

Berth 31, Port of Barry

Transport Assessment



L06471

South West Wood Products Limited

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Project

Berth 31, Port of Barry

Client Name

South West Wood Products Limited (SWWP)

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1 Introduction

1.1 Background

This Transport Assessment has been prepared by Clarkebond on behalf of South West Wood Products Limited (SWWP) to support a planning application for the change of use to a Wood Processing facility, forming part of the Environmental Statement.

The proposed development is located within an industrial estate which forms part of the Barry Docks estate located approximately 10km southwest of Cardiff Town Centre.

The site location is shown in its strategic context in **Figure 1.1** below



Figure 1.1 Site Location

1.2 Proposed Development

The proposed development will feature an area for processing operations located in the south west corner of the site as remote from noise sensitive receptors as possible. The site will include a designated area for wood storage and car parking.

The proposed site layout is included at **Appendix A**.

1.3 Planning History

The site in September 2015 was granted permission for similar uses granted by the Vale of Glamorgan Council (VGC), planning Application Reference 2015/00360/FUL for the development of a recycling facility for Incinerator Bottom Ash (IBA), generated by the Trident Park Energy Recovery Facility (ERF) in Cardiff and also for the recycling of recovered metals. It is understood the consented development has not been implemented and therefore has lapsed.

The associated planning conditions with respect to highways and transport for the planning permission are summarised below:

Cond 13. There shall be no more than 75,000 tonnes of incinerator bottom ash waste delivered to the site per calendar year. A written record of all tonnage entering the site associated with the permission hereby granted shall be kept onsite and shall be made available to the Local Planning Authority for inspection upon request within 14 days of the request being made.

Cond 14. Deliveries to the site, and all other operations, shall be restricted to the following hours: -Monday to Friday : 07:00 - 18:00; and Saturday 07:00 - 13:00 and no working on Sundays or recognised Bank Holidays, unless any variation is first agreed to in writing by the Local Planning Authority.

Cond 19. The development shall strictly accord with the two routes (A & B) identified within the Transport assessment (Chapter 8 of the ES) for the movement of the IBA from the ERF plant in Cardiff to the application site at Barry Docks unless otherwise agreed by the Local Planning Authority.

Cond 20. The access and visibility splays (4.5m x 48m), shall be provided in accordance with the parking and access details ref FIG 3 and B23/RBR/09 Rev C received on 31 March 2015 and constructed from a bound material for a minimum distance of 20.0m from the carriageway boundary. The development shall be carried out in accordance with these details unless otherwise agreed in writing by the Local Planning Authority.

Cond 21. No part of the development hereby approved shall be brought into beneficial use until such time as the parking areas, including all associated access and turning areas, have been laid out in full accordance with the details outlined on draw B23/RBR/09 Rev C and the parking, access and turning areas shall thereafter be so retained at all times to serve the development hereby approved.

Cond 23. Details of secure parking on site for six cycles shall be submitted to and approved in writing by the Local Planning Authority and the approved scheme of cycle parking shall be fully implemented on site prior to the first beneficial occupation of the development hereby approved and shall thereafter be so retained at all times.

1.4 Structure of Report

This Transport Assessment is set out as follows:

- Chapter 2 provides a summary of relevant national and local policy;
- The existing highway and transport conditions surrounding the site are described in Chapter 3;
- Chapter 4 considers the proposed access, parking and servicing arrangements and accessibility of the proposed development;
- The Trip Generation and the transport impact associated with the proposed development is included in Chapter 5;
- Chapter 6 sets out the environmental traffic impact resulting from the development proposal;
- Chapter 7 considers details of Mitigation Measures; and
- Chapter 8 provides a summary and conclusions.

1.5 Limitations

The information, views and conclusions drawn concerning the site are based, in part, on information supplied to Clarkebond by other parties. Clarkebond has proceeded in good faith on the assumption that this information is accurate. Clarkebond accepts no liability for any inaccurate conclusions, assumptions or actions taken resulting from any inaccurate information supplied to Clarkebond from others.

2 Policy and Guidance

2.1 Planning Policy Wales (PPW) 2024

The PPW document sets out the land use planning policies of the Welsh Government which seeks to ensure that planning system contributes towards the delivery of sustainable development as required by the Planning (Wales) Act 2015.

Chapter 3 of the document, ‘Strategic and Spatial Choices’, places good design standards as the core of placemaking. Paragraph 3.49 on Accessibility states, ‘*Spatial strategies should support the objectives of minimising the need to travel, reducing reliance on the private car and increasing walking, cycling and use of public transport...*’.

Paragraph 4.1.8 of Chapter 4 Active and Social Places relating to Sustainable Transport states;

The Welsh Government is committed to reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. Delivering this objective will make an important contribution to decarbonisation, improving air quality, increasing physical activity, improving the health of the nation and realising the goals of the Well-being of Future Generations Act.

Paragraph 4.1.11 states;

Development proposals must seek to maximise accessibility by walking, cycling and public transport, by prioritising the provision of appropriate on-site infrastructure and, where necessary, mitigating transport impacts through the provision of off-site measures, such as the development of active travel routes, bus priority infrastructure and financial support for public transport services. Importantly, sustainable transport infrastructure and services should be prioritised and put in place from the outset, before people have moved in and travel patterns have been established

2.2 Planning Policy Wales Technical Advice Note (TAN) 18: Transport March 2007

TAN 18 is to be read in conjunction with PPW and should be taken into account by local planning authorities in the preparation of their development plans.

The integration of land use planning and development of transport infrastructure is seen as having a key role to play in addressing the environmental aspects of sustainable development. It is noted that the inter-relationships between land use planning and transport are complex and varied and development of land is partly dependent transport infrastructure and services.

TAN 18 addresses policy matters for the following pertinent transport issues:

- The location of development, including major travel generating uses, to encourage a greater choice of means of transport and maximising relative accessibility;
- Parking including parking standards and implementation within new developments;
- The design of development including inclusive mobility and access for disabled people, street design and the use of traffic management measures;

- Walking and Cycling including consideration of the needs of walkers and cyclists and developing effective networks;
- Public transport provision, safe and efficient transport interchange and park and ride facilities;
- Planning for transport infrastructure comprising roads, major transport infrastructure projects such as railways, tramways and other guided transport systems, promoting increased use of the ,freight, railways, shipping, inland waterways and aviation.

Chapter 9 considers the assessment of impacts and the management of implementation. Transport Assessments (TAs) are seen as providing the information necessary to assess the suitability of an application in terms of travel demand and impact. The TA should include the production of a transport implementation strategy for the development which should detail the measures proposed to improve access by public transport, walking and cycling and reduce the number and impacts of motorised journeys.

2.3 The Vale of Glamorgan Local Development Plan (LDP) 2011 - 2026

The Local Development Plan sets a clear vision of how the the Vale of Glamorgan should look in 2026. Specifically to Transport, Policy SP7 states;

‘Sustainable transport improvements that serve the economic, social and environmental needs of the Vale of Glamorgan and promote the objectives of the South East Wales Regional Transport Plan and the Local Transport Plan will be favoured...’

The LDP further goes to say;

‘Priority will also be given to schemes that improve highway safety and accessibility, public transport, walking and cycling. All new developments that have a direct impact on the strategic transportation infrastructure will be required to deliver appropriate improvements to the network’.

2.4 The Vale of Glamorgan Supplementary Planning Guidance (SPG) 2023

The SPG has been prepared to support the employment objectives contained within the adopted LDP.

Paragraph 5.6.2: Active Travel and Accessibility states;

The location, scale, layout and design of a new development will directly influence the mode of travel that employees and visitors will use to get to and from the site. New developments must provide the opportunity to encourage people to change their travel habits towards active and sustainable travel modes to avoid the unnecessary use of private motor vehicles to travel to and from the development. Moreover, it is recognised that individuals are more likely to change their travel habits when they are making a significant change to their lifestyle such as starting a new job, therefore employment proposals with good facilities for walking, cycling and public transport offer a real chance to influence travel patterns.

3 Existing Highway Conditions

3.1 Highway Network

The proposed development lies west of Wimborne Road which provides access to the development. Wimborne Road is subject to 10 mph speed limit and connects to Ffordd Y Mileniwm to the north.

Ffordd Y Mileniwm connects to the A4055 Cardiff Road to the north and the A4055 Harbour Road to the south. The road is subject to a speed limit of 40 mph in the vicinity of the proposed development and typically is 7.3m wide.

The A4055 Cardiff Road connects Barry to Dinas Powys, and to Sully via the B4267 Sully Moors Road. It connects with A4231 Barry Docks Link Road and the A4050 Port Road which provides a link to the A4232 that runs along the eastern and southern edge of Cardiff and joins the M4. The A4055 Cardiff Road is street lit features pedestrian crossing facilities at various junctions.

The A4055 Harbour Road connects to the B4266 via the A4050. The B4226 connects to the A48 via the A4226.

The site location and local highway network map and shown below in **Figure 3.1**.



Figure 3.1 Site Location & Location Highway Network

3.2 Existing Link Traffic Flows (Annual Average Daily Traffic Counts)

Annual Average Daily Traffic (AADT) flows for the most recent year available have been obtained from Department for Transport traffic counter sites located on the main traffic routes related to the highway network of interest. The AADT flows, which are two-way and include a breakdown

by vehicle type, are summarised by **Table 3.1** and the location of the DfT count sites on the on the highway link of interest is shown in **Figure 3.2**.

Table 3.1 DfT Annual Average Daily Traffic Flows (2022)

Site no.	Location	Pedal Cycles	M/Cs	Cars Taxis	Buses Coaches	Light Goods Vehicles	HGVs	All Vehicles
99962	A4231 - A4050 to A4055	0	86	13981	48	2538	667	17320
77069	A4050 - A4050 to Brooklands Terrance Roundabout	48	147	22142	61	4253	798	27401
78435	Brooklands Terrace roundabout - A48/A4232	54	163	24578	68	4721	886	30416
82122	M4 Junction 33 - A48/A4050	0	129	46080	165	10208	2667	59249
99767	M4 Junction 33 - A48/A4050	6	258	46823	223	7221	2690	57216
40629	Barry Island Pleasure Park - Park Ave/Harbour Rd/St Nicholas triangle	43	50	4132	26	531	37	4776
951342 (2019 count)	B4266 Pontypridd Road	54	111	11889	36	1462	105	13603
92003	A4226	11	106	8796	31	1697	405	11034
40526	A4222 Promise Hill A4226	12	122	10747	85	1903	597	13455



Figure 3.2 DfT Count Sites

3.3 Pedestrian Network

Wimborne Road features a 1.0m footway on the western side of the road from the development access and increasing to approximately 2.0m at the junction with Ffordd Y Mileniwm.

Ffordd Y Mileniwm features 2.0m footways on both sides of the road from the junction with Wimborne Road leading up to the A4055 Cardiff Road. To the south of the junction with Wimborne Road, the Ffordd Y Mileniwm features footway on the western side of the road up to the junction with Cory Way and then on both sides after the junction with Cory Way.

3.4 Cycling Network

Ffordd Y Mileniwm features a shared pedestrian/cycle way on the western side between the A4055 Gladstone Road/ Ffordd Y Mileniwm Roundabout and Cory Way/ Ffordd Y Mileniwm Roundabout.

The Barry Cycling Network Map is included in **Appendix B**.

3.5 Bus Services

The nearest bus stop is approximately 600 m north of the proposed development on the A4055 at the intersection with Hillary Rise and Vere Street. The bus stop is only a 7 minutes' walk from the proposed development and can be accessed via Ffordd Y Mileniwm.

The existing bus services in the locality of the proposed site are summarised in **Table 3.2**.

Table 3.2 Bus Service Provision

Service	Day	First Bus	Services per Day (approximate frequency ^[1])	Last Bus
88 – Adventure Travel				
Barry Town Centre – Penarth Centre	Weekday	0655	9 (60 mins)	1555
	Saturday	0655	9 (60 mins)	1555
	Sunday	-	No Service	-
Penarth Centre – Barry Town Centre	Weekday	0648	9 (60 mins)	1526
	Saturday	0648	9 (60 mins)	1526
	Sunday	-	No Service	-
304 – First Bus				
Llantwit Major – Cardiff	Weekday	0645	17 (60 mins)	2255
	Saturday	0645	17 (60 mins)	2255
	Sunday	0705	9(120 mins)	2255
Cardiff - Llantwit Major	Weekday	0455	19 (60 mins)	2315
	Saturday	0455	19 (60 mins)	2315
	Sunday	0705	9(120 mins)	2310

Notes: [1] Frequency may vary slightly through the day e.g., during peak/ off-peak periods.

* Bank holiday services may vary.

The existing bus service route in the locality of the proposed site in **Table 3.2** is shown below on **Figure 3.3**.

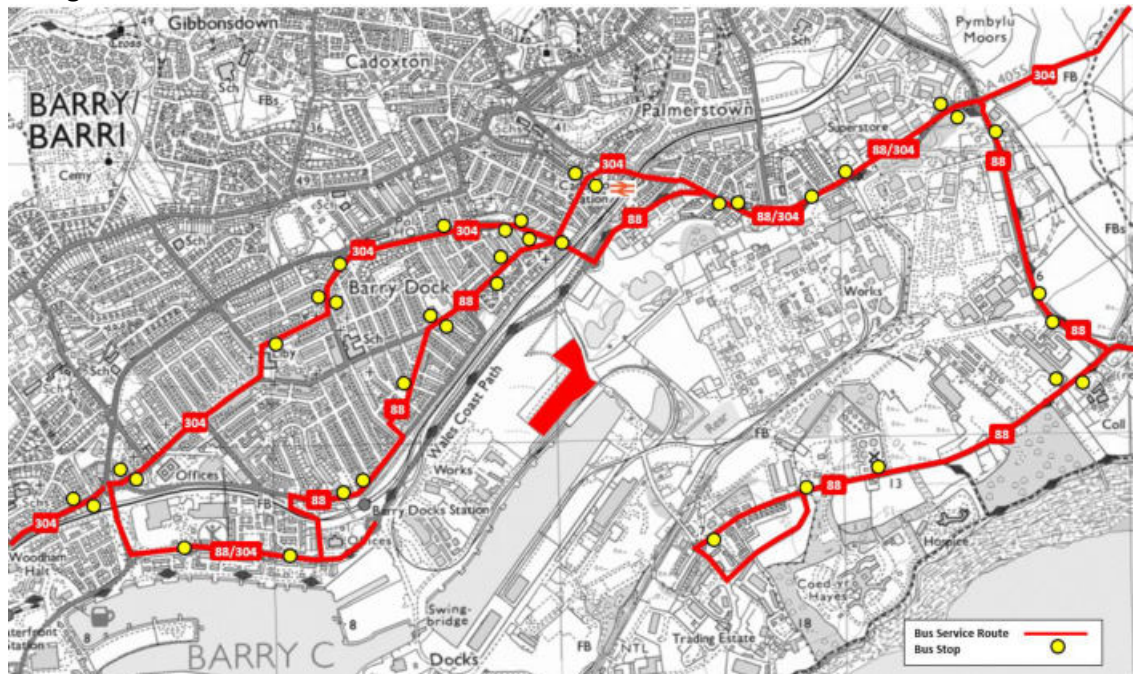


Figure 3.3 Local Bus Routes & Stops

3.6 Rail Services

Cadoxton Railway station is approximately 900m north of the proposed development. The station is a 13 minutes walk or a 5 minutes cycle ride from the proposed development.

Cadoxton Railway station offers frequent services to various destinations including Cardiff Central, Barry Island, Aberdare and Bridgend.

The rail services offer the following typical journey times to principal destinations with reference to the published timetable. Variations depend on the numbers of stops at other stations and time of day:

- Barry Island = 17 minutes;
- Cardiff Central = 1 hour 30 minutes;
- Aberdare = 30 minutes; and
- Bridgend = 40 minutes;

3.7 Highway Safety Record

Recorded Personal Injury Collisions (PIC) data for the 5 year period 2019 to 2023 inclusive have been assessed from StatsWales for the highway link of interest in the vicinity of the proposed development. PICs are classed as Fatal, Serious or Slight and comprise of one or more casualties.

There were no recorded PICs on Wimborne Road.

At the Ffordd Y Mileniwm/ Wimborne Road junction only two collisions have been recorded with two casualties sustaining slight injuries

North of the Ffordd Y Mileniwm from the junction with Wimborne Road to the A4055 Cardiff Road/ Barry Docks Link Road/Sully Moors Road Roundabout there has been 14 PICs recorded in the last 5 years. At the A4055 Cardiff Road/ Barry Docks Link Road/Sully Moors Road Roundabout there have been 4 accidents recorded with 4 casualties. The Culverhouse Cross Interchange has recorded 7 PICs with 13 casualties all of which sustained slight injuries. The Capel Llanilltern Interchange on the M4 also recorded 10 PICs with 13 casualties sustaining slight injuries and 4 casualties sustaining serious injuries.

South of the Ffordd Y Mileniwm from the junction with Wimborne Road to the A4055 Harbour Road/ Friars Road Junction recorded 11 PICs in the last 5 years. The A4226 A48 junction recorded 3 PICs with 5 people sustaining slight injuries. There were 7 PICs recorded on the A48 between Five Mile Lane and Cowbridge By-Pass with 9 people sustaining slight injuries, 2 people sustaining serious injuries and 2 people sustaining fatal injuries.

A summary of the PICs is shown below in **Table 3.3**.

Table 3.3 Recorded Personal Injury Collisions

Location	Link/Junction	Slight	Serious	Fatal	Total Casualties
Fford Y Mileniwm/Wimborne Road Junction	Junction	3	2	0	3
A4055 Cardiff Road	Link	3	1	0	4
A4055 Cardiff Road Palmerston Road	Junction	3	0	0	3
A4055 Cardiff Road	Link	5	0	0	5
A4055 Cardiff Road/ Barry Docks Link Road/Sully Moors Road Roundabout	Junction	3	1	0	4
A4231 Barry Docks Link Road	Link	8	0	0	8
Port Road/ Barry Docks Link Road Roundabout	Junction	1	0	0	8
A4050 Port Road	Link	5	0	0	5
A4050 Port Road/ St Andrews Road Roundabout	Junction	2	0	0	
A4050 Port Road (Culverhouse Cross Interchange to St Andrew's Road	Link	13	0	0	13
Culverhouse Cross Interchange	Junction	8	0	0	8
A4322 between M4 and Culverhouse Cross Interchange	Link	17	1	0	8
M4 Capel Llanilltern Interchange	Junction	13	4	0	17
Fford Y Mileniwm Cory Way Junction	Junction	1	1	0	2
Fford Y Mileniwm Heol Ceiniog Junction	Junction	2	0	0	2
Fford Y Mileniwm (between junction with Cory Way and Subway Road	Link	1	0	0	1
Fford Y Mileniwm (between junction with Gladstone Bridge and Friars Road.	Link	7	3	0	10
A4055 Harbour Road/ Friars Road Junction	Junction	1	0	0	1
A4055 Harbour Road	Link	1	0	0	1
A4050 St. Nicholas Road	Link	1	1	0	2
A4050 Park Crescent	Link	2	1	0	3
B4266 Pontypridd Road	Link	3	1	0	4
Waycock Cross	Junction	1	1	0	2
A4226 Waycock Road	Link	1	1	0	2
A4226 Five Mile Lane	Link	3	1	0	4
A4226 Five Mile Lane A48	Junction	5	0	0	5
A48 (between Five Mile Lane and Cowbridge By-Pass)		9	2	2	13

Further details of the recorded PICs recorded are included at **Appendix C**.

3.8 Existing Traffic Data

To examine the existing traffic conditions, Classified Turning Counts were undertaken on Monday 08/04/2024 and Tuesday 09/04/2024 for a 24-hour period at the Wimborne Road/Ffordd Y Mileniwm priority junction. Automatic Traffic Counts (ATCs) were also undertaken over a 7-day period between 08/04/2024 to 14/04/2024 along Wimborne Road.

A summary of the MCC 5-day average weekday traffic flows recorded are summarised in **Table 3.4**

Table 3.4 Summary of MCC data

Link	Movement	AM Peak (0800-0900)	PM Peak (1700-1800)	24 Hour	HGV	(% HGV)
Ffordd Y Mileniwm East of Wimborne Road	Eastbound	477	705	8418	264	3.1%
	Westbound	538	563	7489	209	2.8%
	Total 2-Way	1015	1268	15907	473	3.0%
Ffordd Y Mileniwm West of Wimborne Road	Eastbound	601	621	8417	179	2.1%
	Westbound	472	668	7661	127	1.7%
	Total 2-Way	1073	1289	16078	306	1.9%
Wimborne Road	Northbound	163	341	3241	194	6.0%
	Southbound	353	152	3068	191	6.2%
	Total 2-Way	516	493	6309	385	6.1%

A summary of the ATC 5-day average data on Wimborne Road is shown below in **Table 3.5**.

Table 3.5 Summary of ATC data

Wimborne Road ATC	Two-Way Vehicle Flows & Speeds	
	Wimborne Road (Southbound)	Wimborne Road (Northbound)
AM Movement (0800-0900)	255	211
PM Movement (1700-1800)	96	140
Average Speed (mph)	28	26
85 th Percentile Speed (mph)	33	32
Advisory Speed Limit (mph)	10	10

Full details of the Traffic Survey Data are shown in **Appendix D**.

4 Proposed development

4.1 Overview

The proposed site is part of the Barry Docks estate and was recently in use in part for a similar operation to that sought in this application. The application site has an area of 4.25ha. It is located in an industrial area which is allocated as employment land.

4.2 Proposed Access Arrangements

The access to the site will be from Wimborne Road.

The site will be accessed via a simple priority tee junction and visibility splays of 4.5m x 48m will be provided to the left and the right. The speed limit along Wimborne Road is identified as 10mph, however ATC data suggest that vehicles using the road are travelling slightly above 30mph.

The 4.5m x 48 m visibility splay complies with condition 20 of the previous approved planning permission (ref: 2015/00360/FUL).

Swept Path Analysis has been done to demonstrate that HGVs can manoeuvre within the site and this is shown on **Drawing No. 0130**.

The proposed access drawing is shown on **Drawing No. 0131**.

4.3 Proposed Parking Arrangements

Adequate car parking will be provided for both operational and non-operational vehicles.

4.4 Accessibility Criteria

Walking Distances

When assessing the accessibility of a site for pedestrians an average walking speed of 1.4 m/s can be assumed, which equates to approximately 400 metres in 5 minutes, or 3 mph. (*Source: The Chartered Institution of Highway and Transportation (CIHT) publication 'Guidelines for Providing Journeys on Foot, 2000*). This document also contains a table of suggested walking distances for different purposes. **Table 4.1** recreates this table:

Table 4.1 Suggested Walking Distances

	Town Centres	Commuting / School	Elsewhere
Desirable	200m	500m	400m
Acceptable	400m	1000m	800m
Maximum	800m	2000m	1200m

Source: CIHT 'Guidelines for Providing for Journeys on Foot'

The desirable maximum walking distance to the nearest bus stop is considered to be 400m (*CIHT Guidelines for Planning for Public Transport in Developments*).

The DfT Manual for Streets (2007) describes the walkable neighbourhood as:

‘Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes’ (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot. However, this is not an upper limit and walking offers the greatest potential to replace short car trips, particularly those under 2 km. MfS encourages a reduction in the need to travel by car through the creation of mixed-use neighbourhoods with interconnected street patterns, where daily needs are within walking distance of most residents.’

Cycling Distances

The CIHT notes that three quarters of journeys by all modes are less than five miles (8km) and half are less than two miles (3.2km). These are distances that can be cycled comfortably by a reasonably fit person. Based on an average cycling speed of 4.0m/s (14.4kph), 8 kilometres can be cycled in just over half an hour and 3.2 kilometres can be cycled in less than 15 minutes. It is also generally accepted that cycling has the potential to substitute for short car trips, particularly those less than 5km.

4.5 Walking and Cycling Distances and Times

Approximately 800m north of the development is Vere Street where a range of local shops can be found including convenience shops, a laundry shop, takeaway shops, a mini market and a chemist shop.

Holton Road which is approximately 900m from the development is the main shopping area for the Town Centre and features a range of local shops including Premier convenience shop, a number of takeaway shops and various eateries. At the junction with St Mary’s Avenue approximately 1600m from the proposed development, Holton Road features an Iceland, a post office, a pharmacy and other various commercial and retail stores.

There are a variety of local facilities within walking and cycling distance of the development site as shown in **Table 4.2** which lists the key facilities and their distance from the centre of the development.

Table 4.2 Walking and Cycling Distances to Local Facilities

Facility	Distance (metres)	Walking time (minutes)	Cycling Time (minutes)
Public Transport			
Weston Square Bus Stop	600	7	3
Cadoxton Railway Station	900	11	4
Retail			
Londis Vere Street	800	10	3
Premier Holton Road	1100	13	5
Post Office	1530	18	6
Health			
The Practice of Health Surgery	1100	13	5
Waterfront Medical Centre	1530	18	6
Court Road Surgery	1570	19	7
West Quay Medical Centre	3200	38	13
Leisure			
Bassett Street Children's Playground	990	12	4
Victoria Park	1270	16	5
Barry Island Pleasure Park	3700	44	15
Education			
Cadoxton Primary School	1270	16	5
Ysgol Gynradd Holton Primary School	1390	17	6
Jenner Park Primary School	1430	17	6
St Helen's RC Primary School	1570	19	7
Barry Island Primary School	4000	48	17
Shopping			
Iceland Supermarket	1530	18	6
Tesco Express	1840	22	8
Asda Barry Superstore	3400	40	14
Morrisons	3500	30	10

Note: Assumes average walking speed of 1.4m/s and average cycling speed of 4.0m/s.

5 Trip Generation and Distribution

5.1 Trip Generation

The proposed development based on information from South West Wood is estimated to process 250,000 tones of wood per year. Estimates based on TRICS database for industrial estate sites located in Wales suggest that 250ktpa is expected to generate 124 daily HGV movements.

A summary of the daily HGV trip generation profile for the Industrial estate is shown below in **Table 5.1**.

Table 5.1 Daily HGV trip generation profile

	Arrivals			Departures			Totals		
	Trip Rate	Profile	HGVs	Trip Rate	Profile	HGVs	Trip Rate	Profile	HGVs
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00	0.000	0%	0	0.009	1%	0	0.009	0%	0
06:00-07:00	0.024	2%	1	0.033	2%	2	0.057	2%	3
07:00-08:00	0.093	7%	4	0.070	5%	3	0.163	6%	8
08:00-09:00	0.112	8%	5	0.140	11%	7	0.252	9%	12
09:00-10:00	0.126	9%	6	0.122	9%	6	0.248	9%	12
10:00-11:00	0.164	12%	8	0.150	11%	7	0.314	12%	15
11:00-12:00	0.215	16%	10	0.187	14%	9	0.402	15%	19
12:00-13:00	0.117	9%	5	0.107	8%	5	0.224	8%	10
13:00-14:00	0.117	9%	5	0.140	11%	7	0.257	10%	12
14:00-15:00	0.098	7%	5	0.098	7%	5	0.196	7%	9
15:00-16:00	0.136	10%	6	0.098	7%	5	0.234	9%	11
16:00-17:00	0.065	5%	3	0.098	7%	5	0.163	6%	8
17:00-18:00	0.023	2%	1	0.061	5%	3	0.084	3%	4
18:00-19:00	0.009	1%	0	0.005	0%	0	0.014	1%	1
19:00-20:00	0.024	2%	1	0.000	0%	0	0.024	1%	1
20:00-21:00	0.005	0%	0	0.009	1%	0	0.014	1%	1
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates	1.328	100%	62	1.327	100%	62	2.655	100%	124

The proposed development will be operational 24 hours a day albeit processing will be limited to daytime. HGV movement is expected to be between 0700hrs and 2300hrs.

It is considered reasonable that trips associated with the wood processing facility would have a similar arrival and departure profile of an industrial estate. **Table 5.1** shows that the proposed development is predicted to attract 12 two-way HGV movements during the AM peak hour

(0800-0900) and 4 two-way HGV movements during the PM peak hour (1700-1800). HGV movements is highest during the 1100-1200 with 19 two-way HGV movements.

It should be noted that approximately 50% (125ktpa) of the wood products created is expected to be exported by ship and as such the estimate of 124 HGV movements per day represent a worst case scenario if all 250ktpa was moved by road.

The detailed TRICS Output is included in **Appendix E**.

The proposed development is also expected to employ a total of 20 staff members. The 2021 Census *'TS061 - Method of Travel to Work' (workday population)* data has been analysed for the Output Areas W01001133, W01001071 and W0100103 in which the site lies to determine the likely modal split of commuter trips to the proposed development. The results are summarised in **Table 5.2**.

Table 5.2 Method is Travel to work

Mode of Travel	2021 output areas: W01001133, W01001071 and W0100103		
	Persons	Percentage	Adjusted
Works mainly at or from home	702	28.3%	Discounted
Underground, metro, light rail or tram	1	0.0%	Added to Train
Train	64	2.6%	3.7%
Bus, minibus or coach	59	2.4%	3.3%
Taxi or minicab	12	0.5%	0.7%
Motorcycle, scooter or moped	10	0.4%	0.6%
Driving a car or van	1,312	52.9%	73.9%
Passenger in a car or van	99	4.0%	5.6%
Bicycle	17	0.7%	1.0%
On foot	178	7.2%	10.0%
Other	24	1.0%	1.4%
TOTAL	2478	100%	100%

It can be seen from **Table 5.2** that approximately 74% of commuters that live in the area travel to work by car. Assuming 74% of staff travel by car on their own this would equate to 30 two way daily car trips.

The method of travel to work data is included in **Appendix F**.

A summary of the vehicle trip generation is shown below in **Table 5.3**

Table 5.3 Summary of Trip Generation

Vehicles	Arrivals	Departures	Total (24 hour two-way)
HGVs	62	62	124
Cars	15	15	30
Totals	77	77	154

5.2 Traffic Distribution

The anticipated route for the transport of the wood product to and from the proposed development by HGVs have been identified. The HGVs will be routed on two main routes. The first (Route A) from the site to the M4 Motorway and the second from the site to the A48.

Route A is approximately 14 km with HGVs travelling via:

- Wimborne Road;
- Ffordd Y Mileniwm;
- A4055 (Cardiff Road);
- A4231 (Barry Docks Link Road);
- A4050 (Port Road); and
- A4232
- M4

Route B is approximately 13 km with HGVs travelling via

- Wimborne Road;
- Ffordd Y Mileniwm;
- A4055 Harbour Road;
- A4050;
- B4266 Pontypridd Road;
- A4226 and
- A48

HGV turning proportion data obtained from the classified traffic count survey show that some 72% of HGV are currently travelling north of Ffordd Y Mileniwm from Wimborne Road with 28% travelling south of Ffordd Y Mileniwm from Wimborne Road. It is therefore concluded that the daily number of HGVs anticipated to travel north and south of Ffordd Y Mileniwm from Wimborne Road are 89 and 35 respectively. The proposed routes for HGVs are shown below in **Figure 5.1**.



Figure 5.1 Proposed HGV Route

Traffic generated by staff associated with the proposed development have been distributed based on observed car turning proportion at the Wimborne Road/ Ffordd Y Mileniwm for the AM period (0700-0900) representing arrivals and PM period (1600-1800) representing departures. It is estimated that there will be approximately a 50% split of vehicle movements north and south of Ffordd Y Mileniwm. To provide a robust assessment on the highway link of interest all staff car trips will be assigned north and south of Ffordd Y Mileniwm as per adopted for HGVs.

Overall traffic generation from the site in the peak hours will be small and will disperse quickly on the highway network. The traffic generation will have a minor effect on the operation of the junctions along the identified routes. Hence, no peak hour junction capacity modelling is deemed necessary.

6 Environmental Traffic Impact

An environmental traffic impact assessment has been carried out with reference to the Guidelines for the Environmental Assessment of Road Traffic 2023 produced by the Institute of Environmental Management Assessment (IEMA). The guidelines are for the assessment of environmental impact of road traffic associated with major new developments, irrespective of whether the sites are subject to a formal Environmental Statement and are designed to be applied to off-site traffic impacts.

It is normal for any assessment to include highway links where traffic flows will increase by more than 30% or heavy goods vehicles will increase by more than 30% and to include any other specifically sensitive areas where traffic flows have increased by 10% or more.

The Guidelines note that it should be assumed that projected traffic changes of less 10% create no discernible environmental impact. This is because the day-to-day variation of traffic on any particular road is frequently at least + or – 10%.

6.1 Route Options

As presented in section 5, all vehicles will take access from Wimborne Road. Traffic flow from the ATC data shown in **Appendix D** indicates that the daily 24 hour two way flow is 6396 vehicle movements. The proposed development is expected to add an additional 154 vehicle movements (124 HGV and 30 cars) to the existing flows which is equivalent to 2.4% increase in the 2 way vehicular movements. The impact of the development traffic on all traffic is insignificant on Wimborne Road

6.1.1 Route A

The Route A from the centre of the proposed development to the M4 is approximately 14km. The traffic impact of the proposed development on the route has been identified for all vehicles and HGVs specifically and summarised in **Table 6.1**.

Table 6.1 Traffic Impact on Route A

Location	All Motor Vehicles	All HGVs	% HGVs	Traffic Generation		Total Motor vehicles including development traffic	% Increase in HGV	All HGV including development	% HGV including development
				HGV	Cars				
A4231 - A4050 to A4055	17320	667	3.9%	89	15	17424	0.5%	756	4.3%
A4050 - A4050 to Brooklands Terrace Roundabout	27401	798	2.9%	89	15	27505	0.3%	887	3.2%
Brooklands Terrace	30416	886	2.9%	89	15	30520	0.3%	975	3.2%

roundabout - A48/A4232									
M4 Junction 33 - A48/A4050	59249	2667	4.5%	89	15	59353	0.2%	2756	4.6%
M4 Junction 33 - A48/A4050	57216	2690	4.7%	89	15	57320	0.2%	2779	4.8%

The impact of the development traffic on the highway network is insignificant at less than 1% on all relevant highway links. As mentioned before, the increase in HGV traffic represents a worst case scenario and therefore it is expected that % HGV will be slightly lower than that shown in **Table 5.5**.

6.1.2 Route B

The Route B from the centre of the proposed development to the A48 is approximately 15 km. The traffic impact of the proposed development on the route has been identified for all vehicles and HGVs specifically and summarised in **Table 6.2**.

Table 6.2 Traffic Impact on Route B

Location	All Motor Vehicles	All HGVs	% HGVs	Traffic Generation		Total Motor vehicles including development traffic	% Increase in HGV	All HGV including development	% HGV including development
				HGV	Cars				
Barry Island Pleasure Park - Park Ave/Harbour Rd/St Nicholas triangle	4776	50	1.0%	35	15	4826	0.7%	85	1.8%
B4266 Pontypridd Road	13603	111	0.4%	35	15	13653	0.3%	146	1.1%
A4226	11034	106	0.5%	35	15	11084	0.3%	141	1.3%
A4222 Promise Hill A4226	13455	122	0.4%	35	15	13505	0.3%	157	1.2%

The impact of the development traffic on the highway network is insignificant at less than 1% on all relevant highway links. As mentioned before, the increase in HGV traffic represents a worst case scenario and therefore it is expected that % HGV will be slightly lower than that shown in **Table 5.7**.

6.2 Severance

Severance is the perceived division that can occur within a community when it becomes separated by a major traffic artery. Severance may result from the difficulty in crossing a heavily trafficked road.

All traffic and HGV proportional changes are significantly below the 30% change threshold. The traffic impact will be minimal at less than 1% consequently there will be no material change in severance.

6.3 Pedestrian Amenity

Pedestrian amenity is defined as the pleasantness of a journey and will be affected by traffic flow and composition. The IEMA Guidelines considers that a doubling of the traffic or HGV flow would be result in a significant impact. The impacts of the HGVs are well below the suggested threshold of significance.

It is concluded that there will be no material change in pedestrian amenity.

6.4 Fear and Intimidation

Pedestrian fear and intimidation are related to the effects of traffic and can be related to the volume of traffic, HGV composition, proximity to pedestrians or lack of protection. The IEMA guidelines suggest thresholds for measuring the degree pf hazard based on average traffic flows. HGV flows with development traffic are well below the thresholds.

It is concluded that there will be no material change in fear and intimidation.

6.5 Road Safety

The Wales Road Accident Data website (StatsWales) was used to review accident hotspots along the routes identify areas that required detailed investigation.

It is concluded that there will be no material change in road safety.

7 Mitigation Measures

7.1 Route Management

The environmental traffic impact assessment carried out and described in Chapter 6 has demonstrated that the impact of the proposed development will be negligible. Both routes considered are acceptable for use by HGVs.

It is therefore concluded that no mitigations measures are necessary along the routes due to the insignificant impact.

7.2 Travel Planning Initiatives

The proposed development will employ 20 people and this level of staff numbers would be well below the threshold that would be considered necessary for the preparation of a workplace Travel Plan. Nonetheless, it is recommended that staff are provided with the following information so that they can be encouraged to make sustainable travel choices in getting to and from the site:

- Relevant bus and rail timetables and other service details; and
- Relevant walking and cycling details.

8 Summary and Conclusions

This Transport Assessment (TA) has been prepared by Clarkebond on behalf of South West Wood Products Limited (SWWP) to support a planning application for the change of use to a Wood Processing facility.

The application site has an area of 4.25ha. It is located in an industrial area which is allocated as employment land. The site is accessed off Wimborne Road, which is the main access to the docks and which links directly to Fford Y Mileniwm, the town of Barry's eastern by pass and distributor road.

Visibility Splays of 4.5m x 48m have been provided and Swept Path Analysis has been undertaken to demonstrate that HGVs can manoeuvre within the site.

The proposed development demonstrates to be easily accessible by sustainable modes of transport including walking, cycling, bus and rail. Highway safety records reviewed indicates that there will be no material change in road safety as a result of the proposed development.

An environmental traffic impact assessment has been carried out with reference to the Guidelines for the Environmental Assessment of Road Traffic produced by the Institute of Environmental Management Assessment (IEMA). The assessment has considered the following relevant issues as follows:

- Severance;
- Pedestrian Amenity;
- Fear and Intimidation; and
- Road Safety.

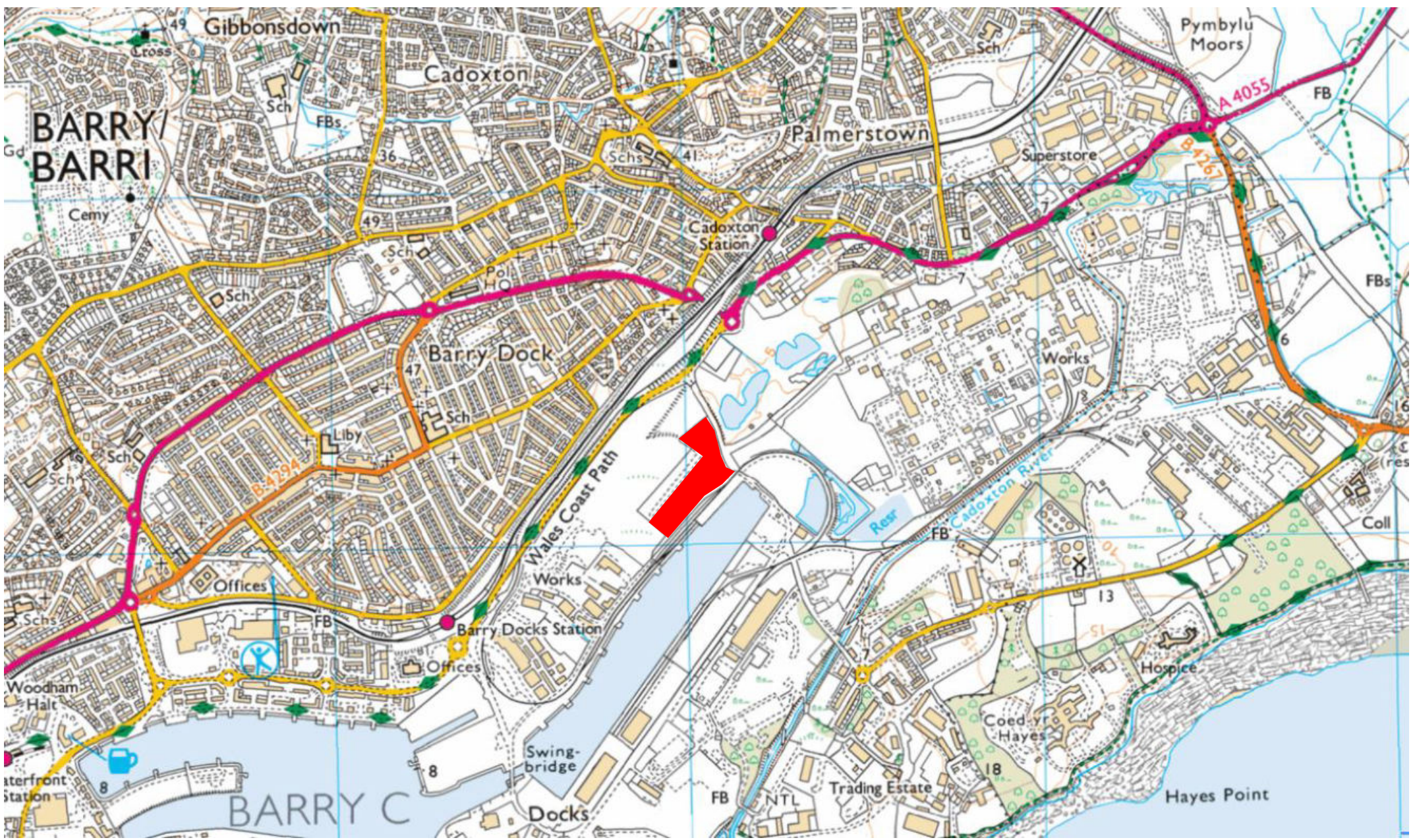
The impact of the development traffic on the highway network is insignificant at less than 1% on all relevant highway links. The worst-case forecasts for total traffic and HGV movements represent a negligible impact on the surrounding local and strategic highways. There will be no material change in severance, pedestrian amenity, fear and intimidation or road safety on the most sensitive highway links as a result of the development. Route A or Route B would be an appropriate HGV route.

The proposed development accords with national and local transport policy and can be provided with suitable access and without detriment to the safe operation of the local transport network. As such it is considered that there is no reason why planning permission for the proposed should not be granted on highway and transport grounds.

Figures



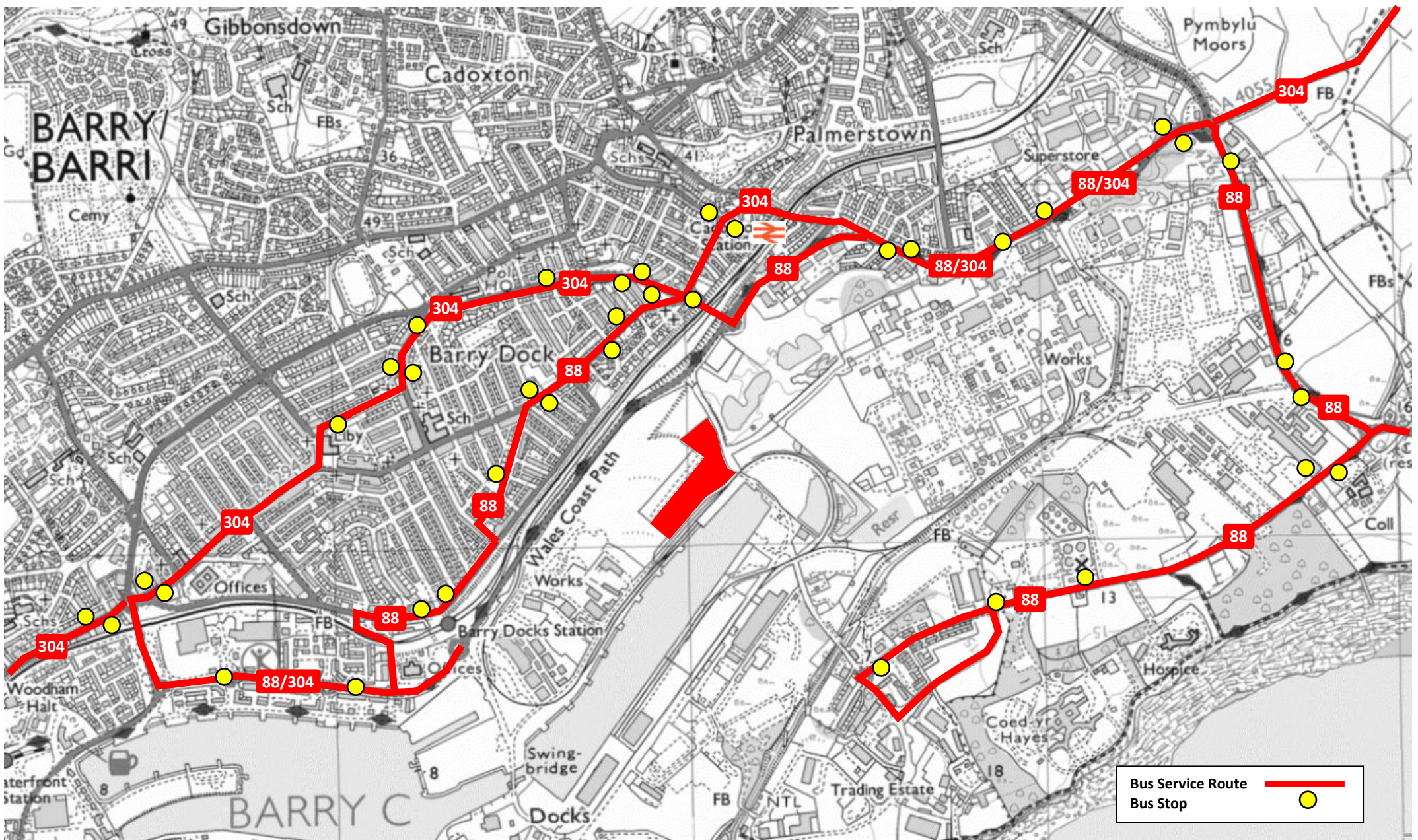
Client: SWWP		Site Location		7 Hatchers Mews Bermondsey Street London SE1 3GS +44(0) 207 939 0959 www.clarkebond.com	
Job Title: Berth 31, Port of Barry	Date: June 2024	Job No: L06471	Dwg No: Figure 1.1		



Client: SWWP		Site Location & Local Highway Network		7 Hatchers Mews Bermondsey Street London SE1 3GS +44(0) 207 939 0959 www.clarkebond.com	clarkebond
Job Title: Berth 31, Port of Barry	Date: June 2024	Job No: L06471	Dwg No: Figure 3.1		



Client: SWWP	Location of DfT Count Sites			7 Hatchers Mews Bermondsey Street London SE1 3GS +44(0) 207 939 0959 www.clarkebond.com	
Job Title: Berth 31, Port of Barry	Date: June 2024	Job No: L06471	Dwg No: Figure 3.2		



Client:	SWWP
Job Title:	Berth 31, Port of Barry

Local Bus Routes & Stops			
Date:	June 2024	Job No:	L06471
Dwg No:	Figure 3.3		

7 Hatchers Mews
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London
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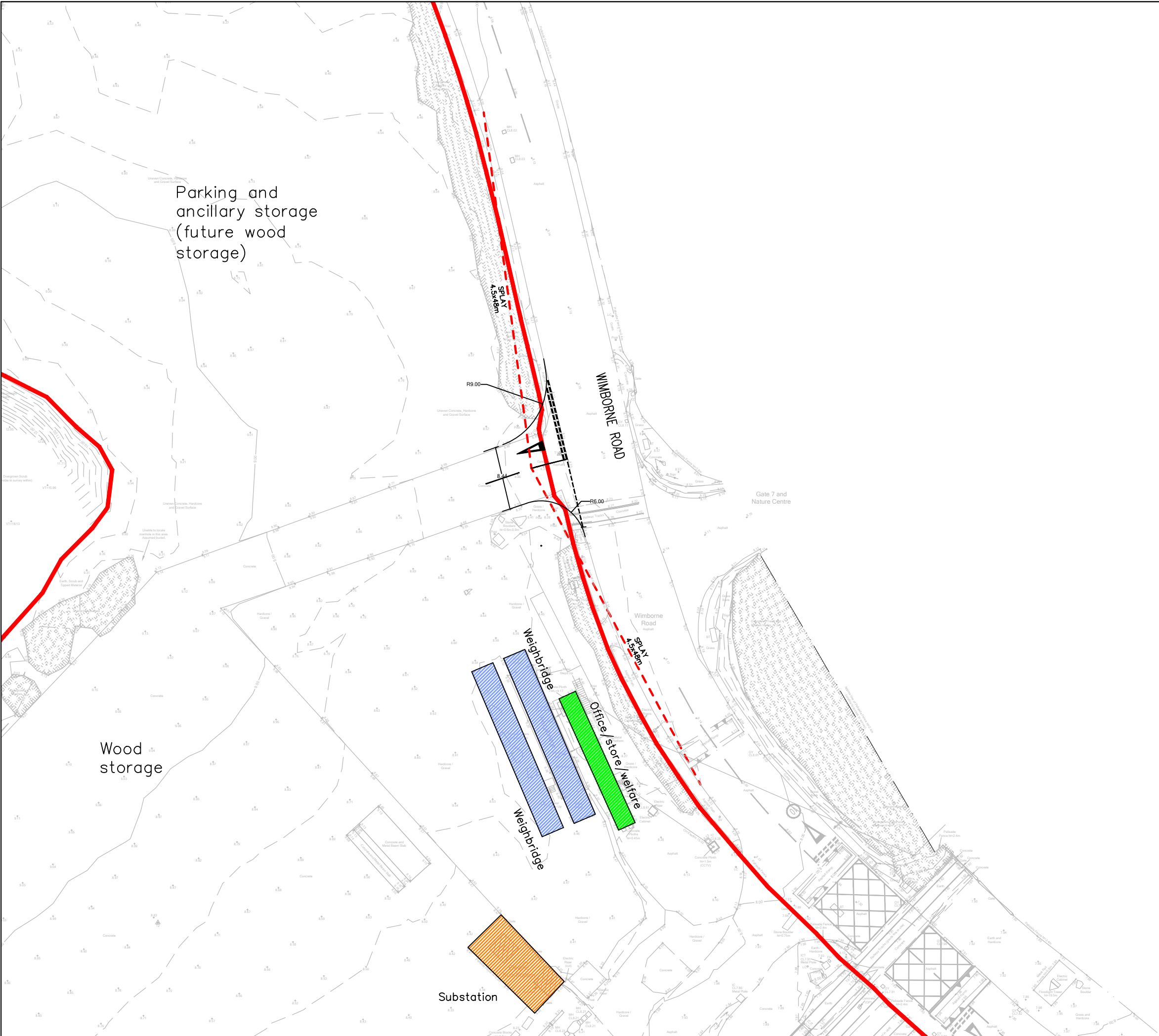




Client:	SWWP		Proposed HGV route		7 Hatchers Mews Bermondsey Street London SE1 3GS +44(0) 207 939 0959 www.clarkebond.com	clarkebond
Job Title:	Berth 31, Port of Barry	Date:	June 2024	Job No:	L06471	
				Dwg No:	Figure 5.1	

Drawings

DWG INFO: \\CB-LON-APP01\DATA-LONDON\BS1192\L06471 - BARRY DOCKS, CARDIFF DOCK, LMM-072-02A



CDM RESIDUAL RISKS

The work shown on this drawing is both familiar to the designers and routinely safely built in similar circumstances by competent contractors.

Risks are not considered significant.

Relevant data is included in the Pre-Construction Information Pack

Signed: **DB** Date: **06/24**

DO NOT SCALE THIS DRAWING FOR CONSTRUCTION PURPOSES.

CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ENGINEER

Rev	Detail	By	Chk	Date
Revisions				

clarkebond

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Client

SOUTH WEST WOOD PRODUCTS LTD

Project

BERTH 31, PORT OF BARRY

Drawing Title

SITE ACCESS LOCATION PLAN

Drawing Status

INFORMATION

Project No.		Discipline	Drawing No.
L06471		C	0131
Scale		Date	Revision
1:500		03.06.2024	*
Drawn	Checked	Sheet Size	
NN	DB	A3	

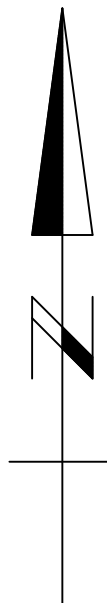
Appendices

Appendix A: Proposed Site Layout Plan



© SWWP
Notes:
1.This drawing should only be used for its original intended purpose.
2.Critical dimensions, levels, clearances etc. should be checked on site before construction work commences.
3.Dimensions in metres unless otherwise stated.

Application boundary



Additional notes:
1.Original topographical survey shown in light grey.
2.Proposed layout shown with bold linework.

SCALE BAR = 70M

A Block walls amended 02 May 2024

Revision	Comment	Date
----------	---------	------

 **South West Wood Products Ltd**
Unit A4 Pacific Road, Compass Business Park, Cardiff CF24 5HL

Project
BARRY DOCK
WOOD DEPOT

Drawing Title
SITE LAYOUT

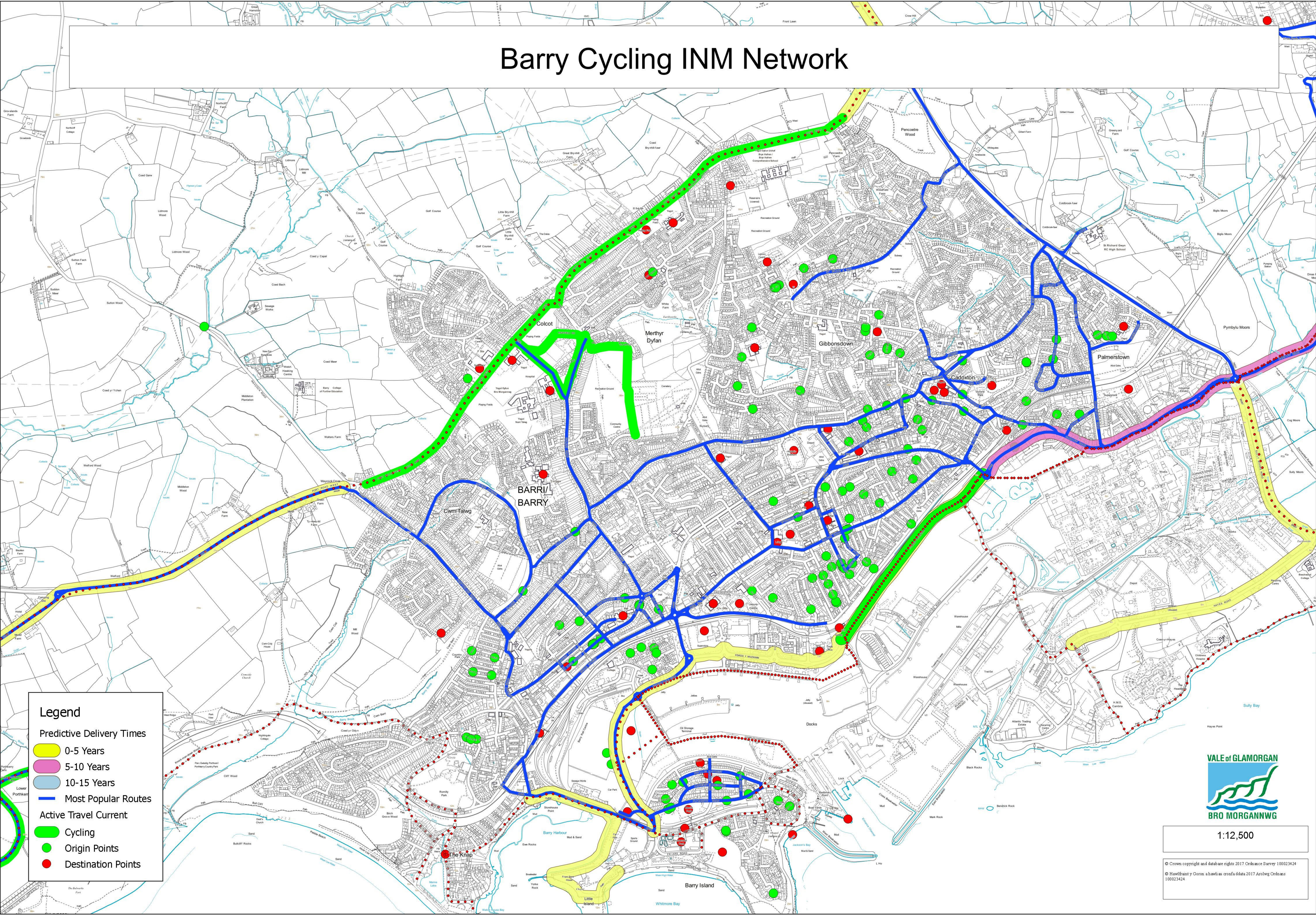
Drawn Date	Surveyed Date
28/04/24	

Scale	(AT A0)
1:500	

Drawing Number	REVA FOR COMMENT
LMM/072/02	02 MAY 2024

Appendix B: Barry Cycling Network Map

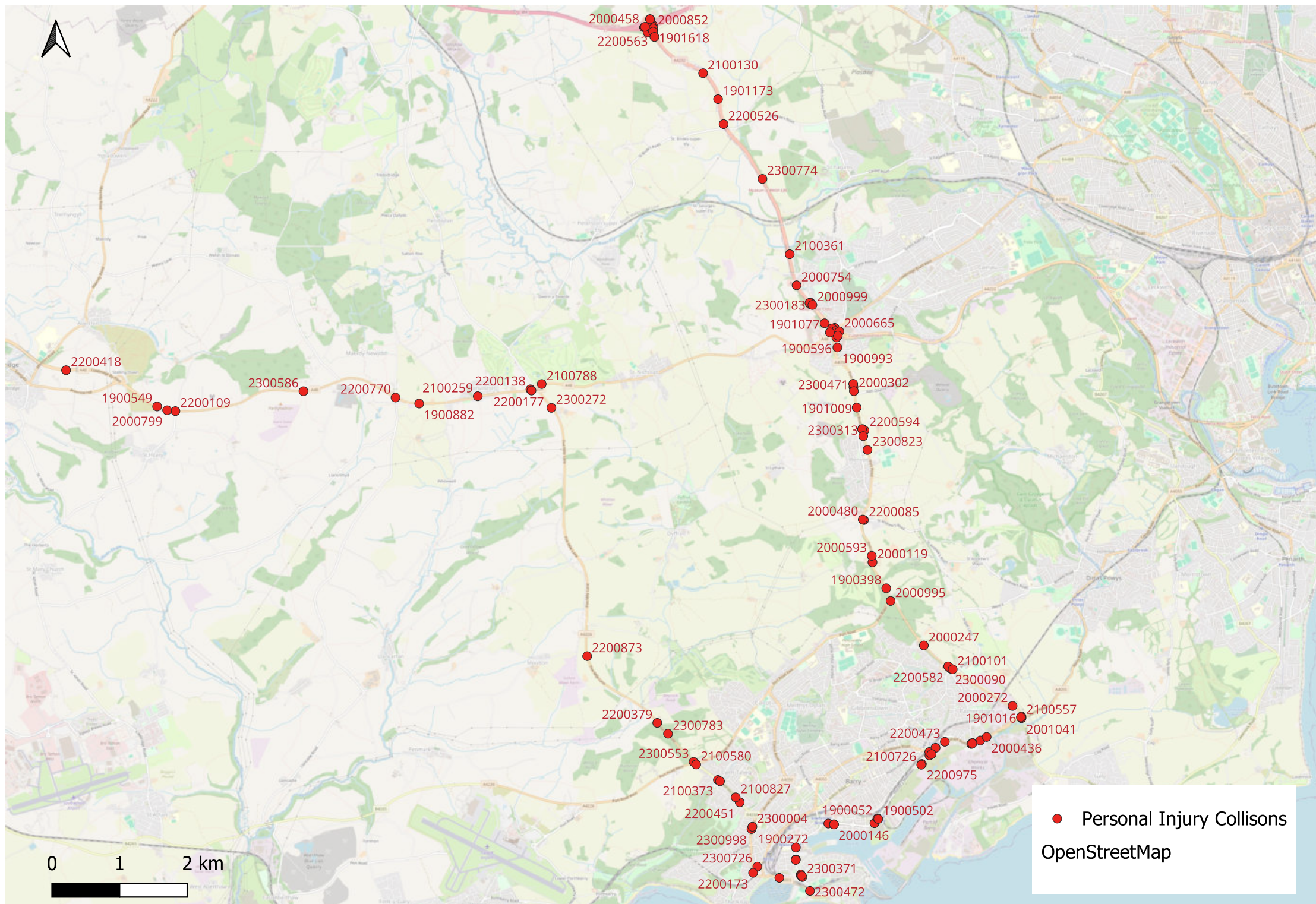
Barry Cycling INM Network



Appendix C: Personal Injury Collisions

[illegible]

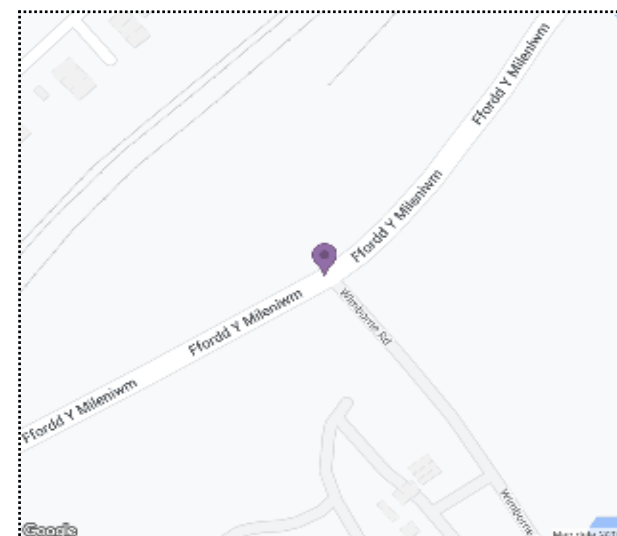
PERSONAL INJURY COLLISIONS 2019-2023





Validated Data

Crash Date:	Saturday, August 7, 2021	Time of Crash:	16:55:00	Crash Reference:	2021622100726
Highest Injury Severity:	Slight	Road Number:	U0	Casualties:	1
Highway Authority:	The Vale of Glamorgan	Vehicles:	2	OS Grid Reference:	312995 168480
Local Authority:	Vale of Glamorgan				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	40				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/faq

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Validated Data

Crash Date:

Saturday, August 7, 2021

Time of Crash: 16:55:00

Crash Reference: 2021622100726

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	8	Male	56 - 65	Vehicle is passing another moving vehicle on its offside	Nearside	Unknown	None	None
2	Motorcycle over 50cc and up to 125cc	30	Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	2	Slight	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

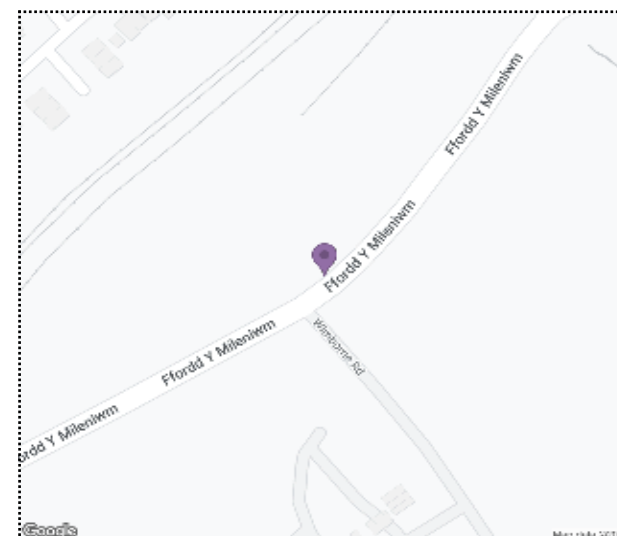
For more information about the data please visit: www.crashmap.co.uk/home/faq

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Validated Data

Crash Date:	Saturday, December 17, 2022	Time of Crash:	20:08:00	Crash Reference:	2022622200975
Highest Injury Severity:	Slight	Road Number:	U0	Casualties:	1
Highway Authority:	The Vale of Glamorgan			Vehicles:	1
Local Authority:	Vale of Glamorgan			OS Grid Reference:	313005 168492
Weather Description:	Other				
Road Surface Description:	Frost or Ice				
Speed Limit:	40				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/faq

To subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services



Validated Data

Crash Date:

Saturday, December 17, 2022

Time of Crash:

20:08:00

Crash Reference: 2022622200975

Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	7	Female	Over 75	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	Bollard/Refuge	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	2	Slight	Vehicle or pillion passenger	Female	46 - 55	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/faq

To subscribe to unlimited reports using CrashMap Pro visit: www.crashmap.co.uk/home/premium_services

Appendix D: Traffic Survey Data



Wimborne Road, Barry Docks ATC

Site No. 653601

Site Ref. 653601

Site 1

Speed Report (Speed Limit 10 Mph)

Week Begin: 08 April 2024

Channel: Southbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10Mph	Bin 2 10-<15	Bin 3 15-<20	Bin 4 20-<25	Bin 5 25-<30	Bin 6 30-<35	Bin 7 35-<40	Bin 8 40-<45	Bin 9 45-<50	Bin 10 50-<55	Bin 11 55-<60	Bin 12 60-<65	Bin 13 =>65
Mon 8 Apr	3100	32	27	5	19	34	106	729	1447	647	102	13	1	2	0	0	0
Tue 9 Apr	3062	33	28	5	18	41	72	623	1384	761	136	21	4	1	0	1	0
Wed 10 Apr	3004	33	27	5	22	37	105	681	1348	672	110	20	7	2	0	0	0
Thu 11 Apr	3076	33	28	5	17	47	94	638	1426	703	121	20	9	1	0	0	0
Fri 12 Apr	3203	33	28	5	17	41	109	630	1424	784	154	28	10	4	2	0	0
Sat 13 Apr	1781	34	28	5	6	21	51	303	792	473	107	22	4	1	1	0	0
Sun 14 Apr	1390	34	28	5	4	26	42	218	622	380	74	13	4	6	1	0	0
5 Day Ave.	3089	33	28	5	19	40	97	660	1406	713	125	20	6	2	0	0	0
7 Day Ave.	2659	33	28	5	15	35	83	546	1206	631	115	20	6	2	1	0	0

PCC Traffic Information Consultancy Ltd.

Site No. 653601

Site Ref. 653601

Site 1

Speed Report (Speed Limit 10 Mph)

Week Begin: 08 April 2024

Channel: Northbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10Mph	Bin 2 10-<15	Bin 3 15-<20	Bin 4 20-<25	Bin 5 25-<30	Bin 6 30-<35	Bin 7 35-<40	Bin 8 40-<45	Bin 9 45-<50	Bin 10 50-<55	Bin 11 55-<60	Bin 12 60-<65	Bin 13 =>65
Mon 8 Apr	3280	31	26	6	89	115	245	963	1271	445	108	23	4	2	4	4	7
Tue 9 Apr	3318	32	25	6	142	124	272	946	1194	487	113	25	6	3	1	3	2
Wed 10 Apr	3143	32	26	6	63	115	286	821	1202	496	117	23	9	2	4	1	4
Thu 11 Apr	3217	32	26	6	24	100	178	857	1341	556	115	29	7	4	3	0	3
Fri 12 Apr	3579	32	25	7	161	171	245	909	1323	592	123	33	8	7	4	2	1
Sat 13 Apr	1926	33	27	5	3	25	47	505	850	391	66	26	8	2	2	0	1
Sun 14 Apr	1624	33	28	5	6	26	47	343	748	332	90	19	5	1	3	0	4
5 Day Ave.	3307	32	26	6	96	125	245	899	1266	515	115	27	7	4	3	2	3
7 Day Ave.	2870	32	26	6	70	97	189	763	1133	471	105	25	7	3	3	1	3

PCC Traffic Information Consultancy Ltd.

Site No. 653601

Site Ref. 653601

Site 1

Speed Report (Speed Limit 10 Mph)

Week Begin: 08 April 2024

Channel: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10Mph	Bin 2 10-<15	Bin 3 15-<20	Bin 4 20-<25	Bin 5 25-<30	Bin 6 30-<35	Bin 7 35-<40	Bin 8 40-<45	Bin 9 45-<50	Bin 10 50-<55	Bin 11 55-<60	Bin 12 60-<65	Bin 13 =>65
Mon 8 Apr	6380	32	26	6	108	149	351	1692	2718	1092	210	36	5	4	4	4	7
Tue 9 Apr	6380	33	26	6	160	165	344	1569	2578	1248	249	46	10	4	1	4	2
Wed 10 Apr	6147	32	27	6	85	152	391	1502	2550	1168	227	43	16	4	4	1	4
Thu 11 Apr	6293	33	27	6	41	147	272	1495	2767	1259	236	49	16	5	3	0	3
Fri 12 Apr	6782	33	27	6	178	212	354	1539	2747	1376	277	61	18	11	6	2	1
Sat 13 Apr	3707	33	28	5	9	46	98	808	1642	864	173	48	12	3	3	0	1
Sun 14 Apr	3014	33	28	5	10	52	89	561	1370	712	164	32	9	7	4	0	4
5 Day Ave.	6396	33	27	6	114	165	342	1559	2672	1229	240	47	13	6	4	2	3
7 Day Ave.	5529	33	27	6	84	132	271	1309	2339	1103	219	45	12	5	4	2	3



Barry Docks, Monday 8th & Tuesday 9th April 2024

Junction: 1

Approach: Ffordd Y Mileniwm North

TIME	Left to Wimborne Road								Ahead to Ffordd Y Mileniwm (S)								U-Turn							
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
15:00 - 15:15	0	0	15	6	2	0	0	23	0	0	111	8	1	0	0	120	0	0	0	0	0	0	0	0
15:15 - 15:30	3	0	9	4	1	2	0	19	0	0	109	11	1	2	0	123	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	16	4	2	2	0	24	0	1	104	9	0	0	0	114	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	21	4	4	2	1	32	0	1	104	9	0	2	1	117	0	0	0	0	0	0	0	0
Hourly Total	3	0	61	18	9	6	1	98	0	2	443	38	2	4	1	490	0	0	0	0	0	0	0	0
16:00 - 16:15	0	1	16	8	0	0	0	25	0	1	117	14	0	0	0	132	0	0	0	0	0	0	0	2
16:15 - 16:30	0	0	23	6	1	1	0	31	0	1	124	11	0	0	0	136	0	0	0	0	0	0	0	0
16:30 - 16:45	0	0	21	6	3	3	0	33	0	0	93	13	1	1	1	109	0	0	0	0	0	0	0	0
16:45 - 17:00	0	0	9	2	2	1	0	14	0	0	129	10	0	0	0	139	0	0	4	0	0	0	0	4
Hourly Total	0	1	69	22	6	3	0	101	0	2	463	48	1	1	1	516	0	0	6	0	0	0	0	6
17:00 - 17:15	0	0	21	3	0	1	0	25	0	0	109	6	0	0	0	115	0	0	7	0	0	0	0	7
17:15 - 17:30	0	0	12	4	2	1	0	19	0	0	108	12	0	0	0	120	0	0	6	2	0	0	0	8
17:30 - 17:45	0	0	11	0	0	1	0	12	0	0	123	8	0	1	0	132	0	0	18	0	0	0	0	18
17:45 - 18:00	0	0	13	1	1	1	0	16	0	0	117	10	0	0	0	127	0	0	0	0	0	0	0	0
Hourly Total	0	0	55	8	3	3	0	69	0	0	457	36	0	1	0	494	0	0	31	2	0	0	0	33
18:00 - 18:15	0	0	4	0	0	0	0	4	0	0	117	9	2	1	0	129	0	0	0	0	0	0	0	0
18:15 - 18:30	0	0	8	2	0	0	0	10	0	0	98	3	0	0	0	101	0	0	0	0	0	0	0	0
18:30 - 18:45	0	0	7	0	1	0	0	8	0	0	100	3	0	1	0	104	0	0	0	0	0	0	0	0
18:45 - 19:00	0	0	7	3	0	0	0	10	0	0	81	1	0	0	0	83	0	0	0	0	0	0	0	0
Hourly Total	0	0	26	5	1	0	0	32	0	0	396	16	2	3	0	417	0	0	0	0	0	0	0	0
19:00 - 19:15	0	0	2	0	0	0	0	2	0	0	73	7	0	0	0	80	0	0	0	0	0	0	0	0
19:15 - 19:30	0	0	3	0	0	0	0	3	0	1	77	6	0	0	0	84	0	0	0	0	0	0	0	0
19:30 - 19:45	0	0	0	1	0	0	0	1	0	0	71	3	0	0	0	74	0	0	0	0	0	0	0	0
19:45 - 20:00	0	0	2	0	0	0	0	2	0	1	80	1	0	1	0	83	0	0	0	0	0	0	0	0
Hourly Total	0	0	7	1	0	0	0	8	0	2	301	17	0	1	0	321	0	0	0	0	0	0	0	0
20:00 - 20:15	0	0	2	0	0	0	0	2	0	0	64	1	0	0	0	65	0	0	0	0	0	0	0	0
20:15 - 20:30	0	0	1	0	0	0	0	1	0	0	65	5	0	0	0	70	0	0	0	0	0	0	0	0
20:30 - 20:45	0	0	3	0	0	0	0	3	0	0	46	2	0	1	0	49	0	0	0	0	0	0	0	0
20:45 - 21:00	0	1	0	1	0	0	0	2	0	0	44	3	0	0	0	47	0	0	0	0	0	0	0	0
Hourly Total	0	1	6	1	0	0	0	8	0	0	219	11	0	1	0	231	0	0	0	0	0	0	0	0
21:00 - 21:15	0	0	1	1	0	0	0	2	0	0	39	2	0	0	0	41	0	0	0	0	0	0	0	0
21:15 - 21:30	0	0	1	0	0	0	0	1	0	0	42	1	0	0	0	43	0	0	0	0	0	0	0	0
21:30 - 21:45	0	0	1	1	0	0	0	2	0	0	38	0	0	1	0	39	0	0	0	0	0	0	0	0
21:45 - 22:00	0	0	1	0	0	0	0	1	0	0	47	3	0	0	0	50	0	0	0	0	0	0	0	0
Hourly Total	0	0	4	2	0	0	0	6	0	0	166	6	0	1	0	173	0	0	0	0	0	0	0	0
22:00 - 22:15	0	0	2	0	0	0	0	2	0	0	26	1	0	0	0	27	0	0	0	0	0	0	0	0
22:15 - 22:30	0	0	0	0	0	0	0	0	0	1	29	1	0	0	0	31	0	0	0	0	0	0	0	0
22:30 - 22:45	0	0	0	0	0	0	0	0	0	0	24	2	0	0	0	26	0	0	0	0	0	0	0	0
22:45 - 23:00	0	0	1	0	0	0	0	1	0	0	12	0	0	0	0	13	0	0	0	0	0	0	0	0
Hourly Total	0	0	3	0	0	0	0	3	0	1	91	4	1	0	0	97	0	0	0	0	0	0	0	0
23:00 - 23:15	0	0	1	0	0	0	0	1	0	0	19	0	0	0	0	19	0	0	1	0	0	0	0	1
23:15 - 23:30	0	0	2	1	0	0	0	3	0	0	19	0	0	0	0	19	0	0	0	0	0	0	0	0
23:30 - 23:45	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	16	0	0	0	0	0	0	0	0
23:45 - 00:00	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	0	0	0	0	0	0	0	0
Hourly Total	0	0	2	0	0	0	1	3	0	0	64	1	0	0	0	65	0	0	1	0	0	0	0	1
00:00 - 00:15	0	0	1	0	0	0	0	1	0	1	12	0	0	0	0	13	0	0	0	0	0	0	0	0
00:15 - 00:30	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
00:30 - 00:45	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	0	0	0	0	0	0	0	0
00:45 - 01:00	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	0	0	0	0	1	0	1	28	0	0	0	0	29	0	0	1	0	0	0	0	1
01:00 - 01:15	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	5	0	0	0	0	0	0	0	0
01:15 - 01:30	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	5	0	0	0	0	0	0	0	0
01:30 - 01:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
01:45 - 02:00	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	13	0	1	2	0	16	0	0	0	0	0	0	0	0
02:00 - 02:15	0	0	1	0	1	0	0	2	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
02:15 - 02:30	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0
02:30 - 02:45	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	3	0	0	0	0	0	0	0	0
02:45 - 03:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	0	1	0	0	2	0	0	7	2	0	1	0	10	0	0	0	0	0	0	0	0
03:00 - 03:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
03:15 - 03:30	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
03:30 - 03:45	0	0	3	0	0	1	0	4																



Barry Docks, Monday 8th & Tuesday 9th April 2024

Junction: 1

Approach: Wimborne Road

TIME	Left to Flordd Y Mileniwm (S)								Right to Flordd Y Mileniwm (N)							
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
15:00 - 15:15	0	0	37	9	2	2	0	50	0	0	44	4	0	0	0	48
15:15 - 15:30	0	0	42	4	1	0	0	47	0	0	28	11	1	1	0	41
15:30 - 15:45	0	0	46	6	0	2	0	54	0	0	25	8	1	1	0	34
15:45 - 16:00	0	0	62	10	1	0	0	73	0	0	39	11	0	1	0	51
Hourly Total	0	0	187	29	4	4	0	224	0	0	136	34	2	2	0	174
16:00 - 16:15	0	0	65	8	0	0	0	73	0	2	74	10	4	1	0	91
16:15 - 16:30	0	0	45	14	1	1	1	62	0	0	52	10	2	0	0	64
16:30 - 16:45	0	0	61	10	0	0	0	71	0	0	50	9	0	0	1	60
16:45 - 17:00	0	0	58	8	0	0	0	66	0	0	40	9	1	0	0	50
Hourly Total	0	0	229	40	1	1	1	272	0	2	216	38	7	1	1	265
17:00 - 17:15	0	0	45	6	1	0	0	52	0	0	50	8	2	0	0	60
17:15 - 17:30	0	0	45	3	0	0	0	48	0	0	45	6	2	0	0	53
17:30 - 17:45	0	0	27	2	0	0	0	29	0	0	32	3	2	2	0	39
17:45 - 18:00	0	0	42	3	0	0	0	45	0	0	12	2	0	0	1	15
Hourly Total	0	0	169	14	1	0	0	174	0	0	139	19	6	3	0	167
18:00 - 18:15	0	0	28	1	0	0	0	29	0	0	15	2	0	1	0	18
18:15 - 18:30	0	0	15	3	0	0	0	18	0	0	7	0	0	0	0	7
18:30 - 18:45	0	0	19	2	0	0	0	21	0	0	7	2	1	0	0	10
18:45 - 19:00	0	0	14	1	0	0	0	15	0	0	7	4	0	0	0	11
Hourly Total	0	0	76	7	0	0	0	83	0	0	36	8	1	1	0	46
19:00 - 19:15	0	0	8	1	0	0	0	9	0	0	4	0	0	0	0	4
19:15 - 19:30	0	0	12	0	0	0	0	12	1	0	5	2	2	0	0	10
19:30 - 19:45	0	0	14	1	0	0	0	15	0	0	6	3	1	2	0	12
19:45 - 20:00	0	0	23	0	0	0	0	23	0	0	6	1	0	3	0	10
Hourly Total	0	0	57	2	0	0	0	59	1	0	21	6	3	5	0	36
20:00 - 20:15	0	0	9	0	0	0	0	9	0	0	1	0	0	0	0	1
20:15 - 20:30	0	0	9	2	0	0	0	11	0	0	9	1	1	0	0	10
20:30 - 20:45	0	0	9	0	0	0	0	9	0	0	2	0	0	0	0	2
20:45 - 21:00	0	0	6	1	0	0	0	7	0	0	2	0	0	0	0	2
Hourly Total	0	0	33	3	0	0	0	36	0	0	14	1	0	0	0	15
21:00 - 21:15	0	0	4	0	0	0	0	4	0	0	3	0	0	0	0	3
21:15 - 21:30	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
21:30 - 21:45	0	0	4	1	0	0	0	5	0	0	2	0	0	0	0	2
21:45 - 22:00	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1
Hourly Total	0	0	11	1	0	0	0	12	0	0	6	0	0	0	0	6
22:00 - 22:15	0	0	2	0	0	0	0	2	0	0	4	1	0	0	0	5
22:15 - 22:30	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	2
22:30 - 22:45	0	0	3	0	0	0	0	3	0	0	1	0	0	0	0	1
22:45 - 23:00	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
Hourly Total	0	0	8	0	0	0	0	8	0	0	7	1	0	0	0	8
23:00 - 23:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
23:15 - 23:30	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1
23:30 - 23:45	0	0	2	0	0	0	0	2	0	0	2	0	0	0	1	3
23:45 - 00:00	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
Hourly Total	0	0	6	0	0	0	0	6	0	0	4	0	0	1	0	5
00:00 - 00:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
00:15 - 00:30	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1
00:30 - 00:45	0	1	2	0	0	0	0	3	0	0	0	0	0	0	0	0
00:45 - 01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	1	4	0	0	0	0	5	0	0	2	0	0	0	0	2
01:00 - 01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 - 01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 - 01:45	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
01:45 - 02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
02:00 - 02:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:15 - 02:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
02:30 - 02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 - 03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Hourly Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	3
03:00 - 03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 - 03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 - 03:45	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
03:45 - 04:00	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0
04:00 - 04:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
04:15 - 04:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
04:30 - 04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 - 05:00	0	0	1	0	0	0	0	1	0	0	1	1	0	0	1	3
Hourly Total	0	0	1	0	0	0	0	1	0	0	2	2	0	0	1	5
05:00 - 05:15	0	0	0	1	0	0	0	1	0	0	2	0	0	0	1	3
05:15 - 05:30	0	0	1	0	1	0	0	2	0	0	1	0	0	0	0	1
05:30 - 05:45	0	0	0	0	1	0	0	1	0	0	4	2	0	1	0	7
05:45 - 06:00	0	0	0	1	0	0	0	1	0	0	4	0	1	1	0	6
Hourly Total	0	0	1	2	2	0	0	5	0	0	11	2	1	1	0	17
06:00 - 06:15	0	0	2	0	0	0	0	2	0	0	1	1	1	0	0	3
06:15 - 06:30	0	0	1	1	0	0	0	2	0	0	2	1	2	3	0	8
06:30 - 06:45	0	0	3	3	0	0	0	6	0	0	1	1	4	0	0	6
06:45 - 07:00	0	0	4	2	0	0	0	6	0	0	8	4	0	0	1	14
Hourly Total	0	0	10	6	0	0	0	16	0	0	12	7	7	4	1	31
07:00 - 07:15	0	0	5	2	0	1	1	9	0	0	6	0	0	0	2	8
07:15 - 07:30	0	0	8	3	1	0	0	12	0	0	6	4	1	3	0	14
07:30 - 07:45	0	0	10	0	1	0	1	12	0	0	13	7	2	1	0	23
07:45 - 08:00	0	0	13	3	0	1	0	17	0	0	4	4	0	2	0	10
Hourly Total	0	0	36	8	2	2	2	50	0	0	29	15	3	8	0	55
08:00 - 08:15	0	0	8	2	1	0	0	11	0	0	8	8	2	2	0	19
08:15 - 08:30	0	0	25	4	0	0	0	29	0	0	8	5	4	0	0	17
08:30 - 08:45	0	0	20	6	1	1	0	28	0	0	8	3	0	2	1	14
08:45 - 09:00	0	0	19	5	0	0	0	24	0	0	12	8	0	1	0	21
Hourly Total	0	0	72	17	2	1	0	92	0	0	36	24	6	4	1	71
09:00 - 09:15	0	0	27	6	0	0	0	33	0	0	19	8	3	2	0	32
09:15 - 09:30	0	0	24	4	0	1	0	29	0	0	17	1	2	0	0	20
09:30 - 09:45	0	0	28	2	1	0	0	31	0	0	16	5	0	1	0	22
09:45 - 10:00	0	0	15	3	1	0	0	19	0	0	18	2</				



Barry Docks, Monday 8th & Tuesday 9th April 2024

Junction: 1

Approach: Ffordd Y Mileniwm South

TIME	Ahead to Ffordd Y Mileniwm (N)								Right to Wimborne Road								U-Turn							
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
15:00 - 15:15	0	1	98	12	3	0	0	114	0	0	27	2	1	0	0	30	0	0	0	0	0	0	0	0
15:15 - 15:30	0	1	100	9	0	4	0	114	0	0	27	3	2	1	0	23	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	91	15	1	1	0	108	0	0	19	4	2	0	0	26	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	94	11	2	2	0	109	0	0	21	9	3	1	0	34	0	0	0	0	0	0	0	0
Hourly Total	0	2	383	47	6	7	0	445	0	0	84	18	8	2	0	112	0	0	0	0	0	0	0	0
16:00 - 16:15	0	1	105	19	2	0	0	127	0	0	23	5	1	0	0	29	0	0	0	0	0	0	0	0
16:15 - 16:30	0	2	106	17	1	0	1	127	0	0	27	7	2	1	0	37	0	0	0	0	0	0	0	0
16:30 - 16:45	0	1	104	13	0	0	1	119	0	0	23	1	0	1	0	26	0	0	0	0	0	0	0	0
16:45 - 17:00	0	1	116	11	2	1	0	131	0	0	16	3	0	0	1	20	0	0	0	0	0	0	0	0
Hourly Total	0	5	431	60	5	1	2	504	0	0	89	16	3	2	1	111	0	0	0	0	0	0	0	0
17:00 - 17:15	0	1	121	13	0	1	0	136	1	0	15	3	1	0	0	20	0	0	0	0	0	0	0	0
17:15 - 17:30	1	0	130	8	1	0	0	140	1	0	23	2	1	1	0	27	0	0	0	0	0	0	0	0
17:30 - 17:45	0	0	134	9	0	0	0	143	0	0	15	3	0	0	0	18	0	0	0	0	0	0	0	0
17:45 - 18:00	0	1	105	12	0	1	1	119	1	0	16	1	0	0	0	18	0	0	0	0	0	0	0	0
Hourly Total	1	1	490	42	1	2	1	538	3	0	69	9	2	0	0	83	0	0	0	0	0	0	0	0
18:00 - 18:15	0	0	111	2	0	0	0	113	1	0	16	2	0	0	0	19	0	0	0	0	0	0	0	0
18:15 - 18:30	0	0	81	7	0	1	1	90	0	0	13	0	0	0	0	13	0	0	0	0	0	0	0	0
18:30 - 18:45	0	0	103	2	0	0	0	105	0	0	11	0	0	0	0	11	0	0	0	0	0	0	0	0
18:45 - 19:00	1	1	94	3	0	2	0	101	0	0	9	0	0	0	0	9	0	0	0	0	0	0	0	0
Hourly Total	1	1	389	14	0	3	1	409	1	0	49	2	0	0	0	52	0	0	0	0	0	0	0	0
19:00 - 19:15	0	0	89	3	0	1	1	94	0	0	7	1	0	1	0	9	0	0	0	0	0	0	0	0
19:15 - 19:30	0	0	79	1	0	2	0	82	0	0	10	2	0	0	0	12	0	0	0	0	0	0	0	0
19:30 - 19:45	0	0	75	3	0	0	0	78	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0
19:45 - 20:00	0	0	63	0	0	0	0	63	0	0	6	2	0	0	0	8	0	0	0	0	0	0	0	0
Hourly Total	0	0	306	7	0	3	1	317	0	0	33	5	0	1	0	39	0	0	0	0	0	0	0	0
20:00 - 20:15	0	0	50	2	0	0	1	53	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0
20:15 - 20:30	0	0	51	0	0	0	0	51	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0
20:30 - 20:45	0	1	57	1	0	0	0	59	1	0	8	0	0	0	0	9	0	0	0	0	0	0	0	0
20:45 - 21:00	0	0	50	0	0	1	0	51	0	0	5	1	0	0	0	6	0	0	0	0	0	0	0	0
Hourly Total	0	1	208	3	0	1	1	214	1	0	25	1	0	0	0	27	0	0	0	0	0	0	0	0
21:00 - 21:15	0	0	45	1	0	1	0	47	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0
21:15 - 21:30	0	0	42	1	0	0	0	43	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0
21:30 - 21:45	0	0	32	3	0	0	0	35	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
21:45 - 22:00	0	0	30	1	0	0	0	31	0	0	5	0	0	0	0	5	0	0	1	0	0	0	0	1
Hourly Total	0	0	149	6	0	1	0	156	0	0	18	0	0	0	0	18	0	0	1	0	0	0	0	1
22:00 - 22:15	0	0	32	1	1	0	0	34	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
22:15 - 22:30	1	0	23	1	0	0	1	26	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0
22:30 - 22:45	0	0	16	1	0	0	0	17	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
22:45 - 23:00	0	0	15	0	0	0	0	15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
Hourly Total	1	0	86	3	1	0	1	92	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	0
23:00 - 23:15	0	0	22	0	0	0	0	22	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
23:15 - 23:30	0	0	16	0	0	1	0	19	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
23:30 - 23:45	0	0	12	0	0	0	0	12	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
23:45 - 00:00	0	0	9	0	0	0	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	1	59	0	1	1	2	64	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
00:00 - 00:15	0	0	14	0	0	0	0	14	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
00:15 - 00:30	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
00:30 - 00:45	0	0	8	0	0	0	0	8	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45 - 01:00	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	30	0	0	0	0	30	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
01:00 - 01:15	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 - 01:30	0	0	7	0	0	0	0	7	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
01:30 - 01:45	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 - 02:00	0	0	2	1	0	1	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Hourly Total	0	0	17	1	0	1	0	19	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
02:00 - 02:15	0	0	4	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 - 02:30	0	0	5	1	1	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 - 02:45	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 - 03:00	0	0	4	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	15	2	1	1	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:15	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 - 03:30	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 - 03:45	0	0	5	0	0	0																		

Appendix E: TRICS Output

Trip Rate Parameter: Site area

124 HGV's Daily Movements

Count Type: OGVS

Trip Rate Parameter: Site area

62 HGV's Daily Movements

Count Type: OGVS

Time Range	ARRIVALS					DEPARTURES					TOTALS				
	No. Days	Ave. AREA	Trip Rate	Profile	HGVs	No. Days	Ave. AREA	Trip Rate	Profile	HGVs	No. Days	Ave. AREA	Trip Rate	Profile	HGVs
00:00-01:00															
01:00-02:00															
02:00-03:00															
03:00-04:00															
04:00-05:00															
05:00-06:00	3	70.67	0	0%	0	3	70.67	0.009	1%	0	3	70.67	0.009	0%	0
06:00-07:00	3	70.67	0.024	2%	1	3	70.67	0.033	2%	1	3	70.67	0.057	2%	1
07:00-08:00	4	53.49	0.093	7%	2	4	53.49	0.07	5%	2	4	53.49	0.163	6%	4
08:00-09:00	4	53.49	0.112	8%	3	4	53.49	0.14	11%	3	4	53.49	0.252	9%	6
09:00-10:00	4	53.49	0.126	9%	3	4	53.49	0.122	9%	3	4	53.49	0.248	9%	6
10:00-11:00	4	53.49	0.164	12%	4	4	53.49	0.15	11%	4	4	53.49	0.314	12%	7
11:00-12:00	4	53.49	0.215	16%	5	4	53.49	0.187	14%	4	4	53.49	0.402	15%	9
12:00-13:00	4	53.49	0.117	9%	3	4	53.49	0.107	8%	2	4	53.49	0.224	8%	5
13:00-14:00	4	53.49	0.117	9%	3	4	53.49	0.14	11%	3	4	53.49	0.257	10%	6
14:00-15:00	4	53.49	0.098	7%	2	4	53.49	0.098	7%	2	4	53.49	0.196	7%	5
15:00-16:00	4	53.49	0.136	10%	3	4	53.49	0.098	7%	2	4	53.49	0.234	9%	5
16:00-17:00	4	53.49	0.065	5%	2	4	53.49	0.098	7%	2	4	53.49	0.163	6%	4
17:00-18:00	4	53.49	0.023	2%	1	4	53.49	0.061	5%	1	4	53.49	0.084	3%	2
18:00-19:00	4	53.49	0.009	1%	0	4	53.49	0.005	0%	0	4	53.49	0.014	1%	0
19:00-20:00	3	70.67	0.024	2%	1	3	70.67	0	0%	0	3	70.67	0.024	1%	1
20:00-21:00	3	70.67	0.005	0%	0	3	70.67	0.009	1%	0	3	70.67	0.014	1%	0
21:00-22:00															
22:00-23:00															
23:00-24:00															
Daily Trip Rates:			1.328	100%	31			1.327	100%	31			2.655	100%	62

Appendix F: Method of Travel to Work Data

TS061 - Method used to travel to work

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population	All usual residents aged 16 years and over in employment the week before the census
units	Persons
date	2021

Method of travel to workplace	W01001133 : Vale of Glamorgan 0085	W01001071 : Vale of Glamorgan 0090	W01001073 : Vale of Glamorgan 0155
Total: All usual residents aged 16 years and over	898	695	885
Work mainly at or from home	374	124	204
Underground, metro, light rail, tram	1	0	0
Train	7	28	29
Bus, minibus or coach	10	23	26
Taxi	3	5	4
Motorcycle, scooter or moped	4	4	2
Driving a car or van	445	411	456
Passenger in a car or van	24	31	44
Bicycle	5	6	6
On foot	16	58	104
Other method of travel to work	9	5	10

In order to protect against disclosure of personal information, records have been swapped between different geographic areas and counts perturbed by small amounts. Small counts at the lowest geographies will be most affected.

Census 2021 took place during a period of rapid change. We gave extra guidance to help people on furlough answer the census questions about work. However, we are unable to determine how furloughed people followed the guidance. Take care.

e when usir



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