

Site on Elm Grove, Hayling Island

Sheltered Housing Development for the Elderly :
Transport Statement

March 2015

Churchill Retirement Living Ltd

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: Transport Statement

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Churchill Retirement Living Ltd

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1 Introduction

1.1 Background

Churchill Retirement Living is proposing to provide a sheltered housing facility of 44 sheltered apartments for the elderly including communal facilities, plus a shop unit and two-bedroom flat, at a site on Elm Grove, Hayling Island. The site is currently occupied by the Pullingers home furnishings store and staff/customer car park. **Figure 1.1** shows the strategic location.

Figure 1.1: Strategic site location



Source: Background Mapping - Ordnance Survey data © Crown copyright and database right 2015

Planning Issues commissioned Mott MacDonald, on behalf of their client, Churchill Retirement Living Ltd, to advise on the transport and highway access aspects of the site in relation to the proposed development.

This report, referred to as a Transport Statement, considers the transport aspects of the site, including the above points, access to the site by sustainable modes, traffic generation, servicing arrangements and parking.

1.2 Report structure

Following this introductory section, the remainder of this report is set out as follows:-

Section 2 - The site location, previous use of the site and the development proposed are outlined.

Section 3 - Consideration is given to existing transport modes and facilities, including bus, rail, pedestrian and cyclists. The existing highway network in relation to the development proposed is outlined.

Section 4 - A review of the daily vehicle trips generated by the proposed development is undertaken.

Section 5 - The design of the access to the site is considered and in particular the servicing arrangements.

Section 6 - Parking standards and provision are considered.

Section 7 - Summarises the transport aspects of the development.

2. Application site details

2.1 Site location

The application site is located on Elm Grove, Hayling Island. The location of the application site is shown in **Figure 2.1**.

Figure 2.1: Site Location



Source: Background Mapping - Ordnance Survey data © Crown copyright and database right 2015

The local area has mixed land use, with predominantly retail/commercial frontages along Elm Grove to the north towards Tournbury Lane and south towards Mengham Road, and residential uses on connecting minor roads. Mengham Junior School is located to the east of the application site, accessed via Palmerston Road.

2.2 Access to key services

Accessibility to health services, fresh food shops, leisure facilities and other local amenities are likely to be the key services of interest to residents of the proposed development. Given the age profile of residents, access to employment and education is not considered to be of significance.

The application site is located on the northern edge of the South Hayling retail area. There are a wide range of local shops and supermarkets available along Elm Grove and Mengham Road, and routes to these services are all pedestrian friendly.

A view of the retail area is shown in **Photo 2.1**, and the standard of pedestrian facilities from the application site is shown in **Photo 2.2** and **Photo 2.3**.

Photo 2.1: South Hayling retail area, Elm Grove



Photo 2.2: Pedestrian route from site to north



Photo 2.3: Pedestrian route from site to south



Via footways along Elm Grove the site is easily accessible to a wide range of facilities, including:

- A range of banks and a post office;
- Pharmacies;
- Library;
- Restaurants and cafes;
- Tesco, Co-op and Sainsbury's supermarkets;
- Newsagent;
- Charity shops;
- Public houses; and
- Take-away food services.

The nearest GP surgery to the site is Hayling Island Health Centre, approximately 400m or five minutes' walk from the site.

The nearest dental surgery to the site is Elm Grove Dental Practice, approximately 400m from the site or five minutes' walk. Alternatively, Rails Lane Dental Surgery is located approximately 1.7km from the site, or a five minute bus journey using service 31.

Loat Opticians is located on Elm Grove, approximately 400m from the site. Alternatively Peter Collins Opticians is located on Mengham Road, within 700m or nine minutes' walk of the site.

Lloyds Pharmacy and Hobbs Pharmacy are both located on Elm Grove, within 400m of the site.

Queen Alexandra Hospital is located in Cosham, Portsmouth approximately 13km from the site. This is accessible via bus routes 30/31 to Havant Bus Station which stop in the vicinity of the application site (Section 3.1.2), and then onwards from Havant Bus Station to the hospital using bus route 23.

Being located within the South Hayling retail area, the application site is close to a wide range of shops, services and local amenities, which will minimise the need for residents of the proposed sheltered housing development to own a car, or use a car for many journey purposes.

2.3 Existing use of the site

The site is currently occupied by the Pullingers home furnishings store and staff/customer car park (38 spaces).

2.4 Development proposal

The type of housing envisaged, similar to other Churchill Retirement Living developments, would cater for elderly residents, normally over 70 years of age who already live locally and wish to live independently. The purchase of apartments in this type of development is legally restricted by Churchill Retirement Living to those over 60 years of age. It is understood that the average age of residents across all their currently occupied sheltered housing facilities is 79 and 30% are over 80 years of age.

Churchill Retirement Living aim to provide a secure environment for residents with a 24 hour support system available on call, should they need it. A "Lodge Manager" is available and provides some assistance to residents, particularly on security and property maintenance issues. This is the only permanent member of staff associated with the development. There will be other staff associated with the development, which includes cleaners for communal areas, maintenance staff when required and gardeners. An owner's lounge is provided for residents as a communal meeting place.

The development proposed for the application site, the layout of which is illustrated in **Figure 2.2**, comprises 44 sheltered housing apartments, with 30 being one bedroom units and the remaining 14 being two bedroom apartments. In addition, a shop unit and two-bedroom flat is proposed adjacent to Elm Grove. A total of 14 parking spaces are proposed for the use of residents and visitors to the sheltered housing site. A further three parking spaces will be provided for use by residents of the flat and shop customers. Vehicular and pedestrian access will be taken from Elm Grove. Within the sheltered housing site a store for electric buggies will be provided, and this store can also accommodate cycles.

Elm Grove, Hayling Island - Proposed Sheltered Housing - Site Plan

334125/TPN/ITD/040/B March 2015
<http://pims01/pims/llisapi.dll/open/1552080503>

3. Existing transport facilities

3.1 Bus connections

3.1.1 Bus stops

The local bus services are easily accessible from the application site, and the bus stops local to the site are shown in **Figure 3.1**.

Figure 3.1: Locations of nearest bus stops to proposed development site



Source: Background Mapping - Ordnance Survey data © Crown copyright and database right 2015

Guidance from the Institution of Highways and Transportation¹ states a threshold of 400m as being generally considered to be the maximum distance acceptable to most people for walking to a bus stop.

As shown in **Figure 3.1**, the nearest bus stops are located on Elm Grove, approximately 200m to the north and south of the site. As reviewed in **Section 3.1.2**, the stops are served by bus routes 30 and 31. The document "Inclusive Mobility"² refers to research that indicates bus use by the elderly and the disabled

¹ Institution of Highways and Transportation, Planning for Public Transport in Developments, 1999

² Inclusive Mobility, A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure, Department for Transport, 2002

reduces rapidly where distances to bus stops are more than 200m. The Elm Grove Road bus stops are within this threshold. Examples of the local bus stop provision are shown in **Photos 3.1** and **3.2**.

Photo 3.1: Elm Grove northbound bus stop (Stop A)



Photo 3.2: Elm Grove southbound bus stop (Stop B)



The Elm Grove bus stops are well overlooked, with a good level of street lighting and other sources of light at or very near the stops. Their location offers no opportunities for concealment or anti-social behaviour.

3.1.2 Bus services

Bus services serving the stops shown in **Figure 3.1** are operated by Stagecoach South. **Figure 3.2** illustrates the local bus network and route descriptions and frequencies are detailed in **Table 3.1**.

Table 3.1: Bus routes stopping in vicinity of proposed development site

Route No	Route Detail	Bus Stops Served	Mon – Sat Daytime Frequency	Sunday Frequency
30	Havant - West Town - Beachlands - Eastoke - Mengham - Havant	A, C	Every 30 minutes. Last service 2118	Every two hours. Last service 1730
31	Havant - Mengham - Eastoke - Beachlands - West Town - Havant	B, D	Every 30 minutes. Last service 1958	Every two hours. Last service 1810

Source: www.travelinesw.com (February 2015)

Figure 3.2: Stagecoach South local bus routes map



Source: http://www.stagecoachbus.com/uploads/portsmouth_havnt_haylingntwmap.pdf (February 2015)

In summary, the bus services stopping close to the site are considered to provide a very good frequency of service that will serve the travel needs of the prospective residents. The location of bus stops makes bus travel accessible for residents, shoppers and visitors, and this together with the destinations served by the bus service from these stops would allow residents and visitors to use public transport as an alternative to a car.

3.2 Rail

There is no railway station on Hayling Island, the closest being located in Havant, approximately 5km southeast of the site. Havant railway station is accessible from the application site via bus services 30 and 31 (**Table 3.1**). The routes and typical weekday daytime frequencies of services calling at Havant railway station can be summarised as follows:

- Portsmouth to London Waterloo via Petersfield (three trains per hour)
- Portsmouth to London Victoria via Chichester (one train per hour)
- Southampton to London Victoria via Chichester (one train per hour)
- Portsmouth to Brighton via Chichester (one train per hour)
- Southampton to Brighton via Chichester (one train per hour)
- Portsmouth to Littlehampton via Chichester (one train per hour)

Residents of the proposed development are unlikely to need to make use of rail services on a regular basis, given they will not be commuting and local shops / services are accessible on foot.

3.3 Local highway network

The application site is currently accessed from Elm Grove via two separate access points. The southern access is shared with the Tesco Express customer car park and delivery area. Deliveries to the Pullingers premises are made via this car park, with HGVs reversing from Elm Grove (**Photo 3.3**). The northern access is shared with no. 112 Elm Grove, also occupied by Pullingers (**Photo 3.4**). The latter location forms the proposed access point for the application site, as shown in **Figure 2.2**.

Photo 3.3: View towards existing southern site access



Photo 3.4: View towards existing northern site access



Elm Grove is a single carriageway road with a 30 mph speed limit. On-street parking bays (waiting limited to 30 minutes, no return within 30 minutes) accommodating approximately four cars are located on the east side of Elm Grove, immediately south of the Tesco Express store; parking is otherwise prohibited on Elm Grove in the vicinity of the application site.

3.4 Pedestrian and cycle connections

The application site adjoins well-used footways along Elm Grove. These provide a route northwards to the Co-operative supermarket on Tournurbury Lane and southwards to Hayling Island Library and beyond to the main Elm Grove/Mengham Road retail area. Crossings of minor side roads are generally provided with dropped kerbs and tactile paving (**Photo 3.5**), and the footways are suitable for mobility scooters. There are no designated cycle routes in the vicinity of the application site, although observations made during a February 2015 site visit indicated widespread evidence of cycle activity.

Photo 3.5: Dropped kerbs/tactile paving, Elm Grove/St Leonards Avenue junction



Photo 3.6: Elm Grove zebra crossing



Photo 3.7: Elm Grove, crossing to Hayling Island Library



Approximately 30m to the north of the site, a zebra crossing provides a controlled pedestrian crossing facility which links to the Hayling Billy public house and a footway connecting to the St Mary's Road long

stay car park (**Photo 3.6**). Immediately south of the Elm Grove/Palmerston Road junction, an uncontrolled crossing enables pedestrian access to Hayling Island Library (**Photo 3.7**)

In summary, it is considered that the pedestrian facilities available from the site serving the South Hayling retail area would provide a good level of access to public transport, local shops and amenities and a high quality pedestrian environment for the residents of the proposed development.

4. Vehicle trip generation

The site is currently occupied by the Pullingers home furnishings store and staff/customer car park. This will be removed as part of the development proposals, and replaced with sheltered housing accommodation. To review the potential impact of the proposed development on the local highway network, data from parking surveys completed in March 2014 for similar sites has been used. CRL sites are all located in similar accessible positions and residents tend to have similar living and travel requirements. This data has been compared against trip rates from the TRICS database for the existing site use, and this is reviewed in the following sections.

4.1 Trips generated by extant site use

To identify the potential trip generation levels associated with the existing land use, reference has been made to the TRICS database (Version 7.1.3). Based on the existing building footprints, the approximate gross floor area (GFA) of Pullingers is estimated at 678sqm and this has been used to determine the trip forecasts. The total daily vehicle trip forecast for the home furnishings store is shown in **Table 4.1**. The full trip rate outputs are provided in **Appendix A**.

Table 4.1: Estimated daily (12 hour) vehicle trips generated by the furnishings store

	Total Daily Vehicle Trips		
	Arrival	Departure	Total
12 hour Vehicle trip rate (per 100 sqm)	20.394	20.132	40.526
12 hour Vehicle trips	138	136	275

4.2 Trips generated by CRL sites

Surveys were undertaken at eight established CRL sites. At each of the survey sites all of the apartments had been sold. The included Lodge sites were as follows:

1. Hampton Lodge, Sutton
2. Lord Rosebery Lodge, Epsom
3. Churchill Lodge, Lilliput
4. Mitchell Lodge, Bitterne
5. Mulberry Lodge, Emsworth
6. Park View Lodge, Faversham
7. Mottisfont Lodge, Romsey
8. St Mary's Lodge, Birchingtton

The surveys took place on a neutral day (Tuesday or Wednesday or Thursday) in a neutral month (March 2014) over 12 hours (0700-1900). An enumerator was based on site for the duration of the survey counting vehicular movements into / out of the car park. In addition to the recording of on-site car parking activity, any on-street car parking associated with each Lodge was noted. A summary of the survey results is presented in **Table 4.2**.

Table 4.2: Total car parking trip rates (per unit)

CRL site/location	Units Occupied	Weekday 12 hr Arrivals	Weekday 12 hr Departures	Recorded two-way trip rate
Hampton Lodge, Sutton	39	0.74	0.69	1.44
Lord Roseberry Lodge, Epsom	31	0.42	0.45	0.87
Churchill Lodge, Lilliput	51	0.94	1.02	1.96
Mitchell Lodge, Bitterne	36	0.83	0.75	1.58
Mulberry Lodge, Emsworth	30	0.80	0.87	1.67
Park View Lodge, Faversham	36	0.81	0.83	1.64
Mottisfont Lodge, Romsey	31	0.98	0.97	1.90
St Mary's Lodge, Birchington	31	0.35	0.32	0.68
CRL Average	36	0.73	0.74	1.47

Using the trip rates presented in **Table 4.2**, the total daily vehicle trips forecast for a development of 44 sheltered housing units is given in **Table 4.3**.

Table 4.3: Estimated daily (12 hour) vehicle trips generated by a 44 unit sheltered housing development

Total Daily Vehicle Trips		
Arrival	Departure	Total
32	33	65

4.3 Trip comparison

Comparing data in **Table 4.1** and **4.3**, the traffic generated will be significantly less than the potential generation of the existing land use. The details of the net difference in flows are provided in **Table 4.4** below.

Table 4.4: Net difference in traffic flows

Total Daily Vehicle Trips		
Arrival	Departure	Total
-106	-103	-210

As presented in **Table 4.4**, there will be a significant benefit to the local highway network as the proposed development will generate less traffic movements than the existing site use.

5. Access Design

5.1 Proposed vehicular access

Vehicular access/egress for the proposed development will be taken from Elm Grove using the existing service access to no. 112 (**Photo 3.4**) as illustrated in **Figure 2.2**. In accordance with the guidance provided in the Manual for Streets³ document, a visibility splay of 2.4m x 43m should be provided. As can be seen from **Photo 5.1** and from **Photo 2.2** previously, the available visibility exceeds these requirements.

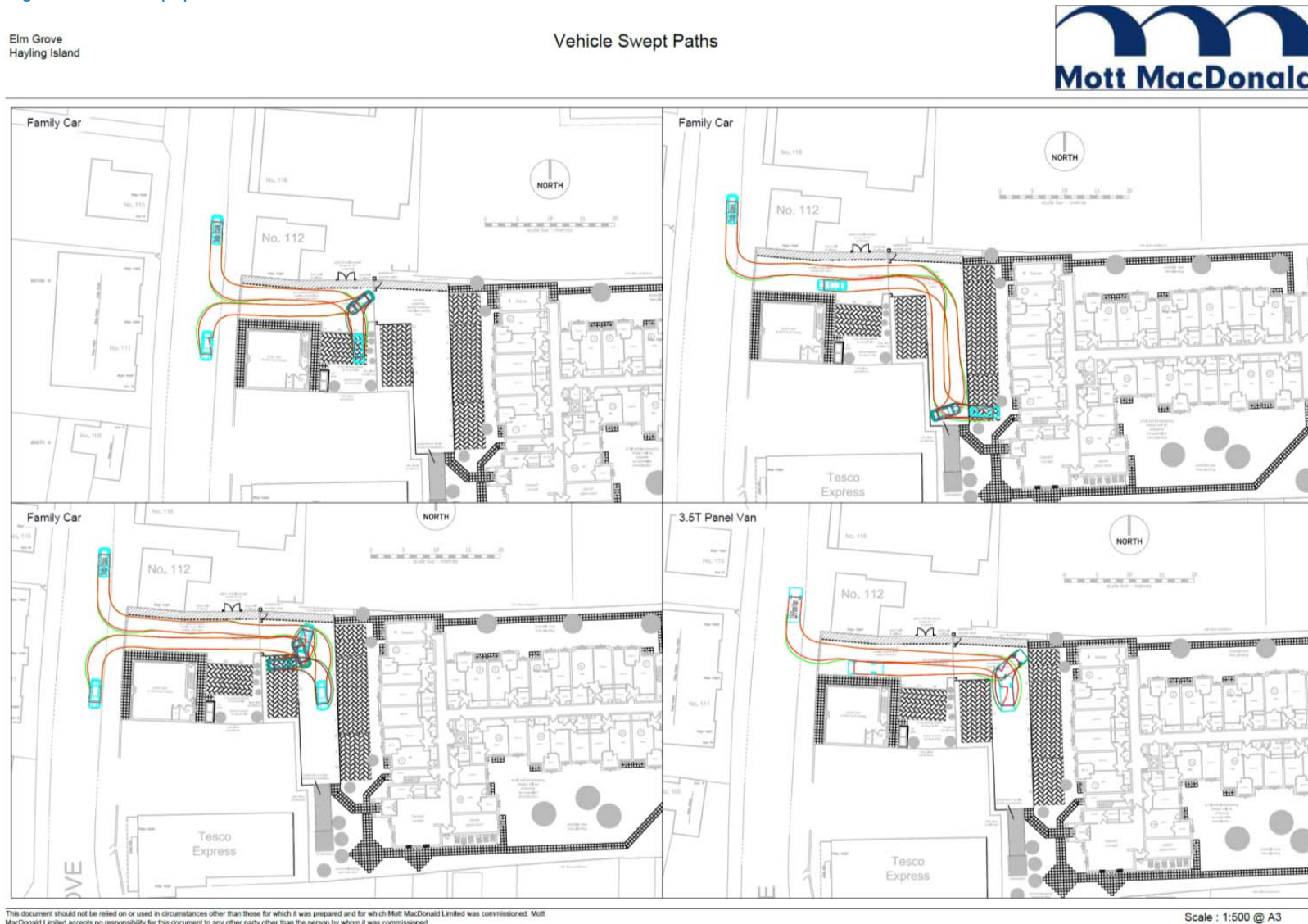
Photo 5.1: Visibility to south from proposed access point



The site access and parking area has been reviewed to confirm that all movements can be undertaken. **Figure 5.2** shows the two-way movement of cars through the site access and along the access road. This demonstrates that the site layout can accommodate the manoeuvres of residents' vehicles and those of shop customers.

³ <https://www.gov.uk/government/publications/manual-for-streets>

Figure 5.1: Swept paths of car and 3.5t van



5.2 Servicing arrangements

The site layout will accommodate the manoeuvres of 3.5tonne vans (Figure 5.1) but larger vehicles will service the site from Elm Grove. Bins for the sheltered housing, shop unit and flat will be wheeled out from the respective refuse stores to Elm Grove and so there will be no requirement for refuse vehicles to enter the site.

Deliveries to the Pullingers premises currently take place via the Tesco car park. HGVs do not turn within the Pullingers premises but instead reverse from Elm Grove (**Photo 5.1**). HGVs delivering to Tesco similarly reverse from Elm Grove (**Photo 5.2**).

Photo 5.2: Delivery to Tesco Express



Photo 5.3: Delivery to Pullingers



Given that the application site does not function as an HGV turning area for either Tesco or Pullingers deliveries at the present time, and as HGV deliveries to Pullingers will no longer take place, the proposed development will result in a reduction in conflicts in the Tesco car park relative to the existing situation. Furthermore, movements associated with larger service vehicles will be occasional in nature for the application site. For these reasons, there are no highway concerns relating to the proposed access arrangements.

5.3 Pedestrian access

Pedestrian access to the application site will be taken from Elm Grove, adjacent to no.112. **Figure 2.2** shows that a marked lane for pedestrians and mobility scooters will be provided along the northern site boundary, with a dedicated access gate to the sheltered housing and a dwarf wall and railings to maximise pedestrian visibility for vehicles leaving no.112. This will minimise vehicle/pedestrian conflicts within the site.

6. Parking

6.1 Parking standards

Havant Borough Council has produced supplementary planning policy guidance relating to residential parking standards. 'Havant Borough Residential Parking and Cycle Provision: Supplementary Planning Document' (adopted March 2010)⁴ sets out car and cycle parking standards for residential developments. Table 6 of the Supplementary Planning Document (SPD) identifies a requirement for sheltered housing of between 0.5 and 1 space per unit for sites in Waterlooville town centre. The guidance goes on to say that *"Mobility vehicle storage provision may also be required in addition to cycle long and short stay provision"*.

Table 5 of the SPD identifies a requirement for 1.3 spaces for a two-bedroom residential unit if parking is unallocated. The SPD does not identify a parking standard for retail units; however Table 3 within 'Hampshire Parking Strategy and Standards (2002)'⁵ identifies a maximum standard for non-food retail and general retail of 1 space per 20 sq m covered retail area.

Justification for the proposed parking levels at this site is presented in the following section using an evidence base from existing Churchill Retirement Living developments.

6.2 Parking provision

The development proposed includes 14 parking spaces for the sheltered housing accommodation and three parking spaces for the shop/flat; see **Figure 2.2** for details of the parking arrangements.

For the 44 sheltered apartments proposed the level of parking provision is at the ratio of 0.32 spaces per unit, which is identical to the average 0.32 which is normally provided by CRL, and will ensure that there is no demand for on-street parking to serve the development. The ratio of 0.32 spaces per unit is found at a number of similar developments in accessible locations, and accepted by local planning authorities.

To determine the appropriate level of parking provision that needs to be provided at CRL sites, the data collected in the March 2014 surveys has been used. A summary of the survey approach is provided in **Section 4**.

The car park surveys have allowed a trip rate and parking accumulation for each CRL site to be calculated. A summary of the site characteristics and trip generation results are presented in **Table 6.1**.

⁴ <http://www.havant.gov.uk/sites/default/files/documents/Adopted%20Residential%20Parking%20Cycle%20Provision%20SPD.pdf>

⁵ <http://www3.hants.gov.uk/highways-development-planning/hdp-parking-policies/2002-parking-standards.htm>

Table 6.1: Total vehicle movements (on-site car park and on-street)

CRL site/location	Units Occupied	Parking Spaces Available	Parking Spaces Per Unit at the time of the survey	Recorded two-way trip rate
Hampton Lodge, Sutton	39	16	0.41	1.44
Lord Roseberry Lodge, Epsom	31	16	0.52	0.87
Churchill Lodge, Lilliput	51	22	0.43	1.96
Mitchell Lodge, Bitterne	36	12	0.33	1.58
Mulberry Lodge, Emsworth	30	14	0.47	1.67
Park View Lodge, Faversham	36	17	0.47	1.64
Mottisfont Lodge, Romsey	31	11	0.35	1.90
St Mary's Lodge, Birchington	31	11	0.35	0.68
CRL Average	36	15	0.42	1.47

In order to determine whether the proposed parking provision is adequate for the development, an average parking accumulation across all eight sites has been identified; see **Figure 6.1** and reference to the pink line. This is compared against the provision of 0.32 spaces per unit which is promoted for the Hayling Island site; refer to the red line.

Figure 6.1: CRL Sites - Average parking demand / unit summary

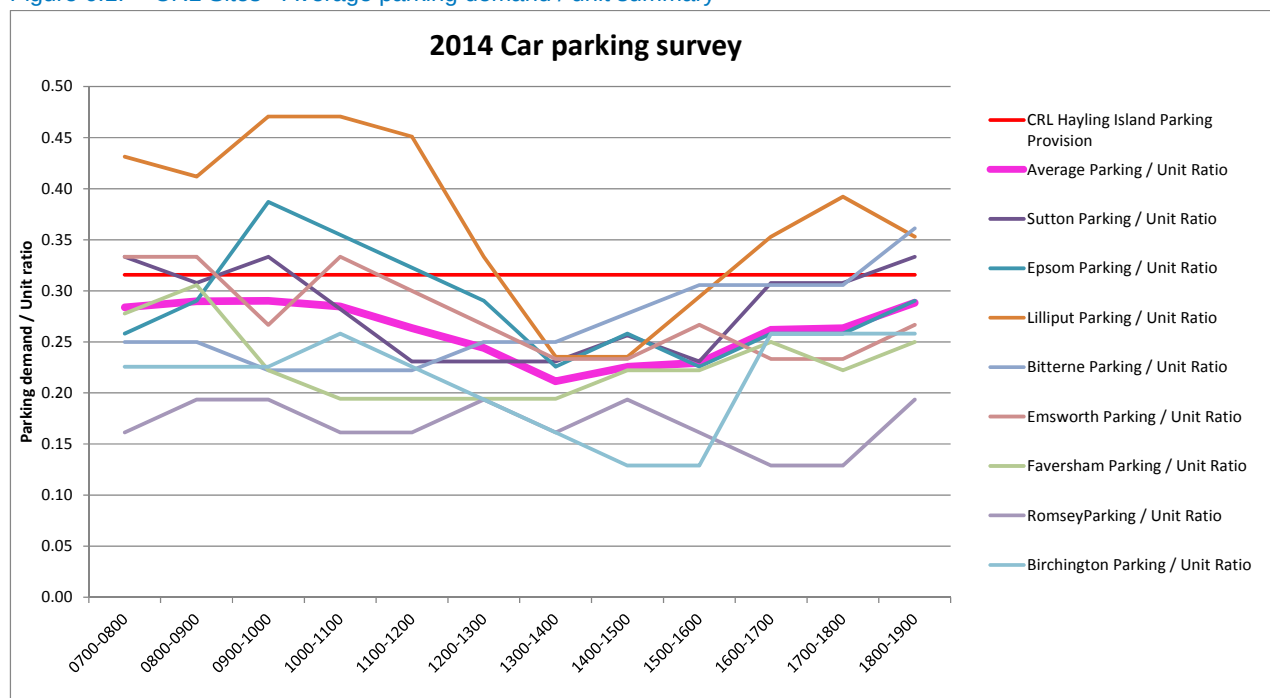


Figure 6.1 shows that during the 2014 surveys, the average parking demand across the eight sites was below that of the proposed parking provision levels (a ratio of 0.32 spaces per unit). The survey data has shown that the average parking demand is 0.26 spaces per residential unit.

It is considered that the parking provision promoted for the site will adequately serve the needs of the residents. Free parking for visitors to the site can be accommodated within the nearby St Mary's Road public car park (56 spaces) and the Co-op supermarket car park on Tournurbury Lane (approximately 65 spaces), both within 300m of the site or less than five minutes' walk. Observations made during an early afternoon site visit on Thursday 12th February 2014 indicate that spare capacity is typically available within these facilities.

In terms of cycle parking, the surveys carried out in March 2014 showed very limited cycle movements per day. If there is a demand for cycle storage, these will be located in the buggy store area.

In relation to parking policy requirements, on 27th March 2012, the National Planning Policy Framework (NPPF) replaced the parking guidance which was set out in the withdrawn *PPG13: Transport* and *PPS3: Housing* documents. In considering parking provision at the local level, the NPPF states that local authorities should take into account:

- *“the accessibility of the development;*
- *the type, mix and use of development;*
- *the availability of and opportunities for public transport;*
- *local car ownership levels; and*
- *an overall need to reduce the use of high-emission vehicles.”*

It is considered that these aims are achieved by the proposed parking levels particularly as the site is considered to be in an accessible location in terms of public transport and walking distance to local shops and other local facilities.

Based on the above and the analysis illustrated in **Figure 6.1**, a standard of 0.32 spaces per dwelling would be appropriate in this case, resulting in the provision of 14 parking spaces as part of the proposed development. We consider this to be the correct level of parking to accommodate the requirements of the residents who would live within the development.

Three unallocated parking spaces are proposed for the shop unit and above two-bedroom flat. This level of provision is consistent with Havant Borough Council and Hampshire County Council guidance and will cater for the needs of residents and shop users.

8. Summary

The assessment of transport aspects of the site and surrounding area is summarised as follows:-

- The proposed development would be in a highly accessible location in relation to local bus stops, local shops and other local services;
- The existing bus service and their frequencies would provide a good level of service for residents of the proposed development;
- There are bus stops located within the desired walking distance to the site;
- With dropped kerbs, provision of high quality footways and pedestrian crossings on local roads, residents would be encouraged to access a range of local shops, services and public transport by foot;
- The provision of 14 parking spaces for the sheltered apartments and three spaces for the shop/flat is considered to be appropriate given the location of the site and its proximity to public parking facilities;
- Vehicular access will be taken from Elm Grove; and
- The proposed development would result in a net reduction in trips relative to the current site use, and would not affect the current arrangements for deliveries to the Tesco Express store. There will therefore be a significant benefit to the local highway network.

It is concluded that the site is in a very sustainable location in terms of access to transport, local services and amenities.

Appendices

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Appendix A. TRICS Outputs

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
 VEHICLES

Selected regions and areas:

06	WEST MIDLANDS	
	HE	HEREFORDSHIRE 1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY	NORTH YORKSHIRE 1 days
	SY	SOUTH YORKSHIRE 1 days
09	NORTH	
	CB	CUMBRIA 1 days
11	SCOTLAND	
	EB	CITY OF EDINBURGH 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: Gross floor area
 Actual Range: 714 to 3500 (units: sqm)
 Range Selected by User: 290 to 26500 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/06 to 22/10/11

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	2 days
Wednesday	2 days
Friday	1 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

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

Retail Zone	3
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:

A1	5 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:

5,001 to 10,000	1 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days
50,001 to 100,000	1 days

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

Population within 5 miles:

50,001 to 75,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	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	3 days
1.1 to 1.5	2 days

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

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	5 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	5 days
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This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	CB-01-G-02 JAMES STREET	STAPLES	CUMBRIA
	CARLISLE Edge of Town Centre Built-Up Zone Total Gross floor area:	2500 sqm	
	Survey date: FRIDAY	05/02/10	Survey Type: MANUAL
2	EB-01-G-01 GYLEMUIR ROAD	PETS AT HOME	CITY OF EDINBURGH
	THE GYLE EDINBURGH Edge of Town Retail Zone Total Gross floor area:	932 sqm	
	Survey date: WEDNESDAY	27/10/10	Survey Type: MANUAL
3	HE-01-G-01 COMMERCIAL ROAD	PETS AT HOME	HEREFORDSHIRE
	HEREFORD Suburban Area (PPS6 Out of Centre) No Sub Category Total Gross floor area:	714 sqm	
	Survey date: MONDAY	17/10/11	Survey Type: MANUAL
4	NY-01-G-03 STIRLING ROAD	DUNELM MILL	NORTH YORKSHIRE
	CLIFTON MOOR YORK Edge of Town Retail Zone Total Gross floor area:	3500 sqm	
	Survey date: WEDNESDAY	16/09/09	Survey Type: MANUAL
5	SY-01-G-01 WOMBWELL LANE	DUNELM MILL	SOUTH YORKSHIRE
	BARNESLEY RETAIL PARK BARNESLEY Edge of Town Retail Zone Total Gross floor area:	3127 sqm	
	Survey date: MONDAY	21/06/10	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.

Mott MacDonald Stoneham Lane Southampton

Licence No: 704101

TRIP RATE for Land Use 01 - RETAIL/G - OTHER INDIVIDUAL NON-FOOD SUPERSTORE
VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	1607	0.093	2	1607	0.000	2	1607	0.093
08:00 - 09:00	5	2155	0.343	5	2155	0.176	5	2155	0.519
09:00 - 10:00	5	2155	1.708	5	2155	1.114	5	2155	2.822
10:00 - 11:00	5	2155	2.219	5	2155	1.856	5	2155	4.075
11:00 - 12:00	5	2155	2.488	5	2155	2.237	5	2155	4.725
12:00 - 13:00	5	2155	2.441	5	2155	2.330	5	2155	4.771
13:00 - 14:00	5	2155	2.646	5	2155	2.488	5	2155	5.134
14:00 - 15:00	5	2155	2.376	5	2155	2.404	5	2155	4.780
15:00 - 16:00	5	2155	2.005	5	2155	2.376	5	2155	4.381
16:00 - 17:00	5	2155	1.541	5	2155	1.792	5	2155	3.333
17:00 - 18:00	5	2155	1.504	5	2155	1.597	5	2155	3.101
18:00 - 19:00	5	2155	0.724	5	2155	0.975	5	2155	1.699
19:00 - 20:00	5	2155	0.306	5	2155	0.650	5	2155	0.956
20:00 - 21:00	4	1818	0.000	4	1818	0.137	4	1818	0.137
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:		20.394			20.132			40.526	

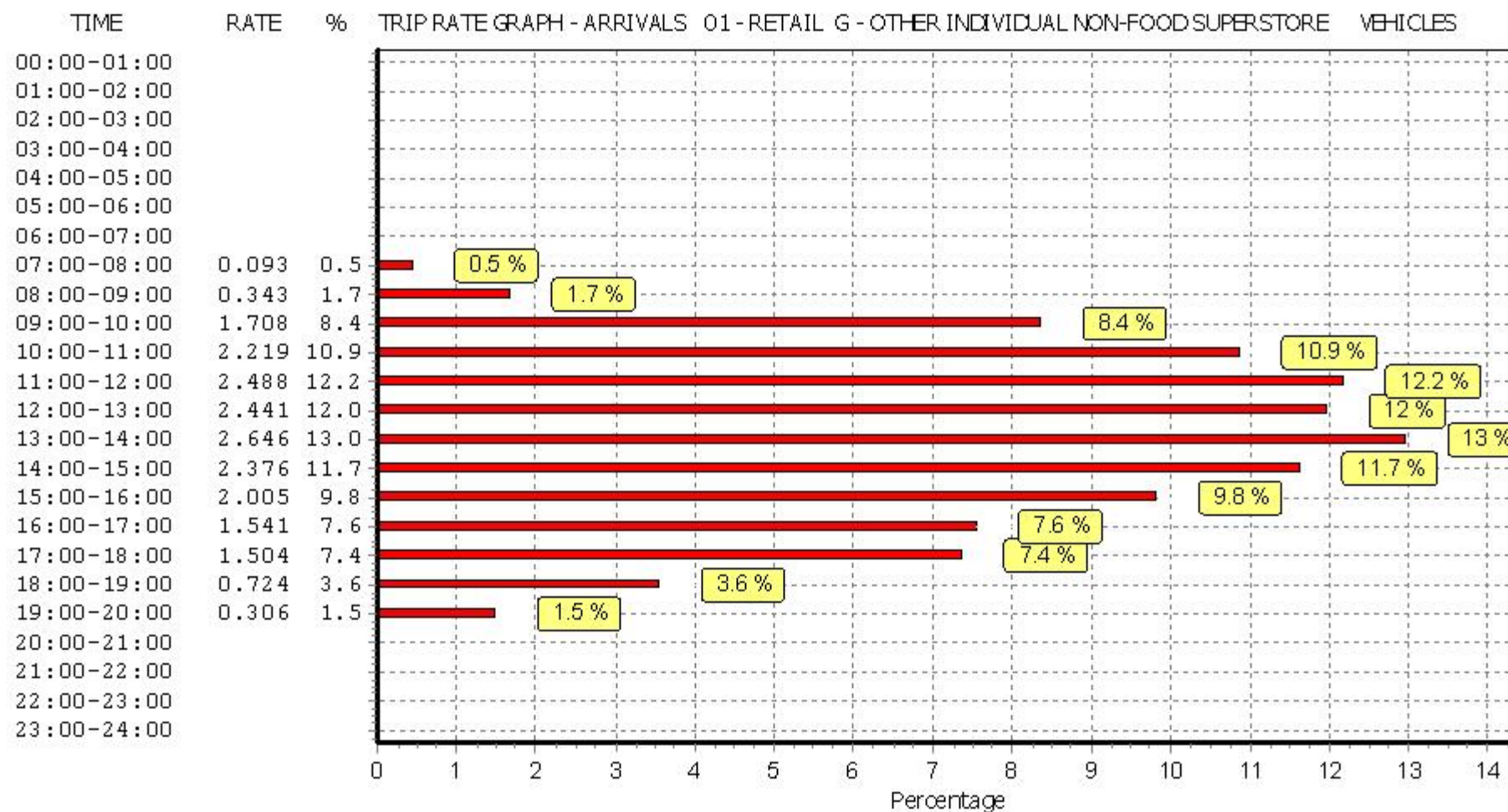
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are 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.

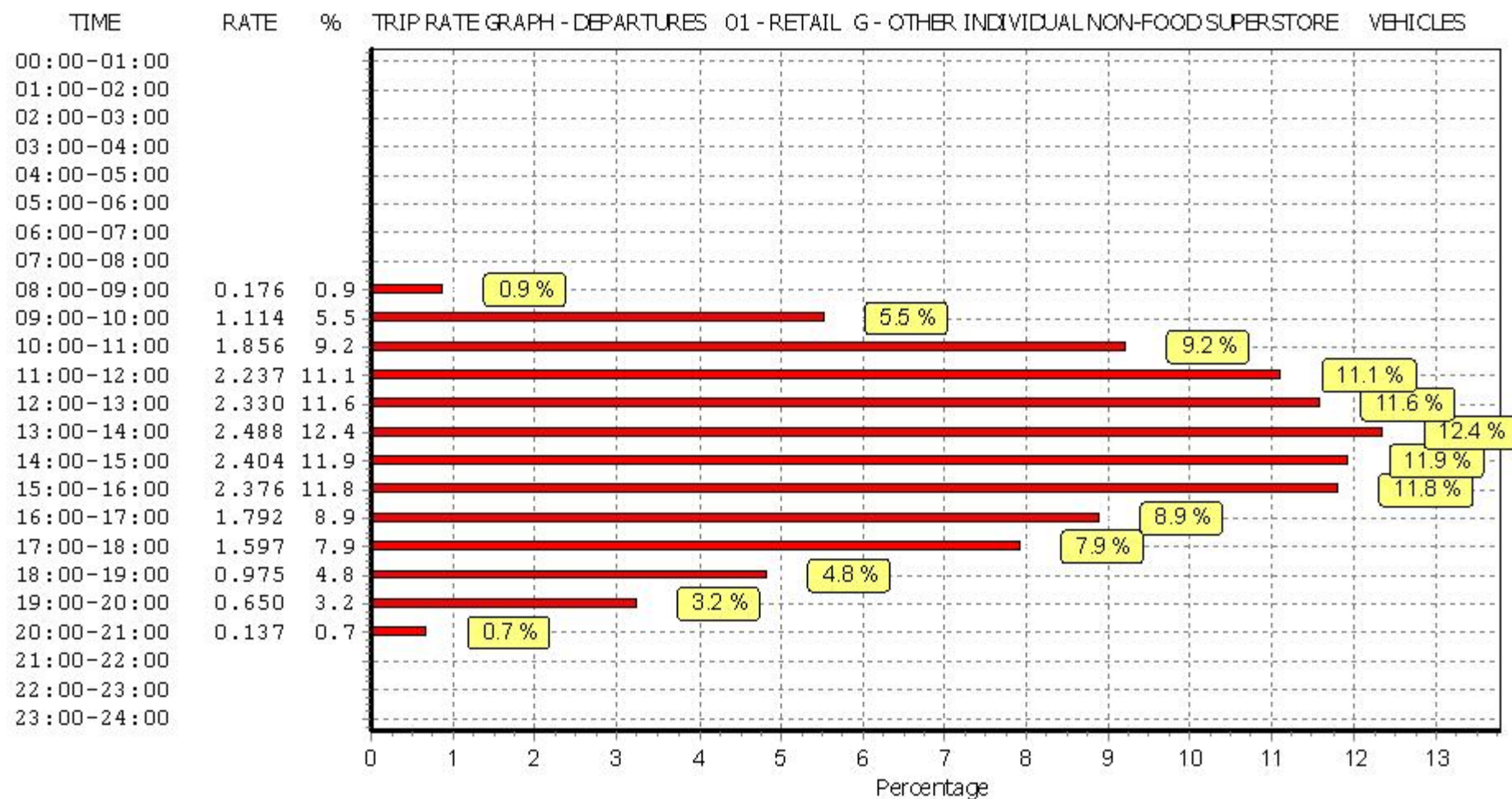
Parameter summary

Trip rate parameter range selected: 714 - 3500 (units: sqm)
 Survey date range: 01/01/06 - 22/10/11
 Number of weekdays (Monday-Friday): 5
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

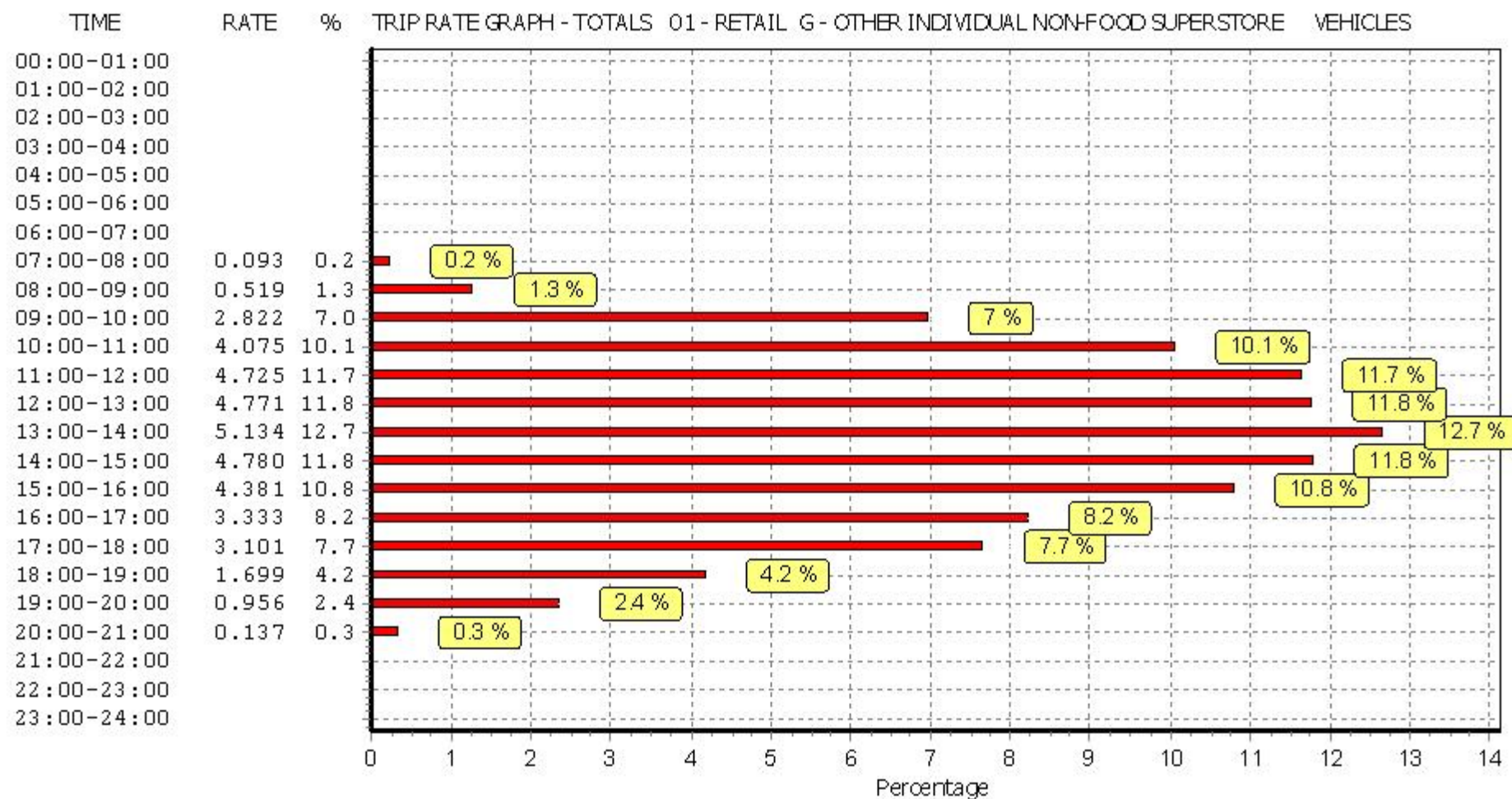
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected 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.



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