Barnes Hospital
London Borough of Richmond upon Thames

Transport Statement

For

Star Land Realty UK Ltd

motion

Document Control Sheet

Barnes Hospital

London Borough of Richmond upon Thames

Star Land Realty UK Ltd

This document has been issued and amended as follows:

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Contents

Figures

Appendices

1.0 Introduction

1.1 Motion has been appointed by Star Land Realty UK Ltd to prepare this Transport Statement in relation to development at the Barnes Hospital site within the London Borough of Richmond upon Thames (LBRuT).

1.2 The application site is situated within the Barnes area of LBRuT and is bound to the north by South Worple Way, to the east by South Worple Avenue, to the west by Old Mortlake Burial Ground and fronts residential properties to the south.

1.3 On 14 September 2020, Outline Planning Permission ('OPP') was granted for the redevelopment of the whole of Barnes Hospital campus (Planning Ref: 18/3642/OUT), which comprised three development plots; (1) the residential plot, (2) the Specials Educational Needs (SEN) School and (3) the health centre.

1.4 Whilst all three parts are still being delivered, it is now proposed that these will be brought forward on an individual site basis rather than through on outline permission and subsequent reserved matters this planning application therefore relates only to the residential plot of the wider campus.

1.5 No changes are proposed to the Health Centre/ SEN elements of the site as part of the current proposals. The current planning application comprises:

"Demolition of existing structures and redevelopment of site including construction of three new buildings comprising residential units of mixed tenure (Use Class C3), conversion of two existing buildings for residential use (Use Class C3), car and cycle parking, landscaping and associated works."

1.6 The proposed development will provide 109 residential dwellings, comprising 1 studio unit, 41 x 1-bedroom units, 49 x 2-bedroom units and 18 x 3-bedroom units. The proposed development will be served by 50 car parking spaces including 11 disabled accessible parking spaces.

1.7 This Transport Statement has been prepared to support the planning application and considers the highway and transport matters associated with the development proposals in particular with regard to trip generation, vehicle access, parking and servicing arrangements.

1.8 Following this introduction, the remainder of the report comprises the following sections:

- Section 2 outlines the transport planning policies that have been approved in the previous application;
- Section 3 considers the existing use of the site and reviews the accessibility of the site by all modes of transport;
- Section 4 provides an overview of the approved development and changes;
- Section 5 assesses the trip generating potential of the increase of residential units against the existing use of the site; and,
- Section 6 summarises the key findings and conclusions of the report.

2.0 Policy Context

2.1 This section summarises relevant policy documents at regional and local level against which the proposed development will be assessed. The most relevant policy documents relating to the study are as follows:

- National Planning Policy Framework (July 2021)
- The London Plan 2021 (March 2021); and,
- London Borough of Richmond upon Thames Local Plan (July 2018)

National Planning Policy Framework (July 2021)

2.2 The updated National Planning Policy Framework (NPPF) was published in July 2021. The document sets out a presumption in favour of sustainable development that recognises the importance of transport policies in facilitating sustainable development. It also indicates that planning decisions should have regard to local circumstances.

2.3 In promoting sustainable transport, the document identifies at paragraph 105 that:

"The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes."

2.4 With regard to transport and development, paragraph 110 of the NPPF states that:

"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- Safe and suitable access to the site can be achieved for all users;
- The design of streets, parking areas, other transport elements and the content of associated standards refer current national guidance, including the National Design Guide and the National Modal Design Code; and
- Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."

2.5 Paragraph 111 continues to state:

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impact on the road network would be severe."

The London Plan (March 2021)

2.6 The London Plan (March 2021) sets out the economic, environmental, transport and social framework for the development of London over the next 20-25 years. With regards transport, the polices pertinent to these proposals are as follows:

2.7 Policy T1 Strategic approach to transport

"A) Development Plans should support, and development proposals should facilitate:

1) the delivery of the Mayor's strategic target of 80 per cent of all trips in London to be made by foot, cycle or public transport by 2041

2) the proposed transport schemes set out in Table 10.1.

B) All development should make the most effective use of land, reflecting its connectivity and accessibility by existing and future public transport, walking and cycling routes, and ensure that any impacts on London's transport networks and supporting infrastructure are mitigated."

2.8 Policy T2 Healthy Streets

"A) Development proposals and Development Plans should deliver patterns of land use that facilitate residents making shorter, regular trips by walking or cycling.

B) Development Plans should:

1) promote and demonstrate the application of the Mayor's Healthy Streets Approach to: improve health and reduce health inequalities; reduce car dominance, ownership and use, road danger, severance, vehicle emissions and noise; increase walking, cycling and public transport use; improve street safety, comfort, convenience and amenity; and support these outcomes through sensitively designed freight facilities.

2) identify opportunities to improve the balance of space given to people to dwell, walk, cycle, and travel on public transport and in essential vehicles, so space is used more efficiently and streets are greener and more pleasant.

C) In Opportunity Areas and other growth areas, new and improved walking, cycling and public transport networks should be planned at an early stage, with delivery phased appropriately to support mode shift towards active travel and public transport. Designs for new or enhanced streets must demonstrate how they deliver against the ten Healthy Streets Indicators.

D) Development proposals should:

1) demonstrate how they will deliver improvements that support the ten Healthy Streets Indicators in line with Transport for London guidance

2) reduce the dominance of vehicles on London's streets whether stationary or moving

3) be permeable by foot and cycle and connect to local walking and cycling networks as well as public transport."

2.9 Policy T4 Assessing and mitigating transport impacts

"A) Development Plans and development proposals should reflect and be integrated with current and planned transport access, capacity and connectivity.

B) When required in accordance with national or local guidance, transport assessments/statements should be submitted with development proposals to ensure that 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 having regard to Transport for London guidance.

C) Where appropriate, mitigation, either through direct provision of public transport, walking and cycling facilities and highways improvements or through financial contributions, will be required to address adverse transport impacts that are identified.

D) Where the ability to absorb increased travel demand through active travel modes has been exhausted, existing public transport capacity is insufficient to allow for the travel generated by proposed developments, and no firm plans and funding exist for an increase in capacity to cater for the increased

demand, planning permission will be contingent on the provision of necessary public transport and active travel infrastructure.

E) The cumulative impacts of development on public transport and the road network capacity including walking and cycling, as well as associated effects on public health, should be taken into account and mitigated.

F) Development proposals should not increase road danger."

2.10 Policy T5 Cycling

"A) 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 at least in accordance with the minimum standards set out in Table 10.2 and Figure 10.2, ensuring that a minimum of two short-stay and two long-stay cycle parking spaces are provided where the application of the minimum standards would result in a lower provision.

B) Cycle parking should be designed and laid out in accordance with the guidance contained in the London Cycling Design Standards. Development proposals should demonstrate how cycle parking facilities will cater for larger cycles, including adapted cycles for disabled people.

C) Development Plans requiring more generous provision of cycle parking based on local evidence will be supported.

D) Where it is not possible to provide suitable short-stay cycle parking off the public highway, the borough should work with stakeholders to identify an appropriate on-street location for the required provision. This may mean the reallocation of space from other uses such as on street car parking. Alternatively, in town centres, adding the required provision to general town centre cycle parking is also acceptable. In such cases, a commuted sum should be paid to the local authority to secure provision.

E) Where it is not possible to provide adequate cycle parking within residential developments, boroughs must work with developers to propose alternative solutions which meet the objectives of the standards. These may include options such as providing spaces in secure, conveniently-located, on-street parking facilities such as bicycle hangers.

F) Where the use class of a development is not fixed at the point of application, the highest potential applicable cycle parking standard should be applied."

2.11 Policy T6 Car parking

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

B) 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'). Car-free development has no general parking but should still provide disabled persons parking in line with Part E of this policy.

C) An absence of local on-street parking controls should not be a barrier to new development, and boroughs should look to implement these controls wherever necessary to allow existing residents to maintain safe and efficient use of their streets.

D) 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.

E) 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.

F) Where provided, each motorcycle parking space should count towards the maximum for car parking spaces at all use classes.

G) Where car parking is provided in new developments, provision should be made for infrastructure for electric or other Ultra-Low Emission vehicles in line with Policy T6.1 Residential parking, Policy T6.2 Office parking, Policy T6.3 Retail parking, and Policy T6.4 Hotel and leisure uses parking. All operational parking should make this provision, including offering rapid charging. New or re-provided petrol filling stations should provide rapid charging hubs and/or hydrogen refuelling facilities.

H) Where electric vehicle charging points are provided on-street, physical infrastructure should not negatively affect pedestrian amenity and should ideally be located off the footway. Where charging points are located on the footway, it must remain accessible to all those using it including disabled people.

I) Adequate provision should be made for efficient deliveries and servicing and emergency access.

J) A Parking Design and Management Plan should be submitted alongside all applications which include car parking provision, indicating how the car parking will be designed and managed, with reference to Transport for London guidance on parking management and parking design.

K) Boroughs that have adopted or wish to adopt more restrictive general or operational parking policies are supported, including borough-wide or other area-based car-free policies. Outer London boroughs wishing to adopt minimum residential parking standards through a Development Plan Document (within the maximum standards set out in Policy T6.1 Residential parking) must only do so for parts of London that are PTAL 0-1. Inner London boroughs should not adopt minimum standards. Minimum standards are not appropriate for non residential use classes in any part of London.

L) Where sites are redeveloped, parking provision should reflect the current approach and not be re-provided at previous levels where this exceeds the standards set out in this policy. Some flexibility may be applied where retail sites are redeveloped outside of town centres in areas which are not well served by public transport, particularly in outer London."

2.12 In relation to parking, London Plan sets out parking standards for cars (including provision for disabled persons and electric vehicles) and cycles. The standards of relevance to the proposals (having regard to land use and proposed quantum of development) are summarised in the tables below.

Land Use	Maximum Car Parking Standards	Minimum Cycle Parking Standards
Residential (C3)	1-2 bed units – 0.5-0.75 spaces per unit 3+ bed units -0.5-0.75 spaces per unit	1 space per studio 1 bedroom 1 person dwelling, 1.5 spaces per 2 person 1 bedroom dwelling, 2 spaces per all other dwellings (long stay) 1 space per 40 dwellings

Table 2.1 - London Plan Car and Cycle Parking Standards

London Borough of Richmond upon Thames Local Plan (July 2018)

2.13 The July 2018 Local Plan replaces the previous policies contained within the Core Strategy and Development Management Plan, which previously applied to Richmond. The Plan sets out policies and guidance for the development of the borough over the next 15 years. The policies considered pertinent to this application are listed below.

- Policy LP 44: Sustainable Travel Choices

  A. *Location of development – "Encourage high trip generating development to be located in areas with good public transport with sufficient capacity, or which are capable of supporting improvements to provide good public transport accessibility and capacity, taking account of local character and context."*

  B. *Walking and cycling – "Ensure that new development is designed to maximise permeability within and to the immediate vicinity of the development site through the provision of safe and convenient walking and cycling routes, and to provide opportunities for walking and cycling, including the provision of links and enhancements to existing networks."*

  C. *Public transport – "Ensure that major new development is designed to maximise opportunities to provide safe and convenient access to public transport services. Proposals will be expected to support improvements to existing services and infrastructure where no capacity current exists or is planned to be provided."*

  D. *The road network – "Ensure that new development does not have a severe impact on the operation, safety or accessibility to the local or strategic highway networks. Any impacts on the local or strategic highway networks, arising from the development itself or the cumulative effects of development, including in relation to on-street parking, should be mitigated through the provisions of, or contributions towards, necessary and relevant transport improvements."*

- Policy LP 45: Parking Standards and Servicing –

2.14 *"Parking Standards: The Council will require new development to make provision for the accommodation of vehicles in order to provide for the needs of the development while minimising the impact of car based travel including on the operation of the road network and local environment, and ensuring making the best use of land. It will achieve this by:*

1. Requiring new development to provide for car, cycle, 2 wheel and, where applicable, lorry parking and electric vehicle charging points, in accordance with the standards set out in Appendix 3. Opportunities to minimise car parking through its shared use will be encouraged.

2. Resisting the provision of front garden car parking unless it can be demonstrated that:

- There would be no material impact on road or pedestrian safety;
- There would be no harmful impact on the character of the area, including the streetscape or setting of the property, in line with the policies on Local Character and Design; and
- The existing on-street demand is less than available capacity.

3. Car free housing developments may be appropriate in locations with high public transport accessibility, such as areas with a PTAL of 5 or 6, subject to:

- The provision of disabled parking;
- Appropriate servicing arrangements; and
- Demonstrating that proper controls can be put in place to ensure that the proposal will not contribute to on-street parking stress in the locality.

Freight and Servicing: New major development which involves freight movements and has servicing needs will be required to demonstrate through the submission of a Delivery and Servicing Plan and Construction and Logistics Plan that it creates no severe impacts on the efficient and safe operation of the road network and no material harm to the living conditions of nearby residents."

2.15 The LB Richmond upon Thames car and cycling parking standards are set out at Appendix 3 of the adopted Local Plan. The relevant standards with regard to the development proposals are set out below.

Land Use		Vehicle Parking Space Required (maximum)	Cycle Parking (minimum)
Use Class C3 (standard residential)	PTALs 0-3 (1-2 bedrooms)	1 space	As per London Plan
	PTALs 0-3 (3+ bedrooms)	2 spaces	
	PTALs 4-6	As per London Plan although local circumstances, CPZ times and on-street parking conditions need to be assessed	

Table 2.5 Richmond upon Thames Car and Cycle Parking Standards

3.0 Baseline Conditions

3.1 The application site is situated within the Barnes area of LBRuT and is bound to the north by South Worple Way, to the east by South Worple Avenue, to the west by Old Mortlake Burial Ground and fronts residential properties to the south.

3.2 The site location in relation to the surrounding area is shown in Figure 3.1.

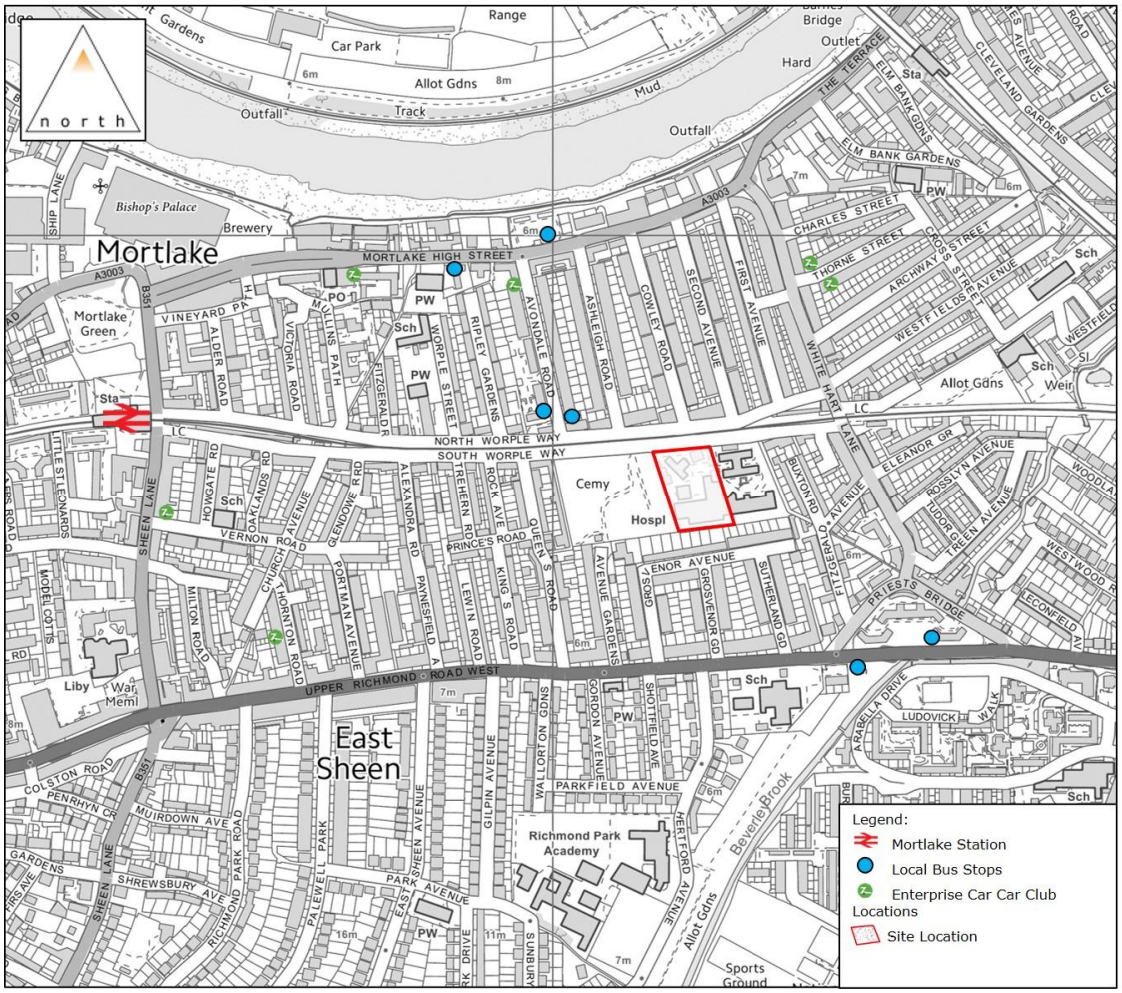


Figure 3.1 Site Location Plan

Existing Site Use

3.3 The entirety of the Barnes Hospital campus currently provides circa 6,950 square metres of C2 medical use floor space. The current application site includes 4,158 square metres of C2 medical use floorspace, all of which is currently vacant.

3.4 There are currently three vehicle accesses to the site. The eastern access operates as an inbound only entrance, the central access operates as an outbound only exit and the western access to the site is not currently in use.

Consented Development

3.5 Planning consent was granted in September 2019 for development proposals at the site comprising 83 residential dwellings, a health centre and Special Education Need (SEN) School along with associated landscaping and car parking (Planning Ref: 18/3642/OUT).

Local Highway Network

3.6 The proposed development is accessed from South Worple Way which run on an east-west alignment adjacent to the site and parallel to the railway line. To the east of the site South Worple Way connects with White Hart Lane and a railway level crossing is located directly north of the junction between South Worple Way and White Hart Lane. At the junction between South Worple Way and White Hart Lane, the left turn movement out of South Worple Way is restricted such that all vehicles are required to turn right out of onto White Hart Lane (southbound).

3.7 White Hart Lane operates in a north-south alignment and connects to Mortlake High Street (A3003) to the north and with Upper Richmond Road West (A205) via Priests Bridge to the south. Mortlake High Street creates a link between the A316 to the west and Hammersmith Bridge to the north east.

3.8 The streets in the immediate vicinity of the site are generally subject to parking controls and predominately all within either the White Hart Lane or East Sheen controlled parking zones. However, some streets south of the site including Grosvenor Avenue, Grosvenor Gardens, Sutherland Gardens and Avenue Gardens are not currently subject to parking controls.

3.9 LBRuT is currently undertaking a consultation with local residents in relation to extension of the parking controls in the local area. The consultation relates to the potential extension of the existing parking controls to include Westwood Road and Leconfield Avenue, west of the site and also along Grosvenor Avenue, Grosvenor Gardens, Sutherland Gardens and Avenue Gardens to the south of the site. LBRuT are currently consulting with local residents on the design/ layout of potential parking controls and the consultation is currently scheduled to end on 17 September 2021. Should the changes to parking controls be agreed and approved, then will increase the number of streets in the vicinity of the site with parking controls and restricted to resident permit holder parking only.

Sustainable Transport Accessibility

3.10 It is generally accepted that walking and cycling provide important alternatives to the private car, and should also be encouraged to form part of longer journeys via public transport. The Chartered Institution of Highways and Transportation (CIHT) have prepared several guidance documents that provide advice with respect to the provision of sustainable travel in conjunction with new developments. Within these documents it is suggested that:

- Most people will walk to a destination that is less than one mile (Planning for Walking, 2015);
- The bicycle is a potential mode of transport for all journeys under five miles (approximately 8 kilometres) (Planning for Cycling, 2015); and,
- Walking distances to bus stops should not exceed 400 metres, whilst people are prepared to walk twice as far to rail stations (Planning for Walking, 2015).

Accessibility by Foot

3.11 South Worple Way benefits from a footway on the southern side of the carriageway, which connects east to White Hart Lane and west to Sheen Lane. This footway connects with streets from South Worple Way, which connect south towards the Upper Richmond Road West (A205). Dropped kerbs and tactile paving are provided at all junctions in the immediate vicinity of the site.

3.12 The site is bound by South Worple Avenue to the east, which is a public right of way (PROW). This provides a traffic free pedestrian route towards White Hart Lane to the south east of the site.

3.13 To the west of the site there is a pedestrian footbridge across the railway line which provides a connection north towards the bus stops on Avondale Road to the north creating a safe route across the railway track. To the south, signalised pedestrian crossings connect Priests Bridge to Upper Richmond Road West (A205) and creates a safe crossing to local bus stops, shops and services.

3.14 Since the previous application has been approved there is now an existing footbridge over White Hart Lane level crossing to the east of the site, improving pedestrian safety and connectivity in the area.

3.15 It is evident that the existing pedestrian infrastructure in the vicinity of the site provides the opportunity for future residents, staff and visitors to the site to undertake journeys on foot with connections to local shops, services and facilities as well as public transport opportunities and residential areas.

Accessibility by Cycle

3.16 The site is well located with regard to cycle opportunities with a range of signed and recommended cycle routes in the immediate vicinity as highlighted by TfL's Local Cycling Guide. Cycle routes are illustrated on Figure 3.2, along with further information on the routes detailed below.

3.17 The TfL Local Cycling Guide identifies South Worple Way as a quiet route recommended by cyclists. This connects with further recommended routes on White Hart Lane, Rosslyn Avenue and Woodlands Road which connect east towards Barnes station. East of Barnes station there are signed cycle routes on Upper Richmond Road towards Putney and Putney Bridge.

3.18 To the west of the application site, Sheen Lane is a signed cycle route and this connects south to off-road cycle routes through Richmond Park. Further signed cycle routes are provided along St Leonards Road and Tangier Road which link west towards North Sheen station.

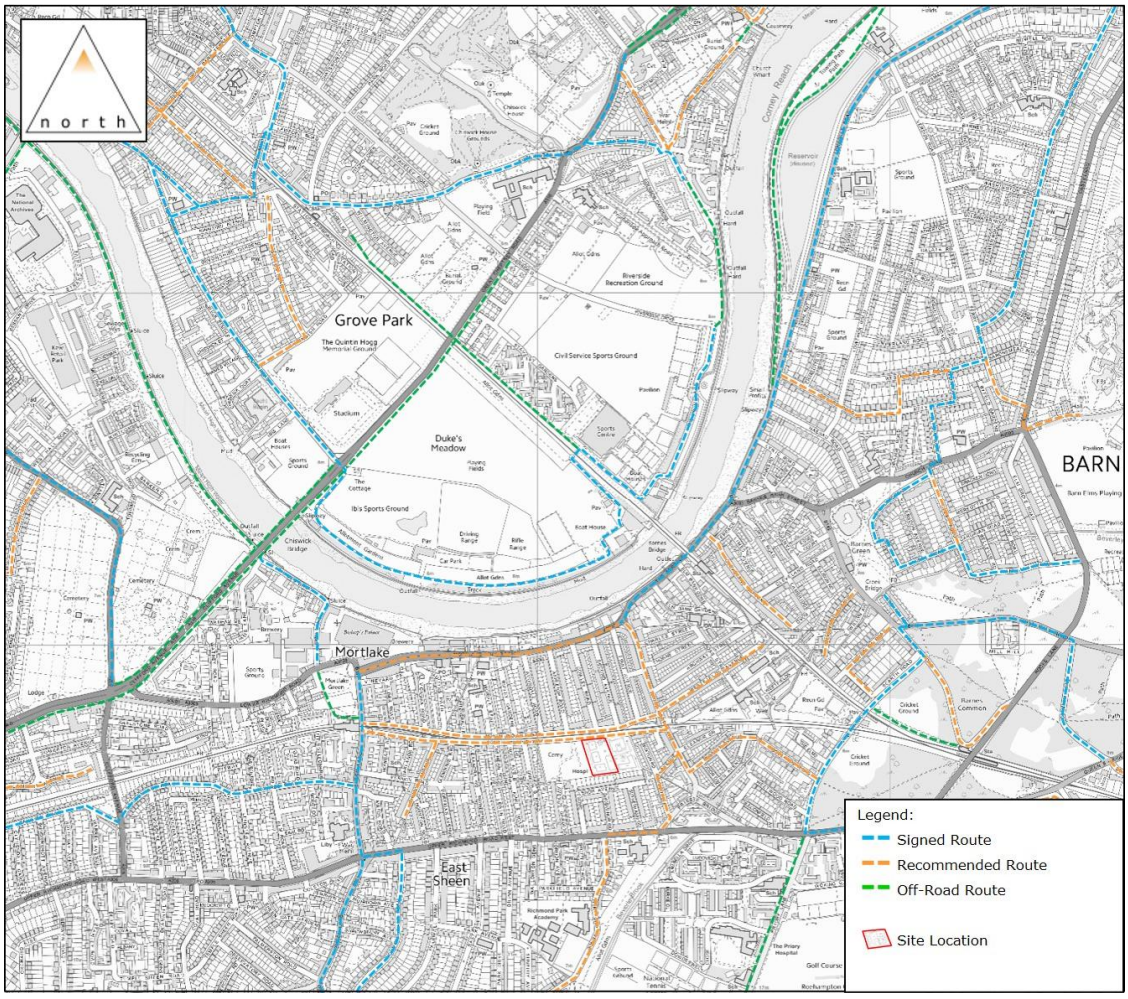


Figure 3.2 Local Cycle Routes

Public Transport Accessibility Level (PTAL)

3.19 Public Transport Accessibility Levels (PTALs) provide a guide to the relative accessibility of a site. PTAL scores range from 1 to 6b, where 6b is the highest score and 1 is the lowest.

3.20 Transport for London online PTAL calculator, WebCAT, indicates that the application site achieves a PTAL of 2. However, from a review of the WebCAT PTAL output report it is evident that the analysis does not include consideration of all pedestrian routes in the vicinity of the site and therefore underestimates the PTAL score and public transport accessibility of the site. In particular, the WebCAT assessment does not include consideration of the pedestrian footbridge across the railway line to the west of the site, which provides a connection north towards bus stops on Avondale Road and Mortlake High Street.

3.21 In addition, a new footbridge has recently been introduced at the White hart Lane level crossing which as improved the pedestrian connectivity across the railway line and improved links to nearby public transport facilities.

3.22 On that basis a manual PTAL assessment has been undertaking in order to accurately assess the PTAL score of the application site. The full manual PTAL assessment is attached at Appendix A and demonstrates that the site achieves a PTAL of 4, indicating a good level of accessibility to public transport services. It is highlighted that this approach was agreed as part of the determination of the OPP.

Accessibility by Bus

3.23 The nearest bus stops to the site are located approximately 300 metres to the south east of the site on Upper Richmond Road West (A205). These stops are served by routes 33, 337 and 493 and provide a regular connection towards, Richmond, Putney, Wimbledon, Twickenham and Fullwell.

3.24 Further bus stops are located north of the site on Avondale Road and Mortlake High Street which are served by services 209, 378, 419, 533 and N22. The bus stops to the north can either be accessed via the railway level crossing to the east of the site or via the pedestrian footbridge to the west of the site.

3.25 A copy of the TfL local bus route spider map is attached at Appendix B.

Accessibility by Rail

3.26 Mortlake railway station is located approximately 750 metres to the west of the site and is managed by South Western Railway. Services from Mortlake station operate to London Waterloo every 15 minutes and to both Wimbledon and Chiswick every 30 minutes during peak periods.

3.27 Barnes Bridge station is located approximately 750 metres to the north east of the site and is also managed by South Western Railway. Services from here operate to London Waterloo every 15 minutes and to both Weybridge and Hounslow every 30 minutes.

3.28 In addition, the bus services which call within the vicinity of the site provide connections to both Mortlake and Barnes Bridge stations, along with a connection to North Sheen, Barnes, Richmond, Southfields and Wimbledon stations. The connections to Richmond, Southfields and Wimbledon provide access to the London Underground District Line.

3.29 It is evident that the site is well placed for future residents to undertake journeys by rail with a number of train stations in the vicinity of the site providing access to a range of destinations. Furthermore, local bus services provide access to further rail stations, providing the opportunity for interchange between public transport and access to a wider range of destinations.

Car Club

3.30 Car Clubs can help to reduce car ownership by offering the convenience of a car, without the costs of repairs, servicing, insurance and parking.

3.31 The nearest car club car to the site is located on Thorne Street, approximately 380 metres north-east of the application site and is operated by ZipCar. Further car club cars, operated by ZipCar, are located on Avondale Road, Mortlake High Street and Vernon Road within a short walk of the site.

3.32 Furthermore, the borough of Richmond is part of the ZipCar FlexZone allowing ZipCar Flex vehicles to park in any on-street resident permit holder bays within the borough. This provides greater flexibility for car club users and provide additional Flex club cars in the local areas, in addition to those are the identified car club bays.

Baseline Travel Behaviour

3.33 In order to establish predicted baseline travel behaviour for residents, reference has been made to Census data extracted from the Nomis website. A summary of the data extracted from the 2011 Census is provided at Table 3.1 and attached at Appendix C.

Mode of Travel	Output Area Richmond upon Thames 003 (%)
Underground	15%
Rail	30%
Bus	11%
Car/van driver	23%
Car/van passenger	1%
Taxi	0%
Motorcycle	2%
Pedal Cycle	10%
On foot	8%
TOTAL	100%

Table 3.1 Method of travel to work (residents)

3.34 Table 3.1 indicates that 74% of residents travel to work via sustainable modes of transport (i.e. public transport, walking and cycling) and 23% travel by private car. This suggests that the existing infrastructure in the vicinity of the site will encourage future residents to travel by more sustainable modes of transport.

Accident Data Review

3.35 To consider the existing standard of road safety on the local highway network in the vicinity of the site, personal injury incident data was obtained from TfL for the latest 3-year period ending February 2021. The study area included the road network surrounding Barnes Hospital including a section of South Worple Way and White Hart Lane. The full extent of the study area can be seen in Appendix D.

3.36 The information received from TfL identified a total of 4 incidents within the study area, during the defined period. In terms of severity, all four were classified as slight in risk with two incidents occurring in darkness and two occurring in light. The one incident that occurred in wet conditions also occurred in daylight hours.

3.37 One of the incidents occurred on South Worple Way and three occurred on White Hart Lane. A summary of the incidents is shown in the table below.

Location	Summary of Incident with Causation Factors
South Worple Way	Incident occurred between a pedestrian and car during dark dry conditions.
White Hart Lane junction with South Worple Way	Incident involving two cars occurred in light dry conditions and occurred when vehicle was slowing in advance of the crossing. A slippery road surface was identified as a causation factor.
White Hart Lane junction with Westfields Avenue	Incident involving two motorcyclists travelling along a single carriageway road. Incident occurred at night in dry conditions.
White Hart Lane	Incident occurred between a pedestrian and a van driver not known how incident occurred. Conditions were dry incident occurred in daylight hours.

Table 3.2 Summary of Recorded Incidents from Causation Factors

3.38 The frequency of incidents on the local road network does not indicate any pattern of incidents or inherent road safety issues on South Worple Way and in the local vicinity of the site. On that basis it is concluded that there are no inherent road safety issues that require further analysis or assessment.

Baseline Survey Data

3.39 In order to ascertain the existing conditions on the local highway network a series of traffic, parking and pedestrian surveys have been undertaken.

Parking Survey

3.40 A parking survey of the streets local to the site was undertaken in October 2017 as part of the consented outline planning application at the site. Since that survey was undertake there have been some changes to some of the parking restrictions on streets in the vicinity of the site and therefore an updated parking survey has been undertaken.

3.41 The parking survey has been undertaken in accordance with the Richmond parking survey methodology and the scope and timing of the scope and timing of the parking survey was agreed with Officers at LBRuT in advance of undertaking the survey. The survey was undertaken on the 2 & 3 February 2021 and the full results of the parking survey are provided at Appendix E and a summary of the results of the survey are presented at Table 3.3 below.

	Tuesday 2 February	Wednesday 3 February
Occupied Spaces	331	330
Available Spaces	57	54
Parking Occupancy	86%	86%

Table 3.3: Parking Survey

3.42 The results of the parking survey demonstrate that there was a minimum of 57 spaces available during the Tuesday night survey and a minimum of 54 spaces available on the Wednesday night of the survey. In addition, the surveyed parking occupancy was 86% on both nights of the survey.

Automatic Traffic Count (ATC) Surveys

3.43 Traffic surveys were undertaken on South Worple Way and White Hart Lane in July 2021. The survey of South Worple Way comprised the installation of an Automatic Traffic Counter (ATC) on South Worple Way to record vehicle volumes. Table 3.4 below provides a summary of the South Worple Way traffic survey and the full survey data is attached at Appendix F.

	Eastbound	Westbound	Two-Way
Average Weekday AM Peak	27	16	43
Average Weekday PM Peak	28	22	50
Average Weekday Daily	198	268	466

Table 3.4: ATC Survey – South Worple Way

3.44 The survey of South Worple Way shows that the street is currently lightly traffic with an average of 43 two-way vehicle movements in the morning peak hour and 50 two-way vehicle movements in the evening peak hour.

3.45 The survey of White Hart Lane comprised the installation of an ATC on White Hart Lane to record vehicle volumes and speeds. Table 3.5 below provides a summary of the White Hart Lane traffic survey and the full survey data is attached at Appendix F.

	Northbound	Southbound	Two-Way
Average Weekday AM Peak	100	141	241
Average Weekday PM Peak	122	151	273
Average Weekday Daily	1,554	1,881	3,435

Table 3.5: ATC Survey – White Hart Lane

3.46 The survey of White Hart Lane shows that the street is current traffic flows on an average weekday are 241 two-way vehicle movements in the morning peak hour and 273 two-way vehicle movements in the evening peak hour.

Manual Turning Count Survey

3.47 In addition, to the ATC surveys of White Hart Lane and South Worple Way, a manual turning count survey of the South Worple Way junction with White Hart Lane was undertaken on Thursday 8th July 2021. The full results of the manual turning count survey are presented at Appendix G and a summary of the results is presented at Figure 3.1 and Figure 3.2, attached.

Level Crossing Down Time

3.48 A survey of the closure of the level crossing was undertaken on Thursday 8h July 2021. The survey recorded the number of instances that the level crossing barriers were lowered and the length of time the barrier was lowered. The survey covered the morning peak periods from 7:00am to 11:00am and the afternoon peak period from 15:00pm to 19:00pm.

3.49 The results of the survey are summarised in the Table 3.6 below and the full survey results are attached at Appendix H.

Time Period	Barrier Closures	Average Time	Total Time
7am to 8am	6	5 min 4 sec	30 min 26 sec
8am to 9am	8	4 min 57 sec	39 min 40 sec
9am to 10am	10	3 min 19 sec	33 min 7 sec
10am to 11am	8	2 min 59 sec	23 min 54 sec
3pm to 4pm	9	3 min 14 sec	29 min 5 sec
4pm to 5pm	8	4 min 42 sec	37 min 40 sec
5pm to 6pm	9	4 min 9 sec	37 min 21 sec
6pm to 7pm	10	3 min 12 sec	32 min 3 sec

Table 3.6: Level Crossing Barrier Survey

3.50 The results of the survey show that on average the barrier is lowered 8 to 9 times per hour and at most 10 times per hour. The barrier was lowered on average for 32 minutes and 54 seconds per hour, with longest recorded period being for 39 minutes and 40 seconds during an hour.

Level Crossing Pedestrians

3.51 A survey of the number of pedestrians crossing the railway line at the White Hart Lane level crossing and footbridge was undertaken on Thursday 8h July 2021. The survey recorded the number of pedestrians that crossed the level crossing at track level and the number of pedestrians that crossed using the footbridge, when the barrier was closed. Table 3.7 below provides a summary of the results and the count of pedestrians is included within the manual survey count presented at Appendix G and the barrier survey presented at Appendix H.

	7:00am to 11:00am		15:00pm to 19:00pm	
	Track Level	Footbridge	Track Level	Footbridge
Northbound	197	147	274	143
Southbound	256	96	316	193
Two-Way	453	243	590	336

Table 3.7: Pedestrian Survey – Level Crossing

3.52 The results of the survey showed that during the morning 4-hour survey period, a total of 696 pedestrians crossed the level crossing, with 453 crossing at track level and 243 crossing via the footbridge. During the evening 4-hour survey period, a total of 926 pedestrians crossed the level crossing, with 590 crossing at track level and 336 crossing via the footbridge.

3.53 During the morning survey period an average of 174 pedestrians an hour crossed the level crossing via either the footbridge or at track level. During the evening survey period an average of 232 pedestrians an hour crossed the level crossing via either the footbridge or at track level.

Hammersmith Bridge

3.54 Hammersmith Bridge has been closed to vehicular traffic since April 2019 and the closure was extended to pedestrians and cyclists in August 2020 although the bridge was recently reopened to pedestrians and cyclist on 17 July 2021, along with being reopened to river traffic passing beneath the bridge. The bridge currently remains closed to vehicular traffic, including buses.

3.55 It is understood that TfL plans to commence a ferry service which will operate across the river in the vicinity of the bridge. Based on information provided on the TfL website the ferry service would operate from 06:00am to 22:00pm daily and will come into operation in later summer 2021.

3.56 The closure of the Hammersmith Bridge has affected local bus services, in particular the 33, 209 and 419 bus services which previously crossed the bridge to connect to Hammersmith.

- The 33 and 209 bus services now terminate at the southern side of Hammersmith bridge;
- The 419 bus service has been extended such that it routes from Richmond via Mortlake to Barnes and then is extended from Barnes Pond to Roehampton, Bessborough Road; and,
- A new 533 service has been introduced which connects from the south side of the Hammersmith bridge via Mortlake, crossing the Chiswick Bridge and connecting through Chiswick to Hammersmith.

3.57 In order to consider the effect of the Hammersmith Bridge closure on traffic flows in the vicinity of the site, reference has been made to traffic data provided by TfL for a traffic counter on the A205 Upper Richmond Road, a short distance east of the Priest Bridge junction.

3.58 TfL has provided daily traffic data for the A205 Upper Richmond Road including the month of May 2019, after the closure of Hammersmith Bridge. In addition, data has been provided for May 2018, the corresponding month the year prior to the closure of the bridge. The traffic survey data is presented at Appendix I and Table 3.8 below summaries the average daily traffic flow on Upper Richmond Road in May 2018 and May 2019

	May 2018	May 2019	Change
Eastbound	12025	13499	+1,475
Westbound	11771	11607	-164
Total	23796	25107	+1,311
		Total Percentage Change	+5.5%

Table 3.8: Upper Richmond Road – Average Daily Traffic Flow

3.59 The traffic data indicates that between May 2018 and May 2019 there was a 5.5% increase in daily traffic movements of Upper Richmond Road. The increase in traffic movements on this section of carriageway could be as a result of the closure of Hammersmith Bridge.

3.60 A planning application has been submitted for development proposals at the former Stag Brewery site, this application is considered further at Paragraph 3.7 below. As part of that application a Technical Note dated January 2021 was submitted by Stantec assessing the change in traffic flows at the A205/ A316 Chalkers Corner junction. A copy of that Technical Note is available from the LBRuT planning portal associated with that planning application.

3.61 In summary that Technical Note concluded that, following the closure of the Hammersmith Bridge, there had been a reduction in traffic movements along Lower Richmond Road, but a slight increase in traffic movements on the A316 Clifford Road. Overall, the Technical Note concluded that the change in traffic movements at the Chalkers Corner junction, following the closure of the Hammersmith Bridge, was an increase of 1.4% in the morning peak hour and 1.3% in the evening peak hour.

3.62 Based on the survey data available it is concluded that the closure of the Hammersmith Bridge has not had a significant effect on traffic movements on streets in the vicinity of the current application site. The Hammersmith Bridge has recently reopened to pedestrian and cycle traffic and it is understood that the closure of the bridge to vehicles will be temporary and that LBRuT and TfL are developing proposals for the full reopening of the bridge for vehicles. On that basis it is concluded that no further consideration of the closure of the Hammersmith Bridge is required as part of the current planning application.

Committed/ Planned Development

3.63 We are aware of nearby committed and planned developments in the vicinity of the site and have reviewed documentation supporting those applications to consider the effect on the highway network local to the current application site

Stag Brewery

3.64 A series of planning applications were submitted to LBRuT in February 2018 (Planning Ref: 18/0547/FUL, 18/0548/Ful and 18/0549/FUL) for redevelopment of the former Stag Brewery site on Lower Richmond Road in Mortlake. Those applications were refused by the Greater London Authority on the 27 July 2021. Subsequent applications have now been submitted to LBRuT in March 2022 (Planning Ref: 22/0900/OUT and 22/0902/FUL) in relation to development proposals at the Stag Brewery site.

3.65 The proposals at the Stag Brewery site comprised the redevelopment of the site to provide seek to up to 1,250 residential dwellings, along with flexible commercial uses, office space, the, public house, cinema, and a new school.

3.66 The Transport Assessment supporting the redevelopment of the Stag Brewery site includes an analysis of the vehicle trips associated with the development and states that the approach has been agreed with TfL. The Transport Assessment supporting the Stag Brewery application assesses the distribution of vehicle trips on the highway network local to the site and concludes that the majority of vehicle trips associated with that development would either route along Lower Richmond Road, towards Chalkers Corner or along Mortlake High Street and it is noted that the application includes a package of highways mitigation works at the Chalkers Corner junction. The assessment supporting the Stag Brewery development concludes that the development will result in an 17 additional vehicle trips on White Hart Lane during the morning peak hour (9 southbound and 8 northbound) and 9 additional vehicle trips on White Hart Lane during the evening peak hour (9 northbound and 0 southbound).

3.67 The scope of the Transport Assessment supporting the redevelopment of the Stag Brewery development does not extend to cover South Worple Way. However, given that the assessment showed a negligible change in trips on White Hart Lane, it is evident that that development will not have a material effect on traffic conditions adjacent to the Barnes Hospital site. On the basis that the Stag Brewery application would not have a material effect on the highway adjacent to the application site, it is concluded that no

further consideration of the Stag Brewery redevelopment is considered necessary as part of this assessment.

Homebase Site

3.68 A planning application has been submitted to LBRuT in February 2019 (Planning Ref:19/0510/FUL) for redevelopment of the Homebase site on Manor Road. The Homebase site is located approximately 2.2km west of the current application site and the redevelopment proposals for the Homebase seek to provide 453 residential dwellings and ground floor commercial floorspace. The Homebase development would be car-free, with no on-site car parking other the 14 disabled accessible car parking spaces. The application is yet to be determined.

3.69 The Transport Assessment supporting the application at the Homebase site concludes that the development will result in 62 two-way car trips during the morning peak hour and 56 two-way car trips during the evening peak hour. However, given the existing use of that site, the Transport Assessment supporting that application also concludes that the redevelopment of the Homebase application will result in a reduction in 17 vehicle movements during the morning peak hour and 51 vehicle movements in the evening peak hour.

3.70 The scope of the Transport Assessment supporting the redevelopment of the Homebase site does not extend to cover South Worple Way or other streets in close proximity to the current application site. However, given the distance from the current site, the car-free nature of the Homebase redevelopment and that the Transport Assessment supporting that application concluded that the redevelopment will result in a reduction in vehicle trips in both morning and evening peak periods, it is evident that that development will not have a material effect on traffic conditions local to the Barnes Hospital site. On that basis no further consideration of the Homebase redevelopment is considered necessary as part of this assessment.

Summary

3.71 The above review demonstrates that, in accordance with local and national planning policy, the site is situated in a highly accessible location with a range of sustainable transport choices in the vicinity of the site.

3.72 The pedestrian and cycle facilities in the vicinity of the site provide the opportunity for future residents, staff and visitors to undertake journeys by foot or cycle and provide access to a range of destinations including local residential areas and employment opportunities. Furthermore, the pedestrian and cycle facilities provide a connection to the public transport infrastructure in the vicinity of the site,

3.73 The site achieves a PTAL of 4 which highlights good accessibility to public transport opportunities. There a number of bus services and train stations in the vicinity of the site providing a choice of public transport routes providing access to a range of destinations.

3.74 A review of personal injury incident records for the local road network has not indicated any pattern of incidents or inherent road safety issues in the local vicinity of the site. On that basis it is concluded that there are no inherent road safety issues that require further analysis or assessment.

3.75 In order to ascertain the existing conditions on the local highway network a series of traffic, parking and pedestrian surveys have been undertaken including:

- Parking Surveys;
- Automatic Traffic Count Surveys of South Worple Way and White Hart Lane;
- Manual Turning Count Survey of South Worple Way/ White Hart Lane junction;
- Level Crossing Down Time Survey; and,

- Level Crossing Pedestrian Crossing Survey

3.76 The Hammersmith Bridge has recently reopened to pedestrian and cycle traffic and it is understood that the closure of the bridge to vehicles will be temporary and that LBRuT and TfL are developing proposals for the reopening of the bridge. Traffic data from The A205 Upper Richmond Road and the Chalkers junction has indicated that the closure has not resulted in a significant change in traffic movements on the local road network. On that basis it is concluded that no further consideration of the closure of the Hammersmith Bridge is required as part of the current planning application.

3.77 Consideration has been given to nearby planned/ consented developments including the Stag brewery and Homebase developments and it has been concluded that these developments will not have a material effect on traffic conditions local to the Barnes Hospital site and no further consideration of these developments is considered necessary as part of this assessment.

4.0 Development Proposals

Existing Site Use

4.1 The entirety of the Barnes Hospital campus currently provides circa 6,950 square metres of C2 medical use floor space. The current application site includes 4,158 square metres of C2 medical use floorspace, all of which is currently vacant.

4.2 There are currently three vehicle accesses to the site from South Worple Way. The eastern access operates as an inbound only entrance, the central access operates as an outbound only exit and the western access to the site is currently not in use.

Consented Development

4.3 Planning permission was granted in September 2020 (Planning Ref: 18/3642/OUT) for development proposals at the Barnes Hospital site comprising:

"Outline planning permission for the demolition and comprehensive redevelopment (phased development) of land at Barnes Hospital to provide a mixed use development comprising a health centre (Use Class D1), a Special Educational Needs (SEN) School (Use Class D1), up to 80 new build residential units (Use class C3), the conversion of two of the retained BTMs for use for up 3no. residential units (Use Class C3), the conversion of one BTM for medical use (Use Class D1), car parking, landscaping and associated works. All matters reserved save for the full details submitted in relation to access points at the site boundaries"

4.4 The consented development proposals included changes to the existing vehicle access arrangements to the site with the western access to the site providing two-way vehicle access to the residential element of the development, the eastern access to the site providing two-way vehicle access to the health centre and SEN school elements of the development. The existing central vehicle access to the site would be closed and operate as a pedestrian, cycle and emergency vehicle access only.

4.5 The consented development proposals provide 44 car parking spaces for the proposed residential use, 26 car parking spaces for the health centre use and 11 parking spaces for the SEN school.

Current Planning Application

4.6 The current planning application relates solely to the residential element of the previously consented development proposals at the Barnes Hospital site. No changes to the health centre or SEN school element of the consented development are proposed as part of this application and those elements of the site fall outside the current application boundary.

4.7 The current residential development proposals comprise the redevelopment of the site to provide 109 residential units comprising:

- 1 x Studio Unit;
- 41 x 1-bed flats;
- 49 x 2-bed flats; and
- 18 x 3-bed flats.

4.8 The proposed site layout plan is attached at Appendix J.

Access

4.9 As part of the consented outline application, the access arrangements to site where amended such that western vehicle access to the site will provide access to the residential element of the site, the eastern

access to the site would provide access to the SEN School/Health Centre elements of the site and the central access to the site would be closed to vehicles and retained as a pedestrian, cycle and emergency vehicle access only.

4.10 The Health Centre and SEN School elements of the consented outline development do not form part of the current planning application and, as such, no changes to the consented access arrangements to the Health Centre/SEN School element of the consented scheme are proposed.

4.11 For the current planning application, no changes are proposed to the pedestrian, cycle or car access arrangements to the site in comparison with those consented as part of the outline application. The western access to the site will provide the sole vehicle entrance to the residential development and provide access to surface and undercroft car parking.

4.12 Following feedback from Highways Officers at LBRuT it has been agreed that the central access be amended such that servicing and delivery vehicles can reverse into the access and stop within the site. The access will be closed to other vehicles but will also provide a pedestrian, cycle and emergency vehicle access to the site. This is detailed on the proposed site layout plan is attached at Appendix J.

Car Parking

4.13 A total of 50 car parking spaces including 11 disabled accessible parking spaces will be provided for the residential dwellings as part of the proposed development.

4.14 The London Plan 2021 provides maximum car parking for residential development in London with reference to the size of dwellings and the PTAL rating of the site. As demonstrated in Section 2 of this report, the proposed development site achieves a PTAL of 4. The maximum car parking standards within the London Plan 2021 for residential units located within outer London with a PTAL rating of 4, are presented in Table 4.1 below.

Unit	Maximum Car Parking Standards
1-2 bed unit	0.5-0.75 spaces per unit
3+ bed unit	0.5-0.75 spaces per unit

Table 4.1: Publication London Plan Residential Parking Standards

4.15 Based on the London Plan maximum parking standards the proposed development of 109 dwellings could provide a maximum of between 55 parking spaces (0.5 spaces per unit) and 82 car parking spaces (0.75 spaces per unit). It is highlighted that the London Plan car parking standards are maximum car parking standards and parking provision below the maximum standards therefore accords with the standards.

4.16 The proposed provision of 50 car parking spaces equates to a ratio of 0.46 spaces per dwelling and is within the maximum parking standards set out in the London Plan 2021. On that basis it is concluded that the proposed car parking provision accords with the London Plan 2021 and is appropriate to meet the needs of the development.

4.17 Of the total of 50 car parking spaces, 11 spaces will be disabled accessible. This is equivalent to 10% of the overall number of residential units and is in accordance with London Plan requirements.

4.18 In accordance with London Plan standards, 11 parking bays (22%) will include active electric vehicle (EV) charging facilities. All remaining bays will include passive EV charging facilities such that they can easily be adapted to include EV charging facilities in future.

Cycle Parking

4.19 The London Plan 2021 parking standards advises the provision of

- 1 space per studio or 1-bedroom 1-person dwelling,

- 1.5 spaces per 2-person 1-bedroom dwelling,
- 2 spaces per all other dwellings; and
- 1 space per 40 dwellings stay for visitors

4.20 Based on the current schedule of development a minimum of 197 long stay cycle parking spaces, including 8 larger spaces for cargo bikes and adapted cycles, will be provided for residents, in accordance with London Plan 2021 guidance. In addition, a further 8 cycle parking spaces (4 Sheffield style stands) are provided externally within the landscape for visitors.

4.21 Cycle parking associated with Blocks A and B is provided at undercroft level and will be accessed via either lifts or cycle wheeling ramp alongside the vehicle access ramp. Cycle parking associated with Block C will be provided at the ground floor of that block.

Parking Survey

4.22 The pre-application response from LBRuT dated 8 December 2020 requested that a parking survey of the streets in the vicinity of the site has been undertaken. The scope and timing of that parking survey was agreed with Officers at LBRuT prior to undertaking the survey and the survey was undertaken on the 2 & 3 February 2021 in accordance with the LBRuT residential parking survey methodology. The full results of the parking survey are provided at Appendix E and a summary of the results of the survey are presented at Table 4.2 below.

Unit	Tuesday 2nd February	Wednesday 3rd February
Occupied spaces	331	330
Available spaces	57	54
Parking occupancy	86%	86%

Table 4.2 Parking Survey

4.23 The results of the parking survey demonstrate that there was a minimum of 57 on-street parking spaces available within the scope of the survey during the Tuesday night survey and a minimum of 54 spaces available on the Wednesday night of the survey. In addition, the surveyed parking occupancy was 86% on both nights of the survey.

4.24 The LBRuT Transport Supplementary Planning Document (SPD) (June 2020) states that "*Where 85% or more local street parking spaces are occupied at night, it may be necessary to exclude any permitted development from eligibility for street parking permits*"

4.25 The consented development scheme at the site includes a Section 106 obligation for a "permit-free" agreement whereby future occupiers of the development will not be eligible to apply for parking permits within the local controlled parking zones (CPZ). It is acknowledged that the current planning application will be subject to a comparable Section 106 obligation restricting future occupiers of the development from applying for parking permits within the local controlled parking zones (CPZ).

4.26 On the basis that future residents of the development will not be able to apply for parking permits within the local CPZ, residents will be unable to park on local controlled streets and the proposed development is not expected to result in an increase in on-street parking demand or any impact on on-street parking conditions. To this extent the proposed development accords with the LBRUT Transport SPD and will not result in any material effect on local parking conditions within the vicinity of the site.

4.27 Furthermore, the consented development proposals include a Section 106 obligation for a financial contribution to a review of the CPZ restrictions in the vicinity of the site. It is acknowledged that the current planning application will be subject to a comparable Section 106 financial contributions towards a review of CPZ restrictions in the vicinity of the site.

4.28 On the basis of the results of the parking survey and previously agreed planning obligations, it is concluded that the current development proposals will not result in a material effect on local parking conditions.

Deliveries and Servicing

4.29 With regard to refuse collection, there is a bin store located in the north western corner of the site adjacent to the site access road. Building management would be responsible for the transfer of waste bins from individual bin stores within blocks to the main bin store in advance of the time of collection and returning the bins to stores after collection. The refuse vehicle will reverse from South Worple Way into the site and stop on the site access road to collect waste from the refuse store, before leaving the site in forward gear. Swept path analysis is presented at Appendix L, demonstrating that the LB Richmond specification refuse vehicle can appropriate manoeuvre into and out of the site.

4.30 As previously detailed, it is proposed that the existing central access to the site will be arranged such that servicing and delivery vehicles associated with the Proposed Development can reverse into the access and stop within the site. The proposed layout of the access is detailed at Drawing 2101073-01, attached at Appendix K.

4.31 Swept path analysis is presented at Appendix L, demonstrating that expected delivery and servicing vehicles can manoeuvre into the loading opportunity on site to undertake deliveries and servicing off the public highway and without affecting the free-flow of vehicle movements on South Worple Way.

4.32 Consideration of the expected number of delivery and servicing movements associated with the proposed development is presented in Section 5 of this report.

Construction

4.33 Consideration has been given to construction activity associated with the construction of the proposed development, in particular the access arrangements for construction vehicles to the site.

4.34 A Framework Construction Traffic Management Plan (CTMP) has been prepared and is submitted alongside the planning application, under separate cover.

4.35 The purpose of this CTMP is to minimise the effect of construction work on local residents and the immediate highway network. The CTMP details how construction vehicles will access the site and details a range of measures that will be implemented to manage construction activity at the site.

Summary

4.36 Planning consent was granted in September 2019 for development proposals at the site comprising 83 residential dwellings, a health centre and Special Education Need (SEN) School along with associated landscaping and car parking (Planning Ref: 18/3642/OUT).

4.37 The current planning application relates solely to the residential element of the previously consented development proposals at the Barnes Hospital site. The current planning application relates to amended proposals for the residential element of the consented development. No changes to the health centre or SEN school element of the consented development are proposed as part of this application and those elements of the site fall outside the current application boundary.

4.38 The current residential development proposals comprise the redevelopment of the site to provide 109 residential units comprising 1 x Studio Unit, 41 x 1-bed flats, 49 x 2-bed flats and 18 x 3-bed flats.

4.39 For the current planning application, no changes are proposed to the pedestrian, cycle or vehicle access arrangements to the site in comparison with those consented as part of the outline application. The western access to the site will provide the sole vehicle entrance to the residential development and provide access to surface and undercroft car parking. The central access will be amended such that

servicing and delivery vehicles can reverse into the access and stop within the site. The access will be closed to other vehicles but will provide a pedestrian, cycle and emergency vehicle access to the site

4.40 A total of 50 car parking spaces including 11 disabled accessible car parking will be provided for the residential dwellings. The proposed parking provision accords with London Plan 2021 guidance, is appropriate to meets the needs of the development and will not result in any overspill from the development onto the streets in the vicinity of the site. It is also noted that the proposed that development would be subject to a permit free agreement, such that future residents of the development are not eligible to apply for a parking permit within the local controlled parking zone.

4.41 Cycle parking is provided in accordance with London Plan 2021 guidance with a mixture of long stay resident parking spaces and short stay visitor spaces.

4.42 Refuse collection will be undertaken on site and swept path analysis has been undertaken to demonstrate that a refuse vehicle can manoeuvre appropriately to the refuse collection location. The existing central access to the site will be arranged such that servicing and delivery vehicles associated with the Proposed Development can reverse into the access and stop within the site. Swept path analysis has been undertaken demonstrating that delivery and servicing vehicles, including refuse collection vehicles, can manoeuvre into the site to undertake deliveries and servicing off the public highway and without affecting the free-flow of vehicle movements on South Worple Way.

5.0 Effect of Development

Overview

5.1 The section of the report considers the likely person and vehicle trips associated with the existing and proposed site uses and the likely effect of those trips on the highway network local to the site.

Existing Site Use

5.2 The entirety of the Barnes Hospital campus currently provides circa 6,950 square metres of C2 medical use floor space. The current application site includes 4,158 square metres of C2 medical use floorspace, all of which is currently vacant.

5.3 The Transport Assessment supporting the consented planning application at the site included an analysis of the trip generation of the existing lawful use of the site. Table 5.1 below summaries the vehicle and person trips of the existing lawful use of the site as agreed as part of the consented planning application.

	Person Trips		Vehicle Trips	
	In	Out	In	Out
AM Peak 08:00-09:00	57	9	41	7
PM Peak 17:00-18:00	14	48	11	35

Table 5.1 Lawful Existing Use Trip Generation

5.4 The analysis presented in the approved Transport Assessment supporting the consented planning application demonstrated that the existing use of the site could attract 66 person trips in the morning peak hour and 62 person trips in the evening peak hour. In terms of vehicle trips the existing use of the site could attract 48 vehicle trips in the morning peak hour and 46 vehicle trips in the evening peak hour.

5.5 It is highlighted that the Planning Officers report to planning committee for the consented planning application states that "*the trip generation, in terms of total vehicle trips, for the existing use at full occupation is found to be 48 vehicle movements in the AM Peak and 46 vehicle movements in the PM Peak. The Council's Transport Officer raises no objection to this approach or outcome*."

Consented Development Proposals

5.6 The Transport Statement supporting the approved outline planning application included a trip generation analysis of the proposed residential development, health centre and SEN school elements of the proposed development with reference to trip rates derived from the TRICS database and a first principles approach. Tables 5.2 and 5.3 present the person and vehicle trip generation of the consented development proposals at the site for the weekday morning and evening peak hour, respectively.

	Person Trips		Vehicle Trips	
	In	Out	In	Out
Residential Use	11	49	2	11
Health Centre	37	8	12	3
SEN School	56	6	17	6
Total	104	63	31	20

Table 5.2 Consented Person and Vehicle Trips – AM Peak

	Person Trips		Vehicle Trips	
	In	Out	In	Out
Residential Use	33	18	8	4
Health Centre	19	39	6	11
SEN School	0	25	0	6
Total	52	82	14	21

Table 5.3 Consented Person and Vehicle Trips – PM Peak

5.7 The analysis presented in the approved Transport Assessment supporting the consented planning application demonstrated that the proposed use of the site could attract 167 person trips in the morning peak hour and 134 person trips in the evening peak hour. In terms of vehicle trips the consented use of the site could attract 51 vehicle trips in the morning peak hour and 35 vehicle trips in the evening peak hour.

5.8 The residential element of the consented scheme would attract 60 person trips in the morning peak hour and 51 person trips in the evening peak hour. In terms of vehicle trips the consented residential use would attract 13 vehicle trips in the morning peak hour and 12 vehicle trips in the evening peak hour.

5.9 It is highlighted that the vehicle trips associated with the residential element of the consented development equate to 25% of the overall consented development vehicle trip generation in the morning peak hour and 34% of the overall consented development vehicle trip generation in the evening peak hour

5.10 It is highlighted that the Planning Officers report to planning committee for the consented planning application states that "*the Council's Transport Officer raises no concerns with the trip generation analysis methodology or findings*"

Current Planning Application

5.11 In order to assess the person and vehicle trip attraction of the current development proposals, a trip generation analysis has been undertaken for the current residential development proposals.

5.12 As detailed above, the Transport Statement supporting the consented planning application included a trip generation analysis of the proposed residential development with reference to the TRICS database and those trip rates were agreed with Officers at LBRuT as part of the outline planning application.

5.13 It is considered that the residential trip rates agreed as part of the consented development are relevant in assessing the person and vehicle trips associated with the current application and will be used for the purpose of assessing the vehicle trips associated with the current proposals.

5.14 The Health Centre and SEN School consented as part of the outline planning application do not form part of the current planning application and therefore no further analysis of person or vehicle trips associated with that element of the consented scheme is considered necessary as part of the current planning application.

5.15 Table 5.4 below summarises the residential person trip rates presented in the Transport Statement supporting the approved outline planning application.

Time Period	Person Trip Rate (per 100sqm)		
	In	Out	Total
AM Peak 0800-0900	0.129	0.585	0.714
PM Peak 1700-1800	0.394	0.222	0.616

Table 5.4 Trip rates 'Agreed' From the 2018 Transport Statement.

5.16 The person trip rates presented in the Transport Statement supporting the approved outline planning application have been applied to the consented 83 residential unit scheme and the currently proposed 109 residential unit scheme and this is presented at Table 5.4 below. In addition, Table 5.2 presents the net change in person trips between the consented and current development proposals.

Time Period	Total Person Trips Rate		
	In	Out	Total
Consented 83 Units			
AM Peak 0800-0900	11	49	60
PM Peak 1700-1800	33	18	51
Proposed 109 Units			
AM PEAK 0800-0900	14	64	78
PM PEAK 1700-1800	43	24	67
Net Change			
AM PEAK 0800-0900	+3	+15	+19
PM PEAK 1700-1800	+10	+6	+16

Table 5.4: Person Trips – Consented and Proposed Use and Net Change

5.17 In total the proposed 109 residential dwellings are expected to result in 78 two-way person trips during the morning peak hour and 67 two-way person trips during the evening peak. Given the accessible location of the site and the proposed car parking provision, it is considered that the majority of trips will be undertaken by sustainable modes of travel.

5.18 In comparison with the consented development proposals at the site, the analysis demonstrates that the current development proposals will result in an additional 19 two-way person trips during the morning peak hour and 16 two-way person trips during the evening peak. Given the accessible location of the site and the proposed car parking provision, it is considered that the majority of additional trips will be undertaken by sustainable modes of travel.

Multi-Model Trips

5.19 In order to establish how the person trips will be distributed across different mode of travels, the modal share data for the output area (Richmond upon Thames 003) based on 2011 Census data (as presented in Table 3.1) has been applied to the person trips outlined in Table 5.4.

5.20 It is noted that this mode share data used to assessing the likely number of car drivers is based on census data for existing residents in the local area and makes no consideration of the level of car parking

at proposed development, the permit free arrangements, proposed level of cycle parking or sustainable travel initiatives such as the Travel Plan. Given the sustainable travel initiatives provided as part of the current development proposals it is evident that the car driver mode share utilised in the assessment provides a robust assessment of likely car diver mode share.

5.21 Table 5.5 summaries total multi-modal trips associated with the current residential development proposals for 109 dwellings.

Mode of Travel		AM Peak		PM Peak	
		In	Out	In	Out
Underground	15%	2	10	7	4
Rail	30%	4	20	13	7
Bus	11%	2	7	5	3
Car/van driver	23%	3	15	10	6
Car/van passenger	1%	0	1	0	0
Taxi	0%	0	0	0	0
Motorcycle	2%	0	1	1	0
Pedal Cycle	10%	2	6	4	2
On foot	8%	1	5	3	2
TOTAL	100%	14	65	43	26

Table 5.5: Total Multi Modal Trips – 109 Dwellings

5.22 The analysis presented at Table 5.5 demonstrates that the majority of person trips associated with proposed development will be undertaken by sustainable modes of travel and, in particular, by public transport.

5.23 The analysis demonstrates that then proposed 109 residential dwellings will result in 18 two-way vehicle movements in the morning peak hour and 16 two-way vehicle movements in the evening peak hour.

Comparison with Consented Development Proposals

5.24 Table 5.6 summaries the additional multi-modal trips associated with the current residential development proposal in comparison with the consented use of at the site.

		In	Out	In	Out
Underground	15%	1	2	2	1
Rail	30%	1	5	3	2
Bus	11%	0	2	1	1
Car/van driver	23%	1	3	2	1
Car/van passenger	1%	0	0	0	0
Taxi	0%	0	0	0	0
Motorcycle	2%	0	0	0	0
Pedal Cycle	10%	0	2	1	1
On foot	8%	0	1	1	1
TOTAL	100%	+3	+15	+10	+6

Table 5.6: Net Change in Person Trips with Consented Application

5.25 The analysis presented at Table 5.6 demonstrates that the majority of additional person trips associated with proposed development in comparison with the consented planning application will be undertaken by sustainable modes of travel and, in particular, by public transport.

5.26 The analysis demonstrates that in comparison with the consented planning application the current development proposals will result in an additional 4 vehicle movements in the morning peak hour and 3 vehicle movements in the evening peak hour. This is equivalent to one additional vehicle movement every 15 minutes in the morning peak hour and one additional vehicle movement every 20 minutes and evening peak hour.

5.27 It is evident that the current development proposals will not result in a material change in person or vehicle trips in comparison with the consented development proposals. On that basis the proposed development will not result in a material effect on the operation of the highway network local to the site and no further assessment of person or vehicle trips is considered necessary as part of this planning application.

Servicing and Deliveries

5.28 In order to assess the likely servicing and delivery movements associated with the proposed development reference has been made to a sample of sites from the TRICS database. A sample of sites from the TRICS category "Private Flats' within Greater London have been utilised. The TRICS output files are attached at Appendix M and show that sample sites had an average servicing trip rate of 0.131 servicing trips per dwelling per bay.

5.29 Based on the sample of TRICS sites and the proposed development of 109 dwellings would be expected to attract 14 servicing vehicles per day.

5.30 It is highlighted that a number of the servicing and delivery movements associated with the site, such as refuse collection and post deliveries will be undertaken as part of existing refuse collection and post deliveries in the local area and to this extent will not result in an additional servicing movement on the local road network. To this extent the estimation that the Proposed Development will result in an additional 14 servicing vehicles per day is a robust estimate.

Summary

5.31 The analysis has demonstrated that the development will not result in a material change in vehicle trips associated with the site in comparison with either the existing lawful use of the site or the consented use of the site. On that basis the development will not have a material effect on the highway network local to the site.

5.32 Given the accessible location of the site, any additional person trips will be distributed across a variety of routes and sustainable transport opportunities including rail, bus, cycling and walking. On that basis, it is evident that the change in total person movements associated with the proposed development will not result in a material effect on the operation of the highway and transport networks in the vicinity of the site. No further assessment of the effect of movements associated with the development proposals is considered necessary.

6.0 Summary and Conclusions

6.1 Motion has been appointed by Star Land Realty UK Ltd ('the Applicant') to prepare this Transport Statement in relation to development proposals at the Barnes Hospital site within the London Borough of Richmond upon Thames (LBRuT).

6.2 The application site is situated within the Barnes area of LBRuT and is bound to the north by South Worple Way, to the east by South Worple Avenue, to the west by Old Mortlake Burial Ground and fronts residential properties to the south.

6.3 On 14 September 2020, Outline Planning Permission ('OPP') was granted for the redevelopment of the whole of Barnes Hospital campus (Planning Ref: 18/3642/OUT), which comprised three development plots; (1) the residential plot, (2) the Specials Educational Needs (SEN) School and (3) the health centre.

6.4 Whilst all three parts are still being delivered, it is now proposed that these will be brought forward on an individual site basis rather than through on outline permission and subsequent reserved matters this planning application therefore relates only to the residential plot of the wider campus.

6.5 No changes are proposed to the Health Centre/ SEN elements of the site as part of the current proposals. The current planning application comprises:

"Demolition of existing structures and redevelopment of site including construction of three new buildings comprising residential units of mixed tenure (Use Class C3), conversion of two existing buildings for residential use (Use Class C3), car and cycle parking, landscaping and associated works."

6.6 The proposed development will provide 109 residential dwellings, comprising 1 studio unit, 41 x 1-bedroom units, 49 x 2-bedroom units and 18 x 3-bedroom units. The proposed development will be served by 50 car parking spaces including 11 disabled accessible parking spaces.

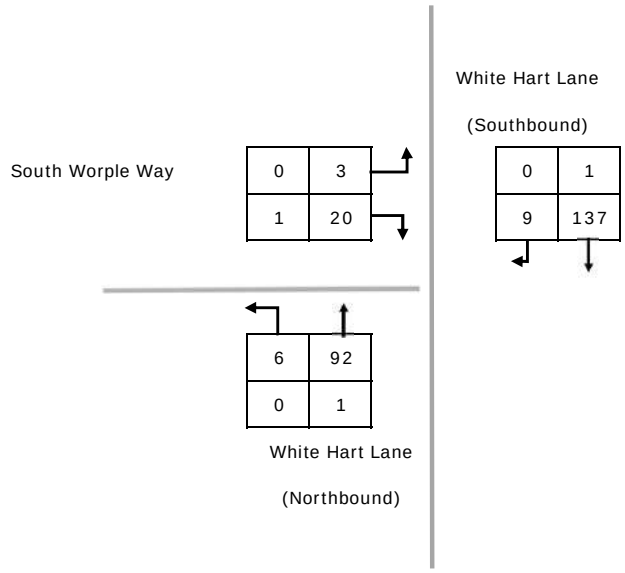
6.7 This Transport Statement has demonstrated that:

- The site is located in a sustainable location that provides convenient access to the wider area and public transport opportunities;
- Vehicle access to the proposed residential dwellings will be via the existing western access. The existing central access will be arranged such that servicing and delivery vehicles can reverse into the site and stop within the site. This access will be closed to other vehicles but provide a pedestrian, cycle and emergency vehicle access to the site;
- A total of 50 car parking spaces including 11 disabled will be provided for the 109 residential units, equating to a ratio of 0.56 spaces per unit and accords with London Plan guidance.
- Electric vehicle charging facilities will be provided in accordance with London Plan guidance;
- Cycle parking for will be provided in accordance with London Plan minimum standards;
- Future residents will not be eligible to apply for parking permits within the local controlled parking zone;
- Refuse collection will be undertaken on site and swept path analysis has been undertaken to demonstrate that a refuse vehicle can manoeuvre appropriately to the refuse collection location;
- Deliveries and servicing will be undertaken on site with vehicles reversing into the site from South Worple Way. Swept path analysis has been undertaken demonstrating that expected delivery and servicing vehicles can manoeuvre appropriately and can stop on-site to undertake deliveries and servicing without affecting the free-flow of vehicle movements on South Worple Way;
- A Delivery and Servicing Management Plan has been prepared and is submitted alongside the planning application under separate cover;

- A Framework Construction Traffic Management Plan (CTMP) has been prepared and is submitted alongside the planning application, under separate cover. The CTMP, in particular, details how construction vehicles will access the site and measures that will be put in place to management construction activity at the site;
- A Framework Residential Travel Plan have been prepared and is submitted alongside the planning application under separate cover and encourages sustainable travel choices for future residents; and,
- An analysis of the likely trip attraction of the development has been undertaken and demonstrates that the development proposals would not result in a material increase in vehicle trips when compared to either the existing use on site or the consented development proposals at the site. It is anticipated that the majority additional person trips as a result of the proposals will be distributed across the sustainable transport opportunities within the vicinity of the site.

6.8 On the basis of the above, it is concluded that the proposals can be accommodated without detriment to the operation of the local transport networks. As such, it is concluded there is no reason why the proposals should be resisted on traffic or transportation grounds.

Figures

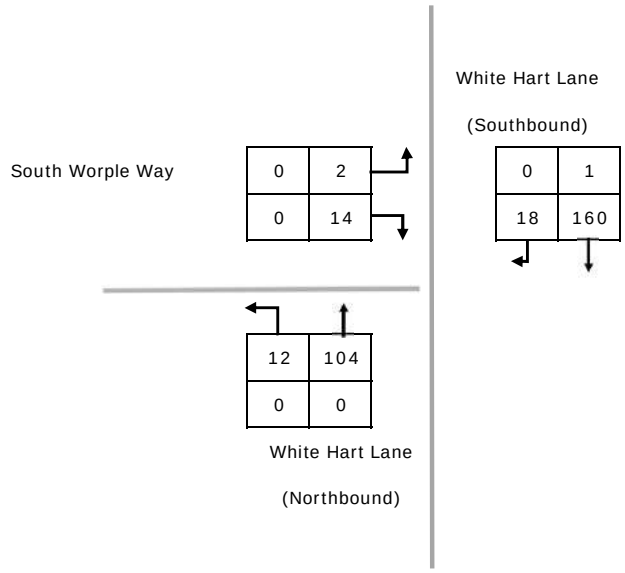


Observed Traffic Flows

Figure 3.3

AM Peak Hour (08:15-09:15)

Barnes Hospital, Barnes



Observed Traffic Flows

Figure 3.4

PM Peak Hour (16:30-17:30)

Barnes Hospital, Barnes

Appendix A

Manual PTAL Assessment

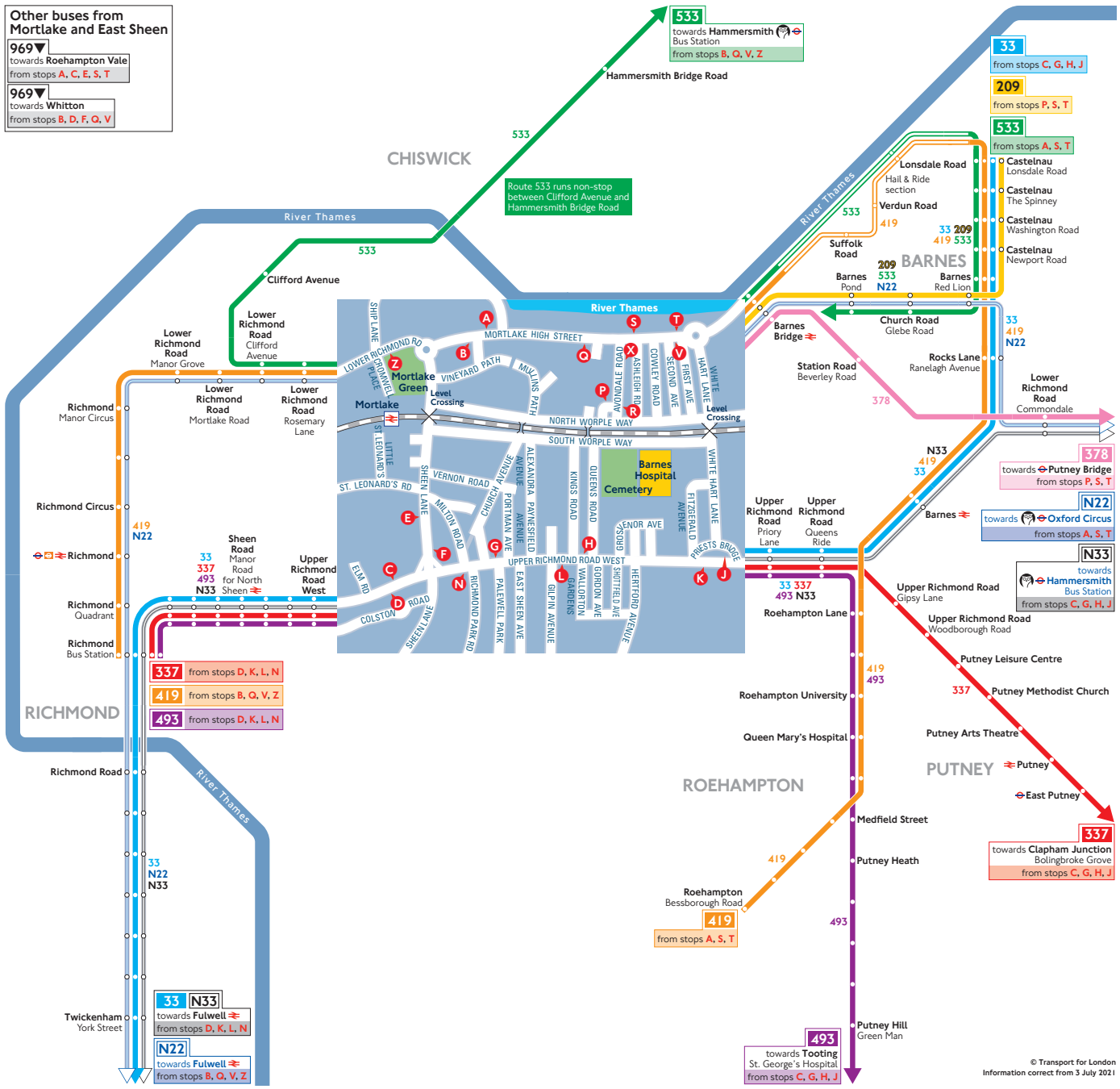
Manual PTAL Assessment

	service	distance	frequency/hr	walk time	swt	awt	tat	edf	weight	ai
bus	33	460	8.57	5.75	3.50	5.50	11.25	2.67	0.5	1.33
	337	460	5.22	5.75	5.75	7.75	13.50	2.22	1	2.22
	493	460	5.45	5.75	5.50	7.50	13.25	2.26	0.5	1.13
	209	400	13.33	5.00	2.25	4.25	9.25	3.24	0.5	1.62
	378	400	7.50	5.00	4.00	6.00	11.00	2.73	0.5	1.36
	419	600	12.00	7.50	2.50	4.50	12.00	2.50	0.5	1.25
	533	600	12	7.50	2.50	4.50	12.00	2.50	0.5	1.25
barnes bridge	bb-wey	800	2	10	1.00	1.75	11.75	2.55	0.5	1.28
	bb-wat	800	4	10	2.00	2.75	12.75	2.35	0.5	1.18
	bb-houn	800	2	10	1.00	1.75	11.75	2.55	1	2.55
mortlake	m-wat	800	4	10	2.00	2.75	12.75	2.35	0.5	1.18
	m-wim	800	2	10	1.00	1.75	11.75	2.55	0.5	1.28
	m-chi	800	2	10	1.00	1.75	11.75	2.55	0.5	1.28
								Total	18.91	PTAL 4

Appendix B

Local Bus Spider Map

Buses from Mortlake and East Sheen



How to use this map

- Find your destination on the map
- See the coloured lines on the map for the bus routes that go to your destination
- Check the map (at the end of each coloured line) for the bus stops to catch your bus from
- Use the central map to find the nearest bus stop for your route
- Look for the bus stop letters at the top of the stop (see example for stop **A** to the right)

Key

	Connections with London Underground
	Connections with London Overground
	Connections with National Rail
	Connections with London Trams
	Connections with river boats
	Tube station with 24-hour service Friday and Saturday nights
▼	Tuesdays and Fridays only

Ways to pay

Use contactless (card or device). It's the same fare as Oyster pay as you go and you don't need to top up

Download the free TfL app to top up or buy a ticket anytime, anywhere, or visit tfl.gov.uk/oyster. Alternatively, find your nearest Oyster Ticket Stop at tfl.gov.uk/ticketstopfinder or visit your nearest TfL station

The Hopper fare offers you unlimited pay as you go Bus and Tram journeys within one hour. Always use the same card or device to touch in

If you fail to show on demand a ticket, validated smartcard or other travel authority valid for the whole of your journey you may be liable for a penalty fare or prosecuted.

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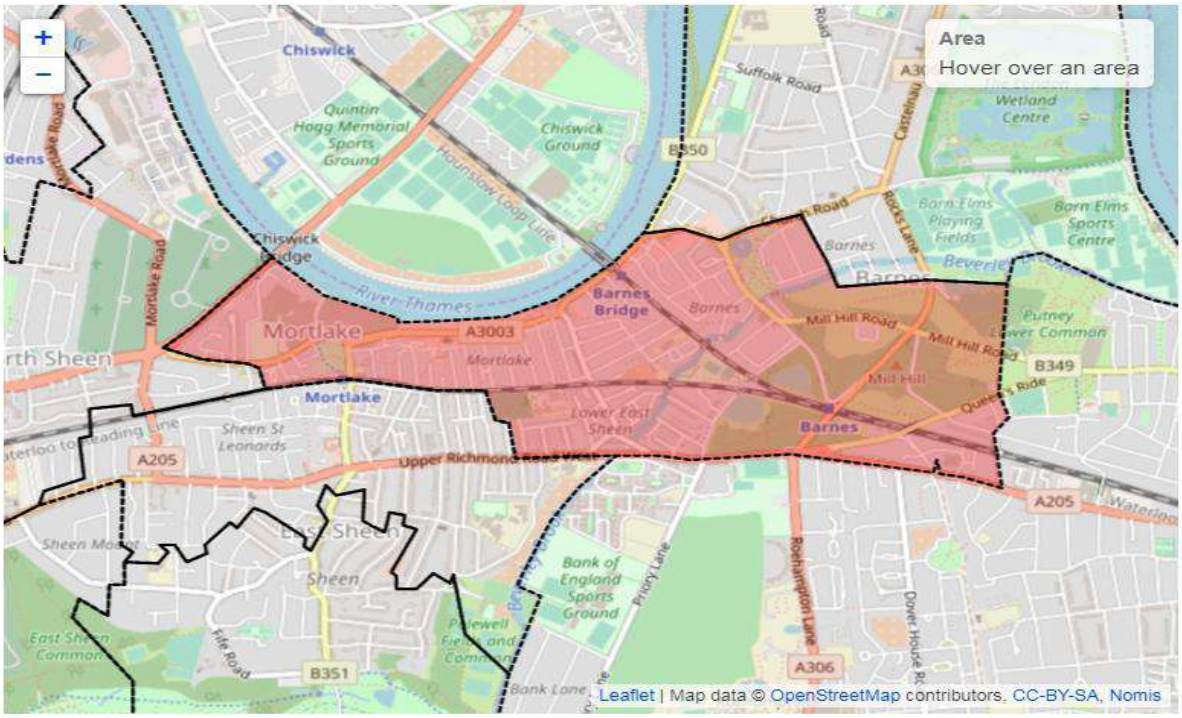
Appendix C

Census Data Journey to Work Data

QS701EW - Method of travel to work

population	All usual residents aged 16 to 74
units	Persons
date	2011
rural urban	Total

Method of Travel to Work	E02000786 : Richmond upon Thames 003	
All categories: Method of travel to work		5,415
Underground, metro, light r	839	15%
Train	1,617	30%
Bus, minibus or coach	578	11%
Taxi	22	0%
Motorcycle, scooter or mop	118	2%
Driving a car or van	1,244	23%
Passenger in a car or van	45	1%
Bicycle	518	10%
On foot	434	8%
	Total	100%



WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

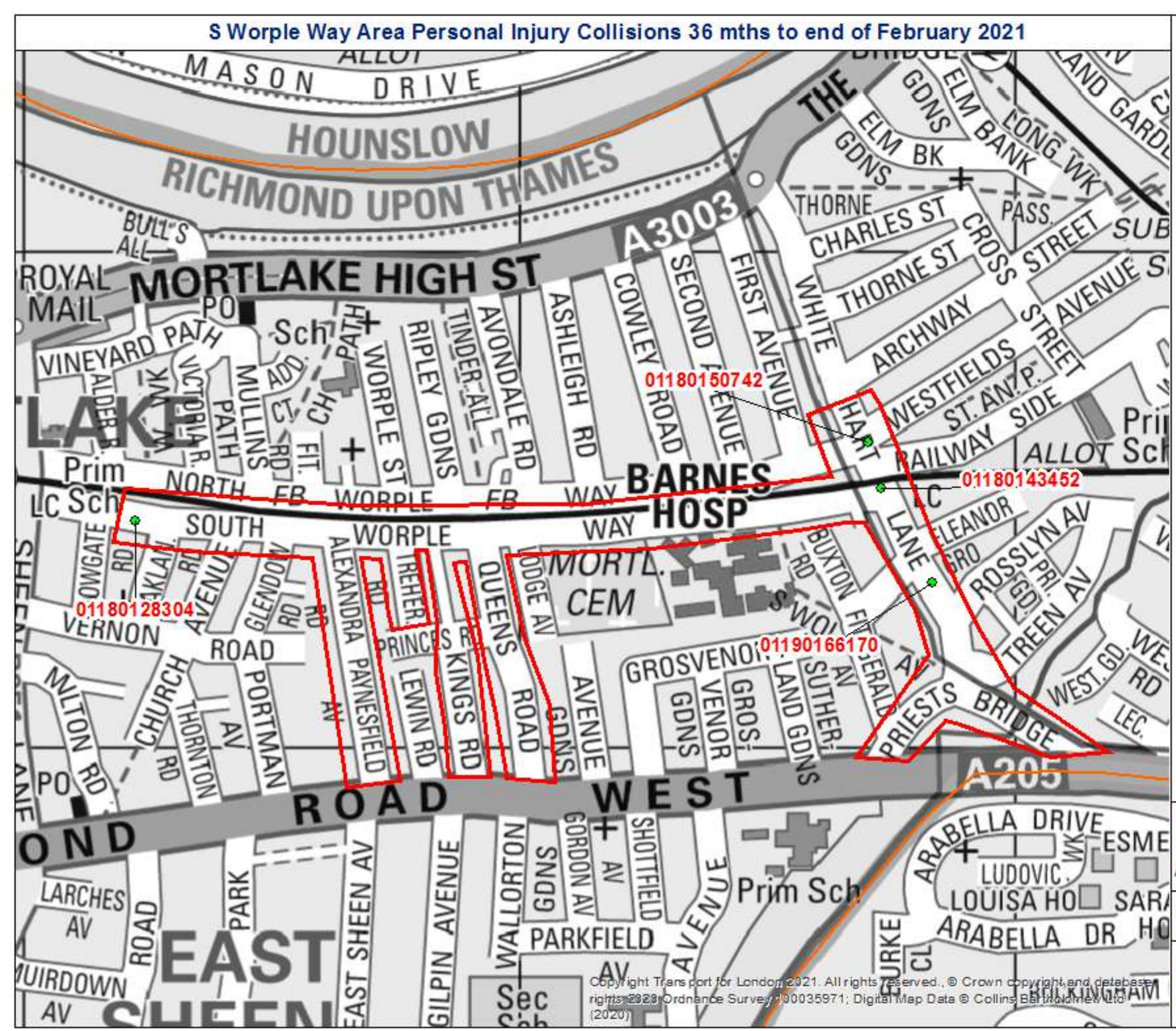
population	All usual residents aged 16 and over in employment the week before the census
units	Persons
date	2011
place of work	E02000786 : Richmond upon Thames 003 (2011 super output area - middle layer)

	usual residence			
Method of travel to work	**England and Wales**	**England**	**Wales**	
				2,506
Underground, metro, light rail or tram	243	243	0	10%
Train	443	443	0	18%
Bus, minibus or coach	276	276	0	11%
Taxi	3	3	0	0%
Motorcycle, scooter or moped	37	37	0	1%
Driving a car or van	915	914	1	37%
Passenger in a car or van	50	50	0	2%
Bicycle	187	187	0	7%
On foot	352	352	0	14%
		Total		100%

Appendix D

Traffic Accident Records

S Worple Way Area Personal Injury Collisions 36 mths to end of February 2021



Severity of collision

	Slight	Serious	Fatal
1	1 (4)	1 (0)	1 (0)
2	2 (0)	2 (0)	2 (0)
3	3 (0)	3 (0)	3 (0)
4	4 (0)	4 (0)	4 (0)
5	5 (0)	5 (0)	5 (0)

N

0 0.075 0.15 Km

PRINTED BY:
COLLSTATS 3 - TfL City Planning

DATE:
06/07/2021

S Worple Way Area Personal Injury Collisions 36 mths to end of February 2021

Summary of Collisions Selected		
Site Reference and Description	Date Period	Collision Count
S Worple Way Area GIS AREA B24 S Worple Way Area (P)	36MTS TO Feb/2021	4

The description of how the collision occurred and the contributory factors are the reporting officer's opinion at the time of reporting and may not be the result of extensive investigation. Note that self-reported collisions (introduced in September 2016) may have limited information. Descriptions have been automatically redacted to remove all personally identifiable information, but should you receive any in error please inform the Collisions Data Team as soon as practical. Self-reported collisions introduced in September 2016 may have limited information and tend to be lower in quality than police reports. The introduction of online self-reporting has made it easier for members of the public to report collisions to the police. There have been year on year increases in self-reports since this was introduced. This has contributed to an overall increase in the number of casualties reported on London's roads.

Pedestrian	2	50%	Fatal	0	0%
Wet	1	25%	Serious	0	0%
Dark	2	50%	Slight	4	100%

Please note that these figures represent the number of collisions that resulted in each type of casualty.

	1	2	3	4
Reference	01180150742	01190166170	01180143452	01180128304
Day	FRIDAY	SUNDAY	MONDAY	TUESDAY
Date	07/12/2018	24/02/2019	05/11/2018	21/08/2018
Time	18:30	11:50	07:40	20:50
Light Conds	DARK	LIGHT	LIGHT	DARK
Road Surface	DRY	DRY	WET/DAMP	DRY
Severity	SLIGHT	SLIGHT	SLIGHT	SLIGHT
Conflict				
Ped Location		0		0
Contributory (* denotes pre-2005)			103 V001 B	809 C001 B
Easting/Northing	521350 175810	521414 175668	521363 175764	520610 175730

S Worple Way Area Personal Injury Collisions 36 mths to end of February 2021

SUMMARY OF COLLISIONS SELECTED

SITE REFERENCE AND DESCRIPTION	DATE PERIOD	COLLISION COUNT
S WORPLE WAY AREA GIS AREA B24 S WORPLE WAY AREA (P)	36MTS TO FEB/2021	4

THE DESCRIPTION OF HOW THE COLLISION OCCURRED AND THE CONTRIBUTORY FACTORS ARE THE REPORTING OFFICER'S OPINION AT THE TIME OF REPORTING AND MAY NOT BE THE RESULT OF EXTENSIVE INVESTIGATION. NOTE THAT SELF-REPORTED COLLISIONS (INTRODUCED IN SEPTEMBER 2016) MAY HAVE LIMITED INFORMATION. DESCRIPTIONS HAVE BEEN AUTOMATICALLY REDACTED TO REMOVE ALL PERSONALLY IDENTIFIABLE INFORMATION, BUT SHOULD YOU RECEIVE ANY IN ERROR PLEASE INFORM THE COLLISIONS DATA TEAM AS SOON AS PRACTICAL. SELF-REPORTED COLLISIONS INTRODUCED IN SEPTEMBER 2016 MAY HAVE LIMITED INFORMATION AND TEND TO BE LOWER IN QUALITY THAN POLICE REPORTS. THE INTRODUCTION OF ONLINE SELF-REPORTING HAS MADE IT EASIER FOR MEMBERS OF THE PUBLIC TO REPORT COLLISIONS TO THE POLICE. THERE HAVE BEEN YEAR ON YEAR INCREASES IN SELF-REPORTS SINCE THIS WAS INTRODUCED. THIS HAS CONTRIBUTED TO AN OVERALL INCREASE IN THE NUMBER OF CASUALTIES REPORTED ON LONDON'S ROADS.

1

01180128304	TUE 21/08/2018 20:50		DARK	SOUTH WORPLE WAY 23M W OF J/W OAKLANDS RD			24 CELL 520500/175500	520610/175730
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(31 YRS - M - REDA)		SLIGHT	PEDESTRIAN	W BOUND	WALKING - BACK TO TRAFFIC	
VEHICLE	001 (000)	CAR BT - NEG		(42 YRS - M - REDACT)		MOVING OFF	(E TO W) FRONT HIT FIRST	J/P - UNKN
C001	B	809 (PEDESTRIAN WEARING DARK CLOTHING AT NIGHT)						

2

01180143452	MON 05/11/2018 07:40		LIGHT	WHITE HART LANE J/W SOUTH WORPLE WAY			24 LINK 189-204	521363/175764
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SINGLE CWY	MULTI JUN	GIVEWAY /UNCONT	PELICAN OR SIML	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(44 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	CAR BT - NOT REQ		(46 YRS - M - REDACT)		SLOWING/STOPPING	(S TO N) FRONT HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	CAR BT - NOT REQ		(44 YRS - M - REDACT)		SLOWING/STOPPING	(S TO N) BACK HIT FIRST	J/P - UNKN JCT APP
V001	B	103 (SLIPPERY ROAD (DUE TO WEATHER))						

3

01180150742	FRI 07/12/2018 18:30		DARK	WHITE HART LANE J/W WESTFIELDS AVENUE				24 LINK 189-204	521350/175810
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	UNKNOWN S/R		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(40 YRS - F - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	M/C <= 50CC BT - DRV NOT CONTACTED		(40 YRS - F - REDACT)		UNKNOWN S/R		(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R
VEHICLE	002 (000)	M/C 51-125CC BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R		(MOVE UNKN) DID NOT IMPACT	J/P - UNKN UNKNOWN S/R

4

01190166170	SUN 24/02/2019 11:50		LIGHT	LOCATION UNCERTAIN. ON WHITE HART LANE, 35 METRES EAST OF JUNCT WTH ROSSLYN AVE.				24 LINK 189-204	521414/175668
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M			NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(29 YRS - M - REDA)		SLIGHT	PEDESTRIAN		STILL	UNKNOWN/OTHER	
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R		(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

Appendix E

Parking Survey

Parking Beat Survey

Barnes Hospital, South Worple Way

Tuesday 2nd February 2021

Wednesday 3rd February 2021

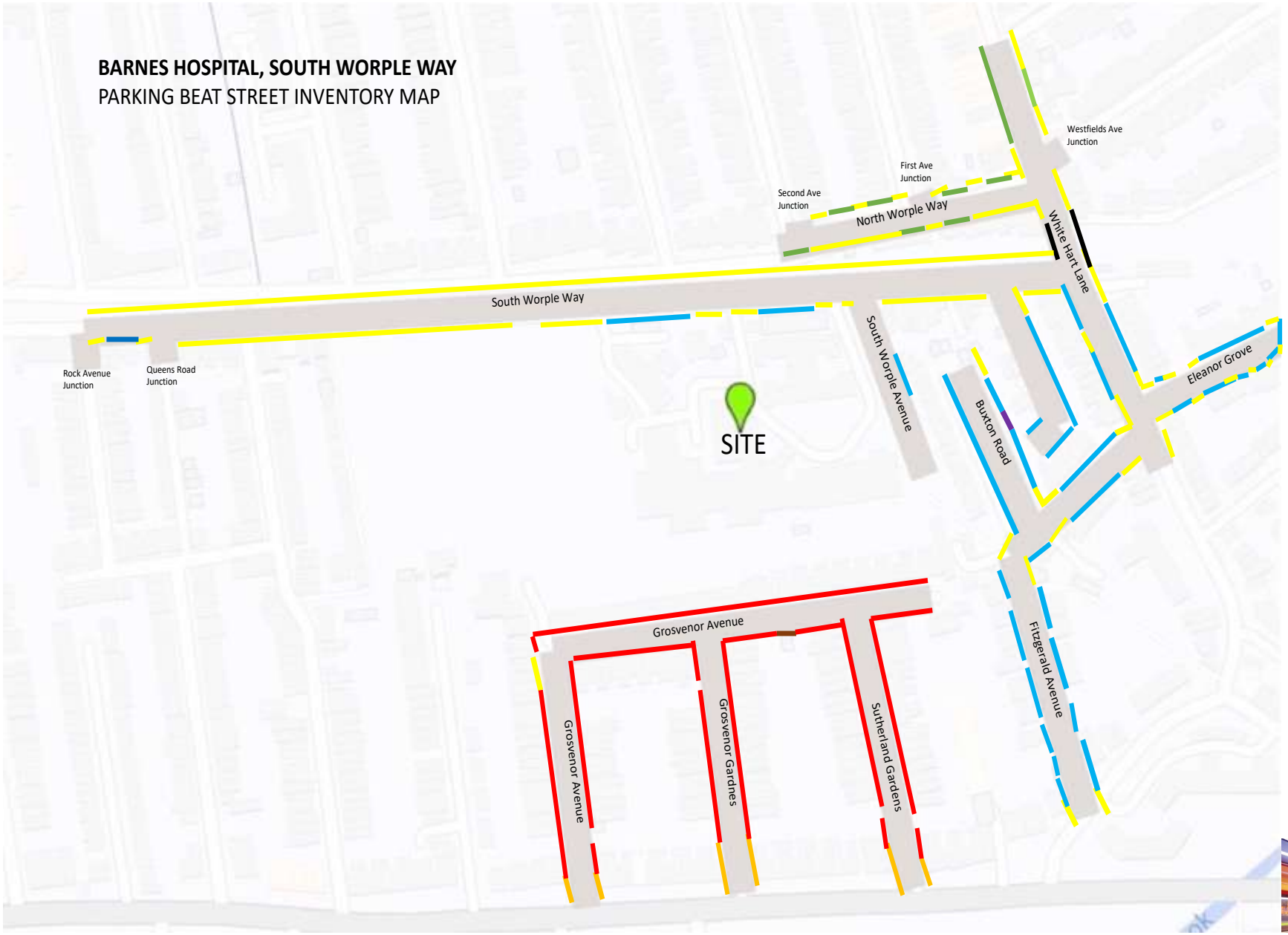
Created by Bert Ramos

SURVEY DETAILS

Survey Type	PARKING BEAT SURVEY	
Methodology Guidance	London Borough of Richmond	
Site	Barnes Hospital, South Worple Way	
Survey Area	200 metre walking distance from site	
Date/s	Tuesday 2nd February 2021	Wednesday 3rd February 2021
Time/s	00:30	00:30
Beat Frequency	Snapshot	
Unit for 1 Unmarked Lengthwise Space (m)	5	
Unit for 1 Unmarked Crosswise Space (m)	2.5	
Areas Excluded From Survey	Private parking spaces, private roads and off road parking (unless requested in survey specification).	
Sections of road excluded from parking capacity calculation	First 7.5m from junction mouth (for reasons of highway safety). Crossovers, dropped kerbs, build-outs, traffic islands, 24/7 illegal parking. Sections of legal lengthwise parking between illegal parking (crossover, dropped kerbs, double yellow etc) that measure less than the unit specified for 1 space. Where the width of the road is such that parking on both sides would cause an obstruction. In this instance one side of the road has been excluded from the capacity calculation.	
Parking excluded from stress calculation	Skips or any other non-vehicle occupying a parking space (but noted separately if observed). Any illegal parking on double yellow lines, crossovers, keep clear lines etc (but noted separately if observed).	
Terminology	"Parking Stress" - Calculation to express the number of parked vehicles as a percentage of available parking for each parking type. Stress can be over 100% if cars are small and/or parked very closely together. "Parking Capacity Calculation" - Measurement of each length of road between illegal parking (e.g. crossovers, traffic islands, double yellow etc) converted into parking spaces by rounding down to the nearest unit assigned to one parking space and dividing this figure by the unit. "Lengthwise Parking" - Vehicles parked in a lengthwise orientation with wheels parallel to the kerbside. "Crosswise Parking" - Vehicles parked in a crosswise orientation (as seen in car parks or wide sections of road)	

BARNES HOSPITAL, SOUTH WORPLE WAY

PARKING BEAT STREET INVENTORY MAP



Key

Unrestricted Parking

- Unrestricted

Restricted Parking

- Permit Holder B2 Mon-Fri 10am-Noon
- Disabled Parking
- Red Line – Red Route
- Single Yellow
- Resident Permit Holder M
- Permit Holder ES

No Parking

- Double Yellow Lines
- White Line
- Railway Crossing
- Crossover/Junction/ Too Narrow to Park

North

PARKING STRESS TABLES

Restriction	1	Permit Holders Only (B2 Mon-Fri 10am-Noon)							
		Tuesday 2nd February 2021.			Wednesday 3rd February 2021				
		00:30			00:30				
Location	Lengthwise Parking (m)	Lengthwise Spaces	Marked/Crosswise Bays	Total Spaces	Occupied	Available Spaces	Stress (%)	Occupied	Available Spaces	Stress (%)
Buxton Road	155	31	0	31	28	3	90%	26	5	84%
Eleanor Grove	163	33	3	36	30	6	85%	31	5	87%
Fitzgerald Avenue	255	51	0	51	41	10	80%	40	11	78%
White Hart Lane	60	12	0	12	11	1	92%	11	1	92%
South Worple Way	85	17	0	17	13	4	76%	11	6	65%
South Worple Avenue	10	2	0	2	1	1	50%	1	1	50%
The Retreat	75	15	0	15	11	4	73%	12	3	80%
Total	**803**	**161**	**3**	**164**	**135**	**29**	**83%**	**132**	**32**	**81%**

Restriction	2	Resident Permit Holder Parking (M Mon-Fri 9am-11am)							
		Tuesday 2nd February 2021.			Wednesday 3rd February 2021				
		00:30			00:30				
Location	Lengthwise Parking (m)	Lengthwise Spaces	Marked/Crosswise Bays	Total Spaces	Occupied	Available Spaces	Stress (%)	Occupied	Available Spaces	Stress (%)
White Hart Lane	40	8	0	8	6	2	75%	7	1	88%
North Worple Way	100	20	0	20	22	0	110%	21	0	105%
Total	**140**	**28**	**0**	**28**	**28**	**2**	**100%**	**28**	**1**	**100%**

Restriction	3	Permit Holder Parking (ES Mon-Fri 10am-Noon)							
		Tuesday 2nd February 2021.			Wednesday 3rd February 2021				
		00:30			00:30				
Location	Lengthwise Parking (m)	Lengthwise Spaces	Marked/Crosswise Bays	Total Spaces	Occupied	Available Spaces	Stress (%)	Occupied	Available Spaces	Stress (%)
South Worple Way	25	5	0	5	4	1	80%	4	1	80%
Total	**25**	**5**	**0**	**5**	**4**	**1**	**80%**	**4**	**1**	**80%**

Restriction	4	Disabled Parking							
Location	Lengthwise Parking (m)	Lengthwise Spaces	Marked/Crosswise Bays	Total Spaces	Tuesday 2nd February 2021. 00:30			Wednesday 3rd February 2021 00:30		
					Occupied	Available Spaces	Stress (%)	Occupied	Available Spaces	Stress (%)
Buxton Road	5	1	0	1	0	1	0%	0	1	0%
Total	**5**	**1**	**0**	**1**	**0**	**1**	**0%**	**0**	**1**	**0%**

Restriction	5	Red Line (Red Route Mon-Sat 7am-7pm 1 Hour No Return within 2							
Location	Lengthwise Parking (m)	Lengthwise Spaces	Marked/Crosswise Bays	Total Spaces	Tuesday 2nd February 2021. 00:30			Wednesday 3rd February 2021 00:30		
					Occupied	Available Spaces	Stress (%)	Occupied	Available Spaces	Stress (%)
Sutherland Gardens	40	8	0	8	4	4	50%	3	5	38%
Grosvenor Gardens	40	8	0	8	6	2	75%	6	2	75%
Grosvenor Avenue	30	6	0	6	3	3	50%	4	2	67%
Total	**110**	**22**	**0**	**22**	**13**	**9**	**59%**	**13**	**9**	**59%**

Restriction	6	Unrestricted							
Location	Lengthwise Parking (m)	Lengthwise Spaces	Marked/Crosswise Bays	Total Spaces	Tuesday 2nd February 2021. 00:30			Wednesday 3rd February 2021 00:30		
					Occupied	Available Spaces	Stress (%)	Occupied	Available Spaces	Stress (%)
Sutherland Gardens	205	41	0	41	35	6	85%	37	4	90%
Grosvenor Gardens	190	38	0	38	36	2	95%	38	0	100%
Grosvenor Avenue	530	106	0	106	93	13	88%	91	15	86%
Total	**925**	**185**	**0**	**185**	**164**	**21**	**89%**	**166**	**19**	**90%**

Restriction				7	Single Yellow Line (Mon-Sat 8.30-6.30pm)					
Location	Lengthwise Parking (m)	Lengthwise Spaces	Marked/Crosswise Bays	Total Spaces	Tuesday 2nd February 2021. 00:30			Wednesday 3rd February 2021 00:30		
					Occupied	Available Spaces	Stress (%)	Occupied	Available Spaces	Stress (%)
White Hart Lane	25	5	0	5	2	3	40%	3	2	60%
Total	**25**	**5**	**0**	**5**	**2**	**3**	**40%**	**3**	**2**	**60%**

Illegal/Obstructive Parking

Location	Description	Tuesday 2nd February 2021. 00:30	Wednesday 3rd February 2021 00:30
		Occupied	Occupied
		0	0
		0	0
Total		0	0

PARKING CAPACITY MEASUREMENTS

A working table showing kerbside measurements for each parking type.

Location	Side of Road & Measuring Orientation	Parking Type	Section Length (m)	Crosswise Spaces or Lengthwise Marked Bays	Number of Crosswise Spaces or Marked Bays	Unit Round Down (If Lengthwise & Unmarked)	Total Spaces
Buxton Road	W S-N	Permit Holders Only (B2 Mon-Fri 10am-Noon)	88.6			85	17
Buxton Road	E N-S	Double Yellow Lines	6.1			5	1
Buxton Road	E N-S	Permit Holders Only (B2 Mon-Fri 10am-Noon)	21.3			20	4
Buxton Road	E N-S	Disabled Parking	5.9			5	1
Buxton Road	E N-S	Permit Holders Only (B2 Mon-Fri 10am-Noon)	50.5			50	10
Buxton Road	E N-S	Double Yellow Lines	6.9			5	1
Eleanor Grove	S W-E	Double Yellow Lines	10.2			10	2
Eleanor Grove	S W-E	Permit Holders Only (B2 Mon-Fri 10am-Noon)	13.7			10	2
Eleanor Grove	S W-E	Double Yellow Lines	4.4			0	0
Eleanor Grove	S W-E	Permit Holders Only (B2 Mon-Fri 10am-Noon)	47.5			45	9
Eleanor Grove	S W-E	Double Yellow Lines	2.4			0	0
Eleanor Grove	S W-E	Permit Holders Only (B2 Mon-Fri 10am-Noon)	7			5	1
Eleanor Grove	S W-E	Double Yellow Lines	2			0	0
Eleanor Grove	S W-E	Permit Holders Only (B2 Mon-Fri 10am-Noon)	5.9			5	1
Eleanor Grove	S W-E	Double Yellow Lines	5.5			5	1
Eleanor Grove	S W-E	Permit Holders Only (B2 Mon-Fri 10am-Noon)	6.2			5	1
Eleanor Grove	S W-E	Double Yellow Lines	14.8			10	2
Eleanor Grove	S W-E	Permit Holders Only (B2 Mon-Fri 10am-Noon)	7.5		3	7.5	3
Eleanor Grove	E S-N	Double Yellow Lines	1.3			0	0
Eleanor Grove	E S-N	Permit Holders Only (B2 Mon-Fri 10am-Noon)	4.7			0	0
Eleanor Grove	N E-W	Double Yellow Lines	10.4			10	2
Eleanor Grove	N E-W	Permit Holders Only (B2 Mon-Fri 10am-Noon)	80.9			80	16
Eleanor Grove	N E-W	Double Yellow Lines	1.7			0	0
Eleanor Grove	N E-W	Crossover	3.3			0	0
Eleanor Grove	N E-W	Double Yellow Lines	7.7			5	1
Eleanor Grove	N E-W	Permit Holders Only (B2 Mon-Fri 10am-Noon)	9.2			5	1
Eleanor Grove	N E-W	Double Yellow Lines	10.2			10	2
Sutherland Gardens	E S-N	Red Line (Red Route Mon-Sat 7am-7pm 1 Hour No Return within 2 Hours)	19.5			15	3
Sutherland Gardens	E S-N	Unrestricted	12			10	2
Sutherland Gardens	E S-N	Crossover	4.9			0	0
Sutherland Gardens	E S-N	Unrestricted	96.6			95	19
Sutherland Gardens	W N-S	Unrestricted	87.1			85	17
Sutherland Gardens	W N-S	Crossover	2.5			0	0
Sutherland Gardens	W N-S	Unrestricted	15.8			15	3
Sutherland Gardens	W N-S	Red Line (Red Route Mon-Sat 7am-7pm 1 Hour No Return within 2 Hours)	15.1			15	3
Sutherland Gardens	W N-S	Red Line (Red Route Mon-Sat 7am-7pm 1 Hour No Return within 2 Hours)	12.1			10	2
Grosvenor Gardens	E S-N	Red Line (Red Route Mon-Sat 7am-7pm 1 Hour No Return within 2 Hours)	24.6			20	4
Grosvenor Gardens	E S-N	Unrestricted	99.1			95	19
Grosvenor Gardens	W N-S	Unrestricted	25.2			25	5
Grosvenor Gardens	W N-S	Crossover	4.2			0	0
Grosvenor Gardens	W N-S	Unrestricted	71.3			70	14
Grosvenor Gardens	W N-S	Red Line (Red Route Mon-Sat 7am-7pm 1 Hour No Return within 2 Hours)	24.1			20	4

Grosvenor Avenue	E S-N	Red Line (Red Route Mon-Sat 7am-7pm 1 Hour No Return within 2 Hours)	9.6			5	1
Grosvenor Avenue	E S-N	Red Line (Red Route Mon-Sat 7am-7pm 1 Hour No Return within 2 Hours)	10.1			10	2
Grosvenor Avenue	E S-N	Unrestricted	13.7			10	2
Grosvenor Avenue	E S-N	Crossover	3.7			0	0
Grosvenor Avenue	E S-N	Unrestricted	148.6			145	29
Grosvenor Avenue	E S-N	Junction	10.2			10	2
Grosvenor Avenue	E S-N	Unrestricted	29.7			25	5
Grosvenor Avenue	E S-N	White Line	6.7			5	1
Grosvenor Avenue	E S-N	Unrestricted	27.5			25	5
Grosvenor Avenue	E S-N	Junction	9.5			5	1
Grosvenor Avenue	E S-N	Unrestricted	41			40	8
Grosvenor Avenue	N E-W	Unrestricted	189.5			185	37
Grosvenor Avenue	N E-W	Double Yellow Lines	6.8			5	1
Grosvenor Avenue	N E-W	Unrestricted	100.4			100	20
Grosvenor Avenue	N E-W	Red Line (Red Route Mon-Sat 7am-7pm 1 Hour No Return within 2 Hours)	19.8			15	3
Fitzgerald Avenue	E S-N	Double Yellow Lines	10.1			10	2
Fitzgerald Avenue	E S-N	Permit Holders Only (B2 Mon-Fri 10am-Noon)	34.2			30	6
Fitzgerald Avenue	E S-N	Crossover	10.3			10	2
Fitzgerald Avenue	E S-N	Permit Holders Only (B2 Mon-Fri 10am-Noon)	19.2			15	3
Fitzgerald Avenue	E S-N	Crossover	6.8			5	1
Fitzgerald Avenue	E S-N	Permit Holders Only (B2 Mon-Fri 10am-Noon)	14.1			10	2
Fitzgerald Avenue	E S-N	Crossover	5.6			5	1
Fitzgerald Avenue	E S-N	Permit Holders Only (B2 Mon-Fri 10am-Noon)	16.6			15	3
Fitzgerald Avenue	E S-N	Double Yellow Lines	4.6			0	0
Fitzgerald Avenue	E S-N	Permit Holders Only (B2 Mon-Fri 10am-Noon)	11.1			10	2
Fitzgerald Avenue	E S-N	Double Yellow Lines	8.2			5	1
Fitzgerald Avenue	E S-N	Permit Holders Only (B2 Mon-Fri 10am-Noon)	49.6			45	9
Fitzgerald Avenue	E S-N	Double Yellow Lines	13.7			10	2
Fitzgerald Avenue	N E-W	Double Yellow Lines	9.5			5	1
Fitzgerald Avenue	N E-W	Permit Holders Only (B2 Mon-Fri 10am-Noon)	62.7			60	12
Fitzgerald Avenue	N E-W	Double Yellow Lines	4.4			0	0
Fitzgerald Avenue	N E-W	Junction	9.4			5	1
Fitzgerald Avenue	N E-W	Double Yellow Lines	8.6			5	1
Fitzgerald Avenue	N E-W	Permit Holders Only (B2 Mon-Fri 10am-Noon)	7.8			5	1
Fitzgerald Avenue	N E-W	Crossover	3.4			0	0
Fitzgerald Avenue	N E-W	Permit Holders Only (B2 Mon-Fri 10am-Noon)	14.5			10	2
Fitzgerald Avenue	N E-W	Crossover	7.2			5	1
Fitzgerald Avenue	N E-W	Permit Holders Only (B2 Mon-Fri 10am-Noon)	14.4			10	2
Fitzgerald Avenue	N E-W	Crossover	6.9			5	1
Fitzgerald Avenue	N E-W	Permit Holders Only (B2 Mon-Fri 10am-Noon)	20.5			20	4
Fitzgerald Avenue	N E-W	Crossover	4.1			0	0
Fitzgerald Avenue	N E-W	Permit Holders Only (B2 Mon-Fri 10am-Noon)	2.6			0	0
Fitzgerald Avenue	N E-W	Crossover	9.7			5	1
Fitzgerald Avenue	N E-W	Permit Holders Only (B2 Mon-Fri 10am-Noon)	29.2			25	5
Fitzgerald Avenue	N E-W	Double Yellow Lines	6.9			5	1

White Hart Lane	E S-N	Double Yellow Lines	7.1			5	1
White Hart Lane	E S-N	Junction	8.7			5	1
White Hart Lane	E S-N	Double Yellow Lines	10.9			10	2
White Hart Lane	E S-N	Permit Holders Only (B2 Mon-Fri 10am-Noon)	30.9			30	6
White Hart Lane	E S-N	Double Yellow Lines	23.4			20	4
White Hart Lane	E S-N	Railway Crossing	26			25	5
White Hart Lane	E S-N	Double Yellow Lines	25.3			25	5
White Hart Lane	E S-N	Junction	6.9			5	1
White Hart Lane	E S-N	Double Yellow Lines	13.8			10	2
White Hart Lane	E S-N	Single Yellow Line (Mon-Sat 8.30-6.30pm)	28.9			25	5
White Hart Lane	E S-N	Double Yellow Lines	9.4			5	1
White Hart Lane	W N-S	Resident Permit Holder Parking (M Mon-Fri 9am-11am)	42.9			40	8
White Hart Lane	W N-S	Double Yellow Lines	14.3			10	2
White Hart Lane	W N-S	Junction	12.6			10	2
White Hart Lane	W N-S	Double Yellow Lines	15.5			15	3
White Hart Lane	W N-S	Railway Crossing	26.4			25	5
White Hart Lane	W N-S	Double Yellow Lines	26			25	5
White Hart Lane	W N-S	Permit Holders Only (B2 Mon-Fri 10am-Noon)	34.1			30	6
White Hart Lane	W N-S	Double Yellow Lines	9.7			5	1
White Hart Lane	W N-S	Junction	16.2			15	3
North Worple Way	N E-W	Double Yellow Lines	12.9			10	2
North Worple Way	N E-W	Resident Permit Holder Parking (M Mon-Fri 9am-11am)	15			15	3
North Worple Way	N E-W	Double Yellow Lines	5.1			5	1
North Worple Way	N E-W	Resident Permit Holder Parking (M Mon-Fri 9am-11am)	20.3			20	4
North Worple Way	N E-W	Double Yellow Lines	2.9			0	0
North Worple Way	N E-W	Junction	9.7			5	1
North Worple Way	N E-W	Double Yellow Lines	4			0	0
North Worple Way	N E-W	Resident Permit Holder Parking (M Mon-Fri 9am-11am)	16.1			15	3
North Worple Way	N E-W	Double Yellow Lines	8.2			5	1
North Worple Way	N E-W	Resident Permit Holder Parking (M Mon-Fri 9am-11am)	20.4			20	4
North Worple Way	N E-W	Double Yellow Lines	4.5			0	0
North Worple Way	S W-E	Resident Permit Holder Parking (M Mon-Fri 9am-11am)	13.2			10	2
North Worple Way	S W-E	Double Yellow Lines	59			55	11
North Worple Way	S W-E	Resident Permit Holder Parking (M Mon-Fri 9am-11am)	12.8			10	2
North Worple Way	S W-E	Double Yellow Lines	8			5	1
North Worple Way	S W-E	Resident Permit Holder Parking (M Mon-Fri 9am-11am)	10.6			10	2
North Worple Way	S W-E	Double Yellow Lines	22.6			20	4
South Worple Way	N E-W	Double Yellow Lines	443.1			440	88
South Worple Way	S W-E	Double Yellow Lines	3.9			0	0
South Worple Way	S W-E	Permit Holder Parking (ES Mon-Fri 10am-Noon)	26.5			25	5
South Worple Way	S W-E	Double Yellow Lines	6.9			5	1
South Worple Way	S W-E	Junction	5.5			5	1
South Worple Way	S W-E	Double Yellow Lines	130.8			130	26
South Worple Way	S W-E	Junction (Burian Ground)	7.8			5	1
South Worple Way	S W-E	Double Yellow Lines	37.2			35	7
South Worple Way	S W-E	Permit Holders Only (B2 Mon-Fri 10am-Noon)	52.6			50	10
South Worple Way	S W-E	Double Yellow Lines	3.2			0	0
South Worple Way	S W-E	Barnes Hospital Access (Gated)	3.4			0	0
South Worple Way	S W-E	Double Yellow Lines	3.8			0	0
South Worple Way	S W-E	Permit Holders Only (B2 Mon-Fri 10am-Noon)	35.2			35	7
South Worple Way	S W-E	Double Yellow Lines	3.8			0	0
South Worple Way	S W-E	Barnes Hospital Access	5.9			5	1
South Worple Way	S W-E	Double Yellow Lines	8.3			5	1
South Worple Way	S W-E	Junction	7.8			5	1
South Worple Way	S W-E	Double Yellow Lines	84.7			80	16
South Worple Way	S W-E	Junction	5.4			5	1
South Worple Way	S W-E	Double Yellow Lines	22.9			20	4

South Worple Avenue	W N-S	Too Narrow to Park	104.2			100	20
South Worple Avenue	E S-N	Too Narrow to Park	57			55	11
South Worple Avenue	E S-N	Permit Holders Only (B2 Mon-Fri 10am-Noon)	13.8			10	2
South Worple Avenue	E S-N	Too Narrow to Park	23.8			20	4
South Worple Avenue	E S-N	Crossover	5.7			5	1
South Worple Avenue	E S-N	Too Narrow to Park	4.6			0	0
The Retreat	W N-S	Double Yellow Lines	4.4			0	0
The Retreat	W N-S	Too Narrow to Park	14.2			10	2
The Retreat	W N-S	Crossover	11.8			10	2
The Retreat	W N-S	Too Narrow to Park	14.5			10	2
The Retreat	W N-S	Permit Holders Only (B2 Mon-Fri 10am-Noon)	15.3			15	3
The Retreat	E S-N	Permit Holders Only (B2 Mon-Fri 10am-Noon)	61.8			60	12
The Retreat	E S-N	Double Yellow Lines	4.3			0	0

Appendix F

South Worple Way and White Hart Lane ATC Surveys

Barnes ATC, South Worple Way

Direction: Eastbound

Hour Beginning	Tue Jul 06	Wed Jul 07	Thu Jul 08	Fri Jul 09	Sat Jul 10	Sun Jul 11	Mon Jul 12	5-Day Ave.	7-Day Ave.
00:00	3	2	4	0	0	0	1	2	1
01:00	0	0	1	0	0	2	1	0	1
02:00	0	1	0	0	1	0	0	0	0
03:00	1	1	0	0	0	0	0	0	0
04:00	1	1	1	0	1	0	0	1	1
05:00	0	0	0	1	1	0	1	0	0
06:00	2	5	2	5	2	0	6	4	3
07:00	15	11	9	6	2	1	6	9	7
08:00	31	33	24	26	15	11	22	27	23
09:00	9	16	9	12	9	12	6	10	10
10:00	8	11	5	11	14	13	9	9	10
11:00	8	11	11	11	11	11	16	11	11
12:00	8	14	14	15	13	12	12	13	13
13:00	7	10	16	11	9	11	11	11	11
14:00	7	13	10	8	14	13	11	10	11
15:00	10	11	10	13	10	8	14	12	11
16:00	13	11	12	18	15	11	12	13	13
17:00	25	25	21	37	11	9	34	28	23
18:00	10	11	10	16	10	12	9	11	11
19:00	8	9	8	11	9	7	9	9	9
20:00	2	6	9	8	4	4	5	6	5
21:00	4	1	7	6	6	3	2	4	4
22:00	3	6	1	3	4	0	2	3	3
23:00	1	4	3	5	2	3	1	3	3
Total									
12H(7-19)	151	177	151	184	133	124	162	165	155
16H(6-22)	167	198	177	214	154	138	184	188	176
18H(6-24)	171	208	181	222	160	141	187	194	181
24H(0-24)	176	213	187	223	163	143	190	198	185
AM Peak	08:00	08:00	08:00	08:00	08:00	10:00	08:00	08:00	08:00
	31	33	24	26	15	13	22	27	23
PM Peak	17:00	17:00	17:00	17:00	16:00	14:00	17:00	17:00	17:00
	25	25	21	37	15	13	34	28	23

360 TSL Ltd

Direction: Westbound

Hour Beginning	Tue Jul 06	Wed Jul 07	Thu Jul 08	Fri Jul 09	Sat Jul 10	Sun Jul 11	Mon Jul 12	5-Day Ave.	7-Day Ave.
00:00	1	4	0	0	0	3	6	2	2
01:00	0	0	3	1	0	1	0	1	1
02:00	0	0	0	0	1	0	1	0	0
03:00	2	1	1	0	1	1	1	1	1
04:00	1	0	1	2	0	0	0	1	1
05:00	0	1	1	0	2	1	1	1	1
06:00	4	5	2	4	3	2	5	4	4
07:00	10	11	8	10	3	5	6	9	8
08:00	17	16	15	14	9	8	16	16	14
09:00	12	13	13	11	17	12	13	12	13
10:00	10	10	8	11	13	18	11	10	12
11:00	13	8	10	15	17	12	11	11	12
12:00	12	12	12	17	21	18	15	14	15
13:00	20	29	24	21	15	10	20	23	20
14:00	20	30	25	17	10	13	21	23	19
15:00	22	26	27	25	11	13	22	24	21
16:00	32	31	33	32	18	9	27	31	26
17:00	20	21	21	24	11	12	22	22	19
18:00	18	21	23	19	14	7	12	19	16
19:00	15	12	13	16	11	11	12	14	13
20:00	15	12	11	11	9	9	9	12	11
21:00	11	7	9	11	8	7	8	9	9
22:00	4	7	5	7	7	6	8	6	6
23:00	2	12	4	4	8	5	2	5	5
Total									
12H(7-19)	206	228	219	216	159	137	196	213	194
16H(6-22)	251	264	254	258	190	166	230	251	230
18H(6-24)	257	283	263	269	205	177	240	262	242
24H(0-24)	261	289	269	272	209	183	249	268	247
AM Peak	08:00	08:00	08:00	11:00	09:00	10:00	08:00	08:00	08:00
	17	16	15	15	17	18	16	16	14
PM Peak	16:00	16:00	16:00	16:00	12:00	12:00	16:00	16:00	16:00
	32	31	33	32	21	18	27	31	26

360 TSL Ltd

Direction: Total Flow

Hour Beginning	Tue Jul 06	Wed Jul 07	Thu Jul 08	Fri Jul 09	Sat Jul 10	Sun Jul 11	Mon Jul 12	5-Day Ave.	7-Day Ave.
00:00	4	6	4	0	0	3	7	4	3
01:00	0	0	4	1	0	3	1	1	1
02:00	0	1	0	0	2	0	1	0	1
03:00	3	2	1	0	1	1	1	1	1
04:00	2	1	2	2	1	0	0	1	1
05:00	0	1	1	1	3	1	2	1	1
06:00	6	10	4	9	5	2	11	8	7
07:00	25	22	17	16	5	6	12	18	15
08:00	48	49	39	40	24	19	38	43	37
09:00	21	29	22	23	26	24	19	23	23
10:00	18	21	13	22	27	31	20	19	22
11:00	21	19	21	26	28	23	27	23	24
12:00	20	26	26	32	34	30	27	26	28
13:00	27	39	40	32	24	21	31	34	31
14:00	27	43	35	25	24	26	32	32	30
15:00	32	37	37	38	21	21	36	36	32
16:00	45	42	45	50	33	20	39	44	39
17:00	45	46	42	61	22	21	56	50	42
18:00	28	32	33	35	24	19	21	30	27
19:00	23	21	21	27	20	18	21	23	22
20:00	17	18	20	19	13	13	14	18	16
21:00	15	8	16	17	14	10	10	13	13
22:00	7	13	6	10	11	6	10	9	9
23:00	3	16	7	9	10	8	3	8	8
Total									
12H(7-19)	357	405	370	400	292	261	358	378	349
16H(6-22)	418	462	431	472	344	304	414	439	406
18H(6-24)	428	491	444	491	365	318	427	456	423
24H(0-24)	437	502	456	495	372	326	439	466	432
AM Peak	08:00	08:00	08:00	08:00	11:00	10:00	08:00	08:00	08:00
	48	49	39	40	28	31	38	43	37
PM Peak	16:00	17:00	16:00	17:00	12:00	12:00	17:00	17:00	17:00
	45	46	45	61	34	30	56	50	42

360 TSL Ltd

Barnes ATC, White Hart Lane

Direction: Northbound

Hour Beginning	Tue Jul 06	Wed Jul 07	Thu Jul 08	Fri Jul 09	Sat Jul 10	Sun Jul 11	Mon Jul 12	5-Day Ave.	7-Day Ave.
00:00	1	12	14	10	26	26	33	14	17
01:00	2	5	11	5	11	18	12	7	9
02:00	0	2	6	2	5	12	11	4	5
03:00	3	4	5	4	5	5	6	4	5
04:00	5	0	4	3	4	6	5	3	4
05:00	7	10	7	7	9	5	5	7	7
06:00	45	39	42	30	13	9	37	39	31
07:00	93	89	93	93	30	27	88	91	73
08:00	102	97	94	110	54	31	98	100	84
09:00	98	92	95	103	89	61	94	96	90
10:00	88	83	85	89	85	65	83	86	83
11:00	103	98	91	105	102	99	84	96	97
12:00	110	97	96	123	106	104	102	106	105
13:00	132	131	94	125	114	109	73	111	111
14:00	87	132	89	146	114	89	90	109	107
15:00	133	106	118	120	122	98	105	116	115
16:00	124	118	99	123	109	78	98	112	107
17:00	124	128	123	121	78	72	115	122	109
18:00	91	89	102	99	73	71	91	94	88
19:00	71	86	90	91	67	68	68	81	77
20:00	59	72	69	71	51	49	61	66	62
21:00	38	26	37	46	45	23	29	35	35
22:00	26	22	31	35	31	21	28	28	28
23:00	23	38	25	26	22	48	9	24	27
Total									
12H(7-19)	1285	1260	1179	1357	1076	904	1121	1240	1169
16H(6-22)	1498	1483	1417	1595	1252	1053	1316	1462	1373
18H(6-24)	1547	1543	1473	1656	1305	1122	1353	1514	1428
24H(0-24)	1565	1576	1520	1687	1365	1194	1425	1555	1476
AM Peak	11:00	11:00	09:00	08:00	11:00	11:00	08:00	08:00	11:00
	103	98	95	110	102	99	98	100	97
PM Peak	15:00	14:00	17:00	14:00	15:00	13:00	17:00	17:00	15:00
	133	132	123	146	122	109	115	122	115

360 TSL Ltd

Direction: Southbound

Hour Beginning	Tue Jul 06	Wed Jul 07	Thu Jul 08	Fri Jul 09	Sat Jul 10	Sun Jul 11	Mon Jul 12	5-Day Ave.	7-Day Ave.
00:00	7	24	28	15	28	34	36	22	25
01:00	4	5	14	13	16	20	20	11	13
02:00	4	5	8	6	7	6	16	8	7
03:00	2	2	1	3	4	4	4	2	3
04:00	7	6	7	3	9	4	6	6	6
05:00	14	12	12	8	11	10	11	11	11
06:00	38	43	30	32	11	13	29	34	28
07:00	67	63	66	68	54	29	67	66	59
08:00	155	151	143	130	94	66	126	141	124
09:00	114	113	112	116	112	91	110	113	110
10:00	86	88	88	90	119	117	88	88	97
11:00	96	105	111	91	131	123	103	101	109
12:00	101	116	112	125	155	127	101	111	120
13:00	112	111	103	128	135	129	108	112	118
14:00	110	149	145	123	132	120	118	129	128
15:00	146	151	155	161	134	131	160	155	148
16:00	152	178	150	165	113	101	156	160	145
17:00	140	168	152	155	98	95	140	151	135
18:00	152	151	153	147	92	89	151	151	134
19:00	99	105	108	110	73	62	90	102	92
20:00	62	71	73	83	61	51	69	72	67
21:00	55	30	66	61	52	27	46	52	48
22:00	35	40	55	59	39	14	34	45	39
23:00	40	51	39	39	42	37	17	37	38
Total									
12H(7-19)	1431	1544	1490	1499	1369	1218	1428	1478	1426
16H(6-22)	1685	1793	1767	1785	1566	1371	1662	1738	1661
18H(6-24)	1760	1884	1861	1883	1647	1422	1713	1820	1739
24H(0-24)	1798	1938	1931	1931	1722	1500	1806	1881	1804
AM Peak	08:00	08:00	08:00	08:00	11:00	11:00	08:00	08:00	08:00
	155	151	143	130	131	123	126	141	124
PM Peak	16:00	16:00	15:00	16:00	12:00	15:00	15:00	16:00	15:00
	152	178	155	165	155	131	160	160	148

360 TSL Ltd

Direction: Total Flow

Hour Beginning	Tue Jul 06	Wed Jul 07	Thu Jul 08	Fri Jul 09	Sat Jul 10	Sun Jul 11	Mon Jul 12	5-Day Ave.	7-Day Ave.
00:00	8	36	42	25	54	60	69	36	42
01:00	6	10	25	18	27	38	32	18	22
02:00	4	7	14	8	12	18	27	12	13
03:00	5	6	6	7	9	9	10	7	7
04:00	12	6	11	6	13	10	11	9	10
05:00	21	22	19	15	20	15	16	19	18
06:00	83	82	72	62	24	22	66	73	59
07:00	160	152	159	161	84	56	155	157	132
08:00	257	248	237	240	148	97	224	241	207
09:00	212	205	207	219	201	152	204	209	200
10:00	174	171	173	179	204	182	171	174	179
11:00	199	203	202	196	233	222	187	197	206
12:00	211	213	208	248	261	231	203	217	225
13:00	244	242	197	253	249	238	181	223	229
14:00	197	281	234	269	246	209	208	238	235
15:00	279	257	273	281	256	229	265	271	263
16:00	276	296	249	288	222	179	254	273	252
17:00	264	296	275	276	176	167	255	273	244
18:00	243	240	255	246	165	160	242	245	222
19:00	170	191	198	201	140	130	158	184	170
20:00	121	143	142	154	112	100	130	138	129
21:00	93	56	103	107	97	50	75	87	83
22:00	61	62	86	94	70	35	62	73	67
23:00	63	89	64	65	64	85	26	61	65
Total									
12H(7-19)	2716	2804	2669	2856	2445	2122	2549	2719	2594
16H(6-22)	3183	3276	3184	3380	2818	2424	2978	3200	3035
18H(6-24)	3307	3427	3334	3539	2952	2544	3066	3335	3167
24H(0-24)	3363	3514	3451	3618	3087	2694	3231	3435	3280
AM Peak	08:00	08:00	08:00	08:00	11:00	11:00	08:00	08:00	08:00
	257	248	237	240	233	222	224	241	207
PM Peak	15:00	16:00	17:00	16:00	12:00	13:00	15:00	17:00	15:00
	279	296	275	288	261	238	265	273	263

360 TSL Ltd

Appendix G

South Worple Way/ White Hart Lane – Turning Count Survey including Pedestrian Survey

Barnes, Thursday 8th July 2021

Junction: 3
Approach: White Hart Lane Southbound

	To White Hart Lane (Southbound)						To South Worple Way					
TIME	PED	LIGHT	HEAVY	BUS	TOTAL	PCUs	PED	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	7	0	0	7	7.0	0	1	0	0	1	1.0
07:15 - 07:30	0	10	0	0	10	10.0	0	2	0	0	2	2.0
07:30 - 07:45	1	9	0	0	10	9.0	2	2	0	0	4	2.0
07:45 - 08:00	2	34	0	0	36	34.0	6	0	0	0	6	0.0
Hourly Total	3	60	0	0	63	60.0	8	5	0	0	13	5.0
08:00 - 08:15	6	27	0	0	33	27.0	6	3	0	0	9	3.0
08:15 - 08:30	13	24	0	0	37	24.0	4	1	0	0	5	1.0
08:30 - 08:45	11	27	0	0	38	27.0	10	4	0	0	14	4.0
08:45 - 09:00	14	48	0	0	62	48.0	17	2	0	0	19	2.0
Hourly Total	44	126	0	0	170	126.0	37	10	0	0	47	10.0
09:00 - 09:15	10	37	1	0	48	39.3	12	2	0	0	14	2.0
09:15 - 09:30	3	20	0	0	23	20.0	3	1	0	0	4	1.0
09:30 - 09:45	1	28	1	1	31	32.3	0	2	0	0	2	2.0
09:45 - 10:00	11	18	1	0	30	20.3	5	0	0	0	5	0.0
Hourly Total	25	103	3	1	132	111.9	20	5	0	0	25	5.0
10:00 - 10:15	7	21	0	0	28	21.0	6	3	0	0	9	3.0
10:15 - 10:30	5	25	0	0	30	25.0	6	0	0	0	6	0.0
10:30 - 10:45	5	24	1	0	30	26.3	0	0	0	0	0	0.0
10:45 - 11:00	3	14	1	0	18	16.3	4	1	0	0	5	1.0
Hourly Total	20	84	2	0	106	88.6	16	4	0	0	20	4.0
TOTAL	92	373	5	1	471	386.5	81	24	0	0	105	24.0
15:00 - 15:15	0	37	0	0	37	37.0	2	4	0	0	6	4.0
15:15 - 15:30	2	24	0	0	26	24.0	6	5	0	0	11	5.0
15:30 - 15:45	0	53	0	0	53	53.0	2	2	0	0	4	2.0
15:45 - 16:00	4	34	0	0	38	34.0	3	5	0	0	8	5.0
Hourly Total	6	148	0	0	154	148.0	13	16	0	0	29	16.0
16:00 - 16:15	0	13	0	0	13	13.0	0	2	0	0	2	2.0
16:15 - 16:30	1	43	0	0	44	43.0	2	2	0	0	4	2.0
16:30 - 16:45	3	38	1	0	42	40.3	3	8	0	0	11	8.0
16:45 - 17:00	1	45	0	0	46	45.0	0	4	0	0	4	4.0
Hourly Total	5	139	1	0	145	141.3	5	16	0	0	21	16.0
17:00 - 17:15	2	37	0	0	39	37.0	2	3	0	0	5	3.0
17:15 - 17:30	1	39	0	0	40	39.0	1	3	0	0	4	3.0
17:30 - 17:45	1	19	0	0	20	19.0	2	6	0	0	8	6.0
17:45 - 18:00	0	38	0	0	38	38.0	2	4	0	0	6	4.0
Hourly Total	4	133	0	0	137	133.0	7	16	0	0	23	16.0
18:00 - 18:15	0	38	0	0	38	38.0	1	5	0	0	6	5.0
18:15 - 18:30	2	32	0	0	34	32.0	2	6	0	0	8	6.0
18:30 - 18:45	1	50	0	0	51	50.0	0	5	0	0	5	5.0
18:45 - 19:00	0	27	0	0	27	27.0	3	4	0	0	7	4.0
Hourly Total	3	147	0	0	150	147.0	6	20	0	0	26	20.0
TOTAL	18	567	1	0	586	569.3	31	68	0	0	99	68.0

PCU Factors:	
PED	0.0
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Barnes, Thursday 8th July 2021

Junction: 3
Approach: White Hart Lane Northbound

	To South Worple Way						To White Hart Lane (Northbound)					
TIME	PED	LIGHT	HEAVY	BUS	TOTAL	PCUs	PED	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	1	0	0	1	1.0	0	17	0	0	17	17.0
07:15 - 07:30	0	1	0	0	1	1.0	0	20	0	0	20	20.0
07:30 - 07:45	0	1	0	0	1	1.0	0	20	1	0	21	22.3
07:45 - 08:00	0	0	0	0	0	0.0	3	32	1	0	36	34.3
Hourly Total	0	3	0	0	3	3.0	3	89	2	0	94	93.6
08:00 - 08:15	0	0	0	0	0	0.0	4	23	0	0	27	23.0
08:15 - 08:30	5	1	0	0	6	1.0	16	20	1	0	37	22.3
08:30 - 08:45	0	2	0	0	2	2.0	0	25	0	0	25	25.0
08:45 - 09:00	6	2	0	0	8	2.0	21	21	0	0	42	21.0
Hourly Total	11	5	0	0	16	5.0	41	89	1	0	131	91.3
09:00 - 09:15	6	1	0	0	7	1.0	8	25	0	0	33	25.0
09:15 - 09:30	0	3	0	0	3	3.0	1	17	0	0	18	17.0
09:30 - 09:45	3	3	0	0	6	3.0	4	26	0	0	30	26.0
09:45 - 10:00	0	1	0	0	1	1.0	12	21	2	0	35	25.6
Hourly Total	9	8	0	0	17	8.0	25	89	2	0	116	93.6
10:00 - 10:15	1	1	0	0	2	1.0	4	23	0	0	27	23.0
10:15 - 10:30	0	2	0	0	2	2.0	6	22	1	0	29	24.3
10:30 - 10:45	0	1	0	0	1	1.0	3	20	0	0	23	20.0
10:45 - 11:00	0	0	0	0	0	0.0	3	17	0	0	20	17.0
Hourly Total	1	4	0	0	5	4.0	16	82	1	0	99	84.3
TOTAL	21	20	0	0	41	20.0	85	349	6	0	440	362.8
15:00 - 15:15	0	0	0	0	0	0.0	0	33	0	0	33	33.0
15:15 - 15:30	2	2	0	0	4	2.0	0	20	0	0	20	20.0
15:30 - 15:45	0	5	0	0	5	5.0	2	29	0	0	31	29.0
15:45 - 16:00	0	5	0	0	5	5.0	3	26	0	0	29	26.0
Hourly Total	2	12	0	0	14	12.0	5	108	0	0	113	108.0
16:00 - 16:15	0	0	0	0	0	0.0	1	18	0	0	19	18.0
16:15 - 16:30	1	8	0	0	9	8.0	1	24	0	0	25	24.0
16:30 - 16:45	0	6	0	0	6	6.0	2	15	0	0	17	15.0
16:45 - 17:00	3	3	0	0	6	3.0	0	26	0	0	26	26.0
Hourly Total	4	17	0	0	21	17.0	4	83	0	0	87	83.0
17:00 - 17:15	0	0	0	0	0	0.0	1	32	0	0	33	32.0
17:15 - 17:30	2	3	0	0	5	3.0	0	31	0	0	31	31.0
17:30 - 17:45	1	1	0	0	2	1.0	2	18	0	0	20	18.0
17:45 - 18:00	1	1	0	0	2	1.0	3	37	0	0	40	37.0
Hourly Total	4	5	0	0	9	5.0	6	118	0	0	124	118.0
18:00 - 18:15	0	2	0	0	2	2.0	0	21	0	0	21	21.0
18:15 - 18:30	3	1	0	0	4	1.0	2	16	0	0	18	16.0
18:30 - 18:45	2	0	0	0	2	0.0	0	30	0	0	30	30.0
18:45 - 19:00	0	1	0	0	1	1.0	1	18	0	0	19	18.0
Hourly Total	5	4	0	0	9	4.0	3	85	0	0	88	85.0
TOTAL	15	38	0	0	53	38.0	18	394	0	0	412	394.0

PCU Factors:	
PED	0.0
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Barnes, Thursday 8th July 2021

Junction: 3
Approach: South Worple Way

	To White Hart Lane (Northbound)						To White Hart Lane (Southbound)					
TIME	PED	LIGHT	HEAVY	BUS	TOTAL	PCUs	PED	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	0	0	0	0	0	0.0	0	1	0	0	1	1.0
07:15 - 07:30	0	1	0	0	1	1.0	0	1	0	0	1	1.0
07:30 - 07:45	0	0	0	0	0	0.0	1	2	0	0	3	2.0
07:45 - 08:00	3	0	0	0	3	0.0	1	4	0	0	5	4.0
Hourly Total	3	1	0	0	4	1.0	2	8	0	0	10	8.0
08:00 - 08:15	2	0	0	0	2	0.0	6	3	0	0	9	3.0
08:15 - 08:30	5	0	0	0	5	0.0	3	12	1	0	16	14.3
08:30 - 08:45	7	0	0	0	7	0.0	2	4	0	0	6	4.0
08:45 - 09:00	13	2	0	0	15	2.0	9	2	0	0	11	2.0
Hourly Total	27	2	0	0	29	2.0	20	21	1	0	42	23.3
09:00 - 09:15	6	1	0	0	7	1.0	2	1	0	0	3	1.0
09:15 - 09:30	4	0	0	0	4	0.0	1	1	0	0	2	1.0
09:30 - 09:45	6	1	0	0	7	1.0	0	2	0	0	2	2.0
09:45 - 10:00	0	0	0	0	0	0.0	1	3	0	0	4	3.0
Hourly Total	16	2	0	0	18	2.0	4	7	0	0	11	7.0
10:00 - 10:15	1	0	0	0	1	0.0	2	1	0	0	3	1.0
10:15 - 10:30	1	0	0	0	1	0.0	0	0	0	0	0	0.0
10:30 - 10:45	5	1	0	0	6	1.0	1	1	0	0	2	1.0
10:45 - 11:00	0	0	0	0	0	0.0	0	2	0	0	2	2.0
Hourly Total	7	1	0	0	8	1.0	3	4	0	0	7	4.0
TOTAL	53	6	0	0	59	6.0	29	40	1	0	70	42.3
15:00 - 15:15	1	0	0	0	1	0.0	2	2	0	0	4	2.0
15:15 - 15:30	2	0	0	0	2	0.0	0	2	0	0	2	2.0
15:30 - 15:45	0	0	0	0	0	0.0	1	2	0	0	3	2.0
15:45 - 16:00	0	1	0	0	1	1.0	1	3	0	0	4	3.0
Hourly Total	3	1	0	0	4	1.0	4	9	0	0	13	9.0
16:00 - 16:15	3	0	0	0	3	0.0	2	2	0	0	4	2.0
16:15 - 16:30	0	0	0	0	0	0.0	1	3	0	0	4	3.0
16:30 - 16:45	1	0	0	0	1	0.0	2	6	0	0	8	6.0
16:45 - 17:00	0	1	0	0	1	1.0	0	0	0	0	0	0.0
Hourly Total	4	1	0	0	5	1.0	5	11	0	0	16	11.0
17:00 - 17:15	3	0	0	0	3	0.0	2	5	0	0	7	5.0
17:15 - 17:30	2	1	0	0	3	1.0	1	3	0	0	4	3.0
17:30 - 17:45	0	0	0	0	0	0.0	4	4	0	0	8	4.0
17:45 - 18:00	4	0	0	0	4	0.0	1	8	0	0	9	8.0
Hourly Total	9	1	0	0	10	1.0	8	20	0	0	28	20.0
18:00 - 18:15	0	0	0	0	0	0.0	0	4	0	0	4	4.0
18:15 - 18:30	2	2	0	0	4	2.0	2	3	0	0	5	3.0
18:30 - 18:45	0	0	0	0	0	0.0	1	0	0	0	1	0.0
18:45 - 19:00	2	0	0	0	2	0.0	3	2	0	0	5	2.0
Hourly Total	4	2	0	0	6	2.0	6	9	0	0	15	9.0
TOTAL	20	5	0	0	25	5.0	23	49	0	0	72	49.0

PCU Factors:	
PED	0.0
LIGHT	1.0
HEAVY	2.3
BUS	2.0

Appendix H

Level Crossing Barrier Survey including Pedestrian Survey

Barnes, Thursday 8th July 2021

** School Party

White Hart Lane Level Crossing

BARRIER TIME DOWN	DURATION (mm:ss)	Crossing Level Crossing		Crossing Footbridge	
		Northbound	Southbound	Northbound	Southbound
07:22	03:14	2	3	0	0
07:25	03:35	0	0	1	2
07:30	06:57	0	3	3	4
07:39	09:06	1	3	4	9
07:51	04:51	0	4	4	4
07:57	02:43	2	3	0	3
08:02	05:47	2	4	6	9
08:10	06:47	2	0	7	9
08:17	05:37	3	4	5	9
08:27	05:19	0	5	7	4
08:33	03:37	1	3	2	5
08:38	03:24	6	3	5	3
08:42	02:49	0	7	6	2
08:50	06:20	6	3	2	8
09:01	05:40	7	3	15	8
09:14	01:47	3	0	1	1
09:17	02:17	2	0	1	1
09:21	05:41	4	2	6	0
09:28	04:26	3	5	50+ **	1
09:34	01:22	0	0	2	0
09:37	02:39	0	0	5	1
09:44	02:41	0	3	2	1
09:51	02:38	0	0	2	0
09:58	03:56	2	1	2	1
10:07	02:27	0	2	0	0
10:12	01:46	1	1	1	0
10:16	01:56	0	2	0	4
10:21	04:03	0	4	2	0
10:28	03:38	5	7	2	2
10:44	02:59	2	3	1	5
10:50	04:02	3	2	3	0
10:57	03:03	2	3	0	0
15:00	03:01	18	12	2	3
15:12	02:26	12	10	4	5
15:19	07:12	13	14	18	14
15:28	04:36	15	12	4	8
15:34	02:39	12	7	4	7
15:42	02:36	14	10	2	3
15:51	03:45	11	4	1	4
15:56	01:21	4	1	1	1
15:59	01:29	3	3	3	0
16:03	02:48	6	5	6	1
16:09	06:11	10	13	6	7
16:19	06:14	7	5	7	23
16:27	02:25	2	4	2	7
16:32	06:02	5	11	1	5
16:42	05:34	2	9	9	3
16:49	05:37	8	6	8	11
16:59	02:49	10	8	3	6
17:04	03:11	2	14	5	10
17:12	05:17	4	9	8	10
17:20	04:35	6	4	12	6
17:28	04:20	0	6	3	3
17:33	02:21	0	2	2	0
17:36	02:40	2	7	3	1
17:41	02:30	6	6	0	8
17:47	06:31	7	4	6	8
17:56	05:56	8	11	0	1
18:05	01:26	3	1	2	2
18:07	02:31	4	4	3	6
18:12	01:49	3	5	0	1
18:15	01:39	5	8	0	2
18:19	04:43	3	15	3	8
18:26	04:29	2	7	2	3
18:31	01:58	18	8	3	3
18:35	03:27	4	14	5	7
18:40	03:59	3	5	2	5
18:49	06:02	4	3	3	1

Appendix I

A205 Upper Richmond Road – Survey Data

East	1	01-May-18	11902	Tuesday	1			2018	2019
West	2	01-May-18	11498	Tuesday	1		East	12025	13499
East	1	02-May-18	12235	Wednesda	1		West	11771	11607
West	2	02-May-18	11587	Wednesda	1		Total	23796	25107
East	1	03-May-18	12254	Thursday	1		Change		1311
West	2	03-May-18	12242	Thursday	1				5.5%
East	1	04-May-18	13103	Friday	1				
West	2	04-May-18	11510	Friday	1				
East	1	05-May-18	11849	Saturday	2				
West	2	05-May-18	11576	Saturday	2				
East	1	06-May-18	11404	Sunday	2				
West	2	06-May-18	11718	Sunday	2				
East	1	07-May-18	10602	Monday	1				
West	2	07-May-18	10237	Monday	1				
East	1	08-May-18	11626	Tuesday	1				
West	2	08-May-18	11601	Tuesday	1				
East	1	09-May-18	11954	Wednesda	1				
West	2	09-May-18	11709	Wednesda	1				
East	1	10-May-18	12135	Thursday	1				
West	2	10-May-18	11972	Thursday	1				
East	1	11-May-18	12716	Friday	1				
West	2	11-May-18	12169	Friday	1				
East	1	12-May-18	12445	Saturday	2				
West	2	12-May-18	12128	Saturday	2				
East	1	13-May-18	12720	Sunday	2				
West	2	13-May-18	13540	Sunday	2				
East	1	14-May-18	11826	Monday	1				
West	2	14-May-18	11399	Monday	1				
East	1	15-May-18	12203	Tuesday	1				
West	2	15-May-18	11722	Tuesday	1				
East	1	16-May-18	12317	Wednesda	1				
West	2	16-May-18	11857	Wednesda	1				
East	1	17-May-18	12599	Thursday	1				
West	2	17-May-18	12133	Thursday	1				
East	1	18-May-18	12982	Friday	1				
West	2	18-May-18	12474	Friday	1				
East	1	19-May-18	11718	Saturday	2				
West	2	19-May-18	11625	Saturday	2				
East	1	20-May-18	11683	Sunday	2				
West	2	20-May-18	11519	Sunday	2				
East	1	21-May-18	11805	Monday	1				
West	2	21-May-18	11499	Monday	1				
East	1	22-May-18	12051	Tuesday	1				
West	2	22-May-18	11873	Tuesday	1				
East	1	23-May-18	12202	1 Wednesda	1				
West	2	23-May-18	12169	1 Wednesda	1				
East	1	24-May-18	12508	Thursday	1				
West	2	24-May-18	12101	Thursday	1				
East	1	25-May-18	12925	Friday	1				
West	2	25-May-18	12003	Friday	1				
East	1	26-May-18	11987	Saturday	2				
West	2	26-May-18	11779	Saturday	2				
East	1	27-May-18	9743	Sunday	2				
West	2	27-May-18	10492	Sunday	2				
East	1	28-May-18	10236	Monday	1				
West	2	28-May-18	10160	Monday	1				
East	1	29-May-18	12009	Tuesday	1				
West	2	29-May-18	11801	Tuesday	1				
East	1	30-May-18	12311	Wednesda	1				
West	2	30-May-18	12156	Wednesda	1				
East	1	31-May-18	12714	Thursday	1				
West	2	31-May-18	12663	Thursday	1				
East	1	01-May-19	14120	Wednesda	1				
West	2	01-May-19	11173	Wednesda	1				
East	1	02-May-19	13684	Thursday	1				
West	2	02-May-19	11793	Thursday	1				
East	1	03-May-19	14230	Friday	1				
West	2	03-May-19	11308	Friday	1				
East	1	04-May-19	14200	Saturday	2				
West	2	04-May-19	12631	Saturday	2				
East	1	05-May-19	12940	Sunday	2				
West	2	05-May-19	11766	Sunday	2				
East	1	06-May-19	11654	Monday	1				
West	2	06-May-19	10632	Monday	1				
East	1	07-May-19	13445	Tuesday	1				
West	2	07-May-19	11034	Tuesday	1				
East	1	08-May-19	13255	Wednesda	1				
West	2	08-May-19	11014	Wednesda	1				
East	1	09-May-19	13871	Thursday	1				

West	2	09-May-19	11795		Thursday	1
East	1	10-May-19	14221		Friday	1
West	2	10-May-19	11883		Friday	1
East	1	11-May-19	13909		Saturday	2
West	2	11-May-19	12223		Saturday	2
East	1	12-May-19	13449		Sunday	2
West	2	12-May-19	11886		Sunday	2
East	1	13-May-19	12814		Monday	1
West	2	13-May-19	11024		Monday	1
East	1	14-May-19	13634		Tuesday	1
West	2	14-May-19	11813		Tuesday	1
East	1	15-May-19	13818		Wednesda	1
West	2	15-May-19	11850		Wednesda	1
East	1	16-May-19	14148		Thursday	1
West	2	16-May-19	11762		Thursday	1
East	1	17-May-19	14340		Friday	1
West	2	17-May-19	11377		Friday	1
East	1	18-May-19	13870		Saturday	2
West	2	18-May-19	12167		Saturday	2
East	1	19-May-19	13242		Sunday	2
West	2	19-May-19	11583		Sunday	2
East	1	20-May-19	12832		Monday	1
West	2	20-May-19	11611		Monday	1
East	1	21-May-19	13368		Tuesday	1
West	2	21-May-19	11962		Tuesday	1
East	1	22-May-19	13855		Wednesda	1
West	2	22-May-19	12168		Wednesda	1
East	1	23-May-19	13662		Thursday	1
West	2	23-May-19	12248		Thursday	1
East	1	24-May-19	14359		Friday	1
West	2	24-May-19	11346		Friday	1
East	1	25-May-19	13139		Saturday	2
West	2	25-May-19	12369		Saturday	2
East	1	26-May-19	12287		Sunday	2
West	2	26-May-19	11155		Sunday	2
East	1	27-May-19	11535		Monday	1
West	2	27-May-19	10542		Monday	1
East	1	28-May-19	13263		Tuesday	1
West	2	28-May-19	11748		Tuesday	1
East	1	29-May-19	13889		Wednesda	1
West	2	29-May-19	11349		Wednesda	1
East	1	30-May-19	13753		Thursday	1
West	2	30-May-19	11895		Thursday	1
East	1	31-May-19	13689		Friday	1
West	2	31-May-19	10720		Friday	1

East	1	01-May-20	9358	1	Friday	1
West	2	01-May-20	8987	1	Friday	1
East	1	02-May-20	7571		Saturday	2
West	2	02-May-20	7174		Saturday	2
East	1	03-May-20	5908		Sunday	2
West	2	03-May-20	5625		Sunday	2
East	1	04-May-20	8878		Monday	1
West	2	04-May-20	8575		Monday	1
East	1	05-May-20	9119		Tuesday	1
West	2	05-May-20	8927		Tuesday	1
East	1	06-May-20	9512		Wednesda	1
West	2	06-May-20	9074		Wednesda	1
East	1	07-May-20	10033		Thursday	1
West	2	07-May-20	9435		Thursday	1
East	1	08-May-20	8136		Friday	1
West	2	08-May-20	7606		Friday	1
East	1	09-May-20	8098		Saturday	2
West	2	09-May-20	7512		Saturday	2
East	1	10-May-20	6228		Sunday	2
West	2	10-May-20	5876		Sunday	2
East	1	11-May-20	9310		Monday	1
West	2	11-May-20	8964		Monday	1
East	1	12-May-20	9840		Tuesday	1
West	2	12-May-20	9528		Tuesday	1
East	1	13-May-20	10369		Wednesda	1
West	2	13-May-20	9923		Wednesda	1
East	1	14-May-20	10881		Thursday	1
West	2	14-May-20	10424		Thursday	1
East	1	15-May-20	11625	2	Friday	1
West	2	15-May-20	11092	2	Friday	1
East	1	16-May-20	10212		Saturday	2
West	2	16-May-20	9711		Saturday	2
East	1	17-May-20	9233		Sunday	2
West	2	17-May-20	8725		Sunday	2
East	1	18-May-20	10951		Monday	1
West	2	18-May-20	10421		Monday	1

East	1	19-May-20	11566	Tuesday	1
West	2	19-May-20	10988	Tuesday	1
East	1	20-May-20	12059	Wednesda	1
West	2	20-May-20	11227	Wednesda	1
East	1	21-May-20	11891	Thursday	1
West	2	21-May-20	11310	Thursday	1
East	1	22-May-20	12602	Friday	1
West	2	22-May-20	11983	Friday	1
East	1	23-May-20	10898	Saturday	2
West	2	23-May-20	10386	Saturday	2
East	1	24-May-20	10186	Sunday	2
West	2	24-May-20	9541	Sunday	2
East	1	25-May-20	10880	Monday	1
West	2	25-May-20	10500	Monday	1
East	1	26-May-20	12520	Tuesday	1
West	2	26-May-20	12227	Tuesday	1
East	1	27-May-20	12444	Wednesda	1
West	2	27-May-20	12358	Wednesda	1
East	1	28-May-20	12811	Thursday	1
West	2	28-May-20	12366	Thursday	1
East	1	29-May-20	13425	Friday	1
West	2	29-May-20	12682	Friday	1
East	1	30-May-20	12397	Saturday	2
West	2	30-May-20	11935	Saturday	2
East	1	31-May-20	11371	Sunday	2
West	2	31-May-20	10555	Sunday	2
East	1	01-May-21	14404	Saturday	2
West	2	01-May-21	14069	Saturday	2
East	1	02-May-21	13697	Sunday	2
West	2	02-May-21	12761	Sunday	2
East	1	03-May-21	12898	Monday	1
West	2	03-May-21	11665	Monday	1
East	1	04-May-21	13536	Tuesday	1
West	2	04-May-21	13172	Tuesday	1
East	1	05-May-21	13688	Wednesda	1
West	2	05-May-21	13527	Wednesda	1
East	1	06-May-21	13745	Thursday	1
West	2	06-May-21	13570	Thursday	1
East	1	07-May-21	14504	Friday	1
West	2	07-May-21	13822	Friday	1
East	1	08-May-21	14840	Saturday	2
West	2	08-May-21	13570	Saturday	2
East	1	09-May-21	13511	Sunday	2
West	2	09-May-21	12557	Sunday	2
East	1	10-May-21	13203	Monday	1
West	2	10-May-21	12999	Monday	1
East	1	11-May-21	13641	Tuesday	1
West	2	11-May-21	13178	Tuesday	1
East	1	12-May-21	13895	Wednesda	1
West	2	12-May-21	13378	Wednesda	1
East	1	13-May-21	14392	Thursday	1
West	2	13-May-21	13901	Thursday	1
East	1	14-May-21	14890	Friday	1
West	2	14-May-21	13754	Friday	1
East	1	15-May-21	15091	Saturday	2
West	2	15-May-21	13991	Saturday	2
East	1	16-May-21	13661	Sunday	2
West	2	16-May-21	12658	Sunday	2
East	1	17-May-21	13632	Monday	1
West	2	17-May-21	12805	Monday	1
East	1	18-May-21	14173	Tuesday	1
West	2	18-May-21	13340	Tuesday	1
East	1	19-May-21	14587	Wednesda	1
West	2	19-May-21	13398	Wednesda	1
East	1	20-May-21	14598	Thursday	1
West	2	20-May-21	13760	Thursday	1
East	1	21-May-21	15160	Friday	1
West	2	21-May-21	13494	Friday	1
East	1	22-May-21	15353	Saturday	2
West	2	22-May-21	14289	Saturday	2
East	1	23-May-21	14446	Sunday	2
West	2	23-May-21	13131	Sunday	2
East	1	24-May-21	13420	Monday	1
West	2	24-May-21	12904	Monday	1
East	1	25-May-21	14092	Tuesday	1
West	2	25-May-21	13439	Tuesday	1
East	1	26-May-21	14315	Wednesda	1
West	2	26-May-21	13619	Wednesda	1
East	1	27-May-21	14510	Thursday	1
West	2	27-May-21	13592	Thursday	1
East	1	28-May-21	14423	Friday	1

West	2	28-May-21	13458	Friday	1
East	1	29-May-21	14846	Saturday	2
West	2	29-May-21	14570	Saturday	2
East	1	30-May-21	14401	Sunday	2
West	2	30-May-21	13886	Sunday	2
East	1	31-May-21	14052	Monday	1
West	2	31-May-21	13426	Monday	1

Appendix J

Site Layout Plan

metres 5 10 15 20 25

SCALE BAR: 1:250

Revision	Description	Date	Drawn	Checked
21	For Planning Submission	12/10/2022	FS	OM
20	For Planning Submission	14/09/2022	FS	OM
19	For Planning Submission	31/05/2022	FS	OM
18	For Planning Submission	04/02/2022	FS	OM
17	For Planning Submission	20/01/2022	FS	OM
16	For Planning Submission	12/11/2021	FS	OM
15	For Planning Submission	17/08/2021	FS	OM
14	For Planning Submission	13/08/2021	FS	OM
13	For Planning Submission	12/08/2021	FS	OM
12	Update Desing Freeze	23/07/2021	FS	OM
11	Draft Planning Submission	09/07/2021	FS	OM
10	For Information	05/07/2021	FS	OM
9	For Information	23/06/2021	FS	OM
8	For Information	04/06/2021	FS	OM
7	For information	12/05/2021	FS	OM
6	For Information	10/05/2021	FS	OM
5	For Information	25/03/2021	FS	OM
4	Pre-App 2 Issue	25/02/2021	FS	OM
3	Building position update	08/02/2021	FS	OM
2	For Information	28/01/2021	FS	OM
1	For Information	14/01/2021	FS	OM

SCOTT BROWNRIGG

77 Endell Street
London WC2H 9DZ
T +44 (0)20 7240 7766
W scottbrownrigg.com

Client's Name
Star Land Realty UK Ltd.

Job Title
Barnes Hospital Site

Drawing Title
Proposed Site Plan

Scale
1 : 250 @A1

SBR Project No.
18387

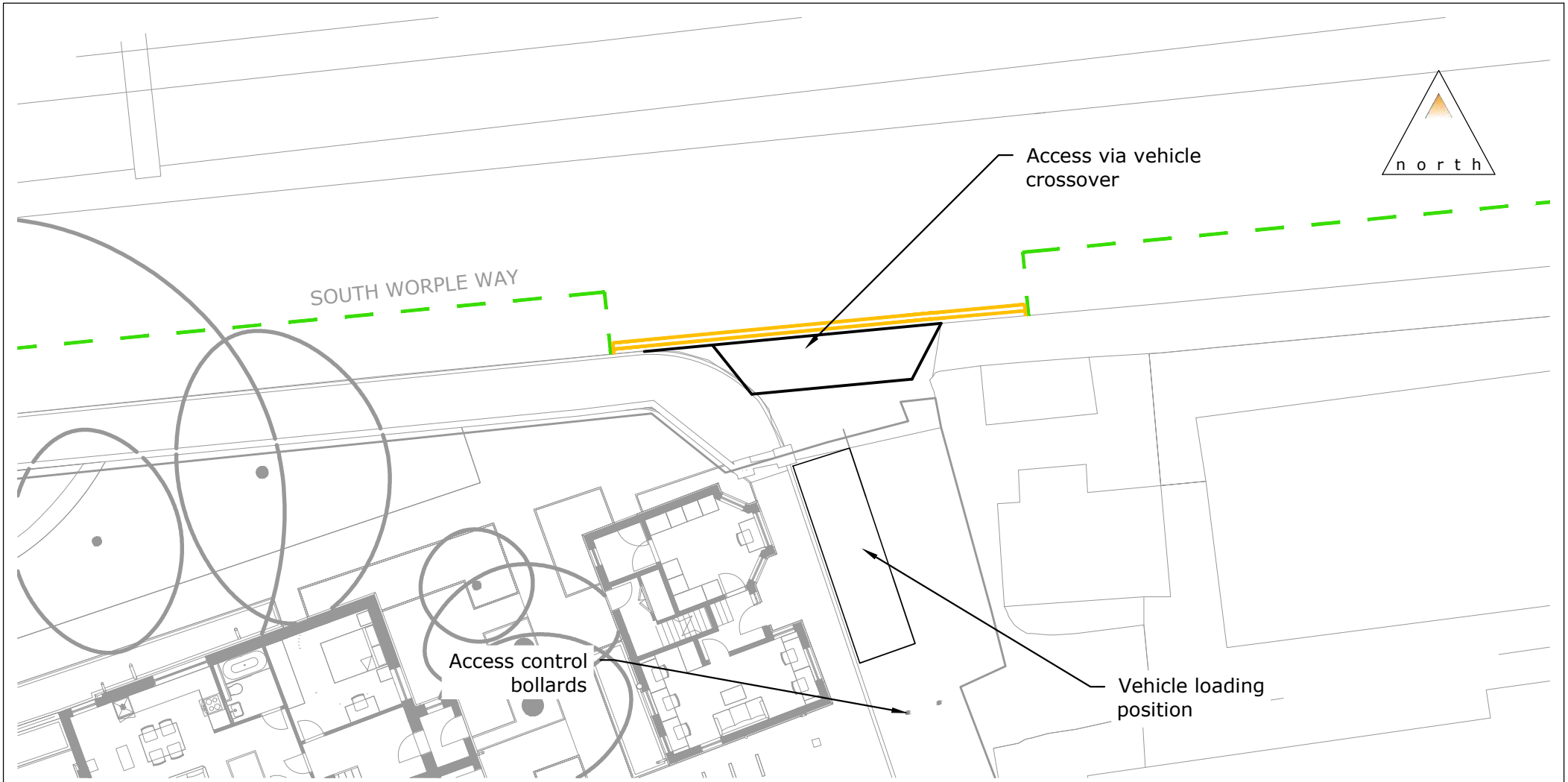
SBR Project No.	Originator	Volume	Level	Type	Role	Number
18387	SBR	ZZ	00	DR	A	80101

Suitability Code: S4 - Status: FOR STAGE APPROVAL

Rev: 21

Appendix K

Access Arrangement & Loading Opportunity



C:\Users\JoeEarp\Motion\StaffSite - Stbarn 2101073\Drawings\2101073-01F.dwg

motion

84 North Street
Guildford
Surrey
GU1 4AU

T: 01483 531 300

Cargo Works
1-2 Hatfields
London
SE1 9PG

T: 020 8065 5208

www.motion.co.uk

Project:
Barnes Hospital

Title:
Central Access Arrangement

Scale: 1:200 (@ A4)

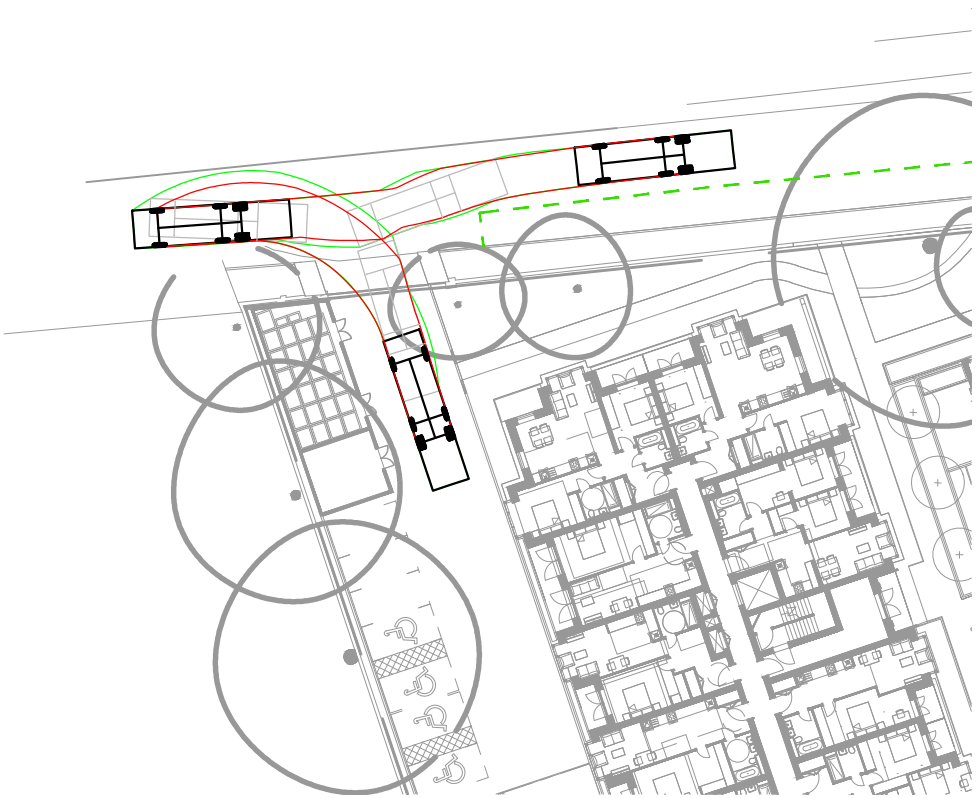
Drawing: 2101073-01

Revision: F

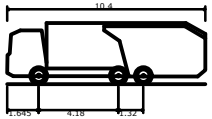
Appendix L

Swept Path Analysis

Access



Egress



Richmond BC RCV (with Elite 2 6x2MS chassis)	
Overall Length	10.400m
Overall Width	2.500m
Overall Body Height	3.211m
Min Body Ground Clearance	0.416m
Track Width	2.530m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.350m

motion

84 North Street
Guildford
Surrey
GU1 4AU

T: 01483 531 300

Cargo Works
1-2 Hatfields
London
SE1 9PG

T: 020 8065 5208

www.motion.co.uk

Project:
Barnes Hospital

Title:
Swept Path Analysis
Refuse Vehicle - Residential

Scale: 1:500 (@ A4)

Drawing: 2101073-TK03

Revision: G

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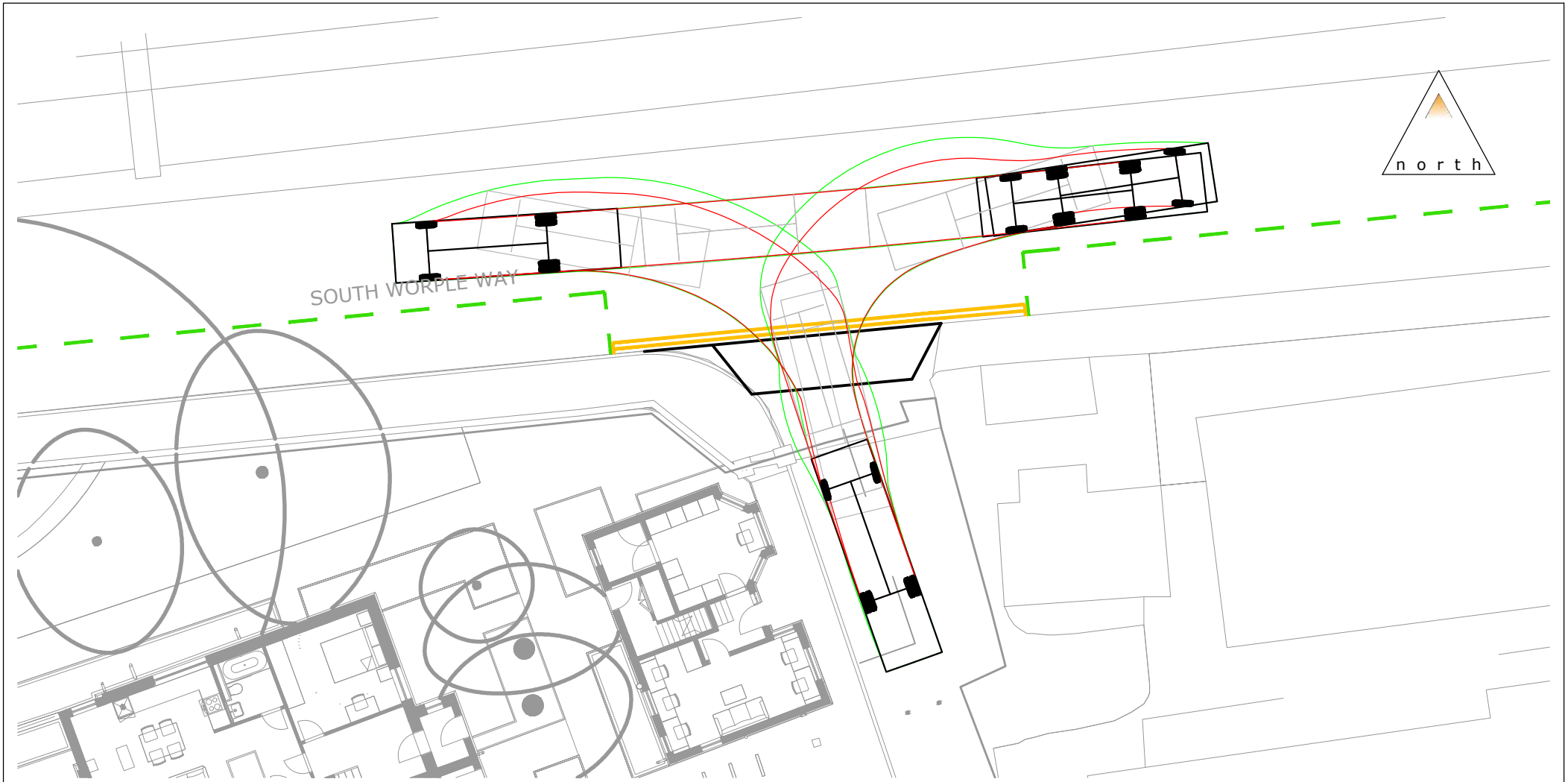

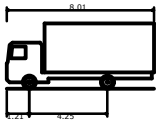

7.5t Box Van	
Overall Length	8.010m
Overall Width	2.100m
Overall Body Height	3.556m
Min Body Ground Clearance	0.351m
Track Width	2.064m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

motion

84 North Street
Guildford
Surrey
GU1 4AU

T: 01483 531 300

Cargo Works
1-2 Hatfields
London
SE1 9PG

T: 020 8065 5208

www.motion.co.uk

Project:
Barnes Hospital

Title:
7.5t Box Van - Central Access

Scale: 1:200 (@ A4)

Drawing: 2101073-TK08

Revision: H

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Appendix M

Servicing Trip Rates

Calculation Reference: AUDIT-734001-210714-0744

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
MULTI-MODAL Servicing Vehicles

Selected regions and areas:

01	GREATER LONDON		
	BE	BEXLEY	1 days
	BT	BRENT	1 days
	HO	HOUNSLOW	1 days
	IS	ISLINGTON	1 days
	KI	KINGSTON	1 days
	RD	RICHMOND	1 days
	SK	SOUTHWARK	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: 20 to 170 (units:)
Range Selected by User: 20 to 175 (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: 01/01/15 to 01/06/21

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

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	3 days
Thursday	2 days
Friday	1 days

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

Selected survey types:

Manual count	8 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	6
Suburban Area (PPS6 Out of Centre)	2

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:

Development Zone	3
Residential Zone	4
Built-Up Zone	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	8 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:

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

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

Population within 5 miles:

500,001 or More	8 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	2 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	5 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:

1a (Low) Very poor	1 days
2 Poor	2 days
3 Moderate	2 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 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 BT-03-C-01 BLOCKS OF FLATS BRENT
LAKESIDE DRIVE
PARK ROYAL

Suburban Area (PPS6 Out of Centre)
Development Zone
Total No of Dwellings: 170
Survey date: WEDNESDAY *28/09/16* *Survey Type: MANUAL*

3 HO-03-C-03 BLOCKS OF FLATS HOUNSLOW
COMMERCE ROAD
BRENTFORD

Edge of Town Centre
Development Zone
Total No of Dwellings: 150
Survey date: FRIDAY *18/11/16* *Survey Type: MANUAL*

4 IS-03-C-04 BLOCK OF FLATS ISLINGTON
CITY ROAD
ISLINGTON

Edge of Town Centre
Development Zone
Total No of Dwellings: 157
Survey date: THURSDAY *14/07/16* *Survey Type: MANUAL*

5 KI-03-C-03 BLOCK OF FLATS KINGSTON
PORTSMOUTH ROAD
SURBITON

Edge of Town Centre
Residential Zone
Total No of Dwellings: 20
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

6 RD-03-C-04 BLOCKS OF FLATS RICHMOND
BESSANT DRIVE
KEW

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 170
Survey date: WEDNESDAY *15/05/19* *Survey Type: MANUAL*

7 SK-03-C-02 BLOCK OF FLATS SOUTHWARK
LAMB WALK
BERMONDSEY

Edge of Town Centre
Built-Up Zone
Total No of Dwellings: 29
Survey date: THURSDAY *23/04/15* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 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 Servicing 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	8	106	0.005	8	106	0.004	8	106	0.009
08:00 - 09:00	8	106	0.004	8	106	0.000	8	106	0.004
09:00 - 10:00	8	106	0.011	8	106	0.007	8	106	0.018
10:00 - 11:00	8	106	0.020	8	106	0.018	8	106	0.038
11:00 - 12:00	8	106	0.015	8	106	0.011	8	106	0.026
12:00 - 13:00	8	106	0.008	8	106	0.018	8	106	0.026
13:00 - 14:00	8	106	0.021	8	106	0.018	8	106	0.039
14:00 - 15:00	8	106	0.008	8	106	0.011	8	106	0.019
15:00 - 16:00	8	106	0.011	8	106	0.012	8	106	0.023
16:00 - 17:00	8	106	0.014	8	106	0.013	8	106	0.027
17:00 - 18:00	8	106	0.006	8	106	0.009	8	106	0.015
18:00 - 19:00	8	106	0.006	8	106	0.006	8	106	0.012
19:00 - 20:00	8	106	0.002	8	106	0.005	8	106	0.007
20:00 - 21:00	8	106	0.000	8	106	0.000	8	106	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.131			0.132			0.263

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.*