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Falmouth Docks Development

Transport Assessment

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1. Introduction

This Transport Assessment (TA) has been prepared by Ramboll on behalf of the Falmouth Docks & Engineering Company (FDEC) (the 'applicant') to support a full planning application for the redevelopment of Falmouth Docks (the 'proposed development') at Falmouth Docks (the 'site') in Falmouth, Cornwall.

The objectives of the proposed development are to repair and update the currently poor condition port infrastructure in order to maintain existing business and future proof the port with respect to cruise capacity, cargo capacity and renewable floating offshore wind (FLOW) (supporting the offshore wind market). The site and the works proposed are considered to be in the jurisdiction of Cornwall Council and the Marine Management Organisation (MMO).

1.1 Pre-Planning Application

On the 31st of May 2024, Ramboll sent a pre-application Transport Scoping Report setting out the proposed scope for the TA for the proposed development to Huw Gibbon at Cornwall County Council (Cornwall Council) Highways, who is the designated highways officer for the proposed development. Following submission of the scoping report, Ramboll arranged a transport scoping meeting with Cornwall Council on 18th June 2024 to run through the proposed scope of the TA and to confirm the level of assessment.

This TA has therefore been undertaken based on the consultation with Cornwall Council in June 2024 and details of the scoping correspondence with Cornwall Council can be found in Appendix 1.

1.2 Report Purpose & Structure

This TA has been prepared to present all the material necessary to support a comprehensive assessment of transport-related aspects of the proposed development and is structured as follows:

- **Section 2: Policy Context** – summarises the relevant national and local planning policy context.
- **Section 3: Baseline Conditions** – presents the baseline transport conditions for the proposed site.
- **Section 4: Proposed Development** – presents the development proposals.
- **Section 5: Trip Generation** – presents the estimated trip generation for the proposed development.
- **Section 6: Operational Assessments** – presents the methodology and results of the operational assessments conducted to evaluate the impact of the proposed development on the local transportation network.
- **Section 8: Policy Compliance** – demonstrates compliance of the development proposals with relevant national and local planning policy.
- **Section 9: Summary and Conclusion**

2. Policy Context

This section provides a summary of the relevant national and local transport planning policies applicable to the site.

2.1 National Policy

2.1.1 National Planning Policy Framework (December 2024)

The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are expected to be applied. The NPPF constitutes guidance for local planning authorities and decision-makers both in drawing up plans and as a material consideration in determining applications.

Paragraph 115 states "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios."

2.2 Local Policy

2.2.1 Cornwall Local Plan Strategic Policies 2010-2030 (Adopted November 2016)

The Cornwall Local Plan (CLP) 2010-2030 sets out a vision for Cornwall to "achieve a leading position in sustainable living" through ten objectives, split into four key themes:

- "Theme 1: To support the economy.
- Theme 2: To enable self-sufficient and resilient communities.
- Theme 3: To promote good health and wellbeing for everyone.
- Theme 4: To make the most of our environment."

There are 28 policies established in the CLP to achieve these objectives.

Of particular relevance is Policy 27 'Transport and accessibility', which states that all developments should "provide safe and suitable access to the site for all people and not cause a significantly adverse impact on the local or strategic road network that cannot be managed or mitigated".

2.2.2 Connecting Cornwall: 2030 Strategy (March 2011)

Connecting Cornwall: 2030 is the third Local Transport Plan for Cornwall, and the key strategic policy tool through which Cornwall Council exercises its responsibilities for planning, management, and development of transport in Cornwall.

The Connecting Cornwall vision is for a transport system which "will connect people, communities, businesses and services in a way that is reliable, efficient, safe, inclusive and enjoyable". There are six overarching goals:

- Tackling climate change
- Supporting economic prosperity
- Respecting and enhancing the environment.

- Encouraging healthy active lifestyles
- Supporting community safety and individual wellbeing; and,
- Supporting equality of opportunity.

Connecting Cornwall establishes 31 strategic policies; policies of particular relevance to the proposed development are detailed below:

- Policy 14: “We will use the local and strategic development control processes to ensure that the transport impacts of development proposals on our transport network and services do not compromise their safety and efficiency.”

3. Baseline Conditions

3.1 Site Location

The location of the site is shown in Figure 3-1.

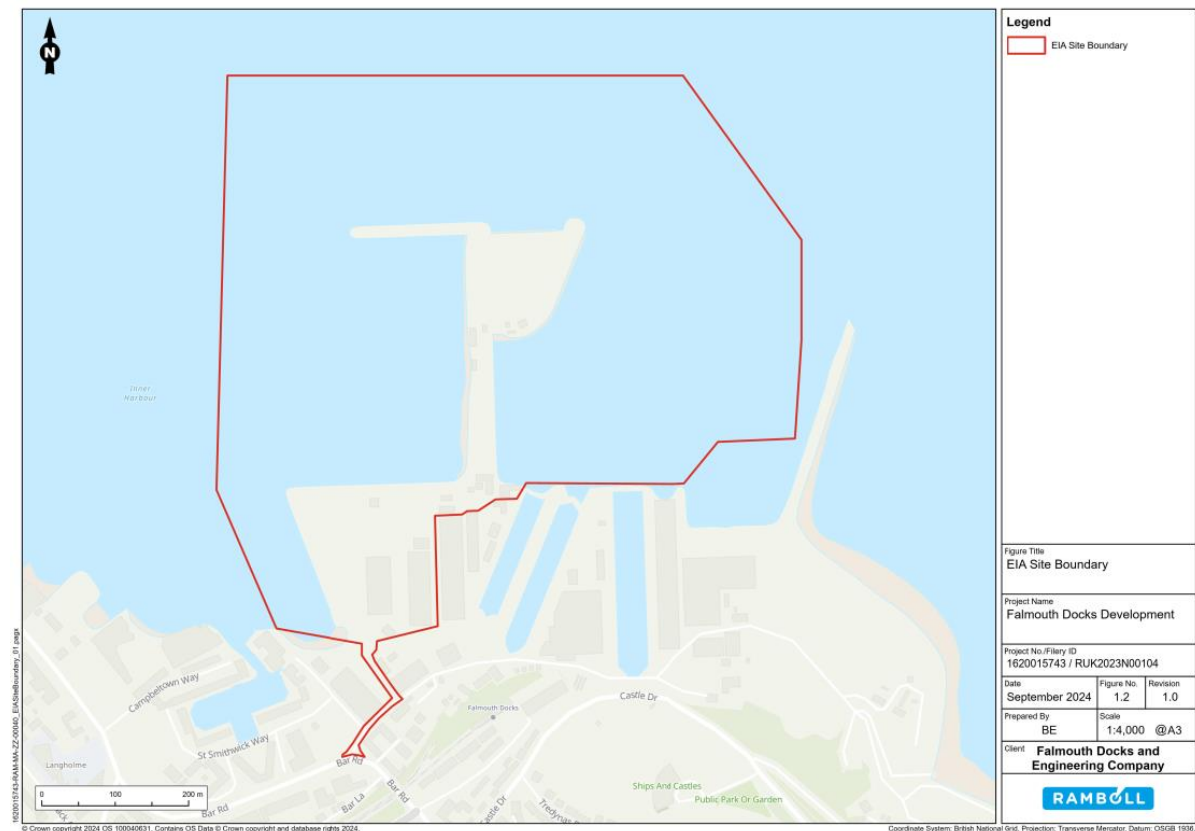


Figure 3-1: Site Location

The site is located at Falmouth Docks, Falmouth, Cornwall, TR11 4NR, centred at National Grid Reference: SW 81765 32796, as presented in Figure 3-1. The site boundary is irregularly shaped, covering a total site area of approximately 47.2 hectares (ha). The site is surrounded by the following in the immediate area:

- To the north, the site is surrounded by the Carrick Roads channel, which lies immediately to the north of the site and leads into the English Channel. The Flushing headland, on the mainland lies approximately 500m to the north across Carrick Roads channel.
- Immediately east of the site lies the FDEC dry docks, followed by the Pendennis Shipyard. The Eastern Breakwater is located approximately 430m further east. Pendennis Castle lies around 1km southeast.
- To the south, the site is surrounded by the Falmouth Docks operational buildings alongside the local road network and Falmouth Docks train station.
- Immediately to the west lies the National Maritime Museum Cornwall and a number of private marinas, such as Port Pendennis Marina. A number of visitor moorings are also present adjacent to the site within the Carrick Roads/Falmouth Bay area. The St Mawes-Falmouth ferry service runs adjacent to the site along the west and north. Falmouth town and residential area lie further west of the site.

3.2 Site Description

Falmouth Docks currently provides 'alongside deep-water berthing' for vessels up to 100,000 tonnes and handles many different types of cargo as well as providing 'alongside facilities and deep-water anchorage' for cruises. The site is also home to the largest ship-repair complex in the UK, providing a complete range of marine repair services, including the use of three dry docks.

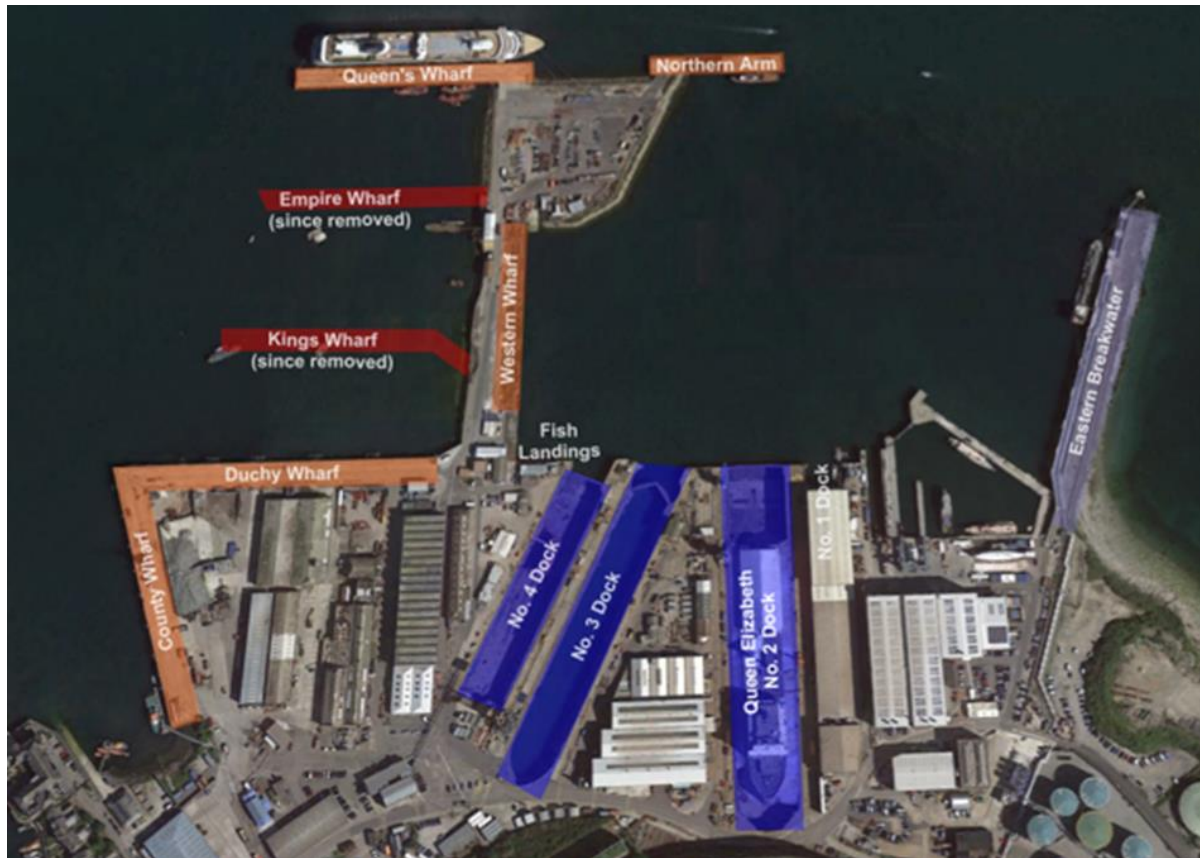


Figure 3-2: Existing Dock Layout

The existing site layout is shown in Figure 3-2 and currently consists of the following eight docks/wharfs:

- 1. Northern Arm**
- 2. Queens Wharf**
- 3. Western Wharf**
- 4. Duchy Wharf**
- 5. County Wharf**
- 6. Queen Elizabeth Dry Dock** – This is the largest of the three dry docks, capable of handling ships up to 100,000 tonnes.
- 7. No. 3 Dry Dock**
- 8. No. 4 Dry Dock**

Currently parts of the existing site infrastructure are considered to be in poor condition and/or unsafe for operational use and have been removed, such as Empire Wharf and Kings Wharf (as

shown in Figure 3-2) which were removed in 2008, however the footprints of these structures remain as foul ground on the seabed, creating shallow water areas.

The remaining area within the site boundary consists of the Carrick Roads channel. The Carrick Roads channel is the determining factor in vessel movements and vessel size, with a channel depth of 5.4 m Chart Datum (CD).

3.3 Existing Site Use

Falmouth Docks offer a range of services to shipping, including ship repair, refuelling, cleaning, and waste disposal, alongside providing a port for the Royal Navy, cruise ships, ferries, and other commercial ships to dock. The docks support the following types of ships and activities:

- **Military ships:** The docks house parts of the Royal Navy Fleet, particularly the auxiliary ships such as HMS Mounts Bay, HMS Lyme Bay, and HMS Argos.
- **Cruise ships:** A number of cruise ships visit Falmouth each year between April and October as a 'stop-off' port. Currently the site can accommodate one cruise ship berthing alongside at a time. Excellence class cruise ships currently dock in Falmouth Bay, with passengers tendered into the dock.
- **Cargo ships:** Falmouth is a busy shipping/cargo port with a schedule of freight traffic throughout the year.
- **Ship repair:** The docks repair a wide range of vessels, from luxury yachts and warships to tankers and cruise liners, primarily managed by FDEC.

3.4 Local Highway Network

The site is accessed from one vehicular access via Tinnars Walk (a private road internal to Falmouth Docks) which connects the site to the local highway network via a priority junction off Bar Road. To the south, Bar Road connects to the A39 Melvill Road / Castle Road / Pendennis Road roundabout and to the east, Bar Road connects through to the Falmouth town centre via Grove Place and Bank Place.

The A39 Melvill Road is the major A-road linking Falmouth with Truro and the A30 to the north. The A30 is a major road through Cornwall and Devon, linking to the M5 at Exeter to the east and Lands End to the west. At a local level, the A39 plays a significant role in providing vehicular access through Falmouth to the wider town, intersecting with many minor roads along its route towards the western area of Falmouth (around the docks and Pendennis Castle).

Bar Road is a minor single carriageway road that provides access to the site from the A39 (to the south) as well as Falmouth town centre (to the west).

To the east and south of the A39 Melvill Road / Castle Road / Pendennis Road roundabout, Pendennis Rise provides access to Falmouth Docks Train Station and Pendennis Castle. Pendennis Rise and Castle Drive form a loop around Pendennis Castle which connects to Cliff Road, which is a minor road, parallel to the A39, which runs along Castle Beach to the south of the site and Falmouth.

The map shown in Figure 3-3 shows the local highway network in relation to the site.

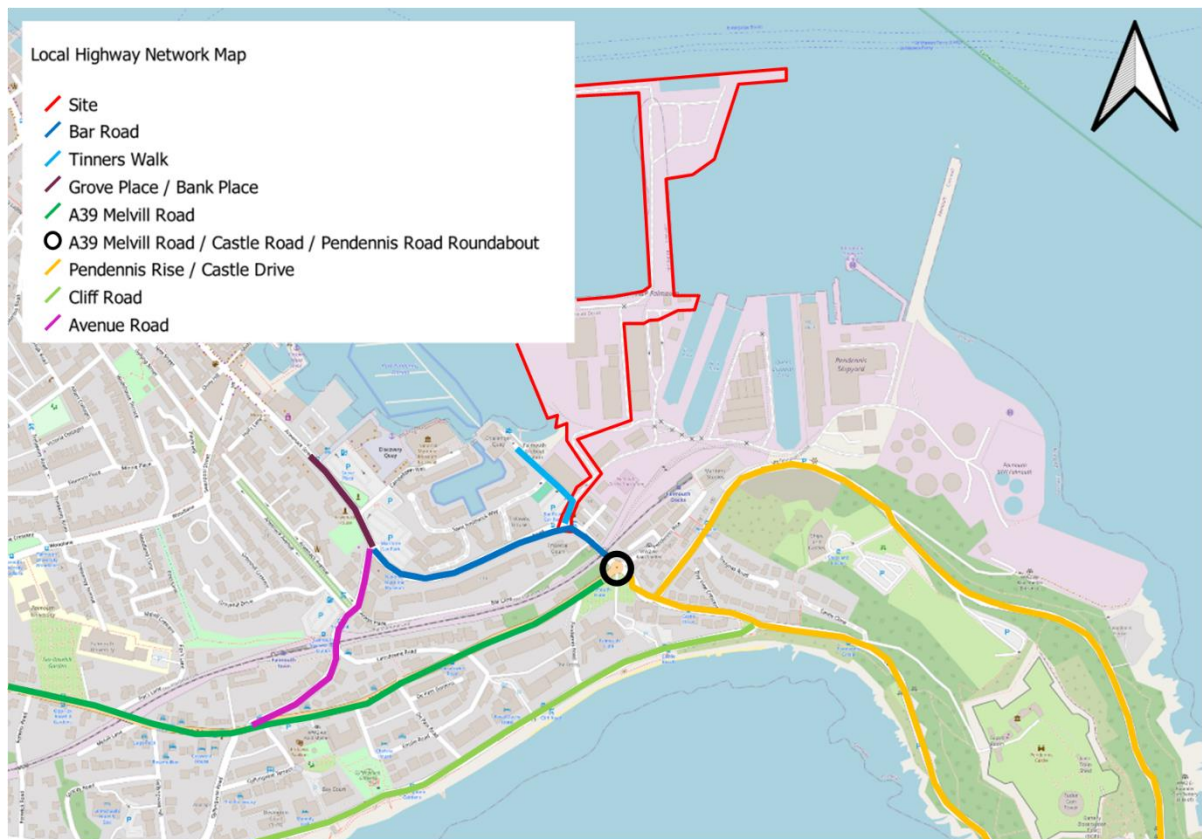


Figure 3-3: Local Highway Network

3.4.1 Existing Vehicular Access

The existing vehicular access to the site is off Tinnars Walk, via a secure gated entrance. All visitors and vehicles wishing to access the site are required to report to the main gate before entry. This is the only vehicular access into the site and can accommodate all vehicles requiring access to the site, such as cars, light goods vehicles (LGVs), large heavy goods vehicles (HGVs) and coaches.

3.5 Sustainable Travel

3.5.1 Access by Walking

Currently pedestrians can access the site from pedestrian footpaths along Tinnars Walk. Tinnars Walk provides a key pedestrian link to Bar Road which connects the site to the local pedestrian network. This existing footpath network ensures the site is accessible by foot from Falmouth town centre and local public bus and rail services (described further in sections 3.5.3 and 3.5.4).

There is a pedestrian refuge island with dropped kerbs at the Tinnars Walk / Bar Road priority junction, enabling pedestrians to cross Tinnars Walk at two locations. There are no other dedicated pedestrian crossing facilities close to site along Bar Road, Bar Terrace and at the A39 Melvill Road / Castle Road / Pendennis Road roundabout. The closest other pedestrian crossing to site is on Grove Place approximately 400m to the west of Tinnars Walk.

Falmouth Docks train station is approximately 400 m to the south of the site and can be accessed on foot (in approximately 5 minutes) via Bar Road and Pendennis Rise which provide a direct

pedestrian link to and from the train station and the main site entrance (off Tinnars Walk) without having to cross any roads. Pendennis Rise primarily provides pedestrian access to Falmouth Docks train station with footways along both sides of the carriageway.

The A39 Melvill Road and Castle Road are also accessible by foot off Bar Road at the A39 Melvill Road / Castle Road / Pendennis Road roundabout. The A39 provides footways along both sides of the carriageway with limited crossing facilities along the majority of its route through Falmouth. Castle Road provides pedestrian access to Pendennis Castle, with the majority of the route only providing a narrow pedestrian footway along one side of the carriageway on its route to the Castle.

3.5.2 Access by Cycling

Currently, there are no dedicated cycle facilities near the site and entrance to Falmouth Docks. Cyclists can access the site by utilising the town's network of shared roads and streets.

There are no National Cycle Routes (NCRs) directly within or close to the site in Falmouth.

3.5.3 Access by Bus

The nearest bus stops from the site gatehouse are shown in Figure 3-4, with the closest stops being located on:

- Bar Road (50 m) and Marine Crescent (330 m) to the west.
- Castle Hill (175 m and 290 m) and the A39 Melvill Road (180 and 190m) to the south.
- Pendennis Rise (Falmouth Docks train station) to the east.

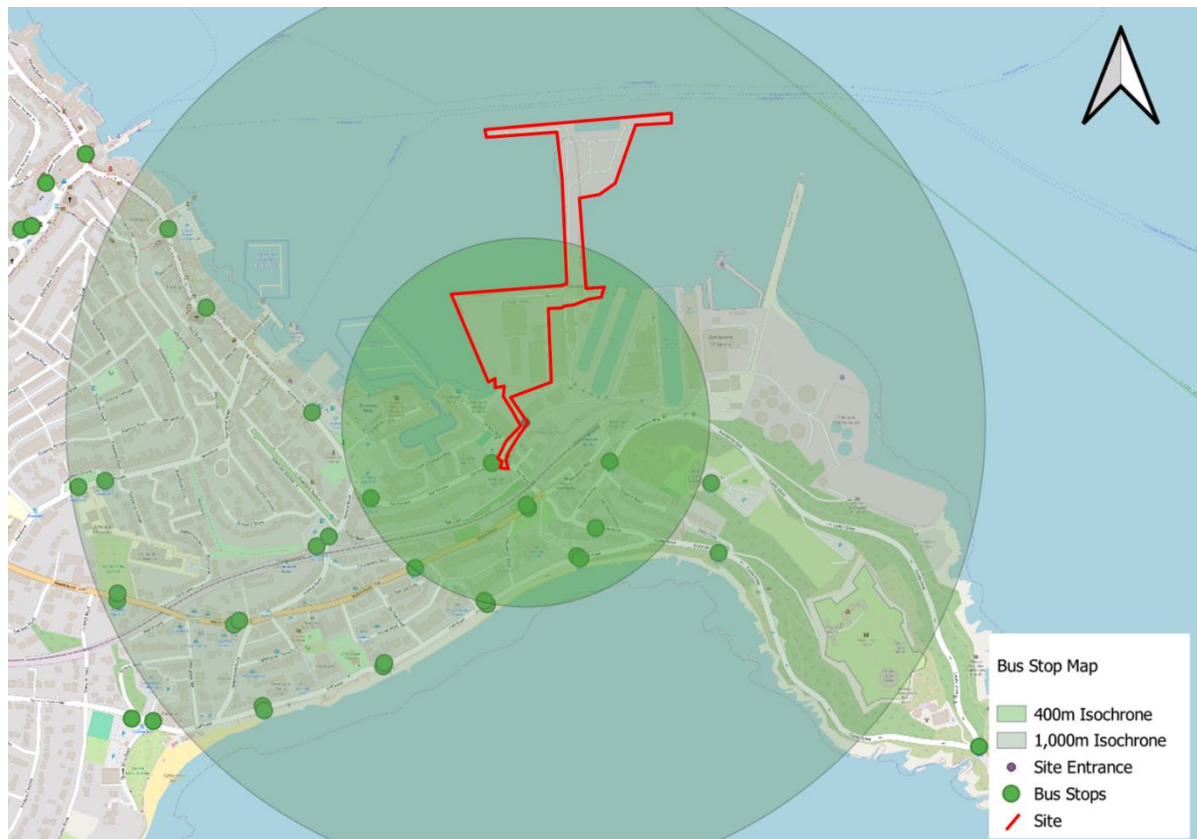


Figure 3-4: Nearest bus stops to site

The bus stops closest to the site are served by the number 67 bus service. This service is operated by OTS Bus and Coach and is a Falmouth town centre loop service, operating to and from Falmouth bus station via Killigrew Street, Pendennis Castle and Falmouth Docks. The service operates hourly between 09:00 and 17:00 Monday to Friday and 09:00 to 18:00 Saturday. Table 3-1 presents a summary of the service.

Table 3-1: Bus Service Summary

Service	Stops	Mon-Fri	Sat	Sun
67 - Falmouth Town Service	Falmouth Bus Station, Killigrew Street, Falmouth Maritime Museum, Falmouth Docks, Pendennis Castle, Gyllyngvase Beach.	Every hour from 09:00 to 17:00	Every hour from 09:00 to 17:00	No Service

The bus stops located on Bar Road, Marine Crescent and Pendennis Rise are located along the northern boundary of the carriageway and provide access to the 'west to east' number 67 bus service. The bus stops located on Castle Hill and A39 Melvill Road provide stops on either side of the carriageway, allowing access to the bus service loop in either direction. The majority of the nearby bus stops close to site only provide a bus stop pole or marked bus stop area, apart from the A39 Melvill Road and Marine Crescent stops which provide bus shelters.

There are other bus stops further away from the site closer to Falmouth town centre on Bank Place, Marlborough Road, Woodlane and Falmouth bus station on Killigrew Street. Whilst these

stops are between 500 m to 1km walk from the site (so are considered outside typical walk distance of 400 m for accessing bus stops in urban areas), but noting bus services are generally quite limited, these stops provide access to bus services that serve local towns such as Penryn, Helston, Truro, and Redruth along with other larger towns within Cornwall and Devon, such as Penzance, St. Austell, and Plymouth.

Falmouth can also be accessed by coach from around the UK via the National Express coach services which operate between Penzance, Bristol, and London. These services drop off and pick up on Berkeley Vale in the centre of Falmouth, approximately 2 km from the site (6-minute car ride or approximately 30-minute walk).

3.5.4 Access by Rail

The closest train station to site is Falmouth Docks train station which is the terminus for the Maritime Line between Falmouth Docks and Truro. The station is a short walk (5 minutes) from the site via Bar Road and Pendennis Rise. Train services from this station are operated by Great Western Railway (GWR) calling at Falmouth Town, Penmere, Penryn, Perranwell and Truro every 30 minutes Monday to Saturday during the day (c.06:00-18:00) and hourly at evenings (c.18:00-23:00) and on Sundays (c.09:00-22:00).

3.6 Parking

Currently there is no public car parking available at Falmouth Docks. Falmouth has a number of car parks close to the site spread throughout the town, providing both short-stay and long-stay options. Some of the long-stay car parks include:

- **Church Street Car Park** (168 spaces)
- **Gyllyngvase Car Park** (107 spaces)
- **The Dell Car Park** (105 spaces)
- **Town Quarry Car Park** (281 spaces)

These car parks offer parking from £5.50 for 2-3 hours, or £10 for 24 hours. The closest short-stay car park to the site are as follows:

- **Falmouth Dock Station Car Park:** Located at Pendennis Rise, this a surface level short-stay car park offering pay-and-display parking with cashless payment options.
- **Grove Car Park:** Situated at Grove Place, this is a short-stay car park and has 168 spaces and charges £2.20 for an hour.
- **Marina parking:** For those using the town marina, temporary parking passes are required and must be displayed on the rear-view mirror.

The site has informal areas on site to accommodate interchange and transhipment for cruise ship passengers (coaches, shuttle buses, and taxis) and cargo/freight ships (HGVs), when required. The areas of the site on Queen's wharf infill and behind County Wharf are used to accommodate coaches/HGVs as required. This area is not formally laid out with bay markings etc, as the space is used flexibly according to interchange/transhipment requirements and is not accessible to the public in anyway. Access and usage are strictly controlled and monitored by FDEC to ensure seamless and efficient operations for cruise ship passengers and cargo/freight ship consignments.

3.7 Accident Analysis

A review of available collision data has been undertaken for the latest 5-year period (2018-2022) in the study area shown in Figure 3-5, in the vicinity of Falmouth Docks.

Figure 3-5: Accident Review – Falmouth Docks



Source: DfT

Review of the accident data for the study area highlights that 21 incidents have occurred within the study area over the latest 5-year period, of which 15 incidents were **slight**, 6 were **serious** and 0 were **fatal**.

The accident analysis identifies there were no incidents close to Falmouth Docks with the majority of incidents happening along the A39, which is the busy A-road running through the town. Three of the accidents involved pedal cycles (two on A39 and one on Arwenack Street) and eight accidents involved pedestrians (only one of which was on A39, however, six were on Arwenack Street/Church Street). As these accidents were mainly slight in severity and spread across a five-year period, there is no evidence suggesting any specific safety issues.

It should also be noted, due to the impact on travel as a result of Covid-19 restrictions (i.e., working from home, limited travel etc), that data in 2020 and 2021 may have been affected.

3.8 Existing Baseline Traffic Data

To establish existing baseline traffic conditions at key junctions and roads close to the site, two classified turning count (CTC) surveys and four automatic traffic count (ATC) surveys were undertaken at the following junctions and links in November 2023.

- CTC 1 at Bar Road/Tinners Walk priority junction.
- CTC 2 at A39 Melvill Road/Bar Terrace/Pendennis Rise/Castle Hill roundabout.
- ATC 1 on A39 Melvill Road
- ATC 2 on Bar Road
- ATC 3 on Tinners Walk (north of Tinners Walk/Bar Road roundabout
- ATC 4 on Avenue Road (in between Arwenack Avenue and Lansdowne Road)

The CTC surveys were undertaken on Wednesday 22nd November 2023 for a 24-hour period and the ATC surveys were undertaken for a 7-day, 24-hour period from Wednesday 22nd November 2023 until Tuesday 28th November 2023. All baseline traffic survey data is presented in Appendix 2.

On review of the survey data, it was established that the network AM and PM peak hours are:

- Network AM peak hour: 07:00 to 08:00
- Network PM peak hour: 16:00 to 17:00

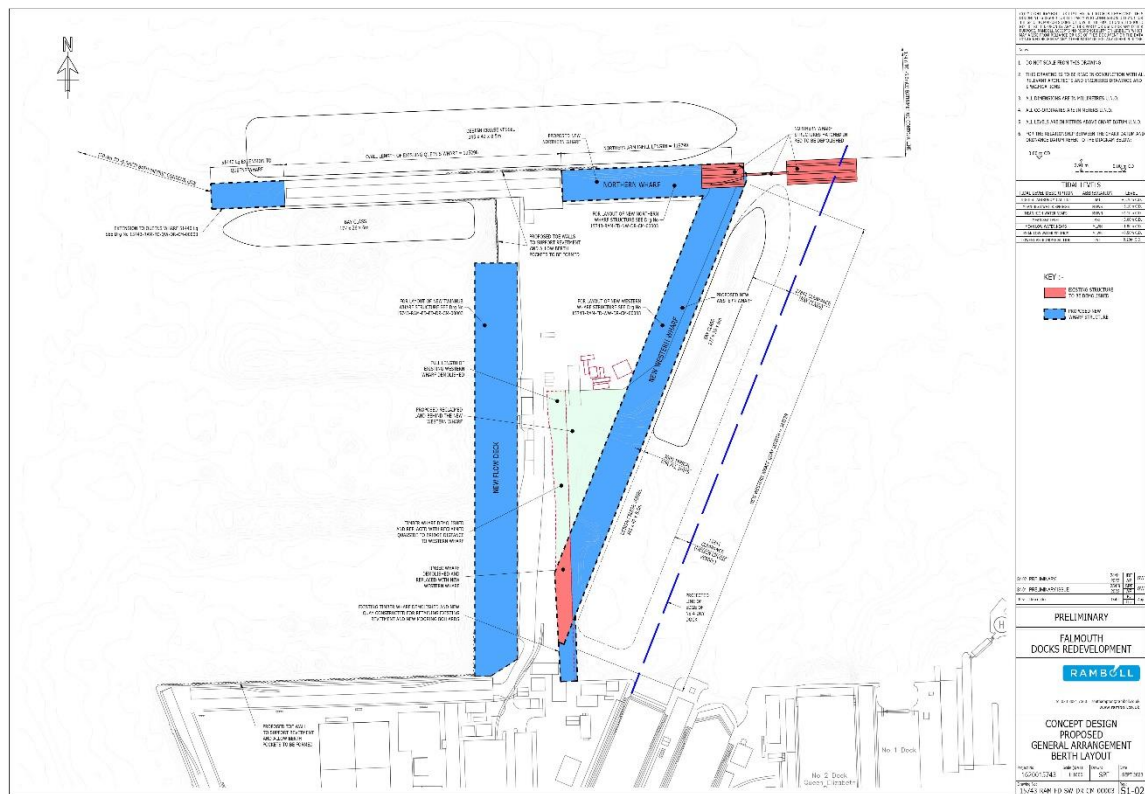
4. Proposed Development

4.1 Development Proposals

The proposed development would redevelop and modernise the existing facilities at Falmouth Docks to reinstate full 'alongside berth' capability and increase berth capacity. The objectives of the proposed development are to repair and update the current poor condition of the port infrastructure in order to maintain existing business and future-proof Falmouth Docks with respect to cruise capacity, cargo capacity and renewable floating offshore wind (FLOW) (supporting the offshore wind market).

The arrangement of the proposed development is illustrated in Figure 4-1.

Figure 4-1: Proposed Development Site Arrangement Plan



The full planning application and marine licence application (MLA) would comprise the following redevelopment activities:

- Pocket dredge of berth areas to achieve required under keel clearance for larger cruise vessels (up to Excellence class) and the FLOW renewable energy device under keel requirements (considered to be -10.5 m Chart Datum (CD)).
- Removal of foul ground within areas of the former Kings and Empire Wharves.
- Surface skim of seabed on eastern side of the site to maintain -5.5 m (CD).
- Demolition of the remaining existing Western Wharf timber piles and above surface infrastructure.
- Construction of a new Western Wharf suspended deck structure.

- Demolition of the Northern Arm concrete structure and substructure to below seabed level and removal of the gang walkway and old timber piles that are located west of this structure.
- Construction of a suspended deck structure (Northern Wharf) in the existing 90 m gap between Queen's Wharf and the Northern Arm to create a longer functional wharf length.
- Upgrades to the existing Queen's Wharf structure.
- Extension of the Queen's Wharf suspended deck structure 50 m westward.
- Installation of a 290 m deck (the 'FLOW Deck') to facilitate a FLOW device.
- Upgrades to the existing Duchy Wharf structure to facilitate a FLOW device.
- Potential strengthening works to Duchy and County Wharf piles.
- Demolition of on-site buildings and re-configuration of Falmouth Dock activities.

The Western Wharf is proposed to be located on the eastern side of the site and would be approximately 348 m long. The Western Wharf structure would extend north-eastwards from the landside docks to the north-eastern corner of the site, where it would wrap around to form a continuous deck surface with Northern Wharf. Land between the existing causeway and Western Wharf would be reclaimed as quayside.

The existing isolated concrete structure at the easternmost extent of Northern Wharf would be demolished to return this area of the site to open channel. The Northern Wharf structure would extend eastwards from the existing Queen's Wharf structure and would wrap around to connect with Western Wharf.

A 50 m extension would project westwards from the existing Queen's Wharf. Including the proposed westward extension and combined with the Northern Wharf infill section, Queen's Wharf would measure 367 m in length and be able to accommodate vessels on its northern and southern berthing faces.

The FLOW Deck would be located on the western side of the site and would extend northwards from the existing Duchy Wharf, parallel to the existing causeway. The FLOW Deck would be 290 m in length.

The existing Duchy Wharf would remain located in the south of the site.

The proposed development also comprises terrestrial components to support landside and dockside operations. An opening year of 2027 has been used, which is the earliest year that the proposed development is likely to be operational in terms of traffic generating activities.

4.1.1 Area Schedule

The total site area is approximately 47.2 ha, with the marine component comprising approximately 39.6 ha and the terrestrial component comprising approximately 7.6 ha.

As the proposed development comprises marine infrastructure, no use-classes would be delivered from the marine parts of the scheme. However, Table 4-1 presents the existing floorspace/deck area vs the proposed development floorspace/deck area (m²) of the dockside and landside elements of the site.

The proposed development would provide a total 23,480 m² of additional hardstanding and a total 810 m additional length of quayside, increasing the area of the suspended deck and wharf structures from 11,644 m² to 26,133 m², a total increase of 14,489 m².

Table 4-1: Proposed Development Area Schedule

Use Class	Existing Floorspace/Deck Area (m²)	Proposed Development Floorspace/Deck Area (m²)
Western Wharf	2,132	7,733
Northern Arm	3,443	0
Northern Wharf	0	2,817
Queens Wharf	3,769	4,696
FLOW Deck	0	8,587
Duchy Wharf	2,300	2,300
Total	11,644	26,133

4.2 Access

4.2.1 Vehicular Access

In accordance with current vehicle access arrangements, all vehicles will continue to access the site via the secure access off Tinnars Walk, which serves as the sole access/egress point for the site. All vehicles wishing to enter the site will continue to be required to report to the main gate to obtain permission for entry.

All HGVs, coaches, buses, and taxis involved in cruise and cargo operations will enter the site via the main site entrance and will then proceed to the designated vehicle layover areas via the vehicle access route shown in Figure 4-2.

The proposed development would make use of existing vehicle routes within the site, utilising existing infrastructure. The routing of different vehicle types through the Falmouth Docks site is illustrated on Figure 4-2.

Internal roads and routing will be configured to continue to facilitate emergency vehicle access.

Figure 4-2: Vehicle, Cycle and Pedestrian Access



4.2.2 Pedestrian and Cycle Access

As shown in Figure 4-2, pedestrian and cycle access to the site will continue to be from the existing entrance off Tinnars Walk. It is not proposed to change or upgrade pedestrian access in or around the site.

Pedestrian movements within the site are limited to staff, visitors accompanied by staff and the managed off-loading of cruise passengers between coaches and the cruise ship gangways within the vehicle layover area.

Passengers disembarking from cruise ships can be discharged from any berth on-site and are escorted via waiting taxis/coaches/shuttle buses to the selected destination. For those vessels berthed on Duchy or County Wharfs, cruise passengers are permitted to walk directly from the

berth to Falmouth town via dedicated safe routes. Shuttle buses are also available for these passengers.

4.3 Parking

4.3.1 Staff Car Parking

Existing dedicated staff parking is provided outside of the site, within the wider Falmouth Docks area. The number of staff would remain as existing and therefore dedicated staff parking provision would not change and would be accommodated within the wider Falmouth Docks area.

4.3.2 HGV, Coach, Shuttle Bus, and Taxi Layover

As shown in Figure 4-2, a designated vehicle layover area located adjacent to the cruise berths would be provided to facilitate the parking of coaches, shuttle buses and taxis for disembarking cruise passengers and HGVs for undertaking cargo operations. This area will be able to accommodate a maximum of 40 coaches/HGVs, 10 taxis and two shuttle buses.

4.3.3 Cycle Parking

Cycle parking provision is currently provided within the wider dock estate (outside the site boundary) would remain unchanged compared to current.

4.4 Servicing & Deliveries

The proposed development is designed to continue to support the delivery of cargo, with the routing and management of HGVs remaining consistent with current operations.

As part of future port operations, the Applicant is exploring the possibility of using the existing rail infrastructure for delivery of freight to the site. Whilst this does not form part of the proposed development as it is not currently considered viable, future opportunities are being considered by the Applicant.

4.5 Demolition and Construction

The demolition and construction stage are planned to commence in Q4 2025 and last approximately 42 months, concluding in Q1 2029. While a detailed final programme hasn't been produced yet as it depends on factors such as funding and contractor commissioning, a "worst-case" scenario programme has been developed to ensure a robust assessment in the Environmental Impact Assessment (EIA). This TA helps support the EIA along with assessing the transport impacts of this temporary demolition and construction scenario.

Although the programme will conclude in Q1 2029, the majority of the wharfs will be completed after 27 months (in Q4 2027) and therefore the earliest operational year, which is deemed the 'worst-case' opening year in EIA terms, is 2027. 2027 has therefore been used as the opening year for this TA.

It is anticipated that the demolition and construction stage would be delivered through five key activities:

- Activity 1: Strengthening and Enabling Works;

- Activity 2: Demolition;
- Activity 3: Dredging;
- Activity 4: Construction; and
- Activity 5: Finishing Works and Upgrades.

It is estimated that 2026 will be the peak construction year and will include strengthening and enabling works, dredging and wharf construction. Peak demolition and construction trip calculations, detailed in section 5.3, are based on this estimation. An indicative demolition and construction programme is presented in Appendix 3.

4.5.1 Hours of Work

The port currently operates 24 hours per day, 7 days per week, and it is anticipated that the majority of construction works will also be undertaken on this basis, with the exception of the following activities, which would not be undertaken at nighttime:

1. Demolition works;
2. Piling; and
3. Compaction works.

Removal of dredge arising from site are also anticipated to occur between 08:00 and 18:00 Monday to Friday.

4.5.2 Construction Site Access and Vehicle Routing

Vehicular access to the site would be via the land in FDEC's ownership, which is itself accessed via the A39 and Tinnars Walk (see. FDEC's land is not accessible to the public; all personnel and vehicles accessing the site would be required to report to the main FDEC gate on Tinnars Walk.

Dedicated routes for construction personnel, vehicles, plant and deliveries would be established throughout the site (see Figure 4-3), in line with existing routes that are regularly used by HGVs for cargo deliveries and are well managed within the site without affecting the public highway. Segregated vehicle and pedestrian routes would be created by use of barriers, providing safe access to the various work areas. These routes would be modified and adapted as works progress.

The construction compound would be located in the west of the site (to the south of Duchy Wharf), as illustrated on Figure 4-3. This will include appropriate welfare facilities for construction workers.

Figure 4-3: Plan showing Proposed Construction Site Access/Egress Routes and Construction Compound



5. Trip Generation

5.1 Proposed Development Trips

The estimation of the proposed development vehicle trips is based on the proposed increase in capacity to handle additional cruise and freight ships as a result of the proposed development.

Currently trips generated by the site are associated with:

- Military ships.
- Cruise ships.
- Cargo/Freight ships.
- Ship repair.

Based on information provided by FDEC, it is assumed that trips related to military ships and ship repair will not change or increase as a result of the proposed development and there will be little to no trips generated by the renewable floating offshore wind (FLOW) operations, as all floating wind devices will be tugged to and from site by boat, with the occasional trip associated with maintenance. Therefore, trips associated with military ships, ship repair and FLOW are not included in the proposed development vehicle trip generation estimates.

The proposed development is expected to only generate additional vehicle trips associated with additional cruise and freight ships, alongside its existing day-to-day operations. In the absence of traffic survey data specific to cruise and freight ships at Falmouth Docks, the estimation of vehicle trips associated with the additional cruise and freight ships has been derived from first principles, using data provided by FDEC.

Once the proposed development is complete, based on information from FDEC, it is assumed the site will be able to accommodate one additional Excellence-class cruise ship (so two Excellence-class ships in total), compared to the existing capacity, where it can only accommodate one Excellence-class ship in Falmouth Bay. Therefore, the trip generation associated with one Excellence-class cruise ship call is considered to be representative of the proposed development additional cruise ship trip generation. It is noted that this assumption represents a 'worst-case' scenario given Excellence-class cruise ships are the largest cruise ship type that can be accommodated at Falmouth Docks; and the simultaneous calling of two Excellence-class ships at Falmouth Docks in the future with the proposed development is considered by FDEC to be a rare future occurrence.

As Falmouth Docks serves only as a 'stop-off' port for cruise ships, the vehicle trip generation associated with an additional Excellence-class cruise ship is expected to consist of:

- Coach trips associated with transporting cruise passengers around Cornwall on pre-planned day excursions.
- Shuttle bus trips associated with transporting cruise passengers to and from Falmouth town centre.
- Taxi trips associated with cruise passengers exploring Falmouth or the surrounding areas independently, along with a very small proportion of cruise passengers who choose to start or end their cruise at Falmouth Docks (only facilitated by a special request), as a worst-case.

Trips associated with loading the ships with supplies have not been included within the cruise ship trip estimate, as it is assumed that all cruise ships are fully loaded and serviced at other ports prior to arrival in Falmouth Docks.

The estimated cruise ship vehicle trip generation is associated with coach, shuttle bus, and taxi trips generated by an additional Excellence-class cruise ship, whereby:

- **Coach trip generation** is based on the maximum coach capacity FDEC anticipates will be required to service an additional Excellence-class cruise ship, which is 40 coaches. This capacity is based on spatial constraints of the site and existing coach arrival and departure data provided by FDEC (Appendix 4). The maximum number of coach trips generated by an Excellence-class cruise ship call, based on the coach capacity of 40 coaches per ship, is estimated to be **160 vehicle trips per day**, consisting of:
 - 40 coach arrivals to pick up day excursion passengers at the start of the day.
 - 40 coach departures to transport day excursion passengers off-site.
 - 40 coach arrivals to drop off day excursion passengers at the end of the day.
 - 40 coach departures to return to depot.
- **Shuttle bus trip generation** is based on two shuttle bus vehicles transporting passengers to and from Falmouth town centre during the day. The shuttle buses will operate on a staggered timetable which allows each vehicle to complete an average of 1.5 round trips per hour (i.e. 3 arrivals and 3 departures per hour), across the operational hours of 9am to 6pm. Therefore, the total number of shuttle bus trips generated by an additional Excellence-class cruise ship call is estimated to be **54 vehicle trips per day** (27 departures and 27 arrivals).
- **Taxi trip generation** is based on worst-case assumptions provided by FDEC, whereby the total number of taxi trips generated by an additional Excellence-class cruise ship call is estimated to be **170 vehicle trips per day**, consisting of:
 - 90 trips associated with taxis transporting passengers for trips (assumed 5 arrivals and 5 departures per hour between 9 am and 6 pm)
 - 40 trips associated with taxis dropping-off passengers starting their cruise (assumed 20 arrivals and 20 departures between 9 am and 11 am), as worst-case.
 - 40 trips associated with taxis picking-up passengers finishing their cruise (assumed 20 arrivals and 20 departures between 10 am and 12 pm), as worst-case.
 - Note that passengers in general do not start or finish their cruise at Falmouth, however some additional trips associated with this have been included as a worst-case scenario.

On this basis, as summarised in Table 5-1, the cruise ship daily vehicle trip generation for the proposed development is estimated to be 384 trips (192 arrivals and 192 departures), consisting of 160 coach trips (80 arrivals and 80 departures), 54 shuttle bus trips (27 arrivals and 27 departures), and 170 taxi trips (85 arrivals and 85 departures).

Table 5-1: Proposed Development Cruise Ship Daily Vehicle Trip Generation

	Coach Trips		Shuttle Bus Trips		Taxi Trips		Total Trips	
	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart
Total Trips	80	80	27	27	85	85	192	192

Two-Way Total Trips	160	54	170	384
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In addition to cruise ships, the proposed development is expected to accommodate an additional 12 freight ships per year, which would dock at the site throughout the year on predetermined dates when there is no cruise ships present.

The site will only accommodate a maximum of one freight ship per day and FDEC have assumed that one freight ship will generate approximately 120 HGV movements (60 HGV trips arriving and 60 HGV trips departing).

No freight ship trips have been included in the proposed development vehicle trip generation for this TA, as the assessment considers a 'worst-case' scenario, whereby an additional Excellence-class cruise ship docks at the site simultaneously with another Excellence-class ship, which will generate more trips than if a freight ship is docked. Therefore, trip generation for the proposed development (Table 5-1) has been based on the uplift in vehicular trips associated with the docking of one additional Excellence-class cruise ship only.

5.1.1 Proposed Development Vehicle Trip Profile

To calculate how the proposed development vehicle trips are distributed across a typical day, daily vehicle trip profiles have been derived for the estimated additional coach, shuttle bus and taxi trips.

The coach trip profile has been derived based on existing coach arrival and departure data provided by FDEC (Appendix 4) and is presented in Table 5-2. This coach trip profile has been averaged across coach arrival and departure times recorded in 2023 and is assumed to be representative of coach trip arrivals and departures for an Excellence-class cruise ship.

Table 5-2: Coach Trip Arrival and Departure Profile

Time		Pick Up Profile		Drop Off Profile	
Start	End	Arrive	Depart	Arrive	Depart
07:00	08:00	33%	2%	0%	0%
08:00	09:00	30%	26%	0%	0%
09:00	10:00	3%	36%	0%	0%
10:00	11:00	6%	7%	0%	0%
11:00	12:00	5%	1%	7%	2%
12:00	13:00	15%	2%	27%	13%
13:00	14:00	9%	20%	21%	27%
14:00	15:00	0%	6%	7%	14%
15:00	16:00	0%	0%	14%	14%
16:00	17:00	0%	0%	10%	7%
17:00	18:00	0%	0%	13%	11%
18:00	19:00	0%	0%	2%	13%
		100%	100%	100%	100%

Shuttle bus and taxi trip profiles have been based on the hourly arrival and departure rates described in Section 5.1, whereby two shuttle buses and 85 taxis will arrive and depart the site between 9am to 6pm over a typical day under the 'worst-case' assessment scenario. By applying the vehicle trip profiles described above this gives estimated trip generation profile (Table 5-3) for the proposed development during a typical day. These trips are considered representative of the typical daily trips to and from the proposed development under the 'worst-case' assessment scenario.

Table 5-3: Proposed Development Trip Generation Trip Profile

Time		Coach Trips		Shuttle Bus Trips		Taxi Trips		Total Trips		
Start	Finish	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Two-Way
00:00	01:00	0	0	0	0	0	0	0	0	0
01:00	02:00	0	0	0	0	0	0	0	0	0
02:00	03:00	0	0	0	0	0	0	0	0	0
03:00	04:00	0	0	0	0	0	0	0	0	0
04:00	05:00	0	0	0	0	0	0	0	0	0
05:00	06:00	0	0	0	0	0	0	0	0	0
06:00	07:00	0	0	0	0	0	0	0	0	0
07:00	08:00	13	1	0	0	0	0	13	1	14
08:00	09:00	12	10	0	0	0	0	12	10	23
09:00	10:00	1	14	3	3	15	15	19	32	51
10:00	11:00	2	3	3	3	25	25	30	31	61
11:00	12:00	5	1	3	3	15	15	23	19	42
12:00	13:00	17	6	3	3	5	5	25	14	39
13:00	14:00	12	19	3	3	5	5	20	27	47
14:00	15:00	3	8	3	3	5	5	11	16	27
15:00	16:00	5	5	3	3	5	5	13	13	27
16:00	17:00	4	3	3	3	5	5	12	11	23
17:00	18:00	5	5	3	3	5	5	13	13	26
18:00	19:00	1	5	0	0	0	0	1	5	6
19:00	20:00	0	0	0	0	0	0	0	0	0
20:00	21:00	0	0	0	0	0	0	0	0	0
21:00	22:00	0	0	0	0	0	0	0	0	0
22:00	23:00	0	0	0	0	0	0	0	0	0
23:00	00:00	0	0	0	0	0	0	0	0	0
Total Trips		80	80	27	27	85	85	192	192	384

5.2 Committed Development Trips

As confirmed with Cornwall Council, no significant committed developments have been identified over the next few years and therefore no committed development trips have been included as part of this assessment.

5.3 Construction Trips

The estimation of construction vehicle trips has been based on an estimate of the number of vehicle movements associated with the peak construction year (2026) of the proposed development and has been split in construction HGV trips and construction worker trips.

5.3.1 Construction HGV trips

During the peak construction year (2026), the following activities are anticipated to generate the most significant construction HGV trips to and from the site:

- **Dredging:** Approximately 414,375 tonnes (220,000 m³) of dredged material (dredge arisings) will need to be removed off-site on land using HGVs throughout the construction programme, with a substantial portion of dredging taking place during the peak construction year (2026).
- **Wharf Construction:** Around 135,933 tonnes of concrete material will be transported on-site for wharf construction. A small portion of these HGV trips will occur in 2026, with the majority happening in 2027 (post-peak construction year).
- **Fill:** Approximately 344,536 tonnes of fill material will be imported to site via HGVs throughout the construction programme. Most fill material will be imported during the peak construction year, concluding at the end of 2027.
- **Rock Armour:** About 37,967 tonnes of rock armour will be transported to the site in HGVs throughout the construction programme. The majority of rock armour will be delivered during the peak construction year, with some deliveries in 2027 (post-peak construction year).

Table 5-4 provides an estimate of construction HGV trips throughout the anticipated construction programme. The number of HGV loads required for each activity is based on an HGV capacity of 20 tonnes, for removing or delivering material to and from the site.

Table 5-4: Estimated Construction HGV Trips (Across Construction Programme)

Construction Activity	Material Removed or Delivered (t)	No. of HGV Loads Required (One-way)	Programme Length (months)	Assumption (based on 20 t HGVs)
Enabling & Demolition Works	28,235	1,412	7	Works occur Q3 2025 to Q1 2026.
Dredge arisings	414,375	20,719	52	Works occur Q1 2026 to Q1 2027. 8 x 20 t HGVs per hour for 10 hr days, 5 days per week.
Wharf Construction	135,933	6,797	78	Works occur Q2 2026 to Q3 2028.
Fill	344,536	10,133	35	Works occur Q2 2026 to Q3 2027.
Rock armour	37,967	1,898	17	Works occur Q2 2026 to Q3 2027.
Total Vehicle Trips (One-Way)		40,959		

The arrival and departure schedule of HGV movements will be aligned with the construction programme, aiming for a consistent and evenly distributed flow of HGVs throughout a typical

working day. This approach will help minimise impact by spreading deliveries and removals across the day.

5.3.2 Construction Worker Trips

During the construction programme, the site may require up to 100 construction workers per day (across a 10-hour working day) during the peak construction period and approximately 50 workers per day during non-peak periods.

Based on similar projects, it is assumed that construction workers will drive to the site in cars or small LGVs, with around 50% participating in car sharing. This equates to 1.5 construction workers per car, resulting in an estimated 67 one-way car/LGV movements during the peak construction period. Construction workers will predominantly arrive on site before the site opens at 8am and will depart at 6pm.

5.3.3 Total Construction Trips

Based on the 'worst-case' demolition and construction programme (Appendix 3) and the estimated construction HGVs and construction worker trips (described above in sections 5.3.1 and 5.3.2) during the construction programme, Table 5-5 outlines the anticipated construction vehicle movements during the peak construction year (2026).

Table 5-5: Construction Vehicle Movements – Peak Construction Year (2026)

Trip Type	Q1 2026			Q2 2026			Q3 2026			Q4 2026		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec*
Enabling/ demolition works	202	202										
Dredge arisings			1727	1727	1727	1727	1727	1727	1727	1727	1727	1727
Wharf Construction												378
Fill				1267		1267	1267	1267			1267	1267
Rock armour				475				475				475
Total HGV Trips (one-way)	202	202	1727	3469	1727	2994	2994	3469	1727	1727	2994	3847
Total Construction Worker Trips (one-way)	733	733	1467	1467	1467	1467	1467	1467	1467	1467	1467	1467
Total vehicle Trips (one-way)	935	935	3194	4936	3194	4461	4461	4936	3194	3194	4461	5314
*denotes the peak construction month												

As shown in Table 5-5, the peak construction vehicle trip month during the peak construction year (2026) is December 2026, with a total of 5,314 one-way vehicle trips. These trips comprise 3,847 HGV trips and 1,467 construction vehicle trips.

Table 5-6 further breaks down the peak construction trips into an estimated monthly, daily, and hourly total.

Table 5-6: Peak Construction Trips Per Month/Day

Trip Type	Trips per Month	Trips per Day	Approx. Trips per Hour
Enabling/ demolition works	0	0	0

Dredge arisings	1727	80	8
Wharf Construction	378	17	2
Fill	1267	58	6
Rock armour	475	22	2
Total HGV Trips (one-way)	3847	177	18
Total Construction Worker Trips (one-way)	1467	67	N/A
Total vehicle Trips(one-way)	5314	244	18

It is noted that the hourly trip totals presented in Table 5-6 are indicative of the construction programme and do not include a construction worker hourly total as it is assumed that all construction workers will arrive on-site between 07:00-08:00 and depart after 18:00.

Table 5-7 presents the daily construction vehicle trip profile for a representative day during the peak construction period. The data shows that HGV trips are spread evenly throughout the day and that construction workers will arrive between 07:00-08:00 and depart after 18:00.

Table 5-7: Construction Vehicle Trip Profile

Time		HGV Trips			Construction Worker Trips			Total Trips		
Start	Finish	Arrive	Depart	Two-Way	Arrive	Depart	Two-Way	Arrive	Depart	Two-Way
07:00	08:00	5	0	5	67	0	67	72	0	72
08:00	09:00	17	16	33	0	0	0	17	16	33
09:00	10:00	20	20	40	0	0	0	20	20	40
10:00	11:00	19	19	38	0	0	0	19	19	38
11:00	12:00	17	17	34	0	0	0	17	17	34
12:00	13:00	19	19	38	0	0	0	19	19	38
13:00	14:00	19	19	38	0	0	0	19	19	38
14:00	15:00	19	19	38	0	0	0	19	19	38
15:00	16:00	19	19	38	0	0	0	19	19	38
16:00	17:00	20	20	40	0	0	0	20	20	40
17:00	18:00	17	18	35	0	0	0	17	18	35
18:00	19:00	5	0	5	0	67	67	5	67	72
Total Trips		72	196	186	382	67	67	134	263	253

5.4 Trip Distribution

The proposed development and demolition and construction trips have been distributed across the local highway network based on specific access route requirements for each vehicle type associated with each development stage, whilst also taking into account the turning proportions derived from the 2023 baseline surveys. Vehicle types have been distributed accordingly:

5.4.1 Proposed Development Trip Distribution:

- **Cruise ship coaches** will follow the main strategic vehicle route to and from the site via the A39, Bar Road and Tinnars Walk. This route provides the most direct route to the site from the strategic road network and avoids the lower-grade roads through Falmouth town centre which are unsuitable for larger coaches and HGVs.
- **Shuttle buses** will utilise the most direct route into the town centre. This route proceeds west from Tinnars Walk, along Bar Road, and into Falmouth town centre before returning to the site via the same route in reverse.
- **Taxis** are assumed to distribute to the local highway network as per the car turning proportions observed in the 2023 baseline surveys, which showed most car trips follow the main strategic vehicle route to and from the A39, while a smaller portion approach from the west via Bar Road.

5.4.2 Demolition and Construction Trip Distribution:

- **Demolition and Construction HGV trips** will follow the HGV construction route to and from the site via the A39, Bar Road and Tinnars Walk.
- **Construction worker trips** which arrive/depart site are assumed to distribute to the local highway network as per the car turning proportions observed in the 2023 baseline surveys, which showed most car trips follow the main strategic vehicle route to and from the A39, while a smaller portion approach from the west via Bar Road.

Full details of the trip distribution for each vehicle type are illustrated in the trip distribution figures in Appendix 5.

6. Operational Assessments

6.1 Overview

This section considers the traffic impact of the trips generated by the proposed development on the operation of the local highway network during the AM, PM and development peak hours in the existing baseline year (2023), peak construction year (2026) and proposed development opening year (2027).

Based on pre-application consultation with Cornwall Council, the following two junctions have been assessed:

1. **Junction 1:** Bar Road/Tinners Walk priority junction.
2. **Junction 2:** A39 Melville Road/Bar Terrace/Pendennis Rise/Castle Hill roundabout.

These two junctions have been assessed for the AM, PM, and development peak hours for the following three assessment scenarios:

- **Scenario 1:** Existing Baseline Year (2023).
- **Scenario 2:** Peak Construction Year (2026) without and with peak construction trips.
- **Scenario 3:** Proposed Development Opening Year (2027) without and with proposed development trips.

The AM and PM peak hours for the Falmouth Dock area have been taken from the busiest morning and evening peak hours from the existing baseline traffic data presented in section 3.8. The development peak hour has been taken as the busiest traffic hour from the proposed development trip generation profile (as presented in Table 5-3 in section 5). As peak construction trips are similar throughout the day, the development peak hour for scenario 2 (peak construction year 2026) has been assessed as the same hour for scenario 3 (10:00-11:00). Accordingly, the final peak hour assessments will cover the following peak hours:

- The AM peak hour is from 07:00 to 08:00.
- The development peak is from 10:00 to 11:00.
- The PM peak hour is 16:00 to 17:00.

6.2 Background Traffic Growth

To factor existing 2023 baseline vehicle trips (excluding HGVs), traffic growth factors have been obtained from the National Trip End Model (NTEM) core scenario using TEMPro v.8.0 and are presented in Table 6-1. Traffic growth factors have been extracted between 2023 to 2026 (for the peak construction year) and from 2023-2027 (for the proposed development opening year) and these growth factors pertain to 'Cornwall' and 'Falmouth East' (MSOA E02003916) and are presented in Table 6-1.

Table 6-1: Background Traffic Growth Factors for Total Vehicles (Excluding HGVs)

Year	Region	Area	Scenario	Average Day Growth Factor
2023 > 2026	Cornwall	Falmouth East	Core	1.03388
2023 > 2027	Cornwall	Falmouth East	Core	1.004075

For HGVs, TEMPro factors do not consider HGVs, therefore HGV growth factors have been obtained from the National Road Traffic Projections 2022 core scenario, as shown in Table 6-2: . The 'A road' growth factor is considered most appropriate for the local highway network.

Table 6-2: Background Traffic Growth Factors for HGVs. Source: National Road Traffic Projections 2022.

Year	Area	Scenario	Road Type	HGV growth factor
2023 > 2026	South West	Core	A road	1.00508
2023 > 2027	South West	Core	A road	1.00614

6.3 Operational Assessment Trips

The estimated operational assessment vehicle trips for the three assessment scenarios have been derived as detailed in this section. The final trips for each scenario are presented in the operational assessment trip tables in Appendix 6 for both junctions.

The junction assessment trip tables have been produced as Origin-Destination (OD) tables and present the trips for the AM, PM, and development peak hours at both junctions. Each junction summary features an OD summary table that clearly presents the baseline trips, the adjusted baseline trips, and the peak construction trips (for scenario 2) and the proposed development trips (for scenario 3).

6.3.1 Scenario 1 Trips (Existing Baseline 2023)

To be able to assess the change in trips at the site due to the proposed development, an existing baseline scenario (scenario 1) has been developed, which is considered to be representative of baseline trips for a typical day at the docks under the 'worst-case' assessment scenario.

The site consists of trips associated with:

1. Military ships
2. Cruise ships
3. Cargo/Freight ships
4. Ship repair

It has been assumed that the traffic survey trips recorded in November 2023 (section 3.8) are representative of baseline vehicle trips on the local highway on a typical weekday.

However, it is recognised that in response to the need to assess the proposed development, owing to the time of year in which the surveys were undertaken, an adjustment to surveyed baseline trips has been made to allow for:

- Existing cruise ship vehicle trips.
- General traffic uplift during the peak summer month.

With these adjustments added to the 2023 survey data, an adjusted 2023 baseline scenario has been created.

With respect to existing cruise ship vehicle trips, as the traffic surveys were conducted in November 2023, the 2023 Falmouth Dock vehicle trips on Tinnars Walk will represent typical

vehicle trips associated with military ships, cargo/freight ships, and ship repair activities, but do not account for existing cruise ship vehicle trips. This is because cruise ships call at Falmouth Docks from April to October, which falls outside of when traffic surveys were undertaken. To account for cruise ship vehicle trips missing from the surveys, an estimate of baseline cruise ship trips has been derived and added to the surveyed trips.

The estimation of existing cruise ship trips is based on the 'worst-case' assessment scenario, in which an Excellence-class cruise ship makes a tender call to the site. This estimation includes the trips associated with this class of cruise ship, which is the same assumption used for the proposed development trips. Consequently, the estimated baseline cruise ship vehicle trips are equivalent to the missing cruise ship vehicle trips from the November surveys. The estimated baseline cruise ship vehicle trips, presented in Table 6-3, have been added to the surveyed baseline as part of the process to derive an adjusted 2023 baseline.

Table 6-3: Existing Cruise Ship Trips

	Coach Trips		Shuttle Bus Trips		Taxi Trips		Total Trips	
	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart
Total Trips	80	80	27	27	85	85	192	192
Two-Way Total Trips	160		54		170		384	

With respect to general traffic uplift in the summer months, following the scoping meeting with Cornwall Council in June 2024 it was also acknowledged that the baseline traffic surveys undertaken in November 2023 and did not reflect the busiest traffic month in Falmouth, which Cornwall Council stated as being August. To account for the seasonal difference in baseline trips between November and August, the existing baseline trips have been factored to August levels using a **seasonality factor of 1.16**, which was derived and provided by Cornwall Council based on a yearly ATC located on the A39 by Dracaena Avenue, south of the Kimberley Park junction.

In summary, the baseline survey trips from November 2023 have been adjusted to account for existing cruise ship vehicle trips and the peak traffic month in Falmouth (which is August). Together these adjustments provide a robust adjusted 2023 baseline for the operational assessments.

The process showing how the scenario 1 operational trips have been derived are presented in the operational assessment trip tables Appendix 5.

6.3.2 Scenario 2 Trips (Peak Construction Year 2026)

The peak construction year trips for Scenario 2 in 2026 are based on the total construction trips detailed in Section 5.3. These trips have been calculated for the AM, PM, and development peak hours.

Peak construction trips have been combined with the adjusted 2026 baseline trips to create a peak construction trip scenario. 2023 background baseline trips have been factored to 2026 levels using the factors and associated adjustments presented earlier in this section.

The process showing how the scenario 2 operational trips have been derived are presented in the operational assessment trip tables Appendix 5.

6.3.3 Scenario 3 Trips (Opening Year 2027)

The final proposed development trips for Scenario 2 in 2027 opening year are based on the total proposed development trips detailed in Section 5.1. These trips have been calculated for the AM, PM, and development peak hours.

Opening year proposed development trips have been combined with the adjusted 2027 baseline trips to create an opening year proposed development scenario which assesses a 'worst-case' scenario whereby two Excellence-class trips would be docked at the site simultaneously (one ship existing plus additional ship proposed). 2023 background baseline trips have been factored to 2027 levels using the factors presented in Section 6.2 and adjusted following the methodology outlined in Section 6.3.1.

The process showing how the scenario 3 operational trips have been derived are presented in the operational assessment trip tables in Appendix 6.

6.4 Assessment Methodology

Highway capacity assessments of the two junctions have been carried out using:

- PICADY for the Bar Road/Tinners Walk priority junction.
- ARCADY for the A39 Melvill Road/Bar Terrace/Pendennis Rise/Castle Hill roundabout.

ARCADY and PICADY are industry-standard computer programs for predicting capacities, queues, delays and accident risk at roundabouts and priority junctions and have been used to calculate the likely queues generated for each approach within each peak period.

Analysing the output for ARCADY and PICADY, the primary focus is on link capacity and queues. The software results output refers to the Ratio of Flow to Capacity (RFC) and queue lengths (in vehicles) predicted on each arm of the junction. An RFC of 1.00 indicates that the arm in question is operating at its theoretical capacity and this figure could cause undesirable queuing on an approach lane. An RFC of 0.85 or less indicates that the arm is operating within capacity and queues can be accommodated.

The results of the junction assessments are presented below and present the modelled queues, delay and RFCs for the roundabout and priority junction.

ARCADY and PICADY outputs of the junction assessments for both junctions and all assessment scenarios for the AM, PM and development peak hours can be found in Appendix 6 for the Bar Road/Tinners Walk priority junction operational assessments and Appendix 7 for the A39 Melvill Road/Bar Terrace/Pendennis Rise/Castle Hill roundabout operational assessments.

6.5 Junction Validation

For validation of the junction models, modelled queue lengths were compared to actual queues recorded by the 2023 junction surveys. During each assessed time period, both junctions recorded no queues in the 2023 traffic surveys, which is consistent with the results of the junction models. Therefore, the modelled queues accurately represent the existing conditions, confirming that the models produced for both junctions are validated and fit for purpose.

Table 6-4: Bar Road/Tinners Walk Priority Junction – PICADY Results Validation (AM, Development & PM Peak)

Stream	AM Peak (07:00-08:00)		Development Peak (10:00-11:00)		PM Peak (16:00-17:00)	
	Surveyed Queues (Veh)	Modelled Queues (Veh)	Surveyed Queues (Veh)	Modelled Queues (Veh)	Surveyed Queues (Veh)	Modelled Queues (Veh)
Scenario 1: 2023 Baseline						
Tinners Walk to Bar Road (E)	0	0.1	0	0.1	0	0.5
Tinners Walk to Bar Road (W)	0	0.0	0	0.0	0	0.1
Bar Road (E) to Tinners Walk & Bar Road (W)	0	0.9	0	0.1	0	0.1

Table 6-5: A39 Melvill Road/Bar Terrace/Pendennis Rise/Castle Hill Roundabout – ARCADY Results Validation (AM, Development & PM Peak)

Arm	AM Peak (07:00-08:00)		Development Peak (10:00-11:00)		PM Peak (16:00-17:00)	
	Surveyed Queues (Veh)	Modelled Queues (Veh)	Surveyed Queues (Veh)	Modelled Queues (Veh)	Surveyed Queues (Veh)	Modelled Queues (Veh)
Scenario 1: 2023 Baseline						
Bar Road	0	0.1	0	0.2	0	0.2
Pendennis Rise	0	0.0	0	0.0	0	0.0
Castle Hill	0	0.0	0	0.1	0	0.1
Melvill Road	0	0.5	0	0.3	0	0.3

6.6 Junction Assessment Results – Bar Road/Tinners Walk Priority Junction

This section presents the results of the Bar Road/Tinners Walk Priority Junction PICADY assessments for the three assessment scenarios for the AM, Development and PM peak hours.

The results are presented in Table 6-6 to Table 6-8 and outputs of the PICADY assessments for all three scenarios and three peak hours can be found in Appendix 6.

Table 6-6: Bar Road/Tinners Walk Priority Junction – PICADY Results – Scenario 1 (Existing Baseline 2023)

Stream	AM Peak (07:00-08:00)			Development Peak (10:00-11:00)			PM Peak (16:00-17:00)		
	Queues (Veh)	Delay (S)	RFC	Queues (Veh)	Delay (S)	RFC	Queues (Veh)	Delay (S)	RFC
Scenario 1: Adjusted Baseline 2023									
Tinners Walk to Bar Road (E)	0.1	5.72	0.06	0.2	7.41	0.18	0.8	9.89	0.44
Tinners Walk to Bar Road (W)	0.0	11.03	0.00	0.1	11.57	0.06	0.1	11.51	0.12
Bar Road (E) to Tinners Walk & Bar Road (W)	1.5	16.12	0.60	0.2	7.43	0.14	0.1	7.33	0.08
Junction LOS	B			A			A		
Total Delay (s)	11.46			4.45			6.80		
Residual Capacity	34%			215%			78%		

Results of the Scenario 1 assessment (Table 6-6) demonstrates the junction operates well within capacity at the 2023 existing baseline year, with no capacity concerns during all three peak hours.

Table 6-7: Bar Road/Tinners Walk Priority Junction – PICADY Results – Scenario 2 (Peak Construction Year 2026)

Stream	AM Peak (07:00-08:00)			Development Peak (10:00-11:00)			PM Peak (16:00-17:00)		
	Queues (Veh)	Delay (S)	RFC	Queues (Veh)	Delay (S)	RFC	Queues (Veh)	Delay (S)	RFC
Scenario 2: Adjusted Baseline 2026									
Tinners Walk to Bar Road (E)	0.1	5.82	0.07	0.3	7.98	0.24	1.0	11.39	0.50
Tinners Walk to Bar Road (W)	0.0	11.67	0.00	0.1	13.07	0.09	0.2	13.42	0.16
Bar Road (E) to Tinners Walk & Bar Road (W)	2.2	21.54	0.69	0.3	8.02	0.21	0.1	7.93	0.11
Junction LOS	C			A			A		
Total Delay (s)	15.48			5.33			7.86		
Residual Capacity	17%			213%			50%		
Scenario 2: Adjusted Baseline 2026 + Peak Construction Flows									
Tinners Walk to Bar Road (E)	0.1	5.83	0.07	0.4	9.55	0.30	1.3	13.98	0.57
Tinners Walk to Bar Road (W)	0.0	12.79	0.00	0.1	13.99	0.10	0.2	15.26	0.17
Bar Road (E) to Tinners Walk & Bar Road (W)	4.5	37.83	0.83	0.4	9.91	0.28	0.2	10.39	0.19
Junction LOS	D			A			A		
Total Delay (s)	27.92			6.88			9.95		
Residual Capacity	-2%			100%			35%		

The Scenario 2 assessment results for the peak construction year (Table 6-7) indicate that the junction operates within capacity during all three peak hours in 2026 before the addition of construction trips. Upon adding peak construction trips, the junction remains within capacity (with all junction RFCs below 0.85) for all three peak periods. However, the AM peak shows some capacity constraint for the right turn into Tinners Walk from Bar Road (East), with an RFC of 0.83. Overall, the junction's operation during the peak construction year is satisfactory, with minor capacity limitations during the AM peak for the right turn into Tinners Walk, but it should be noted that the peak construction trips are based on a conservative 'worst-case' estimation and will only be temporary for the duration of the peak construction period.

Table 6-8: Bar Road/Tinners Walk Priority Junction – PICADY Results – Scenario 3 (Opening Year 2027)

	AM Peak (07:00-08:00)			Development Peak (10:00-11:00)			PM Peak (16:00-17:00)		
Stream	Queues (Veh)	Delay (S)	RFC	Queues (Veh)	Delay (S)	RFC	Queues (Veh)	Delay (S)	RFC
Scenario 3: Adjusted Baseline 2027									
Tinners Walk to Bar Road (E)	0.1	5.80	0.07	0.3	8.00	0.24	0.9	10.94	0.48
Tinners Walk to Bar Road (W)	0.0	11.50	0.00	0.1	12.98	0.09	0.2	13.04	0.15
Bar Road (E) to Tinners Walk & Bar Road (W)	2.0	20.08	0.67	0.3	7.96	0.20	0.1	7.89	0.11
Junction LOS	B			A			A		
Total Delay (s)	14.47			5.53			7.58		
Residual Capacity	20%			141%			56%		
Scenario 3: Adjusted Baseline 2027 + Proposed Development Flows									
Tinners Walk to Bar Road (E)	0.1	5.93	0.07	0.4	8.55	0.28	1.0	11.67	0.50
Tinners Walk to Bar Road (W)	0.0	11.87	0.00	0.1	14.36	0.12	0.2	14.39	0.17
Bar Road (E) to Tinners Walk & Bar Road (W)	2.5	24.64	0.72	0.4	8.58	0.25	0.2	8.41	0.13
Junction LOS	C			A			A		
Total Delay (s)	18.00			6.12			8.17		
Residual Capacity	11%			103%			47%		

The Scenario 3 assessment results for the opening year (Table 6-8) indicate that the junction operates within capacity during all three peak hours in 2027 before the uplift in trips as a result of the proposed development. With the addition of proposed development trips, the junction continues to function within capacity, as indicated by junction RFCs remaining below 0.85 for all three peak periods. The AM peak shows a maximum RFC of 0.73 for the right turn into Tinners Walk from Bar Road (East), demonstrating that the junction maintains satisfactory performance and capacity even under the 'worst-case' scenario of additional proposed development trips.

6.7 Junction Assessment Results – A39 Melville Road/Bar Terrace/Pendennis Rise/Castle Hill Roundabout

This section presents the results of the A39 Melvill Road/Bar Terrace/Pendennis Rise/Castle Hill Roundabout ARCADY assessments for the three assessment scenarios for the AM, Development and PM peak hours.

The results are presented in Table 6-9 to Table 6-11 and outputs of the ARCADY assessments for all three scenarios and three peak hours can be found in Appendix 7.

Table 6-9: A39 Melvill Road/Bar Terrace/Pendennis Rise/Castle Hill Roundabout – ARCADY Results – Scenario 1 (Existing Baseline 2023)

Arm	AM Peak (07:00-08:00)			Development Peak (10:00-11:00)			PM Peak (16:00-17:00)		
	Queues (Veh)	Delay (S)	RFC	Queues (Veh)	Delay (S)	RFC	Queues (Veh)	Delay (S)	RFC
Scenario 1: Adjusted Baseline 2023									
Bar Road	0.1	3.33	0.07	0.3	4.43	0.20	0.6	5.08	0.37
Pendennis Rise	0.0	5.27	0.01	0.0	6.68	0.03	0.1	9.20	0.08
Castle Hill	0.0	3.73	0.03	0.1	4.31	0.07	0.1	5.11	0.10
Melvill Road	0.8	8.22	0.44	0.4	6.30	0.28	0.3	5.76	0.20
Junction LOS	A			A			A		
Total Delay (s)	7.01			5.28			5.47		
Residual Capacity	94%			197%			91%		

Results of the Scenario 1 assessment (Table 6-9) demonstrates the junction operates well within capacity with no capacity concerns during all three peak hours of the 2023 existing baseline year.

Table 6-10: A39 Melvill Road/Bar Terrace/Pendennis Rise/Castle Hill Roundabout – ARCADY Results – Scenario 2 (Peak Construction Year 2026)

AM Peak (07:00-08:00)				Development Peak (10:00-11:00)			PM Peak (16:00-17:00)		
Arm	Queues (Veh)	Delay (S)	RFC	Queues (Veh)	Delay (S)	RFC	Queues (Veh)	Delay (S)	RFC
Scenario 2: Adjusted Baseline 2026									
Bar Road	0.1	3.35	0.1	0.3	4.47	0.21	0.6	5.20	0.38
Pendennis Rise	0.0	5.31	0.0	0.0	6.78	0.03	0.1	9.42	0.09
Castle Hill	0.0	3.74	0.0	0.1	4.34	0.07	0.1	5.18	0.10
Melvill Road	0.8	8.45	0.8	0.4	6.35	0.29	0.3	5.80	0.21
Junction LOS	A			A			A		
Total Delay (s)	7.17			5.33			5.58		
Residual Capacity	57%			187%			85%		
Scenario 2: Adjusted Baseline 2026 + Peak Construction Flows									
Bar Road	0.1	3.35	0.08	0.3	5.03	0.24	0.7	5.81	0.42
Pendennis Rise	0.0	5.31	0.02	0.0	7.13	0.04	0.1	10.09	0.09
Castle Hill	0.1	3.82	0.05	0.1	4.49	0.08	0.1	5.41	0.11
Melvill Road	1.2	10.34	0.55	0.5	7.36	0.34	0.4	6.86	0.26
Junction LOS	A			A			A		
Total Delay (s)	8.60			6.05			6.26		
Residual Capacity	57%			148%			72%		

The Scenario 2 assessment results for the peak construction year (Table 6-10) indicate that the junction operates within capacity during all three peak hours in 2026 before the addition of construction trips. Upon adding peak construction trips, the junction remains within capacity (with all junction RFCs below 0.85) for all three peak periods. The results demonstrate that 'worst-case' peak construction trips have no significant impact on the junction's operation during the peak construction period.

Table 6-11: A39 Melvill Road/Bar Terrace/Pendennis Rise/Castle Hill Roundabout – ARCADY Results – Scenario 3 (Opening Year 2027)

Arm	AM Peak (07:00-08:00)			Development Peak (10:00-11:00)			PM Peak (16:00-17:00)		
	Queues (Veh)	Delay (S)	RFC	Queues (Veh)	Delay (S)	RFC	Queues (Veh)	Delay (S)	RFC
Scenario 3: Adjusted Baseline 2027									
Bar Road	0.1	3.35	0.08	0.3	4.49	0.21	0.6	5.23	0.38
Pendennis Rise	0.0	5.32	0.02	0.0	6.81	0.03	0.1	9.47	0.09
Castle Hill	0.0	3.75	0.03	0.1	4.34	0.07	0.1	5.20	0.10
Melvill Road	0.8	8.50	0.46	0.4	6.37	0.29	0.3	5.77	0.21
Junction LOS	A			A			A		
Total Delay (s)	7.21			5.35			5.59		
Residual Capacity	87%			158%			84%		
Scenario 3: Adjusted Baseline 2027 + Proposed Development Flows									
Bar Road	0.1	3.40	0.08	0.3	4.68	0.24	0.6	5.36	0.39
Pendennis Rise	0.0	5.33	0.02	0.0	7.10	0.04	0.1	9.63	0.09
Castle Hill	0.0	3.75	0.03	0.1	4.48	0.09	0.1	5.25	0.10
Melvill Road	1.0	9.43	0.50	0.5	6.78	0.32	0.3	6.02	0.23
Junction LOS	A			A			A		
Total Delay (s)	7.96			5.60			5.74		
Residual Capacity	73%			158%			80%		

The Scenario 3 assessment results for the opening year (Table 6-11) indicate that the junction operates within capacity during all three peak hours in 2027 before the uplift in trips as a result of the proposed development. With the addition of proposed development trips, the junction remains within capacity (with all junction RFCs below 0.85) for all three peak periods. The results demonstrate that the junction maintains satisfactory performance and capacity even under the 'worst-case' scenario of additional proposed development trips.

7. Policy Compliance

Table 7-1 summarises the compliance of the proposed development with relevant national and local transport policy.

Table 7-1: Policy Compliance

Policy Requirement	Policy Compliance
National Policy	
National Planning Policy Framework (December 2024)	
Paragraph 116 states “Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios”.	This TA has determined that the proposed development will not result in any significant transport impacts on the local highway network as a result of the proposed development. Noting no cumulative impacts have been assessed as no significant cumulative schemes have been identified, as per pre-application consultation with Cornwall Council.
Local Policy	
Cornwall Local Plan: Strategic Policies 2010-2030 (November 2016)	
Policy 27 ‘Transport and accessibility’, which states that all developments should “provide safe and suitable access to the site for all people and not cause a significantly adverse impact on the local or strategic road network that cannot be managed or mitigated”.	As demonstrated in this TA, the proposed development will provide safe and suitable access for all people and vehicles, and the proposed development will not result in any significant transport impacts on the local highway network.
Connecting Cornwall: 2030 Strategy (March 2011)	
Policy 14: “We will use the local and strategic development control processes to ensure that the transport impacts of development proposals on our transport network and services do not compromise their safety and efficiency.”	As demonstrated in this TA, the proposed development will not result in any significant transport impacts, demonstrating its alignment with the local and strategic development control processes for maintaining the safety and efficiency of the transport network and services.

8. Summary and Conclusion

This TA has been prepared by Ramboll on behalf of the FDEC (the 'applicant') to support a full planning application for the redevelopment of Falmouth Docks, in Falmouth, Cornwall.

The proposed development aims to restore and upgrade the existing facilities at the Falmouth Docks, whilst facilitating the offshore renewable energy industry through the provision of berth and deck facilities. Once the proposed development has been completed, it will allow the docks to be able to handle larger cruise ships at the upgraded docks, which in turn will generate coach, bus, and taxi services to enable day trip excursions and passengers disembarking and embarking the large cruise ships.

The proposed development will not provide any additional parking spaces, with existing parking being temporarily accommodated within the wider Falmouth Dock site as required by specific projects.

The proposed uplift in trips as a result of the proposed development is based on the site's ability to accommodate additional cruise and freight ships. To undertake a robust and 'worst-case' assessment, it has been assumed that the uplift in vehicular trips as a result of the development is associated with trips generated by an additional Excellence-class cruise ship whilst another existing Excellence-class ship is berthed. On this basis, as summarised in Table 5-1, the trip generation for the proposed development is estimated to be 384 trips (192 arrivals and 192 departures), consisting of 160 two-way coach trips (80 arrivals and 80 departures), 54 two-way shuttle bus trips (27 arrivals and 27 departures), and 170 two-way taxi trips (85 arrivals and 85 departures).

Two junctions at strategic locations on the local highway network were assessed during the network's AM and PM peak hours, as well as the development peak hour, for the existing baseline year (2023), peak construction year (2026) with the addition of peak construction trips, and the opening year (2027) with the inclusion of proposed development trips. The operational assessment results indicate that the proposed development will not lead to significant transport impacts on the local highway network during the AM, PM, and development peak hours. Moreover, the peak construction year assessment demonstrates that peak construction trips will not cause significant impacts on the local highway network during these peak hours.

This TA has demonstrated that the proposed development is policy compliant with respect to transport and does not present any adverse impacts on the local highway network.

Furthermore, the existing site benefits from good quality pedestrian and cycle links, which will be maintained to ensure good pedestrian and cycle connections to local facilities and sustainable transport options. Additionally, Falmouth Docks Rail Station is a 5-minute walk from the main gate, providing rail connectivity between Falmouth and Truro, where more strategic services can be accessed. This rail access offers the potential for accommodating future growth in rail passenger numbers as part of the Mid Cornwall Metro scheme, improving connectivity across Cornwall between Falmouth and Newquay. This initiative can also enhance employee and passenger transportation options in the future, helping to reduce vehicle trips to Falmouth.

In conclusion, it is considered that the proposed development should be supported by Cornwall Council Highways on highway and transport grounds.

Appendix 1

Transport Scoping Correspondence

Tom Craven

From: Huw Gibbon <Huw.Gibbon@cornwall.gov.uk>
Sent: 10 July 2024 08:04
To: Tom Craven
Cc: Mark Ball; Drystan Jones; Mike Pereir; Rachel Holloway; Julia Thompson; Jessica Allcock; Thaddaeus O'Higgins; paul.rogers@torandco.com; Nia Powys; Monika Crouse
Subject: RE: Falmouth Docks - Transport Scoping Report

Information Classification: CONTROLLED

Hi Tom

I have considered the submitted scoping study and further info regarding the trip generation. Further detail on the background to the trip generation would be recommended – I note that the submitted document refers to 40 vehicles being the capacity on the dock, however I recommend the likely desired trip generation is referenced, as additional space may be able to be utilised to handle additional vehicles relating to the passengers. My colleague Mike Cartwright mike.cartwright@cormacltd.co.uk would be the contact in the Council regarding seasonal uplift and other potential traffic counts.

Regards
Huw

Huw Gibbon | Principal Development Officer (Highways)

Cornwall Council | Environment and Connectivity

hgibbon@cornwall.gov.uk | [REDACTED]

www.cornwall.gov.uk | 'Onen hag oll'

Classification: Confidential

From: Tom Craven <Tom.Craven@ramboll.co.uk>
Sent: 21 June 2024 15:14
To: Huw Gibbon <Huw.Gibbon@cornwall.gov.uk>
Cc: Mark Ball <Mark.Ball@cornwall.gov.uk>; Drystan Jones <Drystan.Jones@ap-group.co.uk>; Mike Pereir <mike.pereir@ap-group.co.uk>; Rachel Holloway <Rachel.Holloway@ramboll.co.uk>; Julia Thompson <julia.thompson@ramboll.co.uk>; Jessica Allcock <jessica.allcock@ramboll.co.uk>; Thaddaeus O'Higgins <thad.ohiggins@ramboll.co.uk>; paul.rogers@torandco.com; Nia Powys <nia.powys@torandco.com>; Monika Crouse <monika.crouse@ramboll.co.uk>
Subject: RE: Falmouth Docks - Transport Scoping Report

CAUTION: This is an **EXTERNAL** email which was sent from outside of Cornwall Council's network. Do not click links, open attachments, or reply unless you recognise the sender and know the content is safe. Do not provide any login or password details if requested.

Hi Huw,

Thanks for meeting with us on Tuesday to discuss the scope of the transport assessment.

As discussed, pls find attached a copy of the Trip Generation note I presented in the meeting which explains the baseline traffic scenario as well as how we have developed the proposed trip generation.

I trust you have everything you need to be able to respond to our transport scoping note.

I'm on annual leave next week, so if you need anything, pls msg here and my colleagues will be able to help.

Kind regards
Tom Craven

Ramboll UK Limited Registered in England & Wales Company No: 03659970
Registered office: 240 Blackfriars Road, London SE1 8NW

Classification: Confidential

From: Tom Craven

Sent: Friday, June 14, 2024 3:40 PM

To: huw.gibbon@cornwall.gov.uk

Cc: Mark Ball <mark.ball@cornwall.gov.uk>; Drystan Jones <Drystan.Jones@ap-group.co.uk>; Mike Pereir <mike.pereir@ap-group.co.uk>; Rachel Holloway <Rachel.Holloway@ramboll.co.uk>; Julia Thompson <julia.thompson@ramboll.co.uk>; Jessica Allcock <jessica.allcock@ramboll.co.uk>; Thaddaeus O'Higgins <thad.ohiggins@ramboll.co.uk>; paul.rogers@torandco.com; nia.powys@torandco.com; Monika Crouse <monika.crouse@ramboll.co.uk>

Subject: RE: Falmouth Docks - Transport Scoping Report [Filed 14 Jun 2024 15:40]

Hi Huw,

I've just sent a meeting invite for us to discuss and agree the scope of the TA for the Falmouth Docks Development.

We are just finalising a trip generation document which outlines our trip generation assumptions which I will circulate before the meeting (hopefully Monday morning).

I've also reattached the scoping report in case you missed it when I issued it two weeks ago.

Pls let me know if the meeting time is ok and if you have any questions, pls feel free to msg me.

Look forward to meeting next week.

Kind regards
Tom Craven

Ramboll UK Limited Registered in England & Wales Company No: 03659970
Registered office: 240 Blackfriars Road, London SE1 8NW

From: Tom Craven

Sent: Monday, June 10, 2024 10:02 AM

To: huw.gibbon@cornwall.gov.uk

Cc: Mark Ball <mark.ball@cornwall.gov.uk>; Drystan Jones <Drystan.Jones@ap-group.co.uk>; Mike Pereir <mike.pereir@ap-group.co.uk>; Rachel Holloway <Rachel.Holloway@ramboll.co.uk>; Julia Thompson <julia.thompson@ramboll.co.uk>; Jessica Allcock <jessica.allcock@ramboll.co.uk>; Thaddaeus O'Higgins <thad.ohiggins@ramboll.co.uk>; paul.rogers@torandco.com; nia.powys@torandco.com; Monika Crouse <monika.crouse@ramboll.co.uk>

Subject: RE: Falmouth Docks - Transport Scoping Report [Filed 10 Jun 2024 10:02]

Hi Huw,

Hope you are well.

I'm following up my email from Fri 31 May to see if you've managed to review the TA scoping note I sent and whether you would be able to meet for a discussion via a Teams meeting this week?

Kind regards
Tom Craven

Ramboll UK Limited Registered in England & Wales Company No: 03659970
Registered office: 240 Blackfriars Road, London SE1 8NW

From: Tom Craven

Sent: Friday, May 31, 2024 9:32 AM

To: huw.gibbon@cornwall.gov.uk

Cc: Mark Ball <mark.ball@cornwall.gov.uk>; Drystan Jones <Drystan.Jones@ap-group.co.uk>; Mike Pereir <mike.pereir@ap-group.co.uk>; Rachel Holloway <Rachel.Holloway@ramboll.co.uk>; Julia Thompson <julia.thompson@ramboll.co.uk>; Jessica Allcock <jessica.allcock@ramboll.co.uk>; Thaddaeus O'Higgins <thad.ohiggins@ramboll.co.uk>; paul.rogers@torandco.com; nia.powys@torandco.com; Monika Crouse <monika.crouse@ramboll.co.uk>

Subject: Falmouth Docks - Transport Scoping Report [Filed 31 May 2024 09:32]

Hi Huw,

I've been given your contact as the highways case officer for the proposed Falmouth Docks Development.

I am looking to agree the scope of the Transport Assessment for this project and have prepared the attached Transport Scoping Report for your review and comment.

I would be grateful if we could arrange an online Teams meeting to run through and agree the scoping report early next week (or at your earliest convenience) once you have had an opportunity to review.

Please advise when would be a good time to schedule a meeting and if you require any further information, please do not hesitate to contact me.

Kind regards
Tom Craven

Senior Transport Planner
Transport Planning


tom.craven@ramboll.co.uk

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Appendix 2

Baseline Traffic Surveys

Falmouth, Wednesday 22nd November 2023

Junction: 5
Approach: Tinnars Walk

TIME	Left to Bar Road (East)										Right to Bar Road (West)										U-Turn				
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	
00:00 - 00:15	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
00:15 - 00:30	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	
00:30 - 00:45	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	
00:45 - 01:00	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	
01:00 - 01:15	0	0	4	0	0	0	0	4	4.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	
01:15 - 01:30	0	0	0	1	0	0	0	1	1.0	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	1.0	0	0	0	0	0	0	0	0	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	0	0	0.0	0	0	0	0	0	0	
Hourly Total	0	0	5	1	0	0	0	6	6.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	
02:00 - 02:15	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	
02:15 - 02:30	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
02:30 - 02:45	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	
02:45 - 03:00	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	
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
03:00 - 03:15	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	
03:15 - 03:30	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	
03:30 - 03:45	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	
03:45 - 04:00	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	
Hourly Total	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	
04:00 - 04:15	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
04:15 - 04:30	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	
04:30 - 04:45	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	
04:45 - 05:00	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	
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
05:00 - 05:15	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	
05:15 - 05:30	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	
05:30 - 05:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
05:45 - 06:00	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	
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
06:00 - 06:15	0	1	2	1	0	0	0	4	3.4	1	0	1	0	0	0	0	2	1.2	0	0	0	0	0	0	
06:15 - 06:30	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	
06:30 - 06:45	0	0	3	0	1	0	0	4	4.5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
06:45 - 07:00	0	0	5	0	0	0	0	5	5.0	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	
Hourly Total	0	1	11	1	1	0	0	14	13.9	1	0	1	1	0	0	0	3	2.2	0	0	0	1	0	0	
07:00 - 07:15	0	0	4	1	1	0	0	6	6.5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
07:15 - 07:30	0	0	5	1	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
07:30 - 07:45	0	0	8	1	0	0	0	9	9.0	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	
07:45 - 08:00	0	0	9	2	0	0	0	11	11.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
Hourly Total	0	0	26	5	1	0	0	32	32.5	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	
08:00 - 08:15	0	0	3	1	1	0	0	5	5.5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
08:15 - 08:30	0	0	7	0	2	0	0	9	10.0	0	0	2	2	0	0	0	4	4.0	0	0	0	0	0	0	
08:30 - 08:45	0	0	1	1	1	0	0	3	3.5	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	
08:45 - 09:00	0	0	7	0	1	0	0	8	8.5	1	0	2	1	0	0	0	4	3.2	0	0	0	0	0	0	
Hourly Total	0	0	18	2	5	0	0	25	27.5	1	0	5	3	0	0	0	9	8.2	0	0	0	0	0	0	
09:00 - 09:15	0	0	11	1	3	0	0	15	16.5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
09:15 - 09:30	1	0	7	4	1	1	0	14	15.0	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	
09:30 - 09:45	1	0	6	4	0	1	0	12	12.5	0	0	0	1	1	0	0	2	2.5	0	0	0	0	0	0	
09:45 - 10:00	0	0	5	3	2	0	0	10	11.0	1	0	3	1	0	0	0	5	4.2	0	0	0	0	0	0	
Hourly Total	2	0	29	12	6	2	0	51	55.0	1	0	7	2	1	0	0	11	10.7	0	0	0	0	0	0	
10:00 - 10:15	0	0	7	4	3	1	0	15	17.8	0	0	2	1	0	0	0	3	3.0	0	0	0	0	0	0	
10:15 - 10:30	0	0	11	1	2	0	0	14	15.0	1	0	2	0	0	0	0	3	2.2	0	0	0	0	0	0	
10:30 - 10:45	0	0	10	5	2	0	0	17	18.0	0	0	1	2	1	0	0	4	4.5	0	0	0	0	0	0	
10:45 - 11:00	0	1	9	5	0	1	0	16	16.7	0	0	0	2	0	0	0	2	2.0	0	0	0	0	0	0	
Hourly Total	0	1	37	15	7	2	0	62	67.5	1	0	5	5	1	0	0	12	11.7	0	0	0	0	0	0	
11:00 - 11:15	0	0	11	6	2	1	0	20	22.3	0	0	5	1	0	0	0	6	6.0	0	0	0	1	1	0	
11:15 - 11:30	0	0	5	2	1	0	0	8	8.5	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	
11:30 - 11:45	0	0	10	1	0	0	0	11	11.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
11:45 - 12:00	0	0	3	1	0	0	0	4	4.0	0	0	2	0												

[illegible]

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.3
BUS	2.0

Falmouth, Wednesday 22nd November 2023

Junction: 6
Approach: Bar Road

TIME	Left to Pendennis Rise										Ahead to Castle Hill										Right to Melhill Road					
	CYCLE	M/CYCLE	CAR	LGW	OGV1	OGV2	BUS	TOTAL	PCUs		CYCLE	M/CYCLE	CAR	LGW	OGV1	OGV2	BUS	TOTAL	PCUs		CYCLE	M/CYCLE	CAR	LGW	OGV1	OGV2
00:00 - 00:15	0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0	0	1	1.0		0	0	1	0	0	0
00:15 - 00:30	0	0	0	0	0	0	0	0	0.0		0	0	2	0	0	0	0	2	2.0		0	0	0	0	0	0
00:30 - 00:45	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
00:45 - 01:00	0	0	0	0	0	0	0	0	0.0		0	1	0	0	0	0	0	1	0.4		0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0.0		0	1	3	0	0	0	0	4	3.4		0	0	1	0	0	0
01:00 - 01:15	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	1	4	0	0	0
01:15 - 01:30	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	1	0	0
01:30 - 01:45	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0
01:45 - 02:00	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	1	6	1	0	0
02:00 - 02:15	0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0	0	1	1.0		0	0	0	0	0	0
02:15 - 02:30	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	1	0	0
02:30 - 02:45	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
02:45 - 03:00	0	0	0	0	0	0	0	0	0.0		0	1	0	0	0	0	0	1	0.4		0	0	1	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0.0		0	1	1	0	0	0	0	2	1.4		0	0	1	1	0	0
03:00 - 03:15	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
03:15 - 03:30	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0
03:30 - 03:45	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
03:45 - 04:00	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
Hourly Total	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0
04:00 - 04:15	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	1	0	0
04:15 - 04:30	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
04:30 - 04:45	0	0	1	0	0	0	0	1	1.0		0	0	1	0	0	0	0	1	1.0		0	0	0	0	0	0
04:45 - 05:00	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0
Hourly Total	0	0	1	0	0	0	0	1	1.0		0	0	1	0	0	0	0	1	1.0		0	0	1	1	1	0
05:00 - 05:15	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
05:15 - 05:30	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
05:30 - 05:45	0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0	0	1	1.0		0	0	2	0	1	0
05:45 - 06:00	0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0	0	1	1.0		0	0	0	1	1	0
Hourly Total	0	0	0	0	0	0	0	0	0.0		0	0	2	0	0	0	0	2	2.0		0	0	3	1	2	0
06:00 - 06:15	0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0	0	1	1.0		0	2	3	0	0	0
06:15 - 06:30	0	0	0	0	0	0	0	0	0.0		1	0	1	0	0	0	0	2	1.2		0	0	1	0	0	0
06:30 - 06:45	0	0	0	0	0	0	0	0	0.0		0	0	3	0	0	0	0	3	3.0		0	0	4	1	1	0
06:45 - 07:00	0	0	1	0	0	0	0	1	1.0		0	0	2	1	0	0	0	3	3.0		0	0	6	0	0	0
Hourly Total	0	0	1	0	0	0	0	1	1.0		1	0	7	1	0	0	0	9	8.2		0	2	14	1	1	0
07:00 - 07:15	0	0	3	0	0	0	0	3	3.0		0	0	4	1	1	0	0	6	6.5		0	0	7	2	0	0
07:15 - 07:30	0	0	0	1	0	0	0	1	1.0		0	0	3	0	0	0	0	3	3.0		0	0	7	2	0	0
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0		0	0	4	2	0	0	0	6	6.0		0	0	10	1	0	0
07:45 - 08:00	0	0	1	0	0	0	0	1	1.0		0	0	3	2	0	0	0	5	5.0		0	1	13	0	0	0
Hourly Total	0	0	4	1	0	0	0	5	5.0		0	0	14	5	1	0	0	20	20.5		0	1	36	5	0	0
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0		0	0	4	1	0	0	0	5	5.0		0	1	7	4	2	0
08:15 - 08:30	0	0	0	0	0	0	0	0	0.0		1	0	1	2	1	0	0	5	4.7		0	0	6	0	2	0
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0		0	0	5	1	0	0	0	6	6.0		1	0	7	0	1	2
08:45 - 09:00	0	0	0	0	0	0	0	0	0.0		1	0	6	2	0	0	0	9	8.2		0	0	11	1	2	0
Hourly Total	0	0	0	0	0	0	0	0	0.0		2	0	16	6	1	0	0	25	23.9		1	1	31	5	7	2
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0		0	0	11	1	2	0	0	14	15.0		0	0	14	4	2	1
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0		0	0	3	2	0	0	0	5	5.0		1	1	14	4	0	4
09:30 - 09:45	0	0	1	0	0	0	0	1	1.0		1	0	10	2	0	0	0	13	12.2		0	0	4	8	2	1
09:45 - 10:00	0	0	1	0	0	0	0	1	1.0		0	0	6	0	0	0	0	6	6.0		0	0	9	6	3	0
Hourly Total	0	0	2	0	0	0	0	2	2.0		1	0	30	5	2	0	0	38	38.2		1	1	41	22	7	6
10:00 - 10:15	0	0	0	0	0	0	0	0	0.0		1	0	10	1	0	1	0	13	13.5		0	0	9	6	5	0
10:15 - 10:30	0	0	2	0	0	0	0	2	2.0		0	0	4	1	0	0	0	5	5.0		0	0	17	3	3	0
10:30 - 10:45	0	0	2	0	0	0	0	2	2.0		1	0	11	1	0	0	0	13	12.2		0	0	17	4	5	0
10:45 - 11:00	0	0	1	0	0	0	0	1	1.0		1	0	9	1	0	0	0	11	10.2		0	1	13	3	0	2
Hourly Total	0	0	5	0	0	0	0	5	5.0		3	0	34	4	0	1	0	42	40.9		0	1	56	16	13	2
11:00 - 11:15	0	0	0	0	0	0	0	0	0.0		0	0	7	4	0	0	0	11	11.0		1	0	15			



BUS	TOTAL	PCUs	U-Turn							BUS	TOTAL	PCUs
			CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2				
0	1	1.0	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	1	1.0	0	0	0	0	0	0	0	0	0.0	
0	5	4.4	0	0	0	0	0	0	0	0	0.0	
0	1	1.0	0	0	0	0	0	0	0	0	0.0	
0	1	1.0	0	0	0	0	0	0	0	0	0.0	
0	1	1.0	0	0	0	0	0	1	0	0	1.5	
0	8	7.4	0	0	0	0	1	0	0	0	1.5	
0	0	0.0	0	0	0	0	0	0	0	0	0.0	
0	1	1.0	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	1	1.0	0	0	0	0	0	0	0	0	0.0	
0	2	2.0	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	1	1.0	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	1	1.0	0	0	0	0	0	0	0	0	0.0	
0	1	1.0	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	2	2.5	0	0	0	0	0	0	0	0	0.0	
0	3	3.5	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	3	3.5	0	0	0	0	0	0	0	0	0.0	
0	3	3.5	0	0	0	0	0	0	0	0	0.0	
0	6	7.0	0	0	0	0	0	0	0	0	0.0	
0	5	3.8	0	0	0	0	0	0	0	0	0.0	
0	1	1.0	0	0	0	0	0	0	0	0	0.0	
0	6	6.5	0	0	0	0	0	0	0	0	0.0	
0	6	6.0	0	0	0	0	0	0	0	0	0.0	
0	18	17.3	0	0	0	0	0	0	0	0	0.0	
0	8	8.0	0	0	0	0	0	0	0	0	0.0	
0	9	9.0	0	0	0	0	0	0	0	0	0.0	
0	11	11.0	0	0	0	0	0	0	0	0	0.0	
0	14	13.4	0	0	0	0	0	0	0	0	0.0	
0	42	41.4	0	0	0	0	0	0	0	0	0.0	
0	14	14.4	0	0	0	0	0	0	0	0	0.0	
0	8	9.0	0	0	0	0	0	0	0	0	0.0	
0	11	13.3	0	0	0	0	0	0	0	0	0.0	
0	14	15.0	0	0	0	0	0	0	0	0	0.0	
0	47	51.7	0	0	0	0	0	0	0	0	0.0	
0	21	23.3	0	0	1	0	0	0	0	1	1.0	
0	24	27.8	0	0	0	0	0	0	0	0	0.0	
0	15	17.3	0	0	1	0	0	0	0	1	1.0	
0	18	19.5	0	0	0	0	0	0	0	0	0.0	
0	78	87.9	0	0	2	0	0	0	0	2	2.0	
0	20	22.5	0	0	0	0	0	0	0	0	0.0	
0	23	24.5	0	0	1	0	0	0	0	1	1.0	
0	26	28.5	0	0	3	0	0	0	0	3	3.0	
0	19	21.0	0	0	0	0	0	0	0	0	0.0	
0	88	86.5	0	0	4	0	0	0	0	4	4.0	
0	24	25.5	0	0	1	0	0	0	0	1	1.0	
0	24	25.0	0	0	1	1	0	0	0	2	2.0	
0	21	20.4	0	0	0	0	0	0	0	0	0.0	
0	19	18.7	0	0	1	0	0	0	0	1	1.0	
0	88	89.6	0	0	3	1	0	0	0	4	4.0	
0	20	20.7	0	0	3	1	0	0	0	4	4.0	
0	21	22.8	0	0	0	0	0	0	0	0	0.0	
0	28	30.0	0	0	1	0	0	0	0	1	1.0	
0	19	19.5	0	0	0	0	0	0	0	0	0.0	
0	88	93.0	0	0	4	1	0	0	0	5	5.0	
0	25	28.6	0	0	1	0	0	0	0	1	1.0	
0	21	21.5	0	0	0	0	0	0	0	0	0.0	
0	17	18.5	0	0	1	0	0	0	0	1	1.0	
0	20	19.9	0	0	2	0	0	0	0	2	2.0	
0	83	88.5	0	0	4	0	0	0	0	4	4.0	
0	23	23.0	0	0	1	0	0	0	0	1	1.0	
0	25	26.0	0	0	0	0	0	0	0	0	0.0	
0	30	29.4	0	0	0	0	0	0	0	0	0.0	
0	21	26.4	0	0	0	0	0	0	0	0	0.0	
0	99	104.8	0	0	1	0	0	0	0	1	1.0	
0	22	21.7	0	0	0	0	0	0	0	0	0.0	
0	19	18.4	0	0	0	0	0	0	0	0	0.0	
0	41	41.5	0	0	0	0	0	0	0	0	0.0	
0	100	96.0	0	0	0	0	0	0	0	0	0.0	
0	182	177.6	0	0	0	0	0	0	0	0	0.0	
0	79	80.0	0	0	0	0	0	0	0	0	0.0	
0	42	41.2	0	0	0	0	0	0	0	0	0.0	
0	73	71.2	0	0	0	0	0	0	0	0	0.0	
0	58	54.6	0	0	0	0	0	0	0	0	0.0	
0	252	247.0	0	0	0	0	0	0	0	0	0.0	
0	35	35.0	0	0	0	0	0	0	0	0	0.0	
0	30	28.6	0	0	0	0	0	0	0	0	0.0	
0	93	91.7	0	0	0	0	0	0	0	0	0.0	
0	36	33.9	0	0	0	0	0	0	0	0	0.0	
0	194	189.2	0	0	0	0	0	0	0	0	0.0	
0	11	9.8	0	0	0	0	0	0	0	0	0.0	
0	17	16.4	0	0	0	0	0	0	0	0	0.0	
0	18	18.0	0	0	0	0	0	0	0	0	0.0	
0	13	12.2	0	0	0	0	0	0	0	0	0.0	
0	59	56.4	0	0	0	0	0	0	0	0	0.0	
0	9	8.4	0	0	0	0	0	0	0	0	0.0	
0	7	7.0	0	0	0	0	0	0	0	0	0.0	
0	6	5.4	0	0	0	0	0	0	0	0	0.0	
0	7	6.4	0	0	0	0	0	0	0	0	0.0	
0	29	27.2	0	0	0	0	0	0	0	0	0.0	
0	4	4.0	0	0	0	0	0	0	0	0	0.0	
0	3	3.0	0	0	0	0	0	0	0	0	0.0	
0	4	5.3	0	0	0	0	0	0	0	0	0.0	
0	3	3.0	0	0	0	0	0	0	0	0	0.0	
0	14	15.3	0	0	0	0	0	0	0	0	0.0	
0	8	8.0	0	0	0	0	0	0	0	0	0.0	
0	1	1.0	0	0	0	0	0	0	0	0	0.0	
0	4	4.0	0	0	0	0	0	0	0	0	0.0	
0	6	6.0	0	0	0	0	0	0	0	0	0.0	
0	19	19.0	0	0	0	0	0	0	0	0	0.0	
0	2	2.0	0	0	0	0	0	0	0	0	0.0	
0	2	2.0	0	0	0	0	0	0	0	0	0.0	
0	3	3.0	0	0	0	0	0	0	0	0	0.0	
0	2	2.0	0	0	0	0	0	0	0	0	0.0	
0	9	9.0	0	0	0	0	0	0	0	0	0.0	
0	1	1.0	0	0	0	0	0	0	0	0	0.0	
0	5	5.0	0	0	0	0	0	0	0	0	0.0	
0	4	4.0	0	0	0	0	0	0	0	0	0.0	
0	13	13.0	0	0	0	0	0	0	0	0	0.0	
0	23	23.0	0	0	0	0	0	0	0	0	0.0	
0	1433	1456.3	0	0	0	18	2	1	0	0	21	21.5

PCU Factors:	
CYCLE	0.2
M/CYCLE	0.4
CAR	1.0
LGV	1.0
OGV1	1.5
OGV2	2.5
BUS	2.0

Falmouth, Wednesday 22nd November 2023



Site 5

Queues are stationary vehicles each 5 minutes

TIME	Tinners Walk	Bar Road (East) RIGHT TURN
00:00	0	0
00:05	0	0
00:10	0	0
00:15	0	0
00:20	0	0
00:25	0	0
00:30	0	0
00:35	0	0
00:40	0	0
00:45	0	0
00:50	0	0
00:55	0	0
01:00	0	0
01:05	0	0
01:10	0	0
01:15	0	0
01:20	0	0
01:25	0	0
01:30	0	0
01:35	0	0
01:40	0	0
01:45	0	0
01:50	0	0
01:55	0	0
02:00	0	0
02:05	0	0
02:10	0	0
02:15	0	0
02:20	0	0
02:25	0	0
02:30	0	0
02:35	0	0
02:40	0	0
02:45	0	0
02:50	0	0
02:55	0	0
03:00	0	0
03:05	0	0

11:30	0	0
11:35	0	0
11:40	0	0
11:45	0	0
11:50	0	0
11:55	0	0
12:00	0	0
12:05	0	0
12:10	0	0
12:15	0	0
12:20	0	0
12:25	0	0
12:30	0	0
12:35	0	0
12:40	0	0
12:45	0	0
12:50	0	0
12:55	0	0
13:00	0	0
13:05	1	0
13:10	0	0
13:15	0	1
13:20	0	0
13:25	0	0
13:30	0	0
13:35	0	0
13:40	0	0
13:45	0	0
13:50	1	0
13:55	0	0
14:00	0	0
14:05	0	0
14:10	0	0
14:15	0	0
14:20	0	0
14:25	0	0
14:30	0	0
14:35	0	0
14:40	0	0
14:45	0	0
14:50	0	0
14:55	0	0
15:00	0	0
15:05	0	0
15:10	0	0
15:15	0	0
15:20	0	0
15:25	0	0
15:30	0	0
15:35	0	0

00:00	0	0
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Falmouth ATC 1, Melvill Road

Direction: Westbound

Hour Beginning	Wed 22/11/2023	Thu 23/11/2023	Fri 24/11/2023	Sat 25/11/2023	Sun 26/11/2023	Mon 27/11/2023
00:00	5	3	9	13	13	9
01:00	6	11	12	9	15	1
02:00	3	3	1	7	8	5
03:00	1	1	1	2	4	0
04:00	4	2	2	3	1	0
05:00	6	6	6	6	4	7
06:00	18	22	25	11	9	20
07:00	52	62	69	23	24	51
08:00	88	92	100	49	31	95
09:00	118	82	126	105	68	110
10:00	130	137	131	98	114	143
11:00	144	149	158	130	100	163
12:00	150	150	185	138	102	145
13:00	134	132	146	160	126	126
14:00	162	166	178	158	103	148
15:00	223	228	287	122	111	241
16:00	307	332	243	131	111	307
17:00	233	201	114	79	51	232
18:00	84	85	67	56	35	81
19:00	55	72	56	56	46	59
20:00	37	39	48	36	21	43
21:00	38	47	22	49	28	44
22:00	19	26	35	36	25	27
23:00	30	20	26	17	10	23
Total						
12H(7-19)	1825	1816	1804	1249	976	1842
16H(6-22)	1973	1996	1955	1401	1080	2008
18H(6-24)	2022	2042	2016	1454	1115	2058
24H(0-24)	2047	2068	2047	1494	1160	2080
AM Peak	11:00 144	11:00 149	11:00 158	11:00 130	10:00 114	11:00 163
PM Peak	16:00 307	16:00 332	15:00 287	13:00 160	13:00 126	16:00 307

Paul Castle Associates

Direction: Eastbound

Tue 28/11/2023	5-Day Ave.	7-Day Ave.	Hour Beginning	Wed 22/11/2023	Thu 23/11/2023	Fri 24/11/2023
4	6	8	00:00	6	6	11
7	7	9	01:00	2	3	9
2	3	4	02:00	3	3	3
3	1	2	03:00	0	1	0
1	2	2	04:00	4	3	5
8	7	6	05:00	33	36	43
25	22	19	06:00	173	200	133
50	57	47	07:00	260	288	308
83	92	77	08:00	118	127	114
133	114	106	09:00	148	93	152
120	132	125	10:00	155	159	156
154	154	143	11:00	137	129	169
125	151	142	12:00	134	151	190
149	137	139	13:00	161	138	163
164	164	154	14:00	144	154	155
268	249	211	15:00	138	142	161
330	304	252	16:00	116	105	132
231	202	163	17:00	75	107	82
111	86	74	18:00	90	90	80
69	62	59	19:00	45	51	55
74	48	43	20:00	44	25	36
51	40	40	21:00	32	29	34
25	26	28	22:00	25	21	18
18	23	21	23:00	15	11	17
			Total			
1918	1841	1633	12H(7-19)	1676	1683	1862
2137	2014	1793	16H(6-22)	1970	1988	2120
2180	2064	1841	18H(6-24)	2010	2020	2155
2205	2089	1872	24H(0-24)	2058	2072	2226
			AM Peak	07:00	07:00	07:00
11:00	11:00	11:00		260	288	308
154	154	143				
			PM Peak	13:00	14:00	12:00
16:00	16:00	16:00		161	154	190
330	304	252				

Paul Castle Associates

Direction:

Sat 25/11/2023	Sun 26/11/2023	Mon 27/11/2023	Tue 28/11/2023	5-Day Ave.	7-Day Ave.	Hour Beginning
17	11	8	4	7	9	00:00
5	7	1	5	4	5	01:00
3	8	2	2	3	3	02:00
5	2	1	0	0	1	03:00
2	3	4	3	4	3	04:00
16	5	31	37	36	29	05:00
40	23	190	193	178	136	06:00
89	50	280	282	284	222	07:00
45	55	143	121	125	103	08:00
105	84	163	155	142	129	09:00
125	112	163	204	167	153	10:00
164	125	172	184	158	154	11:00
160	150	157	176	162	160	12:00
159	107	115	182	152	146	13:00
168	114	139	170	152	149	14:00
170	134	140	152	147	148	15:00
106	101	111	142	121	116	16:00
78	43	79	97	88	80	17:00
54	44	73	103	87	76	18:00
57	41	50	56	51	51	19:00
26	30	43	45	39	36	20:00
34	25	27	44	33	32	21:00
29	25	24	21	22	23	22:00
12	9	16	10	14	13	23:00
						Total
1423	1119	1735	1968	1785	1638	12H(7-19)
1580	1238	2045	2306	2086	1892	16H(6-22)
1621	1272	2085	2337	2121	1929	18H(6-24)
1669	1308	2132	2388	2175	1979	24H(0-24)
						AM Peak
11:00	11:00	07:00	07:00	07:00	07:00	PM Peak
164	125	280	282	284	222	
15:00	12:00	12:00	13:00	12:00	12:00	
170	150	157	182	162	160	

Paul Castle /

Total Flow



Wed 22/11/2023	Thu 23/11/2023	Fri 24/11/2023	Sat 25/11/2023	Sun 26/11/2023	Mon 27/11/2023
11	9	20	30	24	17
8	14	21	14	22	2
6	6	4	10	16	7
1	2	1	7	6	1
8	5	7	5	4	4
39	42	49	22	9	38
191	222	158	51	32	210
312	350	377	112	74	331
206	219	214	94	86	238
266	175	278	210	152	273
285	296	287	223	226	306
281	278	327	294	225	335
284	301	375	298	252	302
295	270	309	319	233	241
306	320	333	326	217	287
361	370	448	292	245	381
423	437	375	237	212	418
308	308	196	157	94	311
174	175	147	110	79	154
100	123	111	113	87	109
81	64	84	62	51	86
70	76	56	83	53	71
44	47	53	65	50	51
45	31	43	29	19	39

3501	3499	3666	2672	2095	3577
3943	3984	4075	2981	2318	4053
4032	4062	4171	3075	2387	4143
4105	4140	4273	3163	2468	4212

07:00	07:00	07:00	11:00	10:00	11:00
312	350	377	294	226	335
16:00	16:00	15:00	14:00	12:00	16:00
423	437	448	326	252	418

Associates



Tue 28/11/2023	5-Day Ave.	7-Day Ave.
8	13	17
12	11	13
4	5	8
3	2	3
4	6	5
45	43	35
218	200	155
332	340	270
204	216	180
288	256	235
324	300	278
338	312	297
301	313	302
331	289	285
334	316	303
420	396	360
472	425	368
328	290	243
214	173	150
125	114	110
119	87	78
95	74	72
46	48	51
28	37	33
3886	3626	3271
4443	4100	3685
4517	4185	3770
4593	4265	3851
11:00	07:00	11:00
338	340	297
16:00	16:00	16:00
472	425	368

Falmouth ATC 2, Bar Road

Direction: Westbound

Hour Beginning	Wed 22/11/2023	Thu 23/11/2023	Fri 24/11/2023	Sat 25/11/2023	Sun 26/11/2023	Mon 27/11/2023
00:00	5	1	0	4	4	2
01:00	2	1	1	1	1	0
02:00	0	0	0	2	0	0
03:00	0	0	1	1	1	0
04:00	0	0	0	0	1	1
05:00	2	0	0	0	1	2
06:00	3	5	2	5	1	11
07:00	11	14	12	14	7	20
08:00	25	13	18	11	12	27
09:00	39	31	49	32	20	31
10:00	55	36	34	43	36	42
11:00	50	43	65	65	41	45
12:00	51	52	58	52	38	48
13:00	51	47	53	67	44	41
14:00	36	42	57	58	19	35
15:00	54	62	108	49	20	77
16:00	47	76	58	31	33	65
17:00	56	48	29	29	18	59
18:00	25	29	28	20	5	28
19:00	7	14	17	22	15	16
20:00	12	8	14	13	9	10
21:00	10	14	15	10	10	10
22:00	9	6	12	12	6	4
23:00	3	3	3	5	2	3
Total						
12H(7-19)	500	493	569	471	293	518
16H(6-22)	532	534	617	521	328	565
18H(6-24)	544	543	632	538	336	572
24H(0-24)	553	545	634	546	344	577
AM Peak	10:00 55	11:00 43	11:00 65	11:00 65	11:00 41	11:00 45
PM Peak	17:00 56	16:00 76	15:00 108	13:00 67	13:00 44	15:00 77

Paul Castle Associates

Direction: Eastbound

Tue 28/11/2023	5-Day Ave.	7-Day Ave.	Hour Beginning	Wed 22/11/2023	Thu 23/11/2023	Fri 24/11/2023
2	2	3	00:00	3	5	6
0	1	1	01:00	1	1	1
1	0	0	02:00	0	1	2
2	1	1	03:00	0	0	0
0	0	0	04:00	3	1	0
0	1	1	05:00	8	14	18
6	5	5	06:00	51	75	70
8	13	12	07:00	88	94	110
31	23	20	08:00	43	37	44
38	38	34	09:00	72	53	81
48	43	42	10:00	81	71	78
40	49	50	11:00	101	79	96
57	53	51	12:00	85	73	107
57	50	51	13:00	95	82	80
46	43	42	14:00	92	81	100
71	74	63	15:00	76	82	93
63	62	53	16:00	99	72	92
65	51	43	17:00	73	65	65
38	30	25	18:00	69	58	49
18	14	16	19:00	31	34	44
14	12	11	20:00	31	23	46
7	11	11	21:00	26	42	23
9	8	8	22:00	17	19	26
4	3	3	23:00	15	12	13
			Total			
562	528	487	12H(7-19)	974	847	995
607	571	529	16H(6-22)	1113	1021	1178
620	582	541	18H(6-24)	1145	1052	1217
625	587	546	24H(0-24)	1160	1074	1244
			AM Peak	11:00	07:00	07:00
10:00	11:00	11:00		101	94	110
48	49	50				
			PM Peak	16:00	13:00	12:00
15:00	15:00	15:00		99	82	107
71	74	63				

Paul Castle Associates

Direction:

Sat 25/11/2023	Sun 26/11/2023	Mon 27/11/2023	Tue 28/11/2023	5-Day Ave.	7-Day Ave.	Hour Beginning
9	8	7	6	5	6	00:00
4	7	0	1	1	2	01:00
2	4	1	1	1	2	02:00
2	3	0	2	0	1	03:00
1	0	0	2	1	1	04:00
7	4	13	14	13	11	05:00
23	17	73	68	67	54	06:00
46	23	118	111	104	84	07:00
34	32	48	52	45	41	08:00
70	43	73	81	72	68	09:00
76	65	80	87	79	77	10:00
101	53	92	74	88	85	11:00
103	70	85	96	89	88	12:00
93	107	74	93	85	89	13:00
113	82	81	93	89	92	14:00
80	81	74	84	82	81	15:00
80	90	77	73	83	83	16:00
70	48	71	74	70	67	17:00
41	28	48	55	56	50	18:00
41	29	40	35	37	36	19:00
33	28	28	27	31	31	20:00
43	18	41	34	33	32	21:00
32	18	12	22	19	21	22:00
13	9	11	6	11	11	23:00
907	722	921	973	942	906	Total
1047	814	1103	1137	1110	1059	12H(7-19)
1092	841	1126	1165	1141	1091	16H(6-22)
1117	867	1147	1191	1163	1114	18H(6-24)
						24H(0-24)
11:00	10:00	07:00	07:00	07:00	11:00	AM Peak
101	65	118	111	104	85	
14:00	13:00	12:00	12:00	14:00	14:00	PM Peak
113	107	85	96	89	92	

Paul Castle /

Total Flow



Wed 22/11/2023	Thu 23/11/2023	Fri 24/11/2023	Sat 25/11/2023	Sun 26/11/2023	Mon 27/11/2023
8	6	6	13	12	9
3	2	2	5	8	0
0	1	2	4	4	1
0	0	1	3	4	0
3	1	0	1	1	1
10	14	18	7	5	15
54	80	72	28	18	84
99	108	122	60	30	138
68	50	62	45	44	75
111	84	130	102	63	104
136	107	112	119	101	122
151	122	161	166	94	137
136	125	165	155	108	133
146	129	133	160	151	115
128	123	157	171	101	116
130	144	201	129	101	151
146	148	150	111	123	142
129	113	94	99	66	130
94	87	77	61	33	76
38	48	61	63	44	56
43	31	60	46	37	38
36	56	38	53	28	51
26	25	38	44	24	16
18	15	16	18	11	14

1474	1340	1564	1378	1015	1439
1645	1555	1795	1568	1142	1668
1689	1595	1849	1630	1177	1698
1713	1619	1878	1663	1211	1724

11:00	11:00	11:00	11:00	10:00	07:00
151	122	161	166	101	138
13:00	16:00	15:00	14:00	13:00	15:00
146	148	201	171	151	151

Associates



Tue 28/11/2023	5-Day Ave.	7-Day Ave.
8	7	9
1	2	3
2	1	2
4	1	2
2	1	1
14	14	12
74	73	59
119	117	97
83	68	61
119	110	102
135	122	119
114	137	135
153	142	139
150	135	141
139	133	134
155	156	144
136	144	137
139	121	110
93	85	74
53	51	52
41	43	42
41	44	43
31	27	29
10	15	15
1535	1470	1392
1744	1681	1588
1785	1723	1632
1816	1750	1661
10:00	11:00	11:00
135	137	135
15:00	15:00	15:00
155	156	144

Falmouth ATC 3, Tinnars Walk

Direction: Northeastbound

Hour Beginning	Wed 22/11/2023	Thu 23/11/2023	Fri 24/11/2023	Sat 25/11/2023	Sun 26/11/2023	Mon 27/11/2023
00:00	1	1	3	2	1	1
01:00	1	2	2	0	0	0
02:00	1	1	0	0	2	0
03:00	1	1	0	0	0	0
04:00	2	2	3	1	0	3
05:00	32	40	54	19	3	33
06:00	214	237	184	56	29	225
07:00	299	342	340	103	52	321
08:00	80	70	65	16	33	76
09:00	84	80	58	22	12	75
10:00	45	56	49	25	20	63
11:00	51	53	68	31	20	75
12:00	73	74	87	39	23	58
13:00	77	71	48	40	32	50
14:00	62	56	45	21	13	52
15:00	52	69	62	33	18	61
16:00	34	38	38	27	13	32
17:00	24	46	24	14	12	35
18:00	31	26	15	16	9	25
19:00	11	9	8	12	7	8
20:00	9	8	6	7	10	8
21:00	1	6	4	9	5	7
22:00	5	2	4	4	2	6
23:00	5	4	4	2	1	1
Total						
12H(7-19)	912	981	899	387	257	923
16H(6-22)	1147	1241	1101	471	308	1171
18H(6-24)	1157	1247	1109	477	311	1178
24H(0-24)	1195	1294	1171	499	317	1215
AM Peak	07:00 299	07:00 342	07:00 340	07:00 103	07:00 52	07:00 321
PM Peak	13:00 77	12:00 74	12:00 87	13:00 40	13:00 32	15:00 61

Paul Castle Associates

Direction: Southwestbound

Tue 28/11/2023	5-Day Ave.	7-Day Ave.
0	1	1
1	1	1
0	0	1
0	0	0
4	3	2
46	41	32
235	219	169
237	308	242
61	70	57
54	70	55
56	54	45
49	59	50
46	68	57
51	59	53
51	53	43
68	62	52
48	38	33
27	31	26
16	23	20
6	8	9
10	8	8
7	5	6
3	4	4
2	3	3
764	896	732
1022	1136	923
1027	1144	929
1078	1191	967
07:00 237	07:00 308	07:00 242
15:00 68	12:00 68	12:00 57

Hour Beginning	Wed 22/11/2023	Thu 23/11/2023	Fri 24/11/2023
00:00	2	3	3
01:00	6	13	11
02:00	0	2	0
03:00	0	0	2
04:00	1	2	2
05:00	1	1	4
06:00	16	31	22
07:00	33	34	31
08:00	33	46	59
09:00	57	56	62
10:00	72	72	67
11:00	55	51	56
12:00	90	76	114
13:00	63	101	91
14:00	75	79	109
15:00	179	161	239
16:00	239	296	157
17:00	191	174	83
18:00	40	35	18
19:00	18	21	7
20:00	8	9	3
21:00	4	2	0
22:00	8	1	2
23:00	17	15	13
Total			
12H(7-19)	1127	1181	1086
16H(6-22)	1173	1244	1118
18H(6-24)	1198	1260	1133
24H(0-24)	1208	1281	1155
AM Peak	10:00 72	10:00 72	10:00 67
PM Peak	16:00 239	16:00 296	15:00 239

Paul Castle Associates

Direction:

Sat 25/11/2023	Sun 26/11/2023	Mon 27/11/2023	Tue 28/11/2023	5-Day Ave.	7-Day Ave.	Hour Beginning
8	0	2	3	3	3	00:00
10	2	0	3	7	6	01:00
2	3	4	0	1	2	02:00
1	0	0	7	2	1	03:00
2	0	0	2	1	1	04:00
6	2	4	6	3	3	05:00
13	3	31	32	26	21	06:00
23	15	37	52	37	32	07:00
25	7	35	34	41	34	08:00
46	35	56	62	59	53	09:00
42	55	72	72	71	65	10:00
73	38	52	50	53	54	11:00
77	35	95	79	91	81	12:00
127	100	105	112	94	100	13:00
63	43	48	74	77	70	14:00
63	42	180	169	186	148	15:00
60	39	226	250	234	181	16:00
56	21	228	219	179	139	17:00
31	6	41	62	39	33	18:00
29	26	10	22	16	19	19:00
26	6	12	8	8	10	20:00
20	8	3	4	3	6	21:00
2	12	5	4	4	5	22:00
3	2	13	18	15	12	23:00
						Total
686	436	1175	1235	1161	989	12H(7-19)
774	479	1231	1301	1213	1046	16H(6-22)
779	493	1249	1323	1233	1062	18H(6-24)
808	500	1259	1344	1249	1079	24H(0-24)
11:00	10:00	10:00	10:00	10:00	10:00	AM Peak
73	55	72	72	71	65	
13:00	13:00	17:00	16:00	16:00	16:00	PM Peak
127	100	228	250	234	181	

Paul Castle /

Total Flow



Wed 22/11/2023	Thu 23/11/2023	Fri 24/11/2023	Sat 25/11/2023	Sun 26/11/2023	Mon 27/11/2023
3	4	6	10	1	3
7	15	13	10	2	0
1	3	0	2	5	4
1	1	2	1	0	0
3	4	5	3	0	3
33	41	58	25	5	37
230	268	206	69	32	256
332	376	371	126	67	358
113	116	124	41	40	111
141	136	120	68	47	131
117	128	116	67	75	135
106	104	124	104	58	127
163	150	201	116	58	153
140	172	139	167	132	155
137	135	154	84	56	100
231	230	301	96	60	241
273	334	195	87	52	258
215	220	107	70	33	263
71	61	33	47	15	66
29	30	15	41	33	18
17	17	9	33	16	20
5	8	4	29	13	10
13	3	6	6	14	11
22	19	17	5	3	14

2039	2162	1985	1073	693	2098
2320	2485	2219	1245	787	2402
2355	2507	2242	1256	804	2427
2403	2575	2326	1307	817	2474

07:00	07:00	07:00	07:00	10:00	07:00
332	376	371	126	75	358
16:00	16:00	15:00	13:00	13:00	17:00
273	334	301	167	132	263

Associates



Tue 28/11/2023	5-Day Ave.	7-Day Ave.
3	4	4
4	8	7
0	2	2
7	2	2
6	4	3
52	44	36
267	245	190
289	345	274
95	112	91
116	129	108
128	125	109
99	112	103
125	158	138
163	154	153
125	130	113
237	248	199
298	272	214
246	210	165
78	62	53
28	24	28
18	16	19
11	8	11
7	8	9
20	18	14
1999	2057	1721
2323	2350	1969
2350	2376	1992
2422	2440	2046
07:00	07:00	07:00
289	345	274
16:00	16:00	16:00
298	272	214

Falmouth ATC 4, Avenue Road

Direction: Northbound

Hour Beginning	Wed 22/11/2023	Thu 23/11/2023	Fri 24/11/2023	Sat 25/11/2023	Sun 26/11/2023	Mon 27/11/2023
00:00	5	10	7	27	47	3
01:00	6	2	1	11	16	3
02:00	0	4	3	9	18	1
03:00	0	0	2	14	15	4
04:00	0	0	0	4	4	1
05:00	5	4	2	0	1	5
06:00	8	6	7	5	4	11
07:00	32	22	31	23	13	35
08:00	70	61	56	33	35	64
09:00	91	81	70	107	58	63
10:00	113	80	101	126	88	67
11:00	122	103	96	111	112	82
12:00	109	121	126	133	150	112
13:00	123	103	124	153	144	103
14:00	148	135	172	180	134	111
15:00	118	111	141	188	131	88
16:00	163	110	134	199	122	124
17:00	109	112	108	155	95	116
18:00	82	85	85	95	75	81
19:00	91	85	85	102	58	55
20:00	100	74	108	111	45	58
21:00	81	79	106	118	36	56
22:00	49	43	87	109	27	46
23:00	21	30	67	56	23	15
Total						
12H(7-19)	1280	1124	1244	1503	1157	1046
16H(6-22)	1560	1368	1550	1839	1300	1226
18H(6-24)	1630	1441	1704	2004	1350	1287
24H(0-24)	1646	1461	1719	2069	1451	1304
AM Peak	11:00 122	11:00 103	10:00 101	10:00 126	11:00 112	11:00 82
PM Peak	16:00 163	14:00 135	14:00 172	16:00 199	12:00 150	16:00 124

Paul Castle Associates

Direction: Southbound

Tue 28/11/2023	5-Day Ave.	7-Day Ave.	Hour Beginning	Wed 22/11/2023	Thu 23/11/2023	Fri 24/11/2023
6	6	15	00:00	3	2	5
4	3	6	01:00	2	1	4
4	2	6	02:00	0	1	1
4	2	6	03:00	1	0	0
0	0	1	04:00	0	0	0
2	4	3	05:00	2	3	8
7	8	7	06:00	44	44	43
26	29	26	07:00	87	92	88
72	65	56	08:00	85	83	87
88	79	80	09:00	109	113	115
92	91	95	10:00	146	149	165
95	100	103	11:00	126	138	160
120	118	124	12:00	110	135	169
138	118	127	13:00	135	140	131
127	139	144	14:00	113	110	127
146	121	132	15:00	106	80	115
141	134	142	16:00	106	104	130
126	114	117	17:00	99	112	116
93	85	85	18:00	106	111	131
67	77	78	19:00	68	72	82
90	86	84	20:00	30	25	41
52	75	75	21:00	25	32	35
58	57	60	22:00	15	13	32
21	31	33	23:00	5	11	20
			Total			
1264	1192	1231	12H(7-19)	1328	1367	1534
1480	1437	1475	16H(6-22)	1495	1540	1735
1559	1524	1568	18H(6-24)	1515	1564	1787
1579	1542	1604	24H(0-24)	1523	1571	1805
			AM Peak	10:00	10:00	10:00
11:00	11:00	11:00		146	149	165
95	100	103				
			PM Peak	13:00	13:00	12:00
15:00	14:00	14:00		135	140	169
146	139	144				

Paul Castle Associates

Direction:

Sat 25/11/2023	Sun 26/11/2023	Mon 27/11/2023	Tue 28/11/2023	5-Day Ave.	7-Day Ave.	Hour Beginning
11	9	2	3	3	5	00:00
9	7	0	3	2	4	01:00
2	7	0	5	1	2	02:00
1	1	0	1	0	1	03:00
1	0	0	1	0	0	04:00
1	2	5	4	4	4	05:00
23	24	40	44	43	37	06:00
69	39	81	101	90	80	07:00
76	67	87	109	90	85	08:00
162	81	100	93	106	110	09:00
179	133	153	145	152	153	10:00
181	169	147	153	145	153	11:00
207	155	112	134	132	146	12:00
188	144	106	114	125	137	13:00
153	135	106	127	117	124	14:00
121	121	88	106	99	105	15:00
124	79	86	122	110	107	16:00
143	87	67	106	100	104	17:00
129	62	67	81	99	98	18:00
96	46	58	54	67	68	19:00
50	18	38	34	34	34	20:00
39	17	35	26	31	30	21:00
35	7	16	16	18	19	22:00
25	5	7	3	9	11	23:00
						Total
1732	1272	1200	1391	1364	1403	12H(7-19)
1940	1377	1371	1549	1538	1572	16H(6-22)
2000	1389	1394	1568	1566	1602	18H(6-24)
2025	1415	1401	1585	1577	1618	24H(0-24)
11:00	11:00	10:00	11:00	10:00	11:00	AM Peak
181	169	153	153	152	153	
12:00	12:00	12:00	12:00	12:00	12:00	PM Peak
207	155	112	134	132	146	

Paul Castle /



Total Flow

Wed 22/11/2023	Thu 23/11/2023	Fri 24/11/2023	Sat 25/11/2023	Sun 26/11/2023	Mon 27/11/2023
8	12	12	38	56	5
8	3	5	20	23	3
0	5	4	11	25	1
1	0	2	15	16	4
0	0	0	5	4	1
7	7	10	1	3	10
52	50	50	28	28	51
119	114	119	92	52	116
155	144	143	109	102	151
200	194	185	269	139	163
259	229	266	305	221	220
248	241	256	292	281	229
219	256	295	340	305	224
258	243	255	341	288	209
261	245	299	333	269	217
224	191	256	309	252	176
269	214	264	323	201	210
208	224	224	298	182	183
188	196	216	224	137	148
159	157	167	198	104	113
130	99	149	161	63	96
106	111	141	157	53	91
64	56	119	144	34	62
26	41	87	81	28	22

2608	2491	2778	3235	2429	2246
3055	2908	3285	3779	2677	2597
3145	3005	3491	4004	2739	2681
3169	3032	3524	4094	2866	2705

10:00	11:00	10:00	10:00	11:00	11:00
259	241	266	305	281	229

16:00	12:00	14:00	13:00	12:00	12:00
269	256	299	341	305	224

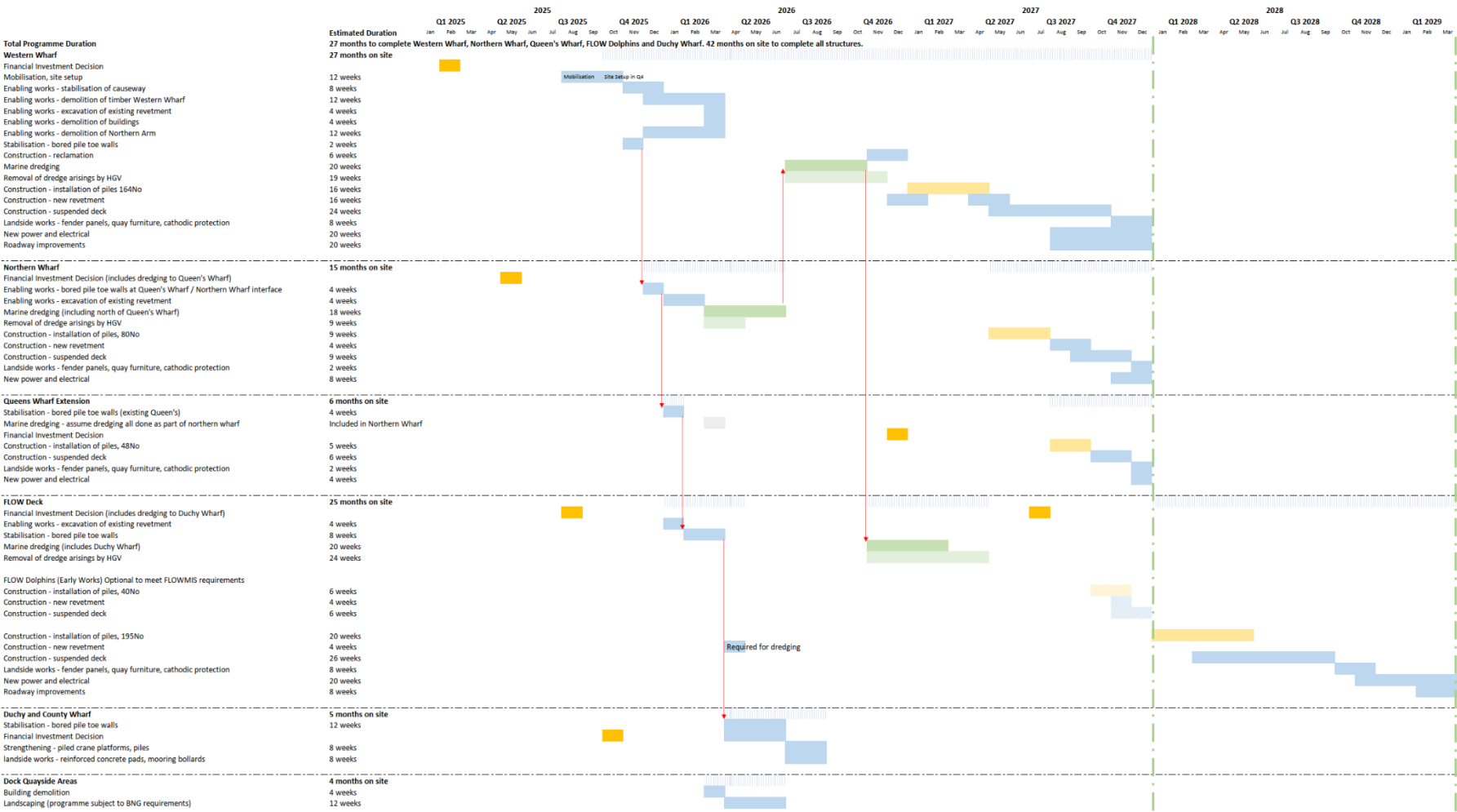
Associates



Tue 28/11/2023	5-Day Ave.	7-Day Ave.
9	9	20
7	5	10
9	4	8
5	2	6
1	0	2
6	8	6
51	51	44
127	119	106
181	155	141
181	185	190
237	242	248
248	244	256
254	250	270
252	243	264
254	255	268
252	220	237
263	244	249
232	214	222
174	184	183
121	143	146
124	120	117
78	105	105
74	75	79
24	40	44
2655	2556	2635
3029	2975	3047
3127	3090	3170
3164	3119	3222
11:00	11:00	11:00
248	244	256
16:00	14:00	12:00
263	255	270

Appendix 3

Indicative Demolition and Construction Programme



Appendix 4

Coach Arrival and Departure Data

Falmouth Docks – Cruise Ship Calls 2023

<i>2023 Cruise Calls</i>	<i>DATE</i>	<i>COACHES</i>	<i>NUMBER OF PAX</i>
Viking Jupiter	10th April	26	820
Balmoral	10th April	6	1104
Spirit of Discovery	04th May	8	831
Deutschland	11th May	9	457
Artania	23rd May	21	1094
AIDAaura	29th May		985
Balmoral	29th May	10	1133
Zuiderdam	1st June	17	1863
Island Princess	11th June	14	1951
The World	12th June	0	153
Viking Mars	13th June	28	894
Deutschland	15th June	7	360
Silver Shadow	19th June	0	318
Silver Moon	23rd June	18	544
Hamburg	29th June	7	347
Regal Princess	09th July	23	3618
Spirit of Discovery	19th July	7	954
Silver Shadow	19th July	9	286
Hamburg	21st July	8	374
Deutschland	23rd July	9	507
Silver Moon	04th Aug	19	558
Silver Moon	06th Aug	9	273
Seven Seas Splendor	06th Aug	8	722
Island Princess	10th Aug	14	2073
Regal Princess	25th Aug	21	3450
Spirit of Adventure	31st Aug	12	948
Ambition	06th Sept	2	715
Silver Moon	07th Sept	19	529
Island Princess	09th Sept	15	2082
MSC Fanatasia	10th Sept	21	2969
Viking Neptune	11th Sept	30	925
AIDAaura	12th Sept	15	1233
Seabourn Ovation	12th Sept	9	511
Viking Jupiter	13th Sept	28	882
Ambition	17th Sept	2	946
Le Champlain	18th Sept	5	134
Artania	01st Oct	18	1095
MSC Preziosa	03rd Oct	23	3416
Ambition	04th Oct	1	867
Viking Venus	07th Oct	23	867
Ambition	16th Oct	15	833
Spirit of Adventure	1st Nov	0	936
Total: 42 Calls			45,557

Quay Plan Viking Jupiter 10th April

Tours	Report	Depart	Arrive	Guide	Coach	Driver	VRN
Scenic Cornish Drive - A	07:45	08:30	11:45	Madeline Kempsford	Hopleys B2B	John Davey	C19 UAF
Scenic Cornish Drive - A				Janice Paige Bailey	Hopleys B2B	John Dower	WK23 AYW
Scenic Cornish Drive - A				Rachel Hollow	Hopleys B2B	James Wills	C8 UAF
Picturesque Poldark	08:15	09:00	13:30	Gail Angrove	Hopleys 36 seater	Dean Gregory	C9 UAF
Hike the Beautiful Lizard Peninsula (QV)	07:45	08:30	12:30	Jilly Hellerman	Williams B2B	Dave Liggett	BD11 LWM
Scenic Cornish Drive - B	08:00	08:45	12:00	Jayne Dymock	Tamar B2B	Graham Bell	TA13 MAR
Scenic Cornish Drive - B				Angela Spatz	Tamar B2B	Sue Ellis	H16 TLC
Scenic Cornish Drive - B				Cilla George	Tamar B2B	Steve Harry	T18 VDL
Scenic Cornish Drive - B				Ursula	A2B Newquay Travel	Pete Berry	PUI 6684
Cornish Villages of the Roseland Peninsula	08:00	08:45	13:00	Adrian Chapman	Hopleys 29 seater B2B	John Michell	WK22 RAF
The Lost Gardens of Heligan QV	08:15	09:00	13:00	Di Smith	Hopleys - single use	Andrew Worgan	C7 UAF
St Michaels Mount	08:30	09:15	13:45	Russell Chapman	Hopleys - single use	Simon Fielding	C20 UAF
Scenic Cornish Drive - C	08:30	09:15	12:30	Paula Clarke	Tamar B2B	Mitch Brenen	TA18 MAR
Scenic Cornish Drive - C				Nick Moore	Tamar B2B	Bunny Warren	TA09 MAR
Scenic Cornish Drive - C				Elaine Whitchery	Tamar B2B	Chris Higman	TC15 TCL
Trebah Gardens QV	08:45	09:30	12:30	Renata Davies	Williams B2B	Martin Ralph	HT07 CCT

AFTERNOON DEPARTURES

Picturesque St Ives	12:15	13:00	17:30	Rachel Hollow	Williams B2B	Martin Ralph	HT07 CCT
Picturesque St Ives				Jayne Dymock	Williams B2B	Dave Liggett	BD11 LWM
Scenic Cornish Drive - D	12:15	13:00	16:15	Madeline Kempsford	Tamar B2B	Graham Bell	TA13 MAR
Scenic Cornish Drive - D				Janice Paige Bailey	Tamar B2B	Sue Ellis	H16 TLC
Scenic Cornish Drive - D				Cilla George	Tamar B2B	Steve Harry	T18 VDL
Scenic Cornish Drive - E	12:45	13:30	16:45	Nick Moore	Hopleys B2B	John Davey	C19 UAF
Scenic Cornish Drive - E				Angela Spatz	Hopleys B2B	John Dower	WK23 AYW
Tregothnan Tea Estate	13:00	13:45	17:15	Julia Morris	Hopleys 29 seater B2B	John Michell	WK22 RAF
Scenic Cornish Drive - F	13:15	14:00	17:15	Paula Clarke	Tamar B2B	Mitch Brenen	TA18 MAR
Scenic Cornish Drive - F				Di Smith	Tamar B2B	Bunny Warren	TA09 MAR
Falmouth Walking Tour QV	13:45	14:30	17:00	Jilly Hellerman	N/A	N/A	N/A
Falmouth Walking Tour QV				Adrian Chapman	N/A	N/A	N/A
Falmouth Walking Tour QV	14:00	14:45	17:15	Renata Davies	N/A	N/A	N/A

Quay plan Balmoral – 10th April

TOURS	Report	Depart	Return	Guide	Coach Company	Driver	VRN
The Eden	08:15	09:00	15:00	Viv Robinson	Oates 53 Seater	Padriac Williamson	831 OCV
The Eden	08:15	09:00	15:00	Mark Camp	Oates 49 Seater	David Jenkins	N666 BUS
The Lost G	08:30	09:15	13:15	Chrissie Le Merchant	Roselyn 53 seater	John McFertlidge	NUF 276
The Lost G	08:30	09:15	13:15	Birgit Weidwald	Roselyn 57 seater	Kevin Essery	XO16 BOY
Scenic Co	08:30	09:15	12:30	Anne McClary	Hopleys 49 seater	Shaun Cowling	C6 UAF
Scenic Co	08:30	09:15	12:30	Julia Morris	Roselyn 57 seater	Paul Murryfield	RO71 LYN

Quay Plan Artania – 23rd May

Ship: Artania		ECS Representatives					
Falmouth/ 23 May							
ETA: 08:00							
ETD: 19:00							
Tour Name	REPORT TIME	Depart	Return	pax	Guide	BUS #	Coach Supplier
Panoramic Cornwall with Land's End 1	07:40	08:25	12:40	45	Damaris White	1	Tilleys 1
Panoramic Cornwall with Land's End 2	07:40	08:25	12:40	45	Angela Spatz	2	Tilleys 2
Panoramic Cornwall with Land's End 3	07:40	08:25	12:40	45	Alexandra Blackman	3	Hopleys 1
Panoramic Cornwall with Land's End 4	07:40	08:25	12:40	45	Andrew Holliman	4	Hopleys 2
Panoramic Cornwall with Land's End 5	07:55	08:40	12:55	45	Anna Adriana McClary	5	Hopleys 3
Panoramic Cornwall with Land's End 6	07:55	08:40	12:55	45	Patrick Keane	6	Williams 1
Panoramic Cornwall with Land's End 7	07:55	08:40	12:55	45	Franziska Spindler	7	Williams 2
Panoramic Cornwall with Land's End 8	07:55	08:40	12:55	45	Jilly Hellerman	8	Williams 3
Panoramic Cornwall with Land's End 9	07:55	08:40	12:55	45	Elaine Wycherley	9	Williams 4
Idyllic St Ives 1	08:00	08:45	13:00	45	Nick Moore	10	Tamar 1
Idyllic St Ives 2	08:15	09:00	13:15	45	Madeleine Kempson	11	First 1
Idyllic St Ives 3	08:30	09:15	13:30	45	Renate Davie	12	First 2
Idyllic St Ives 4	12:45	13:15	17:30	45	Patrick Keane	13	Williams 1
Panoramic Cornwall with Land's End 10	12:45	13:20	17:35	40	Birgit Wiedwald	14	Hopleys 1
Lost Gardens of Heligan 1	13:00	13:25	17:55	45	Nick Moore	15	Tamar 1
Lost Gardens of Heligan 2	12:45	13:25	17:55	45	Damaris White	16	Tilleys 1
Lost Gardens of Heligan 3	12:45	13:25	17:55	45	Angela Spatz	17	Tilleys 2
Prideaux Place 1	13:00	13:30	18:00	45	Andrew Holliman	18	Hopleys 2
Prideaux Place 2	13:00	13:30	18:00	45	Anna Adriana McClary	19	Hopleys 3
Idyllic St Ives 5	13:00	13:45	18:00	45	Franziska Spindler	20	Williams 2
Idyllic St Ives 6	13:15	14:00	18:15	45	Jilly Hellerman	21	Williams 3
Shore-ex Manager:							
Mobile:							

Quay Plan Viking Mars -13th June

Viking Coach Number	Tour Code	Tours	Report	Depart	Arrive	Guide	Coach	Size	Driver	VRN
1	GBFLH101A	Scenic Cornish Drive - A	07:00	07:45	11:00	Elaine Wycherley	HOPLEYS B2B	49	John Long	C6 UAF
2	GBFLH101A	Scenic Cornish Drive - A				Paula Clarke	HOPLEYS B2B	49	David Joynes	C7 UAF
3	GBFLH101A	Scenic Cornish Drive - A				Chrissie La Merchant	OATES B2B	49	Steve Tiffany	831 OCV
4	GBFLH110	Hike the Beautiful Lizard Peninsula QV	07:15	08:00	12:00	Jilly Hellerman	TRURONIAN	49	Andy Rees	481 FPO
5	GBFLH110	Hike the Beautiful Lizard Peninsula QV				Russell Chapman	TRURONIAN	49	Dave Taylor	XFF 283
7	GBFLH101B	Scenic Cornish Drive - B	07:30	08:00	11:15	Rachel Hollow	TAMAR B2B	49	Graham Bell	T18 VDL
8	GBFLH101B	Scenic Cornish Drive - B				Madeleine Kempson	TAMAR B2B	49	Steve Compton	T19 VDL
10	GBFLH101B	Scenic Cornish Drive - B				Alex Blackman	TAMAR B2B	49	Chris Higman	TC15 HOL
6	GBFLH05	Picturesque Poldark	07:30	08:15	12:45	Viv Robinson	WILLIAMS	49	Paul Thomas	BU18 YMV
12	GBFLH18	Pencarrow House QV	07:45	08:30	13:30	Di Smith	TRURONIAN	49	Jonathan Bulford	UHW 661
11	GBFLH15	Cornish Villages of the Roseland Peninsula	07:45	08:30	12:45	Adrian Chapman	HOPLEYS	29	John Michell	WK22 RAF
14	GBFLH101C	Scenic Cornish Drive - C -	08:00	08:45	12:00	Ursula Hold	WILLIAMS	49	Martin Ralph	BV10 ZKE
15	GBFLH101C	Scenic Cornish Drive - C				Cilla George	WILLIAMS	51	Barry Aimable	BL16 GCO
16	GBFLH101C	Scenic Cornish Drive - C				Angela Spatz	WILLIAMS	49	Josh Williams	W100 TEN
18	GBFLH12	St Michaels Mount	08:30	09:15	13:45	Birgit Weidwalt	HOPLEYS	49	Dean Gregory	C19 UAF
17	GBFLH06A	The Lost Gardens of Heligan	08:30	09:15	13:15	Pat Issac	HOPLEYS	36	James Mills	C9 UAF
19	GBFLH14	Trebah Gardens QV	08:45	09:30	12:30	Renate Davies AM	HOPLEYS	49	Simon Fielding	C16 UAF
20	GBFLH101D	Scenic Cornish Drive - D -	11:15	11:45	15:00	Elaine Wycherley	HOPLEYS B2B	49	John Long	C6 UAF
21	GBFLH101D	Scenic Cornish Drive - D -				Paula Clarke	HOPLEYS B2B	49	David Joynes	C7 UAF
22	GBFLH101D	Scenic Cornish Drive - D -				Chrissie La Merchant	OATES	49	Steve Tiffany	831 OCV
23	GBFLH101E	Scenic Cornish Drive - E -	11:45	12:00	15:15	Rachel Hollow	TAMAR B2B	49	Graham Bel	T18 VDL
24	GBFLH101E	Scenic Cornish Drive - E				Madeleine Kempson	TAMAR B2B	49	Steve Compton	T19 VDL
25	GBFLH101F	Scenic Cornish Drive - F	11:30	12:15	15:30	Janice Page-Bailey	TAMAR B2B	49	Chris Higman	TC15 HOL
26	GBFLH101F	Scenic Cornish Drive - F				Alex Blackman	ROSELYNN	49	Kevin Essery	WD13 LKC
27	GBFLH21A	Falmouth Walking Tour QV	12:15	12:30	15:00	Russell Chapman	N/A	20	N/A	N/A
28	GBFLH21A	Falmouth Walking Tour QV				Jilly Hellerman	N/A	20	N/A	N/A

Quay Plan – Silver Moon 23rd June

Coach No	Tours	Report	Depart	Arrive	Prelim	Guide	Coach	Driver	VRN
1	The Lost Gardens of Heligan	07:45	08:45	12:45	36	Viv Robinson	Truronian	Ben Richards	BF73 CCD
2	The Lost Gardens of Heligan				36	Jilly Hellerman	Truronian	Tony Moon	HVJ 716
3	The Lost Gardens of Heligan				36	Madeleine Kempson	Truronian	Padric Williamson	Y15 TRU
4	The Lost Gardens of Heligan				36	Rachel Hollow	Truronian	Rob Bryant-Jefferies	BF21 EOC
5	The Lost Gardens of Heligan				35	Gail Angrove	Truronian	David Toms	BF21 EOL
6	The Lost Gardens of Heligan	07:45	09:00	13:00	38	Damaris White	Tamar	Tom O'Reilly	TC15 HOL
7	The Lost Gardens of Heligan				38	Angela Spatz	Tamar	Phil Ward	T700 TCL
8	The Lost Gardens of Heligan				38	Chrissie La Merchant	Tamar	Kian Corrie	H16 TCL
10	The Lost Gardens of Heligan				38	Nick Moore	Tamar	Rob Dower	TA18 MAR
11	The Lost Gardens of Heligan				28	Jainie Dymock	Tamar	Mitch Brenen	TA13 MAR
12	The Lost Gardens of Heligan				37	Janice Paige Bailey	Hopley's	John Dower	C16 UAF
14	The Lost Gardens of Heligan	07:45	09:15	13:15	40	Adrian Chapman	Williams	Simon Ashworth	BD11 LWM
15	The Lost Gardens of Heligan				38	Julia Morris	Williams	Barry Aimable	BV10 ZKE
16	The Lost Gardens of Heligan				36	Di Smith	Williams	Dave Liggett	BL16 GCO
17	The Lost Gardens of Heligan				36	Elaine Wycherley	Williams	Paul Thomas	BU18 YMV
18	The Lost Gardens of Heligan	07:45	09:30	13:30	40	Alex Blackman	Hopley's	Malcom Riches	C3 UAF
19	The Lost Gardens of Heligan				40	Tessa Farthing	Hopley's	Phil Richards	C7 UAF
20	The Lost Gardens of Heligan				39	Cilla George	Hopley's	Dave Joynes	C6 UAF
21	The Lost Gardens of Heligan				38	Anna McClary	Hopley's	John Michell	WK23 AYW
22	The Lost Gardens of Heligan				38	Paula Clarke	Oates 1 x 3	John Edwards	831 OCV
23	The Lost Gardens of Heligan				38	Kathy Alexander	Oates 1 x 4	David Jenkins	N666 BUS

Quay Plan – Spirit of Discovery 19th July

Ship: SPIRIT OF DISCOVERY
Port: Falmouth
Day/Date: Wed 19 Jul 2023
ECS Cruise Ref: 1017-7945
ETA: 08:00
ETD: 17:00

ECS Representatives
Renate Davie: 07887 865 607

Tour Name	Tour Code	Dur'n	MAX	REPORT TIME	Depart	Return	Notes	Pax Language	Guide	Guide Mobile	Guide Language	BUS #	Coach Supplier	SEATS	PAX LOAD
The Cornish Coast to Lands End	ENGFA021	04:15	135	08:15	09:00	13:15		ENG	Paula Clarke	07850906288	ENG	1	Group Travel 1	49	31
The Cornish Coast to Lands End	ENGFA021	04:15	135	08:15	09:00	13:15		ENG	Ursula Hold	07969774686	ENG	2	Tilleys 1	55	31
The Cornish Coast to Lands End	ENGFA021	04:15	135	08:15	09:00	13:15	Reversed.	ENG	Mark Jones	07456406677	ENG	3	Tilleys 2	55	32
															94
Cruise into the Helford River Estuary T1	ENGFA023a	03:15	40	08:30	09:15	12:30		ENG	N/A	N/A	N/A	4	Tamar 1	48	40
Trebah Gardens T1	ENGFA005a	03:30	45	08:30	09:15	12:45		ENG	Alan Frost	07732917966	ENG	5	Hopley's Coaches	36	22
Trebah Gardens T2	ENGFA005b	03:30	45	08:45	09:30	13:00		ENG	Pat Isaac- do not move	07801706015	ENG	6	Tamar 2	48	30
Cruise into the Helford River Estuary T2	ENGFA023b	03:15	40	12:45	13:15	16:30		ENG	N/A	N/A	N/A	7	Tamar 1	48	40

Shore-ex Manager:	Oana Bercea
Mobile:	447,732,076,269

Quay Plan - Silver Shadow 19th July

Coach #	CODES	TOURS	Report	Depart	Return	Guide	Coach Company	Driver	VRN
1	FAL-GB	St Ives - The Idyllic Cornish Village	08:30	09:15	14:45	Rachell Hollow	Oates	David Jenkin	831 OCV
2	FAL-GB	St Ives - The Idyllic Cornish Village	08:30	09:15	14:45	Chrissie La Marchant	Truronian	Ashley Murrell	260 ERY
3	FAL-D	St Michaels Mount	09:15	10:00	14:30	Adrian Chapman	Truronian	Quint Bray	Y17 TRU
4	FAL-GA	St Ives - The Idyllic Cornish Village	09:15	10:00	15:30	Jayne Dymock	Truronian	Paul Buckingham	Y24 TRU
5	FAL-D	St Michaels Mount	10:00	10:45	15:15	Russel Chapman	Truronian	Howard Jones	UHW 661
6	FAL-SB	Hike the Lizard	10:00	10:45	14:45	Nick Moore	Williams	Paul Thomas	BD11 LWM
7	FAL-SB	Hike the Lizard	10:00	10:45	14:45	Jilly Helleman	Williams	Barry Aimable	W100 TEN
8	FAL-TA	Scenic Cornish Drive	10:30	11:15	14:30	Gail Angove	Williams	Richard Forty	HT07 CCT
9	FAL-TB	Scenic Cornish Drive	10:30	11:15	14:30	Di Smith	Williams	Scott Lavender	WIL 9815

Quay Plan Viking Neptune – 11th September

Tours	Report	Depart	Arrive	Guide	Coach	Size	Driver	VRN
Scenic Cornish Drive - A	07:30	08:15	11:30	Urshula Hold	Tamar 49	49	Len Death	TA13 MAR
Scenic Cornish Drive - A				Nick Moore	Tamar 49	49	Neil Hookins	T18 VDL
Scenic Cornish Drive - A				Franziska Hughes	Tamar 49	49	Steve Compton	T19
Hike the Beautiful Lizard Peninsula	07:15	08:30	12:30	Russell Chapman	Williams b	49	Mike Cassidy	BU18 YMV
Hike the Beautiful Lizard Peninsula				Renata Davies		49		
Picturesque Poldark	07:45	08:30	13:00	Gail Angove	Hopleys 36 seater	36	John Long	C20 UAF
Cornish Villages of the Roseland Peninsula	08:00	08:45	13:00	Adrian Chapman	Hopleys 30 seater	29	David Joynes	WK22 RAF
Scenic Cornish Drive - B	08:00	08:45	12:00	Rachel Hollow	Tamar 49	49	Tom O Reilly	T21 VDL
Scenic Cornish Drive - B				Madeline Kempson	Tamar 49	49	Rob Dower	3271 CD
Scenic Cornish Drive - B				Janice Paige-Bailey	Tamar 49	49	Steve Compton	T19 VDI
The Lost Gardens of Heligan	08:15	09:00	13:00	Julia Morris	Williams b	49	Alan Cooper	BL16 GCO
St Michaels Mount	08:30	09:15	13:45	Kathy Alexander	Truronian	49	Steph Deeks	BF73 CCD
Scenic Cornish Drive - C FRONT SEAT 5093	08:30	09:15	12:30	Angela Spatz	Hopleys	49	Phil Richards	C7 UAF
Scenic Cornish Drive - C				Elaine Wycherley	Oates B2B	53	Mathew Hopkins	831 OCV
Scenic Cornish Drive - C				Paula Clarke	Truronian	49	Patrick Williams	BF21 EOL
Trebah Gardens	08:45	09:30	12:30	Birgit Wiedwald	Hopleys (S	49	John Michell	C19 UAF
Scenic Cornish Drive - D	12:15	13:00	16:15	Urshula Hold	Tamar 49	49	Len Death	TA13 MAR
Scenic Cornish Drive - D				Nick Moore	Tamar 49	49	Neil Hookins	T18 VDL
Scenic Cornish Drive - D				Franziska Hughes	Tamar 49	49	Steve Compton	T19
Picturesque St. Ives	12:15	13:00	17:30	Janie Dymock	Williams b	49	Mike Cassidy	BU18 YMV
Picturesque St. Ives				Di Smith	Williams	49	Ben Hylands	WIL 9816
Scenic Cornish Drive - E	12:45	13:30	16:45	Rachel Hollow	Tamar 49	49	Tom O Reilly	T21 VDL
Scenic Cornish Drive - E				Madeline Kempson	Tamar 49	49	Rob Dower	TBC
Scenic Cornish Drive - E				Janice Paige Bailey	Tamar 49	49	Steve Compton	T19 VDI
Tregothnan Tea Estate	12:45	13:30	17:15	Viv Robinson	Tamar 1 x	29	Mitch Brenen	TA72 MAR
Scenic Cornish Drive - F	13:15	14:00	17:15	Angela Spatz	Hopleys	49	Phil Richards	C7 UAF
Scenic Cornish Drive - F				Elaine Wycherley	Oates B2B	53	Mathew Hopkins	831 OCV
Scenic Cornish Drive - F				Paula Clarke	Williams b	49	Alan Cooper	BL16 GCO
Falmouth on Foot	13:45	14:30	17:00	Julia Morris		20		
Falmouth on Foot				Russell Chapman		20		

Quay Plan – Seabourn Ovation 12th September

Coach #	TOURS	Report	Depart	Arrive	Guide	Coach Company	Driver Name	VRN
1	Quaint Villages of Cornwall	07:30	08:00	14:00	Adrian Chapman	Roselyn 1x 30 seater	Colin Hoare	RO23 LYN
2	A Day in Cornwall	07:30	08:00	15:00	Viv Robinson	Tamar 1 x 53 seater	Mike Boobier	TA18 MAR
3		07:30			Nick Moore	Tamar 1 x 53 seater	Nikki Rich	T18 VDL
4	St Michaels Mount	08:00	08:30	14:30	Russell Chapman	Truonian 1 x 49	Tony Moon	HVJ 716
5	A Day in Cornwall	08:15	08:45	15:45	Birgit Wiedwald	Oates 1 x 49 seater	John Edward	831 OCV
6		08:15			Chrissie Le Merchant	Oates 1 x 53 seater	David Jenkin	N666 BUS
7	Quaint Villages of Cornwall	08:15	08:45	14:45	Di Smith	Tamar 1 x 33 seater	Tom O' Rielly	TA72 MAR
8	A Day In Cornwall	08:30	09:00	16:00	kathy Alexander	Truronian 1 x 49	Steph Deeks	BF21 EOJ
9	Quaint Villages of Cornwall	08:45	09:15	15:15	Gail Angrove	Hopley's 29 Seater	John Michelle	PO19 CCD
PRIVATE VEHICLES								
	Private Mini Van HD	07:30	08:00	12:00	Renate Davie	Hilton Ames Chauffeurs	Leslie Day	H4 EXW
	Private Mini Van FD	07:30	08:00	16:00	Julia Morris	Hilton Ames Chauffeurs	Rob Marchant	H4 CXW
	Private Car HD	08:30	09:00	13:00	Jane Dymock	Hilton Ames Chauffeurs	Andy Hilton	H4 VPP

Quay Plan – AidaAura 12th September

Tour Sign	Tour Code	Tour Name	Meeting time	Start time	End time	Ad	Max capacity	Bus capacity	Lang	Guide's name/Phone
1	FAL05	Rosamund	07:45	08:30	12:30	45	47	49	German	ELAINE WYCHERLEY
2	FAL04	In the Steeple	08:15	09:00	16:35	45	47	49	German	CLAUDIA SCHAEFFER
3	FAL11	Charlestown	08:15	09:00	15:30	23	38	40	German	DAMARIS WHITE
4	FAL04	In the Steeple	09:00	09:45	17:15	45	47	49	German	URSULA HOLD
5	FAL55	Walking Tour	09:15	10:00	12:00	13	25	25	English	WILLIAM HAZEL
6	FAL08	Trelissick	09:45	10:30	15:00	15	47	49	German	MANFRED KREMMNER
7	FAL01	Classic Cornwall	10:00	10:45	15:45	45	47	49	German	MADELEINE KEMPSON
8	FAL01	Classic Cornwall	10:00	10:45	15:45	45	47	49	German	RACHEL HOLLOW
9	FAL01	Classic Cornwall	10:00	10:45	15:45	45	47	49	English	ALAN FROST
10	FAL03	Lost Gardens	10:00	10:45	15:15	30	47	49	German	ANGELA SPATZ
11	FAL12	Boat Tour	11:30	12:15	16:05	28	30	30	English	SAMANTHA EVANS
12	FAL55	Walking Tour	12:15	13:00	15:00	12	25	25	English	WILLIAM HAZEL
13	FAL05A	Rosamund	12:45	13:30	17:30	45	47	49	German	ELAINE WYCHERLEY
14	FAL99	Panoramic	13:00	13:45	16:15	25	47	49	English	PAULA CLARKE
GOLF	GOLF	Golf transfer	10:35	10:45	17:30	3	3	MPV	English	NO GUIDE

Falmouth Docks - Cruise Ship Coach Arrival and Departure Data
Pick Up and Drop Profile per Cruise Ship

10th April
Viking Jupiter

	Tour	Report	Depart	Return	Duration	Depart	Capacity
	MORNING DEPARTURES						
1	Scenic Cornish Drive A	07:45	08:30	11:45	03:15	12:30	
2	Scenic Cornish Drive A	07:45	08:30	11:45	03:15	12:30	
3	Scenic Cornish Drive A	07:45	08:30	11:45	03:15	12:30	
4	Hike of Lizard Peninsula	07:45	08:30	12:30	04:00	13:15	
5	Scenic Cornish Drive B	08:00	08:45	12:00	03:15	12:45	
6	Scenic Cornish Drive B	08:00	08:45	12:00	03:15	12:45	
7	Scenic Cornish Drive B	08:00	08:45	12:00	03:15	12:45	
8	Scenic Cornish Drive B	08:00	08:45	12:00	03:15	12:45	
9	Villages Roseland Peninsula	08:00	08:45	13:00	04:15	13:45	
10	Picturesque Poldark	08:15	09:00	13:30	04:30	14:15	
11	The Lost Gardens of Heligan	08:15	09:00	13:00	04:00	13:45	
12	St. Michaels Mount	08:30	09:15	13:45	04:30	14:30	
13	Scenic Cornish Drive C	08:30	09:15	12:30	03:15	13:15	
14	Scenic Cornish Drive C	08:30	09:15	12:30	03:15	13:15	
15	Scenic Cornish Drive C	08:30	09:15	12:30	03:15	13:15	
16	Trebah Gardens	08:45	09:30	12:30	03:00	13:15	
	Morning Total	16	16				
	AFTERNOON DEPARTURES						
17	Picturesque St. Ives	12:15	13:00	17:30	04:30	18:15	
18	Picturesque St. Ives	12:15	13:00	16:15	03:15	17:00	
19	Scenic Cornish Drive D	12:15	13:00	16:15	03:15	17:00	
20	Scenic Cornish Drive D	12:15	13:00	16:15	03:15	17:00	
21	Scenic Cornish Drive D	12:15	13:00	16:15	03:15	17:00	
22	Scenic Cornish Drive E	12:45	13:30	16:45	03:15	17:30	
23	Scenic Cornish Drive E	12:45	13:30	16:45	03:15	17:30	
24	Tregothnan Estate	13:00	13:45	17:15	03:30	18:00	
25	Scenic Cornish Drive F	13:15	14:00	17:15	03:15	18:00	
26	Scenic Cornish Drive F	13:15	14:00	17:15	03:15	18:00	
27	Falmouth Walking Tour	13:45	14:30	17:00	02:30	17:45	
28	Falmouth Walking Tour	13:45	14:30	17:00	02:30	17:45	
29	Falmouth Walking Tour	13:45	14:30	17:15	02:45	18:00	
	Morning Total	13	13				
	Daily Total	29	29				

PICK UP

DROP OFF

Arrive	Depart	Profile	Arrive	Depart
4		07:00	08:00	
12	9	08:00	09:00	
	7	09:00	10:00	
		10:00	11:00	
		11:00	12:00	3
7		12:00	13:00	9
6	8	13:00	14:00	4
	5	14:00	15:00	
		15:00	16:00	
		16:00	17:00	6
		17:00	18:00	7
		18:00	19:00	
29	29		29	29

10th April
Balmoral

	Tour	Report	Depart	Return	Duration	Depart	Capacity
1	The Eden Project	08:15	09:00	15:00	06:00	15:45	
2	The Eden Project	08:15	09:00	15:00	06:00	15:45	
3	The Lost Gardens	08:30	09:15	13:15	04:00	14:00	
4	The Lost Gardens	08:30	09:15	13:15	04:00	14:00	
5	Scenic Coast	08:30	09:15	12:30	03:15	13:15	

6	Scenic Coast	08:30	09:15	12:30	03:15	13:15
		6	6			

PICK UP				DROP OFF	
Arrive	Depart	Profile		Arrive	Depart
6	6	07:00	08:00		
		08:00	09:00		
		09:00	10:00		
		10:00	11:00		
		11:00	12:00		
		12:00	13:00	2	
		13:00	14:00	2	2
		14:00	15:00	2	2
		15:00	16:00		2
		16:00	17:00		
		17:00	18:00		
		18:00	19:00		
6	6			6	6

23rd May Artania

	Tour	Report	Depart	Return	Duration	Depart	Capacity
1	Lands End 1	07:40	08:25	12:40	04:15	13:25	45
2	Lands End 2	07:40	08:25	12:40	04:15	13:25	45
3	Lands End 3	07:40	08:25	12:40	04:15	13:25	45
4	Lands End 4	07:40	08:25	12:40	04:15	13:25	45
5	Lands End 5	07:55	08:40	12:55	04:15	13:40	45
6	Lands End 6	07:55	08:40	12:55	04:15	13:40	45
7	Lands End 7	07:55	08:40	12:55	04:15	13:40	45
8	Lands End 8	07:55	08:40	12:55	04:15	13:40	45
9	Lands End 9	07:55	08:40	12:55	04:15	13:40	45
10	St Ives 1	08:00	08:45	13:00	04:15	13:45	45
11	St Ives 2	08:15	09:00	13:15	04:15	14:00	45
12	St Ives 3	08:30	09:15	13:30	04:15	14:15	45
13	St Ives 4	12:45	13:30	17:30	04:00	18:15	45
14	Lands End 10	12:45	13:30	17:35	04:05	18:20	40
15	Lost Gardens	13:00	13:45	17:55	04:10	18:40	45
16	Lost Gardens	12:45	13:30	17:55	04:25	18:40	45
17	Lost Gardens	12:45	13:30	17:55	04:25	18:40	45
18	Prideaux	13:00	13:45	18:00	04:15	18:45	45
19	Prideaux	13:00	13:45	18:00	04:15	18:45	45
20	St Ives	13:00	13:45	18:00	04:15	18:45	45
21	St Ives	13:15	14:00	18:15	04:15	19:00	45
		21	21				

PICK UP				DROP OFF	
Arrive	Depart	Profile		Arrive	Depart
9		07:00	08:00		
3	10	08:00	09:00		
	2	09:00	10:00		
		10:00	11:00		
		11:00	12:00		
5		12:00	13:00	9	
4	8	13:00	14:00	3	10
	1	14:00	15:00		2
		15:00	16:00		
		16:00	17:00		
		17:00	18:00	5	
		18:00	19:00	4	9
21	21			21	21

13th June Viking Mars

Taking more							
	Tour	Report	Depart	Return	Duration	Depart	Capacity
1	Scenic Cornish Drive A	07:00	07:45	11:00	03:15	11:45	49

2	Scenic Cornish Drive A	07:00	07:45	11:00	03:15	11:45	49
3	Scenic Cornish Drive A	07:00	07:45	11:00	03:15	11:45	49
4	Hike Lizard Peninsula	07:15	08:00	12:00	04:00	12:45	49
5	Hike Lizard Peninsula	07:15	08:00	12:00	04:00	12:45	49
6	Scenic Cornish Drive B	07:30	08:15	11:15	03:00	12:00	49
7	Scenic Cornish Drive B	07:30	08:15	11:15	03:00	12:00	49
8	Scenic Cornish Drive B	07:30	08:15	11:15	03:00	12:00	49
9	Picturesque Poldark	07:30	08:15	12:45	04:30	13:30	49
10	Pencarrow House	07:45	08:30	13:30	05:00	14:15	49
11	Villages Roseland Peninsula	07:45	08:30	12:45	04:15	13:30	29
12	Scenic Cornish Drive C	08:00	08:45	12:00	03:15	12:45	49
13	Scenic Cornish Drive C	08:00	08:45	12:00	03:15	12:45	51
14	Scenic Cornish Drive C	08:00	08:45	12:00	03:15	12:45	49
15	St. Michaels Mount	08:30	09:15	13:45	04:30	14:30	49
16	The Lost Gardens of Heligan	08:30	09:15	13:15	04:00	14:00	36
17	Trebah Gardens	08:45	09:30	12:30	03:00	13:15	49
18	Scenic Cornish Drive D	11:15	11:45	15:00	03:15	15:30	49
19	Scenic Cornish Drive D	11:15	11:45	15:00	03:15	15:30	49
20	Scenic Cornish Drive D	11:15	11:45	15:00	03:15	15:30	49
21	Scenic Cornish Drive E	11:45	12:00	15:15	03:15	15:30	49
22	Scenic Cornish Drive E	11:45	12:00	15:15	03:15	15:30	49
23	Scenic Cornish Drive F	11:30	12:15	15:30	03:15	16:15	49
24	Scenic Cornish Drive F	11:30	12:15	15:30	03:15	16:15	49
25	Falmouth Walking Tour	12:15	12:30	15:00	02:30	15:15	20
26	Falmouth Walking Tour	12:15	12:30	15:00	02:30	15:15	20

PICK UP				DROP OFF	
Arrive	Depart	Profile		Arrive	Depart
11	3	07:00	08:00		
6	11	08:00	09:00		
	3	09:00	10:00		
		10:00	11:00		
7		11:00	12:00	6	3
2	3	12:00	13:00	8	8
	6	13:00	14:00	3	3
		14:00	15:00		3
		15:00	16:00	9	9
		16:00	17:00		
		17:00	18:00		
		18:00	19:00		
26	26			26	26

23rd June
Silver Moon

	Tour	Report	Depart	Return	Duration	Depart	Capacity
1	The Lost Gardens of Heligan	07:45	08:45	12:45	04:00	13:30	36
2	The Lost Gardens of Heligan	07:45	08:45	12:45	04:00	13:30	36
3	The Lost Gardens of Heligan	07:45	08:45	12:45	04:00	13:30	36
4	The Lost Gardens of Heligan	07:45	08:45	12:45	04:00	13:30	36
5	The Lost Gardens of Heligan	07:45	08:45	12:45	04:00	13:30	36
6	The Lost Gardens of Heligan	07:45	09:00	13:00	04:00	13:45	38
7	The Lost Gardens of Heligan	07:45	09:00	13:00	04:00	13:45	38
8	The Lost Gardens of Heligan	07:45	09:00	13:00	04:00	13:45	38
9	The Lost Gardens of Heligan	07:45	09:00	13:00	04:00	13:45	38
10	The Lost Gardens of Heligan	07:45	09:00	13:00	04:00	13:45	28
11	The Lost Gardens of Heligan	07:45	09:00	13:00	04:00	13:45	37
12	The Lost Gardens of Heligan	07:45	09:15	13:15	04:00	14:00	40
13	The Lost Gardens of Heligan	07:45	09:15	13:15	04:00	14:00	38
14	The Lost Gardens of Heligan	07:45	09:15	13:15	04:00	14:00	36
15	The Lost Gardens of Heligan	07:45	09:15	13:15	04:00	14:00	36
16	The Lost Gardens of Heligan	07:45	09:30	13:30	04:00	14:15	40
17	The Lost Gardens of Heligan	07:45	09:30	13:30	04:00	14:15	40
18	The Lost Gardens of Heligan	07:45	09:30	13:30	04:00	14:15	39
19	The Lost Gardens of Heligan	07:45	09:30	13:30	04:00	14:15	38
20	The Lost Gardens of Heligan	07:45	09:30	13:30	04:00	14:15	38

21	The Lost Gardens of Heligan	07:45	09:30	13:30	04:00	14:15	38
		21	21				

PICK UP				DROP OFF	
Arrive	Depart	Profile		Arrive	Depart
21		07:00	08:00		
	5	08:00	09:00		
	16	09:00	10:00		
		10:00	11:00		
		11:00	12:00		
		12:00	13:00	5	
		13:00	14:00	16	11
		14:00	15:00		10
		15:00	16:00		
		16:00	17:00		
		17:00	18:00		
		18:00	19:00		
21	21			21	21

19th July
Spirit of Discovery

	Tour	Report	Depart	Return	Duration	Depart	Capacity	Pax
1	Cornish Coast to Lands End	08:15	09:00	13:15	04:15	14:00	49	31
2	Cornish Coast to Lands End	08:15	09:00	13:15	04:15	14:00	55	31
3	Cornish Coast to Lands End	08:15	09:00	13:15	04:15	14:00	55	32
4	Cruise Helford River Estuary T1	08:30	09:15	12:30	03:15	13:15	48	40
5	Trebah Gardens	08:30	09:15	12:45	03:30	13:30	36	22
6	Trebah Gardens	08:45	09:30	13:00	03:30	13:45	48	30
7	Cruise Helford River Estuary T2	12:45	13:15	16:30	03:15	17:00	48	40
		7	7					

PICK UP				DROP OFF	
Arrive	Depart	Profile		Arrive	Depart
		07:00	08:00		
6		08:00	09:00		
	6	09:00	10:00		
		10:00	11:00		
		11:00	12:00		
1		12:00	13:00	2	
	1	13:00	14:00	4	3
		14:00	15:00		3
		15:00	16:00	1	
		16:00	17:00		
		17:00	18:00		1
		18:00	19:00		
7	7			7	7

19th July
Silver Shadow

	Tour	Report	Depart	Return	Duration	Depart	Capacity
1	St Ives	08:30	09:15	14:45	05:30	15:30	
2	St Ives	08:30	09:15	14:45	05:30	15:30	
3	St Michaels Mount	09:15	10:00	14:30	04:30	15:15	
4	St Ives	09:15	10:00	15:30	05:30	16:15	
5	St Michaels Mount	10:00	10:45	15:15	04:30	16:00	
6	Hike the Lizard	10:00	10:45	14:45	04:00	15:30	
7	Hike the Lizard	10:00	10:45	14:45	04:00	15:30	
8	Scenic Cornish Drive	10:30	11:15	14:30	03:15	15:15	
9	Scenic Cornish Drive	10:30	11:15	14:30	03:15	15:15	
		9	9				

PICK UP				DROP OFF	
Arrive	Depart	Profile		Arrive	Depart
		07:00	08:00		
2		08:00	09:00		

2	2	09:00	10:00		
5	5	10:00	11:00		
	2	11:00	12:00		
		12:00	13:00		
		13:00	14:00		
		14:00	15:00	7	
		15:00	16:00	2	7
		16:00	17:00		2
		17:00	18:00		
		18:00	19:00		
9	9			9	9

11th September
Viking Neptune

	Tour	Report	Depart	Return	Duration	Depart	Capacity
MORNING DEPARTURES							
1	Scenic Cornish Drive A	07:30	08:15	11:30	03:15	12:15	
2	Scenic Cornish Drive A	07:30	08:15	11:30	03:15	12:15	
3	Scenic Cornish Drive A	07:30	08:15	11:30	03:15	12:15	
4	Hike of Lizard Peninsula	07:15	08:00	12:30	04:30	13:15	
5	Hike of Lizard Peninsula	07:15	08:00	12:30	04:30	13:15	
6	Picturesque Poldark	07:45	08:30	13:00	04:30	13:45	
7	Villages Roseland Peninsula	08:00	08:45	13:00	04:15	13:45	
8	Scenic Cornish Drive B	08:00	08:45	12:00	03:15	12:45	
9	Scenic Cornish Drive B	08:00	08:45	12:00	03:15	12:45	
10	Scenic Cornish Drive B	08:00	08:45	12:00	03:15	12:45	
11	The Lost Gardens of Heligan	08:15	09:00	13:00	04:00	13:45	
12	St. Michaels Mount	08:30	09:15	13:45	04:30	14:30	
13	Scenic Cornish Drive C	08:30	09:15	12:30	03:15	13:15	
14	Scenic Cornish Drive C	08:30	09:15	12:30	03:15	13:15	
15	Scenic Cornish Drive C	08:30	09:15	12:30	03:15	13:15	
16	Trebah Gardens	08:45	09:30	12:30	03:00	13:15	
	Morning Total	16	16				
AFTERNOON DEPARTURES							
17	Scenic Cornish Drive D	12:15	13:00	16:15	03:15	17:00	
18	Scenic Cornish Drive D	12:15	13:00	16:15	03:15	17:00	
19	Scenic Cornish Drive D	12:15	13:00	16:15	03:15	17:00	
20	Picturesque St. Ives	12:15	13:00	17:30	04:30	18:15	
21	Picturesque St. Ives	12:15	13:00	17:30	04:30	18:15	
22	Scenic Cornish Drive E	12:45	13:30	16:45	03:15	17:30	
23	Scenic Cornish Drive E	12:45	13:30	16:45	03:15	17:30	
24	Scenic Cornish Drive E	12:45	13:30	16:45	03:15	17:30	
25	Tregothnan Estate	12:45	13:30	17:15	03:45	18:00	
26	Scenic Cornish Drive F	13:15	14:00	17:15	03:15	18:00	
27	Scenic Cornish Drive F	13:15	14:00	17:15	03:15	18:00	
28	Scenic Cornish Drive F	13:15	14:00	17:15	03:15	18:00	
29	Falmouth Walking Tour	13:45	14:30	17:00	02:30	17:45	
30	Falmouth Walking Tour	13:45	14:30	17:00	02:30	17:45	
	Morning Total	14	14				
	Daily Total	30	30				

PICK UP				DROP OFF	
Arrive	Depart	Profile		Arrive	Depart
6		07:00	08:00		
10	10	08:00	09:00		
	6	09:00	10:00		
		10:00	11:00		
		11:00	12:00	3	
9		12:00	13:00	9	6
5	9	13:00	14:00	4	9
	5	14:00	15:00		1
		15:00	16:00		
		16:00	17:00	6	
		17:00	18:00	8	8
		18:00	19:00		6
30	30			30	30

12th September
Seabourn Ovation

	Tour	Report	Depart	Return	Duration	Depart	Capacity
1	Quaint Villages of Cornwall	07:30	08:15	14:00	05:45	14:45	30
2	A Day in Cornwall	07:30	08:15	15:00	06:45	15:45	53
3	A Day in Cornwall	07:30	08:15	15:00	06:45	15:45	53
4	St Michaels Mount	08:00	08:45	14:30	05:45	15:15	49
5	A Day in Cornwall	08:15	09:00	15:45	06:45	16:30	49
6	A Day in Cornwall	08:15	09:00	15:45	06:45	16:30	53
7	Quaint Villages of Cornwall	08:15	09:00	14:45	05:45	15:30	33
8	A Day in Cornwall	08:30	09:15	16:00	06:45	16:45	49
9	Quaint Villages of Cornwall	08:45	09:30	15:15	05:45	16:00	29
10	Private Mini Van HD	07:30	08:15	12:00	03:45	12:45	
11	Private Mini Van HD	07:30	08:15	16:00	07:45	16:45	
12	Private Mini Car HD	07:30	08:15	13:00	04:45	13:45	
		12	12				

PICK UP				DROP OFF	
Arrive	Depart	Profile		Arrive	Depart
6		07:00	08:00		
6		08:00	09:00		
	12	09:00	10:00		
		10:00	11:00		
		11:00	12:00		
		12:00	13:00	1	1
		13:00	14:00	1	1
		14:00	15:00	3	1
		15:00	16:00	5	4
		16:00	17:00	2	5
		17:00	18:00		
		18:00	19:00		
12	12			12	12

12th September
AidaAura

	Tour	Report	Depart	Return	Duration	Depart	Capacity	Pax
1	The Eden Project	07:45	08:30	12:30	04:00	13:15	47	45
2	The Eden Project	08:15	09:00	16:35	07:35	17:20	47	45
3	The Lost Gardens	08:15	09:00	15:30	06:30	16:15	38	23
4	The Lost Gardens	09:00	09:45	17:15	07:30	18:00	47	45
5		09:15	10:00	12:00	02:00	12:45	25	13
6		09:45	10:30	15:00	04:30	15:45	47	15
7		10:00	10:45	15:45	05:00	16:30	47	45
8		10:00	10:45	15:45	05:00	16:30	47	45
9		10:00	10:45	15:45	05:00	16:30	47	45
10		10:00	10:45	15:15	04:30	16:00	47	30
11		11:30	12:15	16:05	03:50	16:50	30	28
12		12:15	13:00	15:00	02:00	15:45	25	12
13		12:45	13:30	17:30	04:00	18:15	47	45
14	Scenic Coast	13:00	13:45	16:15	02:30	17:00	47	25
Golf	Golf	10:35	10:45	17:30	06:45	17:40	3	3
		15	15					

PICK UP				DROP OFF	
Arrive	Depart	Profile		Arrive	Depart
1		07:00	08:00		
2	1	08:00	09:00		
3	3	09:00	10:00		
5	7	10:00	11:00		
1		11:00	12:00		
2	1	12:00	13:00	2	1
1	3	13:00	14:00		1
		14:00	15:00		
		15:00	16:00	7	2

		16:00	17:00	3	6
		17:00	18:00	3	3
		18:00	19:00		2
15	15			15	15

Falmouth Docks - Cruise Ship Coach Arrival and Departure Data
Coach Cruise Ship Profile (2023)

10th April Viking Jupiter				19th July Spirit of Discovery			
PICK UP		DROP OFF		PICK UP		DROP OFF	
START	FINISH	Arrive	Depart	Arrive	Depart	Arrive	Depart
07:00	08:00	4	0	0	0	0	0
08:00	09:00	12	9	0	0	6	0
09:00	10:00	0	7	0	0	0	0
10:00	11:00	0	0	0	0	0	0
11:00	12:00	0	0	3	0	0	0
12:00	13:00	7	0	9	7	1	0
13:00	14:00	6	8	4	7	0	1
14:00	15:00	0	5	0	2	0	0
15:00	16:00	0	0	0	0	0	1
16:00	17:00	0	0	6	0	0	0
17:00	18:00	0	0	7	8	0	0
18:00	19:00	0	0	0	5	0	0
		29	29	29	29	7	7

10th April Balmoral				19th July Silver Shadow			
PICK UP		DROP OFF		PICK UP		DROP OFF	
START	FINISH	Arrive	Depart	Arrive	Depart	Arrive	Depart
19:00	20:00	0	0	0	0	0	0
20:00	21:00	6	0	0	0	2	0
21:00	22:00	0	6	0	0	2	0
22:00	23:00	0	0	0	0	5	5
23:00	00:00	0	0	0	0	0	2
00:00	01:00	0	0	2	0	0	0
01:00	02:00	0	0	2	2	0	0
02:00	03:00	0	0	2	2	0	0
03:00	04:00	0	0	0	2	0	2
04:00	05:00	0	0	0	0	0	0
05:00	06:00	0	0	0	0	0	0
06:00	07:00	0	0	0	0	0	0
		6	6	6	6	9	9

23rd May Artania				11th September Viking Neptune			
PICK UP		DROP OFF		PICK UP		DROP OFF	
START	FINISH	Arrive	Depart	Arrive	Depart	Arrive	Depart
07:00	08:00	9	0	0	0	6	0
08:00	09:00	3	10	0	0	10	10
09:00	10:00	0	2	0	0	0	6
10:00	11:00	0	0	0	0	0	0
11:00	12:00	0	0	0	0	0	3
12:00	13:00	5	0	9	0	9	0
13:00	14:00	4	8	3	10	5	9
14:00	15:00	0	1	0	2	0	5
15:00	16:00	0	0	0	0	0	0
16:00	17:00	0	0	0	0	0	6
17:00	18:00	0	0	5	0	0	8
18:00	19:00	0	0	4	9	0	0
		21	21	21	21	30	30

13th June Viking Mars				12th September Seabourn Ovation			
PICK UP		DROP OFF		PICK UP		DROP OFF	
START	FINISH	Arrive	Depart	Arrive	Depart	Arrive	Depart
19:00	20:00	11	3	0	0	6	0
20:00	21:00	6	11	0	0	6	0
21:00	22:00	0	3	0	0	0	12
22:00	23:00	0	0	0	0	0	0
23:00	00:00	7	0	6	3	0	0
00:00	01:00	2	3	8	8	0	1
01:00	02:00	0	6	3	3	0	1
02:00	03:00	0	0	0	3	0	3
03:00	04:00	0	0	9	9	0	5
04:00	05:00	0	0	0	0	0	2
05:00	06:00	0	0	0	0	0	0
06:00	07:00	0	0	0	0	0	0
		26	26	26	26	12	12

23rd June Silver Moon				12th September AidaAura			
PICK UP		DROP OFF		PICK UP		DROP OFF	
START	FINISH	Arrive	Depart	Arrive	Depart	Arrive	Depart
07:00	08:00	21	0	0	0	1	0
08:00	09:00	0	5	0	0	2	1
09:00	10:00	0	16	0	0	3	3
10:00	11:00	0	0	0	0	5	7
11:00	12:00	0	0	0	0	1	0
12:00	13:00	0	0	5	0	2	1
13:00	14:00	0	0	16	11	1	3
14:00	15:00	0	0	0	10	0	0
15:00	16:00	0	0	0	0	0	7
16:00	17:00	0	0	0	0	0	3
17:00	18:00	0	0	0	0	0	3
18:00	19:00	0	0	0	0	0	2
		21	21	21	21	15	15

FINAL PROFILE

Total PICK UP		Total DROP OFF		Profile % PICK UP		Profile % DROP OFF	
START	FINISH	Arrive	Depart	Arrive	Depart	Arrive	Depart
19:00	20:00	58	3	0	0	33%	2%
20:00	21:00	53	46	0	0	30%	26%
21:00	22:00	5	63	0	0	3%	36%
22:00	23:00	10	12	0	0	6%	7%
23:00	00:00	8	2	12	3	5%	1%
00:00	01:00	26	4	47	23	15%	2%
01:00	02:00	16	35	37	47	9%	20%
02:00	03:00	0	11	12	24	0%	6%
03:00	04:00	0	0	24	24	0%	0%
04:00	05:00	0	0	17	13	0%	0%
05:00	06:00	0	0	23	20	0%	0%
06:00	07:00	0	0	4	22	0%	0%
		176	176	176	176	100%	100%

Appendix 5

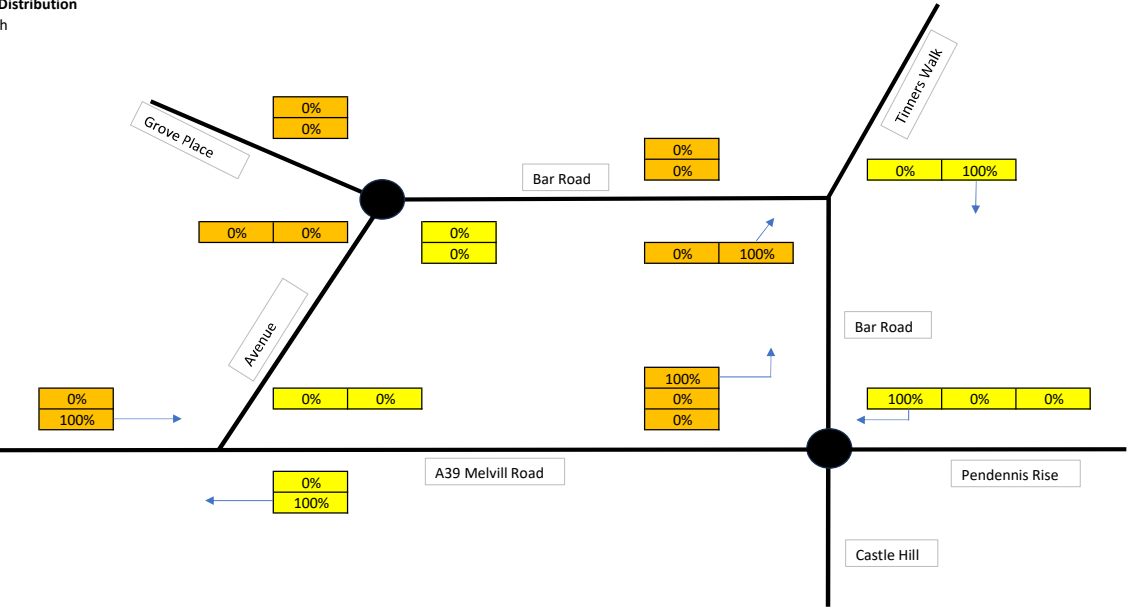
Trip Distribution Figures

Trip Distribution

Arrivals
Departures

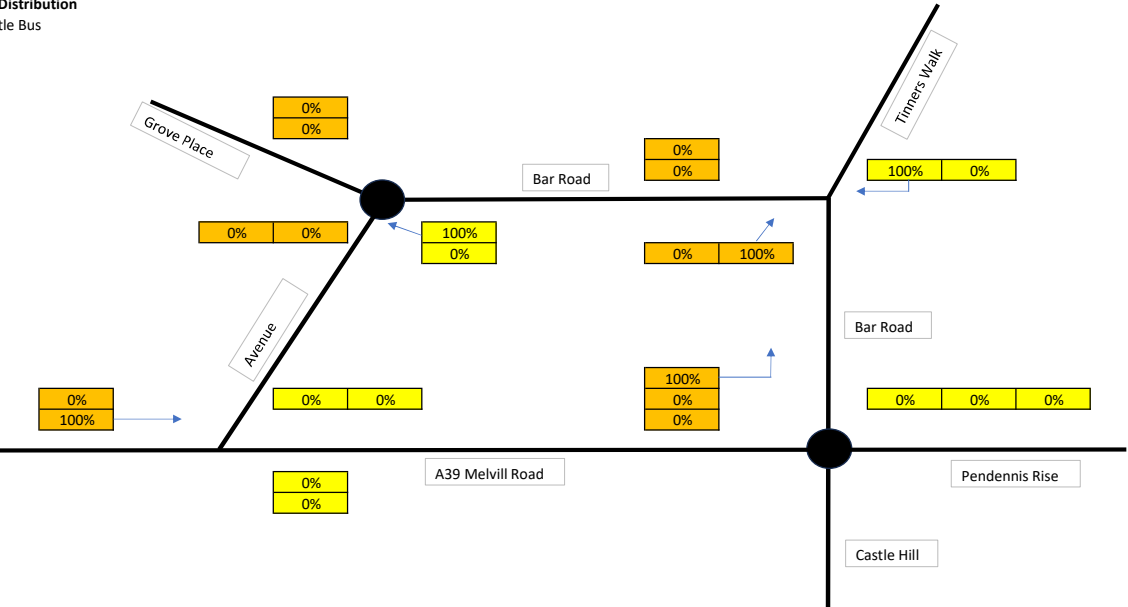
Trip Distribution

Coach



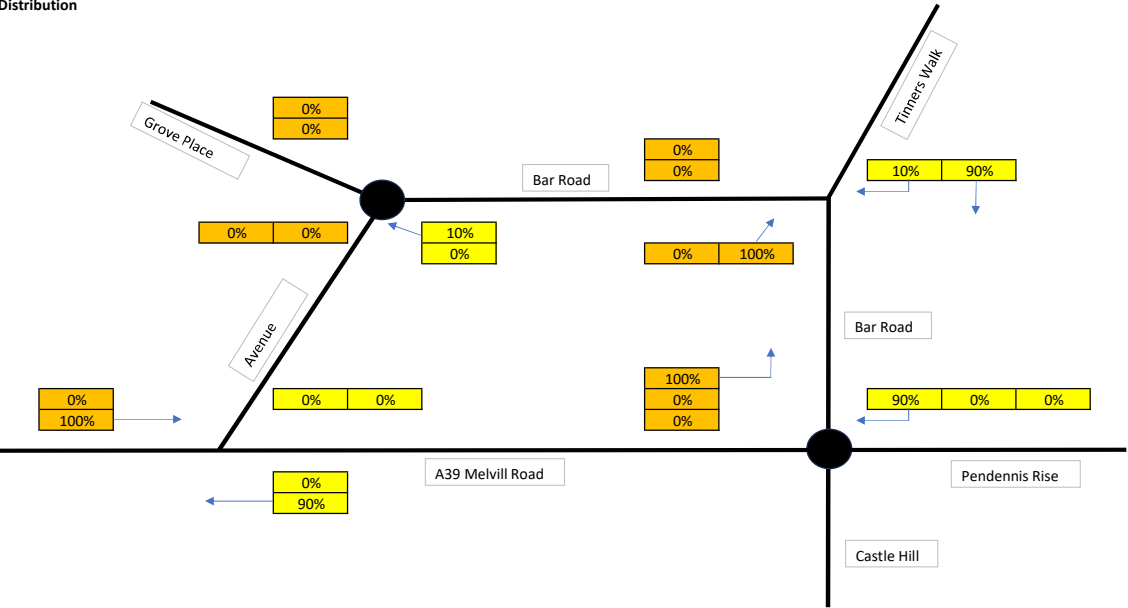
Trip Distribution

Shuttle Bus



Trip Distribution

Taxis



Appendix 6

Operational Assessment Trip Tables

AM Peak (07:00-08:00)**2023 November Surveys****Lights (M/Cycle + Car + LGV)**

07:00-08:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	31	1	32
Bar Road (East)	241	0	9	250
Bar Road (West)	58	31	0	89
TOTAL	299	62	10	371

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	1	0	1
Bar Road (East)	3	0	2	5
Bar Road (West)	0	0	0	0
TOTAL	3	1	2	6

Total Vehicles

07:00-08:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	32	1	33
Bar Road (East)	244	0	11	255
Bar Road (West)	58	31	0	89
TOTAL	302	63	12	377

2023 Adjusted Baseline**Lights (M/Cycle + Car + LGV)**

07:00-08:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	36	1	37
Bar Road (East)	280	0	10	290
Bar Road (West)	67	36	0	103
TOTAL	347	72	12	430

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	2	0	2
Bar Road (East)	17	0	2	19
Bar Road (West)	0	0	0	0
TOTAL	17	2	2	21

Total Vehicles

07:00-08:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	38	1	39
Bar Road (East)	296	0	13	309
Bar Road (West)	67	36	0	103
TOTAL	364	74	14	451

Proposed Development Trips

Lights (M/Cycle + Car + LGV)

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	0	0
Bar Road (East)	0	0	0	0
TOTAL	0	0	0	0

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	1	1
Bar Road (East)	0	13	0	13
TOTAL	0	13	1	14

Total Vehicles

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	1	1
Bar Road (East)	0	13	0	13
TOTAL	0	13	1	14

Construction Trips

Lights (M/Cycle + Car + LGV)

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	7	0	7
Tinners Walk	0	0	0	0
Bar Road (East)	0	60	0	60
TOTAL	0	67	0	67

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	0	0
Bar Road (East)	0	5	0	5
TOTAL	0	5	0	5

Total Vehicles

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	7	0	7
Tinners Walk	0	0	0	0
Bar Road (East)	0	65	0	65
TOTAL	0	72	0	72

2026 Adjusted Baseline (2023 Adjusted Baseline x 2023-2026 Traffic Growth)

Lights (M/Cycle + Car + LGV)

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	72	39	111
Tinners Walk	1	0	39	40
Bar Road (East)	11	301	0	312
TOTAL	12	373	77	463

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	3	3
Bar Road (East)	2	30	0	33
TOTAL	2	30	3	35

Total Vehicles

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	72	39	111
Tinners Walk	1	0	41	43
Bar Road (East)	14	331	0	345
TOTAL	15	403	80	498

2026 Adjusted Baseline + Construction Trips

Lights (M/Cycle + Car + LGV)

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	79	39	118
Tinners Walk	1	0	39	40
Bar Road (East)	11	361	0	372
TOTAL	12	440	77	530

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	3	3
Bar Road (East)	2	35	0	38
TOTAL	2	35	3	40

Total Vehicles

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	79	39	118
Tinners Walk	1	0	41	43
Bar Road (East)	14	396	0	410
TOTAL	15	475	80	570

2027 Adjusted Baseline (2023 Adjusted Baseline x 2023-2027 Traffic Growth)

Lights (M/Cycle + Car + LGV)

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	70	37	107
Tinners Walk	1	0	37	39
Bar Road (East)	11	291	0	302
TOTAL	12	361	75	448

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	3	3
Bar Road (East)	2	30	0	32
TOTAL	2	30	3	35

Total Vehicles

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	70	37	107
Tinners Walk	1	0	40	41
Bar Road (East)	13	321	0	334
TOTAL	14	391	77	483

2027 Adjusted Baseline + Proposed Development Trips

Lights (M/Cycle + Car + LGV)

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	70	37	107
Tinners Walk	1	0	37	39
Bar Road (East)	11	291	0	302
TOTAL	12	361	75	448

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	3	3
Bar Road (East)	2	43	0	46
TOTAL	2	43	3	49

Total Vehicles

07:00-08:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	70	37	107
Tinners Walk	1	0	41	42
Bar Road (East)	13	334	0	347
TOTAL	14	404	78	497

Development Peak (10:00-11:00)**2023 November Surveys****Lights (M/Cycle + Car + LGV)**

10:00-11:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	53	10	63
Bar Road (East)	29	0	44	73
Bar Road (West)	9	67	0	76
TOTAL	38	120	54	212

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	9	1	10
Bar Road (East)	4	0	1	5
Bar Road (West)	2	5	0	7
TOTAL	6	14	2	22

Total Vehicles

10:00-11:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	62	11	73
Bar Road (East)	33	0	45	78
Bar Road (West)	11	72	0	83
TOTAL	44	134	56	234

2023 Adjusted Baseline**Lights (M/Cycle + Car + LGV)**

10:00-11:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	84	14	98
Bar Road (East)	56	0	51	107
Bar Road (West)	13	78	0	91
TOTAL	69	162	65	296

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	13	4	17
Bar Road (East)	7	0	1	8
Bar Road (West)	5	6	0	11
TOTAL	12	19	5	37

Total Vehicles

10:00-11:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	97	18	115
Bar Road (East)	63	0	52	115
Bar Road (West)	18	84	0	102
TOTAL	81	181	71	332

Proposed Development Trips

Lights (M/Cycle + Car + LGV)

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	3	0	3
Tinners Walk	3	0	22	25
Bar Road (East)	0	22	0	22
TOTAL	3	25	22	50

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	3	0	3
Tinners Walk	3	0	3	6
Bar Road (East)	0	2	0	2
TOTAL	3	5	3	11

Total Vehicles

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	6	0	6
Tinners Walk	6	0	25	31
Bar Road (East)	0	25	0	25
TOTAL	6	30	25	61

Construction Trips

Lights (M/Cycle + Car + LGV)

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	0	0
Bar Road (East)	0	0	0	0
TOTAL	0	0	0	0

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	19	19
Bar Road (East)	0	19	0	19
TOTAL	0	19	19	38

Total Vehicles

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	19	19
Bar Road (East)	0	19	0	19
TOTAL	0	19	19	38

2026 Adjusted Baseline (2023 Adjusted Baseline x 2023-2026 Traffic Growth)

Lights (M/Cycle + Car + LGV)

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	17	84	100
Tinners Walk	18	0	114	132
Bar Road (East)	55	84	0	139
TOTAL	73	101	198	372

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	8	6	14
Tinners Walk	7	0	16	23
Bar Road (East)	1	9	0	10
TOTAL	8	18	22	48

Total Vehicles

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	25	90	115
Tinners Walk	25	0	130	156
Bar Road (East)	56	94	0	150
TOTAL	81	119	220	420

2026 Adjusted Baseline + Construction Trips

Lights (M/Cycle + Car + LGV)

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	17	84	100
Tinners Walk	18	0	114	132
Bar Road (East)	55	84	0	139
TOTAL	73	101	198	372

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	8	6	14
Tinners Walk	7	0	35	42
Bar Road (East)	1	28	0	29
TOTAL	8	37	41	86

Total Vehicles

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	25	90	115
Tinners Walk	25	0	149	175
Bar Road (East)	56	113	0	169
TOTAL	81	138	239	458

2027 Adjusted Baseline (2023 Adjusted Baseline x 2023-2027 Traffic Growth)

Lights (M/Cycle + Car + LGV)

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	16	81	97
Tinners Walk	18	0	111	128
Bar Road (East)	53	82	0	135
TOTAL	71	98	192	360

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	8	6	14
Tinners Walk	7	0	16	23
Bar Road (East)	1	9	0	10
TOTAL	8	18	22	48

Total Vehicles

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	25	87	111
Tinners Walk	25	0	127	151
Bar Road (East)	54	91	0	145
TOTAL	79	116	213	408

2027 Adjusted Baseline + Proposed Development Trips

Lights (M/Cycle + Car + LGV)

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	19	81	100
Tinners Walk	20	0	133	153
Bar Road (East)	53	104	0	157
TOTAL	73	123	214	410

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	11	6	17
Tinners Walk	10	0	19	29
Bar Road (East)	1	12	0	13
TOTAL	11	23	25	59

Total Vehicles

10:00-11:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	30	87	117
Tinners Walk	30	0	152	182
Bar Road (East)	54	116	0	170
TOTAL	85	146	238	469

PM Peak (16:00-17:00)
2023 November Surveys

Lights (M/Cycle + Car + LGV)

16:00-17:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	214	30	244
Bar Road (East)	26	0	19	45
Bar Road (West)	9	95	0	104
TOTAL	35	309	49	393

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	2	0	2
Bar Road (East)	0	0	2	2
Bar Road (West)	0	0	0	0
TOTAL	0	2	2	4

Total Vehicles

16:00-17:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	216	30	246
Bar Road (East)	26	0	21	47
Bar Road (West)	9	95	0	104
TOTAL	35	311	51	397

2023 Adjusted Baseline

Lights (M/Cycle + Car + LGV)

16:00-17:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	253	35	288
Bar Road (East)	35	0	22	57
Bar Road (West)	11	110	0	121
TOTAL	46	363	57	466

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	5	3	8
Bar Road (East)	4	0	2	6
Bar Road (West)	3	0	0	3
TOTAL	7	5	5	17

Total Vehicles

16:00-17:00	Tinners Walk	Bar Road (East)	Bar Road (West)	TOTAL
Tinners Walk	0	258	38	296
Bar Road (East)	39	0	24	63
Bar Road (West)	14	110	0	124
TOTAL	52	368	63	483

Proposed Development Trips

Lights (M/Cycle + Car + LGV)

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	1	0	1
Tinners Walk	1	0	4	5
Bar Road (East)	0	4	0	4
TOTAL	1	5	4	10

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	3	0	3
Tinners Walk	3	0	3	6
Bar Road (East)	0	4	0	4
TOTAL	3	7	3	13

Total Vehicles

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	4	0	4
Tinners Walk	4	0	7	11
Bar Road (East)	0	8	0	8
TOTAL	4	12	7	23

Construction Trips

Lights (M/Cycle + Car + LGV)

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	0	0
Bar Road (East)	0	0	0	0
TOTAL	0	0	0	0

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	20	20
Bar Road (East)	0	20	0	20
TOTAL	0	20	20	40

Total Vehicles

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	0	0	0
Tinners Walk	0	0	20	20
Bar Road (East)	0	20	0	20
TOTAL	0	20	20	40

2026 Adjusted Baseline (2023 Adjusted Baseline x 2023-2026 Traffic Growth)

Lights (M/Cycle + Car + LGV)

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	12	119	131
Tinners Walk	39	0	277	315
Bar Road (East)	24	42	0	66
TOTAL	62	54	395	512

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	6	0	6
Tinners Walk	6	0	8	14
Bar Road (East)	2	8	0	10
TOTAL	8	14	8	31

Total Vehicles

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	18	119	137
Tinners Walk	45	0	285	330
Bar Road (East)	26	50	0	76
TOTAL	71	68	404	543

2026 Adjusted Baseline + Construction Trips

Lights (M/Cycle + Car + LGV)

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	12	119	131
Tinners Walk	39	0	277	315
Bar Road (East)	24	42	0	66
TOTAL	62	54	395	512

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	6	0	6
Tinners Walk	6	0	28	34
Bar Road (East)	2	28	0	30
TOTAL	8	34	28	71

Total Vehicles

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	18	119	137
Tinners Walk	45	0	305	350
Bar Road (East)	26	70	0	96
TOTAL	71	88	424	583

2027 Adjusted Baseline (2023 Adjusted Baseline x 2023-2027 Traffic Growth)

Lights (M/Cycle + Car + LGV)

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	12	115	127
Tinners Walk	37	0	268	305
Bar Road (East)	23	41	0	64
TOTAL	60	53	382	495

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	6	0	6
Tinners Walk	6	0	8	14
Bar Road (East)	2	8	0	10
TOTAL	8	14	8	30

Total Vehicles

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	18	115	133
Tinners Walk	43	0	276	319
Bar Road (East)	25	48	0	74
TOTAL	69	66	391	526

2027 Adjusted Baseline + Proposed Development Trips

Lights (M/Cycle + Car + LGV)

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	12	115	127
Tinners Walk	38	0	272	310
Bar Road (East)	23	45	0	68
TOTAL	61	58	387	505

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	9	0	9
Tinners Walk	9	0	11	20
Bar Road (East)	2	12	0	14
TOTAL	11	21	11	43

Total Vehicles

16:00-17:00	Bar Road (West)	Tinners Walk	Bar Road (East)	TOTAL
Bar Road (West)	0	22	115	136
Tinners Walk	47	0	283	330
Bar Road (East)	25	57	0	82
TOTAL	72	78	398	549

AM Peak (07:00-08:00)**2023 November Surveys****Lights (M/Cycle + Car + LGV)**

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	5	19	42	66
Pendennis Rise	3	0	3	3	9
Castle Hill	17	1	0	7	25
Melvill Road	229	5	22	1	257
TOTAL	249	11	44	53	357

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	0	1
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	4	0	0	0	4
TOTAL	4	0	1	0	5

Total Vehicles

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	5	20	42	67
Pendennis Rise	3	0	3	3	9
Castle Hill	17	1	0	7	25
Melvill Road	233	5	22	1	261
TOTAL	253	11	45	53	362

2023 Adjusted Baseline**Lights (M/Cycle + Car + LGV)**

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	6	22	49	77
Pendennis Rise	3	0	3	3	10
Castle Hill	20	1	0	8	29
Melvill Road	266	6	26	1	298
TOTAL	289	13	51	61	414

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	1	2
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	18	0	0	0	18
TOTAL	18	0	1	1	20

Total Vehicles

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	6	23	49	78
Pendennis Rise	3	0	3	3	10
Castle Hill	20	1	0	8	29
Melvill Road	283	6	26	1	316
TOTAL	307	13	52	62	434

Proposed Development Trips

Lights (M/Cycle + Car + LGV)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	0	0
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	0	0	0	0	0
TOTAL	0	0	0	0	0

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	1	1
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	13	0	0	0	13
TOTAL	13	0	0	1	14

Total Vehicles

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	1	1
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	13	0	0	0	13
TOTAL	13	0	0	1	14

Construction Trips

Lights (M/Cycle + Car + LGV)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	0	0
Pendennis Rise	0	0	0	0	0
Castle Hill	19	0	0	0	19
Melvill Road	48	0	0	0	48
TOTAL	67	0	0	0	67

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road				0	0
Pendennis Rise					0
Castle Hill					0
Melvill Road	5				5
TOTAL	5	0	0	0	5

Total Vehicles

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	0	0
Pendennis Rise	0	0	0	0	0
Castle Hill	19	0	0	0	19
Melvill Road	53	0	0	0	53
TOTAL	72	0	0	0	72

2026 Adjusted Baseline (2023 Adjusted Baseline x 2023-2026 Traffic Growth)

Lights (M/Cycle + Car + LGV)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	6	23	50	79
Pendennis Rise	4	0	4	4	11
Castle Hill	20	1	0	8	30
Melvill Road	275	6	26	1	308
TOTAL	299	13	53	64	428

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	1	2
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	18	0	0	0	18
TOTAL	18	0	1	1	20

Total Vehicles

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	6	24	51	81
Pendennis Rise	4	0	4	4	11
Castle Hill	20	1	0	8	30
Melvill Road	293	6	26	1	326
TOTAL	317	13	54	64	448

2026 Adjusted Baseline + Construction Trips

Lights (M/Cycle + Car + LGV)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	6	23	50	79
Pendennis Rise	4	0	4	4	11
Castle Hill	39	1	0	8	49
Melvill Road	323	6	26	1	356
TOTAL	366	13	53	64	495

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	1	2
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	23	0	0	0	23
TOTAL	23	0	1	1	25

Total Vehicles

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	6	24	51	81
Pendennis Rise	4	0	4	4	11
Castle Hill	39	1	0	8	49
Melvill Road	346	6	26	1	379
TOTAL	389	13	54	64	520

2027 Adjusted Baseline (2023 Adjusted Baseline x 2023-2027 Traffic Growth)

Lights (M/Cycle + Car + LGV)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	6	23	51	80
Pendennis Rise	4	0	4	4	11
Castle Hill	21	1	0	8	30
Melvill Road	277	6	27	1	310
TOTAL	301	13	53	64	431

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	1	2
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	18	0	0	0	18
TOTAL	18	0	1	1	20

Total Vehicles

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	6	24	51	82
Pendennis Rise	4	0	4	4	11
Castle Hill	21	1	0	8	30
Melvill Road	294	6	27	1	328
TOTAL	319	13	54	65	451

2027 Adjusted Baseline + Proposed Development Trips

Lights (M/Cycle + Car + LGV)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	6	23	50	79
Pendennis Rise	4	0	4	4	11
Castle Hill	39	1	0	8	49
Melvill Road	323	6	26	1	356
TOTAL	366	13	53	64	495

Heavies (OGV1 + OVG2 + Bus)

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	1	2
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	23	0	0	0	23
TOTAL	23	0	1	1	25

Total Vehicles

07:00-08:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	6	24	51	81
Pendennis Rise	4	0	4	4	11
Castle Hill	39	1	0	8	49
Melvill Road	346	6	26	1	379
TOTAL	389	13	54	64	520

Development Peak (10:00-11:00)**2023 November Surveys****Lights (M/Cycle + Car + LGV)**

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	4	5	38	73	120
Pendennis Rise	4	0	3	7	14
Castle Hill	9	0	2	32	43
Melvill Road	59	6	82	3	150
TOTAL	76	11	125	115	327

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	15	16
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	1	1
Melvill Road	5	0	0	0	5
TOTAL	5	0	1	16	22

Total Vehicles

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	4	5	39	88	136
Pendennis Rise	4	0	3	7	14
Castle Hill	9	0	2	33	44
Melvill Road	64	6	82	3	155
TOTAL	81	11	126	131	349

2023 Adjusted Baseline**Lights (M/Cycle + Car + LGV)**

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	5	6	51	103	164
Pendennis Rise	5	0	3	8	16
Castle Hill	18	0	2	37	57
Melvill Road	86	7	95	3	192
TOTAL	113	13	152	151	429

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	20	21
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	1	1
Melvill Road	8	0	0	0	8
TOTAL	8	0	1	21	31

Total Vehicles

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	5	6	52	123	185
Pendennis Rise	5	0	3	8	16
Castle Hill	18	0	2	38	58
Melvill Road	94	7	95	3	200
TOTAL	121	13	153	173	460

Proposed Development Trips

Lights (M/Cycle + Car + LGV)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	7	18	25
Pendennis Rise	0	0	0	0	0
Castle Hill	7	0	0	0	7
Melvill Road	18	0	0	0	18
TOTAL	25	0	7	18	50

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	3	3
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	2	0	0	0	2
TOTAL	2	0	0	3	5

Total Vehicles

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	7	21	28
Pendennis Rise	0	0	0	0	0
Castle Hill	7	0	0	0	7
Melvill Road	20	0	0	0	20
TOTAL	27	0	7	21	55

Construction Trips

Lights (M/Cycle + Car + LGV)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	0	0
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	0	0	0	0	0
TOTAL	0	0	0	0	0

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	19	19
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	19	0	0	0	19
TOTAL	19	0	0	19	38

Total Vehicles

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	19	19
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	19	0	0	0	19
TOTAL	19	0	0	19	38

2026 Adjusted Baseline (2023 Adjusted Baseline x 2023-2026 Traffic Growth)

Lights (M/Cycle + Car + LGV)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	5	6	53	106	170
Pendennis Rise	5	0	4	8	17
Castle Hill	18	0	2	38	59
Melvill Road	89	7	98	4	198
TOTAL	117	13	157	156	444

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	20	21
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	1	1
Melvill Road	8	0	0	0	8
TOTAL	8	0	1	21	31

Total Vehicles

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	5	6	54	126	191
Pendennis Rise	5	0	4	8	17
Castle Hill	18	0	2	40	60
Melvill Road	97	7	98	4	206
TOTAL	125	13	158	178	475

2026 Adjusted Baseline + Construction Trips

Lights (M/Cycle + Car + LGV)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	5	6	53	106	170
Pendennis Rise	5	0	4	8	17
Castle Hill	18	0	2	38	59
Melvill Road	89	7	98	4	198
TOTAL	117	13	157	156	444

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	39	40
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	1	1
Melvill Road	27	0	0	0	27
TOTAL	27	0	1	40	69

Total Vehicles

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	5	6	54	145	210
Pendennis Rise	5	0	4	8	17
Castle Hill	18	0	2	40	60
Melvill Road	116	7	98	4	225
TOTAL	144	13	158	197	513

2027 Adjusted Baseline (2023 Adjusted Baseline x 2023-2027 Traffic Growth)

Lights (M/Cycle + Car + LGV)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	5	6	53	107	171
Pendennis Rise	5	0	4	8	17
Castle Hill	18	0	2	39	59
Melvill Road	90	7	99	4	200
TOTAL	118	13	158	157	447

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	20	21
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	1	1
Melvill Road	8	0	0	0	8
TOTAL	8	0	1	21	31

Total Vehicles

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	5	6	55	127	192
Pendennis Rise	5	0	4	8	17
Castle Hill	18	0	2	40	61
Melvill Road	98	7	99	4	208
TOTAL	126	13	160	179	478

2027 Adjusted Baseline + Proposed Development Trips

Lights (M/Cycle + Car + LGV)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	5	6	53	106	170
Pendennis Rise	5	0	4	8	17
Castle Hill	18	0	2	38	59
Melvill Road	89	7	98	4	198
TOTAL	117	13	157	156	444

Heavies (OGV1 + OVG2 + Bus)

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	39	40
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	1	1
Melvill Road	27	0	0	0	27
TOTAL	27	0	1	40	69

Total Vehicles

10:00-11:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	5	6	54	145	210
Pendennis Rise	5	0	4	8	17
Castle Hill	18	0	2	40	60
Melvill Road	116	7	98	4	225
TOTAL	144	13	158	197	513

PM Peak (16:00-17:00)**2023 November Surveys****Lights (M/Cycle + Car + LGV)**

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	6	64	245	315
Pendennis Rise	2	0	6	19	27
Castle Hill	6	3	1	47	57
Melvill Road	42	14	59	1	116
TOTAL	50	23	130	312	515

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	2	2
Pendennis Rise	0	0	0	2	2
Castle Hill	1	0	0	0	1
Melvill Road	1	3	0	0	4
TOTAL	2	3	0	4	9

Total Vehicles

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	6	64	247	317
Pendennis Rise	2	0	6	21	29
Castle Hill	7	3	1	47	58
Melvill Road	43	17	59	1	120
TOTAL	52	26	130	316	524

2023 Adjusted Baseline**Lights (M/Cycle + Car + LGV)**

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	7	76	288	370
Pendennis Rise	2	0	7	22	31
Castle Hill	8	3	1	55	68
Melvill Road	52	16	68	1	138
TOTAL	63	27	152	365	607

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	5	5
Pendennis Rise	0	0	0	2	2
Castle Hill	1	0	0	0	1
Melvill Road	5	3	0	0	9
TOTAL	6	3	0	8	17

Total Vehicles

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	7	76	293	376
Pendennis Rise	2	0	7	24	34
Castle Hill	10	3	1	55	69
Melvill Road	57	20	68	1	147
TOTAL	69	30	152	373	625

Proposed Development Trips

Lights (M/Cycle + Car + LGV)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	4	5
Pendennis Rise	0	0	0	0	0
Castle Hill	1	0	0	0	1
Melvill Road	4	0	0	0	4
TOTAL	5	0	1	4	10

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	3	3
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	4	0	0	0	4
TOTAL	4	0	0	3	7

Total Vehicles

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	1	7	8
Pendennis Rise	0	0	0	0	0
Castle Hill	1	0	0	0	1
Melvill Road	7	0	0	0	7
TOTAL	9	0	1	7	17

Construction Trips

Lights (M/Cycle + Car + LGV)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	0	0
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	0	0	0	0	0
TOTAL	0	0	0	0	0

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	20	20
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	20	0	0	0	20
TOTAL	20	0	0	20	40

Total Vehicles

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	20	20
Pendennis Rise	0	0	0	0	0
Castle Hill	0	0	0	0	0
Melvill Road	20	0	0	0	20
TOTAL	20	0	0	20	40

2026 Adjusted Baseline (2023 Adjusted Baseline x 2023-2026 Traffic Growth)

Lights (M/Cycle + Car + LGV)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	7	78	298	383
Pendennis Rise	2	0	7	23	32
Castle Hill	9	4	1	56	70
Melvill Road	54	17	71	1	143
TOTAL	65	28	157	378	628

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	5	5
Pendennis Rise	0	0	0	2	2
Castle Hill	1	0	0	0	1
Melvill Road	5	3	0	0	9
TOTAL	6	3	0	8	17

Total Vehicles

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	7	78	303	388
Pendennis Rise	2	0	7	25	35
Castle Hill	10	4	1	56	71
Melvill Road	59	20	71	1	151
TOTAL	71	31	157	386	645

2026 Adjusted Baseline + Construction Trips

Lights (M/Cycle + Car + LGV)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	7	78	298	383
Pendennis Rise	2	0	7	23	32
Castle Hill	9	4	1	56	70
Melvill Road	54	17	71	1	143
TOTAL	65	28	157	378	628

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	25	25
Pendennis Rise	0	0	0	2	2
Castle Hill	1	0	0	0	1
Melvill Road	25	3	0	0	29
TOTAL	26	3	0	28	57

Total Vehicles

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	7	78	323	408
Pendennis Rise	2	0	7	25	35
Castle Hill	10	4	1	56	71
Melvill Road	79	20	71	1	171
TOTAL	91	31	157	406	685

2027 Adjusted Baseline (2023 Adjusted Baseline x 2023-2027 Traffic Growth)

Lights (M/Cycle + Car + LGV)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	7	79	300	386
Pendennis Rise	2	0	7	23	33
Castle Hill	9	4	1	57	70
Melvill Road	54	17	71	1	144
TOTAL	66	28	158	380	632

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	5	5
Pendennis Rise	0	0	0	2	2
Castle Hill	1	0	0	0	1
Melvill Road	5	4	0	0	9
TOTAL	6	4	0	8	17

Total Vehicles

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	7	79	305	391
Pendennis Rise	2	0	7	25	35
Castle Hill	10	4	1	57	71
Melvill Road	59	20	71	1	152
TOTAL	72	31	158	388	650

2027 Adjusted Baseline + Proposed Development Trips

Lights (M/Cycle + Car + LGV)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	7	78	298	383
Pendennis Rise	2	0	7	23	32
Castle Hill	9	4	1	56	70
Melvill Road	54	17	71	1	143
TOTAL	65	28	157	378	628

Heavies (OGV1 + OVG2 + Bus)

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	0	0	25	25
Pendennis Rise	0	0	0	2	2
Castle Hill	1	0	0	0	1
Melvill Road	25	3	0	0	29
TOTAL	26	3	0	28	57

Total Vehicles

16:00-17:00	Bar Road	Pendennis Rise	Castle Hill	Melvill Road	Total
Bar Road	0	7	78	323	408
Pendennis Rise	2	0	7	25	35
Castle Hill	10	4	1	56	71
Melvill Road	79	20	71	1	171
TOTAL	91	31	157	406	685

Appendix 7

PICADY Outputs

Junctions 9																	
PICADY 9 - Priority Intersection Module																	
Version: 9.5.2.1013 © Copyright TRL Limited, 2019																	
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Filename: Tinnars Walk_Bar Road priority junction_IS.j9
Report generation date: 15/11/2024 09:05:56

- »2023 Baseline, AM Peak
- »2023 Baseline, Inter Peak
- »2023 Baseline, PM Peak
- »2023 Adjusted Baseline, AM Peak
- »2023 Adjusted Baseline, Inter Peak
- »2023 Adjusted Baseline, PM Peak
- »2023 Adjusted Baseline + Development, AM Peak
- »2023 Adjusted Baseline + Development, Inter Peak
- »2023 Adjusted Baseline + Development, PM Peak

Summary of junction performance

	AM Peak							Inter Peak							PM Peak									
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2023 Baseline																							
Stream B-C	D 1	0.1	5.52	0.05	A	8.08	A	72 %	D 2	0.1	6.78	0.11	A	3.48	A	399 %	D 3	0.5	8.38	0.36	A	5.75	A	111 %
Stream B-A		0.0	10.23	0.00	B			[Stream C-AB]		0.0	9.55	0.03	A			[Stream B-A]		0.1	10.05	0.08	B			[Stream B-C]
Stream C-AB		0.9	11.52	0.47	B			0.1		6.95	0.07	A	0.1			6.36		0.05	A					
	2023 Adjusted Baseline																							
Stream B-C	D 4	0.1	5.72	0.06	A	11.46	B	34 %	D 5	0.2	7.41	0.18	A	4.45	A	215 %	D 6	0.8	9.89	0.44	A	6.80	A	72 %
Stream B-A		0.0	11.03	0.00	B			[Stream C-AB]		0.1	11.57	0.06	B			[Stream B-A]		0.1	11.51	0.12	B			[Stream B-A]
Stream C-AB		1.5	16.12	0.60	C			0.2		7.43	0.14	A	0.1			7.33		0.08	A					
	2023 Adjusted Baseline + Development																							

Stream B-C	D 7	0.1	5.83	0.06	A	13.79	B	[Stream C-AB]	D 8	0.3	7.88	0.23	A	5.26	A	150 %	[Stream B-A]	D 9	0.8	10.47	0.46	B	7.32	A	62 %	[Stream B-A]
Stream B-A		0.0	11.35	0.00	B					0.1	12.92	0.09	B						0.2	12.71	0.14	B				
Stream C-AB		1.8	19.07	0.65	C					0.3	7.89	0.19	A						0.1	7.86	0.11	A				

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

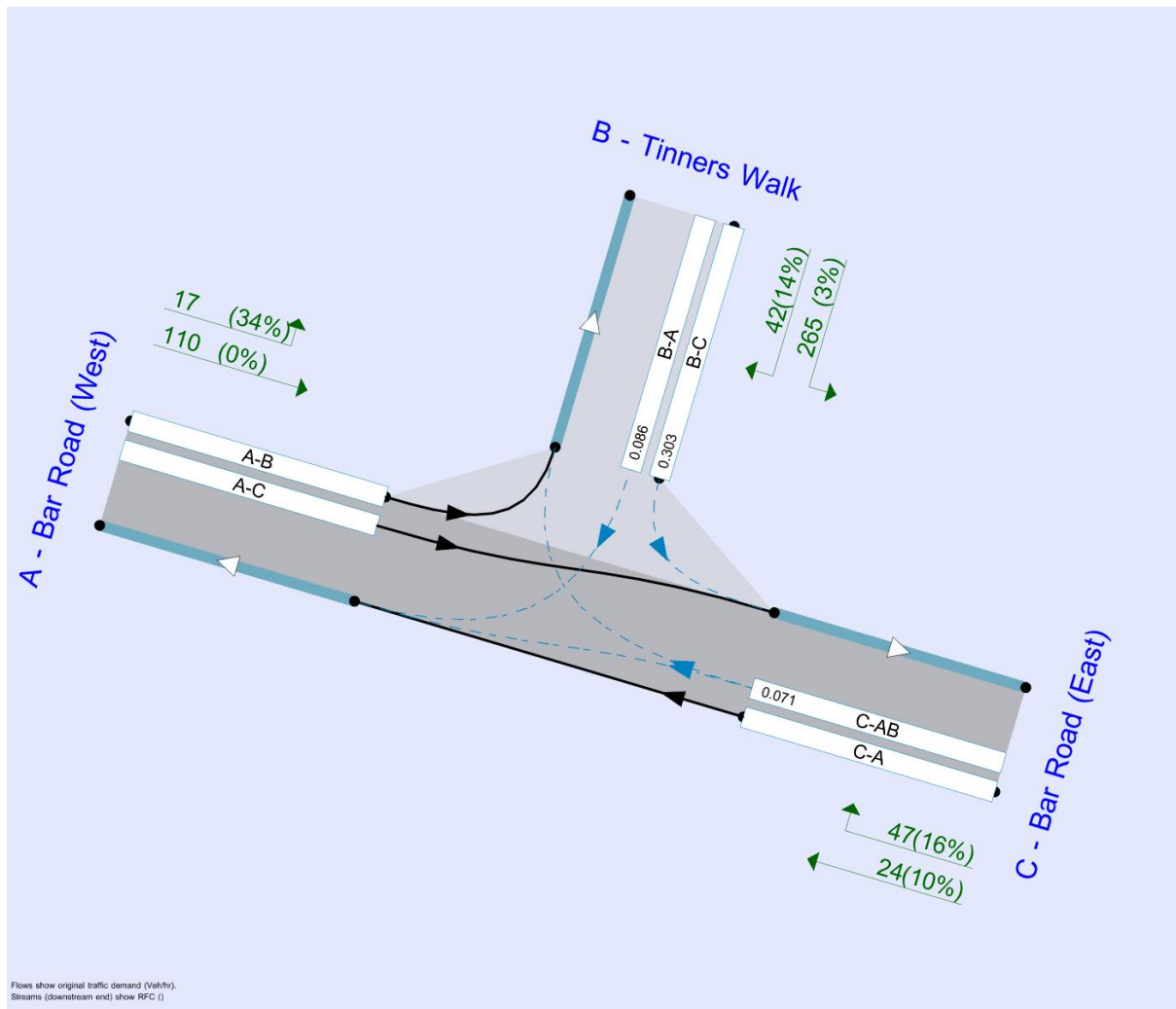
File summary

File Description

Title	Falmouth Docks Development
Location	
Site number	
Date	26/07/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	RAMBOLL\BBABA
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Baseline	AM Peak	ONE HOUR	06:45	08:15	15	✓
D2	2023 Baseline	Inter Peak	ONE HOUR	09:45	11:15	15	✓
D3	2023 Baseline	PM Peak	ONE HOUR	15:45	17:15	15	✓
D4	2023 Adjusted Baseline	AM Peak	ONE HOUR	06:45	08:15	15	✓
D5	2023 Adjusted Baseline	Inter Peak	ONE HOUR	09:45	11:15	15	✓
D6	2023 Adjusted Baseline	PM Peak	ONE HOUR	15:45	17:15	15	✓
D7	2023 Adjusted Baseline + Development	AM Peak	ONE HOUR	06:45	08:15	15	✓
D8	2023 Adjusted Baseline + Development	Inter Peak	ONE HOUR	09:45	11:15	15	✓

D9	2023 Adjusted Baseline + Development	PM Peak	ONE HOUR	15:45	17:15	15	✓
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Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2023 Baseline, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Bar Road (East) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		8.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	72	Stream C-AB

Arms

Arms

Arm	Name	Description	Arm type
A	Bar Road (West)		Major
B	Tinners Walk		Minor
C	Bar Road (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Bar Road (East)	5.50			60.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Tinners Walk	One lane plus flare	8.20	5.30	4.00	3.60	2.20		1.00	26	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	451	0.084	0.212	0.133	0.303

B-C	725	0.114	0.287	-	-
C-B	609	0.241	0.241	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Baseline	AM Peak	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bar Road (West)		ONE HOUR	✓	89	100.000
B - Tinnerns Walk		ONE HOUR	✓	33	100.000
C - Bar Road (East)		ONE HOUR	✓	255	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	0	58	31
	B - Tinnerns Walk	1	0	32
	C - Bar Road (East)	11	244	0

Proportions

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	0.00	0.65	0.35
	B - Tinnerns Walk	0.03	0.00	0.97
	C - Bar Road (East)	0.04	0.96	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	0	0	0
	B - Tinnerns Walk	0	0	3
	C - Bar Road (East)	18	1	0

Average PCU Per Veh

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	1.000	1.000	1.000
	B - Tinnerns Walk	1.000	1.000	1.030
	C - Bar Road (East)	1.180	1.010	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bar Road (West)	06:45-07:00	67	67

	07:00-07:15	80	80
	07:15-07:30	98	98
	07:30-07:45	98	98
	07:45-08:00	80	80
	08:00-08:15	67	67
B - Tinnars Walk	06:45-07:00	25	26
	07:00-07:15	30	31
	07:15-07:30	36	37
	07:30-07:45	36	37
	07:45-08:00	30	31
	08:00-08:15	25	26
C - Bar Road (East)	06:45-07:00	192	195
	07:00-07:15	229	233
	07:15-07:30	281	286
	07:30-07:45	281	286
	07:45-08:00	229	233
	08:00-08:15	192	195

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	5.52	0.1	A	29	44
B-A	0.00	10.23	0.0	B	0.92	1
C-AB	0.47	11.52	0.9	B	228	342
C-A					6	9
A-B					53	80
A-C					28	43

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	6	693	0.035	24	0.0	0.0	5.383	A
B-A	0.75	0.19	385	0.002	0.75	0.0	0.0	9.373	A
C-AB	186	47	592	0.315	184	0.0	0.5	8.801	A
C-A	6	1			6				
A-B	44	11			44				
A-C	23	6			23				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	690	0.042	29	0.0	0.0	5.441	A
B-A	0.90	0.22	371	0.002	0.90	0.0	0.0	9.716	A
C-AB	223	56	590	0.378	223	0.5	0.6	9.785	A
C-A	6	2			6				

A-B	52	13			52				
A-C	28	7			28				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	35	9	687	0.051	35	0.0	0.1	5.522	A
B-A	1	0.28	353	0.003	1	0.0	0.0	10.216	B
C-AB	274	69	587	0.468	273	0.6	0.9	11.439	B
C-A	6	2			6				
A-B	64	16			64				
A-C	34	9			34				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	35	9	687	0.051	35	0.1	0.1	5.522	A
B-A	1	0.28	353	0.003	1	0.0	0.0	10.226	B
C-AB	274	69	587	0.468	274	0.9	0.9	11.518	B
C-A	6	2			6				
A-B	64	16			64				
A-C	34	9			34				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	690	0.042	29	0.1	0.0	5.442	A
B-A	0.90	0.22	371	0.002	0.90	0.0	0.0	9.731	A
C-AB	223	56	590	0.378	224	0.9	0.6	9.882	A
C-A	6	2			6				
A-B	52	13			52				
A-C	28	7			28				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	6	693	0.035	24	0.0	0.0	5.385	A
B-A	0.75	0.19	384	0.002	0.75	0.0	0.0	9.393	A
C-AB	186	47	592	0.315	187	0.6	0.5	8.911	A
C-A	6	1			6				
A-B	44	11			44				
A-C	23	6			23				

2023 Baseline, Inter Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Bar Road (East) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.48	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	399	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Baseline	Inter Peak	ONE HOUR	09:45	11:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bar Road (West)		ONE HOUR	✓	83	100.000
B - Tinnerns Walk		ONE HOUR	✓	73	100.000
C - Bar Road (East)		ONE HOUR	✓	78	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	0	11	72
	B - Tinnerns Walk	11	0	62
C - Bar Road (East)	45	33	0	

Proportions

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	0.00	0.13	0.87
	B - Tinnerns Walk	0.15	0.00	0.85
C - Bar Road (East)	0.58	0.42	0.00	

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	0	18	0
	B - Tinnerns Walk	9	0	15
C - Bar Road (East)	2	12	0	

Average PCU Per Veh

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	1.000	1.180	1.000
	B - Tinnerns Walk	1.090	1.000	1.150
C - Bar Road (East)	1.020	1.120	1.000	

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bar Road (West)	09:45-10:00	62	64
	10:00-10:15	75	76
	10:15-10:30	91	94
	10:30-10:45	91	94
	10:45-11:00	75	76
	11:00-11:15	62	64
B - Tinnars Walk	09:45-10:00	55	63
	10:00-10:15	66	75
	10:15-10:30	80	92
	10:30-10:45	80	92
	10:45-11:00	66	75
	11:00-11:15	55	63
C - Bar Road (East)	09:45-10:00	59	62
	10:00-10:15	70	74
	10:15-10:30	86	91
	10:30-10:45	86	91
	10:45-11:00	70	74
	11:00-11:15	59	62

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.11	6.78	0.1	A	57	85
B-A	0.03	9.55	0.0	A	10	15
C-AB	0.07	6.95	0.1	A	33	49
C-A					39	58
A-B					10	15
A-C					66	99

Main Results for each time segment

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	47	12	608	0.077	46	0.0	0.1	6.409	A
B-A	8	2	401	0.021	8	0.0	0.0	9.172	A
C-AB	26	7	553	0.048	26	0.0	0.1	6.828	A
C-A	32	8			32				
A-B	8	2			8				
A-C	54	14			54				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	56	14	604	0.092	56	0.1	0.1	6.561	A

B-A	10	2	396	0.025	10	0.0	0.0	9.329	A
C-AB	32	8	555	0.058	32	0.1	0.1	6.880	A
C-A	38	10			38				
A-B	10	2			10				
A-C	65	16			65				

10:15 - 10:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	68	17	599	0.114	68	0.1	0.1	6.773	A
B-A	12	3	389	0.031	12	0.0	0.0	9.551	A
C-AB	40	10	558	0.071	40	0.1	0.1	6.948	A
C-A	46	11			46				
A-B	12	3			12				
A-C	79	20			79				

10:30 - 10:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	68	17	599	0.114	68	0.1	0.1	6.776	A
B-A	12	3	389	0.031	12	0.0	0.0	9.551	A
C-AB	40	10	558	0.071	40	0.1	0.1	6.947	A
C-A	46	11			46				
A-B	12	3			12				
A-C	79	20			79				

10:45 - 11:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	56	14	604	0.092	56	0.1	0.1	6.567	A
B-A	10	2	396	0.025	10	0.0	0.0	9.331	A
C-AB	32	8	555	0.058	32	0.1	0.1	6.875	A
C-A	38	10			38				
A-B	10	2			10				
A-C	65	16			65				

11:00 - 11:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	47	12	608	0.077	47	0.1	0.1	6.419	A
B-A	8	2	401	0.021	8	0.0	0.0	9.178	A
C-AB	26	7	553	0.048	27	0.1	0.1	6.830	A
C-A	32	8			32				
A-B	8	2			8				
A-C	54	14			54				

2023 Baseline, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Bar Road (East) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.75	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	111	Stream B-C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2023 Baseline	PM Peak	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bar Road (West)		ONE HOUR	✓	104	100.000
B - Tinnerns Walk		ONE HOUR	✓	246	100.000
C - Bar Road (East)		ONE HOUR	✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	0	9	95
	B - Tinnerns Walk	30	0	216
	C - Bar Road (East)	21	26	0

Proportions

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	0.00	0.09	0.91
	B - Tinnerns Walk	0.12	0.00	0.88
	C - Bar Road (East)	0.45	0.55	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	0	0	0
	B - Tinnerns Walk	4	0	1
	C - Bar Road (East)	10	0	0

Average PCU Per Veh

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	1.000	1.000	1.000
	B - Tinnerns Walk	1.040	1.000	1.010
	C - Bar Road (East)	1.100	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bar Road (West)	15:45-16:00	78	78
	16:00-16:15	93	93
	16:15-16:30	115	115
	16:30-16:45	115	115
	16:45-17:00	93	93
	17:00-17:15	78	78
B - Tinnars Walk	15:45-16:00	185	188
	16:00-16:15	221	224
	16:15-16:30	271	275
	16:30-16:45	271	275
	16:45-17:00	221	224
	17:00-17:15	185	188
C - Bar Road (East)	15:45-16:00	35	37
	16:00-16:15	42	44
	16:15-16:30	52	54
	16:30-16:45	52	54
	16:45-17:00	42	44
	17:00-17:15	35	37

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.36	8.38	0.5	A	198	297
B-A	0.08	10.05	0.1	B	28	41
C-AB	0.05	6.36	0.1	A	25	37
C-A					18	28
A-B					8	12
A-C					87	131

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	163	41	683	0.238	161	0.0	0.3	6.885	A
B-A	23	6	414	0.055	22	0.0	0.1	9.189	A
C-AB	20	5	600	0.034	20	0.0	0.0	6.205	A
C-A	15	4			15				
A-B	7	2			7				
A-C	72	18			72				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	194	49	676	0.287	194	0.3	0.4	7.457	A
B-A	27	7	406	0.067	27	0.1	0.1	9.507	A
C-AB	24	6	598	0.040	24	0.0	0.0	6.267	A
C-A	18	5			18				
A-B	8	2			8				
A-C	85	21			85				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	238	59	667	0.356	237	0.4	0.5	8.358	A
B-A	33	8	391	0.084	33	0.1	0.1	10.041	B
C-AB	30	7	596	0.050	30	0.0	0.1	6.354	A
C-A	22	5			22				
A-B	10	2			10				
A-C	105	26			105				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	238	59	667	0.356	238	0.5	0.5	8.382	A
B-A	33	8	391	0.084	33	0.1	0.1	10.049	B
C-AB	30	7	596	0.050	30	0.1	0.1	6.359	A
C-A	22	5			22				
A-B	10	2			10				
A-C	105	26			105				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	194	49	676	0.287	195	0.5	0.4	7.488	A
B-A	27	7	405	0.067	27	0.1	0.1	9.518	A
C-AB	24	6	598	0.040	24	0.1	0.0	6.273	A
C-A	18	5			18				
A-B	8	2			8				
A-C	85	21			85				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	163	41	682	0.238	163	0.4	0.3	6.933	A
B-A	23	6	414	0.055	23	0.1	0.1	9.205	A
C-AB	20	5	600	0.034	20	0.0	0.0	6.213	A
C-A	15	4			15				
A-B	7	2			7				
A-C	72	18			72				

2023 Adjusted Baseline, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Bar Road (East) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		11.46	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	34	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2023 Adjusted Baseline	AM Peak	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bar Road (West)		ONE HOUR	✓	103	100.000
B - Tinnners Walk		ONE HOUR	✓	39	100.000
C - Bar Road (East)		ONE HOUR	✓	309	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Bar Road (West)	B - Tinnners Walk	C - Bar Road (East)
From	A - Bar Road (West)	0	67	36
	B - Tinnners Walk	1	0	38
	C - Bar Road (East)	13	296	0

Proportions

	To			
		A - Bar Road (West)	B - Tinnners Walk	C - Bar Road (East)
From	A - Bar Road (West)	0.00	0.65	0.35
	B - Tinnners Walk	0.03	0.00	0.97
	C - Bar Road (East)	0.04	0.96	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Bar Road (West)	B - Tinners Walk	C - Bar Road (East)
	A - Bar Road (West)	0	0	0
	B - Tinners Walk	0	0	5
	C - Bar Road (East)	18	6	0

Average PCU Per Veh

From	To			
		A - Bar Road (West)	B - Tinners Walk	C - Bar Road (East)
	A - Bar Road (West)	1.000	1.000	1.000
	B - Tinners Walk	1.000	1.000	1.050
	C - Bar Road (East)	1.180	1.060	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bar Road (West)	06:45-07:00	78	78
	07:00-07:15	93	93
	07:15-07:30	113	113
	07:30-07:45	113	113
	07:45-08:00	93	93
	08:00-08:15	78	78
B - Tinners Walk	06:45-07:00	29	31
	07:00-07:15	35	37
	07:15-07:30	43	45
	07:30-07:45	43	45
	07:45-08:00	35	37
	08:00-08:15	29	31
C - Bar Road (East)	06:45-07:00	233	248
	07:00-07:15	278	296
	07:15-07:30	340	362
	07:30-07:45	340	362
	07:45-08:00	278	296
	08:00-08:15	233	248

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	5.72	0.1	A	35	52
B-A	0.00	11.03	0.0	B	0.92	1
C-AB	0.60	16.12	1.5	C	278	417
C-A					6	9
A-B					61	92
A-C					33	50

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	678	0.042	28	0.0	0.0	5.544	A
B-A	0.75	0.19	368	0.002	0.74	0.0	0.0	9.806	A
C-AB	227	57	563	0.403	224	0.0	0.7	10.551	B
C-A	6	1			6				
A-B	50	13			50				
A-C	27	7			27				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	9	675	0.051	34	0.0	0.1	5.617	A
B-A	0.90	0.22	351	0.003	0.90	0.0	0.0	10.287	B
C-AB	272	68	561	0.485	271	0.7	0.9	12.370	B
C-A	6	1			6				
A-B	60	15			60				
A-C	32	8			32				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	10	671	0.062	42	0.1	0.1	5.717	A
B-A	1	0.28	328	0.003	1	0.0	0.0	11.006	B
C-AB	335	84	558	0.600	332	0.9	1.5	15.830	C
C-A	6	1			6				
A-B	74	18			74				
A-C	40	10			40				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	10	671	0.062	42	0.1	0.1	5.717	A
B-A	1	0.28	327	0.003	1	0.0	0.0	11.029	B
C-AB	335	84	558	0.600	335	1.5	1.5	16.115	C
C-A	6	1			6				
A-B	74	18			74				
A-C	40	10			40				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	9	675	0.051	34	0.1	0.1	5.620	A
B-A	0.90	0.22	350	0.003	0.90	0.0	0.0	10.320	B
C-AB	272	68	561	0.485	274	1.5	1.0	12.651	B
C-A	6	1			6				
A-B	60	15			60				
A-C	32	8			32				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	678	0.042	29	0.1	0.0	5.549	A

B-A	0.75	0.19	367	0.002	0.75	0.0	0.0	9.840	A
C-AB	227	57	563	0.403	228	1.0	0.7	10.793	B
C-A	6	1			6				
A-B	50	13			50				
A-C	27	7			27				

2023 Adjusted Baseline, Inter Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Bar Road (East) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.45	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	215	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2023 Adjusted Baseline	Inter Peak	ONE HOUR	09:45	11:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bar Road (West)		ONE HOUR	✓	102	100.000
B - Tinnars Walk		ONE HOUR	✓	115	100.000
C - Bar Road (East)		ONE HOUR	✓	115	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Bar Road (West)	B - Tinners Walk	C - Bar Road (East)
	A - Bar Road (West)	0	18	84
	B - Tinners Walk	18	0	97
	C - Bar Road (East)	52	63	0

Proportions

From	To			
		A - Bar Road (West)	B - Tinners Walk	C - Bar Road (East)
	A - Bar Road (West)	0.00	0.18	0.82
	B - Tinners Walk	0.16	0.00	0.84
	C - Bar Road (East)	0.45	0.55	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Bar Road (West)	B - Tinners Walk	C - Bar Road (East)
	A - Bar Road (West)	0	29	7
	B - Tinners Walk	23	0	14
	C - Bar Road (East)	2	11	0

Average PCU Per Veh

From	To			
		A - Bar Road (West)	B - Tinners Walk	C - Bar Road (East)
	A - Bar Road (West)	1.000	1.290	1.070
	B - Tinners Walk	1.230	1.000	1.140
	C - Bar Road (East)	1.020	1.110	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bar Road (West)	09:45-10:00	77	85
	10:00-10:15	92	102
	10:15-10:30	112	125
	10:30-10:45	112	125
	10:45-11:00	92	102
	11:00-11:15	77	85
B - Tinners Walk	09:45-10:00	87	100
	10:00-10:15	103	119
	10:15-10:30	127	146
	10:30-10:45	127	146
	10:45-11:00	103	119
	11:00-11:15	87	100
C - Bar Road (East)	09:45-10:00	87	93
	10:00-10:15	103	111
	10:15-10:30	127	135
	10:30-10:45	127	135
	10:45-11:00	103	111
	11:00-11:15	87	93

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.18	7.41	0.2	A	89	134

B-A	0.06	11.57	0.1	B	17	25
C-AB	0.14	7.43	0.2	A	63	95
C-A					42	63
A-B					17	25
A-C					77	116

Main Results for each time segment

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	18	605	0.121	72	0.0	0.1	6.756	A
B-A	14	3	347	0.039	13	0.0	0.0	10.787	B
C-AB	51	13	557	0.092	51	0.0	0.1	7.094	A
C-A	36	9			36				
A-B	14	3			14				
A-C	63	16			63				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	22	600	0.145	87	0.1	0.2	7.020	A
B-A	16	4	340	0.048	16	0.0	0.0	11.101	B
C-AB	62	15	559	0.111	62	0.1	0.1	7.242	A
C-A	42	10			42				
A-B	16	4			16				
A-C	76	19			76				

10:15 - 10:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	107	27	593	0.180	107	0.2	0.2	7.402	A
B-A	20	5	331	0.060	20	0.0	0.1	11.566	B
C-AB	77	19	562	0.138	77	0.1	0.2	7.432	A
C-A	49	12			49				
A-B	20	5			20				
A-C	92	23			92				

10:30 - 10:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	107	27	593	0.180	107	0.2	0.2	7.408	A
B-A	20	5	331	0.060	20	0.1	0.1	11.570	B
C-AB	77	19	562	0.138	77	0.2	0.2	7.431	A
C-A	49	12			49				
A-B	20	5			20				
A-C	92	23			92				

10:45 - 11:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	22	600	0.145	87	0.2	0.2	7.029	A
B-A	16	4	340	0.048	16	0.1	0.1	11.109	B
C-AB	62	15	559	0.111	62	0.2	0.1	7.236	A
C-A	42	10			42				
A-B	16	4			16				
A-C	76	19			76				

11:00 - 11:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	18	605	0.121	73	0.2	0.1	6.777	A
B-A	14	3	347	0.039	14	0.1	0.0	10.801	B
C-AB	51	13	557	0.092	51	0.1	0.1	7.111	A
C-A	36	9			36				
A-B	14	3			14				
A-C	63	16			63				

2023 Adjusted Baseline, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Bar Road (East) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.80	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	72	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Adjusted Baseline	PM Peak	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bar Road (West)		ONE HOUR	✓	124	100.000

B - Tinnerns Walk		ONE HOUR	✓	296	100.000
C - Bar Road (East)		ONE HOUR	✓	63	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	A - Bar Road (West)	0	14	110
	B - Tinnerns Walk	38	0	258
	C - Bar Road (East)	24	39	0

Proportions

From	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	A - Bar Road (West)	0.00	0.11	0.89
	B - Tinnerns Walk	0.13	0.00	0.87
	C - Bar Road (East)	0.38	0.62	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	A - Bar Road (West)	0	21	0
	B - Tinnerns Walk	8	0	2
	C - Bar Road (East)	10	11	0

Average PCU Per Veh

From	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	A - Bar Road (West)	1.000	1.210	1.000
	B - Tinnerns Walk	1.080	1.000	1.020
	C - Bar Road (East)	1.100	1.110	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bar Road (West)	15:45-16:00	93	96
	16:00-16:15	111	114
	16:15-16:30	137	140
	16:30-16:45	137	140
	16:45-17:00	111	114
	17:00-17:15	93	96
B - Tinnerns Walk	15:45-16:00	223	229
	16:00-16:15	266	273
	16:15-16:30	326	335
	16:30-16:45	326	335
	16:45-17:00	266	273
	17:00-17:15	223	229
C - Bar Road (East)	15:45-16:00	47	52
	16:00-16:15	57	63
	16:15-16:30	69	77
	16:30-16:45	69	77
	16:45-17:00	57	63
	17:00-17:15	47	52

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.44	9.89	0.8	A	237	355
B-A	0.12	11.51	0.1	B	35	52
C-AB	0.08	7.33	0.1	A	37	56
C-A					20	31
A-B					13	19
A-C					101	151

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	194	49	668	0.291	193	0.0	0.4	7.547	A
B-A	29	7	389	0.074	28	0.0	0.1	9.970	A
C-AB	30	8	540	0.056	30	0.0	0.1	7.059	A
C-A	17	4			17				
A-B	11	3			11				
A-C	83	21			83				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	232	58	660	0.352	231	0.4	0.5	8.393	A
B-A	34	9	377	0.091	34	0.1	0.1	10.509	B
C-AB	37	9	538	0.068	36	0.1	0.1	7.174	A
C-A	20	5			20				
A-B	13	3			13				
A-C	99	25			99				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	284	71	648	0.438	283	0.5	0.8	9.836	A
B-A	42	10	355	0.118	42	0.1	0.1	11.490	B
C-AB	45	11	536	0.084	45	0.1	0.1	7.332	A
C-A	24	6			24				
A-B	15	4			15				
A-C	121	30			121				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	284	71	648	0.438	284	0.8	0.8	9.886	A
B-A	42	10	355	0.118	42	0.1	0.1	11.511	B
C-AB	45	11	536	0.084	45	0.1	0.1	7.332	A
C-A	24	6			24				
A-B	15	4			15				

A-C	121	30			121				
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16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	232	58	660	0.352	233	0.8	0.5	8.452	A
B-A	34	9	376	0.091	34	0.1	0.1	10.534	B
C-AB	37	9	538	0.068	37	0.1	0.1	7.179	A
C-A	20	5			20				
A-B	13	3			13				
A-C	99	25			99				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	194	49	668	0.291	195	0.5	0.4	7.619	A
B-A	29	7	389	0.074	29	0.1	0.1	10.001	B
C-AB	30	8	540	0.056	30	0.1	0.1	7.066	A
C-A	17	4			17				
A-B	11	3			11				
A-C	83	21			83				

2023 Adjusted Baseline + Development, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Bar Road (East) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		13.79	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	24	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Adjusted Baseline + Development	AM Peak	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bar Road (West)		ONE HOUR	✓	103	100.000
B - Tinnars Walk		ONE HOUR	✓	39	100.000
C - Bar Road (East)		ONE HOUR	✓	322	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Bar Road (West)	B - Tinnars Walk	C - Bar Road (East)
	A - Bar Road (West)	0	67	36
	B - Tinnars Walk	1	0	38
	C - Bar Road (East)	13	309	0

Proportions

From	To			
		A - Bar Road (West)	B - Tinnars Walk	C - Bar Road (East)
	A - Bar Road (West)	0.00	0.65	0.35
	B - Tinnars Walk	0.03	0.00	0.97
	C - Bar Road (East)	0.04	0.96	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Bar Road (West)	B - Tinnars Walk	C - Bar Road (East)
	A - Bar Road (West)	0	0	0
	B - Tinnars Walk	0	0	7
	C - Bar Road (East)	18	10	0

Average PCU Per Veh

From	To			
		A - Bar Road (West)	B - Tinnars Walk	C - Bar Road (East)
	A - Bar Road (West)	1.000	1.000	1.000
	B - Tinnars Walk	1.000	1.000	1.070
	C - Bar Road (East)	1.180	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bar Road (West)	06:45-07:00	78	78
	07:00-07:15	93	93
	07:15-07:30	113	113
	07:30-07:45	113	113
	07:45-08:00	93	93
	08:00-08:15	78	78
B - Tinnars Walk	06:45-07:00	29	31
	07:00-07:15	35	37
	07:15-07:30	43	46
	07:30-07:45	43	46
	07:45-08:00	35	37
	08:00-08:15	29	31
C - Bar Road (East)	06:45-07:00	242	267
	07:00-07:15	289	319

	07:15-07:30	355	391
	07:30-07:45	355	391
	07:45-08:00	289	319
	08:00-08:15	242	267

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	5.83	0.1	A	35	52
B-A	0.00	11.35	0.0	B	0.92	1
C-AB	0.65	19.07	1.8	C	290	435
C-A					5	8
A-B					61	92
A-C					33	50

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	665	0.043	28	0.0	0.0	5.655	A
B-A	0.75	0.19	362	0.002	0.74	0.0	0.0	9.968	A
C-AB	237	59	543	0.437	234	0.0	0.8	11.547	B
C-A	6	1			6				
A-B	50	13			50				
A-C	27	7			27				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	9	662	0.052	34	0.0	0.1	5.730	A
B-A	0.90	0.22	344	0.003	0.90	0.0	0.0	10.506	B
C-AB	284	71	541	0.525	283	0.8	1.1	13.880	B
C-A	5	1			5				
A-B	60	15			60				
A-C	32	8			32				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	10	659	0.064	42	0.1	0.1	5.834	A
B-A	1	0.28	319	0.003	1	0.0	0.0	11.317	B
C-AB	350	87	538	0.650	347	1.1	1.8	18.567	C
C-A	5	1			5				
A-B	74	18			74				
A-C	40	10			40				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	10	659	0.064	42	0.1	0.1	5.834	A
B-A	1	0.28	318	0.003	1	0.0	0.0	11.350	B
C-AB	350	87	538	0.650	350	1.8	1.8	19.065	C
C-A	5	1			5				
A-B	74	18			74				
A-C	40	10			40				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	9	662	0.052	34	0.1	0.1	5.731	A
B-A	0.90	0.22	342	0.003	0.90	0.0	0.0	10.551	B
C-AB	284	71	541	0.525	287	1.8	1.2	14.330	B
C-A	5	1			5				
A-B	60	15			60				
A-C	32	8			32				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	665	0.043	29	0.1	0.0	5.660	A
B-A	0.75	0.19	360	0.002	0.76	0.0	0.0	10.013	B
C-AB	237	59	543	0.437	238	1.2	0.8	11.890	B
C-A	5	1			5				
A-B	50	13			50				
A-C	27	7			27				

2023 Adjusted Baseline + Development, Inter Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Bar Road (East) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.26	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	150	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Adjusted Baseline + Development	Inter Peak	ONE HOUR	09:45	11:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bar Road (West)		ONE HOUR	✓	108	100.000
B - Tinnerns Walk		ONE HOUR	✓	146	100.000
C - Bar Road (East)		ONE HOUR	✓	140	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	0	24	84
	B - Tinnerns Walk	24	0	122
	C - Bar Road (East)	52	88	0

Proportions

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	0.00	0.22	0.78
	B - Tinnerns Walk	0.16	0.00	0.84
	C - Bar Road (East)	0.37	0.63	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	0	35	7
	B - Tinnerns Walk	30	0	13
	C - Bar Road (East)	2	10	0

Average PCU Per Veh

	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	From			
	A - Bar Road (West)	1.000	1.350	1.070
	B - Tinnerns Walk	1.300	1.000	1.130
	C - Bar Road (East)	1.020	1.100	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bar Road (West)	09:45-10:00	81	92
	10:00-10:15	97	110
	10:15-10:30	119	135
	10:30-10:45	119	135
	10:45-11:00	97	110
	11:00-11:15	81	92
B - Tinnerns Walk	09:45-10:00	110	127
	10:00-10:15	131	152

	10:15-10:30	161	186
	10:30-10:45	161	186
	10:45-11:00	131	152
	11:00-11:15	110	127
C - Bar Road (East)	09:45-10:00	105	113
	10:00-10:15	126	135
	10:15-10:30	154	165
	10:30-10:45	154	165
	10:45-11:00	126	135
	11:00-11:15	105	113

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.23	7.88	0.3	A	112	168
B-A	0.09	12.92	0.1	B	22	33
C-AB	0.19	7.89	0.3	A	89	133
C-A					40	60
A-B					22	33
A-C					77	116

Main Results for each time segment

09:45 - 10:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	92	23	606	0.152	91	0.0	0.2	6.989	A
B-A	18	5	324	0.056	18	0.0	0.1	11.748	B
C-AB	71	18	561	0.127	71	0.0	0.2	7.343	A
C-A	34	9			34				
A-B	18	5			18				
A-C	63	16			63				

10:00 - 10:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	600	0.183	109	0.2	0.2	7.344	A
B-A	22	5	316	0.068	22	0.1	0.1	12.210	B
C-AB	86	22	562	0.154	86	0.2	0.2	7.567	A
C-A	40	10			40				
A-B	22	5			22				
A-C	76	19			76				

10:15 - 10:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	34	591	0.227	134	0.2	0.3	7.870	A

B-A	26	7	305	0.087	26	0.1	0.1	12.913	B
C-AB	108	27	564	0.191	108	0.2	0.3	7.890	A
C-A	46	12			46				
A-B	26	7			26				
A-C	92	23			92				

10:30 - 10:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	34	591	0.227	134	0.3	0.3	7.880	A
B-A	26	7	305	0.087	26	0.1	0.1	12.923	B
C-AB	108	27	564	0.191	108	0.3	0.3	7.891	A
C-A	46	12			46				
A-B	26	7			26				
A-C	92	23			92				

10:45 - 11:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	600	0.183	110	0.3	0.2	7.359	A
B-A	22	5	316	0.068	22	0.1	0.1	12.229	B
C-AB	86	22	562	0.154	87	0.3	0.2	7.568	A
C-A	39	10			39				
A-B	22	5			22				
A-C	76	19			76				

11:00 - 11:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	92	23	605	0.152	92	0.2	0.2	7.016	A
B-A	18	5	324	0.056	18	0.1	0.1	11.774	B
C-AB	71	18	561	0.127	71	0.2	0.2	7.357	A
C-A	34	9			34				
A-B	18	5			18				
A-C	63	16			63				

2023 Adjusted Baseline + Development, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Bar Road (East) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.32	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	62	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Adjusted Baseline + Development	PM Peak	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Bar Road (West)		ONE HOUR	✓	127	100.000
B - Tinnerns Walk		ONE HOUR	✓	307	100.000
C - Bar Road (East)		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	A - Bar Road (West)	0	17	110
	B - Tinnerns Walk	42	0	265
	C - Bar Road (East)	24	47	0

Proportions

From	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	A - Bar Road (West)	0.00	0.13	0.87
	B - Tinnerns Walk	0.14	0.00	0.86
	C - Bar Road (East)	0.34	0.66	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	A - Bar Road (West)	0	34	0
	B - Tinnerns Walk	14	0	3
	C - Bar Road (East)	10	16	0

Average PCU Per Veh

From	To			
		A - Bar Road (West)	B - Tinnerns Walk	C - Bar Road (East)
	A - Bar Road (West)	1.000	1.340	1.000
	B - Tinnerns Walk	1.140	1.000	1.030
	C - Bar Road (East)	1.100	1.160	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - Bar Road (West)	15:45-16:00	96	100

	16:00-16:15	114	119
	16:15-16:30	140	146
	16:30-16:45	140	146
	16:45-17:00	114	119
	17:00-17:15	96	100
B - Tinnars Walk	15:45-16:00	231	242
	16:00-16:15	276	288
	16:15-16:30	338	353
	16:30-16:45	338	353
	16:45-17:00	276	288
	17:00-17:15	231	242
C - Bar Road (East)	15:45-16:00	53	61
	16:00-16:15	64	73
	16:15-16:30	78	89
	16:30-16:45	78	89
	16:45-17:00	64	73
	17:00-17:15	53	61

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.46	10.47	0.8	B	243	365
B-A	0.14	12.71	0.2	B	39	58
C-AB	0.11	7.86	0.1	A	45	68
C-A					20	30
A-B					16	23
A-C					101	151

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	200	50	658	0.303	198	0.0	0.4	7.801	A
B-A	32	8	366	0.086	31	0.0	0.1	10.730	B
C-AB	37	9	516	0.071	36	0.0	0.1	7.493	A
C-A	17	4			17				
A-B	13	3			13				
A-C	83	21			83				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	238	60	649	0.367	238	0.4	0.6	8.747	A
B-A	38	9	353	0.107	38	0.1	0.1	11.411	B
C-AB	44	11	515	0.086	44	0.1	0.1	7.646	A
C-A	20	5			20				

A-B	15	4			15				
A-C	99	25			99				

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	292	73	636	0.459	291	0.6	0.8	10.404	B
B-A	46	12	330	0.140	46	0.1	0.2	12.675	B
C-AB	55	14	513	0.106	54	0.1	0.1	7.856	A
C-A	24	6			24				
A-B	19	5			19				
A-C	121	30			121				

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	292	73	636	0.459	292	0.8	0.8	10.470	B
B-A	46	12	330	0.140	46	0.2	0.2	12.707	B
C-AB	55	14	513	0.106	55	0.1	0.1	7.856	A
C-A	24	6			24				
A-B	19	5			19				
A-C	121	30			121				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	238	60	648	0.367	239	0.8	0.6	8.818	A
B-A	38	9	353	0.107	38	0.2	0.1	11.446	B
C-AB	44	11	515	0.086	44	0.1	0.1	7.649	A
C-A	20	5			20				
A-B	15	4			15				
A-C	99	25			99				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	200	50	657	0.304	200	0.6	0.4	7.884	A
B-A	32	8	366	0.086	32	0.1	0.1	10.773	B
C-AB	37	9	517	0.071	37	0.1	0.1	7.505	A
C-A	17	4			17				
A-B	13	3			13				
A-C	83	21			83				

Appendix 8

ARCADY Outputs

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.5.2.1013 © Copyright TRL Limited, 2019															
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution															

Filename: A39 Melvill Mini-Roundabout_IS.j9
Report generation date: 15/11/2024 09:33:57

- »2023 Baseline, AM Peak
- »2023 Baseline, Inter Peak
- »2023 Baseline, PM Peak
- »2023 Adjusted Baseline , AM Peak
- »2023 Adjusted Baseline , Inter Peak
- »2023 Adjusted Baseline, PM Peak
- »2023 Adjusted Baseline + Development, AM Peak
- »2023 Adjusted Baseline + Development, Inter Peak
- »2023 Adjusted Baseline + Development, PM Peak

Summary of junction performance

	AM Peak							Inter Peak							PM Peak									
	Set ID	Queue (Veh)	Delay (s)	RF	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RF	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RF	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2023 Baseline																								
1 - Bar Road	D 1	0.1	3.27	0.06	A	5.91	A	144 % [4 - Melvill Road]	D 2	0.2	4.13	0.15	A	4.87	A	278 % [2 - Pendennis Rise]	D 3	0.4	4.55	0.31	A	4.96	A	126 % [2 - Pendennis Rise]
2 - Pendennis Rise		0.0	5.20	0.01	A					0.0	6.14	0.03	A					0.1	8.19	0.07	A			
3 - Castle Hill		0.0	3.69	0.03	A					0.1	4.09	0.05	A					0.1	4.76	0.08	A			
4 - Melvill Road		0.5	6.81	0.35	A					0.3	5.67	0.21	A					0.2	5.32	0.16	A			
2023 Adjusted Baseline																								
1 - Bar Road	D 4	0.1	3.33	0.07	A	7.01	A	94 % [4 - Melvill]	D 5	0.3	4.43	0.20	A	5.28	A	197 % [2 - Pendennis]	D 6	0.6	5.08	0.37	A	5.47	A	91 % [2 - Pendennis]
2 - Pendennis Rise		0.0	5.27	0.01	A					0.0	6.68	0.03	A					0.1	9.20	0.08	A			

3 - Castle Hill		0.0	3.73	0.03	A			Road]		0.1	4.31	0.07	A			is Rise]		0.1	5.11	0.10	A			is Rise]
4 - Melvill Road		0.8	8.22	0.44	A					0.4	6.30	0.28	A					0.3	5.76	0.20	A			
2023 Adjusted Baseline + Development																								
1 - Bar Road	D 7	0.1	3.38	0.08	A	7.72	A	80 % [4 - Melvill Road]	D 8	0.3	4.61	0.23	A	5.51	A	168 % [4 - Melvill Road]	D 9	0.6	5.21	0.38	A	5.63	A	87 % [2 - Penn dennis Rise]
2 - Pendennis Rise		0.0	5.28	0.01	A					0.0	6.96	0.03	A					0.1	9.39	0.09	A			
3 - Castle Hill		0.0	3.74	0.03	A					0.1	4.43	0.08	A					0.1	5.17	0.10	A			
4 - Melvill Road		0.9	9.08	0.48	A					0.4	6.65	0.31	A					0.3	6.01	0.22	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

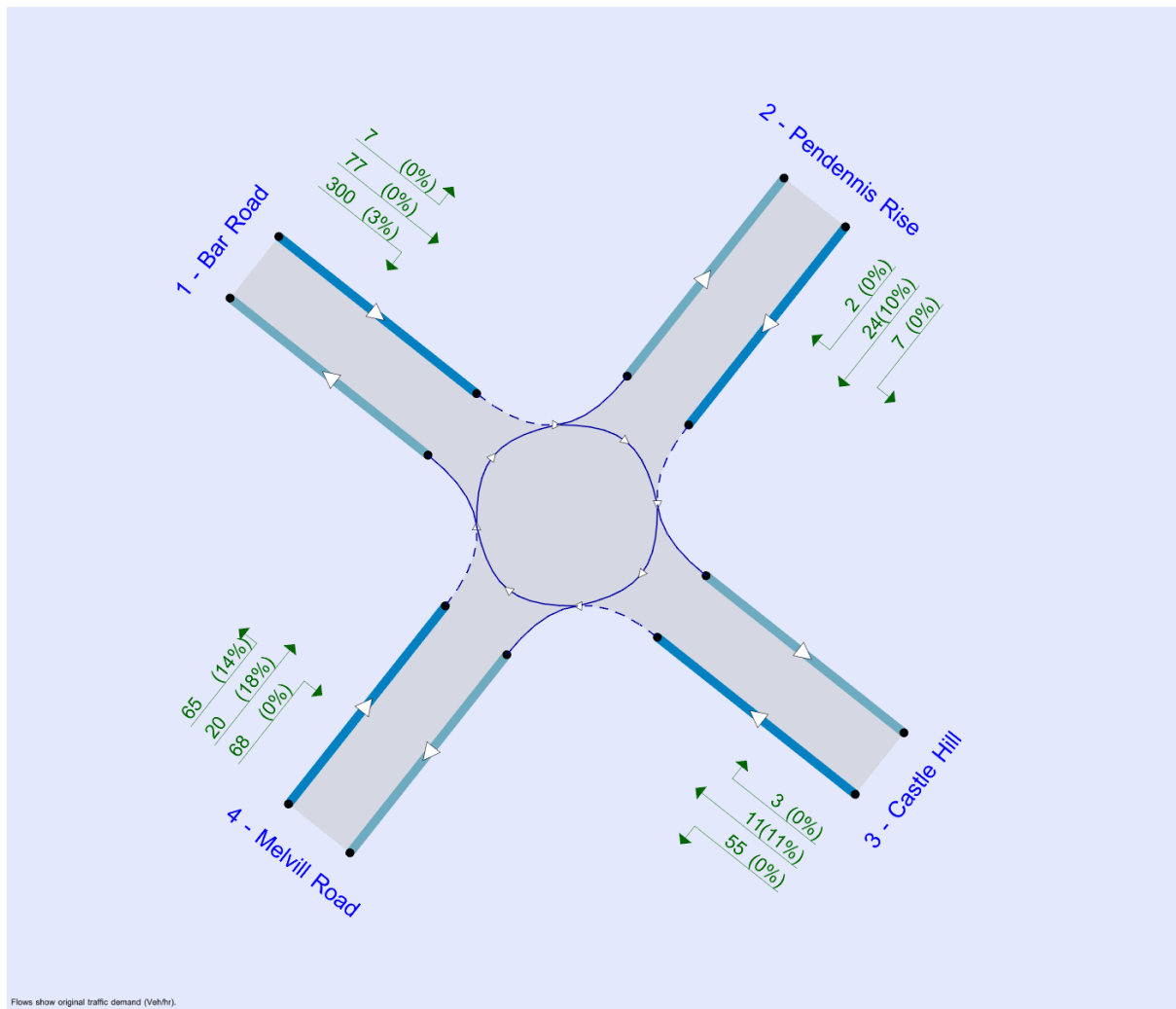
File summary

File Description

Title	
Location	
Site number	
Date	30/07/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	RAMBOLL\BBABA
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Baseline	AM Peak	ONE HOUR	06:45	08:15	15	✓
D2	2023 Baseline	Inter Peak	ONE HOUR	09:45	11:15	15	✓
D3	2023 Baseline	PM Peak	ONE HOUR	15:45	17:15	15	✓
D4	2023 Adjusted Baseline	AM Peak	ONE HOUR	06:45	08:15	15	✓
D5	2023 Adjusted Baseline	Inter Peak	ONE HOUR	09:45	11:15	15	✓
D6	2023 Adjusted Baseline	PM Peak	ONE HOUR	15:45	17:15	15	✓
D7	2023 Adjusted Baseline + Development	AM Peak	ONE HOUR	06:45	08:15	15	✓

D8	2023 Adjusted Baseline + Development	Inter Peak	ONE HOUR	09:45	11:15	15	✓
D9	2023 Adjusted Baseline + Development	PM Peak	ONE HOUR	15:45	17:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2023 Baseline, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 4 have 90% of the total flow for the roundabout for one or more time segments][Arms 3 and 4 have 79% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	5.91	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		144	4 - Melvill Road

Arms

Arms

Arm	Name	Description
1	Bar Road	
2	Pendennis Rise	
3	Castle Hill	
4	Melvill Road	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Bar Road	4.00	4.00	6.15	2.9	20.00	16.96	0.0	
2 - Pendennis Rise	3.50	3.50	4.48	1.2	10.95	6.08	0.0	
3 - Castle Hill	4.45	4.45	4.94	0.5	20.00	15.27	0.0	
4 - Melvill Road	3.41	3.41	5.84	3.4	14.07	10.54	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Bar Road	0.718	1216
2 - Pendennis Rise	0.619	761

3 - Castle Hill	0.678	1039
4 - Melvill Road	0.636	845

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Baseline	AM Peak	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Bar Road		ONE HOUR	✓	67	100.000
2 - Pendennis Rise		ONE HOUR	✓	9	100.000
3 - Castle Hill		ONE HOUR	✓	25	100.000
4 - Melvill Road		ONE HOUR	✓	261	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	5	20	42
	2 - Pendennis Rise	3	0	3	3
	3 - Castle Hill	17	1	0	7
	4 - Melvill Road	233	5	22	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	0	5	0
	2 - Pendennis Rise	0	0	0	0
	3 - Castle Hill	0	0	0	0
	4 - Melvill Road	2	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Bar Road	0.06	3.27	0.1	A	61	92
2 - Pendennis Rise	0.01	5.20	0.0	A	8	12

3 - Castle Hill	0.03	3.69	0.0	A	23	34
4 - Melvill Road	0.35	6.81	0.5	A	239	359

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	50	13	22	1183	0.043	50	189	0.0	0.0	3.179	A
2 - Pendennis Rise	7	2	64	721	0.009	7	8	0.0	0.0	5.038	A
3 - Castle Hill	19	5	37	1014	0.019	19	34	0.0	0.0	3.616	A
4 - Melvill Road	196	49	16	820	0.240	195	40	0.0	0.3	5.748	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	60	15	26	1179	0.051	60	227	0.0	0.1	3.215	A
2 - Pendennis Rise	8	2	76	713	0.011	8	10	0.0	0.0	5.104	A
3 - Castle Hill	22	6	44	1009	0.022	22	40	0.0	0.0	3.648	A
4 - Melvill Road	235	59	19	818	0.287	234	48	0.3	0.4	6.160	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	74	18	32	1175	0.063	74	278	0.1	0.1	3.267	A
2 - Pendennis Rise	10	2	93	703	0.014	10	12	0.0	0.0	5.196	A
3 - Castle Hill	28	7	54	1002	0.027	28	49	0.0	0.0	3.692	A
4 - Melvill Road	287	72	23	816	0.352	287	58	0.4	0.5	6.800	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	74	18	32	1175	0.063	74	279	0.1	0.1	3.267	A
2 - Pendennis Rise	10	2	94	703	0.014	10	12	0.0	0.0	5.197	A
3 - Castle Hill	28	7	54	1002	0.027	28	50	0.0	0.0	3.692	A
4 - Melvill Road	287	72	23	816	0.352	287	58	0.5	0.5	6.814	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	60	15	26	1179	0.051	60	228	0.1	0.1	3.216	A
2 - Pendennis Rise	8	2	77	713	0.011	8	10	0.0	0.0	5.105	A
3 - Castle Hill	22	6	44	1009	0.022	22	41	0.0	0.0	3.651	A
4 - Melvill Road	235	59	19	818	0.287	235	48	0.5	0.4	6.179	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	50	13	22	1182	0.043	50	191	0.1	0.0	3.182	A
2 - Pendennis Rise	7	2	64	721	0.009	7	8	0.0	0.0	5.039	A
3 - Castle Hill	19	5	37	1014	0.019	19	34	0.0	0.0	3.620	A
4 - Melvill Road	196	49	16	820	0.240	197	40	0.4	0.3	5.778	A

2023 Baseline, Inter Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 4 have 84% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	4.87	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		278	2 - Pendennis Rise

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Baseline	Inter Peak	ONE HOUR	09:45	11:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Bar Road		ONE HOUR	✓	136	100.000
2 - Pendennis Rise		ONE HOUR	✓	14	100.000
3 - Castle Hill		ONE HOUR	✓	44	100.000
4 - Melvill Road		ONE HOUR	✓	155	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	4	5	39	88
	2 - Pendennis Rise	4	0	3	7
	3 - Castle Hill	9	0	2	33
	4 - Melvill Road	64	6	82	3

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	0	3	17
	2 - Pendennis Rise	0	0	0	0
	3 - Castle Hill	0	0	0	3
	4 - Melvill Road	8	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Bar Road	0.15	4.13	0.2	A	125	187
2 - Pendennis Rise	0.03	6.14	0.0	A	13	19
3 - Castle Hill	0.05	4.09	0.1	A	40	61
4 - Melvill Road	0.21	5.67	0.3	A	142	213

Main Results for each time segment

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	102	26	70	1042	0.098	102	61	0.0	0.1	3.826	A

2 - Pendennis Rise	11	3	163	653	0.016	10	8	0.0	0.0	5.607	A
3 - Castle Hill	33	8	79	956	0.035	33	94	0.0	0.0	3.901	A
4 - Melvill Road	117	29	14	809	0.144	116	98	0.0	0.2	5.190	A

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	122	31	84	1033	0.118	122	73	0.1	0.1	3.951	A
2 - Pendennis Rise	13	3	196	631	0.020	13	10	0.0	0.0	5.821	A
3 - Castle Hill	40	10	95	944	0.042	40	113	0.0	0.0	3.980	A
4 - Melvill Road	139	35	17	807	0.173	139	118	0.2	0.2	5.386	A

10:15 - 10:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	150	37	102	1021	0.147	150	89	0.1	0.2	4.130	A
2 - Pendennis Rise	15	4	240	602	0.026	15	12	0.0	0.0	6.139	A
3 - Castle Hill	48	12	117	928	0.052	48	139	0.0	0.1	4.093	A
4 - Melvill Road	171	43	21	805	0.212	170	144	0.2	0.3	5.673	A

10:30 - 10:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	150	37	102	1021	0.147	150	89	0.2	0.2	4.131	A
2 - Pendennis Rise	15	4	240	601	0.026	15	12	0.0	0.0	6.141	A
3 - Castle Hill	48	12	117	928	0.052	48	139	0.1	0.1	4.094	A
4 - Melvill Road	171	43	21	805	0.212	171	144	0.3	0.3	5.674	A

10:45 - 11:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	122	31	84	1033	0.118	122	73	0.2	0.1	3.955	A
2 - Pendennis Rise	13	3	196	631	0.020	13	10	0.0	0.0	5.827	A
3 - Castle Hill	40	10	95	944	0.042	40	113	0.1	0.0	3.982	A
4 - Melvill Road	139	35	17	807	0.173	140	118	0.3	0.2	5.392	A

11:00 - 11:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	102	26	70	1042	0.098	102	61	0.1	0.1	3.834	A
2 - Pendennis Rise	11	3	164	652	0.016	11	8	0.0	0.0	5.615	A
3 - Castle Hill	33	8	80	956	0.035	33	95	0.0	0.0	3.902	A
4 - Melvill Road	117	29	14	809	0.144	117	99	0.2	0.2	5.201	A

2023 Baseline, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 4 have 83% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	4.96	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		126	2 - Pendennis Rise

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2023 Baseline	PM Peak	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Bar Road		ONE HOUR	✓	317	100.000
2 - Pendennis Rise		ONE HOUR	✓	29	100.000
3 - Castle Hill		ONE HOUR	✓	58	100.000
4 - Melvill Road		ONE HOUR	✓	120	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	6	64	247
	2 - Pendennis Rise	2	0	6	21
	3 - Castle Hill	7	3	1	47
	4 - Melvill Road	43	17	59	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	0	0	1
	2 - Pendennis Rise	0	0	0	10
	3 - Castle Hill	14	0	0	0
	4 - Melvill Road	2	18	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Bar Road	0.31	4.55	0.4	A	291	436
2 - Pendennis Rise	0.07	8.19	0.1	A	27	40
3 - Castle Hill	0.08	4.76	0.1	A	53	80
4 - Melvill Road	0.16	5.32	0.2	A	110	165

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	239	60	61	1162	0.205	238	39	0.0	0.3	3.893	A
2 - Pendennis Rise	22	5	279	548	0.040	22	19	0.0	0.0	6.842	A
3 - Castle Hill	44	11	203	884	0.049	43	97	0.0	0.1	4.282	A
4 - Melvill Road	90	23	10	812	0.111	90	237	0.0	0.1	4.984	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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1 - Bar Road	285	71	73	1153	0.247	285	47	0.3	0.3	4.147	A
2 - Pendennis Rise	26	7	334	516	0.051	26	23	0.0	0.1	7.354	A
3 - Castle Hill	52	13	243	857	0.061	52	117	0.1	0.1	4.474	A
4 - Melvill Road	108	27	12	810	0.133	108	284	0.1	0.2	5.123	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	349	87	89	1140	0.306	349	57	0.3	0.4	4.544	A
2 - Pendennis Rise	32	8	409	472	0.068	32	29	0.1	0.1	8.179	A
3 - Castle Hill	64	16	298	820	0.078	64	143	0.1	0.1	4.762	A
4 - Melvill Road	132	33	14	809	0.163	132	347	0.2	0.2	5.318	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	349	87	89	1140	0.306	349	57	0.4	0.4	4.548	A
2 - Pendennis Rise	32	8	410	472	0.068	32	29	0.1	0.1	8.186	A
3 - Castle Hill	64	16	298	819	0.078	64	143	0.1	0.1	4.764	A
4 - Melvill Road	132	33	14	809	0.163	132	348	0.2	0.2	5.320	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	285	71	73	1152	0.247	285	47	0.4	0.3	4.154	A
2 - Pendennis Rise	26	7	335	515	0.051	26	23	0.1	0.1	7.363	A
3 - Castle Hill	52	13	244	856	0.061	52	117	0.1	0.1	4.477	A
4 - Melvill Road	108	27	12	810	0.133	108	285	0.2	0.2	5.128	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	239	60	61	1161	0.206	239	39	0.3	0.3	3.905	A
2 - Pendennis Rise	22	5	280	547	0.040	22	20	0.1	0.0	6.858	A
3 - Castle Hill	44	11	204	883	0.049	44	98	0.1	0.1	4.288	A
4 - Melvill Road	90	23	10	812	0.111	90	238	0.2	0.1	4.992	A

2023 Adjusted Baseline , AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 4 have 91% of the total flow for the roundabout for one or more time segments][Arms 2 and 4 have 76% of the total flow for the roundabout for one or more time segments][Arms 3 and 4 have 80% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	7.01	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		94	4 - Melvill Road

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2023 Adjusted Baseline	AM Peak	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Bar Road		ONE HOUR	✓	77	100.000
2 - Pendennis Rise		ONE HOUR	✓	9	100.000
3 - Castle Hill		ONE HOUR	✓	29	100.000
4 - Melvill Road		ONE HOUR	✓	316	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	6	23	49
	2 - Pendennis Rise	3	0	3	3
	3 - Castle Hill	20	1	0	8
	4 - Melvill Road	283	6	26	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	0	5	1
	2 - Pendennis Rise	0	0	0	0
	3 - Castle Hill	0	0	0	0
	4 - Melvill Road	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Bar Road	0.07	3.33	0.1	A	71	106
2 - Pendennis Rise	0.01	5.27	0.0	A	8	12
3 - Castle Hill	0.03	3.73	0.0	A	27	40
4 - Melvill Road	0.44	8.22	0.8	A	290	435

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	58	15	25	1173	0.050	58	229	0.0	0.1	3.228	A
2 - Pendennis Rise	7	2	74	715	0.009	7	10	0.0	0.0	5.084	A
3 - Castle Hill	22	5	42	1010	0.022	22	39	0.0	0.0	3.640	A
4 - Melvill Road	238	59	18	791	0.301	236	45	0.0	0.4	6.470	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	69	17	31	1169	0.059	69	275	0.1	0.1	3.272	A
2 - Pendennis Rise	8	2	88	706	0.011	8	12	0.0	0.0	5.160	A
3 - Castle Hill	26	7	50	1005	0.026	26	46	0.0	0.0	3.677	A
4 - Melvill Road	284	71	22	789	0.360	284	54	0.4	0.6	7.118	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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1 - Bar Road	85	21	37	1164	0.073	85	336	0.1	0.1	3.334	A
2 - Pendennis Rise	10	2	108	693	0.014	10	14	0.0	0.0	5.268	A
3 - Castle Hill	32	8	61	997	0.032	32	57	0.0	0.0	3.729	A
4 - Melvill Road	348	87	26	786	0.443	347	67	0.6	0.8	8.186	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	85	21	37	1164	0.073	85	337	0.1	0.1	3.334	A
2 - Pendennis Rise	10	2	108	693	0.014	10	14	0.0	0.0	5.269	A
3 - Castle Hill	32	8	61	997	0.032	32	57	0.0	0.0	3.729	A
4 - Melvill Road	348	87	26	786	0.443	348	67	0.8	0.8	8.219	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	69	17	31	1169	0.059	70	276	0.1	0.1	3.273	A
2 - Pendennis Rise	8	2	88	705	0.011	8	12	0.0	0.0	5.164	A
3 - Castle Hill	26	7	50	1005	0.026	26	47	0.0	0.0	3.680	A
4 - Melvill Road	284	71	22	789	0.360	285	54	0.8	0.6	7.160	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	58	15	26	1173	0.050	58	231	0.1	0.1	3.232	A
2 - Pendennis Rise	7	2	74	715	0.009	7	10	0.0	0.0	5.088	A
3 - Castle Hill	22	5	42	1010	0.022	22	39	0.0	0.0	3.644	A
4 - Melvill Road	238	59	18	791	0.301	238	46	0.6	0.4	6.525	A

2023 Adjusted Baseline , Inter Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 4 have 84% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	5.28	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		197	2 - Pendennis Rise

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2023 Adjusted Baseline	Inter Peak	ONE HOUR	09:45	11:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Bar Road		ONE HOUR	✓	186	100.000
2 - Pendennis Rise		ONE HOUR	✓	16	100.000
3 - Castle Hill		ONE HOUR	✓	58	100.000
4 - Melvill Road		ONE HOUR	✓	199	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	5	6	52	123
	2 - Pendennis Rise	5	0	3	8
	3 - Castle Hill	18	0	2	38
	4 - Melvill Road	94	7	95	3

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	0	2	16
	2 - Pendennis Rise	0	0	0	0
	3 - Castle Hill	0	0	0	3
	4 - Melvill Road	9	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Bar Road	0.20	4.43	0.3	A	171	256
2 - Pendennis Rise	0.03	6.68	0.0	A	15	22
3 - Castle Hill	0.07	4.31	0.1	A	53	79
4 - Melvill Road	0.28	6.30	0.4	A	183	274

Main Results for each time segment

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	140	35	80	1042	0.134	139	91	0.0	0.2	3.985	A
2 - Pendennis Rise	12	3	210	622	0.019	12	10	0.0	0.0	5.905	A
3 - Castle Hill	43	11	108	937	0.046	43	114	0.0	0.0	4.025	A
4 - Melvill Road	150	37	22	797	0.188	149	129	0.0	0.2	5.549	A

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	167	42	96	1032	0.162	167	110	0.2	0.2	4.163	A
2 - Pendennis Rise	14	4	251	594	0.024	14	12	0.0	0.0	6.211	A
3 - Castle Hill	52	13	129	921	0.056	52	136	0.0	0.1	4.140	A
4 - Melvill Road	179	45	27	794	0.225	179	154	0.2	0.3	5.851	A

10:15 - 10:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	205	51	118	1018	0.201	205	134	0.2	0.3	4.425	A
2 - Pendennis Rise	18	4	308	556	0.032	18	14	0.0	0.0	6.681	A
3 - Castle Hill	63	16	158	899	0.071	63	167	0.1	0.1	4.307	A
4 - Melvill Road	219	55	33	790	0.277	219	189	0.3	0.4	6.294	A

10:30 - 10:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	205	51	118	1018	0.201	205	134	0.3	0.3	4.427	A

2 - Pendennis Rise	18	4	308	556	0.032	18	14	0.0	0.0	6.684	A
3 - Castle Hill	63	16	159	899	0.071	63	167	0.1	0.1	4.307	A
4 - Melvill Road	219	55	33	790	0.277	219	189	0.4	0.4	6.302	A

10:45 - 11:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	167	42	96	1032	0.162	167	110	0.3	0.2	4.168	A
2 - Pendennis Rise	14	4	252	593	0.024	14	12	0.0	0.0	6.219	A
3 - Castle Hill	52	13	130	921	0.056	52	137	0.1	0.1	4.142	A
4 - Melvill Road	179	45	27	794	0.225	179	154	0.4	0.3	5.861	A

11:00 - 11:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	140	35	81	1042	0.134	140	92	0.2	0.2	3.994	A
2 - Pendennis Rise	12	3	211	621	0.019	12	10	0.0	0.0	5.913	A
3 - Castle Hill	43	11	109	937	0.046	43	115	0.1	0.0	4.029	A
4 - Melvill Road	150	37	23	797	0.188	150	129	0.3	0.2	5.569	A

2023 Adjusted Baseline, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 4 have 83% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	5.47	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		91	2 - Pendennis Rise

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Adjusted Baseline	PM Peak	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Bar Road		ONE HOUR	✓	376	100.000
2 - Pendennis Rise		ONE HOUR	✓	33	100.000
3 - Castle Hill		ONE HOUR	✓	69	100.000
4 - Melvill Road		ONE HOUR	✓	146	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
	1 - Bar Road	0	7	76	293
	2 - Pendennis Rise	2	0	7	24
	3 - Castle Hill	10	3	1	55
	4 - Melvill Road	57	20	68	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
	1 - Bar Road	0	0	0	2
	2 - Pendennis Rise	0	0	0	10
	3 - Castle Hill	12	0	0	0
	4 - Melvill Road	9	18	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Bar Road	0.37	5.08	0.6	A	345	518
2 - Pendennis Rise	0.08	9.20	0.1	A	30	45
3 - Castle Hill	0.10	5.11	0.1	A	63	95
4 - Melvill Road	0.20	5.76	0.3	A	134	201

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	283	71	70	1146	0.247	282	52	0.0	0.3	4.160	A
2 - Pendennis Rise	24	6	329	517	0.047	24	22	0.0	0.0	7.296	A
3 - Castle Hill	52	13	239	858	0.060	52	114	0.0	0.1	4.465	A
4 - Melvill Road	110	27	12	790	0.139	109	279	0.0	0.2	5.288	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	338	85	84	1136	0.298	338	62	0.3	0.4	4.508	A
2 - Pendennis Rise	29	7	394	479	0.061	29	27	0.0	0.1	8.000	A
3 - Castle Hill	62	15	287	825	0.075	62	136	0.1	0.1	4.716	A
4 - Melvill Road	131	33	14	788	0.167	131	335	0.2	0.2	5.478	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	414	103	102	1122	0.369	413	76	0.4	0.6	5.076	A
2 - Pendennis Rise	36	9	483	427	0.084	36	33	0.1	0.1	9.190	A
3 - Castle Hill	76	19	351	781	0.097	76	167	0.1	0.1	5.103	A
4 - Melvill Road	161	40	17	786	0.205	161	410	0.2	0.3	5.755	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	414	103	102	1122	0.369	414	76	0.6	0.6	5.085	A
2 - Pendennis Rise	36	9	483	427	0.084	36	33	0.1	0.1	9.204	A
3 - Castle Hill	76	19	352	781	0.097	76	167	0.1	0.1	5.106	A
4 - Melvill Road	161	40	18	786	0.205	161	410	0.3	0.3	5.757	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	338	85	84	1136	0.298	339	62	0.6	0.4	4.520	A
2 - Pendennis Rise	29	7	395	478	0.061	29	27	0.1	0.1	8.018	A

3 - Castle Hill	62	15	288	825	0.075	62	137	0.1	0.1	4.721	A
4 - Melvill Road	131	33	14	788	0.167	131	336	0.3	0.2	5.485	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	283	71	70	1146	0.247	283	52	0.4	0.3	4.178	A
2 - Pendennis Rise	24	6	331	516	0.047	25	23	0.1	0.1	7.326	A
3 - Castle Hill	52	13	241	857	0.061	52	115	0.1	0.1	4.474	A
4 - Melvill Road	110	27	12	789	0.139	110	281	0.2	0.2	5.301	A

2023 Adjusted Baseline + Development, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 4 have 92% of the total flow for the roundabout for one or more time segments][Arms 2 and 4 have 76% of the total flow for the roundabout for one or more time segments][Arms 3 and 4 have 81% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	7.72	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		80	4 - Melvill Road

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Adjusted Baseline + Development	AM Peak	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
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1 - Bar Road		ONE HOUR	✓	79	100.000
2 - Pendennis Rise		ONE HOUR	✓	9	100.000
3 - Castle Hill		ONE HOUR	✓	29	100.000
4 - Melvill Road		ONE HOUR	✓	330	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	6	23	50
	2 - Pendennis Rise	3	0	3	3
	3 - Castle Hill	20	1	0	8
	4 - Melvill Road	297	6	26	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	0	5	3
	2 - Pendennis Rise	0	0	0	0
	3 - Castle Hill	0	0	0	0
	4 - Melvill Road	10	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Bar Road	0.08	3.38	0.1	A	72	109
2 - Pendennis Rise	0.01	5.28	0.0	A	8	12
3 - Castle Hill	0.03	3.74	0.0	A	27	40
4 - Melvill Road	0.48	9.08	0.9	A	303	454

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	59	15	25	1159	0.051	59	239	0.0	0.1	3.274	A
2 - Pendennis Rise	7	2	75	714	0.010	7	10	0.0	0.0	5.093	A

3 - Castle Hill	22	5	43	1009	0.02 2	22	39	0.0	0.0	3.645	A
4 - Melvill Road	248	62	18	765	0.32 5	247	46	0.0	0.5	6.924	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	71	18	31	1155	0.06 1	71	287	0.1	0.1	3.319	A
2 - Pendennis Rise	8	2	90	704	0.01 1	8	12	0.0	0.0	5.172	A
3 - Castle Hill	26	7	51	1003	0.02 6	26	47	0.0	0.0	3.683	A
4 - Melvill Road	297	74	22	763	0.38 9	296	56	0.5	0.6	7.707	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	87	22	37	1150	0.07 6	87	351	0.1	0.1	3.384	A
2 - Pendennis Rise	10	2	110	691	0.01 4	10	14	0.0	0.0	5.283	A
3 - Castle Hill	32	8	63	995	0.03 2	32	57	0.0	0.0	3.736	A
4 - Melvill Road	363	91	26	760	0.47 8	362	68	0.6	0.9	9.032	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	87	22	37	1150	0.07 6	87	352	0.1	0.1	3.384	A
2 - Pendennis Rise	10	2	110	691	0.01 4	10	14	0.0	0.0	5.283	A
3 - Castle Hill	32	8	63	995	0.03 2	32	57	0.0	0.0	3.736	A
4 - Melvill Road	363	91	26	760	0.47 8	363	68	0.9	0.9	9.080	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	71	18	31	1155	0.06 1	71	289	0.1	0.1	3.323	A
2 - Pendennis Rise	8	2	90	704	0.01 1	8	12	0.0	0.0	5.175	A
3 - Castle Hill	26	7	51	1003	0.02 6	26	47	0.0	0.0	3.683	A
4 - Melvill Road	297	74	22	762	0.38 9	298	56	0.9	0.6	7.764	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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1 - Bar Road	59	15	26	1158	0.05 1	60	242	0.1	0.1	3.277	A
2 - Pendennis Rise	7	2	75	713	0.01 0	7	10	0.0	0.0	5.097	A
3 - Castle Hill	22	5	43	1009	0.02 2	22	39	0.0	0.0	3.646	A
4 - Melvill Road	248	62	18	765	0.32 5	249	47	0.6	0.5	6.991	A

2023 Adjusted Baseline + Development, Inter Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 4 have 85% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	5.51	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		168	4 - Melvill Road

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Adjusted Baseline + Development	Inter Peak	ONE HOUR	09:45	11:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Bar Road		ONE HOUR	✓	214	100.000
2 - Pendennis Rise		ONE HOUR	✓	16	100.000
3 - Castle Hill		ONE HOUR	✓	65	100.000
4 - Melvill Road		ONE HOUR	✓	219	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	5	6	60	143
	2 - Pendennis Rise	5	0	3	8
	3 - Castle Hill	25	0	2	38
	4 - Melvill Road	114	7	95	3

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	0	2	16
	2 - Pendennis Rise	0	0	0	0
	3 - Castle Hill	0	0	0	3
	4 - Melvill Road	9	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Bar Road	0.23	4.61	0.3	A	196	295
2 - Pendennis Rise	0.03	6.96	0.0	A	15	22
3 - Castle Hill	0.08	4.43	0.1	A	60	89
4 - Melvill Road	0.31	6.65	0.4	A	201	301

Main Results for each time segment

09:45 - 10:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	161	40	80	1041	0.155	160	112	0.0	0.2	4.084	A
2 - Pendennis Rise	12	3	231	607	0.020	12	10	0.0	0.0	6.049	A
3 - Castle Hill	49	12	123	928	0.053	49	120	0.0	0.1	4.094	A
4 - Melvill Road	165	41	28	790	0.209	164	144	0.0	0.3	5.738	A

10:00 - 10:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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1 - Bar Road	192	48	96	1031	0.187	192	134	0.2	0.2	4.291	A
2 - Pendennis Rise	14	4	277	576	0.025	14	12	0.0	0.0	6.404	A
3 - Castle Hill	58	15	147	909	0.064	58	144	0.1	0.1	4.231	A
4 - Melvill Road	197	49	33	787	0.250	197	172	0.3	0.3	6.096	A

10:15 - 10:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	236	59	118	1017	0.232	235	164	0.2	0.3	4.605	A
2 - Pendennis Rise	18	4	339	535	0.033	18	14	0.0	0.0	6.956	A
3 - Castle Hill	72	18	180	884	0.081	71	176	0.1	0.1	4.430	A
4 - Melvill Road	241	60	41	782	0.308	241	211	0.3	0.4	6.640	A

10:30 - 10:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	236	59	118	1017	0.232	236	164	0.3	0.3	4.608	A
2 - Pendennis Rise	18	4	339	535	0.033	18	14	0.0	0.0	6.961	A
3 - Castle Hill	72	18	181	884	0.081	72	176	0.1	0.1	4.431	A
4 - Melvill Road	241	60	41	782	0.308	241	211	0.4	0.4	6.651	A

10:45 - 11:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	192	48	96	1031	0.187	193	134	0.3	0.2	4.299	A
2 - Pendennis Rise	14	4	277	576	0.025	14	12	0.0	0.0	6.410	A
3 - Castle Hill	58	15	148	909	0.064	59	144	0.1	0.1	4.233	A
4 - Melvill Road	197	49	33	787	0.250	197	173	0.4	0.3	6.113	A

11:00 - 11:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	161	40	81	1041	0.155	161	112	0.2	0.2	4.095	A
2 - Pendennis Rise	12	3	232	606	0.020	12	10	0.0	0.0	6.062	A
3 - Castle Hill	49	12	124	927	0.053	49	121	0.1	0.1	4.101	A
4 - Melvill Road	165	41	28	790	0.209	165	145	0.3	0.3	5.762	A

2023 Adjusted Baseline + Development, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 4 have 83% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3, 4	5.63	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		87	2 - Pendennis Rise

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Adjusted Baseline + Development	PM Peak	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Bar Road		ONE HOUR	✓	384	100.000
2 - Pendennis Rise		ONE HOUR	✓	33	100.000
3 - Castle Hill		ONE HOUR	✓	70	100.000
4 - Melvill Road		ONE HOUR	✓	154	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	7	77	300
	2 - Pendennis Rise	2	0	7	24
	3 - Castle Hill	11	3	1	55
	4 - Melvill Road	65	20	68	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Bar Road	2 - Pendennis Rise	3 - Castle Hill	4 - Melvill Road
From	1 - Bar Road	0	0	0	3
	2 - Pendennis Rise	0	0	0	10
	3 - Castle Hill	11	0	0	0
	4 - Melvill Road	14	18	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Bar Road	0.38	5.21	0.6	A	352	529
2 - Pendennis Rise	0.09	9.39	0.1	A	30	45
3 - Castle Hill	0.10	5.17	0.1	A	64	96
4 - Melvill Road	0.22	6.01	0.3	A	141	212

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	289	72	70	1137	0.254	288	58	0.0	0.3	4.231	A
2 - Pendennis Rise	25	6	335	512	0.048	25	22	0.0	0.1	7.378	A
3 - Castle Hill	53	13	245	852	0.062	52	115	0.0	0.1	4.500	A
4 - Melvill Road	116	29	13	772	0.150	115	285	0.0	0.2	5.471	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	345	86	84	1127	0.306	345	70	0.3	0.4	4.600	A
2 - Pendennis Rise	30	7	401	473	0.063	30	27	0.1	0.1	8.115	A
3 - Castle Hill	63	16	294	819	0.077	63	137	0.1	0.1	4.762	A
4 - Melvill Road	138	35	15	771	0.180	138	341	0.2	0.2	5.689	A

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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	d (Veh/hr)	Arrivals (Veh)						e (Veh)	e (Veh)		
1 - Bar Road	423	106	102	1113	0.38 0	422	86	0.4	0.6	5.202	A
2 - Pendennis Rise	36	9	491	420	0.08 6	36	33	0.1	0.1	9.375	A
3 - Castle Hill	77	19	359	773	0.10 0	77	168	0.1	0.1	5.169	A
4 - Melvill Road	170	42	19	769	0.22 1	169	418	0.2	0.3	6.002	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	423	106	102	1113	0.38 0	423	86	0.6	0.6	5.213	A
2 - Pendennis Rise	36	9	492	420	0.08 7	36	33	0.1	0.1	9.390	A
3 - Castle Hill	77	19	360	773	0.10 0	77	168	0.1	0.1	5.172	A
4 - Melvill Road	170	42	19	769	0.22 1	170	418	0.3	0.3	6.007	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	345	86	84	1127	0.30 6	346	70	0.6	0.4	4.614	A
2 - Pendennis Rise	30	7	403	472	0.06 3	30	27	0.1	0.1	8.134	A
3 - Castle Hill	63	16	295	818	0.07 7	63	138	0.1	0.1	4.770	A
4 - Melvill Road	138	35	15	771	0.18 0	139	342	0.3	0.2	5.696	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Bar Road	289	72	70	1137	0.25 4	290	59	0.4	0.3	4.252	A
2 - Pendennis Rise	25	6	337	511	0.04 9	25	23	0.1	0.1	7.405	A
3 - Castle Hill	53	13	247	851	0.06 2	53	115	0.1	0.1	4.508	A
4 - Melvill Road	116	29	13	772	0.15 0	116	287	0.2	0.2	5.488	A