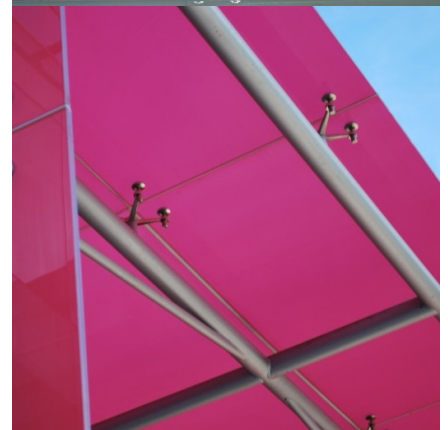
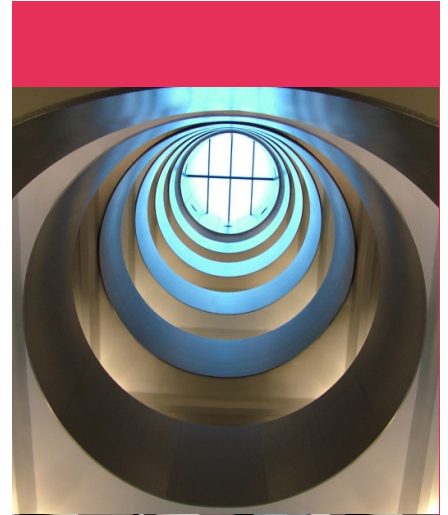


Strand House, Liverpool

Transport Statement

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1.0 Introduction

1.1 Background

- 1.1.1 Curtins has been appointed on behalf of Patten Properties to provide traffic and transportation advice in relation to a proposed mixed use residential and commercial development. This will replace the current building at 21 Strand Street, Strand House.
- 1.1.2 The development proposals will be set out in within a 'Full detailed planning application for the demolition of the existing building and erection of a part 16, part 19 storey mixed use development comprising 395 apartments (C3 Use), with associated communal facilities (including residents' gym, cinema, roof terrace), two ground floor commercial units (A1/A2/A3/A4/D1 Use Class) and associated access, servicing, parking and landscaping'.

1.2 Purpose of This Report

- 1.2.1 This Transport Statement (TS) has been written in order to consider the redevelopment proposals and their potential impact on the surrounding area from a traffic and transportation perspective.

1.3 Scope of the Report

- 1.3.1 Scoping discussions have been undertaken with Liverpool City Council (LCC) highways department about the proposals to redevelop the Strand House site considering any potential traffic and transport impacts of the scheme.
- 1.3.2 On this basis, this TS contains the following:
- A description of the highway network in the vicinity of the site;
 - A review of the accident record in the immediate vicinity of the site for a three year period;
 - A summary of the development proposals;
 - A summary of relevant transport planning policy;
 - Parking Proposals;
 - Justification of parking proposals;
 - A review of accessibility by all sustainable modes of travel;
 - Information regarding traffic generation and trip rates; and
 - Commentary on the highway impact associated with the development proposals.

1.4 Structure of the Report

- 1.4.1 Following this introduction, **Section 2** of the report provides a comprehensive description of the existing site and its location. This includes the local highway network and facilities for pedestrians, cyclists and public transport users.
- 1.4.2 **Section 2** also reviews the local area in terms of highway safety by way of obtaining and analysing records of accidents adjacent to the site over the most recent five year period available.
- 1.4.3 The development proposals summarised in **Section 3**, including justification of the proposed parking provision, servicing and access arrangements.
- 1.4.4 The accessibility of the site by sustainable modes of travel is assessed in **Section 4**.
- 1.4.5 **Section 5** outlines the traffic forecasting methodology used to establish the likely traffic generation associated with the development proposals.
- 1.4.6 Relevant local and national transport policy is summarised in **Section 7**, and the report is summarised and concluded in **Section 8**.

2.0 Site Location and Highway Layout

2.1 Site Location

- 2.1.1 The proposed development site is located on the north eastern side of the A5036 Strand Street in Liverpool opposite Canning Dock.
- 2.1.2 The application site is bounded by Strand Street to the south west and Red Cross Street to the north west, Liverpool Crown Court is at the rear of the development to the north east and an access route into the basement level of the courts borders the site to the south east.
- 2.1.3 **Plan TPMA5125_001** illustrates the location of the site in relation to the surrounding areas, and **Plan TPMA5125_002** shows the site in a more localised context relating to the local highway network.

2.2 Existing Use and Access Arrangements

- 2.2.1 The application site currently comprises the 21 Strand Street building with the pedestrian entrance to the site from Strand Street. To the rear of the site there is an existing NCP car park which is accessed via Red Cross Street.
- 2.2.2 The site is currently accessed from Red Cross Street for vehicles into the NCP car park to the rear of the existing Strand House building. The existing NCP car park has 65 parking spaces. For pedestrians access is from Strand Street at the front of the building.

2.3 Surrounding Highway Network

Red Cross Street

- 2.3.1 The proposed redevelopment would retain vehicular access via Red Cross Street which runs along the north western boundary of the redevelopment. Beyond the site Red Cross Street provides an additional access from The Strand to the basement level of the Crown Courts.
- 2.3.2 Red Cross Street is a two-way single carriageway road with a typical carriageway width of approximately 7.2m in width. The highway is subject to a 30mph speed limit and has footways on either side of the carriageway. There is street lighting provided on the north western side of the carriageway.
- 2.3.3 Red Cross Street benefits from dropped kerbs and tactile paving with footways connecting to The Strand as well as through into Derby Square towards Liverpool's main shopping areas.

- 2.3.4 Red Cross Street as mentioned previously provides vehicle access to the NCP car park and the Crown Courts as well as servicing access for the Travelodge and access to some office buildings along the north western side of the road.

Strand Street / A5036

- 2.3.5 Strand Street A5036 runs along the front of the redevelopment site from the junction of Upper Parliament Street/Sefton Street at its south eastern end up to the junction with Water Street to the north west of the site where it becomes St Georges Dock Gates and then New Quay.
- 2.3.6 The Strand is a varying three to four lane two-way dual carriageway road. The southbound carriageway onto (which Red Cross Street joins) has a bus lane on the nearside lane which pauses approximately 25m north of the Red Cross Street junction to allow vehicle access off/onto The Strand before restarting again on its approach to Liverpool One bus station.
- 2.3.7 The Strand is subject to a 30mph speed limit and has footways on either side with street lighting present along its length.
- 2.3.8 The Strand benefits from tactile paving and dropped kerbs as well as a shared usage route on the south western side of the carriageway. The footways along either side of The Strand are predominantly in excess of 4 metres in width, reducing in some instances to no less than 3 metres.

2.4 Highway Safety

- 2.4.1 Personal Injury Accident (PIA) data for the highway network adjacent to the site has been obtained from LCC for the most recent five years, up to 31/05/2016. A breakdown of the information is contained in **Table 2.1**:

| Junction/Link | Slight | Serious | Fatal | Totals |
|-------------------------------------|-----------|----------|----------|-----------|
| The Strand | 6 | 0 | 0 | 6 |
| The Strand/ James Street | 9 | 3 | 0 | 12 |
| Red Cross Street/ The Strand | 2 | 1 | 0 | 3 |
| James Street | 2 | 0 | 0 | 2 |
| Totals | 19 | 4 | 0 | 23 |

Table 2.1 – Personal Injury Accident Data Summary

- 2.4.2 There have been a total of 23 accidents in the latest five year period available, comprising zero fatal accidents recorded in the study area. There is nothing to suggest an existing safety issue from the frequency and nature of the accidents indicated in the above table.

- 2.4.3 Following a thorough review of the records, it is not considered that there is an existing safety issue that is likely to be exacerbated by the proposed redevelopment.

3.0 Development Proposals

3.1 Introduction

- 3.1.1 This Transport Statement has been prepared in order to support the proposed development of circa 395 residential apartments within Liverpool city centre. The site will have 56 car parking spaces on a basement level with two of these to be accessible parking spaces.
- 3.1.2 The development proposals will be set out in within a 'Full detailed planning application for the demolition of the existing building and erection of a part 16, part 19 storey mixed use development comprising 395 apartments (C3 Use), with associated communal facilities (including residents' gym, cinema, roof terrace), two ground floor commercial units (A1/A2/A3/A4/D1 Use Class) and associated access, servicing, parking and landscaping'.

3.2 Proposed Access

Vehicular Access

- 3.2.1 Vehicular access into the underground car parking level will be gained via Red Cross Street in a similar location to where the car park is accessed from currently.
- 3.2.2 Refuse vehicles are proposed to head down Red Cross Street and then reverse into a refuse and delivery facility within the building. The bay is proposed to be on a ramp at 1:21 gradient with a flat surface at the rear which provides a direct access to 28 Eurobins. The bay will have a sliding door that will be opened when required.
- 3.2.3 There will be an additional service lay-by along Red Cross Street on the southern side of the road, which will be used to service the commercial units. Vehicles will access this lay- by performing a turn in the road further along Red Cross Street before entering the lay-by. This arrangement is considered acceptable due to the low traffic levels on the road and the similar turning requirements for current service vehicles along Red Cross Street.
- 3.2.4 **Drawing TPMA5125_100** details the proposed site access point, pedestrian visibility and swept path into the underground car park.
- 3.2.5 **Drawing TPMA5125_200** illustrates how a refuse vehicle will access and egress the refuse collection zone.
- 3.2.6 **Drawing TPMA5125_300** illustrates how a servicing vehicle will access and egress the lay-by along Red Cross Street.

Pedestrian and Cycle Access

- 3.2.7 Pedestrian and cycle access will be gained from the front of the building from The Strand for both the residential and commercial aspects of the development. There are singular entrances into each of the commercial aspects and the residential section of the building.
- 3.2.8 Cycle access could be via Red Cross Street and down the access ramp to parking in the basement which has 30 spaces or on the south side of the development along the court access road where 46 further secure and covered cycle parking spaces are provided.

3.3 Parking Provision

Car Parking

- 3.3.1 It is proposed that there will be circa 56 car parking spaces in the underground car park that will be used for contract parking by the residents. Two of the spaces are to be provided for disabled parking.
- 3.3.2 The parking provision for the development is considered appropriate for the scheme due to the city centre location and the abundance of employment, retail and travel opportunities within walkable distance of the site. There is no minimum parking provision for C3 developments within the city centre.
- 3.3.3 Near to the site there are a number of other parking opportunities within ten minutes' walk of the site that offer contract parking, all of the below facilities offer parking prices ranging from £100 - £244 per month and all have capacity at the time of this report being written.
- Q Park Liverpool One
 - Mann Island
 - NCP The Strand (off Drury Lane)
 - Henry Street
 - Duke Street
 - Rumford Street
 - Gladwell Street
 - Princess Dock MSCP
- 3.3.4 Should the requirement for parking on the site be higher than the 56 spaces provided the above shows that there is ample surrounding parking opportunities within a short distance of the development site.

- 3.3.5 The underground car park is proposed to be accessed via a 1:12 ramp via Redcross Street. Drawing **TPMA5125_100** shows the accessibility of the car and the priority system to be employed within the car park through a signalised traffic light system.

Cycle Parking

- 3.3.6 Cycle Parking will be provided in two locations one is on the basement level for circa 30 cycles, the second is on the southern wall of the development at ground level which is for 46 spaces.
- 3.3.7 In the vicinity of the site there are a number of 'City Bike' facilities that would offer residents the opportunity to cycle. The nearest cycle locations to the site are to the north west by Mann Island with two stands, each with a maximum of 10 cycle spaces. The other nearest City Bike stand is located to the south east of the site at the Canning Street stand.
- 3.3.8 As an enhancement to the above, it is proposed that the scheme will provide a 14 space City Bike Stand outside of the new building upon Strand Street providing even further City Bike cycle opportunities for residents. There will also be 12 cycle parking spaces provided outside commercial unit 1 for visitors/customers to these units.
- 3.3.9 It is acknowledged that LCC's parking standards suggest that all apartments are accessible by cycle, it is considered that the scheme offers an appropriate level of cycle parking for the type and size of scheme.

4.0 Accessibility by Sustainable Modes of Travel

4.1 Introduction

4.1.1 A key element of national, regional and local policy is to ensure that new developments are located in areas where alternative modes of travel are available. It is important to ensure that developments are not isolated but are located close to complementary land uses. This supports the aims of integrating planning and transport, providing more sustainable transport choices, and reducing overall travel and car use.

4.1.2 The accessibility of the proposed development is considered in this context for the following modes of travel:

- Pedestrian Accessibility;
- Accessibility by Cycle; and
- Accessibility by Public Transport.

4.2 Pedestrian Accessibility

4.2.1 Research has indicated that acceptable walking distances depend on a number of factors, including the quality of the development, the type of amenity offered, the surrounding area, and other local facilities. The Chartered Institution for Highways and Transportation (CIHT) document entitled '*Providing for Journeys on Foot*' suggests walking distances which are relevant to this planning application. These are reproduced in **Table 4.1**.

| | Town Centres (m) | Commuting/School/ Sightseeing (m) | Elsewhere/Local Services (m) |
|--------------------------|---------------------|--------------------------------------|---------------------------------|
| Desirable | 200 | 500 | 400 |
| Acceptable | 400 | 1,000 | 800 |
| Preferred Maximum | 800 | 2,000 | 1,200 |

Table 4.1 – CIHT Suggested Acceptable Walking Distances

4.2.2 To assist in summarising the accessibility of the site by foot, an indicative pedestrian catchment plan has been produced. **Plan TPMA5125_003** shows distances of 200m, 400m and 800m which are termed '*Desirable*', '*Acceptable*' and the '*Preferred Maximum*' by the CIHT for town centre trips, which are most applicable for the city centre location of this development.

4.2.3 Within 200m of the redevelopment, there are a number of employment opportunities within Liverpool City Centre as well as some public houses along James Street. Also within this catchment, area lies James street rail station on the Merseyrail network (to be discussed within the section 4.4). Also

within this catchment area there are some leisure facilities including The Gym at One Park West along The Strand and an art gallery named the Open Eye Gallery.

- 4.2.4 Within 400m of the redevelopment there are numerous other facilities to potential residents at The Strand. This catchment includes more tourist attractions such as museums, local landmarks as well as more employment opportunities. Other notable locations within this catchment are Liverpool One Bus station (to be further discuss within section 4.4) as well as access to restaurants, cafes and some retail shops towards the north of the development. This catchment also highlights the nearby location of James Street rail station and bus stops and Liverpool One bus station to the retail units on the ground floor of the redevelopment.
- 4.2.5 Within 800m of the site, the majority of Liverpool One is accessible as well as other retail areas are accessible. There are also more tourist, restaurant, café and bar within this catchment as well as office locations and Moorfields rail station and the Castle Street bus stops.
- 4.2.6 The above shows the site is in an excellent location with a wealth of facilities within 800m for pedestrians.

4.3 Accessibility by Cycle

- 4.3.1 In order to assist in assessing the accessibility of the site by cycle, **Plan TPMA5125_004** presents a 8km cycle catchment for the site. The 8km cycling distance refers to a recommendation by Cycling England in the document 'Integrating Cycling into Development Proposals' (2009).
- 4.3.2 The catchment extends as far as Seaforth in the north, Roby to the east, Cressington in the south and Upton to the west via the Queensway tunnel.
- 4.3.3 The site is located near to the Trans Pennine Trail (National Cycle Route 56), which has a traffic-free section running along the River Mersey coast promenade from Mann Island (Across The Strand from the site) to the north-west of the site, travelling south-eastwards to St Michael's Railway Station in Aigburth. From St Michael's Railway Station, the route connects to Sefton Park via an on-road section, and connects to a further traffic free cycleway which continues along the coast as far as Grassendale Park.
- 4.3.4 In addition to the above there are a number of City Bike Liverpool stations located within the vicinity of the site. The closest of which is located adjacent to Mann Island at the junction of James Street and The strand and there are spaces available.
- 4.3.5 In view of the site's location and the surrounding infrastructure, travel to and from the site by bicycle, it is considered to be an attractive and realistic option for residents of the development.

4.4 Accessibility by Public Transport

- 4.4.1 **Plan TPMA5125_005** demonstrates those areas accessible via public transport within 15, 30 and 45 minutes journey from the site. Accessibility by bus and rail are considered in further detail within the subsections below. Within 45 minutes of the site the following locations are accessible Runcorn, Ormskirk, West Kirby, Ellesmere Port and Formby.

Bus Accessibility

- 4.4.2 Guidance from the Chartered Institution of Highways and Transportation (CIHT) document 'Guidelines for Planning for Public Transport in Development' indicates that ideally, a bus stop should be located within 400m from a new development.
- 4.4.3 Liverpool One Bus station is located approximately 350m south east of the site. Liverpool One bus station is a calling point for many services travelling to and from Liverpool. A large number of Liverpool's suburbs are accessible from the bus station should residents work outside of the city centre or employees/customers travel to the site using bus transport. Destinations from Liverpool One bus station include; Liverpool John Lennon Airport, Huyton, Halewood, Runcorn and St Helens.
- 4.4.4 The Liverpool One bus station is also served by National Express services, which residents and visitors may choose to use this to travel to other parts of the United Kingdom.
- 4.4.5 Two other key bus stop locations are from Mann Island and outside James Street Station, located approximately 200m from the site. Liverpool One, combined with the services to and from the Mann Island and the James Street stops offer most other services to and from Liverpool City Centre including Netherton, Croxteth, Kirkby, Dingle and Knowlsey Village.
- 4.4.6 The vicinity of the Liverpool One bus station highlights the excellent service available to residents of Strand House.

Rail Accessibility

- 4.4.7 The nearest train station is James Street on the Merseyrail, located approximately 200m to the north west of the site. A summary of rail services from James Street station is summarised in **Table 4.3**:

| Destination | Frequency | | |
|-----------------------|-----------|--------|----------|
| | Mon – Fri | Sat | Sun/Hols |
| West Kirby | 15mins | 15mins | 30mins |
| Chester | 15mins | 15mins | 30mins |
| Ellesmere Port | 15mins | 15mins | 30mins |
| New Brighton | 15mins | 15mins | 30mins |

Table 4.2 – Summary of Rail Services from James Street

- 4.4.8 These above services stop at numerous locations along their route with the West Kirby and New Brighton services which call at Bidston, where services towards Wrexham can be joined. Connections can also be made at Liverpool Lime Street for regional and national locations including Manchester, Birmingham and London.

4.5 Summary

- 4.5.1 It is considered the site is highly accessible by sustainable modes of transport. The surrounding area exhibits excellent levels of pedestrian and cycling infrastructure, and there are a number of public transport opportunities within acceptable walking distance of the site.
- 4.5.2 Overall and considering this, the site can be seen to be highly accessible by multiple modes of sustainable transport such as walking, cycling and public transport.

5.0 Traffic Forecasting and Highway Impact

5.1 Introduction

- 5.1.1 The following section contains trip generation analysis based on the proposed development of 395 apartments within Liverpool City Centre
- 5.1.2 In order to undertake the assessment, the TRICS database has been used. TRICS is the industry recognised tool for calculating the anticipated future trip demand of a proposed development. The database contains multi-modal surveys of varying land uses in multiple destinations across the UK, including apartment land uses.
- 5.1.3 The TRICS search was undertaken for all privately rented apartment city/town centre sites across England and Scotland (excluding Greater London and Ireland). Survey days were Monday – Friday, and various location and population filters ensured the sites were representative of the proposed development location. The full TRICS outputs are contained within **Appendix B** to the rear of this report.

5.2 Forecasted Trip Generation

- 5.2.1 The full development of 395 apartments has been assumed. The following **Table 5.1** summarises the AM and PM peak periods:

| TRICS Residential Developments | Average TRICS Trip Rates | | | Proposed Development Trips | | |
|--------------------------------|--------------------------|--------|-------|----------------------------|--------|-------|
| | Arrive | Depart | Total | Arrive | Depart | Total |
| AM (08:00 – 09:00) | 0.047 | 0.124 | 0.171 | 19 | 49 | 68 |
| PM (17:00 – 18:00) | 0.139 | 0.064 | 0.203 | 55 | 25 | 80 |

Table 5.1 – Proposed Development Trip Rates and Trip Generation

- 5.2.2 The above table demonstrates the proposed redevelopment would generate approximately 68 two-way trips in the AM peak and 80 two-way trips in the PM peak period.
- 5.2.3 No Parking will be provided for vehicles for the commercial units therefore zero vehicle trips will be associated with this development. Users of the stores will be either foot or cycle based.
- 5.2.4 TRICS has suggested that the AM peak would be 68 and the PM peak would be 80 two way trips, these are considered higher than what would occur in reality as the maximum number of individually reserved parking spaces is 56. This therefore suggests that as a worst case the 56 vehicles would

leave in the AM and then return in the PM which is less than the figures suggested by TRICS. If these figures are then used this is 9 extra vehicles every 10 minutes on the highway network.

- 5.2.5 The trips produced by TRICS could occur on the network however would park elsewhere in one of the contract parking locations highlighted in section 3.3 of this report.

5.3 Forecasted Highway Impact

- 5.3.1 It is not considered the proposed development would have a material impact on the surrounding highway network.
- 5.3.2 The above TRICS trip generation forecast equates to 11 additional vehicles on the surrounding highway network every 10 minutes in the AM and an additional 13 vehicles in the PM. If the max capacity of the car park is considered the vehicle trips created by the development is even less. This is considered an imperceptible impact on the existing highway and is considered higher than would actually occur in reality.

6.0 Transport Planning Policy

6.1 Introduction

- 6.1.1 This section of the report sets out the key national and local traffic and transport policies that are relevant to this application. The below sections of the report illustrate how the proposals accord with these policies.

6.2 National Planning Policy Framework

- 6.2.1 The NPPF sets out national transport planning policy and from the outset the Minister for Planning's Foreword lays the foundations for the policy rationale;

'The purpose of planning is to help achieve sustainable development....

Development means growth. We must accommodate the new ways by which we will earn our living in a competitive world. We must respond to the changes that new technologies offer us. Our lives, and the places in which we live them, can be better, but they will certainly be worse if things stagnate.'

- 6.2.2 Paragraph 14 states that at the heart of the NPPF is:

'A presumption in favour of sustainable development, which should be seen as a golden thread running through both plan making and decision making.'

- 6.2.3 For decision making a presumption in favour of sustainable development means granting permission:

'Unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies.'

- 6.2.4 Paragraph 23 demonstrates that ensuring the vitality of town centres is a core planning principle, and states that planning policies should:

'Promote competitive town centre environments and set out policies for the management and growth of centres over the plan period.'

- 6.2.5 In drawing up Local Plans, local planning 'authorities should:

- 'recognise town centres as the heart of their communities and pursue policies to support their viability and vitality;
- define a network and hierarchy of centres that is resilient to anticipated future economic changes;

- define the extent of town centres and primary shopping areas, based on a clear definition of primary and secondary frontages in designated centres, and set policies that make clear which uses will be permitted in such locations;
- promote competitive town centres that provide customer choice and a diverse retail offer and which reflect the individuality of town centres;
- retain and enhance existing markets and, where appropriate, reintroduce or create new ones, ensuring that markets remain attractive and competitive;
- allocate a range of suitable sites to meet the scale and type of retail, leisure, commercial, office, tourism, cultural, community and residential development needed in town centres. It is important that needs for retail, and leisure, office and other main town centre uses are met in full and are not compromised by limited site availability.

6.2.6 In respect of supporting traffic and transportation documentation, Paragraph 32 of the NPPF states that:

“All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- *‘The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*
- *Safe and suitable access to the site can be achieved for all people; and*
- *Improvements can be undertaken within the transport network that cost-effectively limits the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.”*

6.2.7 Paragraph 35 of the NPPF states that plans for new development should:

“protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to;

- *Accommodate the efficient delivery of goods and supplies;*
- *Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;*
- *Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;*
- *Incorporate facilities for charging plug-in and other ultra-low emission vehicles; and*
- *Consider the needs of people with disabilities by all modes of transport.”*

6.2.8 Paragraph 36 of the NPPF states:

“All developments which generate significant amounts of movement should be required to provide a Travel Plan.”

6.2.9 This TA has been accompanied by an Interim Travel Plan which provides a commitment to produce a full Travel Plan upon occupation of the completed development.

6.3 National Planning Policy Guidance

6.3.1 The Government has recently produced the National Planning Practice Guidance (NPPG) to supplement the NPPF. Within the PPG, there is a specific section clarifying the over-arching principles on Travel Plans, Transport Assessments and Transport Statements. There are also sections advising further on each of the three discussed documents.

6.3.2 The guidance on Transport Assessments and Statements re-iterates the circumstances in which either document would usually be required. It is clear that a development of the size and nature of this development requires a full Transport Assessment. It also clarifies the process for establishing a scope for the assessment, and what the document should contain. The NPPG has been considered in the production of this TS.

6.3.3 The guidance on Travel Plans reinforces the requirement for a Travel Plan, the scope of the document, and the need for monitoring to continue the strategy into the future. The NPPG has been considered in the production of the accompanying Interim Travel Plan.

6.4 Merseyside Local Transport Plan

6.4.1 The Local Transport Plan sets out implementation plans for the medium and long term and aims to improve transport within the Merseyside region. The Third Local Transport Plan envisions the following;

“A city region committed to a low carbon future, which has a transport network and mobility culture that positively contributes to a thriving economy and the health and wellbeing of its citizens and where sustainable travel is the option of choice”.

6.4.2 The Local Transport Plan has six goals;

- *Help create the right conditions for sustainable economic growth by supporting the priorities of the Liverpool City Region, the Local Enterprise Partnership and the Local Strategic Partnerships.*
- *Provide and promote a clean, low emission transport system which is resilient to changes to climate and oil availability.*
- *Ensure the transport system promotes and enables improved health and wellbeing and road safety.*

- *Ensure equality of travel opportunity for all, through a transport system that allows people to connect easily with employment, education, healthcare, other essential services and leisure and recreational opportunities.*
- *Ensure the transport network supports the economic success of the city region by the efficient movement of people and goods.*
- *Maintain our assets to a high standard.*

6.4.3 As described in **Section 5** of this Transport Statement, the site is considered to be accessible by sustainable modes, including walking, cycling and public transport, and is therefore considered to be consistent with the objectives of the LTP.

6.5 Liverpool City Council Policy: Liverpool Core Strategy

6.5.1 Liverpool City Council in 2012 released a draft document of the 'Liverpool Core Strategy' which outlines the policies that should be taken into consideration when new developments within the city and surrounding areas are being planned and designed.

6.5.2 The Core Strategy includes section 6: 'The Delivery Strategy for Liverpool' and within this section there is the subsection: 'Strategic Policies' which includes the objectives that new developments should consider.

6.5.3 'Strategic Objective Seven - Maximising Sustainable Accessibility' is included in the 'Strategic Policies' subsection and outlines the main objectives and policies that are associated with travel, transport and accessibility of new developments.

6.5.4 Strategic Policy 34 states that:

1. *"Improving Accessibility and Managing Demand for Travel Development proposals should make the best use of existing transport infrastructure. Where this cannot be achieved, development should be phased to coincide with new transport infrastructure provision."*
2. *Developments which singly or in combination have a significant impact on the movement of people or goods, should, through the provision of Travel Plans, positively manage travel demand and contribute to the improvement of accessibility in general, particularly by more sustainable modes of transport including walking, cycling and public transport."*

6.5.5 **Section 5** of this report shows that the proposed development adjacent to Leeward Drive complies with this policy as there are many existing public transport links available to users of the site, and as there are many ways of accessing the site via sustainable methods of transport.

6.5.6 The Core Strategy DPD which has been under preparation for a number of years will not be submitted as a separate DPD, but will instead, form the framework for the Local Plan for Liverpool.

6.6 Liverpool Core Strategy

6.6.1 Liverpool's current planning policy is set out in "A Plan for Liverpool", the City's Unitary Development Plan (UDP), adopted in November 2002. Since then, the range of policy issues to be addressed by development plans has expanded to include areas such as climate change, renewable energy use and conservation, waste reduction and recycling, and flood protection.

6.6.2 The below policies are highlighted as being relevant to the scheme:

- Strategic Policy 1 – Sustainable Development Principles: - Improve accessibility, reduce the need to travel by motorised transport and where travel is necessary, enable convenient and safe access by sustainable transport modes;
- Strategic Policy 23 - Key Place-Making and Design Principles:- Support for increased permeability of the built environment, and strengthened linkages between places, by all sustainable modes of transport
- Strategic Policy 34 - Improving Accessibility and Managing Demand for Travel: - .
 - Development proposals should make the best use of existing transport infrastructure. Where this cannot be achieved, development should be phased to coincide with new transport infrastructure provision.
 - Developments which singly or in combination have a significant impact on the movement of people or goods, should, through the provision of Travel Plans, positively manage travel demand and contribute to the improvement of accessibility in general, particularly by more sustainable modes of transport including walking, cycling and public transport.
 - Development proposals should not compromise existing transport infrastructure or schemes programmed in the Local Transport Plan (LTP) and actions that are planned. These include:
 - Improving access to Liverpool John Lennon Airport, including support for measures to maintain and increase the proportion of passengers arriving and departing the airport by public transport
 - Increasing the network of cycling and walking routes, based on programmes in the LTP's Active Travel Strategy and the longer term plan to complete the comprehensive Merseyside Cycle Network
 - Improvements in the City Centre (e.g. rail capacity improvements)
 - Protecting Merseytram Line One and longer term objectives relating to the development of the Merseytram network

6.7 Ensuring a Choice of Travel SPD

6.7.1 The Ensuring a Choice of Travel SPD (adopted December 2008) forms one of several statutory documents that sit within the Local Plan. The document provides guidance to developers on the access and transport requirements for new development across Merseyside. The SPD is intended to;

- *Enable the provision of a balanced transport infrastructure which provides access to employment, leisure, retail and other facilities for all the city's residents and visitors; and*
- *Provide a framework for future investment in the City's strategic road and rail network where new development would create additional travel demand.*

6.7.2 The objectives are achieved through components within the document. These components include a Minimum Accessibility Standard Assessment (MASA) and Parking Standards. The MASA is a requirement for new developments and is intended to demonstrate accessibility by all modes. The complete MASA outputs have been discussed throughout Section 4 of this Transport Assessment, and the assessment outputs are included in **Appendix C**.

6.7.3 **Section 3** of this report details the parking arrangements at the proposed development, and how they are considered appropriate for the development.

6.8 Conclusions

6.8.1 In accordance with local and national transport guidance, there are a number of sustainable transport opportunities available to future staff of the proposed development. It is considered that the proposed development is in line with all relevant transportation planning policy.

7.0 Summary and Conclusions

7.1 Summary

- 7.1.1 Curtins has been appointed on behalf of Patten Properties to provide traffic and transportation advice in relation to a 'Full detailed planning application for the demolition of the existing building and erection of a part 16, part 19 storey mixed use development comprising 395 apartments (C3 Use), with associated communal facilities (including residents' gym, cinema, roof terrace), two ground floor commercial units (A1/A2/A3/A4/D1 Use Class) and associated access, servicing, parking and landscaping'.
- 7.1.2 The development also includes associated 56 car parking on a basement level as well as 76 cycle parking spaces. There will also be the provision of a City Bike stand with 14 bikes/spaces available. The commercial units will be provided with 12 parking spaces between them.
- 7.1.3 The accessibility to and from the site has been shown to be of an excellent standard due to the sites city centre location and proximity to a number of bus service hubs (e.g. Mann Island, James Street, Liverpool One bus station) as well as James Street rail station. The site also benefits from high quality walking and cycling facilities in the vicinity of the site.
- 7.1.4 The expected trips to and from the development are considered to be imperceptible to the existing traffic on the surrounding highway. TRICS suggested that the AM peak would be 68 and the PM peak would be 80, these are considered higher than what would occur in reality as the maximum number of parking spaces is only 56 which are reserved individually. This therefore suggests that as a worst case the 56 vehicles would leave in the AM and then return in the PM which is 12 less than the figures suggested by TRICS for the AM and 24 less than the PM.
- 7.1.5 The scheme adheres to national and local planning policy and provides justification for the parking proposed level of parking.

7.2 Conclusions

- 7.2.1 Overall it is considered that from a traffic and transportation perspective there are no reasons why the development proposals should not be granted planning approval.

TPMA5125 Strand House, Liverpool

Transport Statement



Plans

Drg No:

TPMA5125_001

Rev:

/

Project: STRAND HOUSE, LIVERPOOL

Drg Title: REGIONAL SITE LOCATION PLAN

Drawn: TL

Checked: KY

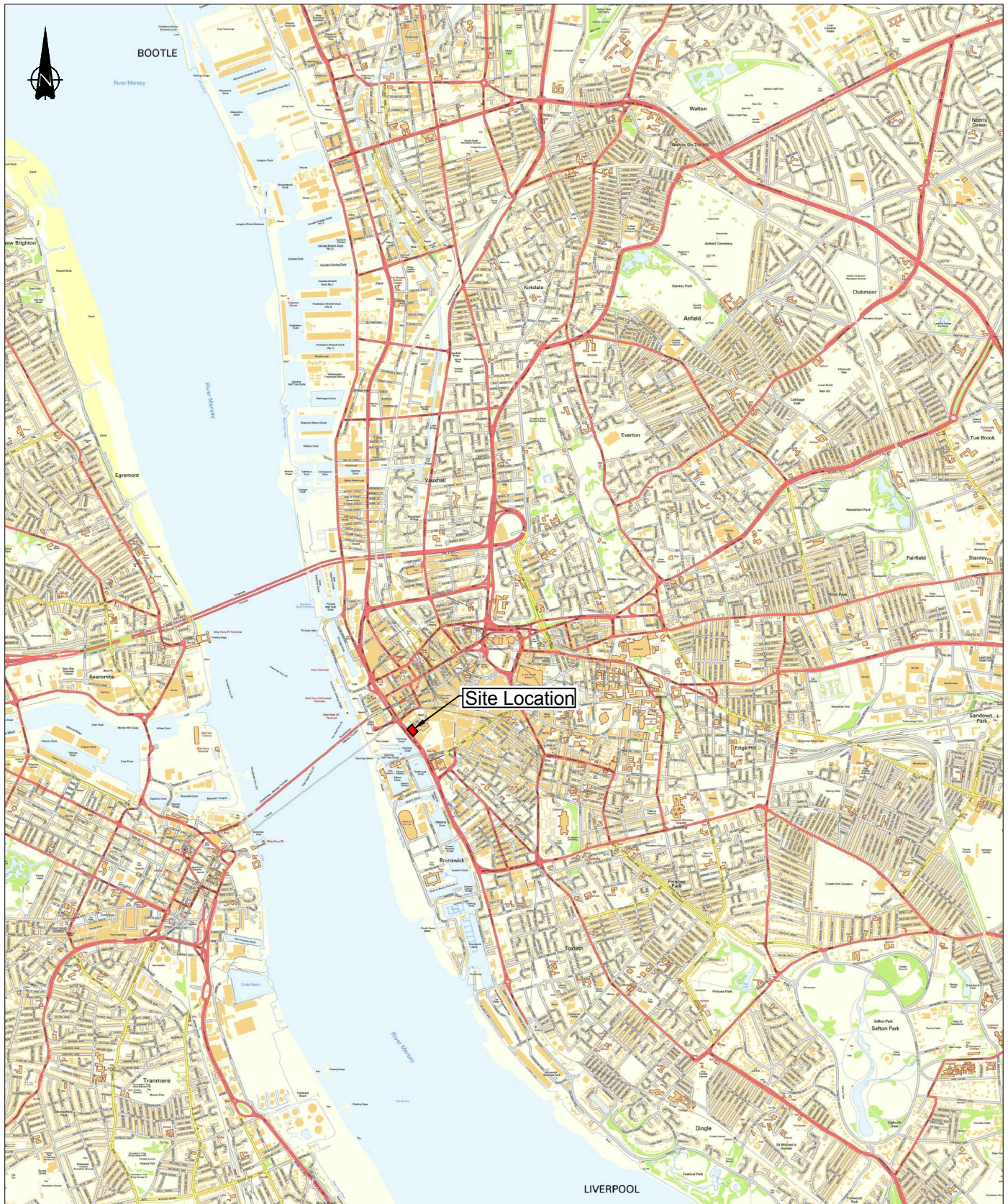
Scale: NTS

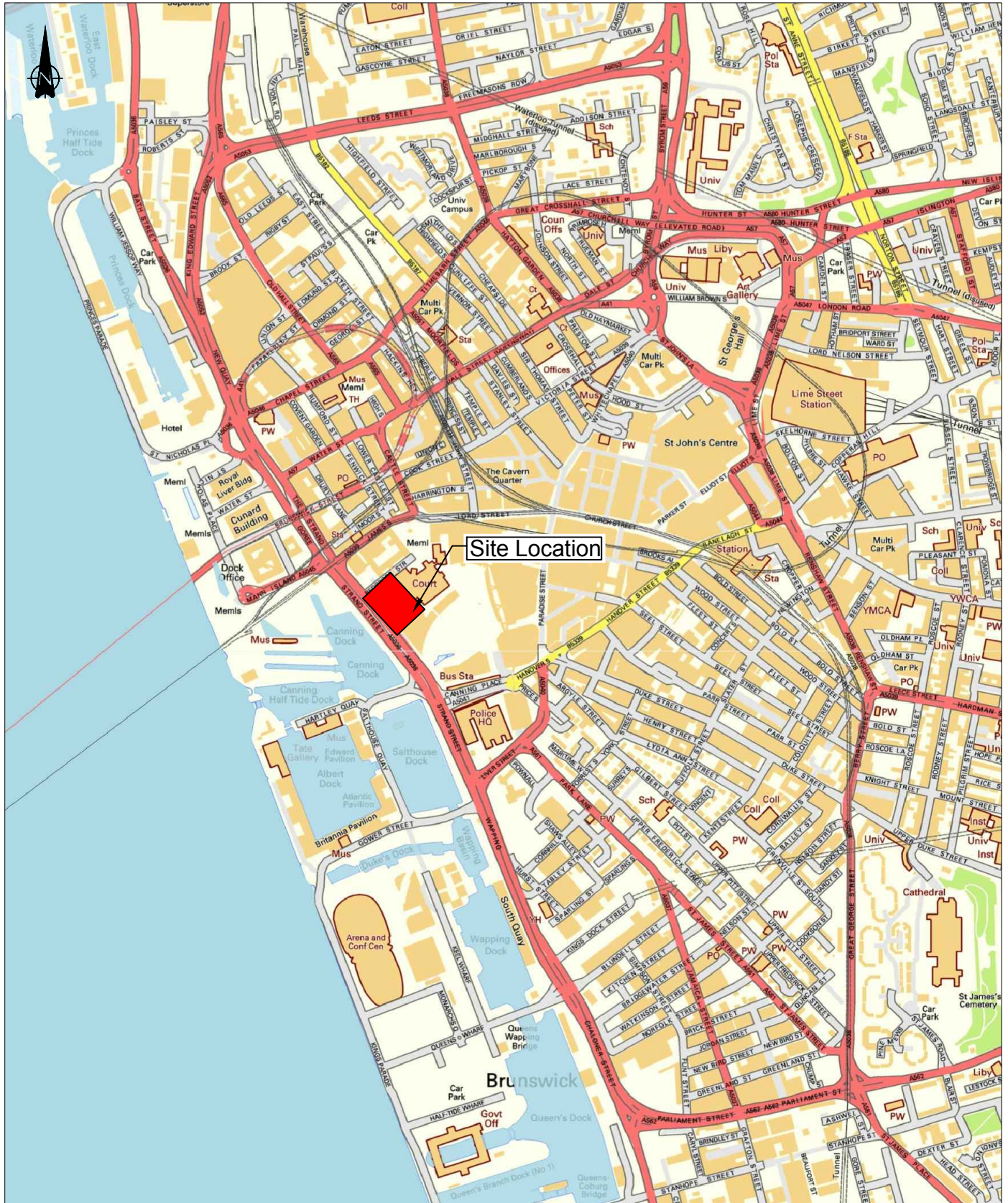


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version 1.3





Drg No:

TPMA5125_003

Rev:

/

Project: STRAND HOSUE, LIVERPOOL

Drg Title: INDICATIVE PEDESTRIAN CATCHMENT PLAN

Drawn: TL

Checked: KY

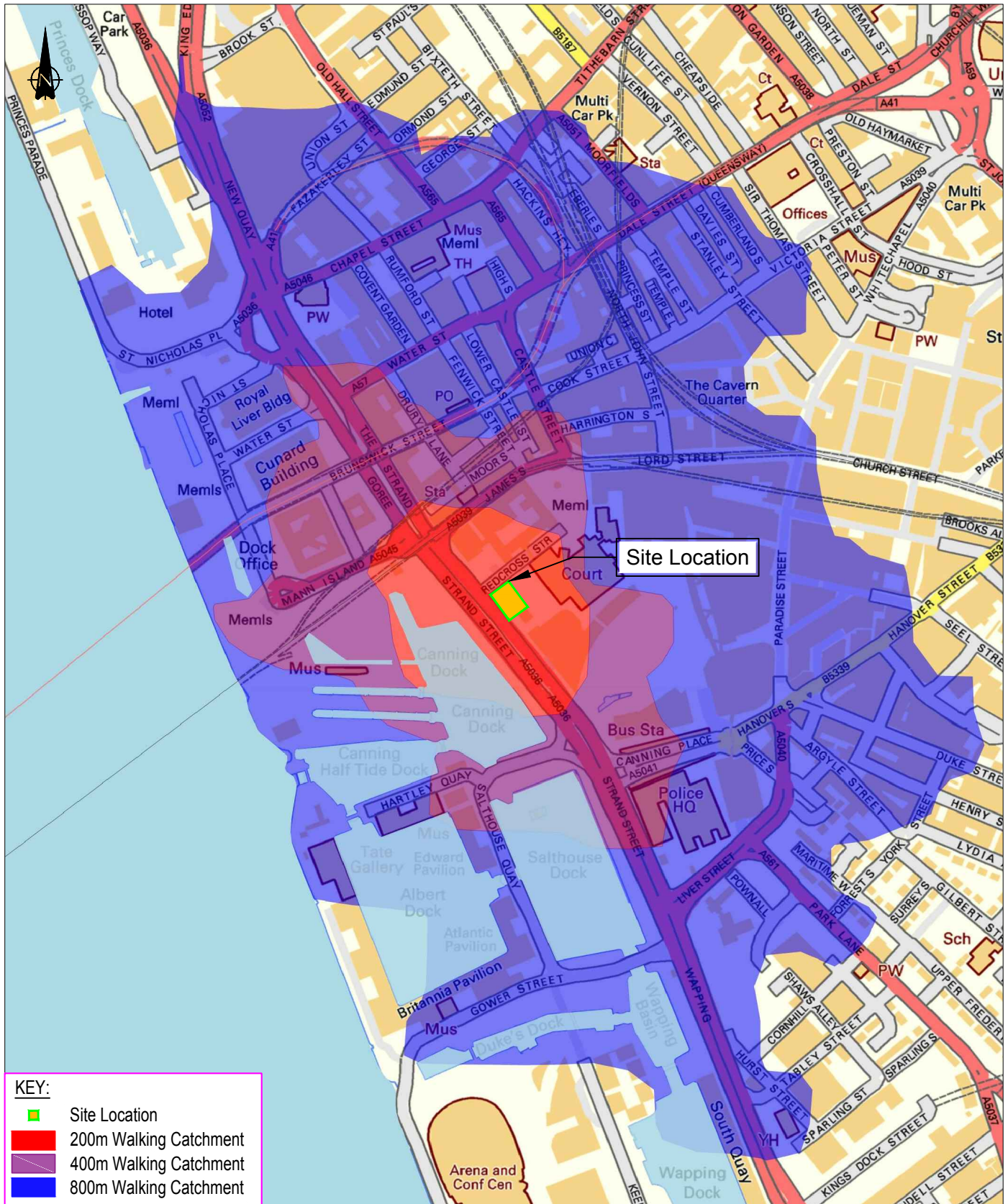
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Drg No:

TPMA5125_004

Rev:

/

Project: STRAND HOUSE, LIVERPOOL

Drg Title: 8KM CYCLE CATCHMENT PLAN

Drawn: TL

Checked: KY

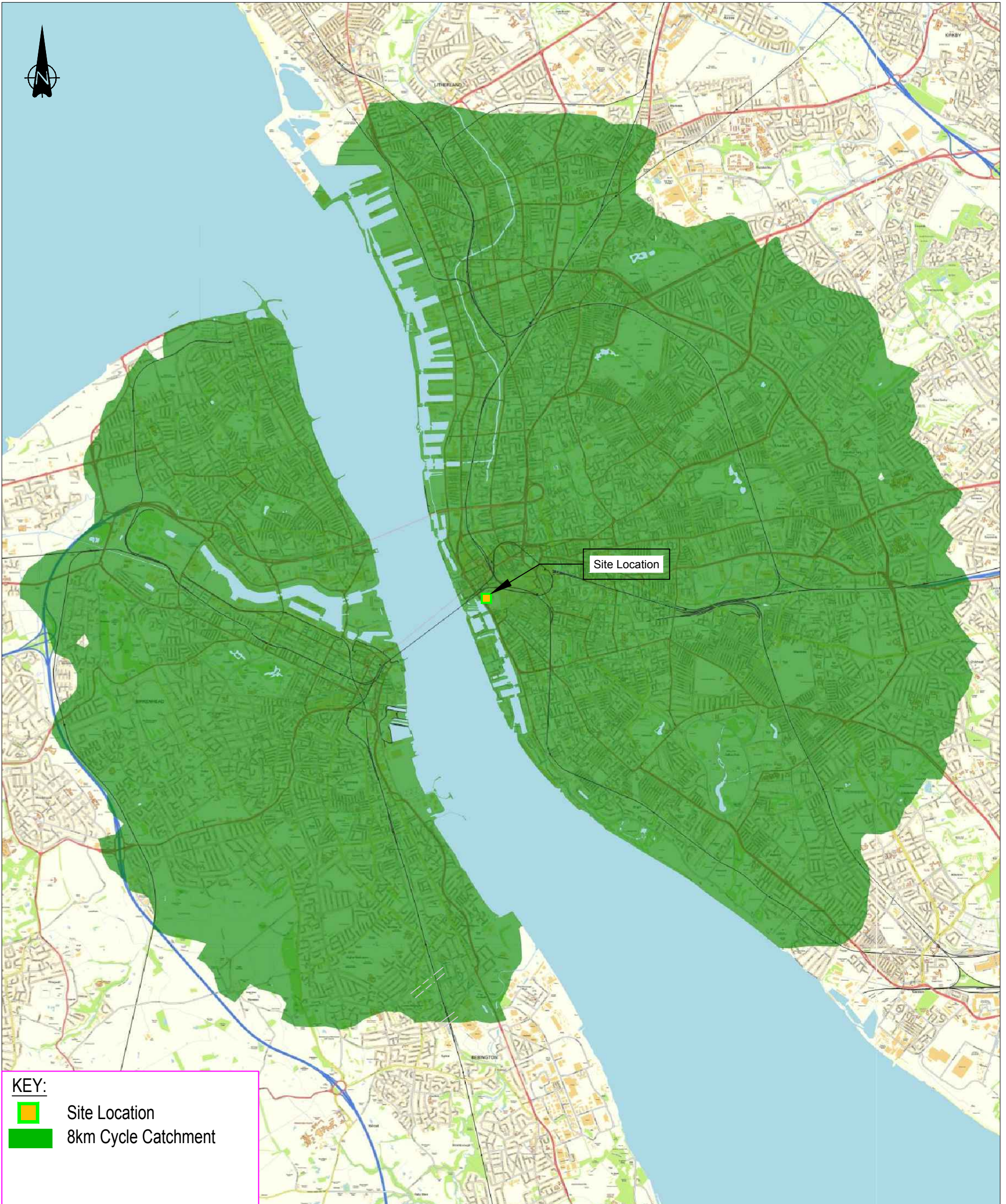
Scale: NTS



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version 1.3



Drg No:

TPMA5125_005

Rev:

/

Project: STRAND HOUSE

Drg Title: PUBLIC TRANSPORT CATCHMENT PLAN

Drawn: TL

Checked: KY

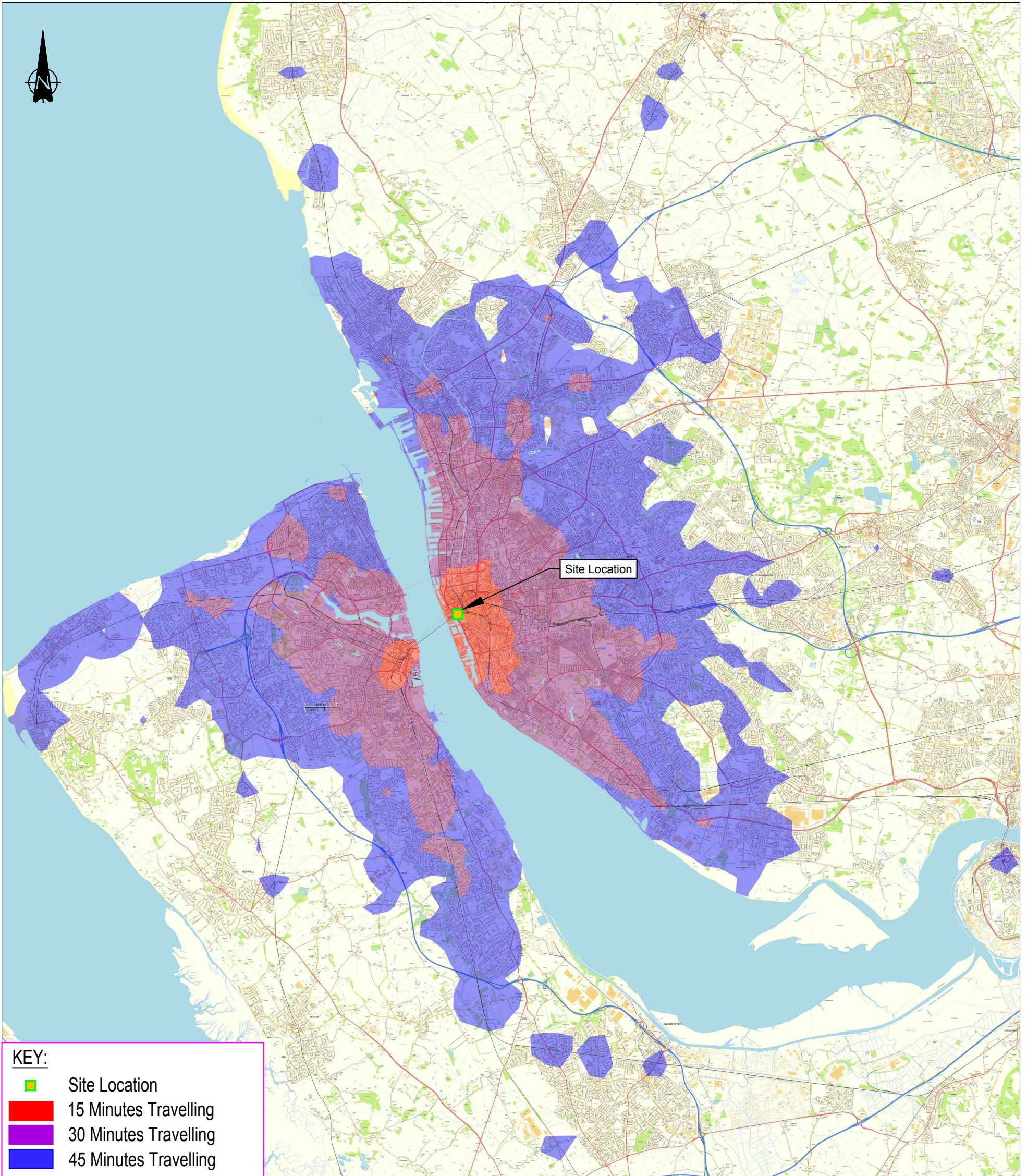
Scale: NTS



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version 1.3

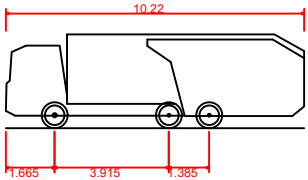


TPMA5125 Strand House, Liverpool

Transport Statement



Drawings



| | |
|--|---------|
| Phoenix 2-20W (with Elite 2 6x4 chassis) | |
| Overall Length | 10.220m |
| Overall Width | 2.530m |
| Overall Body Height | 3.211m |
| Min Body Ground Clearance | 0.416m |
| Track Width | 2.530m |
| Lock-to-lock time | 4.00s |
| Curb to Curb Turning Radius | 9.450m |

DRAWING BASED UPON LEACH RHODES
WALKER ARCHITECTS DRAWING:
LRW-7494-L(00)03J - Ground Floor Plan

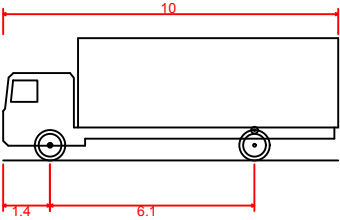
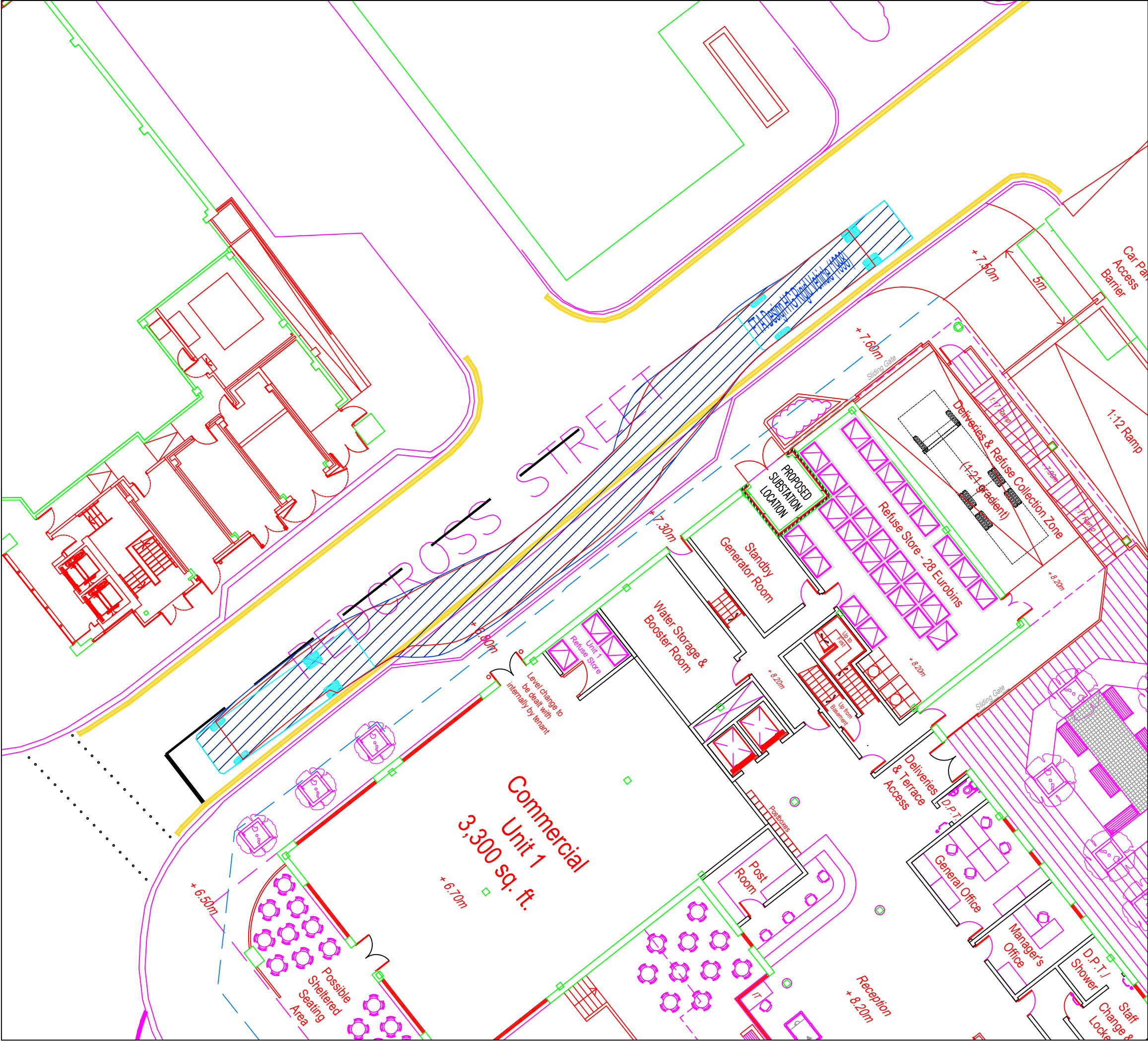
| Rev: | Description: | Date: | By: | Chkd: |
|------|--------------|-------|-----|-------|
|------|--------------|-------|-----|-------|



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| | | | | |
|------------|---|--------------|--------|----------|
| Status: | FOR INFORMATION | | | |
| Project: | 21 STRAND STREET RESIDENTIAL DEVELOPMENT | | | |
| Drg Title: | REFUSE VEHICLE ACCESS SWEEP PATH | | | |
| Scale: | Size: | First Issue: | Drawn: | Checked: |
| 1:200 | A3 | 10/06/16 | TL | KY |
| Drg No: | TPMA5125_200 | | | Rev: |
| | | | | / |



FTA Design HG Rigid Vehicle (1998)
Overall Length 10.000m
Overall Width 2.500m
Overall Body Height 3.645m
Min Body Ground Clearance 0.440m
Track Width 2.470m
Lock-to-lock time 3.00s
Curb to Curb Turning Radius 11.000m

DRAWING BASED UPON LEACH RHODES
WALKER ARCHITECTS DRAWING:
LRW-7494-L(00)03J - Ground Floor Plan

| Rev: | Description: | Date: | By: | Chkd: |
|------|--------------|-------|-----|-------|
|------|--------------|-------|-----|-------|



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Status: FOR INFORMATION

Project: 21 STRAND STREET
RESIDENTIAL DEVELOPMENT

Drg Title: SERVICING VEHICLE
ACCESS SWEEP PATH

| Scale: | Size: | First Issue: | Drawn: | Checked: |
|--------|-------|--------------|--------|----------|
| 1:200 | A3 | 10/06/16 | TL | KY |

| Drg No: | Rev: |
|--------------|------|
| TPMA5125_300 | / |

Appendix A – Site Plan



Appendix B – TRICS Outputs

Calculation Reference: AUDIT-148301-160509-0539

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : C - FLATS PRIVATELY OWNED
 VEHICLES

Selected regions and areas:

| | | |
|----|-----------------------|--------|
| 02 | SOUTH EAST | |
| | EX ESSEX | 1 days |
| | SC SURREY | 1 days |
| 08 | NORTH WEST | |
| | GM GREATER MANCHESTER | 1 days |
| 11 | SCOTLAND | |
| | SR STIRLING | 1 days |

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

Filtering Stage 2 selection:

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

| | |
|-------------------------|---------------------|
| Parameter: | Number of dwellings |
| Actual Range: | 80 to 154 (units:) |
| Range Selected by User: | 80 to 215 (units:) |

Public Transport Provision:

| | |
|---------------|---------------------|
| Selection by: | Include all surveys |
|---------------|---------------------|

| | |
|-------------|----------------------|
| Date Range: | 01/01/08 to 18/12/14 |
|-------------|----------------------|

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

Selected survey days:

| | |
|-----------|--------|
| Monday | 1 days |
| Tuesday | 1 days |
| Wednesday | 1 days |
| Thursday | 1 days |

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

Selected survey types:

| | |
|-----------------------|--------|
| Manual count | 4 days |
| Directional ATC Count | 0 days |

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

Selected Locations:

| | |
|---------------------|---|
| Town Centre | 1 |
| Edge of Town Centre | 3 |

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

| | |
|------------------|---|
| Residential Zone | 2 |
| Built-Up Zone | 1 |
| No Sub Category | 1 |

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

Filtering Stage 3 selection:

Use Class:

| | |
|----|--------|
| C3 | 4 days |
|----|--------|

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

| | |
|------------------|--------|
| 10,001 to 15,000 | 1 days |
| 15,001 to 20,000 | 1 days |
| 25,001 to 50,000 | 2 days |

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

Population within 5 miles:

| | |
|--------------------|--------|
| 75,001 to 100,000 | 1 days |
| 125,001 to 250,000 | 1 days |
| 250,001 to 500,000 | 1 days |
| 500,001 or More | 1 days |

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

Car ownership within 5 miles:

| | |
|------------|--------|
| 0.6 to 1.0 | 1 days |
| 1.1 to 1.5 | 3 days |

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

| | |
|----|--------|
| No | 4 days |
|----|--------|

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

| | | | | |
|---|----------------------------|----------------|--|---------------------|
| 1 | EX-03-C-02 | BLOCK OF FLATS | | ESSEX |
| | WESTCLIFF PARADE | | | |
| | WESTCLIFF | | | |
| | SOUTHEND-ON-SEA | | | |
| | Edge of Town Centre | | | |
| | Residential Zone | | | |
| | Total Number of dwellings: | 94 | | |
| | Survey date: TUESDAY | 22/10/13 | | Survey Type: MANUAL |
| 2 | GM-03-C-02 | BLOCK OF FLATS | | GREATER MANCHESTER |
| | WHITWORTH STREET W. | | | |
| | MANCHESTER | | | |
| | Town Centre | | | |
| | Built-Up Zone | | | |
| | Total Number of dwellings: | 154 | | |
| | Survey date: THURSDAY | 13/10/11 | | Survey Type: MANUAL |
| 3 | SC-03-C-01 | FLATS | | SURREY |
| | HEATHCOTE ROAD | | | |
| | CAMBERLEY | | | |
| | Edge of Town Centre | | | |
| | Residential Zone | | | |
| | Total Number of dwellings: | 140 | | |
| | Survey date: MONDAY | 21/07/08 | | Survey Type: MANUAL |
| 4 | SR-03-C-01 | FLATS | | STIRLING |
| | FORTH SIDE WAY | | | |
| | STIRLING | | | |
| | Edge of Town Centre | | | |
| | No Sub Category | | | |
| | Total Number of dwellings: | 80 | | |
| | Survey date: WEDNESDAY | 18/06/14 | | Survey Type: MANUAL |

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---------------|----------|-------------|-----------|------------|-------------|-----------|----------|-------------|-----------|
| | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 4 | 117 | 0.017 | 4 | 117 | 0.094 | 4 | 117 | 0.111 |
| 08:00 - 09:00 | 4 | 117 | 0.047 | 4 | 117 | 0.124 | 4 | 117 | 0.171 |
| 09:00 - 10:00 | 4 | 117 | 0.047 | 4 | 117 | 0.085 | 4 | 117 | 0.132 |
| 10:00 - 11:00 | 4 | 117 | 0.062 | 4 | 117 | 0.071 | 4 | 117 | 0.133 |
| 11:00 - 12:00 | 4 | 117 | 0.049 | 4 | 117 | 0.068 | 4 | 117 | 0.117 |
| 12:00 - 13:00 | 4 | 117 | 0.103 | 4 | 117 | 0.077 | 4 | 117 | 0.180 |
| 13:00 - 14:00 | 4 | 117 | 0.073 | 4 | 117 | 0.094 | 4 | 117 | 0.167 |
| 14:00 - 15:00 | 4 | 117 | 0.075 | 4 | 117 | 0.088 | 4 | 117 | 0.163 |
| 15:00 - 16:00 | 4 | 117 | 0.075 | 4 | 117 | 0.049 | 4 | 117 | 0.124 |
| 16:00 - 17:00 | 4 | 117 | 0.085 | 4 | 117 | 0.060 | 4 | 117 | 0.145 |
| 17:00 - 18:00 | 4 | 117 | 0.139 | 4 | 117 | 0.064 | 4 | 117 | 0.203 |
| 18:00 - 19:00 | 4 | 117 | 0.100 | 4 | 117 | 0.058 | 4 | 117 | 0.158 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.872 | | | 0.932 | | | 1.804 |

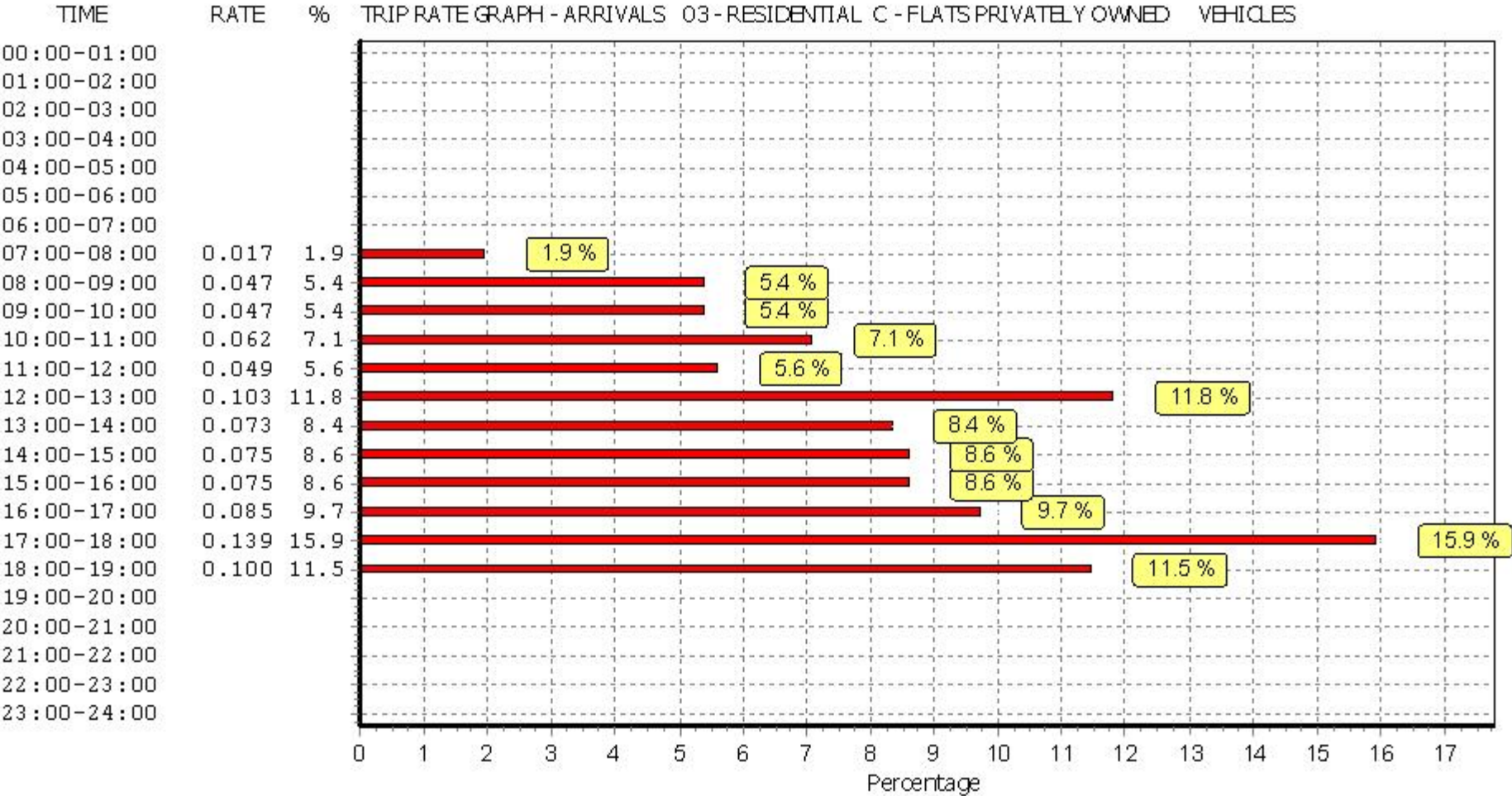
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

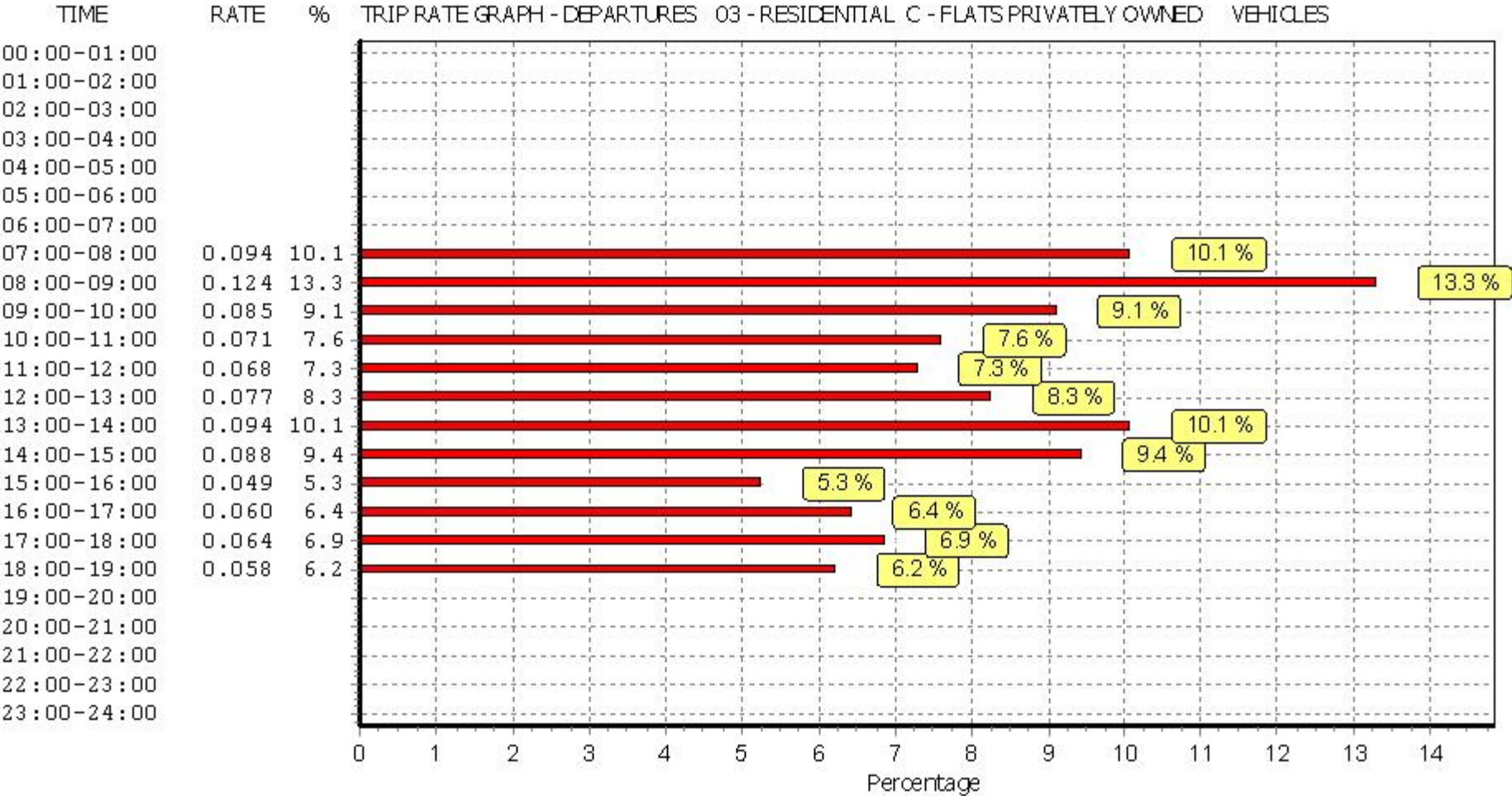
Parameter summary

Trip rate parameter range selected: 80 - 154 (units:)
 Survey date range: 01/01/08 - 18/12/14
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

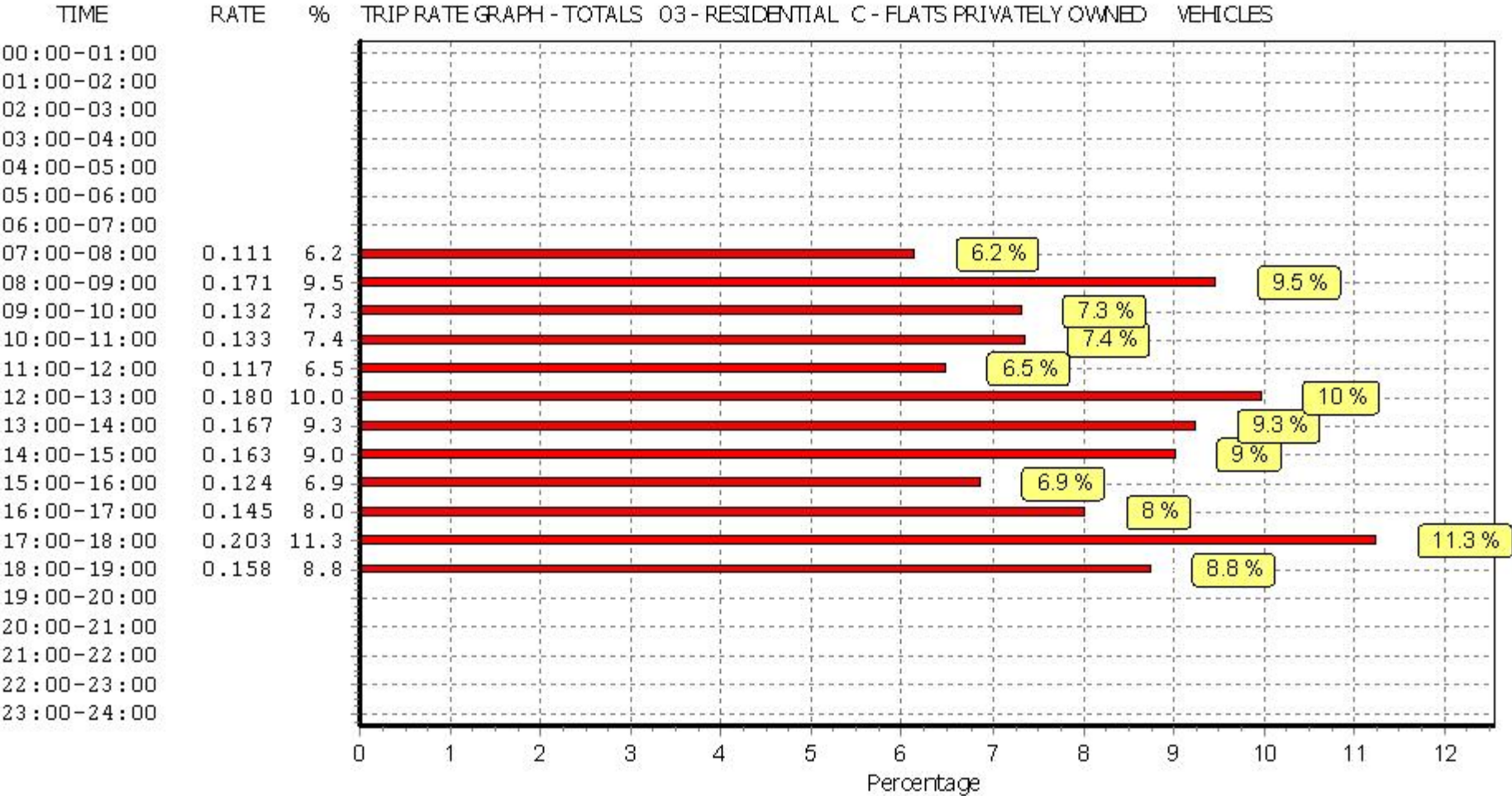
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.



This graph is a visual representation of the trip rate calculation results screen. The same time periods and trip rates are displayed, but in addition there is an additional column showing the percentage of the total trip rate by individual time period, allowing peak periods to be easily identified through observation. Note that the type of count and the selected direction is shown at the top of the graph.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---------------|----------|-------------|-----------|------------|-------------|-----------|----------|-------------|-----------|
| | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 08:00 - 09:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 09:00 - 10:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 10:00 - 11:00 | 4 | 117 | 0.002 | 4 | 117 | 0.002 | 4 | 117 | 0.004 |
| 11:00 - 12:00 | 4 | 117 | 0.004 | 4 | 117 | 0.004 | 4 | 117 | 0.008 |
| 12:00 - 13:00 | 4 | 117 | 0.002 | 4 | 117 | 0.002 | 4 | 117 | 0.004 |
| 13:00 - 14:00 | 4 | 117 | 0.004 | 4 | 117 | 0.004 | 4 | 117 | 0.008 |
| 14:00 - 15:00 | 4 | 117 | 0.004 | 4 | 117 | 0.002 | 4 | 117 | 0.006 |
| 15:00 - 16:00 | 4 | 117 | 0.000 | 4 | 117 | 0.002 | 4 | 117 | 0.002 |
| 16:00 - 17:00 | 4 | 117 | 0.004 | 4 | 117 | 0.004 | 4 | 117 | 0.008 |
| 17:00 - 18:00 | 4 | 117 | 0.006 | 4 | 117 | 0.004 | 4 | 117 | 0.010 |
| 18:00 - 19:00 | 4 | 117 | 0.000 | 4 | 117 | 0.002 | 4 | 117 | 0.002 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.026 | | | 0.026 | | | 0.052 |

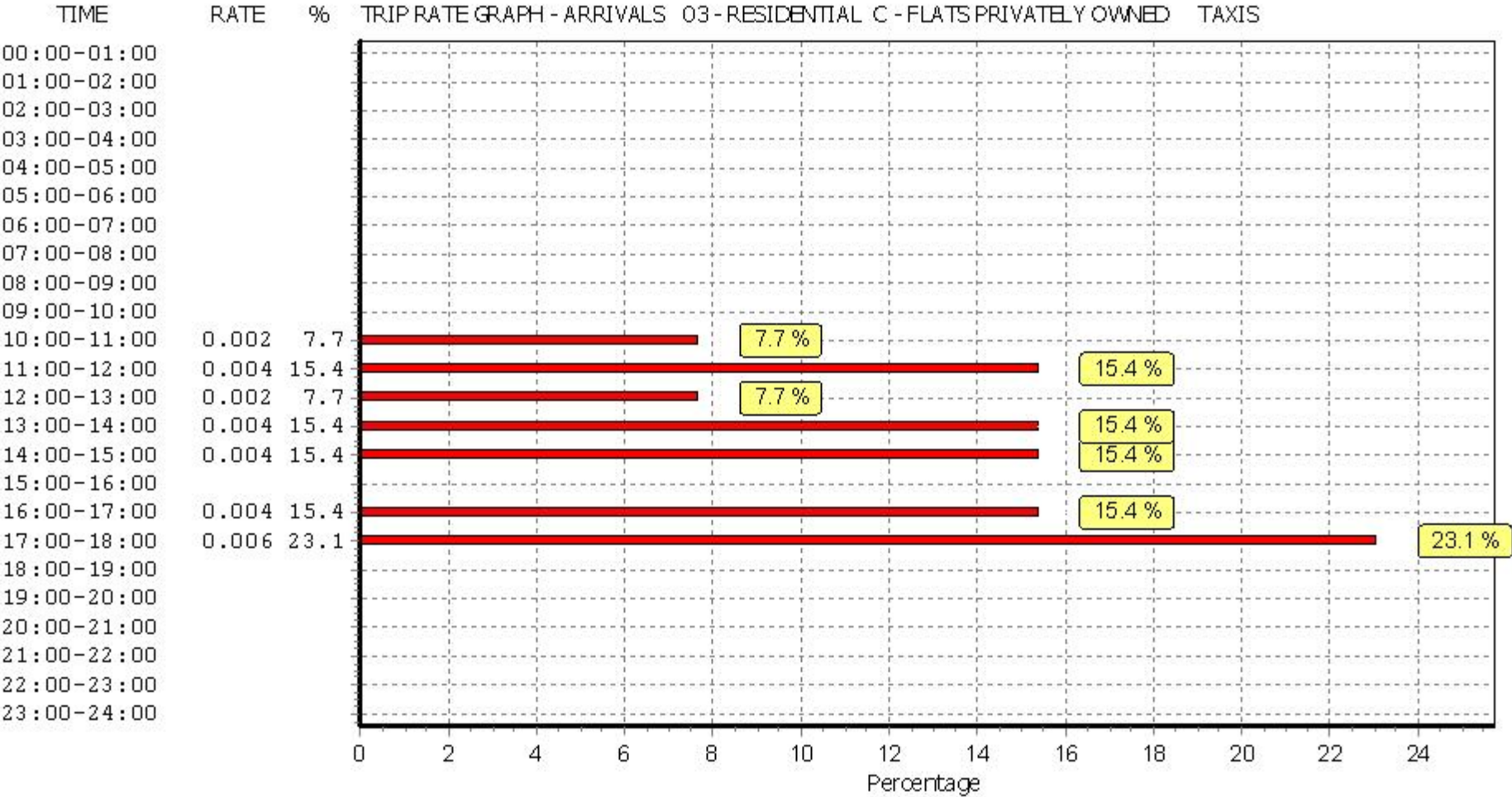
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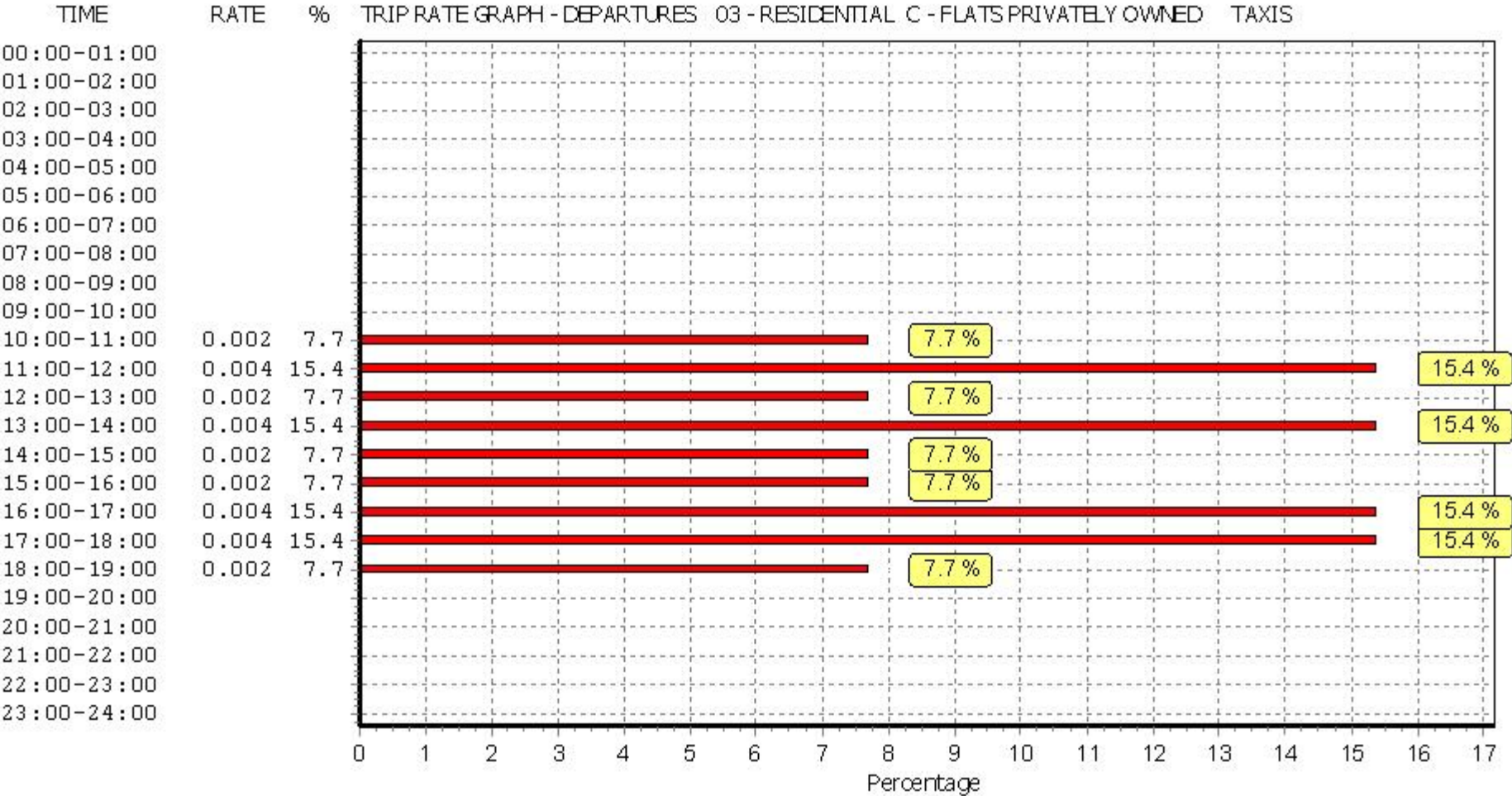
Parameter summary

Trip rate parameter range selected: 80 - 154 (units:)
 Survey date range: 01/01/08 - 18/12/14
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

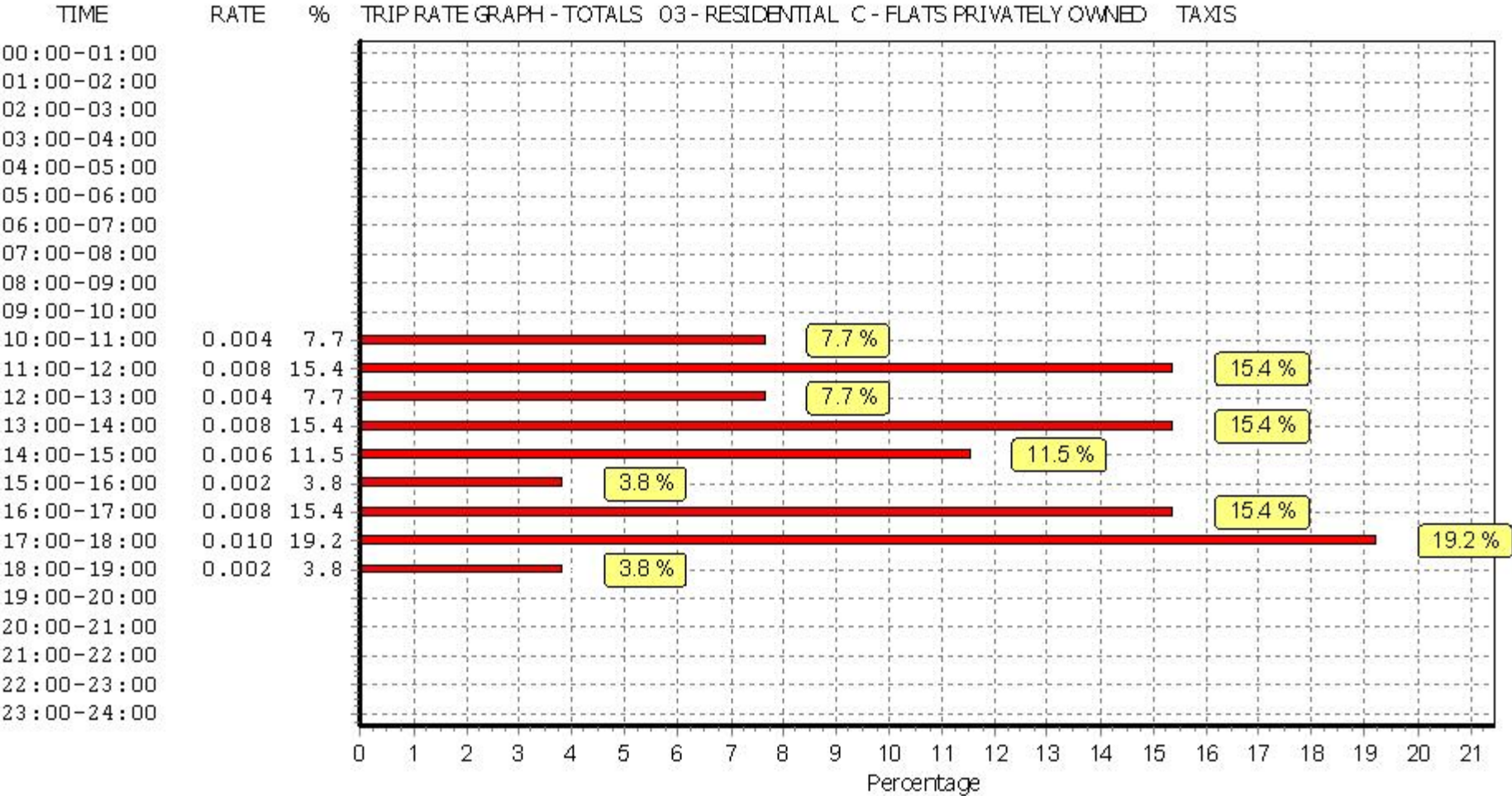
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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---------------|----------|-------------|-----------|------------|-------------|-----------|----------|-------------|-----------|
| | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 08:00 - 09:00 | 4 | 117 | 0.002 | 4 | 117 | 0.000 | 4 | 117 | 0.002 |
| 09:00 - 10:00 | 4 | 117 | 0.002 | 4 | 117 | 0.004 | 4 | 117 | 0.006 |
| 10:00 - 11:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 11:00 - 12:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 12:00 - 13:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 13:00 - 14:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 14:00 - 15:00 | 4 | 117 | 0.002 | 4 | 117 | 0.002 | 4 | 117 | 0.004 |
| 15:00 - 16:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 16:00 - 17:00 | 4 | 117 | 0.002 | 4 | 117 | 0.002 | 4 | 117 | 0.004 |
| 17:00 - 18:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 18:00 - 19:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.008 | | | 0.008 | | | 0.016 |

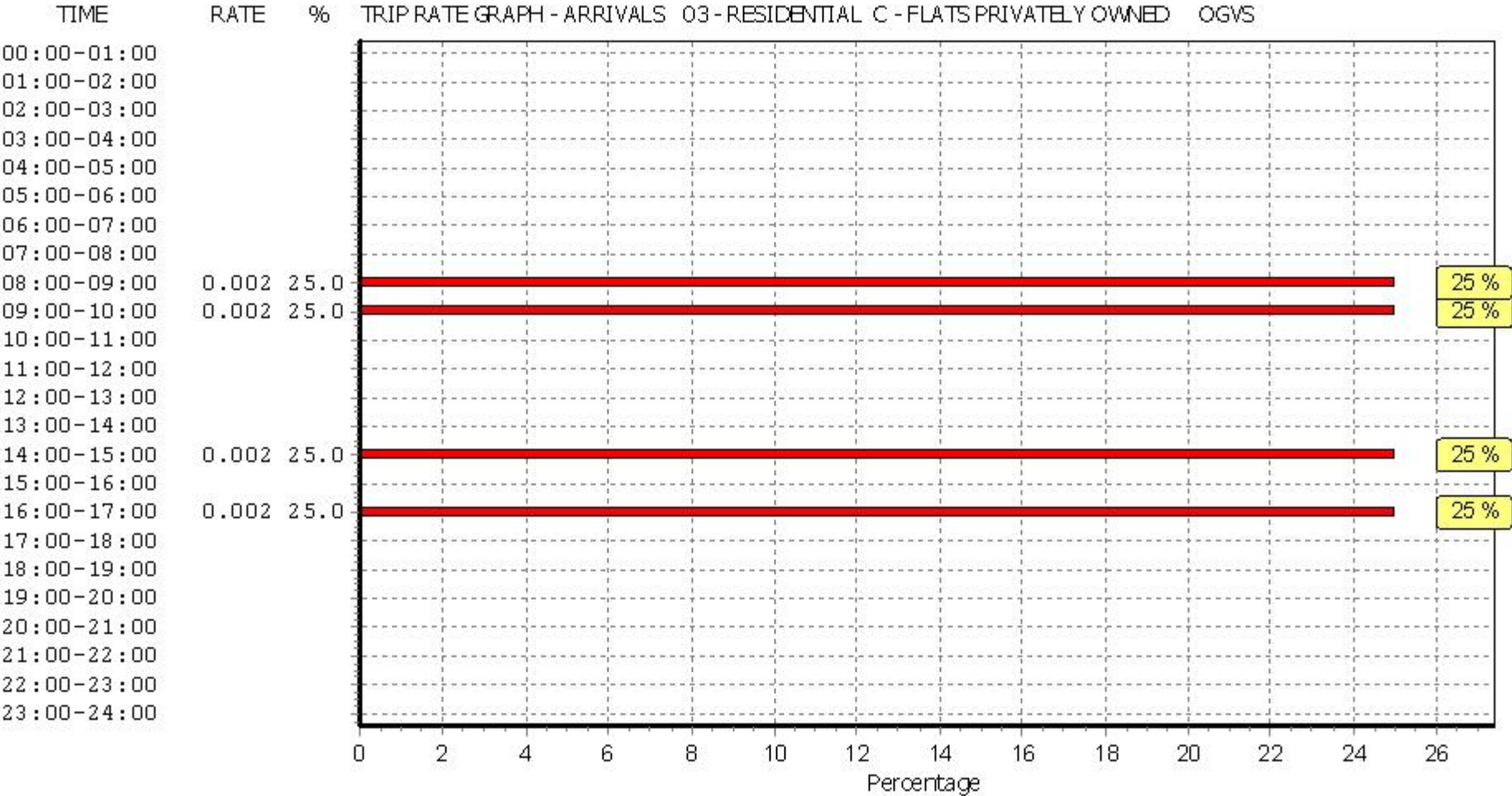
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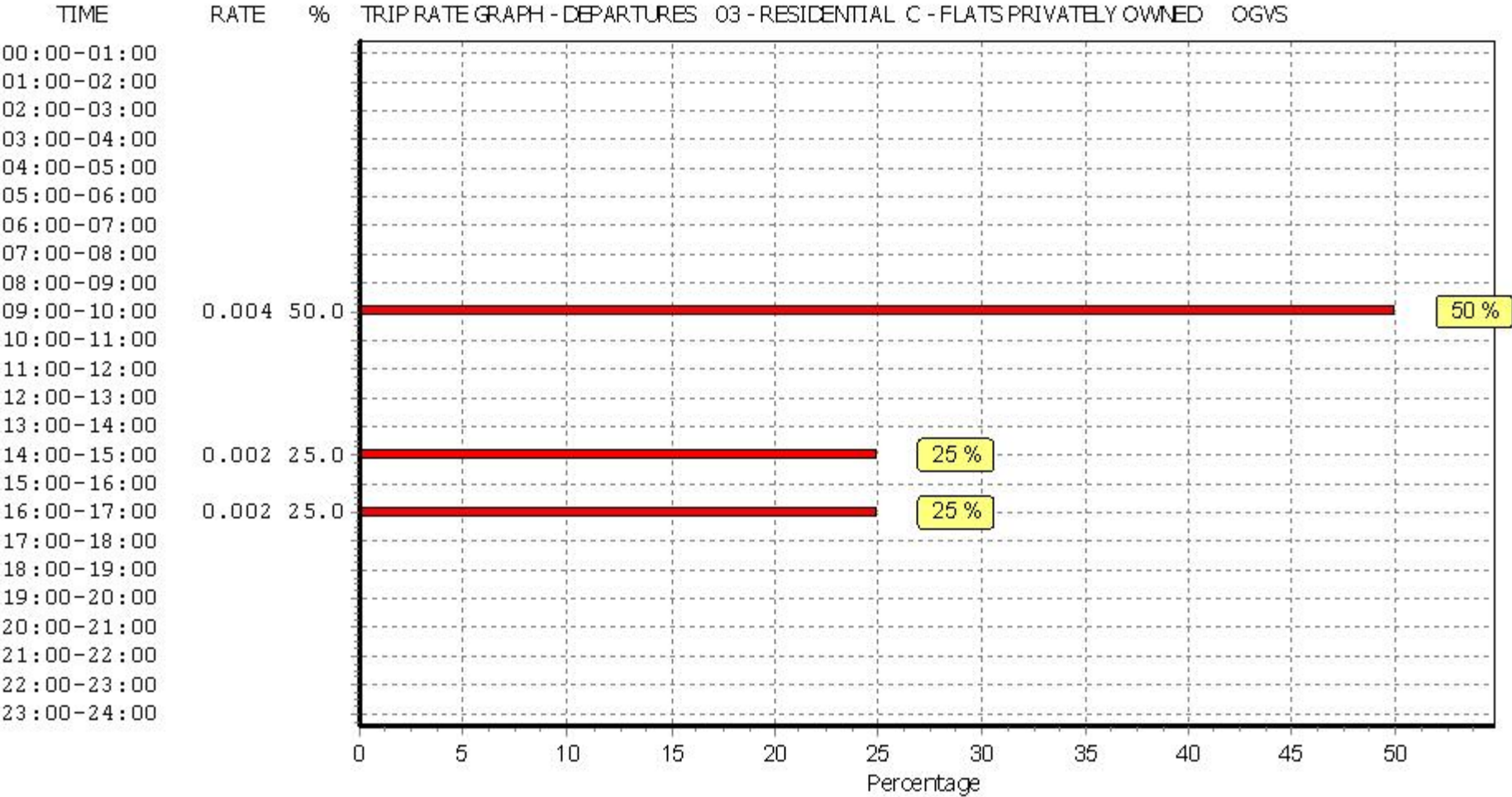
Parameter summary

Trip rate parameter range selected: 80 - 154 (units:)
 Survey date date range: 01/01/08 - 18/12/14
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

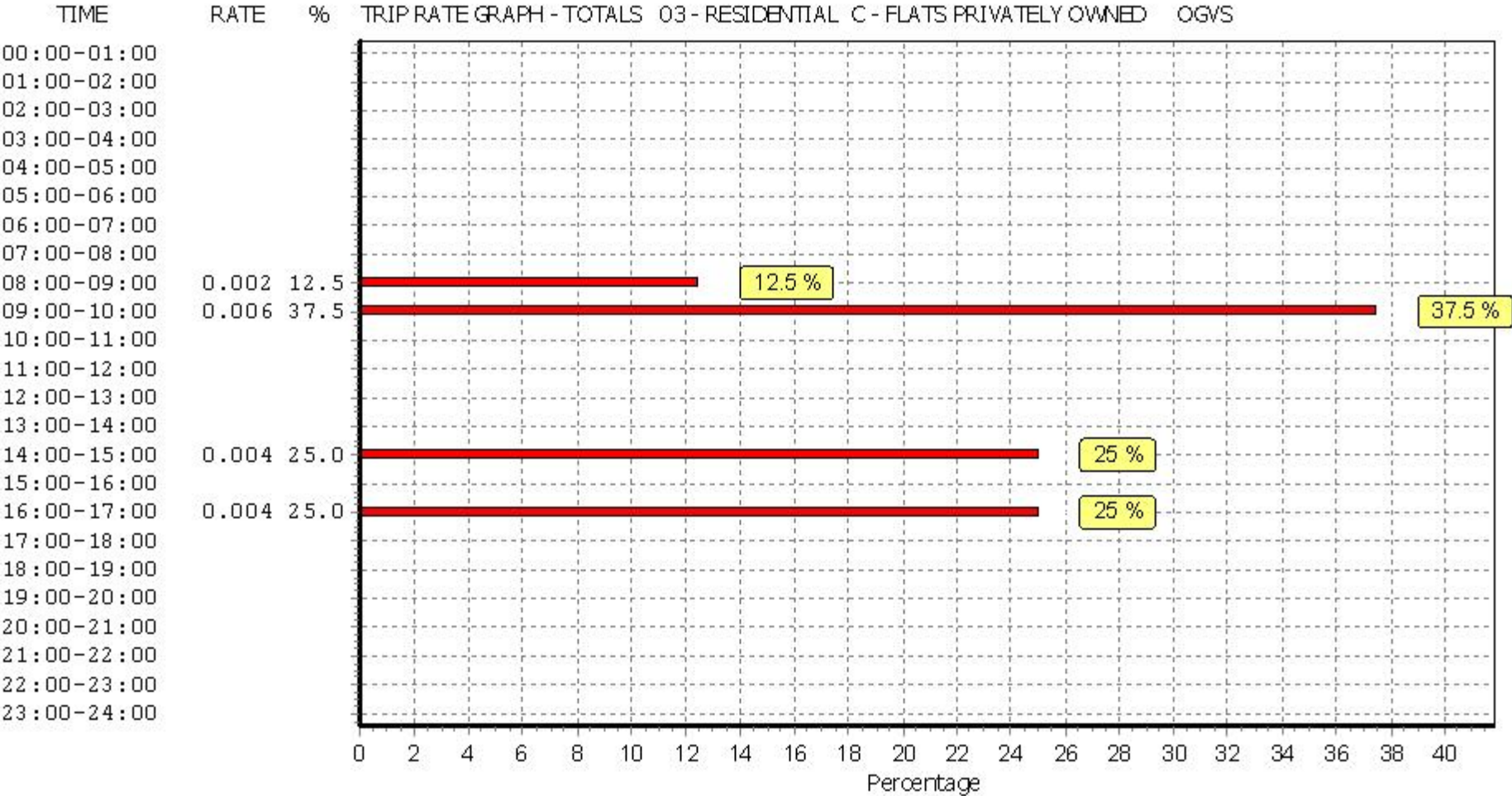
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---------------|----------|-------------|-----------|------------|-------------|-----------|----------|-------------|-----------|
| | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 08:00 - 09:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 09:00 - 10:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 10:00 - 11:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 11:00 - 12:00 | 4 | 117 | 0.002 | 4 | 117 | 0.002 | 4 | 117 | 0.004 |
| 12:00 - 13:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 13:00 - 14:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 14:00 - 15:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 15:00 - 16:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 16:00 - 17:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 17:00 - 18:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 18:00 - 19:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.002 | | | 0.002 | | | 0.004 |

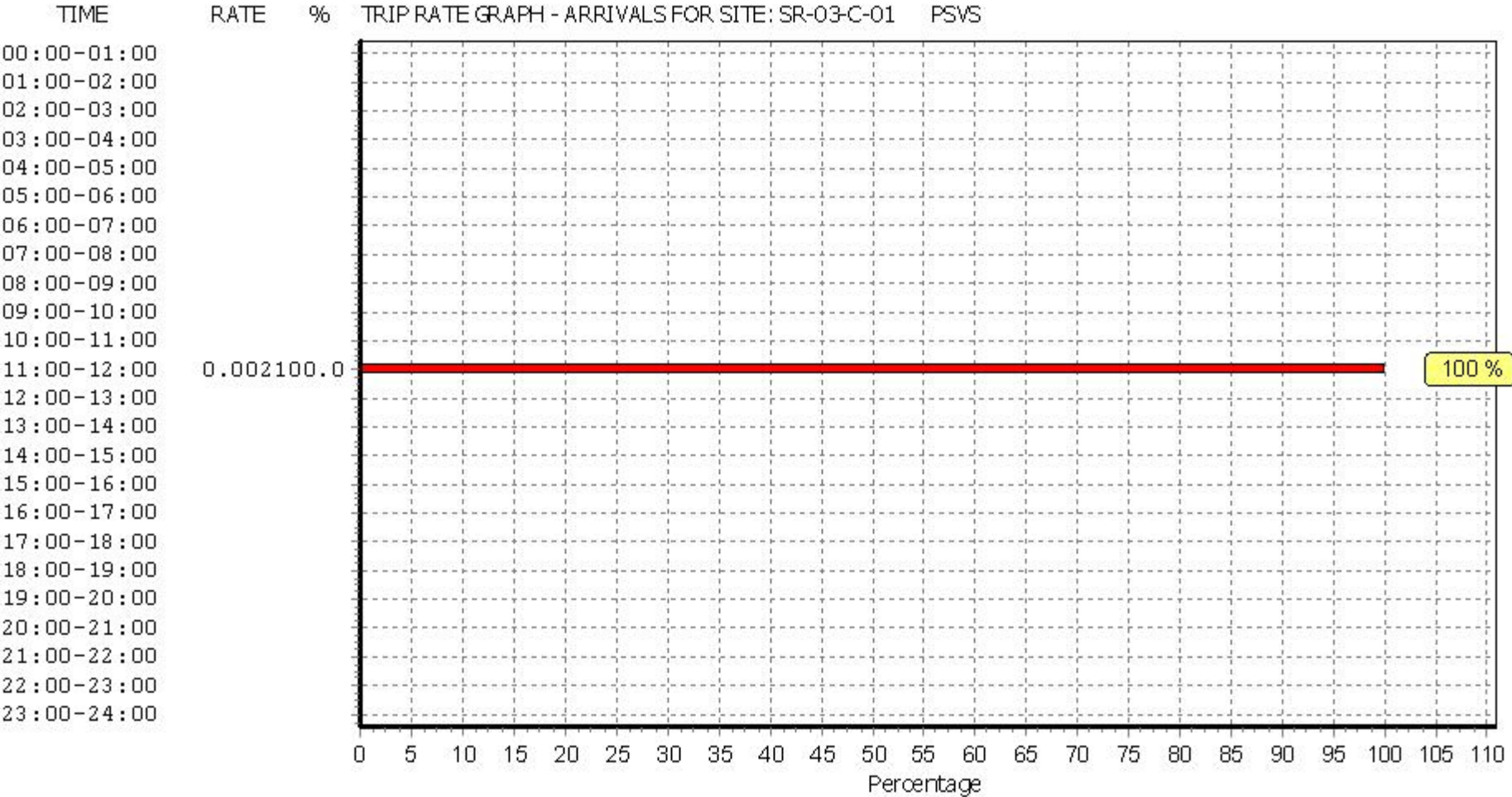
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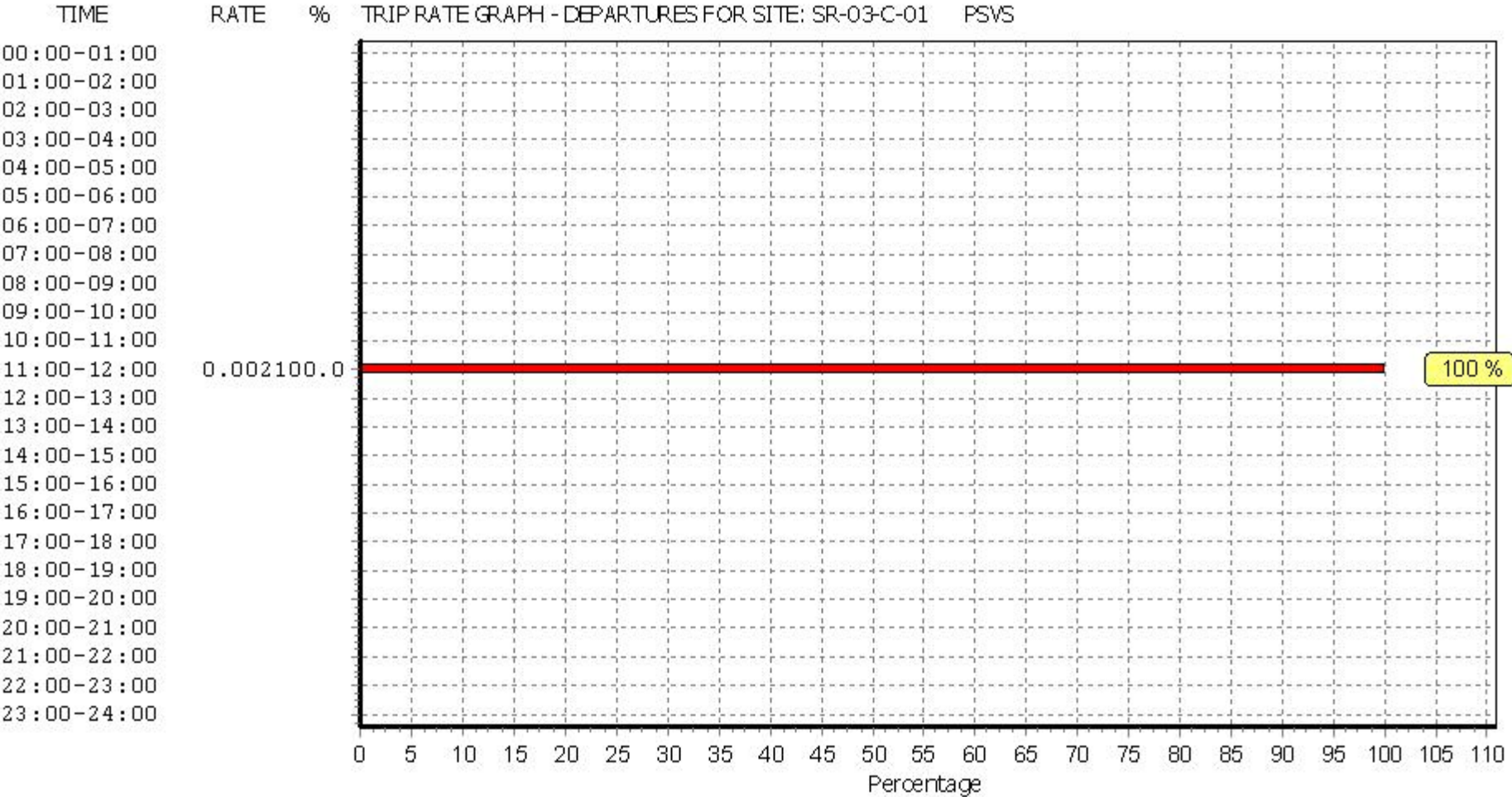
Parameter summary

Trip rate parameter range selected: 80 - 154 (units:)
 Survey date date range: 01/01/08 - 18/12/14
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

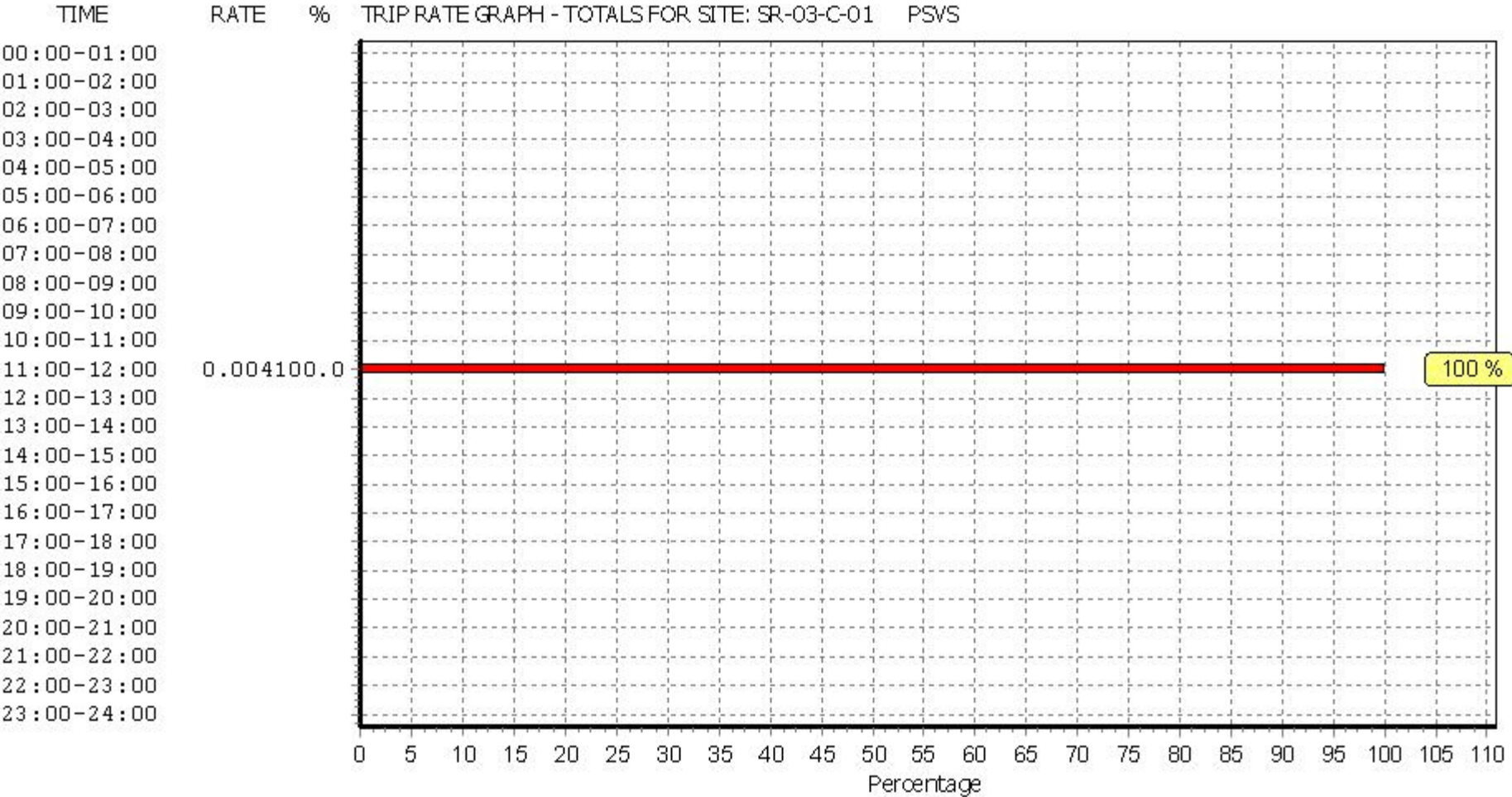
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected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



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TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---------------|----------|-------------|-----------|------------|-------------|-----------|----------|-------------|-----------|
| | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 4 | 117 | 0.000 | 4 | 117 | 0.004 | 4 | 117 | 0.004 |
| 08:00 - 09:00 | 4 | 117 | 0.000 | 4 | 117 | 0.004 | 4 | 117 | 0.004 |
| 09:00 - 10:00 | 4 | 117 | 0.002 | 4 | 117 | 0.004 | 4 | 117 | 0.006 |
| 10:00 - 11:00 | 4 | 117 | 0.000 | 4 | 117 | 0.004 | 4 | 117 | 0.004 |
| 11:00 - 12:00 | 4 | 117 | 0.004 | 4 | 117 | 0.000 | 4 | 117 | 0.004 |
| 12:00 - 13:00 | 4 | 117 | 0.004 | 4 | 117 | 0.009 | 4 | 117 | 0.013 |
| 13:00 - 14:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 14:00 - 15:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 15:00 - 16:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 16:00 - 17:00 | 4 | 117 | 0.000 | 4 | 117 | 0.000 | 4 | 117 | 0.000 |
| 17:00 - 18:00 | 4 | 117 | 0.006 | 4 | 117 | 0.000 | 4 | 117 | 0.006 |
| 18:00 - 19:00 | 4 | 117 | 0.006 | 4 | 117 | 0.000 | 4 | 117 | 0.006 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 0.022 | | | 0.025 | | | 0.047 |

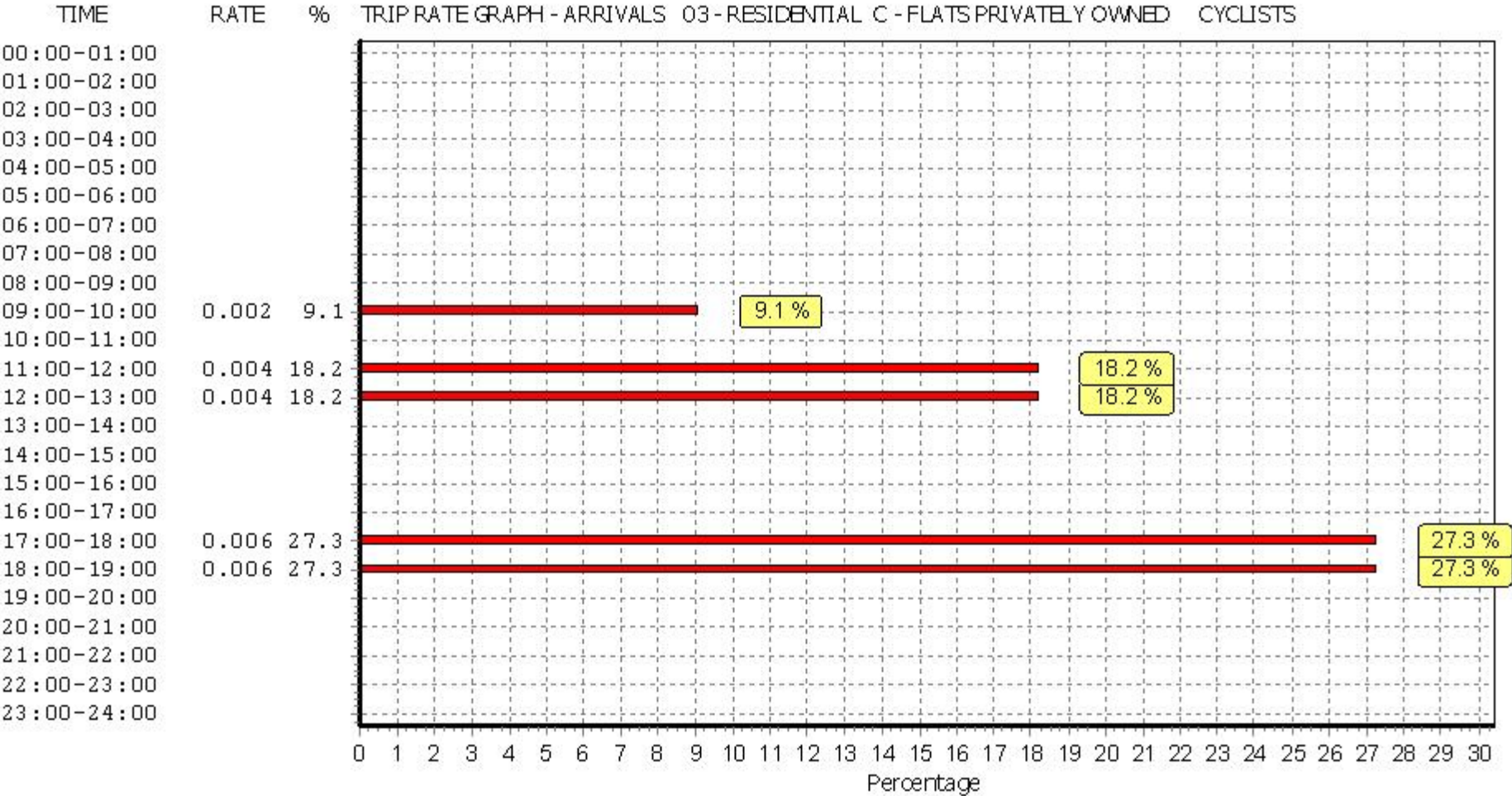
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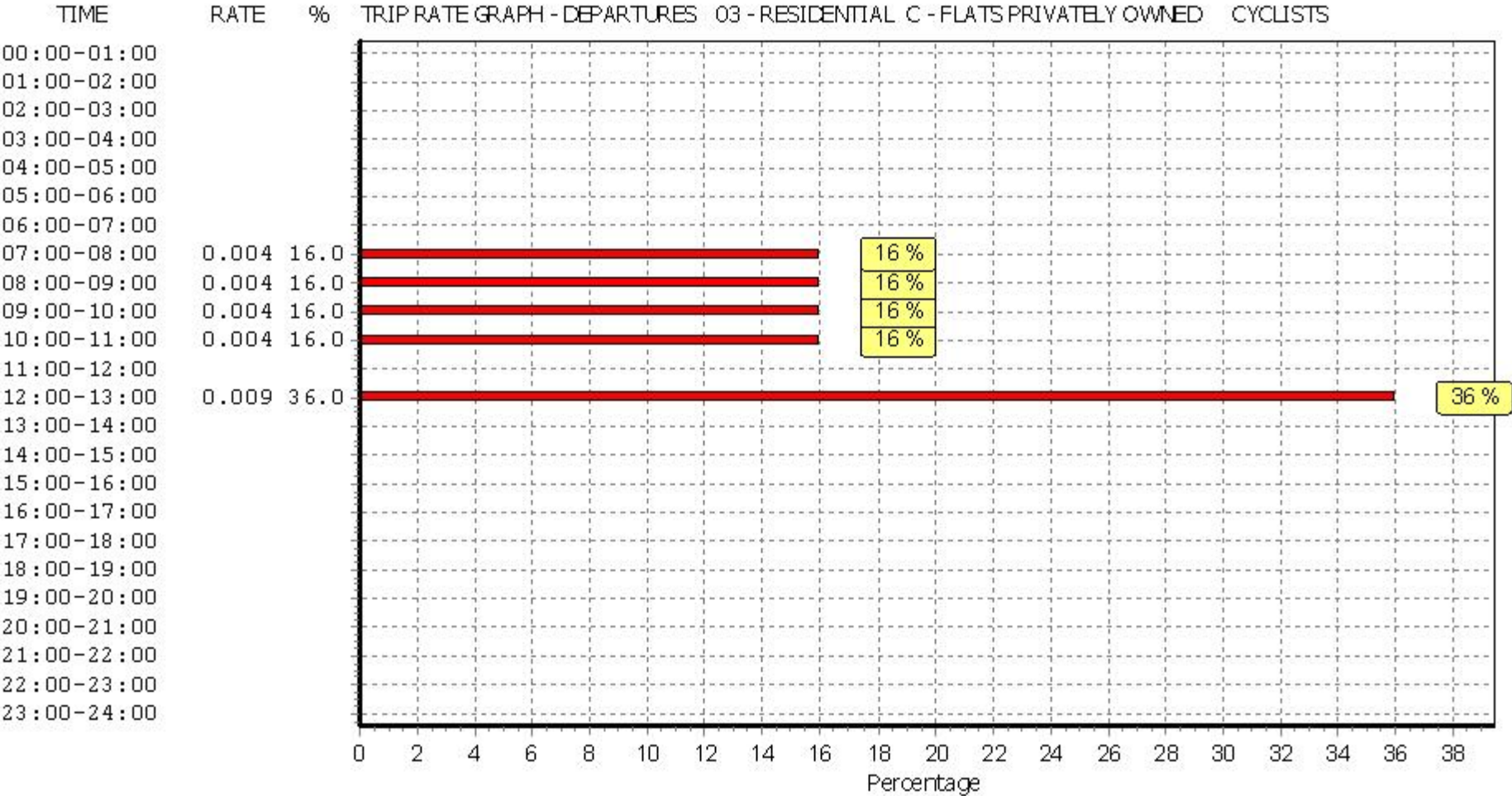
Parameter summary

Trip rate parameter range selected: 80 - 154 (units:)
 Survey date date range: 01/01/08 - 18/12/14
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

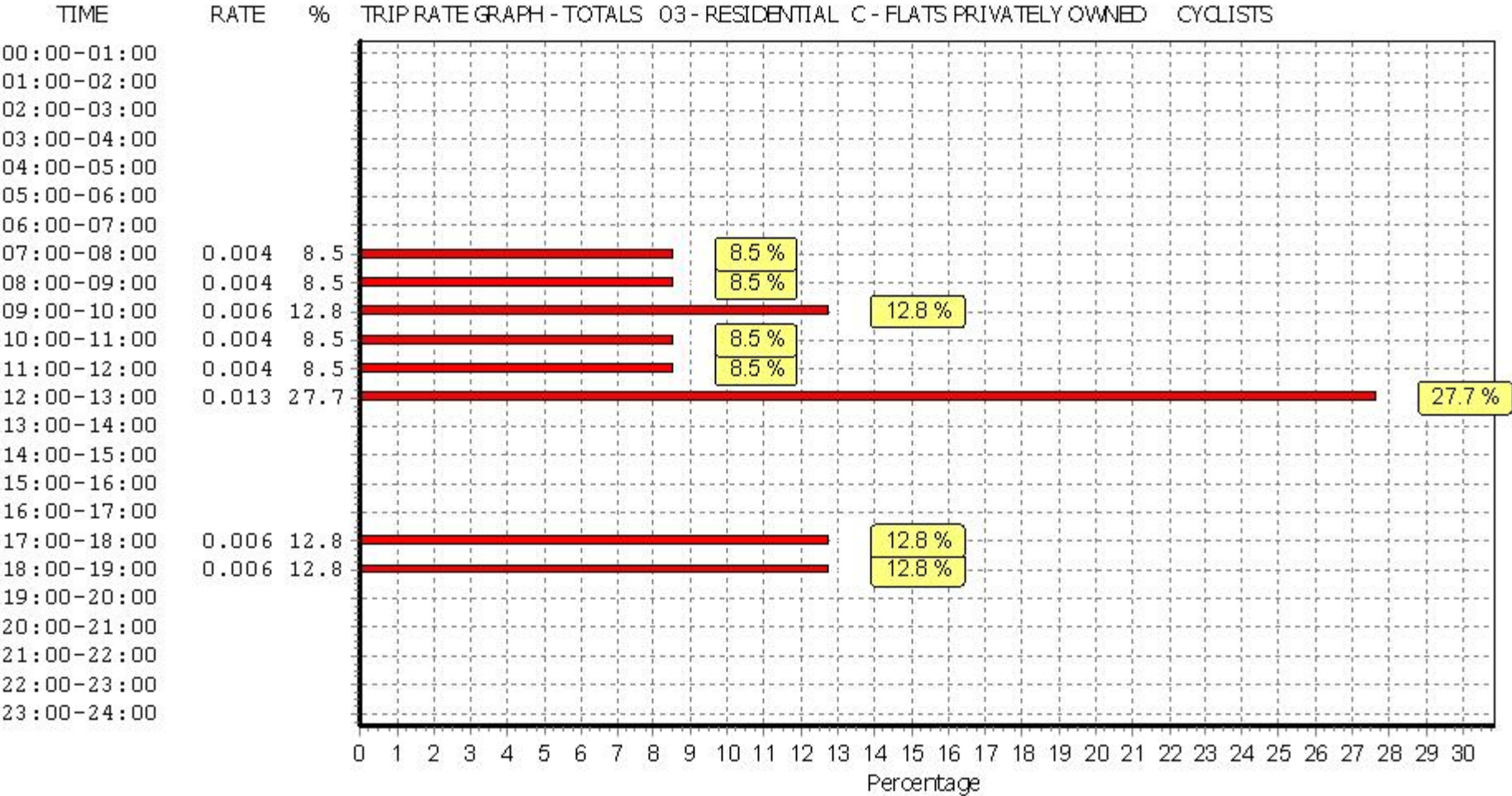
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Appendix C – MASA Assessment

Minimum Accessibility Standard Assessment

Proposal: **21 The Strand Street: Residential and Commercial Development**

Address: **21 The Strand Street, Liverpool**

Completed by: **Tom Lavin, Curtins Consulting**

Has a diagram been submitted which shows how people move to and through the development and how this links to the surrounding roads, footpaths and sight lines?

Yes / No

(This can be included within the Design and Access Statement, see Section 2.25.)
If a diagram has not been submitted your application may not be processed.

| Access on foot | | | Points | Score |
|------------------------|--|-----------------------|--------|------------------------|
| Safety | Is there safe pedestrian access to and within the site, and for pedestrians passing the site (2m minimum width footpath on both sides of the road)? If no your application must address safe pedestrian access. | | | <u>Yes</u> / No |
| Location | <p>Housing Development: Is the development within 500m of a district or local centre (see Accessibility Map 1 in Appendix F)</p> <p>Other development: Is the density of existing local housing (i.e. within 800m) more than 50 houses per hectare (see Accessibility Map 4 in Appendix F)</p> | Yes | 2 | <u>2</u> |
| | | No | 0 | |
| Internal layout | Does 'circulation' and access inside the sites reflect direct, safe and easy to use pedestrian routes for all, with priority given to pedestrians when they have to cross roads or cycle routes? | Yes | 1 | <u>1</u> |
| | | No | 0 | |
| External layout | <p>Are there barriers between site and local facilities or housing, which restrict pedestrian access? (see Merseyside Code of Practice on Access and Mobility) e.g.</p> <ul style="list-style-type: none"> No dropped kerbs at crossings or on desire lines; | There are barriers | -2 | <u>1</u> |
| | | There are no barriers | 1 | |

| | | | | |
|-----------|--|----------|--|-----------------|
| | <ul style="list-style-type: none">• Steep gradients;• A lack of a formal crossing where there is heavy traffic;• Security concerns, e.g. lack of lighting. | | | |
| Other | The development links to identified recreational walking network (see Accessibility Map 1). If no, please provide reasons why not. | | | <u>Yes</u> / No |
| Total (B) | | | | <u>4</u> |
| Summary | Box A: Minimum Standard (from Table 3.1) | <u>4</u> | Comments or action needed to correct any shortfall | |
| | Box B: Actual Score | <u>4</u> | | |

| Access by Cycle | | | Points | Score |
|-----------------|--|-----|--------|------------------------|
| Safety | Are there safety issues for cyclists either turning into or out of the site or a road junctions within 400m of the site (e.g. dangerous right turns for cyclists due to the level of traffic)? If yes, you must address safety issues in your application. | | | Yes / <u>No</u> |
| Cycle Parking | Does the development meet cycle parking standards, in a secure location with natural surveillance, or where appropriate contribute to communal cycle parking facilities? If no, you must address cycle parking standards and cycle parking facilities. | | | <u>Yes</u> / No |
| Location | Housing Development: Is the development within 1 mile of a district or local centre (see Accessibility Map 1) Other Development: Is the density of local housing (e.g. within 1 mile) more than 50 houses per hectare (see Accessibility Map 4 in Appendix F) | Yes | 2 | <u>2</u> |
| | | No | 0 | |
| Internal layout | Does 'circulation' and access inside the site reflect direct and safe cycle routes; with priority given to cyclists where they meet motor vehicles? | Yes | 1 | <u>0</u> |
| | | No | 0 | |
| External | The development is within 400m of an existing or proposed | | 1 | <u>1</u> |

| | | | | |
|-----------|--|----------|--|----------|
| Access | cycle route (see Accessibility Map 1 in Appendix F) and / or proposes to create a link to a cycle route, or develop a route? | | | |
| | The development is not within 400m of an existing or proposed cycle route (see Accessibility Map 1 in Appendix F) | | -1 | |
| Other | Development includes shower facilities and lockers for cyclists | Yes | 1 | <u>1</u> |
| | | No | 0 | |
| Total (B) | | | | <u>4</u> |
| Summary | Box A: Minimum Standard (from Table 3.1) | <u>4</u> | Comments or action needed to correct any shortfall | |
| | Box B: Actual Score | <u>4</u> | | |

| Access by Public Transport | | | Points | Score |
|---|--|-----------------------|--------|----------|
| Location and access to public transport | Is the site within a 200m walk of a bus or tram stop, and/or within 400m of a rail station? (See Accessibility Map 2 in Appendix F). | Yes | 2 | <u>2</u> |
| | | No | 0 | |
| | Are there barriers on direct and safe pedestrian routes to bus stops or rail stations i.e. <ul style="list-style-type: none"> A lack of dropped kerbs; Pavements less than 2m wide; A lack of formal crossings where there is heavy traffic; or Bus access kerbs. | There are barriers | 0 | <u>1</u> |
| | | There are no barriers | 1 | |
| Frequency | High (four or more bus services or trains an hour) | | 2 | <u>2</u> |
| | Medium (two or three bus services or trains an hour) | | 1 | |
| | Low (less than two bus services or trains an hour) | | 0 | |
| Other | The proposal contributes to bus priority measures serving the site | | 1 | <u>0</u> |
| | The proposal contributes to bus stops, bus interchange or | | 1 | <u>0</u> |

| | | | |
|-----------|---|----------|--|
| | bus or rail stations in the vicinity and/or provides bus stops or bus interchange in the site | | |
| | The proposal contributes to an existing or new bus service | 1 | <u>0</u> |
| Total (B) | | | <u>5</u> |
| Summary | Box A: Minimum Standard (from Table 3.1) | <u>5</u> | Comments or action needed to correct any shortfall |
| | Box B: Actual Score | <u>5</u> | |

| Vehicle Access and Parking | | Points | Score |
|--------------------------------|--|--------|----------------------|
| Vehicle access and circulation | Is there safe access to and from the road? If no, you must address safety issues. | | <u>Yes</u> /No |
| | Can the site be adequately serviced? If no, you must address service issues. | | <u>Yes</u> /No |
| | Is the safety and convenience of other users (pedestrians, cyclists and public transport) affected by the proposal? If yes, you must address safety issues. | | Yes/ <u>No</u> |
| | Has access for the emergency services been provided? If no, you must provide emergency service provision. | | <u>Yes</u> /No |
| | For development which generates significant freight movements, is the site easily accessed from the road or rail freight route networks (i.e. minimising the impact of traffic on local roads and neighbourhoods) (see Accessibility Map 3 in Appendix F)? If no, please provide an explanation. | | Yes/No <u>N/A</u> |
| Parking | The off-street parking provided is more than advised in Section 4 for that development type. If yes, parking provision must be reassessed. | | Yes/ <u>No</u> |
| | The off-street parking provided is as advised in Section 4 for that development type | 1 | <u>1</u> |
| | The off-street parking provided is less than 75% of the amount advised 2 Yes / No | 2 | Yes/No |
| | in Section 4 for that development type (or shares parking provision with another development) | | |
| | For development in controlled parking zones: | | |
| | Is it a car free development? | 1 | Yes/ <u>No</u> |
| | Supports the control or removal of on-street parking spaces | 1 | Yes/ <u>No</u> |

| | | | |
|-----------|---|-----------------|--|
| | (inc provision of disabled spaces), or contributes to other identified measures in the local parking strategy (including car clubs) | | |
| Total (B) | | | <u>3</u> |
| Summary | Box A: Minimum Standard (from Table 3.1) | <u>3</u> | Comments or action needed to correct any shortfall |
| | Box B: Actual Score | <u>3</u> | |

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