LANMOR Consulting

Civil Engineers & Transport Planners

Kingston Bridge House

Transport Statement

November 2020

201345/TS/JR/KBL/01

LANMOR Consulting

Civil Engineers & Transport Planners

LANMOR Consulting Ltd,
Thorogood House, 34 Tolworth Close
Surbiton, Surrey, KT6 7EW

Tel: 0208 339 7899 Fax: 0208 339 7898
E-mail: info@lanmor.co.uk
Internet: www.lanmor.co.uk

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1 INTRODUCTION

1.1 Scope

1.1.1 Lanmor Consulting Ltd has been commissioned to provide an assessment of the highway and transportation implications to the proposed development at the site of Kingston Bridge House, Church Grove, Hampton Wick, Kingston upon Thames, KT1 4AG.

1.1.2 Within this Transport Statement, detailed consideration will be given to the location of the proposed development in terms of its accessibility by car and non-car modes of travel such as walking, cycling and public transport. It will consider changes in travel demand arising from the development and the associated implications for the highway and transport networks within the area.

1.1.3 This statement will also demonstrate that the proposed development accords with the key planning policies, will have minimal impact on the surrounding highway and transportation infrastructure and that the parking provisions for the development will be adequate and will not increase parking on-street.

1.2 Site Description and Existing Conditions

1.2.1 The site is located within an area made up of residential, commercial and public spaces, with the London Borough of Richmond. The site is located at the junction of Church Grove and Hampton Court Road, opposite the Kings Field.

1.2.2 Kingston Bridge House is currently made up of student living facilities which span over 7 floors. Drawing FLU.1191.2.02 in Appendix A show the existing site plan for the site.

1.3 Proposed Development

1.3.1 The proposed development will see the conversion from the existing student living arrangement (C4) to make way for a total of 89 new residential (C3) units spread across 8 floors. Drawing FLU.1191.2.10 shows the proposed site plan and this is enclosed within Appendix A.

2 NATIONAL GOVERNMENT POLICY

2.1 National Planning Policy Framework (NPPF) revised 2019

2.1.1 Within the NPPF it states:

"The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs. Achieving sustainable development means that the planning system has three overarching objectives, Economic; Social; Environmental; which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives)".

Promoting Sustainable Transport

2.1.2 NNPF acknowledges Transport policies have an important role to play in facilitating sustainable development but also in contributing to the wider sustainability and health objectives and it states planning policies should;

a) support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;

b) be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;

c) identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development;

d) provide for high quality walking and cycling networks and supporting facilities such as cycle parking (drawing on Local Cycling and Walking Infrastructure Plans); and

e) Provide for any large scale transport facilities that need to be located in the area, and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. In doing so they should take into account whether such development is likely to be a nationally significant infrastructure project and any relevant national policy statements.

2.1.3 The NPPF states that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

2.1.4 Within this context, applications for development should:

a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and

e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

Parking Standards

2.1.5 NPPF states when setting local parking standards for residential and non-residential development, local planning authorities should consider:

- 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
- the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.

2.2 Regional Policies

Adopted London Plan (2016)

2.2.1 Under the legislation establishing the Greater London Authority (GLA), the Mayor should produce a spatial development strategy (SDS) – which has become known as 'the London Plan' – and to keep it under review.

2.2.2 The proposed development is not referable under the Greater London Authority (GLA) Act 1999. The current London Plan was adopted in March 2016. London Boroughs' local development plan documents should be prepared so that they are in 'general conformity' with the London Plan.

2.2.3 The adopted London Plan policies relevant to the proposed development are:

Policy 6.3 – Assessing Effects of Development on Transport Capacity

"Transport assessments will be required in accordance with TfL's Transport Assessment Best Practice Guidance for major planning applications. Workplace and/or residential travel plans should be provided for planning applications exceeding the thresholds in, and produced in accordance with, the relevant TfL guidance. Construction logistics plans and delivery and servicing plans should be secured in line with the London Freight Plan1 and should be co-ordinated with travel plans."

"..... Boroughs should take the lead in exploiting opportunities for development in areas where appropriate transport accessibility and capacity exist or is being introduced. Boroughs should facilitate opportunities to integrate major transport proposals with development in a way that supports London Plan priorities."

"..... LDFs should include policies requiring transport assessments, travel plans, construction logistics and delivery/servicing plans as set out in above."

Policy 6.9 – Cycling

"Developments should:

a provide secure, integrated, convenient and accessible cycle parking facilities in line with the minimum standards set out in Table 6.3 and the guidance set out in the London Cycle Design Standards (or subsequent revisions)

b provide on-site changing facilities and showers for cyclists

c contribute positively to an integrated cycling network for London by providing infrastructure that is safe, comfortable, attractive, coherent, direct and adaptable and in line with the guidance set out in the London Cycle Design Standards (or subsequent revisions)

d provide links to existing and planned cycle infrastructure projects including Cycle Superhighways, Quietway's, the Central London Grid and the 'mini-Hollands'

e facilitate the Mayor's cycle hire scheme through provision of land and/or planning obligations where relevant, to ensure the provision of sufficient capacity."

Policy 6.10 – Walking

"Development proposals should ensure high quality pedestrian environments and emphasise the quality of the pedestrian and street space by referring to Transport for London's Pedestrian Design Guidance"

Policy 6.13 -Parking

"The Mayor wishes to see an appropriate balance being struck between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport use."

Parking Standards (Adopted London Plan)

2.2.4 The adopted London Plan sets parking standards for new residential development. Policy 6.13 "PARKING" of the adopted London Plan states:

A The Mayor wishes to see an appropriate balance being struck between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport use.

B The Mayor supports Park and Ride schemes in outer London where it can be demonstrated they will lead to overall reductions in congestion, journey times and vehicle kilometres.

Planning Decisions

C The maximum standards set out in Table 6.2 in the Parking Addendum to this chapter should be the basis for considering planning applications (also see Policy 2.8).

D In addition, developments must:

a ensure that 1 in 5 spaces (both active and passive) provide an electrical charging point to encourage the uptake of electric vehicles

b provide parking for disabled people in line with Table 6.2

c meet the minimum cycle parking standards set out in Table 6.3

d provide for the needs of businesses for delivery and servicing.

Parking for residential development

	PTAL 0 to 1		PTAL 2 to 4		PTAL 5 to 6	
Suburban	**150–200 hr/ha**	**Parking provision**	**150–250 hr/ha**	**Parking provision**	**200–350 hr/ha**	**Parking provision**
3.8–4.6 hr/unit	35–55 u/ha	Up to 2 spaces per unit	35–65 u/ha	Up to 1.5 spaces per unit	45–90 u/ha	Up to one space per unit
3.1–3.7 hr/unit	40–65 u/ha		40–80 u/ha		55–115 u/ha	
2.7–3.0 hr/unit	50–75 u/ha		50–95 u/ha		70–130 u/ha	
Urban	**150–250 hr/ha**		**200–450 hr/ha**		**200–700 hr/ha**	
3.8 –4.6 hr/unit	35–65 u/ha	Up to 1.5 spaces per unit	45–120 u/ha	Up to 1.5 spaces per unit	45–185 u/ha	Up to one space per unit
3.1–3.7 hr/unit	40–80 u/ha		55–145 u/ha		55–225 u/ha	
2.7–3.0 hr/unit	50–95 u/ha		70–170 u/ha	Up to one space per unit	70–260 u/ha	
Central	**150–300 hr/ha**		**300–650 hr/ha**		**650–1100 hr/ha**	
3.8–4.6 hr/unit	35–80 u/ha	Up to 1.5 spaces per unit	65–170 u/ha	Up to one space per unit	140–290 u/ha	Up to one space per unit
3.1–3.7 hr/unit	40–100 u/ha		80–210 u/ha		175–355 u/ha	
2.7–3.0 hr/unit	50–110 u/hr	Up to one space per unit	100–240 u/ha		215–405 u/ha	

Maximum residential parking standards			
number of beds	4 or more	3	1-2
parking spaces	up to 2 per unit	up to 1.5 per unit	less than 1 per unit

Notes:

All developments in areas of good public transport accessibility should aim for significantly less than 1 space per unit

Adequate parking spaces for disabled people must be provided preferably on-site[1]

20 per cent of all spaces must be for electric vehicles with an additional 20 per cent passive provision for electric vehicles in the future.

2.2.5 Cycle Parking Standards set out in the London plan are tabulated below.

Land use		Long-stay	Short-stay
A1	food retail	from a threshold of 100 sqm: 1 space per 175 sqm	from a threshold of 100 sqm: first 750 sqm: 1 space per 40 sqm thereafter: 1 space per 300 sqm
	non-food retail	from a threshold of 100 sqm: first 1000 sqm: 1 space per 250 sqm thereafter: 1 space per 1000 sqm	from a threshold of 100 sqm: first 1000 sqm: 1 space per 125 sqm thereafter: 1 space per 1000 sqm
A2-A5	financial / professional services	from a threshold of 100 sqm: 1 space per 175 sqm	from a threshold of 100 sqm: 1 space per 40 sqm
	cafes & restaurants		
	drinking establishments		
	take-aways		
B1	business offices	inner/ central London: 1 space per 90 sqm outer London: 1 space per 150 sqm	first 5,000 sqm: 1 space per 500 sqm thereafter: 1 space per 5,000 sqm
B1	light industry and research and development	1 space per 250 sqm	1 space per 1000 sqm
B2-B8	general industrial, storage or distribution	1 space per 500 sqm	1 space per 1000 sqm
C1	hotels (bars, restaurants, gyms etc open to the public should be considered individually under relevant standards)	1 space per 20 bedrooms	1 space per 50 bedrooms
C2	hospitals	1 space per 5 staff	1 space per 30 staff
C2	care homes / secure accommodation	1 space per 5 staff	1 space per 20 bedrooms
C2	student accommodation	1 space per 2 beds	1 space per 40 beds
C3-C4	dwellings (all)	1 space per studio and 1 bedroom unit 2 spaces per all other dwellings	1 space per 40 units

D1	nurseries/schools (primary and secondary)	1 space per 8 staff + 1 space per 8 students	1 space per 100 students
	universities and colleges	1 space per 4 staff + 1 space per 20 FTE students	1 space per 7 FTE students
	health centre, including dentists	1 space per 5 staff	1 space per 3 staff
	other (e.g. library, church, etc.)	1 space per 8 staff	1 space per 100 sqm
D2	other (e.g. cinema, bingo, etc.)	1 space per 8 staff	1 per 30 seats
	sports (e.g. sports hall, swimming, gymnasium, etc.)	1 space per 8 staff	1 space per 100 sqm
Sui generis		as per most relevant other standard e.g. casino and theatre = d2	
Stations		to be considered on a case-by-case basis through liaison with TfL	

2.3 Draft New London Plan

2.3.1 The new London Plan is currently in draft however it still forms a material consideration and as such is included within this report. The Mayor's Intend to Publish version of the Plan was published in December 2019. The Secretary of State has since written to the Mayor setting out a number of directions required to make the Plan Sound (13 March 2020).

2.3.2 "Policy GG2 – Making the best use of land – " *Plan for good local walking, cycling and public transport connections to support a strategic target of 80 per cent of all journeys using sustainable travel, enabling car-free lifestyles that allow an efficient use of land, as well as using new and enhanced public transport links to unlock growth."*

2.3.3 Policy GG3 – Creating a healthy city – "Promote more active and healthy lifestyles for all Londoners and enable them to make healthy choices".

2.3.4 Policy T4 – Assessing and mitigating transport impacts provides the following advice:

"b) Transport assessments should be submitted with development proposals to ensure that any impacts on the capacity of the transport network (including impacts on pedestrians and the cycle network), at the local, network-wide and strategic level, are fully assessed. Transport assessments should focus on embedding the Healthy Streets Approach within, and in the vicinity of, new development. Travel plans, parking design and management plans, construction logistics plans and delivery and servicing plans will be required in accordance with relevant Transport for London guidance."

2.3.5 Policy T6 - Car Parking

"Car parking should be restricted in line with levels of existing and future public transport accessibility and connectivity."

"Car-free development should be the starting point for all development proposals in places that are (or are planned to be) well-connected by public transport, with developments elsewhere designed to provide the minimum necessary parking ('car-lite')."

"The maximum car parking standards set out in Policy T6.1 Residential parking to Policy T6.5 Non-residential disabled persons parking should be applied to development proposals and used to set local standards within Development Plans."

"Appropriate disabled persons parking for Blue Badge holders should be provided as set out in Policy T6.1 Residential parking to Policy T6.5 Non-residential disabled persons parking."

2.3.6 Table 10.3 in policy 6.1 of the London Plan sets out the relevant maximum residential car parking standards and is included at Table 2.1 below.

Table 10.3 Maximum Car Parking Standards	
Location	**Parking Provision**
Central Activities Zone, Inner London, Metropolitan and Major Town Centres, All areas of PTAL 5-6, Inner London PTAL 4	Car Free
Inner London PTAL 3	Up to 0.25 Spaces per nit

Inner London PTAL 2 **Outer London PTAL 4** **Outer London Opportunity Areas**	Up to 0.5 Spaces per unit
Inner London PTAL 0-1 **Outer London PTAL 3**	Up to 0.75 Spaces per unit
Outer London PTAL 2	Up to 1 Spaces per unit
Outer London PTAL 0-1	Up to 1.5 Spaces per unit *
*** Where small units (studios and on bedroom flats) make up a proportion of a development, parking provisions should reflect the resultant reduction in demand so that provision across the site is less than 1.5 spaces per unit**	

Table 2.1 – Maximum Car Parking Standards

2.3.7 Policy T6.1 states the following:

"Disabled persons parking should be provided for new residential developments. Residential development proposals delivering ten or more units must, as a minimum:

1) ensure that at least one designated disabled persons parking bay per dwelling for three per cent of dwellings is available from the outset;

2) demonstrate on plan and as part of the Car Parking Design and Management Plan, how the remaining bays to a total of one per dwelling for ten per cent of dwellings can be requested and provided when required as designated disabled persons parking in the future."

2.3.8 Policy T5 – Cycling

"Development Plans and development proposals should help remove barriers to cycling and create a healthy environment in which people choose to cycle. This will be achieved through: 1. supporting the delivery of a London-wide network of cycle routes, with new routes and improved infrastructure. 2. securing the provision of appropriate levels of cycle parking which should be fit for purpose, secure and well-located. Developments should provide cycle parking in accordance with the minimum standards set out in Table 10.2 and Figure 10.2, and should be designed and laid out in accordance with the guidance contained in the London Cycling Design Standards"

Table 10.3 Cycle Parking Standards			
Use Class	**Description of use**	**Long-stay (e.g. for residents or employees)**	**Short-stay (e.g. for visitors or customers)**
A1	Food retail	From a threshold of 100 sqm: 1 space per 175 sqm gross external area (GEA)	From a threshold of 100 sqm: areas with higher cycle parking standards (see Figure 10.2): First 750 sqm: 1 space per 20 sqm; thereafter: 1 space per 150 sqm (GEA) Rest of London: first 750 sqm: 1 space per 40 sqm; thereafter: 1 space per 300 sqm (GEA)
A1	Non-food retail	From a threshold of 100 sqm: first 1,000 sqm: 1 space per 250 sqm. Thereafter: 1 space per 1,000 sqm (GEA)	From a threshold of 100sqm: areas with higher cycle parking standards (see Figure 10.2): First 1,000 sqm: 1 space per 60 sqm; thereafter: 1 space per 500 sqm (GEA). Rest of London: first 1,000 sqm: 1 space per 125 sqm; thereafter: 1 space per 1,000 sqm (GEA)
A2 - A5	Financial / professional services; cafés & restaurants; drinking establishments; takeaways	From a threshold of 100 sqm: 1 space per 175 sqm (GEA)	From a threshold of 100 sqm: areas with higher cycle parking standards (see Figure 10.2): 1 space per 20 sqm (GEA). Rest of London: 1 space per 40 sqm (GEA)
B1	Business offices	Areas with higher cycle parking standards (see Figure 10.2): 1 space per 75 sqm. Rest of London: 1 space per 150 sqm (GEA)	First 5,000 sqm: 1 space per 500 sqm. Thereafter: 1 space per 5,000 sqm (GEA)
B1	Light industry and research and development	1 space per 250 sqm (GEA)	1 space per 1,000 sqm (GEA)
B2-B8	General industrial, storage or distribution	1 space per 500 sqm (GEA)	1 space per 1,000 sqm (GEA)
C1	Hotels (bars, restaurants, gyms etc. open to the public should be considered individually under relevant standards)	1 space per 20 bedrooms	1 space per 50 bedrooms
C2	Hospitals	1 space per 5 FTE staff	1 space per 30 FTE staff
C2	Care homes / secure accommodation	1 space per 5 FTE staff	1 space per 20 bedrooms
C3-C4	Dwellings (all)	1 space per studio, 1.5 spaces per 1 bedroom unit, 2 spaces per all other dwellings	1 space per 40 units
D1	Nurseries	1 space per 8 FTE staff + 1 space per 8 students	

D1	Primary schools / secondary schools / sixth form colleges	1 space per 8 FTE staff + 1 space per 8 students	1 space per 100 students
D1	Universities and colleges	1 space per 4 FTE staff + 1 space per 20 FTE students	1 space per 7 FTE students
D1	Health centre, including dentists	1 space per 5 FTE staff	1 space per 3 FTE staff
D1	other (e.g. library, church, etc.)	1 space per 8 FTE staff	1 space per 100 sqm (GEA)
D2	Other (e.g. cinema, bingo, etc.)	1 space per 8 FTE staff	1 per 30 seats
D2	Sports (e.g. sports hall, swimming, gymnasium, etc.)	1 space per 8 FTE staff	1 space per 100 sqm (GEA)
Sui generis		As per most relevant other standard e.g. casino and theatre = D2, room in large-scale purpose-built shared living or student accommodation = studio C3.	
Stations		To be considered on a case by case basis through liaison with TfL. The level of provision should take into account the type and location of the station, current and future rail and cycle demand and the potential for journey stages to and from the station to be made by cycle. A Future growth, though a step-change in provision is expected, especially at termini, in order to meet the Mayor's mode share target.	

Table 2.2 – Cycle Parking Standard

2.4 Richmond Council Core Strategy (2009):

2.4.1 The Core Strategy (2009) sets out the Strategic Planning Framework for the Borough for the next 15 years. The Core Strategy supersedes the Strategic policies section of the Unitary Development Plan: First Review 2005. The Core Strategy takes account of other plans and strategies and is the delivery mechanism for the spatial elements of the Community Plan.

2.4.2 Section 8.1.5 of the Core Strategy 'Sustainable Travel' states:

2.4.3 "The need for travel will be reduced by the provision of employment, shops and services at the most appropriate level locally, within the network of town centres identified in CP 8. To implement this policy the Council will:

- Protect and enhance local facilities and employment to reduce the need to travel.
- Require developments which would generate significant amounts of travel to be located on sites well served by public transport.

In promoting safe, sustainable and accessible transport modes such as walking, cycling and public transport, in association with its partners the Council will seek to:"

2.4.4 Policy 5.C – Cycling and Walking

- Give priority to pedestrians, including those with disabilities, particularly in Richmond town centre and the district and local shopping centres.
- Provide and promote a well designed bicycle and walking network across the Borough (the Strategic Walks network, Richmond Borough Cycle Network and London Cycle Network Plus), and improve conditions for cyclists and pedestrians elsewhere.
- Prioritise the needs of pedestrians and cyclists in the design of new developments including links to existing networks and requiring the provision of adequate cycle parking.
- Investigate the possibility of a footbridge across the Thames between Ham and Twickenham for pedestrians and cyclists.

2.4.5 Policy 5.D – Public Transport

- Improve provision for buses particularly in Richmond and Twickenham town centres, and seek to improve bus services within River Crane Corridor through the implementation of development proposals.
- Achieve integration and convenient interchange facilities at all the borough's stations
- Seek improvements to orbital public transport including rail access to Heathrow.
- Improve walking, cycling and public transport in areas less well served by public transport, including some of the areas of relative deprivation.

2.4.6 Policy 5.F – Car Parking and Travel

- Require new car free housing in Richmond and Twickenham town centres and in other areas where there is good public transport and elsewhere have regard to maximum parking standards.
- Require car share facilities and car clubs in appropriate new developments and encourage the use of low emission motor vehicles in order to reduce congestion and pollution.
- Discourage commuter parking particularly by giving priority to residents' needs.
- Limit any further expansion of parking in town and local centres and manage parking controls to help maintain the vitality and viability of the centres, including the evening economy.

2.4.7 Policy 5.G – Sustainable Travel

- Encourage major employers and schools to develop Green Travel Plans and require these where appropriate with planning applications.
- Require all major developments to submit a Transport Assessment based on TfL's Best Practice Guidance.
- Encourage efficient, safe and sustainable freight transport.
- Encourage river transport through the retention and support for new transport infrastructure.

Parking Standards

2.4.8 Appendix 4 of the Richmond Adopted Development Management Plan sets out the maximum vehicle and minimum cycle parking standards for new developments.

2.4.9 For new residential units in CPZ's areas the maximum parking allocation should not exceed 1 space for 1-2 bedroom dwellings, 1.5 spaces for 3 bedrooms and 2 spaces for 4+ bedroom dwellings. Provision for secure cycle parking should be at least 1 space for 1-3 bedroom dwellings and 2 spaces for 4+ bedroom units.

3 ACCESSIBILITY OF THE SITE

3.1 Site Accessibility and Local Facilities

3.1.1 Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly those under 2km. A number of local facilities are located within close proximity of the site, these include supermarkets, schools, restaurants, pharmacies and leisure facilities.

3.1.2 The site is located to west of Kingston Town Centre, on the opposite side of Kingston Bridge. Most facilities are located to the north and to the east of the site of the site. Table 3.1 below shows some selected facilities near the site.

Facility	Description	Distance from site (m)
HSBC UK	Bank	50m
St Johns Hampton Wick	Place of Worship	60m
Hampton Wick Hotel	Hotel	100m
Copper Leaf Restaurant	Restaurant	105m
London Pizza Experts	Restaurant	110m
Bright Horizons Nursery (HW)	School	145m
CLD Computers	Computer Repair Shop	170m
The Swan	Restaurant	195m
Bills Kingston	Restaurant	280m
TK Maxx	Superstore	290m
John Lewis	Superstore	320m
Hampton Wick Station	Train Station	432m
Bentall Centre	Shopping Centre	434m
All Saints Church	Place of Worship	445m
Barclays Bank	Bank	445m
Hampton Wick Library	Library	465m
Kingston Historic Market	Market	466m
Kingston Train Station	Train Station	900m

Table 3.1 – Local Facilities

3.1.3 As mentioned, Kingston Town Centre is located just over Kingston Bridge, approximately 300m away. There are various facilities located within a Kingston Town Centre.

3.2 Public Accessibility Rating Level (PTAL)

3.2.1 PTAL (Public Transport Accessibility Level) is a method of calculating public transport access in Central and Greater London. Originally developed by the London Borough of Hammersmith and Fulham, it has since been adopted by Transport for London. The PTAL ratings specified by Transport for London vary from 1a, considered very poor, to 6b considered excellent. The PTAL of the site has been categorized as Level 4, this considered to be good. It is also very close to PTAL zone 6 which have very good accessibility level.

3.2.2 A copy of the full PTAL report can be found in Appendix B.

3.3 Pedestrian Access

3.3.1 Walking is the most important mode that offers the greatest potential to replace short car trips, particular those under 2.0 km. Guidance suggests that walking distances of between 200m and 2km depending on the journey purpose are reasonable. There is a network of footways within the vicinity of the site. This runs alongside all the major and minor routes allowing safe and convenient access to the site. The footpaths in the area are generally well maintained and lit.

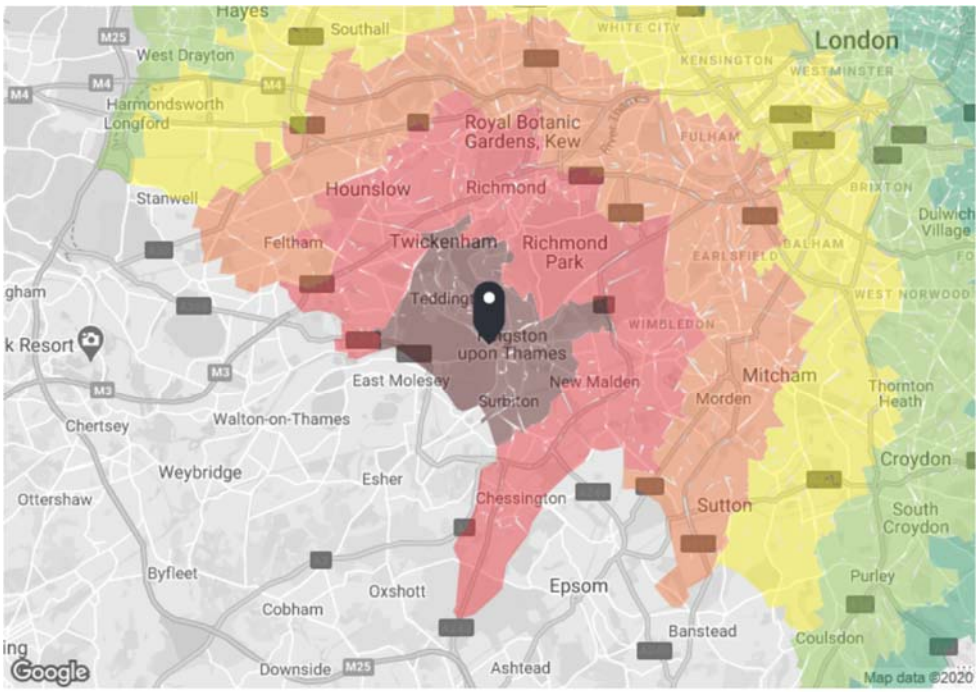
3.3.2 Walking can also from part of a wider journey for commuting and leisure purposes when combined with public transport. The nearest train stations are Hampton Wick and Kingston Station, which are located 450m from the site (6-minute walk) and 900m (11-minute walk) respectively.

3.3.3 Drawing 201345/TS/01 is included in Appendix B and shows the range of destinations that can be reached within walking distance of the site.

3.4 Cycle Access

3.4.1 Cycling also has the potential to substitute for short car trips particularly for those journeys of less than 5km, or when it forms part of a longer journey by public transport etc. Both train stations can be reached within 4-minutes of cycling from the site. Drawing 201345/TS/02 in Appendix B shows the destinations that can be reached within different cycle times.

3.4.2 There are cycle routes within the vicinity of the site, those on main roads, quieter roads, through parks and along canals. The closest identified on road cycle route is located on Hampton Court Road which has cycle lanes marked on the road surface. A cycle route map is provided in Appendix B and shows all routes within the vicinity of the site. Figure 3.1 below also shows information from a PTAL Time Map on the range of destinations that can be reached within cycling distance of the site. The map below only covers London, the cycle times with the county of Surrey are not shown.



TIM output for Base Year

Scenario: Base Year Mode: Cycle only, Time of day: Between peak times, Direction: From location

KT1 4AG
Kingston upon Thames KT1 4AG, UK
Easting: 517494, Northing: 169388

Code: NWMAT00I

Map key - Travel Time

< 15 mins	15 - 30 mins
30 - 45 mins	45 - 60 mins
60 - 75 mins	75 - 90 mins
90 - 105 mins	105 - 120 mins
120 - 135 mins	135 - 150 mins

Map layers

Travel Times

TRANSPORT FOR LONDON

Figure 3.1 – Cycle PTAL Time Map

3.5 Travel by Bus

3.5.1 The nearest bus stop to the site is located directly outside the building on Hampton Court Road however the services for this stop end in Kingston which is 2-3 stops away. Therefore, bus stops within the area which provide services away from Kingston have been considered as users are most likely to use a bus for longer journeys.

3.5.2 The nearest bus stops which provide a greater service to the application site are located outside the site on Church Grove opposite the existing access for Kingston Bridge House, 93m to the southwest on Hampton Court Road, 230m to the northeast on the High Street, 130m to the northeast on the High Street and 550m to the east on Wood Street. The services calling at the surrounding bus stops are tabulated below in Table 3.2 and outline the frequencies.

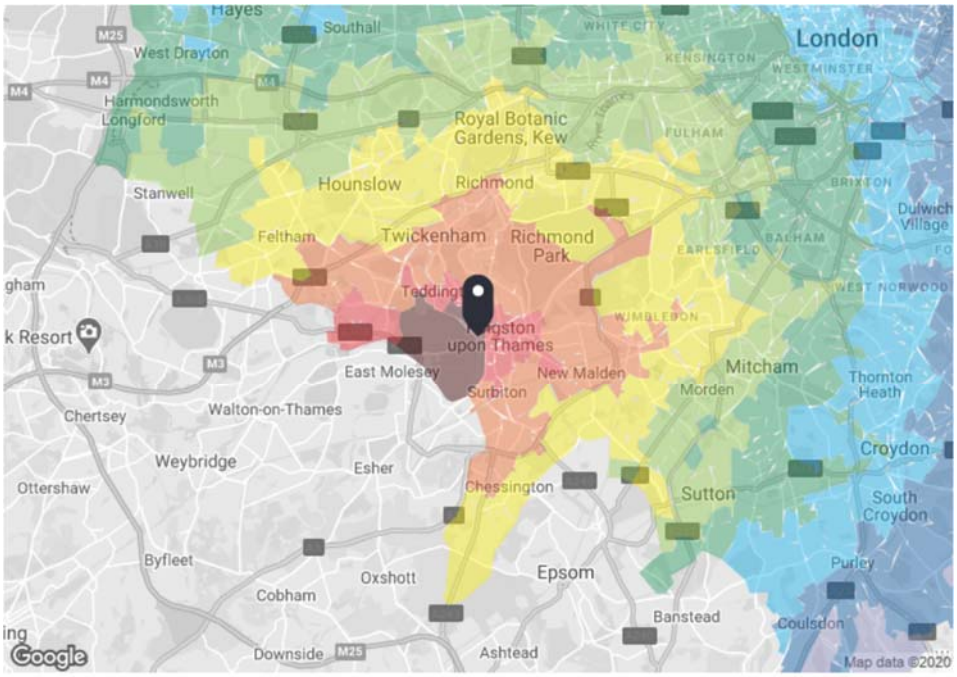
Service	Bus Stop	Distance from Site	Bus Route	Weekday Frequency (p/h)	Saturday Frequency (p/h)	Sunday Frequency (p/h)
111	Church Grove / The King's Field (Stop J)	93m	Kingston - Hampton - Hanworth - Hounslow - Heston - Cranford - Heathrow Central	24 Hours 7	24 Hours 5-6	24 Hours 5
216	Church Grove / The King's Field (Stop J)	93m	Kingston - Hampton Court Green - Hampton - Sunbury - Ashford - Staines	(06:28 – 00:34) 2-3	(06:29 – 00:34) 3	(06:28 – 00:33) 2
411	Church Grove / The King's Field (Stop J)	93m	Kingston - Hampton Court - West Molesey	(05:33 – 00:13) 3-4	(05:34 – 00:13) 3	(08:08 – 00:13) 2
461	Church Grove / The King's Field (Stop J)	93m	Kingston Upon Thames - Weybridge - Addlestone	(06:42 – 18:51) 2	(06:42 – 18:45) 2	-
481	Church Grove / The King's Field (Stop U)	Outside Site	Kingston - Twickenham - West Middlesex Hospital	(06:49 – 19:04) 1	(06:58 – 19:04) 1	(10:03 – 19:04) 1
281 Northbound	Lower Teddington Road (Stop A)	230m	Tolworth - Kingston - Hounslow	(05:39 – 00:29) 6	(06:14 – 00:29) 6	(06:24 – 00:29) 4-5
281 Southbound	Lower Teddington Road (Stop H)	130m	Hounslow - Kingston - Tolworth	(05:28 – 01:08) 5-6	(05:28 – 01:08) 5-6	(05:28 – 01:08) 4
285	Lower Teddington Road (Stop A)	230m	Kingston - Hampton Wick - Teddington - Hanworth - Feltham - Hatton Cross - Heathrow Central	24 Hours 5	24 Hours 4-5	24 Hours 4-5

X26 SE-Bound	Wood Street (Stop N)	550m	Heathrow Central - West Croydon	(06:17 – 01:00) 2	(06:15 – 00:59) 2	(06:15 – 00:59) 2
X26 NW-Bound	Wood Street (Stop P1)	550m	West Croydon - Heathrow Central	(05:01 – 00:01) 2	(05:00 – 00:01) 2	(05:01 – 00:01) 2

Table 3.2 – Bus Schedule

3.5.3 Guidance suggest that people will walk up to 400m for a bus, the assessments used in TfL PTAL scoring assumes distances of up to 640m which equates to an 8-minute journey time by foot at a walking speed of 80m per minute. The bus stops are well within walking distance of the site. The services offered from these stops provide a highly frequent service to a wide range of destinations including underground stations, national rail stations, hospitals, schools, supermarkets and other facilities.

3.5.4 The majority of buses around the local area are run and maintained by Transport for London, others include Falcon Buses, Metrobus and Reptons Coaches. A bus route map for Richmond is included within Appendix B. Figure 3.2 below also shows information from the PTAL Time Map on the range of destinations that can be reached by bus in London, again destinations within Surrey are not shown.



TIM output for Base Year

Scenario: Base Year Mode: Bus only, Time of day: Between peak times, Direction: From location

KT1 4AG
Kingston upon Thames KT1 4AG, UK
Easting: 517494, Northing: 169388

Code: NT096I05A

Map key - Travel Time

- < 15 mins
- 15 - 30 mins
- 30 - 45 mins
- 45 - 60 mins
- 60 - 75 mins
- 75 - 90 mins
- 90 - 105 mins
- 105 - 120 mins
- 120 - 135 mins
- 135 - 150 mins

Map layers

Travel Times

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TRANSPORT FOR LONDON

Figure 3.2 – Bus PTAL Time Map

3.6 National Rail

3.6.1 The nearest rail stations which offer national services is Hampton Wick Station and Kingston Station, which are located to the north of the site on High Street (A310) and east on Wood Street (A307) respectively. Facilities provided at Hampton Wick include public Wi-Fi and ticket machines, more facilities are provided at Kingston Station where there are payphones, post box, shops, toilets and step free access.

3.6.2 Hampton Wick and Kingston Station are within the Travelcard Zone 6, train services from the stations are operated by South Western Railway. The typical off-peak weekday service at both stations in trains per hour are:

- 6 to Waterloo, of which:
  - 4 run via Wimbledon
  - 2 run via Richmond and Twickenham
- 2 to Shepperton

3.6.3 On Sundays, there are hourly services at Kingston to Waterloo via Wimbledon & via Richmond and along the branch to Shepperton. An additional hourly service to Waterloo via the Hounslow Loop Line (calling at all intermediate stations) starts/terminates here.

3.6.4 Stations which can be accessed include Twickenham, Richmond, Wimbledon, Clapham Junction and London Waterloo. A copy of the South Western Railway map is included in Appendix B.

3.7 Car Clubs

3.7.1 Car clubs are another great sustainable means of travel which have been implemented largely across London over recent years. The nearest car club spot is located only a 7-minute walk away towards the north of the site on Seymour Road. There is currently one car available at this location and is provided by Enterprise Car Club.

3.7.2 There are more car club locations within the area provided by Zipcar, 9-11 minutes away located on Down Hall Road and Seven Kings Way. It is considered that there are sufficient car clubs within the area and within suitable walking distance and therefore a car club provision on site is considered excessive.

3.8 Site Location Summary

3.8.1 The site has very good access to a wide range of services and facilities within the local area. In respect of land use and transport planning, the site is well located in close proximity to public transport facilities and therefore discourages the need to travel by car.

3.8.2 It is considered that the site has 'good' access to public transport as assessed by Transport for London and would offer many alternatives to the use of a private car to travel to local facilities thus encouraging the use to use different modes of sustainable transport making it a suitable proposed development.

4 DEVELOPMENT PROPOSALS

4.1 Proposed Uses

4.1.1 The proposed development is fully described in the accompanying planning application documents and will involve the conversion of the existing student accommodation (C4) building to provide 89 new residential (C3) units spread across 8 floors with associated access, parking, cycle and bin storage provision.

4.1.2 The make-up of the development will consist of 7 x studio, 39 x 1-bed and 9 x 2-bed units in Block A (private housing) and 6 x 1-bed, 17 x 2-bed and 11 x 3-bed units in Block B (affordable housing). The development will include for 28 parking spaces, 9 car parking spaces which will be allocated for disabled; 160 secure cycle spaces will also be provided, 80 in Building A and 80 in Building B. A Sheffield stand for storage of 2 no. visitor cycle spaces will also be provided for both blocks.

4.2 Site Access

4.2.1 There are currently two points of vehicular access to the site and one pedestrian access into the building which is achieved via Church Grove. The main vehicular access to the centre of the site provides access to the parking areas on site. The development will comprise of a conversion of the existing student accommodation (C4) to residential (C3) units, the main access will be retained to serve the proposed development. The existing access to the north of the site will be closed. The existing pedestrian access will also be retained with 3 additional access provided around the building with accompanying footpaths.

4.3 Visibility Splays

4.3.1 Church Grove has a speed limit of 30mph, guidance in Manual for Streets Stopping for visibility requirements from junctions recommends 43 metres should be provided for drivers at the site egress point. The footways are wide and there is a grass verge providing very good visibility from the existing access. Visibility splays in excess of 2.4 x 43 metres are achievable to the nearside carriageway edge in both directions offering drivers exiting the site with appropriate levels of visibility.

4.3.2 Table 4.1 below lists the required horizontal visibilities based on speed limits.

Speed	Kilometres per hour	16	20	24	25	30	32	40	45	48	50	60
	Miles per hour	10	12	15	16	19	20	25	28	30	31	37
SSD (metres)		9	12	15	16	20	22	31	36	40	43	56
SSD adjusted for bonnet length. See 7.6.4		11	14	17	18	23	25	33	39	43	45	59
		Additional features will be needed to achieve low speeds										

Table 4.1 – Visibility Splay Requirements

4.3.3 Drawing 201345/TS/03 in Appendix C shows the access arrangements and visibility splays for the existing access and that it is currently appropriate.

4.4 Parking Provisions

4.4.1 The volume of car parking to be provided within any development is a key consideration, National Policy is promoting parking restraint to encourage sustainable travel behaviour, it is recognised that parking levels should be appropriate to the developments accessibility to public transport.

4.4.2 Public Transport Accessibility (PTAL) will play a significant role in potential car ownership, as greater access to public transport reduces the need to travel by car.

4.4.3 Given the high level of accessibility available to the public transport network, low residential parking levels will be provided on site. The proposals will provide for 28 spaces. This level of provision is considered adequate given the site proximity to public transport facilities. These are also less than one space per 1 / 2 bed unit and therefore complies with Richmond's current policy. The emerging London Plan sets out the maximum provision for parking in PTAL zones 4 as less than 0.5 spaces per unit. The proposal allows for 28 spaces which is less than 0.5 spaces per unit and therefore meets the emerging London Plan.

4.4.4 The emerging London Plan also sets out the requirements for disabled parking, the plan sets out the minimum level of disabled parking and that the provision of the upper level of 10% should be catered for in the event of demand. The proposals incorporate space for 9 disabled bays which equated to 10% of the proposed 89 units, in line with the emerging London Plan.

4.4.5 The current London Plan also sets out a minimum requirement that 20% of the available parking spaces are be fitted with electrical changing points. The proposals will provide for 20% of the spaces to have an electrical charging point and a further 20% will have a passive facility for later conversion.

4.5 Cycle Parking

4.5.1 The proposals will incorporate a total of 160 secure cycle storage spaces. These will be located on the ground floor of the 2 blocks, Block A will contain 80 and Block B will have 80.

4.5.2 The proposed level of cycle parking to be provided will be more than the minimum requirements of 1 space per studio, 1.5 spaces per 1 bedroom unit, 2 spaces per all other dwellings. This is in line with the Draft New London Plan.

4.6 Servicing

4.6.1 The development will provide refuse stores at the ground floor level adjacent to the undercroft access, it is anticipated that the refuse vehicle will collect from the proposed development as they current do. However, they will be able to reverse into the site entrance and leave the site in a forward gear. All bin stores will be located within 10 metres of the collection vehicle. Other smaller service vehicles will be able to enter and turn around on site.

5 TRAFFIC GENERATION & IMPACT ON TRANSPORT NETWORKS

5.1 Trip Generation

5.1.1 Both the existing and proposed uses has the potential to generate vehicle movements. The site is located on the edge of a town centre and the peak periods in traffic movements on Church Grove are considered to between 8.00am – 9.00am and 5.00pm – 6.00pm.

5.2 Existing Use

The site is currently used as student accommodation which has a controlled car parking for 32 vehicles. The TRICS database was interrogated to assess the number of trips generated from similar student accommodation sites. The table below sets out the peak trip rates based on TRICS database. The TRICS outputs have been included in Appendix D.

Trip Rates Vehicles	AM Peak 08:00 – 09:00		PM Peak 18:00 – 17:00		Daily Total	
	Trip Rates Arr	Trip Rates Dep	Trip Rates Arr	Trip Rates Dep	Trip Rates Arr	Trip Rates Dep
C4 – Student Accommodation (per resident)	0.003	0.005	0.012	0.012	0.073	0.069
Total Trips Vehicles	**AM Peak 08:00 – 09:00**		**PM Peak 17:00 – 18:00**		**Daily Total**	
	Total Trip Arr	Total Trips Dep	Total Trip Arr	Total Trips Dep	Total Trip Arr	Total Trips Dep
C4 – Student Accommodation (Approx. 216 residents)	0.648	1.080	2.592	2.592	15.768	14.904

Table 5.1 – TRICS Vehicle Trip Rates (Existing C4 Student Accommodation)

5.3 Proposed Use

5.3.1 The TRICS database was interrogated to establish the level of vehicle trips the proposed development might generate. The split between private and affordable dwellings will 55 units and 34 units respectively and TRICS outputs are included in Appendix D, a summary of the results is tabulated below.

Trip Rates Vehicles	AM Peak 08:00 – 09:00		PM Peak 18:00 – 17:00		Daily Total	
	Trip Rates Arr	Trip Rates Dep	Trip Rates Arr	Trip Rates Dep	Trip Rates Arr	Trip Rates Dep
C3 – Residential Accommodation Private (per unit)	0.031	0.092	0.056	0.042	0.761	0.761
Total Trips Vehicles	AM Peak 08:00 – 09:00		PM Peak 17:00 – 18:00		Daily Total	
	Total Trip Arr	Total Trips Dep	Total Trip Arr	Total Trips Dep	Total Trip Arr	Total Trips Dep
C3 – Residential Accommodation Private (55 units)	1.70	5.06	3.08	2.31	41.85	41.85

Table 5.2 – Vehicle Trip Rates for (55 Private Flats)

Trip Rates Vehicles	AM Peak 08:00 – 09:00		PM Peak 18:00 – 17:00		Daily Total	
	Trip Rates Arr	Trip Rates Dep	Trip Rates Arr	Trip Rates Dep	Trip Rates Arr	Trip Rates Dep
C3 – Residential Accommodation Affordable (per unit)	0.071	0.109	0.067	0.062	0.920	0.878
Total Trips Vehicles	AM Peak 08:00 – 09:00		PM Peak 17:00 – 18:00		Daily Total	
	Total Trip Arr	Total Trips Dep	Total Trip Arr	Total Trips Dep	Total Trip Arr	Total Trips Dep
C3 – Residential Accommodation Affordable (28 units)	2.41	3.70	2.78	2.10	31.28	29.85

Table 5.3 – Vehicle Trip Rates for (34 Affordable Flats)

5.3.2 As can be seen for the above the level of traffic that will be generated by the development will be 4 arrivals and 9 departures in the morning peak and 4-5 in the evening peak. Compared to the current situation the development has the potential to generate up to 12 additional trips in the peak hour when compared to the existing situation. However, this is considered an over estimate as the current facility has 32 parking spaces and therefore the existing site is likely to generate more than 2-5 trips in the peak hour suggested by the TRICS data.

5.3.3 A similar exercise was carried out for the total person trips for the housing mix and then combined to give a total person movements for the 89 units, these are tabulated below.

Private Flats	Person Trip Rates (per dwelling)		Total Person Movements (55 units)	
	Arrivals	**Departures**	**Arrivals**	**Departures**
Weekday Morning (08:00 – 09:00)	0.102	0.599	5.610	32.945
Weekday Evening (17:00 – 18:00)	0.416	0.262	22.880	14.410
Daily Total	3.341	3.218	183.755	176.990

Table 5.4 – Person Trip Rates (55 Private Flats)

Affordable Flats	Person Trip Rates (per dwelling)		Total Person Movements (34 units)	
	Arrivals	**Departures**	**Arrivals**	**Departures**
Weekday Morning (08:00 – 09:00)	0.180	0.464	6.120	15.776
Weekday Evening (17:00 – 18:00)	0.346	0.242	11.764	8.228
Daily Total	3.061	3.040	104.074	103.360

Table 5.5 – Person Trip Rates (34 Affordable Flats)

Private and Affordable Flats	Total Person Movements (89 units)	
	Arrivals	**Departures**
Weekday Morning (08:00 – 09:00)	12	49
Weekday Evening (17:00 – 18:00)	35	23

Table 5.6 – Combined Person Trip Rates (89 Units)

5.3.4 In order to establish the number of trips by travel mode, the 2011 Census Data has been reviewed to determine the modal split for journeys to work from the area. The modal split for from the census data is outlined in Table 5.7 below.

5.3.5 The modal splits below have been applied to the total person trips from the TRICS database to give the estimated number of trips the proposed development might generate. The number of trips is summarised below in Table 5.8.

Method of Travel to Work	Total Person Movements AM Peak	
	Persons	**Percentage**
All Categories: Method of Travel to Work	1,352	100.00%
Work mainly at or from home	68	5.03%
Underground, metro, light rail, tram	32	2.37%
Train	269	19.90%
Bus, minibus or coach	57	4.22%
Taxi	0	0.00%
Motorcycle, scooter or moped	10	0.74%
Driving a car	246	18.20%
Passenger in car	10	0.74%
Bicycle	38	2.81%
On foot	134	9.91%
Other method of travel to work	4	0.30%
Not in employment	484	35.80%

Table 5.7 – Modal Split (2011 Census Data)

Method of Travel to Work	Total Person Movements AM Peak		Total Person Movements PM Peak	
	Arrivals	Departures	Arrivals	Departures
Underground, metro, light rail, tram (2.37%)	0	1	1	1
Train (19.90%)	3	10	7	5
Bus, minibus or coach (4.22%)	1	2	2	1
Taxi (0.00%)	0	0	0	0
Motorcycle, scooter or moped (0.74%)	0	0	0	0
Driving a car (18.94%)	3	9	7	4
Bicycle (2.81%)	0	2	1	1
On foot (9.91%)	1	5	4	2

Table 5.8 – Proposed Person Trips

5.3.6 The above assessment shows a very similar level of trips to the TRICS data above, the TRICS data shows a slightly higher rate so it is considered the use of the TRICS rates will provide a more robust assessment. In the worst case in the morning peak the TRICS data indicates that there could be net increase in departures from the site of 8 vehicles which equates to one extra vehicle on the highway network every 7.5 minutes.

5.3.7 This level of additional traffic is considered to have no impact on the flow of traffic on the surrounding road as the increase is likely the be well within the daily fluctuations that would occur on the road network in the area. The increase in traffic will have no detrimental impact on the capacity of the highway networks or junctions in the vicinity of the site.

6 PARKING SURVEYS

6.1 Scope

6.1.1 Although the proposed development provides for 28 car parking spaces, parking surveys of the surrounding area have been completed to establish if the surrounding roads could accommodate any additional parking on-street. Two surveys were undertaken at night when residents are considered to be at home.

6.1.2 The methodology employed for the parking beat surveys was that developed by Lambeth Borough Council and that recommends that:-

"The survey should be undertaken when the highest number of residents are at home; generally late at night during the week. A snapshot survey between the hours of 0030-0530 should be undertaken on two separate weekday nights (i.e. Monday, Tuesday, Wednesday or Thursday)."

6.1.3 The night surveys were undertaken between the hours of 1.00am to 5.00am. This is considered to represent the period when the majority of residents are at home and will give an accurate reflection of the average parking congestion in the area.

6.2 Survey of Existing Parked Vehicles

6.2.1 The methodology sets out the limits for the survey, for residential developments it recommends all roads within 200m walking distance of the site should be covered as this is the maximum people are likely to walk to their residence. It goes on say that as people are unlikely to stop half way along the road so the survey should be extended to a convenient point, it states:-

"All roads within 200 metres (or 500m for commercial uses) walking distance of the site. Note this area is NOT a circle with a 200/500m radius but a 200/500m walking distance as measured along all roads up to a point 200/500m from the site.

Since people are unlikely to stop half way along a road at an imaginary 200/500m line so the survey should be extended to the next junction or shortened to the previous one, or taken to a suitable location along a road."

6.2.2 The 200m meter walking distance from the site covered parts of Church Grove, St John's Road, High Street and Hampton Court Road. Drawings 201345/PS/01, 02 and 03 are included in Appendix E. Drawing 201345/PS/01 shows all base line parking restrictions, identifying the different types of parking bays and restrictions. It also shows single/double yellow lines and restricted lines as well as how many cars were parked or spaces available.

6.2.3 Drawing 201345/PS/02 and 03 shows the number of vehicles parked and spaces available.

6.3 Survey Results – Friday 16th October 2020

6.3.1 The first survey was carried out between the hours of 01.15am to 01.45am and during this survey all vehicles were parked in the marked bays. Both the number of cars parked, and available spaces were recorded within the survey area of approximately 200m walking distance from the site. This survey showed that the overall parking stress during this period was 47%.

6.3.2 The full results of the parking survey are tabulated below as Table 6.2.

6.4 Survey Results – Wednesday 21st October 2020

6.4.1 The second survey was carried out between the hours of 01.30am to 02.00am and during the survey all vehicles were also parked in the marked bays. Both the number of cars parked, and available spaces were recorded within the survey area of approximately 200m walking distance from the site. This survey showed that the overall parking stress during this period was 48%.

6.4.2 The full results are tabulated below as Table 6.3.

6.5 Conclusion

6.5.1 The parking stress in the controlled parking bays only was also assessed and the results are tabulated below.

Date	Total Permit Holder Bays	Total Parked	Parking Stress
16/10/2020	**32**	**30**	**94%**
21/10/2020		**30**	**94%**

Table 6.1 – CPZ Parking Bays

6.5.2 The development proposals include for 28 parking spaces which is a slight reduction of the existing number of spaces, this level is considered adequate for the proposed development. The proposed development shouldn't therefore result in any overspill parking on to the surrounding roads. The parking surveys have demonstrated that there is more than adequate space on the surrounding roads to accommodate parking for additional vehicles.

6.5.3 During the 2 night time surveys, of the 87 spaces available only an average of 42 were occupied, clearly demonstrating that the surrounding roads could accommodate any overspill parking.

6.5.4 On Church Grove alone there were 18 & 17 spaces available during the surveys, more than enough to cater for parking for overspill vehicles from the development should this occur. The parking stresses on Church Grove during the survey was recorded at 38% and 41%. Based on the parking surveys it is clear the proposed development will not have any impact on the ability of local residents to park on street.

Parking Survey Undertaken on 16/10/2020 at 01.15am to 01.45am

Time	Road Name Length of road measured (m)		Type of Parking Bays					Total
			Permit Holders Only Zone X	Permit Holders or Pay and Display (Max 10 Hours)	Pay and Display	Restricted Parking (Single Yellow Line)	Urban Clearway (8am to 6.30pm)	
01.15am - 01.45am	**Church Grove 215**	Available Spaces	0	29	0	0	0	29
		Parked Vehicles	0	11	0	0	0	11
		Parking Stress	**0%**	**38%**	**0%**	**0%**	**0%**	38%
	St John's Road 115	Available Spaces	32	0	0	0	0	32
		Parked Vehicles	30	0	0	0	0	30
		Parking Stress	**94%**	**0%**	**0%**	**0%**	**0%**	94%
	High Street 70	Available Spaces	4	0	0	0	0	4
		Parked Vehicles	0	0	0	0	0	0
		Parking Stress	**0%**	**0%**	**0%**	**0%**	**0%**	0%
	Hampton Court Road 240	Available Spaces	0	0	0	0	22	22
		Parked Vehicles	0	0	0	0	0	0
		Parking Stress	**0%**	**0%**	**0%**	**0%**	**0%**	0%
						Total Spaces Available		87
						Total Vehicles Parked		41
						Overall Parking Stress		47.13%

Table 6.2 – Parking Survey (16/10/2020)

Parking Survey Undertaken on 21/10/2020 at 01.30am to 02.00am

Time	Road Name Length of road measured (m)		Type of Parking Bays					Total
			Permit Holders Only Zone X	Permit Holders or Pay and Display (Max 10 Hours)	Pay and Display	Restricted Parking (Single Yellow Line)	Urban Clearway (8am to 6.30pm)	
01.30am - 02.00am	**Church Grove 215**	Available Spaces	0	29	0	0	0	29
		Parked Vehicles	0	12	0	0	0	12
		Parking Stress	**0%**	**41%**	**0%**	**0%**	**0%**	41%
	St John's Road 115	Available Spaces	32	0	0	0	0	32
		Parked Vehicles	30	0	0	0	0	30
		Parking Stress	**94%**	**0%**	**0%**	**0%**	**0%**	94%
	High Street 70	Available Spaces	4	0	0	0	0	4
		Parked Vehicles	0	0	0	0	0	0
		Parking Stress	**0%**	**0%**	**0%**	**0%**	**0%**	0%
	Hampton Court Road 240	Available Spaces	0	0	0	0	22	22
		Parked Vehicles	0	0	0	0	0	0
		Parking Stress	**0%**	**0%**	**0%**	**0%**	**0%**	0%
						Total Spaces Available		87
						Total Vehicles Parked		42
						Overall Parking Stress		48.28%

Table 6.2 – Parking Survey (21/10/2020)

7 PROMOTING SUSTAINABLE TRAVEL

7.1.1 National and local planning policy requires that all major development proposals are accompanied by a Travel Plan in order to encourage sustainable travel choices for trips to and from the development. The proposed development will be a car free development, so it is important to communicate the benefits of public transport as well walking and cycling as part of their everyday routine.

7.1.2 A Travel Plan will be prepared and implemented prior to first occupation of the development. The contents and measures in the plan will be agreed with the planning authority and it will be reviewed and monitored by the developer for the 5 year life of the plan. Annual surveys will form part of the plan to measure the change in people's mode of travel and to engage with residents to encourage more activate life styles and not rely on private motor vehicles.

7.1.3 The Travel Plan will be implemented by the Travel Plan Coordinator (TPC) who is likely to be part of the management team at the development, they will also provide personal travel plan information for residents and monitor the cycle storage usage on site to see if additional provisions are required.

7.1.4 The development is a low parking development and residents will be prevented from obtaining a residents parking permit by way of legal obligation with the planning authority. To reinforce the low car ownership ethos all new residents will be entitled to 2 years free membership of the local car club to allow those residents that may need the use of a car infrequently the ability to have one without them needing to purchase a car.

7.1.5 Sustainable travel at the development will be promoted through the Travel Plan, incentives will be clearly set out in the plan along with the aims of the plan and targets, against which it will be measured. Leaflets and notices will also play a part in the communication of using sustainable travel, this will also be coordinated by the TPC and form part of the Travel Plan.

7.1.6 The above measures will ensure a sustainable development, that not only benefits the residents on site but the wider community by reducing car traffic and pollution.

8 SUMMARY AND CONCLUSION

8.1.1 The application site is located off Church Grove in Hampton Wick, 300m to the west of Kingston town centre. The site is currently occupied by a C4 student accommodation building with associated parking.

8.1.2 The proposed application seeks the conversion of the C4 student accommodation to C3 residential flats organised within 2 cores, the make up of the development will comprise of 7 x studio, 39 x 1-bed and 9 x 2-bed in Block A (private housing) and 6 x 1-bed, 17 x 2-bed and 11 x 3-bed units in Block B (affordable housing). The proposed development will also incorporate parking for 28 cars. Access to the development will be achieved directly off Church Grove. Secure cycle storage will also be provided on-site at the minimum rate 1 space per studio, 1.5 spaces per 1 bedroom unit, 2 spaces per all other dwellings, a total of 160 will be provided which is more than the current policy.

8.1.3 The existing access off Church Grove will be retained with the access to the north being closed. The site has good access to the local public transport network and has a PTAL rating of 4. The proposed development will generate very few vehicle movements. Parking for disabled residents will be provided on site in line with the merging London Plan.

8.1.4 The current site has up to 218 students on site so overall there will be a decrease in person trips to the site when compared to the existing use. The proposals however have the potential to increase the number of vehicular trips to the site, but these will be very low, and it is considered they will not have any adverse impacts on the surrounding highway network.

8.1.5 The increase in traffic is likely to be well within the daily fluctuations that would be expected on the highway network and therefore unnoticeable. Refuse vehicles will be able to collect from the development as they currently do but they will also be able to reverse into the site to leave in a forward gear, smaller servicing vehicles will be able enter the site under the building and turn on site so they can also leave in a forward gear.

8.1.6 A Travel Plan with other sustainable measures will be implemented as part of this development to encourage wider use of sustainable modes of travel. On the basis of the above it is concluded that the proposals accord with national, regional and local transport related policies, it will not have a detrimental impact on the surrounding highway networks and there is no reason to refuse the application on traffic or transportation grounds.

APPENDIX A

Drawing FLU.1191.2.02 – Existing Site Plan

Rev	Date	Description

FLUENT
ARCHITECTURAL DESIGN SERVICES
69-71 Windmill Road, Sunbury,
Middlesex, TW16 7DT
Tel: 0800 0438838
E-mail: info@fluent-ads.co.uk
Web: fluent-ads.co.uk

Kingston Bridge House
Church Grove, Hampton Wick

Existing Site Plan

0 10 20

Scale	1:500 @ A3
Date	28.09.20
Drawn	N.Millin
Dwg No.	FLU.1191.2.02
Rev	

Drawing FLU.1191.2.10 – Proposed Site Plan

Rev	Date	Description

Fluent
ARCHITECTURAL DESIGN SERVICES

FLUENT
ARCHITECTURAL DESIGN SERVICES
69-71 Windmill Road, Sunbury,
Middlesex, TW16 7DT
Tel: 0800 0438838
E-mail: info@fluent-ads.co.uk
Web: fluent-ads.co.uk

Kingston Bridge House
Church Grove, Hampton Wick

Proposed Site Plan

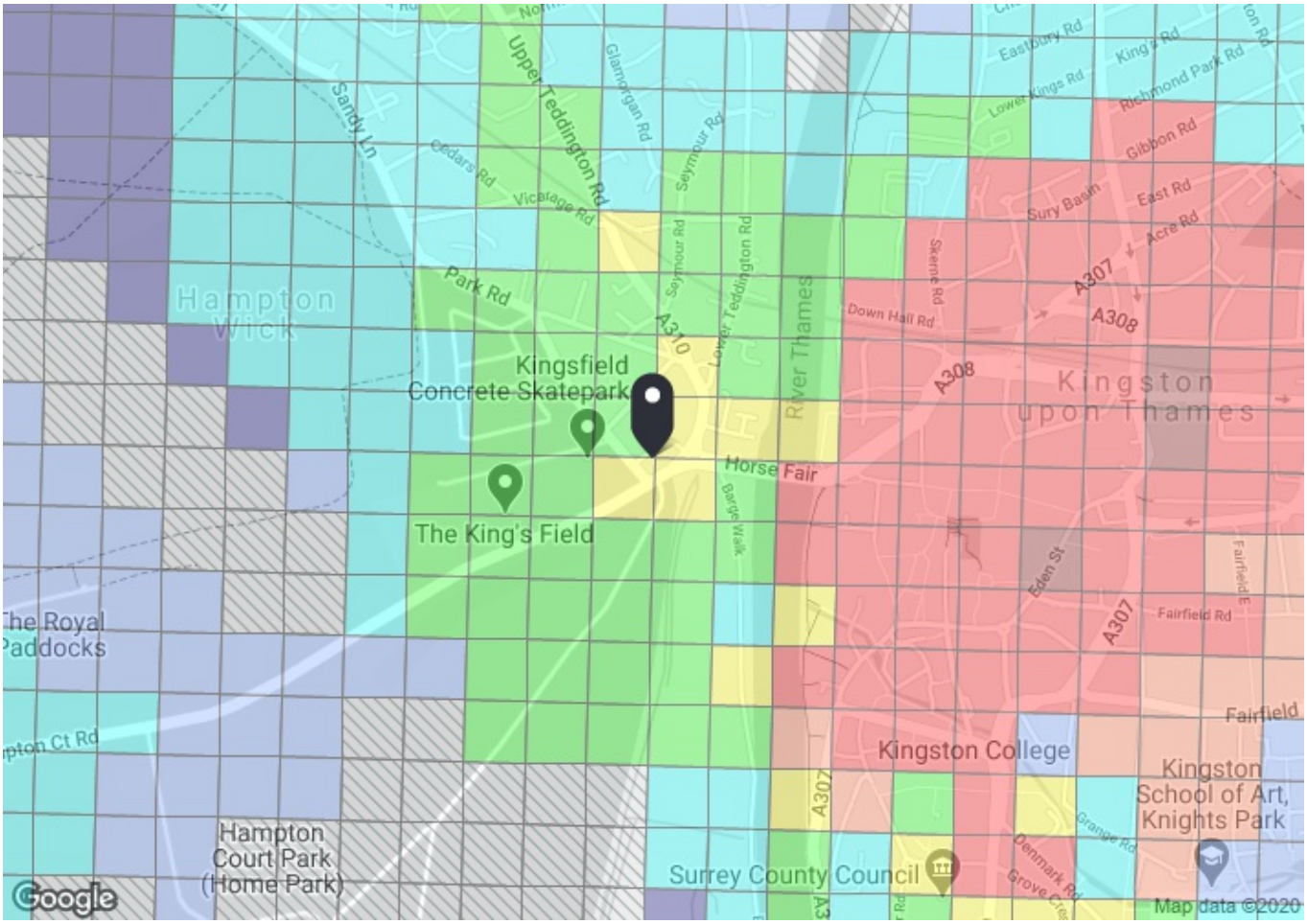
0 10 20

Scale 1:500 @ A3	Dwg No. FLU.1191.2.10
Date 28.09.20	Rev D
Drawn N.Millin	

APPENDIX B

Full PTAL Report

TRANSPORT FOR LONDON



PTAL output for Base Year
4

KT1 4AG
Kingston upon Thames KT1 4AG, UK
Easting: 517494, Northing: 169388

Grid Cell: 29680

Report generated: 28/10/2020

Map key - PTAL

0 (Worst)	1a
1b	2
3	4
5	6a
6b (Best)	

Map layers

PTAL (cell size: 100m)

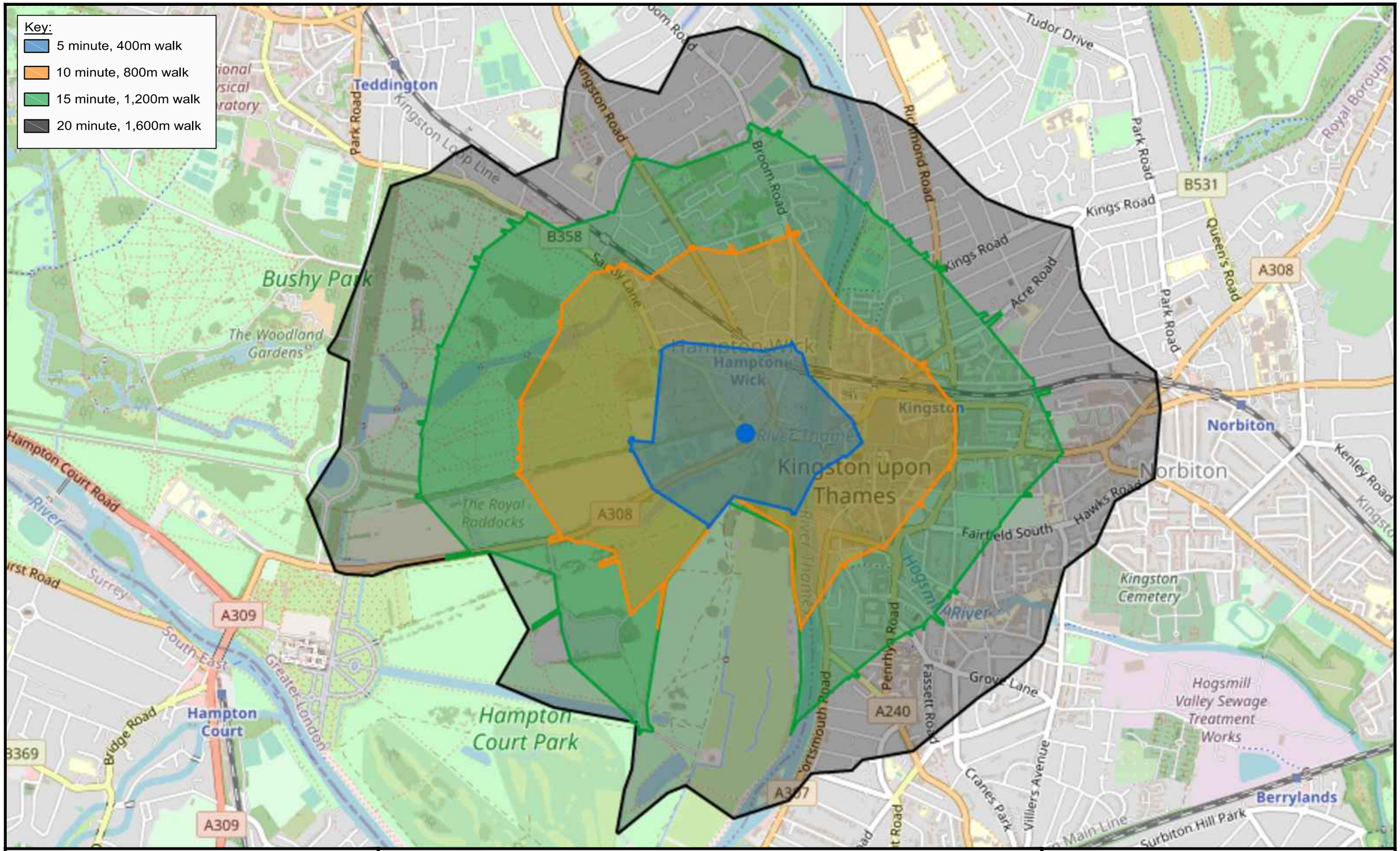
Calculation Parameters

Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency (vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	HAMPTON WICK HIGH STREET	281	172.98	7.5	2.16	6	8.16	3.68	0.5	1.84
Bus	HAMPTON WICK HIGH STREET	285	172.98	6	2.16	7	9.16	3.27	0.5	1.64
Bus	HAMPTON WICK ROUNDABOUT	481	60.51	1	0.76	32	32.76	0.92	0.5	0.46
Bus	HAMPTON WICK ROUNDABOUT	411	60.51	4	0.76	9.5	10.26	2.93	0.5	1.46
Bus	HAMPTON WICK ROUNDABOUT	X26	60.51	2	0.76	17	17.76	1.69	0.5	0.84
Bus	HAMPTON WICK ROUNDABOUT	111	60.51	7	0.76	6.29	7.04	4.26	1	4.26
Bus	HAMPTON WICK ROUNDABOUT	216	60.51	3	0.76	12	12.76	2.35	0.5	1.18
Rail	Hampton Wick	'WATRLMN-SHEPRTN 2H09'	525.35	2	6.57	15.75	22.32	1.34	1	1.34
Rail	Hampton Wick	'SHEPRTN-WATRLMN 2H10'	525.35	2	6.57	15.75	22.32	1.34	0.5	0.67
Rail	Hampton Wick	'WDON-WATRLMN 2K03 '	525.35	0.33	6.57	91.66	98.23	0.31	0.5	0.15
Rail	Hampton Wick	'WATRLMN-WATRLMN 2K09'	525.35	2	6.57	15.75	22.32	1.34	0.5	0.67
Rail	Hampton Wick	'WATRLMN-WATRLMN 2O09'	525.35	2	6.57	15.75	22.32	1.34	0.5	0.67
Rail	Hampton Wick	'TEDNGTN-WATRLMN 2O90'	525.35	0.33	6.57	91.66	98.23	0.31	0.5	0.15
Rail	Hampton Wick	'TWCKNHM-WATRLMN 2O92'	525.35	0.67	6.57	45.53	52.09	0.58	0.5	0.29
									Total Grid Cell AI:	**15.62**

Drawing 201345/TS/01 – Walking Isochrones



Westcombe Group

Kingston Bridge House
Hampton Wick

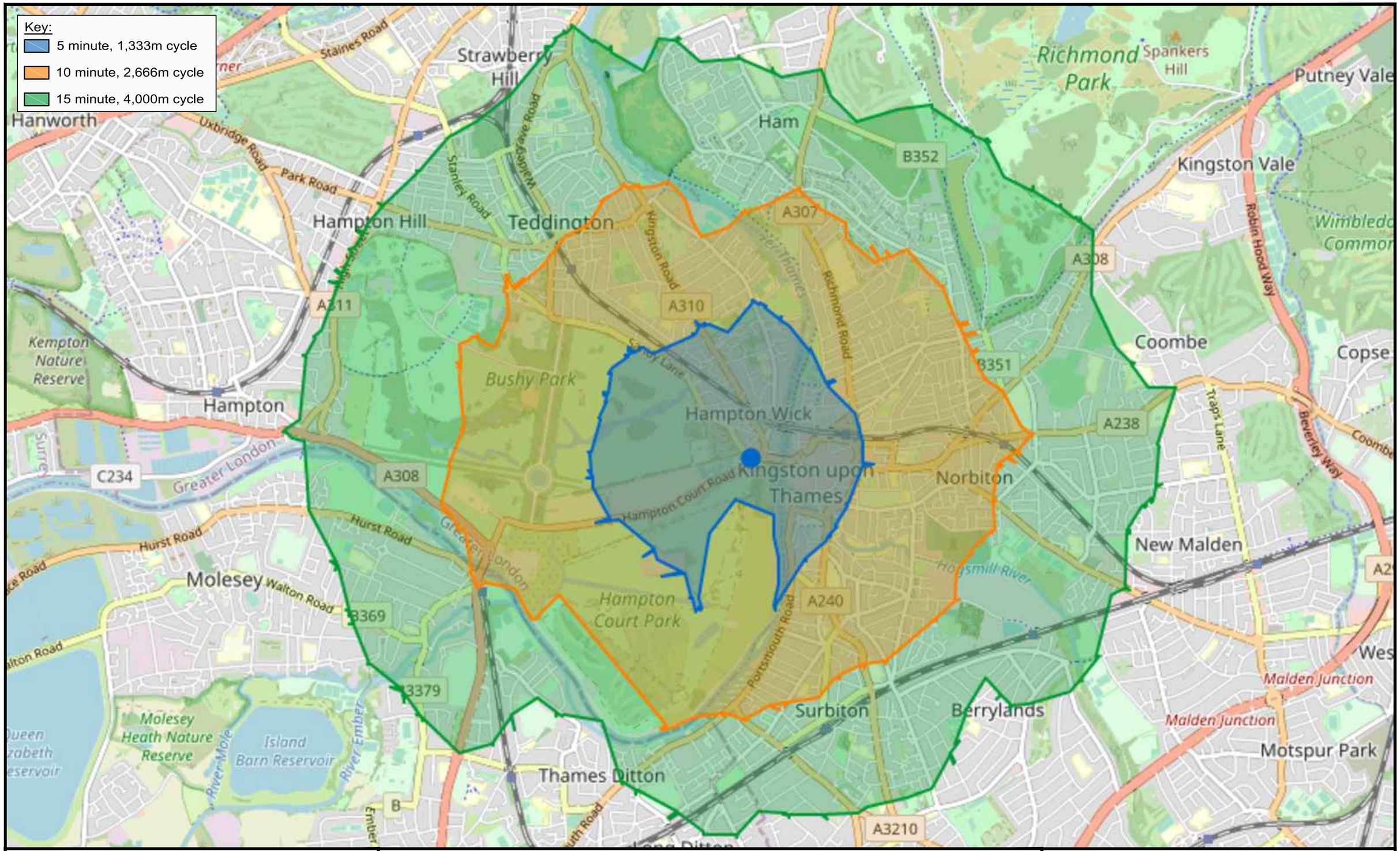
Walking
Isochrones

SCALE	DRAWN BY	PRJ No.	DWG No.
NTS	MK	201345	201345/TS/01

LANMOR Consulting
Civil Engineers & Transport Planning

Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW
Telephone: 0208 339 7899 Fax: 0208 339 7898
E-mail: info@lanmor.co.uk
www.lanmor.co.uk

Drawing 201345/TS/02 – Cycling Isochrones



Westcombe Group

Kingston Bridge House
Hampton Wick

Cycling
Isochrones

SCALE	DRAWN BY	PRJ No.	DWG No.
NTS	MK	201345	201345/TS/02

LANMOR Consulting
Civil Engineers & Transport Planning

Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW
Telephone: 0208 339 7899 Fax: 0208 339 7898
E-mail: info@lanmor.co.uk
www.lanmor.co.uk

Cycle Route Map

RICHMOND UPON THAMES CYCLE NETWORK MAP

RICHMOND TOWN CENTRE

RICHMOND TOWN CENTRE

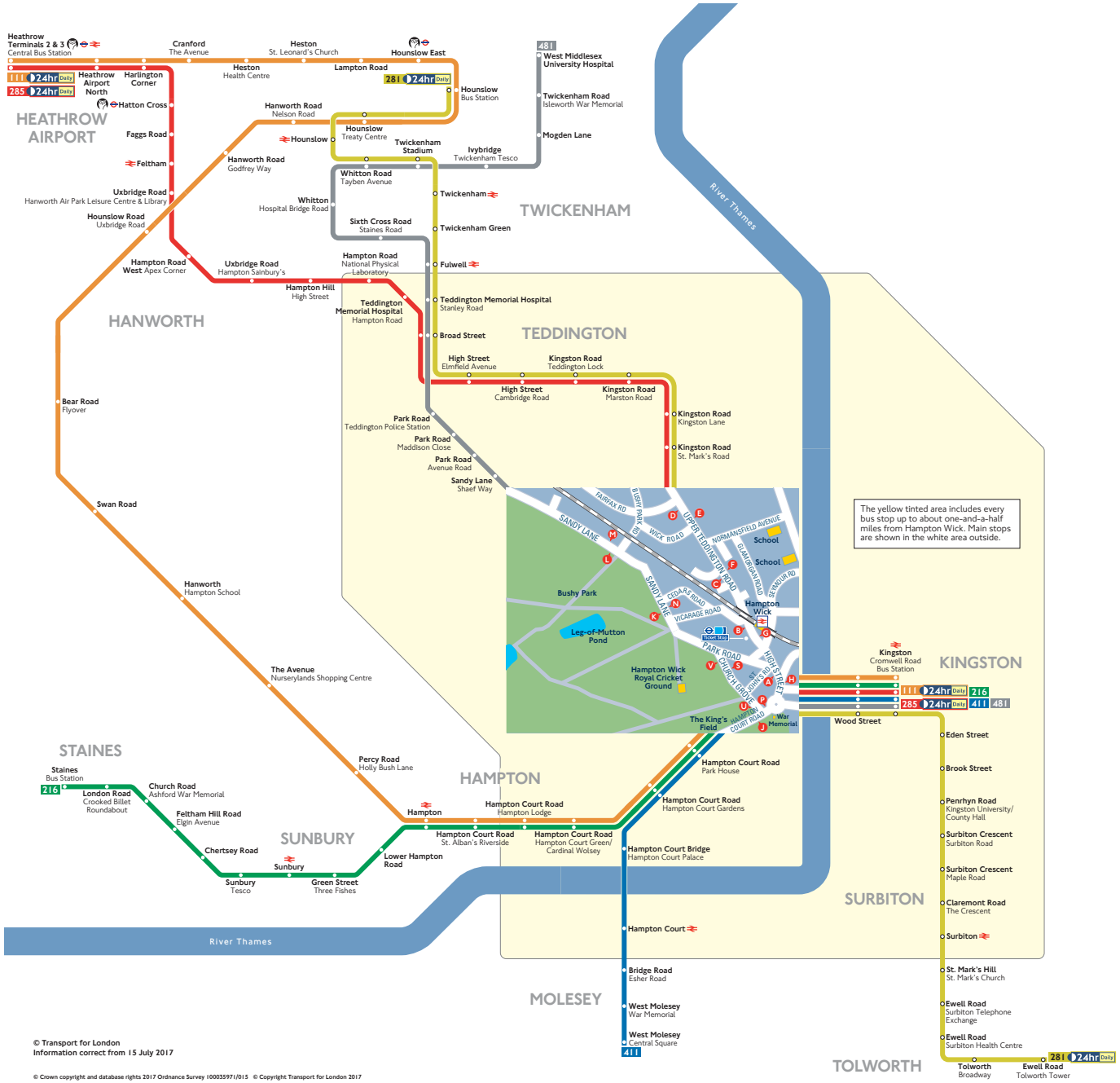
within the Borough of Richmond | BOROUGH BOUNDARY | outside the Borough of Richmond

- Main road cycle routes — Routes signed for use by cyclists on a mixture of quiet and busier roads
- Off-road and quiet cycle routes suitable for family groups
- Off-road cycle paths through green spaces — Off-road paths through green spaces
- National Cycle Network Route 4 — National Cycle Network Route 4
- No crossing facility
- Car club bays
- National Rail lines — National Rail lines
- London Overground — London Overground
- District Line — District Line
- Circle Line
- Hammersmith & City line
- Piccadilly Line

0 1/4 1/2 1 Mile
0 1/2 1 Kilometre
Based on Ordnance Survey Street View
Drawn by FWT 27.1.11 www.fwt.co.uk

Bus Route Map

Buses from Hampton Wick



Route finder

Bus route	Towards	Bus stops
111 24hr Daily	Heathrow Terminals 2 & 3	J
	Kingston	P
216	Kingston	P
	Staines	J
281 24hr Daily	Hounslow	A B C D
	Tolworth	E F G H
285 24hr Daily	Heathrow Terminals 2 & 3	A B C D
	Kingston	E F G H
411	Kingston	P
	West Molesey	J
481	Kingston ✚	M N P S
	West Middlesex University Hospital ✚	K L U V

Other buses

Bus route	Towards	Bus stops
461	Addlestone	J
	Kingston	P
513	Downside ●	J
	Kingston ●	P
641 Sch	Teddington School	A B C D P
	West Molesey	F G H J
681 Sch	Hounslow	D

Key

	Connections with London Underground
	Connections with National Rail
	Tube station with 24-hour service Friday and Saturday nights
✚	Mondays to Saturdays except evenings
●	Monday to Friday daytime off-peak
Sch	School journeys

Ways to pay

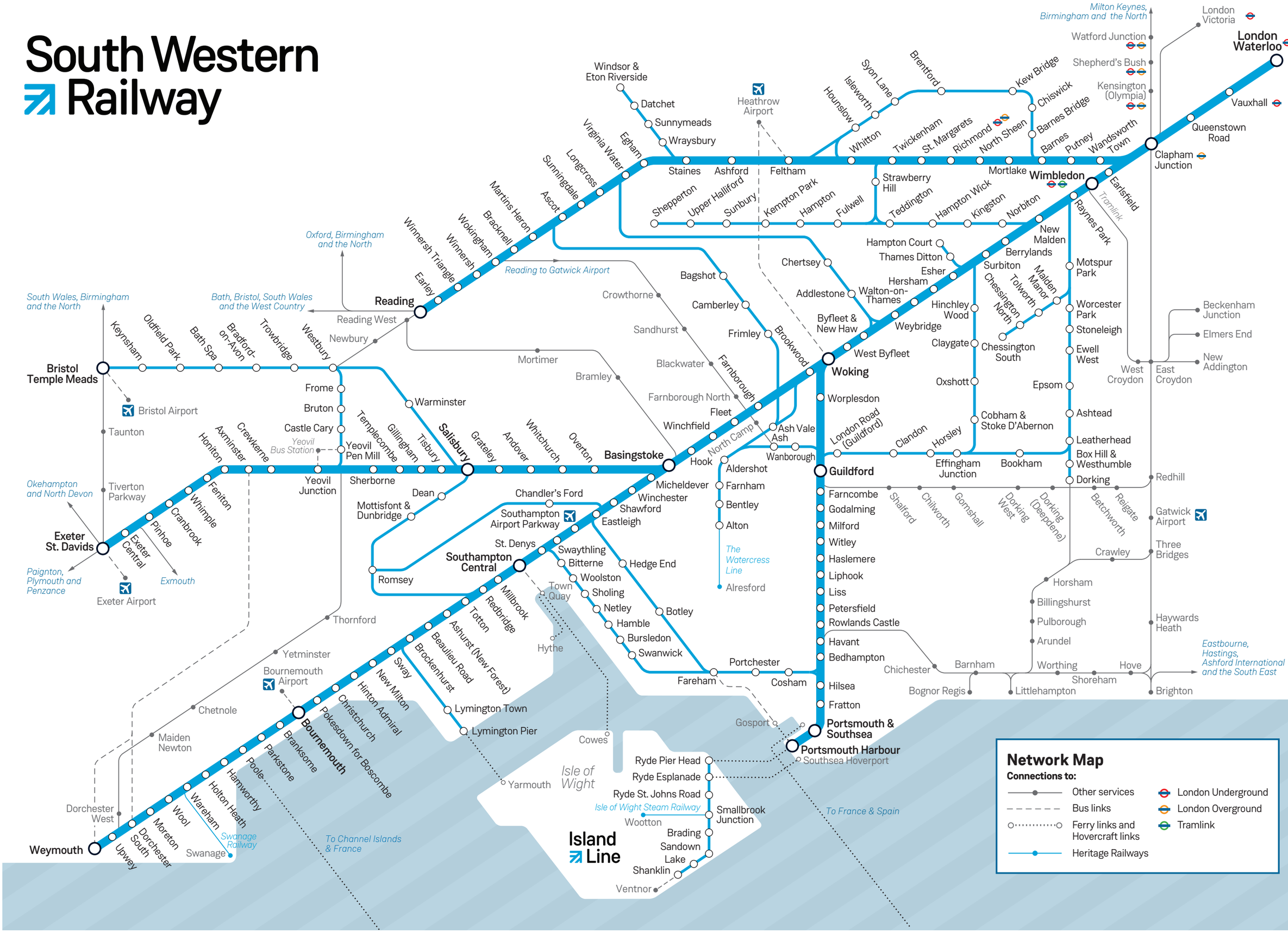
Use your contactless debit or credit card. It's the same fare as Oyster and there is no need to top up.

Top up your Oyster pay as you go credit or buy Travelcards and bus & tram passes at around 4,000 shops across London.

TFL33213.06.17 (P)

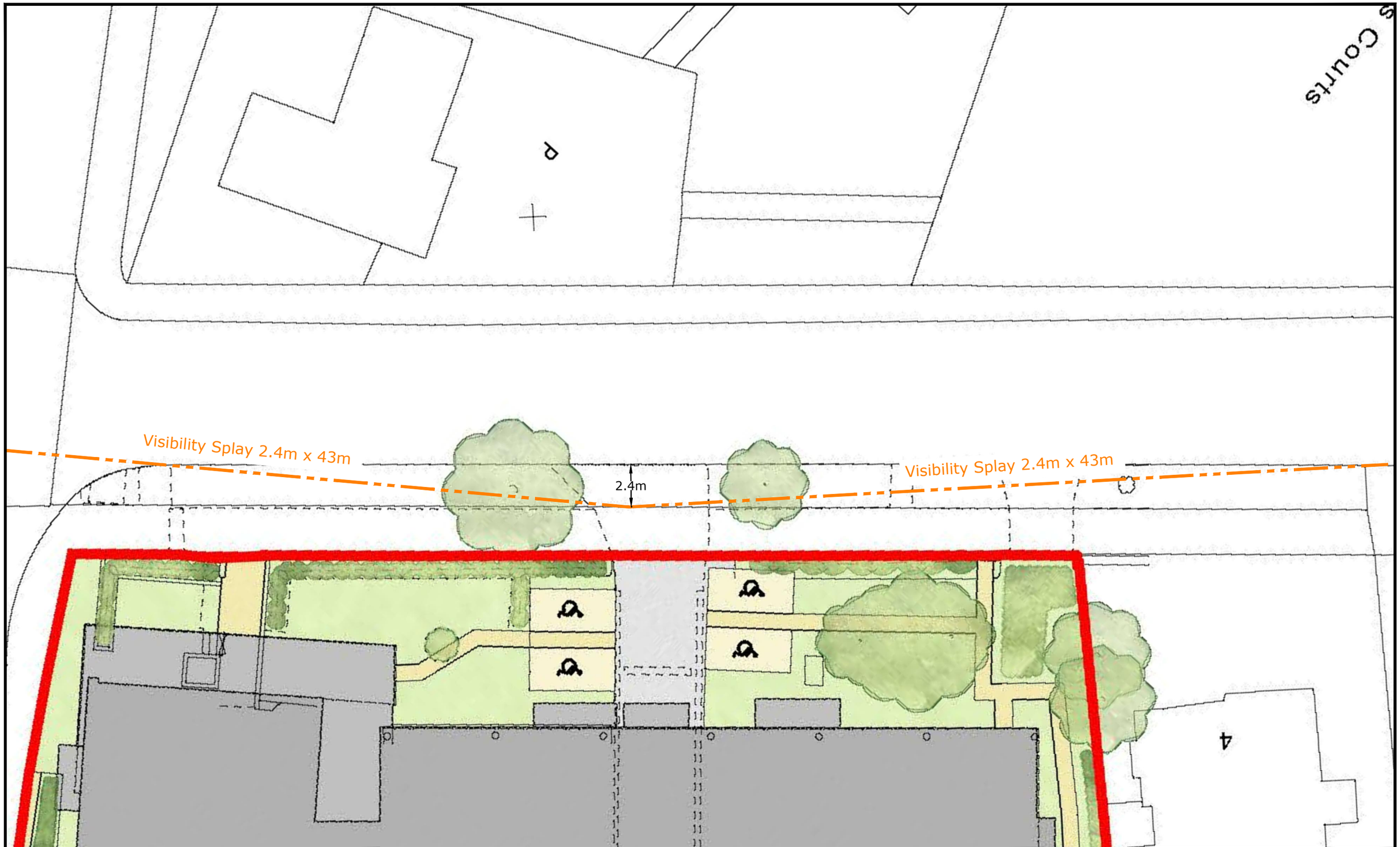
South Western Railway Network Map

South Western Railway



APPENDIX C

Drawing 201345/TS/03 – Visibility Splays



Westcombe Group

Kingston Bridge House
Hampton Wick

Visibility Splays

SCALE	DRAWN BY	PRJ No.	DWG No.
1:200	MK	201345	201345/TS/03

LANMOR Consulting
Civil Engineers & Transport Planning

Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW
Telephone: 0208 339 7899 Fax: 0208 339 7898
E-mail: info@lanmor.co.uk
www.lanmor.co.uk

APPENDIX D

TRICS Output (C4 Trip Rates – Student Accommodation)

Calculation Reference: AUDIT-162301-201029-1031

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : G - STUDENT ACCOMMODATION
TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	HM	HAMMERSMITH AND FULHAM	1 days
	IS	ISLINGTON	1 days
	KI	KINGSTON	2 days

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

Primary Filtering selection:

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

Parameter: Number of residents
Actual Range: 146 to 300 (units:)
Range Selected by User: 100 to 500 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 09/03/20

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:

Wednesday	2 days
Thursday	1 days
Friday	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 undertaking using machines.

Selected Locations:

Edge of Town Centre	4

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	2

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.

Secondary Filtering 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 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000	3 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:

125,001 to 250,000	1 days
250,001 to 500,000	2 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:

0.5 or Less	1 days
0.6 to 1.0	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:

Yes	1 days
No	3 days

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

PTAL Rating:

4 Good	1 days
5 Very Good	1 days
6a Excellent	1 days
6b (High) Excellent	1 days

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

LIST OF SITES relevant to selection parameters

1 HM-03-G-01 STUDENT FLATS HAMMERSMITH AND FULHAM
PADDENSWICK ROAD
HAMMERSMITH

Edge of Town Centre
Residential Zone
Total Number of residents: 235
Survey date: THURSDAY *31/10/19* *Survey Type: MANUAL*

2 IS-03-G-01 STUDENT FLATS ISLINGTON
OLD STREET
ST LUKE'S

Edge of Town Centre
Built-Up Zone
Total Number of residents: 146
Survey date: FRIDAY *07/12/12* *Survey Type: MANUAL*

3 KI-03-G-01 STUDENT FLATS KINGSTON
PENRHYN ROAD
KINGSTON UPON THAMES

Edge of Town Centre
Built-Up Zone
Total Number of residents: 200
Survey date: WEDNESDAY *12/06/19* *Survey Type: MANUAL*

4 KI-03-G-02 STUDENT FLATS KINGSTON
CAMBRIDGE ROAD
KINGSTON UPON THAMES
NORBITON
Edge of Town Centre
Residential Zone
Total Number of residents: 300
Survey date: WEDNESDAY *26/06/19* *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/G - STUDENT ACCOMMODATION
TOTAL VEHICLES
Calculation factor: 1 RESIDE
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	3	194	0.000	3	194	0.000	3	194	0.000
08:00 - 09:00	3	194	0.003	3	194	0.005	3	194	0.008
09:00 - 10:00	3	194	0.000	3	194	0.000	3	194	0.000
10:00 - 11:00	3	194	0.005	3	194	0.005	3	194	0.010
11:00 - 12:00	3	194	0.003	3	194	0.007	3	194	0.010
12:00 - 13:00	3	194	0.009	3	194	0.007	3	194	0.016
13:00 - 14:00	3	194	0.007	3	194	0.003	3	194	0.010
14:00 - 15:00	3	194	0.009	3	194	0.010	3	194	0.019
15:00 - 16:00	3	194	0.003	3	194	0.002	3	194	0.005
16:00 - 17:00	3	194	0.005	3	194	0.002	3	194	0.007
17:00 - 18:00	3	194	0.003	3	194	0.002	3	194	0.005
18:00 - 19:00	3	194	0.012	3	194	0.012	3	194	0.024
19:00 - 20:00	2	218	0.009	2	218	0.009	2	218	0.018
20:00 - 21:00	2	218	0.005	2	218	0.005	2	218	0.010
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.073			0.069			0.142

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:	146 - 300 (units:)
Survey date date range:	01/01/12 - 09/03/20
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRICS Output (C3 Trip Rates – Private Flats)

Calculation Reference: AUDIT-162301-201029-1037

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON		
	BE	BEXLEY	1 days
	HG	HARINGEY	1 days
	HM	HAMMERSMITH AND FULHAM	1 days
	HO	HOUNSLOW	1 days
	KN	KENSINGTON AND CHELSEA	1 days
	WF	WALTHAM FOREST	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 30 to 86 (units:)
Range Selected by User: 9 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 06/03/20

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:

Tuesday	1 days
Wednesday	4 days
Friday	1 days

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

Selected survey types:

Manual count	6 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 undertaking using machines.

Selected Locations:

Town Centre	2
Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	1

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	4
Built-Up Zone	1
High Street	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.

Secondary Filtering selection:

Use Class:

C3	6 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 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
25,001 to 50,000	2 days
50,001 to 100,000	2 days
100,001 or More	1 days

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

Population within 5 miles:

125,001 to 250,000	1 days
500,001 or More	5 days

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

Car ownership within 5 miles:

0.6 to 1.0	6 days

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

Travel Plan:

Yes	1 days
No	5 days

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

PTAL Rating:

3 Moderate	2 days
4 Good	1 days
5 Very Good	3 days

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

LIST OF SITES relevant to selection parameters

1 BE-03-C-01 BLOCKS OF FLATS BEXLEY
CROOK LOG
BEXLEYHEATH

Edge of Town Centre
Residential Zone
Total No of Dwellings: 79
Survey date: WEDNESDAY *19/09/18* *Survey Type: MANUAL*

2 HG-03-C-02 BLOCK OF FLATS HARINGEY
HIGH ROAD
WOOD GREEN
WOODSIDE PARK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 30
Survey date: WEDNESDAY *01/10/14* *Survey Type: MANUAL*

3 HM-03-C-01 BLOCK OF FLATS HAMMERSMITH AND FULHAM
VANSTON PLACE
FULHAM

Town Centre
High Street
Total No of Dwellings: 42
Survey date: WEDNESDAY *16/07/14* *Survey Type: MANUAL*

4 HO-03-C-02 BLOCK OF FLATS HOUNSLOW
HIGH STREET
BRENTFORD

Town Centre
Built-Up Zone
Total No of Dwellings: 86
Survey date: WEDNESDAY *03/09/14* *Survey Type: MANUAL*

5 KN-03-C-03 BLOCK OF FLATS KENSINGTON AND CHELSEA
ALLEN STREET
KENSINGTON

Edge of Town Centre
Residential Zone
Total No of Dwellings: 72
Survey date: FRIDAY *11/05/12* *Survey Type: MANUAL*

6 WF-03-C-01 BLOCKS OF FLATS WALTHAM FOREST
ERSKINE ROAD
WALTHAMSTOW

Edge of Town Centre
Residential Zone
Total No of Dwellings: 73
Survey date: TUESDAY *05/11/19* *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
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	6	64	0.026	6	64	0.071	6	64	0.097
08:00 - 09:00	6	64	0.031	6	64	0.092	6	64	0.123
09:00 - 10:00	6	64	0.021	6	64	0.042	6	64	0.063
10:00 - 11:00	6	64	0.052	6	64	0.045	6	64	0.097
11:00 - 12:00	6	64	0.050	6	64	0.052	6	64	0.102
12:00 - 13:00	6	64	0.042	6	64	0.037	6	64	0.079
13:00 - 14:00	6	64	0.045	6	64	0.058	6	64	0.103
14:00 - 15:00	6	64	0.034	6	64	0.042	6	64	0.076
15:00 - 16:00	6	64	0.065	6	64	0.050	6	64	0.115
16:00 - 17:00	6	64	0.073	6	64	0.047	6	64	0.120
17:00 - 18:00	6	64	0.102	6	64	0.071	6	64	0.173
18:00 - 19:00	6	64	0.055	6	64	0.042	6	64	0.097
19:00 - 20:00	2	76	0.112	2	76	0.066	2	76	0.178
20:00 - 21:00	2	76	0.053	2	76	0.046	2	76	0.099
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.761			0.761			1.522

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:	30 - 86 (units:)
Survey date date range:	01/01/12 - 06/03/20
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	6	64	0.000	6	64	0.000	6	64	0.000
08:00 - 09:00	6	64	0.000	6	64	0.000	6	64	0.000
09:00 - 10:00	6	64	0.003	6	64	0.003	6	64	0.006
10:00 - 11:00	6	64	0.000	6	64	0.000	6	64	0.000
11:00 - 12:00	6	64	0.000	6	64	0.000	6	64	0.000
12:00 - 13:00	6	64	0.000	6	64	0.000	6	64	0.000
13:00 - 14:00	6	64	0.003	6	64	0.003	6	64	0.006
14:00 - 15:00	6	64	0.000	6	64	0.000	6	64	0.000
15:00 - 16:00	6	64	0.000	6	64	0.000	6	64	0.000
16:00 - 17:00	6	64	0.000	6	64	0.000	6	64	0.000
17:00 - 18:00	6	64	0.000	6	64	0.000	6	64	0.000
18:00 - 19:00	6	64	0.000	6	64	0.000	6	64	0.000
19:00 - 20:00	2	76	0.007	2	76	0.007	2	76	0.014
20:00 - 21:00	2	76	0.000	2	76	0.000	2	76	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.013			0.013			0.026

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	6	64	0.005	6	64	0.005	6	64	0.010
08:00 - 09:00	6	64	0.000	6	64	0.000	6	64	0.000
09:00 - 10:00	6	64	0.000	6	64	0.000	6	64	0.000
10:00 - 11:00	6	64	0.003	6	64	0.000	6	64	0.003
11:00 - 12:00	6	64	0.005	6	64	0.008	6	64	0.013
12:00 - 13:00	6	64	0.000	6	64	0.000	6	64	0.000
13:00 - 14:00	6	64	0.000	6	64	0.000	6	64	0.000
14:00 - 15:00	6	64	0.008	6	64	0.005	6	64	0.013
15:00 - 16:00	6	64	0.000	6	64	0.003	6	64	0.003
16:00 - 17:00	6	64	0.000	6	64	0.000	6	64	0.000
17:00 - 18:00	6	64	0.003	6	64	0.003	6	64	0.006
18:00 - 19:00	6	64	0.000	6	64	0.000	6	64	0.000
19:00 - 20:00	2	76	0.000	2	76	0.000	2	76	0.000
20:00 - 21:00	2	76	0.000	2	76	0.000	2	76	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.024			0.048

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	6	64	0.000	6	64	0.005	6	64	0.005
08:00 - 09:00	6	64	0.003	6	64	0.008	6	64	0.011
09:00 - 10:00	6	64	0.003	6	64	0.003	6	64	0.006
10:00 - 11:00	6	64	0.003	6	64	0.003	6	64	0.006
11:00 - 12:00	6	64	0.000	6	64	0.000	6	64	0.000
12:00 - 13:00	6	64	0.000	6	64	0.000	6	64	0.000
13:00 - 14:00	6	64	0.008	6	64	0.000	6	64	0.008
14:00 - 15:00	6	64	0.000	6	64	0.000	6	64	0.000
15:00 - 16:00	6	64	0.000	6	64	0.000	6	64	0.000
16:00 - 17:00	6	64	0.005	6	64	0.005	6	64	0.010
17:00 - 18:00	6	64	0.003	6	64	0.003	6	64	0.006
18:00 - 19:00	6	64	0.010	6	64	0.008	6	64	0.018
19:00 - 20:00	2	76	0.000	2	76	0.000	2	76	0.000
20:00 - 21:00	2	76	0.000	2	76	0.000	2	76	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.035			0.035			0.070

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	6	64	0.034	6	64	0.092	6	64	0.126
08:00 - 09:00	6	64	0.039	6	64	0.162	6	64	0.201
09:00 - 10:00	6	64	0.029	6	64	0.050	6	64	0.079
10:00 - 11:00	6	64	0.063	6	64	0.052	6	64	0.115
11:00 - 12:00	6	64	0.065	6	64	0.063	6	64	0.128
12:00 - 13:00	6	64	0.052	6	64	0.045	6	64	0.097
13:00 - 14:00	6	64	0.063	6	64	0.081	6	64	0.144
14:00 - 15:00	6	64	0.042	6	64	0.042	6	64	0.084
15:00 - 16:00	6	64	0.131	6	64	0.073	6	64	0.204
16:00 - 17:00	6	64	0.102	6	64	0.058	6	64	0.160
17:00 - 18:00	6	64	0.128	6	64	0.086	6	64	0.214
18:00 - 19:00	6	64	0.058	6	64	0.052	6	64	0.110
19:00 - 20:00	2	76	0.138	2	76	0.086	2	76	0.224
20:00 - 21:00	2	76	0.059	2	76	0.053	2	76	0.112
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.003			0.995			1.998

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	6	64	0.029	6	64	0.076	6	64	0.105
08:00 - 09:00	6	64	0.037	6	64	0.178	6	64	0.215
09:00 - 10:00	6	64	0.026	6	64	0.079	6	64	0.105
10:00 - 11:00	6	64	0.045	6	64	0.073	6	64	0.118
11:00 - 12:00	6	64	0.060	6	64	0.063	6	64	0.123
12:00 - 13:00	6	64	0.050	6	64	0.029	6	64	0.079
13:00 - 14:00	6	64	0.063	6	64	0.076	6	64	0.139
14:00 - 15:00	6	64	0.058	6	64	0.047	6	64	0.105
15:00 - 16:00	6	64	0.170	6	64	0.063	6	64	0.233
16:00 - 17:00	6	64	0.094	6	64	0.081	6	64	0.175
17:00 - 18:00	6	64	0.128	6	64	0.110	6	64	0.238
18:00 - 19:00	6	64	0.107	6	64	0.073	6	64	0.180
19:00 - 20:00	2	76	0.171	2	76	0.072	2	76	0.243
20:00 - 21:00	2	76	0.092	2	76	0.053	2	76	0.145
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.130			1.073			2.203

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	6	64	0.005	6	64	0.136	6	64	0.141
08:00 - 09:00	6	64	0.013	6	64	0.154	6	64	0.167
09:00 - 10:00	6	64	0.013	6	64	0.055	6	64	0.068
10:00 - 11:00	6	64	0.021	6	64	0.034	6	64	0.055
11:00 - 12:00	6	64	0.021	6	64	0.018	6	64	0.039
12:00 - 13:00	6	64	0.024	6	64	0.018	6	64	0.042
13:00 - 14:00	6	64	0.018	6	64	0.029	6	64	0.047
14:00 - 15:00	6	64	0.016	6	64	0.026	6	64	0.042
15:00 - 16:00	6	64	0.092	6	64	0.029	6	64	0.121
16:00 - 17:00	6	64	0.071	6	64	0.029	6	64	0.100
17:00 - 18:00	6	64	0.102	6	64	0.031	6	64	0.133
18:00 - 19:00	6	64	0.099	6	64	0.037	6	64	0.136
19:00 - 20:00	2	76	0.125	2	76	0.033	2	76	0.158
20:00 - 21:00	2	76	0.039	2	76	0.020	2	76	0.059
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.659			0.649			1.308

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	6	64	0.008	6	64	0.076	6	64	0.084
08:00 - 09:00	6	64	0.010	6	64	0.097	6	64	0.107
09:00 - 10:00	6	64	0.010	6	64	0.045	6	64	0.055
10:00 - 11:00	6	64	0.021	6	64	0.034	6	64	0.055
11:00 - 12:00	6	64	0.016	6	64	0.026	6	64	0.042
12:00 - 13:00	6	64	0.010	6	64	0.008	6	64	0.018
13:00 - 14:00	6	64	0.016	6	64	0.024	6	64	0.040
14:00 - 15:00	6	64	0.016	6	64	0.016	6	64	0.032
15:00 - 16:00	6	64	0.042	6	64	0.013	6	64	0.055
16:00 - 17:00	6	64	0.042	6	64	0.018	6	64	0.060
17:00 - 18:00	6	64	0.055	6	64	0.031	6	64	0.086
18:00 - 19:00	6	64	0.123	6	64	0.042	6	64	0.165
19:00 - 20:00	2	76	0.086	2	76	0.033	2	76	0.119
20:00 - 21:00	2	76	0.059	2	76	0.007	2	76	0.066
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.514			0.470			0.984

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	6	64	0.013	6	64	0.212	6	64	0.225
08:00 - 09:00	6	64	0.024	6	64	0.251	6	64	0.275
09:00 - 10:00	6	64	0.024	6	64	0.099	6	64	0.123
10:00 - 11:00	6	64	0.042	6	64	0.068	6	64	0.110
11:00 - 12:00	6	64	0.037	6	64	0.045	6	64	0.082
12:00 - 13:00	6	64	0.034	6	64	0.026	6	64	0.060
13:00 - 14:00	6	64	0.034	6	64	0.052	6	64	0.086
14:00 - 15:00	6	64	0.031	6	64	0.042	6	64	0.073
15:00 - 16:00	6	64	0.134	6	64	0.042	6	64	0.176
16:00 - 17:00	6	64	0.113	6	64	0.047	6	64	0.160
17:00 - 18:00	6	64	0.157	6	64	0.063	6	64	0.220
18:00 - 19:00	6	64	0.223	6	64	0.079	6	64	0.302
19:00 - 20:00	2	76	0.211	2	76	0.066	2	76	0.277
20:00 - 21:00	2	76	0.099	2	76	0.026	2	76	0.125
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.176			1.118			2.294

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	6	64	0.076	6	64	0.385	6	64	0.461
08:00 - 09:00	6	64	0.102	6	64	0.599	6	64	0.701
09:00 - 10:00	6	64	0.081	6	64	0.230	6	64	0.311
10:00 - 11:00	6	64	0.152	6	64	0.196	6	64	0.348
11:00 - 12:00	6	64	0.162	6	64	0.170	6	64	0.332
12:00 - 13:00	6	64	0.136	6	64	0.099	6	64	0.235
13:00 - 14:00	6	64	0.168	6	64	0.209	6	64	0.377
14:00 - 15:00	6	64	0.131	6	64	0.131	6	64	0.262
15:00 - 16:00	6	64	0.435	6	64	0.178	6	64	0.613
16:00 - 17:00	6	64	0.314	6	64	0.191	6	64	0.505
17:00 - 18:00	6	64	0.416	6	64	0.262	6	64	0.678
18:00 - 19:00	6	64	0.398	6	64	0.212	6	64	0.610
19:00 - 20:00	2	76	0.520	2	76	0.224	2	76	0.744
20:00 - 21:00	2	76	0.250	2	76	0.132	2	76	0.382
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.341			3.218			6.559

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.*

TRICS Output (C3 Trip Rates – Affordable Flats)

Calculation Reference: AUDIT-162301-201029-1002

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	IS	ISLINGTON	1 days
02	SOUTH EAST		
	ES	EAST SUSSEX	2 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 15 to 62 (units:)
Range Selected by User: 6 to 80 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 01/07/15

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:

Tuesday	1 days
Wednesday	1 days
Thursday	4 days
Friday	1 days

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

Selected survey types:

Manual count	7 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 undertaking using machines.

Selected Locations:

Town Centre	2
Suburban Area (PPS6 Out of Centre)	5

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	5
Built-Up Zone	2

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.

Secondary Filtering selection:

Use Class:

C3	7 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 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
15,001 to 20,000	2 days
25,001 to 50,000	2 days
50,001 to 100,000	1 days
100,001 or More	1 days

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

Population within 5 miles:

25,001 to 50,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	2 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:

0.5 or Less	1 days
0.6 to 1.0	5 days
1.1 to 1.5	1 days

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

Travel Plan:

Yes	1 days
No	6 days

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

PTAL Rating:

No PTAL Present	6 days
6a Excellent	1 days

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

LIST OF SITES relevant to selection parameters

1 CH-03-D-01 BLOCK OF FLATS CHESHIRE
HEATH LANE
CHESTER
BOUGHTON HEATH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 30
Survey date: THURSDAY *24/05/12* *Survey Type: MANUAL*

2 ES-03-D-05 BLOCKS OF FLATS EAST SUSSEX
WALWERS LANE
LEWES

Town Centre
Built-Up Zone
Total No of Dwellings: 24
Survey date: FRIDAY *10/10/14* *Survey Type: MANUAL*

3 ES-03-D-06 FLATS & HOUSES EAST SUSSEX
WELLINGTON ROAD
BRIGHTON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 15
Survey date: THURSDAY *16/10/14* *Survey Type: MANUAL*

4 IS-03-D-03 BLOCK OF FLATS ISLINGTON
HAWES STREET
ISLINGTON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 36
Survey date: THURSDAY *21/11/13* *Survey Type: MANUAL*

5 LN-03-D-02 FLATS LINCOLNSHIRE
ADDISON DRIVE
LINCOLN

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 22
Survey date: WEDNESDAY *01/07/15* *Survey Type: MANUAL*

6 NT-03-D-02 BLOCK OF FLATS NOTTINGHAMSHIRE
WATCOMBE ROAD
NOTTINGHAM
CARRINGTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 22
Survey date: TUESDAY *23/06/15* *Survey Type: MANUAL*

7 WK-03-D-01 BLOCKS OF FLATS WARWICKSHIRE
QUEEN VICTORIA ROAD
COVENTRY

Town Centre
Built-Up Zone
Total No of Dwellings: 62
Survey date: THURSDAY *17/10/13* *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/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	30	0.057	7	30	0.076	7	30	0.133
08:00 - 09:00	7	30	0.071	7	30	0.109	7	30	0.180
09:00 - 10:00	7	30	0.081	7	30	0.090	7	30	0.171
10:00 - 11:00	7	30	0.085	7	30	0.076	7	30	0.161
11:00 - 12:00	7	30	0.062	7	30	0.043	7	30	0.105
12:00 - 13:00	7	30	0.071	7	30	0.085	7	30	0.156
13:00 - 14:00	7	30	0.090	7	30	0.076	7	30	0.166
14:00 - 15:00	7	30	0.066	7	30	0.062	7	30	0.128
15:00 - 16:00	7	30	0.057	7	30	0.057	7	30	0.114
16:00 - 17:00	7	30	0.100	7	30	0.066	7	30	0.166
17:00 - 18:00	7	30	0.104	7	30	0.076	7	30	0.180
18:00 - 19:00	7	30	0.076	7	30	0.062	7	30	0.138
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.920			0.878			1.798

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:	15 - 62 (units:)
Survey date date range:	01/01/12 - 01/07/15
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	30	0.009	7	30	0.009	7	30	0.018
08:00 - 09:00	7	30	0.009	7	30	0.009	7	30	0.018
09:00 - 10:00	7	30	0.000	7	30	0.000	7	30	0.000
10:00 - 11:00	7	30	0.000	7	30	0.000	7	30	0.000
11:00 - 12:00	7	30	0.000	7	30	0.000	7	30	0.000
12:00 - 13:00	7	30	0.005	7	30	0.005	7	30	0.010
13:00 - 14:00	7	30	0.009	7	30	0.009	7	30	0.018
14:00 - 15:00	7	30	0.005	7	30	0.005	7	30	0.010
15:00 - 16:00	7	30	0.005	7	30	0.005	7	30	0.010
16:00 - 17:00	7	30	0.005	7	30	0.005	7	30	0.010
17:00 - 18:00	7	30	0.000	7	30	0.000	7	30	0.000
18:00 - 19:00	7	30	0.005	7	30	0.000	7	30	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.052			0.047			0.099

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	30	0.000	7	30	0.000	7	30	0.000
08:00 - 09:00	7	30	0.009	7	30	0.000	7	30	0.009
09:00 - 10:00	7	30	0.000	7	30	0.009	7	30	0.009
10:00 - 11:00	7	30	0.000	7	30	0.000	7	30	0.000
11:00 - 12:00	7	30	0.000	7	30	0.000	7	30	0.000
12:00 - 13:00	7	30	0.000	7	30	0.000	7	30	0.000
13:00 - 14:00	7	30	0.000	7	30	0.000	7	30	0.000
14:00 - 15:00	7	30	0.000	7	30	0.000	7	30	0.000
15:00 - 16:00	7	30	0.000	7	30	0.000	7	30	0.000
16:00 - 17:00	7	30	0.000	7	30	0.000	7	30	0.000
17:00 - 18:00	7	30	0.000	7	30	0.000	7	30	0.000
18:00 - 19:00	7	30	0.000	7	30	0.000	7	30	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.009			0.009			0.018

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	30	0.000	7	30	0.009	7	30	0.009
08:00 - 09:00	7	30	0.014	7	30	0.014	7	30	0.028
09:00 - 10:00	7	30	0.009	7	30	0.009	7	30	0.018
10:00 - 11:00	7	30	0.009	7	30	0.000	7	30	0.009
11:00 - 12:00	7	30	0.000	7	30	0.005	7	30	0.005
12:00 - 13:00	7	30	0.019	7	30	0.000	7	30	0.019
13:00 - 14:00	7	30	0.000	7	30	0.000	7	30	0.000
14:00 - 15:00	7	30	0.005	7	30	0.000	7	30	0.005
15:00 - 16:00	7	30	0.005	7	30	0.009	7	30	0.014
16:00 - 17:00	7	30	0.014	7	30	0.024	7	30	0.038
17:00 - 18:00	7	30	0.019	7	30	0.005	7	30	0.024
18:00 - 19:00	7	30	0.000	7	30	0.005	7	30	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.094			0.080			0.174

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	30	0.066	7	30	0.095	7	30	0.161
08:00 - 09:00	7	30	0.081	7	30	0.185	7	30	0.266
09:00 - 10:00	7	30	0.081	7	30	0.104	7	30	0.185
10:00 - 11:00	7	30	0.114	7	30	0.104	7	30	0.218
11:00 - 12:00	7	30	0.071	7	30	0.052	7	30	0.123
12:00 - 13:00	7	30	0.100	7	30	0.095	7	30	0.195
13:00 - 14:00	7	30	0.085	7	30	0.085	7	30	0.170
14:00 - 15:00	7	30	0.095	7	30	0.081	7	30	0.176
15:00 - 16:00	7	30	0.100	7	30	0.071	7	30	0.171
16:00 - 17:00	7	30	0.175	7	30	0.085	7	30	0.260
17:00 - 18:00	7	30	0.109	7	30	0.118	7	30	0.227
18:00 - 19:00	7	30	0.095	7	30	0.071	7	30	0.166
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.172			1.146			2.318

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	30	0.009	7	30	0.028	7	30	0.037
08:00 - 09:00	7	30	0.081	7	30	0.185	7	30	0.266
09:00 - 10:00	7	30	0.118	7	30	0.123	7	30	0.241
10:00 - 11:00	7	30	0.114	7	30	0.109	7	30	0.223
11:00 - 12:00	7	30	0.100	7	30	0.118	7	30	0.218
12:00 - 13:00	7	30	0.095	7	30	0.090	7	30	0.185
13:00 - 14:00	7	30	0.118	7	30	0.156	7	30	0.274
14:00 - 15:00	7	30	0.133	7	30	0.104	7	30	0.237
15:00 - 16:00	7	30	0.227	7	30	0.142	7	30	0.369
16:00 - 17:00	7	30	0.137	7	30	0.090	7	30	0.227
17:00 - 18:00	7	30	0.137	7	30	0.104	7	30	0.241
18:00 - 19:00	7	30	0.071	7	30	0.085	7	30	0.156
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.340			1.334			2.674

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	30	0.005	7	30	0.052	7	30	0.057
08:00 - 09:00	7	30	0.005	7	30	0.062	7	30	0.067
09:00 - 10:00	7	30	0.009	7	30	0.038	7	30	0.047
10:00 - 11:00	7	30	0.009	7	30	0.038	7	30	0.047
11:00 - 12:00	7	30	0.014	7	30	0.028	7	30	0.042
12:00 - 13:00	7	30	0.033	7	30	0.019	7	30	0.052
13:00 - 14:00	7	30	0.028	7	30	0.028	7	30	0.056
14:00 - 15:00	7	30	0.024	7	30	0.028	7	30	0.052
15:00 - 16:00	7	30	0.043	7	30	0.024	7	30	0.067
16:00 - 17:00	7	30	0.057	7	30	0.038	7	30	0.095
17:00 - 18:00	7	30	0.062	7	30	0.005	7	30	0.067
18:00 - 19:00	7	30	0.043	7	30	0.009	7	30	0.052
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.332			0.369			0.701

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	30	0.000	7	30	0.005	7	30	0.005
08:00 - 09:00	7	30	0.000	7	30	0.019	7	30	0.019
09:00 - 10:00	7	30	0.000	7	30	0.000	7	30	0.000
10:00 - 11:00	7	30	0.000	7	30	0.024	7	30	0.024
11:00 - 12:00	7	30	0.014	7	30	0.005	7	30	0.019
12:00 - 13:00	7	30	0.000	7	30	0.005	7	30	0.005
13:00 - 14:00	7	30	0.019	7	30	0.009	7	30	0.028
14:00 - 15:00	7	30	0.005	7	30	0.005	7	30	0.010
15:00 - 16:00	7	30	0.024	7	30	0.014	7	30	0.038
16:00 - 17:00	7	30	0.014	7	30	0.005	7	30	0.019
17:00 - 18:00	7	30	0.019	7	30	0.009	7	30	0.028
18:00 - 19:00	7	30	0.028	7	30	0.000	7	30	0.028
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.123			0.100			0.223

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL COACH PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	30	0.000	7	30	0.000	7	30	0.000
08:00 - 09:00	7	30	0.000	7	30	0.000	7	30	0.000
09:00 - 10:00	7	30	0.000	7	30	0.000	7	30	0.000
10:00 - 11:00	7	30	0.000	7	30	0.000	7	30	0.000
11:00 - 12:00	7	30	0.000	7	30	0.000	7	30	0.000
12:00 - 13:00	7	30	0.000	7	30	0.005	7	30	0.005
13:00 - 14:00	7	30	0.000	7	30	0.000	7	30	0.000
14:00 - 15:00	7	30	0.000	7	30	0.000	7	30	0.000
15:00 - 16:00	7	30	0.000	7	30	0.000	7	30	0.000
16:00 - 17:00	7	30	0.000	7	30	0.000	7	30	0.000
17:00 - 18:00	7	30	0.000	7	30	0.000	7	30	0.000
18:00 - 19:00	7	30	0.000	7	30	0.000	7	30	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.005			0.005

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	30	0.005	7	30	0.057	7	30	0.062
08:00 - 09:00	7	30	0.005	7	30	0.081	7	30	0.086
09:00 - 10:00	7	30	0.009	7	30	0.038	7	30	0.047
10:00 - 11:00	7	30	0.009	7	30	0.062	7	30	0.071
11:00 - 12:00	7	30	0.028	7	30	0.033	7	30	0.061
12:00 - 13:00	7	30	0.033	7	30	0.028	7	30	0.061
13:00 - 14:00	7	30	0.047	7	30	0.038	7	30	0.085
14:00 - 15:00	7	30	0.028	7	30	0.033	7	30	0.061
15:00 - 16:00	7	30	0.066	7	30	0.038	7	30	0.104
16:00 - 17:00	7	30	0.071	7	30	0.043	7	30	0.114
17:00 - 18:00	7	30	0.081	7	30	0.014	7	30	0.095
18:00 - 19:00	7	30	0.071	7	30	0.009	7	30	0.080
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.453			0.474			0.927

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	7	30	0.081	7	30	0.190	7	30	0.271
08:00 - 09:00	7	30	0.180	7	30	0.464	7	30	0.644
09:00 - 10:00	7	30	0.218	7	30	0.275	7	30	0.493
10:00 - 11:00	7	30	0.246	7	30	0.275	7	30	0.521
11:00 - 12:00	7	30	0.199	7	30	0.209	7	30	0.408
12:00 - 13:00	7	30	0.246	7	30	0.213	7	30	0.459
13:00 - 14:00	7	30	0.251	7	30	0.280	7	30	0.531
14:00 - 15:00	7	30	0.261	7	30	0.218	7	30	0.479
15:00 - 16:00	7	30	0.398	7	30	0.261	7	30	0.659
16:00 - 17:00	7	30	0.398	7	30	0.242	7	30	0.640
17:00 - 18:00	7	30	0.346	7	30	0.242	7	30	0.588
18:00 - 19:00	7	30	0.237	7	30	0.171	7	30	0.408
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.061			3.040			6.101

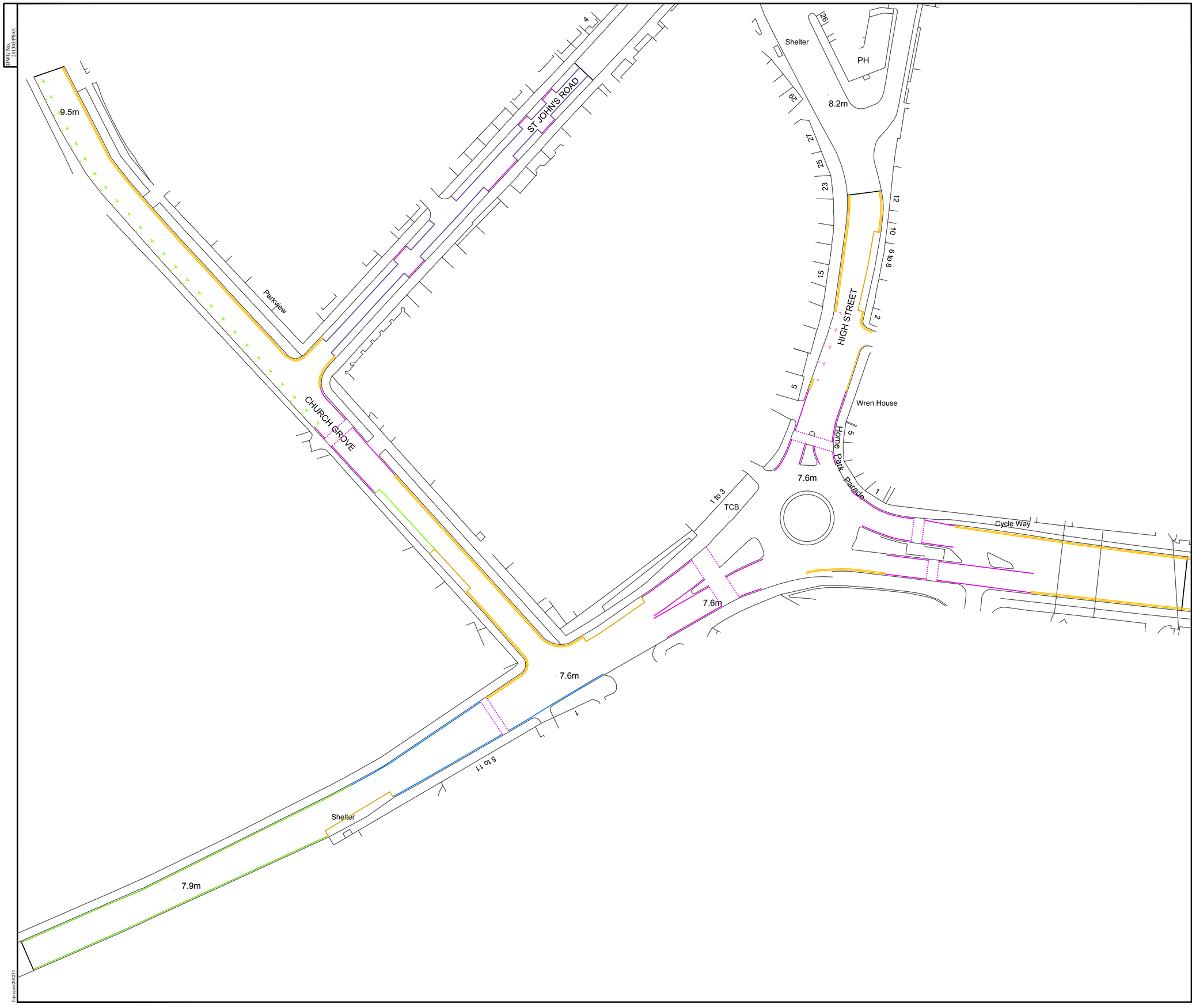
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are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

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

APPENDIX E

Drawing 201345/PS/01 – Parking Survey (Base Layout)

DWG No. 201345/PS/01



NOTES

KEY

- Resticted "NO PARKING"
- Permit Holders Only (Zone X)
- Permit Holders or Pay at Machine (Max 10 hours)
- Pay at Machine
- Clearway (No Parking)
- Urban Clearway (8am to 6.30pm)
- Bus Stop
- Single Yellow Line
- Double Yellow Line

Rev	Amendment	Drawn	Checked	Approved	Date

LANMOR Consulting
Civil Engineers & Transport Planning
Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW
Telephone: 0208 339 7899 Fax: 0208 339 7898
e-mail: info@lanmor.co.uk
www.lanmor.co.uk

Westcombe Group

Kingston Bridge House
Hampton Wick

Parking Survey
Base Layout

DRAWN	CHECKED	APPROVED
JR	KBL	KBL
DATE Oct-20	DATE Oct-20	DATE Oct-20

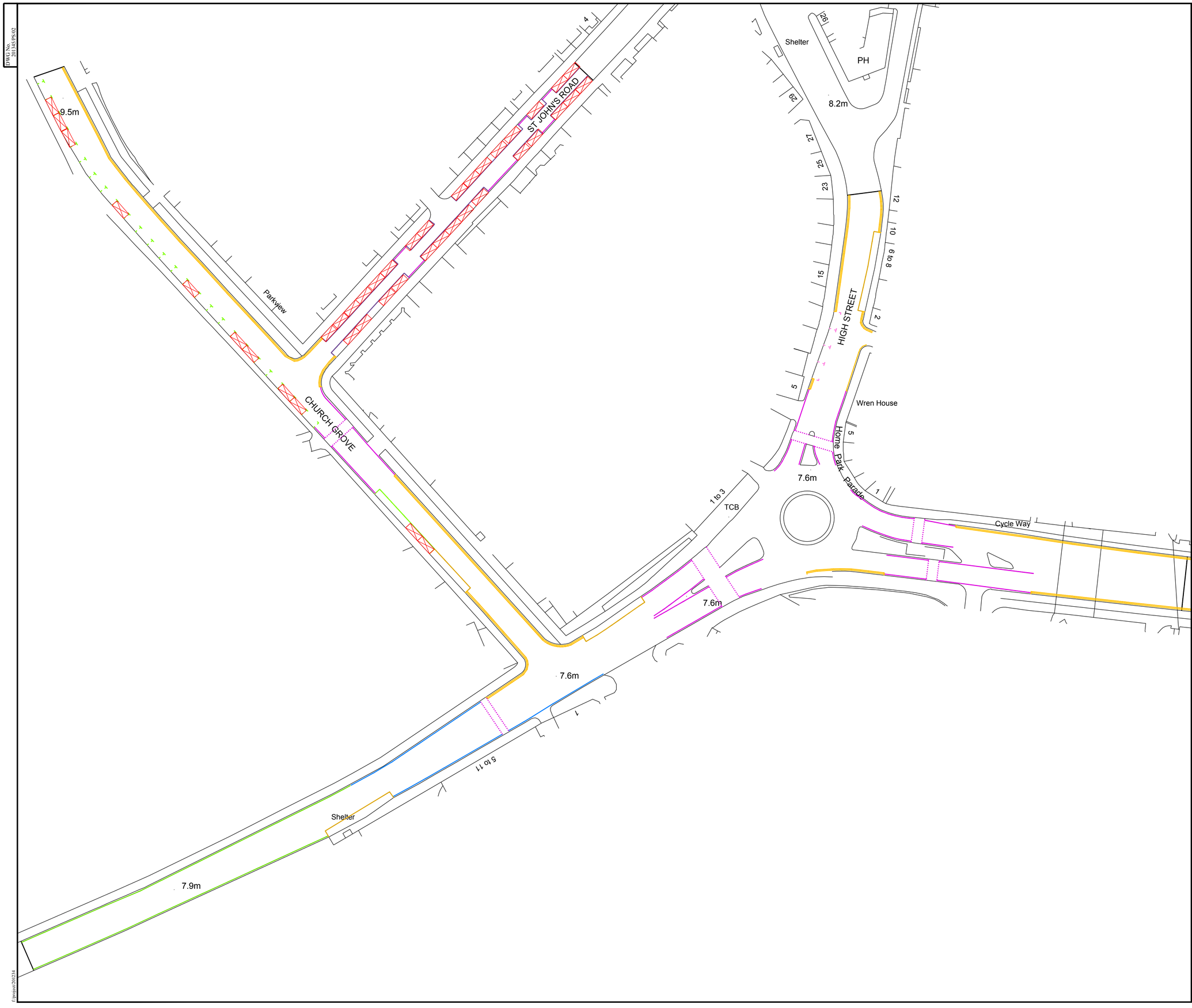
SCALE	JOB No.	SIZE	REV
1:500	201345	A1	

DWG No. 201345/PS/01

f:\projects\201234

Drawing 201345/PS/02 – Parking Survey (16/10/2020)

DWG No. 201345/PS/02



NOTES

KEY

- Resticted "NO PARKING"
- Permit Holders Only (Zone X)
- Permit Holders or Pay at Machine (Max 10 hours)
- Pay at Machine
- Clearway (No Parking)
- Urban Clearway (8am to 6.30pm)
- Bus Stop
- Single Yellow Line
- Double Yellow Line

Rev	Amendment	Drawn	Checked	Approved	Date

LANMOR Consulting
Civil Engineers & Transport Planning
Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW
Telephone: 0208 339 7899 Fax: 0208 339 7898
e-mail: info@lanmor.co.uk
www.lanmor.co.uk

Westcombe Group

Kingston Bridge House
Hampton Wick

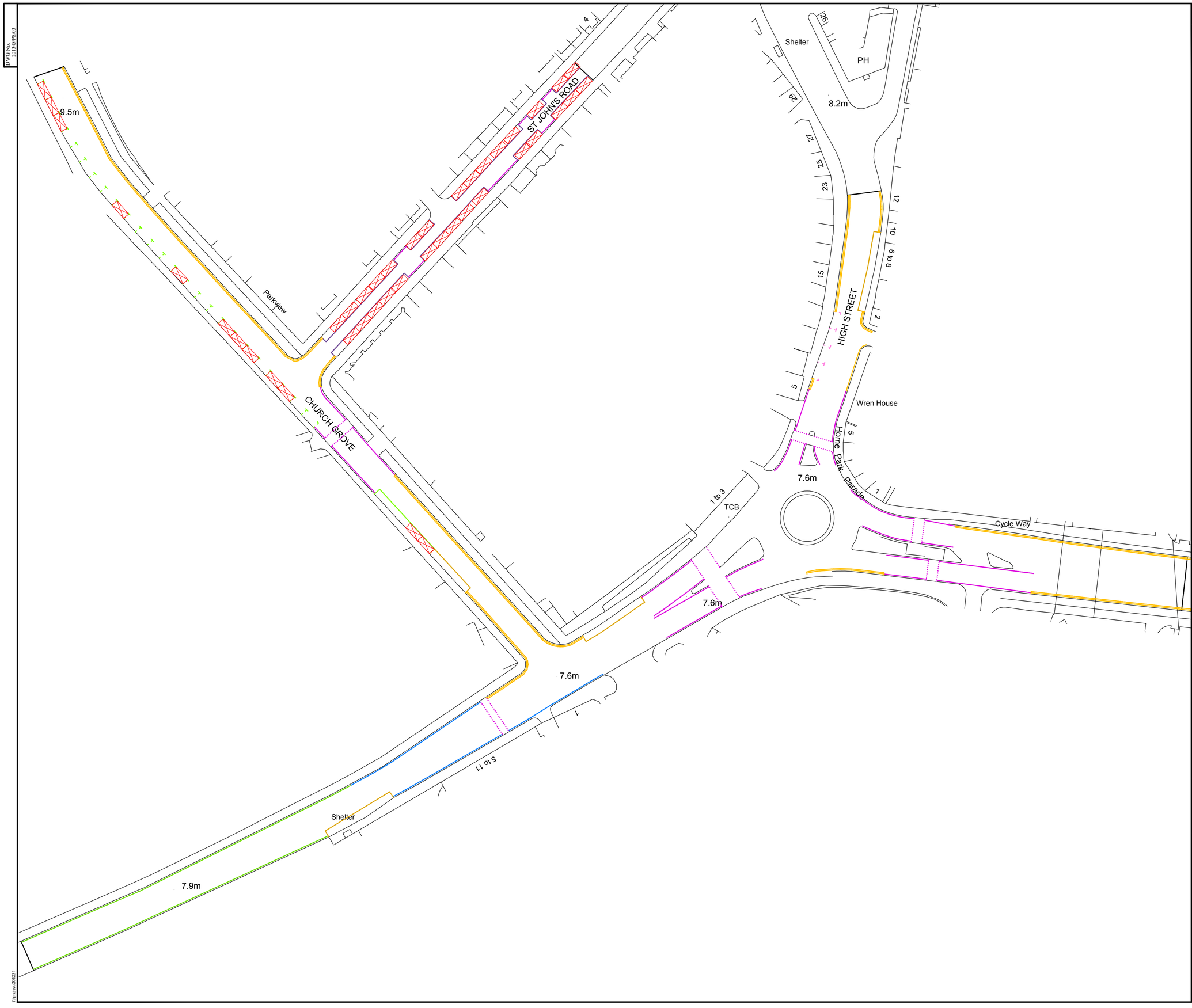
Parking Survey
Friday Morning16/10/20
1.15am to 1.45am

DRAWN JR		CHECKED KBL		APPROVED KBL	
DATE Oct-20		DATE Oct-20		DATE Oct-20	
SCALE 1:500	JOB No. 201345		SIZE A1	REV	
DWG No. 201345/PS/02					

f:\projects\201234

Drawing 201345/PS/03 – Parking Survey (21/10/2020)

DWG No. 201345/PS/03



NOTES

KEY

- Resticted "NO PARKING"
- Permit Holders Only (Zone X)
- Permit Holders or Pay at Machine (Max 10 hours)
- Pay at Machine
- Clearway (No Parking)
- Urban Clearway (8am to 6.30pm)
- Bus Stop
- Single Yellow Line
- Double Yellow Line

Rev	Amendment	Drawn	Checked	Approved	Date

LANMOR Consulting
Civil Engineers & Transport Planning
Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW
Telephone: 0208 339 7899 Fax: 0208 339 7898
e-mail: info@lanmor.co.uk
www.lanmor.co.uk

Westcombe Group

Kingston Bridge House
Hampton Wick

Parking Survey
Wednesday Morning 21/10/20
1.30am to 2.00am

DRAWN	CHECKED	APPROVED
JR	KBL	KBL
DATE Oct-20	DATE Oct-20	DATE Oct-20

SCALE	JOB No.	SIZE	REV
1:500	201345	A1	

DWG No. 201345/PS/03

f:\projects\201234