanes (%):	3.1	Total Delay for Signalled Lanes (pcuHr):	26.24	Cycle Time (s):	240																				
	PRC Over All Lanes (%):	3.1	Total Delay Over All Lanes(pcuHr):	26.24																						

Full Input Data And Results

Scenario 3: '2028 Future Base AM' (FG3: '2028 Future Base AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Mean Max Queue (pcu)	Total Delay (pcuHr)	Deg Sat (%)
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	-	-	-	-	-	-	-	-	16.8	83.8%
Station Road / Water Street Signals	-	-	-	-	-	-	-	-	-	-	16.8	83.8%
1/1	Station Road Left Ahead Right	U	E	2	14	-	93	1788	119	4.6	3.0	78.0%
2/1	Water Street (east) Left Ahead Right	O	B	2	103	-	550	1500	656	19.6	7.1	83.8%
3/2+3/1	Tidal Reach Right Left Ahead	U	D	2	14	-	143	1986:1741	108+116	3.2	3.0 (1.5+1.6)	63.8 : 63.8%
4/1+4/2	Water Street (west) Ahead Right Left	U+O	A C	2	130:14	-	500	1897:1868	717+125	9.6	3.7 (2.5+1.2)	59.4 : 59.4%
Ped Link: P1	Water Street East	-	H	1	6	-	0	-	0	-	-	0.0%
Ped Link: P2	Tidal Reach Pedestrian	-	I	1	6	-	0	-	0	-	-	0.0%
Ped Link: P3	Water Street West Pedestrian	-	H	1	6	-	0	-	0	-	-	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	19	48	26	11.2	5.6	0.0	-	-	-	
Station Road / Water Street Signals	-	-	19	48	26	11.2	5.6	0.0	-	-	-	
1/1	93	93	-	-	-	1.4	1.6	-	116.4	3.0	1.6	
2/1	550	550	19	0	0	4.6	2.5	0.0	46.3	17.1	2.5	
3/2+3/1	143	143	-	-	-	2.2	0.9	-	76.1 (75.8:76.3)	2.4	0.9	
4/1+4/2	500	500	0	48	26	3.0	0.7	0.0	26.8 (21.0:60.4)	8.8	0.7	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	
<p>C1 PRC for Signalled Lanes (%): 7.4 Total Delay for Signalled Lanes (pcuHr): 16.83 Cycle Time (s): 240</p> <p> PRC Over All Lanes (%): 7.4 Total Delay Over All Lanes(pcuHr): 16.83</p>												

Full Input Data And Results

Scenario 4: '2028 Future Base PM' (FG4: '2028 Future Base PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Mean Max Queue (pcu)	Total Delay (pcuHr)	Deg Sat (%)
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	-	-	-	-	-	-	-	-	31.0	91.1%
Station Road / Water Street Signals	-	-	-	-	-	-	-	-	-	-	31.0	91.1%
1/1	Station Road Left Ahead Right	U	E	2	16	-	120	1799	135	7.0	4.7	88.9%
2/1	Water Street (east) Left Ahead Right	O	B	2	87	-	502	1500	556	19.9	9.0	90.2%
3/2+3/1	Tidal Reach Right Left Ahead	U	D	2	25	-	305	1997:1741	190+145	10.4	8.4 (4.8+3.6)	91.1 : 91.1%
4/1+4/2	Water Street (west) Ahead Right Left	U+O	A C	2	117:17	-	648	1893:1868	584+148	17.0	8.8 (5.9+2.9)	88.6 : 88.6%
Ped Link: P1	Water Street East	-	H	1	6	-	0	-	0	-	-	0.0%
Ped Link: P2	Tidal Reach Pedestrian	-	I	1	6	-	0	-	0	-	-	0.0%
Ped Link: P3	Water Street West Pedestrian	-	H	1	6	-	0	-	0	-	-	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)															
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	22	66	60	16.2	14.5	0.2	-	-	-															
Station Road / Water Street Signals	-	-	22	66	60	16.2	14.5	0.2	-	-	-															
1/1	120	120	-	-	-	1.8	2.9	-	142.0	4.1	2.9															
2/1	502	502	17	0	0	5.0	4.0	0.0	64.8	15.9	4.0															
3/2+3/1	305	305	-	-	-	4.4	4.0	-	99.1 (99.3:98.9)	6.4	4.0															
4/1+4/2	648	648	5	66	60	5.0	3.6	0.2	48.8 (41.0:79.5)	13.5	3.6															
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-															
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-															
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-															
<table style="width:100%; border:none;"> <tr> <td style="width:15%;">C1</td> <td style="width:15%;">PRC for Signalled Lanes (%):</td> <td style="width:15%;">-1.2</td> <td style="width:15%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width:15%;">30.96</td> <td style="width:15%;">Cycle Time (s):</td> <td style="width:15%;">240</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>-1.2</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>30.96</td> <td></td> <td></td> </tr> </table>													C1	PRC for Signalled Lanes (%):	-1.2	Total Delay for Signalled Lanes (pcuHr):	30.96	Cycle Time (s):	240		PRC Over All Lanes (%):	-1.2	Total Delay Over All Lanes(pcuHr):	30.96		
C1	PRC for Signalled Lanes (%):	-1.2	Total Delay for Signalled Lanes (pcuHr):	30.96	Cycle Time (s):	240																				
	PRC Over All Lanes (%):	-1.2	Total Delay Over All Lanes(pcuHr):	30.96																						

Full Input Data And Results

Scenario 5: '2028 Future Base + Development AM' (FG5: '2028 Future Base + Development AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Mean Max Queue (pcu)	Total Delay (pcuHr)	Deg Sat (%)
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	-	-	-	-	-	-	-	-	19.6	88.2%
Station Road / Water Street Signals	-	-	-	-	-	-	-	-	-	-	19.6	88.2%
1/1	Station Road Left Ahead Right	U	E	2	18	-	127	1787	149	6.8	4.3	85.3%
2/1	Water Street (east) Left Ahead Right	O	B	2	99	-	557	1500	631	20.8	8.4	88.2%
3/2+3/1	Tidal Reach Right Left Ahead	U	D	2	14	-	144	1988:1741	110+116	3.3	3.0 (1.5+1.6)	63.8 : 63.8%
4/1+4/2	Water Street (west) Ahead Right Left	U+O	A C	2	126:14	-	513	1892:1868	760+125	10.0	3.9 (2.7+1.2)	57.8 : 59.4%
Ped Link: P1	Water Street East	-	H	1	6	-	0	-	0	-	-	0.0%
Ped Link: P2	Tidal Reach Pedestrian	-	I	1	6	-	0	-	0	-	-	0.0%
Ped Link: P3	Water Street West Pedestrian	-	H	1	6	-	0	-	0	-	-	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	26	48	26	12.3	7.4	0.0	-	-	-	
Station Road / Water Street Signals	-	-	26	48	26	12.3	7.4	0.0	-	-	-	
1/1	127	127	-	-	-	1.9	2.4	-	121.9	4.4	2.4	
2/1	557	557	26	0	0	5.0	3.4	0.0	54.4	17.3	3.4	
3/2+3/1	144	144	-	-	-	2.2	0.9	-	76.0 (75.8:76.2)	2.5	0.9	
4/1+4/2	513	513	0	48	26	3.2	0.7	0.0	27.4 (21.9:60.0)	9.3	0.7	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	
<p>C1 PRC for Signalled Lanes (%): 2.0 Total Delay for Signalled Lanes (pcuHr): 19.65 Cycle Time (s): 240</p> <p> PRC Over All Lanes (%): 2.0 Total Delay Over All Lanes(pcuHr): 19.65</p>												

Full Input Data And Results

Scenario 6: '2028 Future Base + Development PM' (FG6: '2028 Future Base + Development PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Mean Max Queue (pcu)	Total Delay (pcuHr)	Deg Sat (%)
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	-	-	-	-	-	-	-	-	35.7	94.2%
Station Road / Water Street Signals	-	-	-	-	-	-	-	-	-	-	35.7	94.2%
1/1	Station Road Left Ahead Right	U	E	2	18	-	137	1797	150	8.2	5.6	91.5%
2/1	Water Street (east) Left Ahead Right	O	B	2	86	-	518	1500	550	22.7	11.3	94.2%
3/2+3/1	Tidal Reach Right Left Ahead	U	D	2	24	-	307	1998:1741	186+140	11.9	9.7 (5.5+4.2)	94.2 : 94.2%
4/1+4/2	Water Street (west) Ahead Right Left	U+O	A C	2	116:17	-	678	1884:1868	617+148	18.6	9.1 (6.3+2.9)	88.6 : 88.6%
Ped Link: P1	Water Street East	-	H	1	6	-	0	-	0	-	-	0.0%
Ped Link: P2	Tidal Reach Pedestrian	-	I	1	6	-	0	-	0	-	-	0.0%
Ped Link: P3	Water Street West Pedestrian	-	H	1	6	-	0	-	0	-	-	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	38	66	60	17.2	18.2	0.3	-	-	-	
Station Road / Water Street Signals	-	-	38	66	60	17.2	18.2	0.3	-	-	-	
1/1	137	137	-	-	-	2.1	3.5	-	146.1	4.7	3.5	
2/1	518	518	33	0	0	5.3	5.9	0.1	78.5	16.8	5.9	
3/2+3/1	307	307	-	-	-	4.5	5.2	-	113.7 (113.9:113.5)	6.6	5.2	
4/1+4/2	678	678	5	66	60	5.4	3.6	0.2	48.4 (41.2:78.8)	15.0	3.6	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	
<p>C1 PRC for Signalled Lanes (%): -4.7 Total Delay for Signalled Lanes (pcuHr): 35.67 Cycle Time (s): 240</p> <p> PRC Over All Lanes (%): -4.7 Total Delay Over All Lanes(pcuHr): 35.67</p>												

Full Input Data And Results

Scenario 7: '2028 Future Base + Development - Sensitivity AM' (FG7: '2028 Future Base + Development - Sens AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Mean Max Queue (pcu)	Total Delay (pcuHr)	Deg Sat (%)
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	-	-	-	-	-	-	-	-	35.1	100.3%
Station Road / Water Street Signals	-	-	-	-	-	-	-	-	-	-	35.1	100.3%
1/1	Station Road Left Ahead Right	U	E	2	27	-	210	1788	216	13.2	9.0	97.2%
2/1	Water Street (east) Left Ahead Right	O	B	2	90	-	577	1500	575	32.8	18.8	100.3%
3/2+3/1	Tidal Reach Right Left Ahead	U	D	2	14	-	145	1990:1741	111+116	3.4	3.1 (1.5+1.6)	63.8 : 63.8%
4/1+4/2	Water Street (west) Ahead Right Left	U+O	A C	2	117:14	-	528	1888:1868	841+125	11.5	4.3 (3.1+1.2)	54.0 : 59.4%
Ped Link: P1	Water Street East	-	H	1	6	-	0	-	0	-	-	0.0%
Ped Link: P2	Tidal Reach Pedestrian	-	I	1	6	-	0	-	0	-	-	0.0%
Ped Link: P3	Water Street West Pedestrian	-	H	1	6	-	0	-	0	-	-	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	26	48	26	15.2	19.9	0.0	-	-	-	
Station Road / Water Street Signals	-	-	26	48	26	15.2	19.9	0.0	-	-	-	
1/1	210	210	-	-	-	3.1	5.9	-	153.7	7.3	5.9	
2/1	577	575	26	0	0	6.2	12.5	0.0	117.2	20.3	12.5	
3/2+3/1	145	145	-	-	-	2.2	0.9	-	75.9 (75.7:76.1)	2.5	0.9	
4/1+4/2	528	528	0	48	26	3.7	0.6	0.0	29.2 (24.2:59.3)	10.9	0.6	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	
<p>C1 PRC for Signalled Lanes (%): -11.5 Total Delay for Signalled Lanes (pcuHr): 35.08 Cycle Time (s): 240</p> <p>PRC Over All Lanes (%): -11.5 Total Delay Over All Lanes(pcuHr): 35.08</p>												

Full Input Data And Results

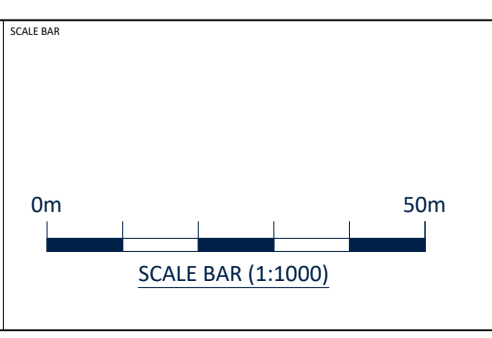
Scenario 8: '2028 Future Base + Development - Sensitivity PM' (FG8: '2028 Future Base + Development - Sens PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Mean Max Queue (pcu)	Total Delay (pcuHr)	Deg Sat (%)
Network: Station Road / Water Street / Tidal Reach Signal Junction	-	-	-	-	-	-	-	-	-	-	78.5	106.9%
Station Road / Water Street Signals	-	-	-	-	-	-	-	-	-	-	78.5	106.9%
1/1	Station Road Left Ahead Right	U	E	2	27	-	232	1804	218	21.4	16.8	106.4%
2/1	Water Street (east) Left Ahead Right	O	B	2	79	-	541	1500	506	45.9	33.7	106.9%
3/2+3/1	Tidal Reach Right Left Ahead	U	D	2	22	-	317	2003:1741	178+127	21.5	19.1 (11.0+8.0)	104.2 : 104.2%
4/1+4/2	Water Street (west) Ahead Right Left	U+O	A C	2	109:17	-	712	1877:1868	702+148	21.1	9.0 (6.2+2.8)	82.7 : 88.6%
Ped Link: P1	Water Street East	-	H	1	6	-	0	-	0	-	-	0.0%
Ped Link: P2	Tidal Reach Pedestrian	-	I	1	6	-	0	-	0	-	-	0.0%
Ped Link: P3	Water Street West Pedestrian	-	H	1	6	-	0	-	0	-	-	0.0%

Appendix L Indicative Dropped Kerb Crossing Locations



KEY PLAN



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. The locations of the crossings are indicative and would be agreed as part of detailed technical approval and subject to the final site layout agreed as part of a reserved matters application.
4. Drawing is based on topographical survey data, supplemented with OS mapping data, Ordnance Survey, (c) Crown Copyright 2023. All rights reserved. Licence number 100022432
5. Extent of adopted highway has been considered based on the Swansea online mapping.

NOTES (CONTINUED)

6. Drawing overlaid onto concept masterplan produced by Hammonds Architects.
7. Please do not scale from this drawing.

REVISIONS

Rev	Date	Description	By	App
001	18/10/23	First Issue	DC	DC

Apex
TRANSPORT PLANNING
11-13 PENHILL ROAD
CARDIFF
CF11 9PD
t: 0300 639 361
e: info@apex-tp.co.uk

CLIENT
WALTERS GROUP

PROJECT
HIGH STREET, PONTARDULLAIS

TITLE
POTENTIAL LOCATIONS OF DROPPED KERB CROSSINGS

PROJECT NO. C23-025	SCALE @ AS 1:1000
STATUS DESCRIPTION INFORMATION	STATUS S2
DRAWING NO. C23025-ATP-DR-TP-007	