

REPORT

Transport Statement

63-71 High Street, Hampton Hill, Richmond

Client: Greatplanet Limited

Reference: T&PR001D01

Revision: 02/Final

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1 INTRODUCTION

1.1 Preface

- 1.1.1 This Transport Statement (TS) has been prepared by Royal HaskoningDHV on behalf of Greatplanet Limited in association with the full planning application for a proposed residential led mixed-use development consisting of 31 apartments (Land Use Class C3), 8 town houses (Land Use Class C3) and 131 sq.m of non-food retail space (Land Use Class A1) and 102sq.m of space for use either as A1 non-food retail, A3 café, B1 (office) and D1 (Non-residential) clinic or crèche or education and training centre
- 1.1.2 This TS will consider the proposed development in the context of national, regional and local planning policy and guidance.
- 1.1.3 This TS has been prepared with reference to the Transport for London (TfL) Transport Assessment guidance.

1.2 Existing Development

- 1.2.1 63-71 High Street (A311) in Hampton Hill is located in Fulwell and Hampton Hill Ward within the London Borough of Richmond-upon-Thames (LBRuT). The site is currently developed with three purpose built office buildings comprising 2,055 sq.m, and accommodates 49 on-site surface level car parking spaces, which are accessed via a crossover from the High Street. One of the existing buildings also incorporates 3 self-contained flats.
- 1.2.2 Prior approval for the Change of Use of the existing offices to provide 26 residential apartments (23 new units + the 3 existing units) was issued on 20th October 2016.
- 1.2.3 The site is conveniently located on Hampton Hill High Street, with local amenities in close proximity and with access to Bushy Park (via Hampton Hill Gate), a walk distance of 130 metres.
- 1.2.4 The site location is shown at **Appendix A**. Hampton Hill is located approximately 3 miles west of Kingston and 4 miles south west of Richmond. The site fronts onto High Street, which principally provides a mix of independent shops, cafes, restaurants and residential terraced and flatted housing. The site benefits from its proximity to attractions such as Hampton Court Palace, The River Thames and Bushy Park.

1.3 Scope of Assessment

- 1.3.1 This TS provides an overview of the site's accessibility by all modes of transport and provides a comparison of the traffic attraction of the existing and proposed developments. This report is divided into additional sections, as summarised below:

- Section 2 describes the existing site and surroundings, access to local amenities and provides an overview of the site's current accessibility by non-car modes of transport.
- Section 3 reviews the site's vehicular access and provides an overview of the existing local highway network.
- Section 4 sets out the development proposals.
- Section 5 sets out the potential traffic attraction of the site's existing office development, and the traffic generation of the site's proposed residential land use.
- Section 6 provides a summary of relevant national, regional and local planning policy and guidance.
- Finally, Section 7 provides a summary and conclusion to this document.

2 BASELINE CONDITIONS

2.1 Preface

2.1.1 The site is located on High Street, Hampton Hill, between Windmill Road to the north, and Holly Road to the south, within the London Borough of Richmond upon Thames. The site is within an Air Quality Management Area (AQMA) and conservation area (No. 38).

2.1.2 Hampton Hill is bordered by Bushy Park, Fulwell Golf Course and the Longford River. The A312 Uxbridge Road, A308 Upper Sunbury Road and the A313 Park Road are access points for commuters into the borough and out to the A316, and beyond to Heathrow and other major motorways.

2.2 Local Amenities

2.2.1 The development site is located on High Street, Hampton Hill, and as such the immediate area around the site accommodates a range of key services and facilities, including chain food stores, other independent retail units, educational, health and social/ recreational facilities.

2.2.2 **Table 2.1** overleaf lists some key local amenities in the Hampton Hill area and identifies their respective distances from the site. It is evident from the table that the site is well located for access to these facilities and that these key destinations, such as shops, schools, healthcare and transport facilities, are accessible on foot and by cycle.

Local Amenities	Approx. Distance from Site Access (m)	Estimated Walking Time (mins)	Estimated Cycling Time (mins)
Public Transport			
Northbound Bus Stop – High Street (Stop HL)	10	0	0
Southbound Bus Stop – High Street (Stop HC)	35	0	0
Fulwell Railway Station	1,200	14	5
Hampton Railway Station	1,950	23	8
Educational Institutions			
Greenacres Day Nursery School Ltd - Preschool	65	1	0
Hampton Hill Junior School	380	5	2
Hamptons Day Nursery	485	6	2
Carlisle Infant School	685	8	3
Clarendon School	890	11	4
The Lady Eleanor Holles School	935	11	4
Hampton School	1,600	19	6
Healthcare			
Pharmacy and Surgery	185	2	1
Hampton Hill Medical Centre	355	4	1
Hampton Hill Pharmacy	415	5	2
Broad Lane Surgery	1,010	12	4
Other			
Public House	20	0	0
United Reformed Church	135	2	1
Access to Bushy Park	150	2	1
Hampton Hill Post Office	160	2	1
Sainsbury Local	320	4	1
Hampton Hill Theatre	350	4	1
Hampton Hill Library	305	4	1
Carlisle Park	975	12	4
Fulwell Golf Club	1,050	13	4
Teddington	2,000	24	8
Numerous retail facilities	within 500m	6	2
Numerous restaurants/ Take-away outlets	within 500m	6	2

Table 2.1: Local Amenities

2.3 Walking

- 2.3.1 The Chartered Institute of Highways and Transportation (CIHT) guidance, “*Providing for journeys on foot*” states that an acceptable walking distance for the purpose of either commuting or travelling to and from school is 1km.
- 2.3.2 A walk distance catchment of 1km as measured from the site includes the areas of Hampton Hill including retail, employment destinations, as well as access to schools and leisure/ recreation facilities.
- 2.3.3 Footways are present on both sides of High Street and on each side of all other streets in the immediate surrounding area.
- 2.3.4 Pedestrian routes between the site and local bus stops, and to Fulwell Railway Station on both sides of the road are in good condition: large sections of both footways have been recently resurfaced, as part of the LBRuT scheme to improve pedestrian and traffic conditions along High Street.
- 2.3.5 Zebra crossings are present on High Street, being located approximately 90 metres to the south of the site (to the south of Holly Road) and 140 metres to the north of the site (to the north of Windmill Road). In addition, pedestrian crossing facilities are provided at the signalised junction of High Street and Broad Lane.
- 2.3.6 As part of LBRuT’s improvement scheme on High Street these zebra crossings will be improved.
- 2.3.7 Bushy Park is located adjacent to High Street and includes a network of surfaced routes which provide connections to Kingston, Teddington and Hampton Court. In addition to providing traffic free pedestrian routes to key local destinations, they also offer routes for recreation.

2.4 Cycling

- 2.4.1 The National Travel Survey (Table NTS0306) identifies that the average length of a cycle trip in England, as a main mode of travel, was 3.3 miles in 2013 (circa 5.3 km). Areas including Twickenham, Hounslow, Feltham, Sunbury-on-Thames, Kingston-upon-Thames and Surbiton are accessible from the site within this distance. Recognising that 3.3 miles is an average, longer journeys by bicycle will be considered acceptable for some future site residents and users.
- 2.4.2 Local Cycle Guide 9 (TfL, 2013) shows details of local cycle routes in the surrounding area such as Broad Lane and Holly Road. These are shown as “*quieter roads that have been recommended by other cyclists*”. Additionally, there are a number of other recognised cycle routes nearby including the Hampton Court to Putney section of National Cycle Network Route 4.

2.5 Bus Services

2.5.1 There are a number of bus stops located on Hampton Hill High Street, with the closest being located directly adjacent to the site. These stops are referred to by TfL as stops HL (accommodating northbound services) and HC (accommodating southbound services). There are three bus routes with frequent services accessible from these stops. This travel mode consequentially provides a relatively quick and convenient way of accessing the site. **Table 2.2** below provides a summary of frequency for the bus routes which serve High Street Hampton Hill.

Bus Service	Distance to Nearest Bus Stop	Route	Direction	Frequency, Monday to Friday (per hour)			Sat	Sun
				AM Peak Hour	Inter Peak Hour	PM Peak Hour		
285	10m	Heathrow Central Station - Hatton Cross Station - Feltham Station - Windmill Road - Holly Road - Teddington - Hampton Wick Station – Kingston	Kingston	8ph	6ph	6ph	6ph	5ph
			Heathrow Central Station	6ph	6ph	6ph	6ph	5ph
R68	10m	Kew Retail Park - Richmond Station - York Street/ Twickenham - Teddington Memorial Hospital - Holly Road - Hampton Court Road	Hampton Court Road	4ph	4ph	4ph	4ph	4ph
			Kew Retail Park	4ph	4ph	4ph	4ph	4ph
R70	10m	Nurserylands Shopping Centre - Hampton lane - Carlisle School - Holly Road - Fulwell Station - Richmond Station - Richmond/ Manor Road	Richmond/ Manor Road	7ph	7ph	7ph	6ph	4ph
			Nurserylands Shopping Centre	7ph	7ph	7ph	5ph	4ph

Table 2.2: Summary of Local Bus Services

2.5.2 Route maps for bus services that are accessible from local bus stops are published by TfL and are provided in **Appendix B**.

2.6 Rail Services

2.6.1 The site is located approximately 1,200 metres from Fulwell Railway Station, which is on the Shepperton Branch Line and is in Travelcard Zone 6. Train services are operated at this station by South West Trains. The 1,200m distance equates to an approximate walk time of 14 minutes, or a 5 minute cycle. The station has provision for 70 cycle parking spaces and a car park which has the benefit of CCTV surveillance.

2.6.2 A summary of the train services from Fulwell Station to a selection of other stations is set out in **Table 2.3 below**.

Destination	AM Peak Hour (Mon -Fri)		PM Peak Hour (Mon-Fri)		Saturday		Sunday	
	Trip Duration	Frequency (Trains per hour)	Trip Duration	Frequency (Trains per hour)	Trip Duration	Frequency (Trains per hour)	Trip Duration	Frequency (Trains per hour)
London Waterloo	43 - 52 mins	3	42 mins	2	41 mins	2	40 - 45 mins	1
Twickenham	6 - 19 mins	3	19 mins	2	19 mins	2	38 mins	1
Richmond	15 - 25 mins	3	25 mins	2	25 mins	2	44mins	1
Shepperton	18 mins	2	18 - 19 mins	2	14 mins	2	16 mins	1
Clapham Junction	26 - 36 mins	3	30 mins	2	31 mins	2	30 mins	1

Table 2.3: Train Services from Fullwell Station

- 2.6.3 At London Waterloo connection can be made to Jubilee, Northern and the Waterloo/ Bank Underground Line Services and the South-Eastern National Rail services to Charing Cross, London Bridge and Kent. At Clapham Junction connections for National Rail services towards London Victoria and a wide range of other destinations served by Southern and South West Trains as well as London Overground services to Highbury & Islington and Stratford. At Richmond connection can be made to National Rail services towards Reading; London Overground services to Stratford and London Underground District Line services to Upminster and Edgware Road.
- 2.6.4 In the future Fulwell Station is expected to be a calling point of Crossrail 2. Crossrail 2, running from nine stations in Surrey to three in Hertfordshire, would provide a new rail link across London and connect the South Western Main Line to the West Anglia Main Line, via Victoria and Kings Cross St. Pancras.
- 2.6.5 Overall, rail services from Fulwell Railway Station offer a practical travel mode for those travelling to and from the site, with direct connections to local employment centres in Richmond and Kingston as well as Central London and wider areas.

2.7 Public Transport Accessibility Level

- 2.7.1 The Public Transport Accessibility Level (PTAL) methodology is a widely adopted tool for quantifying a site's accessibility to public transport and is considered to be a usable measure of relative accessibility to public transport at any location within a London borough and provides a general comparison of one site's accessibility relative to another.
- 2.7.2 'The London Plan – The Spatial Development Strategy for Greater London' (GLA, 2016) states:
- 'Public Transport Accessibility Levels (PTALs) are used by TfL to produce a consistent London wide public transport access mapping facility to help boroughs with locational planning and assessment of appropriate parking provision by measuring broad public transport accessibility levels. There is evidence that car use reduces as access to public transport (as measured by PTALs) increases. Given the need to avoid over-provision, car parking should reduce as public transport accessibility increases.'*
- 2.7.3 The PTAL methodology scores accessibility on the number and frequency of public transport services available, and the distance to stops/stations where those services can be accessed. It is accepted that PTALs are a 'blunt tool' which provide an initial basis on which to assess a site but they do not necessarily reflect public transport use, particularly in sites located in outer London. This is confirmed by TRICS/ TRAVL surveys where some sites with lower PTAL value experiences high public transport use, indicating that people will walk further than the PTAL 'cut off' distance to public transport (640m bus and 960m rail).

2.7.4 The methodology for calculating a PTAL was initially developed by the London Borough of Hammersmith and Fulham in consultation with Transport for London and other London Boroughs.

2.7.5 The relationship between PTAL levels and PTAL scores are set out below in **Table 2.4**.

PTAL Band	Level		Accessibility Index Value	Rating
1	a	Low	below 2.5	Very Poor
	b		2.51 - 5.0	Very Poor
2			5.01 - 10.0	Poor
3			10.01 - 15.0	Moderate
4			15.01 - 20.0	Good
5			20.01 - 25.0	Very Good
6	a		25.01 - 40.0	Excellent
	b	High	above 40.0	Excellent

Table 2.4: PTAL Levels and Scores

2.7.6 The PTAL rating for the proposed development site has been calculated using the Transport for London WebCAT service. The Transport for London WebCAT service indicates that the site has a PTAL rating of 2, which suggests that the site has “Poor” access to public transport.

2.7.7 The full PTAL rating calculation can be found in **Appendix C**.

2.7.8 Although Fullwell Station is outside the maximum 960m walking distance for the PTAL rating, the 1,200m distance is walkable for many people and there are good connecting services in the form of buses from the Holly Road bus stop adjacent to the site. It is therefore likely that future site residents would use Fulwell Station with its high degree of connectivity for travelling to/ from the site.

2.7.9 In addition, our research indicates that a high proportion of existing local residents travel to work by train or underground (22.6%). An overview of existing local travel patterns is provided in **Table 2.5** below which details of the travel to work mode share of residents located in Super Output Area Richmond 019D, within which the development site is located.

Method of Travel to Work	Raw Data	Mode Split
Underground, Metro, Light Rail, Tram	51	5.5%
Train	159	17.1%
Bus, Minibus or Coach	97	10.4%
Taxi	0	0.0%
Motorcycle, Scooter or Moped	24	2.6%
Driving a Car or Van	402	43.1%
Passenger in a Car or Van	21	2.3%
Bicycle	72	7.7%
On Foot	106	11.4%
Total	932	100%

Table 2.5: 2011 Census Data – Travel to Work Mode Share, Super Output Area Richmond 019D

2.8 In our judgement the PTAL rating for the development site does not represent a robust assessment of the reasonable accessibility to a range of public transport services - which we consider to be good – or reflect the level of other modes aside from single occupancy motor vehicle used by local residents in their journeys to and from work. Overall, the opportunity to access the development site by public transport is good.

2.9 Car Clubs

2.9.1 LBRuT's website offers a search facility to locate available cars and car club parking bays.

2.9.2 ZipCar, City Car Club and EasyCar Club operate across the Borough. The nearest on-street car club only bay is located on Oxford Road, some 620 metres from the site, near to the junction with Hampton Road

2.10 Summary

2.10.1 A significant number of key facilities are situated within walking and cycling distances of the site.

2.10.2 The site is accessible by sustainable transport modes and Hampton Hill is served by regular daytime bus services.

2.10.3 Pedestrian crossing facilities are provided locally and Fulwell Railway Station is located within a 14 minute walking distance or a 5 minute cycling distance of the site. In addition, Car Club vehicles are available within the area.

3 LOCAL HIGHWAY OPERATION

3.1 Site Access

- 3.1.1 Vehicular access to the site is currently provided by a dropped kerb and crossover from High Street. The access leads to a surface level car park which can accommodate 49 cars.



Figure 3.1: Vehicular Site Access

3.2 Local Highway Network

- 3.2.1 Hampton Hill High Street serves a relatively busy local centre with various uses located along its length, including local shops, cafes/public houses, offices, residential units a theatre, a library and places of worship. In the vicinity of the site the street is approximately 9 metres wide, with on-street parking permitted at various locations, with some provision on both sides of the road.
- 3.2.2 High Street, Hampton Hill lies between junctions with Park Road and Uxbridge Road.
- 3.2.3 The High Street is the main route for people living in Hampton to get to Twickenham and Teddington, as well as commuters accessing the borough from main roads such as the A308 and the A312.
- 3.2.4 Windmill Road connects the High Street with the A312, and is located approximately 130 metres to the north of the site. The Windmill Road junction with the High Street is a priority junction. A zebra crossing is located on the High Street just to the north of the junction. There are plans to upgrade this zebra crossing as part of the LBRuT's plan to improve the pedestrian environment on High Street.

- 3.2.5 In terms of strategic links, Hampton Court Road (A308) is located approximately 1,450 metres to the south of the site and is accessed via Church Street at the A308/ High Street/ Church Street junction. From this junction, the route is referred to as Upper Sunbury Road to the west and provides access to the M3, while to the east it is referred to as Hampton Court Road and provides access to the A309 via Hampton Court Roundabout. Junction 1 of the M3 is located approximately three miles to the south west.
- 3.2.6 Overall, the site is well connected to the wider strategic highway network which can be accessed through a number of 'A' roads.

3.3 Car Parking

- 3.3.1 Whilst Hampton Hill is not currently in a residents or controlled parking zone and there are no imminent proposals to introduce a CPZ, there is extensive provision of on-street car parking 'bays' along High Street. Much of the parking is controlled through the use of single yellow lines to deter all day parking. Single yellow line parking close to the site restricts any parking within the hours of 08:00 – 09:30, Monday to Friday. There are some designated parking bays not restricted by a single yellow line, including parking bays for disabled persons. In addition to this unrestricted parking is available on side streets connecting to High Street.
- 3.3.2 Currently car parking restrictions in designated bays opposite the site limit stays to a maximum of 20 minutes, with no return within 1 hour.
- 3.3.3 LBRuT are currently carrying out works to improve the pedestrian environment along High Street and these works will lead to a number of changes to the previously established on-street car parking provision. The plans include the use of build outs to produce areas of designated car parking on High Street and these areas will maintain the current single yellow line restrictions.
- 3.3.4 Two pay and display car parks available for public use located in close proximity to the site are accessible off the High Street: to the rear of Sainsbury's and the Library (47 spaces) and in Taylor Close (72 Spaces).
- 3.3.5 In order to understand the current levels of parking during the day and overnight a parking stress survey has been undertaken in the roads surrounding the site. The surveys covered the streets within approximately 250m walking distance of the site. The surveys were undertaken overnight 03:40-04:00 and at midday on Tuesday 28th June and Thursday 30th June.
- 3.3.6 A table summarising the results along the High Street between Cross Street to the north and Holly Road to the south giving separate results for the west and east sides of the road is given in **Table 3.1** overleaf.

Date of Survey	Time	High Street West		High Street East	
		Cars parked	Spaces empty	Cars parked	Spaces empty
Tuesday 28/06/16	04:00	8	21	14	19
	12:00	24	5	32	3
Thursday 30/06/16	03:40	10	19	10	24
	12:00	20	9	37	2

Table 3.1 Summary of Parking Survey Undertaken in June 2016

3.3.7 The key observations are that the High Street has capacity overnight for additional cars to be accommodated on street. Over the two days surveyed:

- The average parking stress overnight was surveyed as 31% on the west side and 41% on the east side of the road.
- During the day the average parking stress is 76% on the west side and 93% on the east side.

3.3.8 Full results of the parking survey are presented in **Appendix D**.

4 PROPOSED DEVELOPMENT

4.1 Composition

4.1.1 The proposed development site covers an area of 0.2528 hectares.

4.1.2 The proposed development will involve the demolition of the existing office blocks and the construction of 31 apartments and 8 town houses, with an underground car park to provide space for up to 45 vehicles and cycle parking for 65 cycles (2 per house and 49 in three separate secure enclosures for the occupants of the apartments). The development will also include 131 sq.m of non-food retail space (Land Use Class A1) and 102 sq.m of space for use either as A1 non-food retail, A3 café, B1 (office) and D1 (Non-residential) clinic or crèche or education and training centre

4.2 Development Site Access

4.2.1 Vehicular access to the development will be provided from High Street via a new site access. The access will be located to the south of the existing site access and will lead to a ramped connection to the basement car parking. The access ramp accommodates a single vehicle and operates in bi-directional or shuttle working controlled by a traffic signal and security gate at street level. The vehicle crossover and waiting area are sufficiently wide to accommodate an arriving vehicle whilst it waits for an exiting vehicle to clear the ramp. The vehicle waiting to access the basement will not block the footway.

4.2.2 The ramp has been designed with reference to guidance published by the Institute of Structural Engineers, namely their 'Design recommendations for multi-storey and underground car parks'. The ramp is provided with short sections of gradient at 1:6, with 1:12 gradient transition zones provided to prevent vehicles from grounding. As the ramp bends its centre line is no steeper than a 1:12 gradient. **Appendix G** of this report provides vehicle tracking for the ramp and the associated basement car park.

4.2.3 For vehicles exiting the site onto the High Street, a car driver visibility splay of 2.4m x 43m and a pedestrian visibility is provided.

4.2.4 At the back of footway a pedestrian visibility splay of 2.1m x 2.4m is provided at the point the ramp connects with the highway, as shown on drawing PB5253-SK02 in **Appendix E**.

4.2.5 Bicycles wishing to access the basement parking area will be able to use the ramp. Cyclists will also have the option to access the basement from the ground floor of the development using the lifts or stairs in the buildings cores. Visitors to the development using bicycles will also be able to use short term cycle parking on the ground floor of the development.

4.3 Car Parking

4.3.1 The site's proposed basement car park will accommodate 45 car parking spaces (including garage parking for the town houses). Each garage attached to one of the houses and 20% of the open bays will be served by electrical charging points.

4.3.2 Policy DM TP8 of the Borough's Development Management Plan (DMP) – November 2011, states:

“New developments will have to demonstrate that the new scheme provides an appropriate level of off street parking to avoid an unacceptable impact on on-street parking conditions and local traffic conditions.”

Residential dwellings	Car parking
1 to 2 bedroom	1 spaces
3 bedroom	1.5 spaces

Table 4.1 LBRuT's Development Management Plan

4.3.3 In terms of car ownership the 2011 Census identifies that, on average, fewer than 1 car per household is owned by residents located in Super Output Area Richmond 019D, in which the development site is located. This is confirmed in **Table 4.2** below.

Car ownership	Number of households
No Cars or Vans in Household	214
1 Car or Van in Household	440
2 Cars or Vans in Household	154
3 Cars or Vans in Household	12
4 or More Cars or Vans in Household	4
All Cars or Vans in Area	805
All Households	824
Average level of car ownership (per household)	0.98

Table 4.2: 2011 Census Data – Car Ownership, Super Output Area, Richmond 019D

4.3.5 The development proposals have set car parking provision at a level intended to ensure that there would be no inappropriate on-street parking as a result of the development. However, the parking survey has identified that there are opportunities for any additional resident vehicles to be accommodated on street overnight should that circumstance arise.

4.3.6 On the basis of the above it is evident that the proposed basement car parking provision will be more than adequate to fully accommodate the parking demand associated with a residential development of 31 flats and 8 town houses. Any additional parking could be accommodated overnight on-street without detriment to the area.

4.4 Cycle Parking Provision

4.4.1 The proposed development will include secure cycle parking, in line with the minimum requirements of the London Plan. The long term cycle storage provision will be accommodated within the site's basement car park. This area can be accessed from street level by the ramp or using the lifts in the building's service cores, each of the three bedroom townhouses will have two cycle parking spaces within the private basement area of each dwelling.

4.4.2 A further 49 secure cycle parking spaces will be provided in three separate secure areas in the basement for use by residents of the apartments, and this level of provision exceeds the minimum requirements of the London Plan.

4.4.3 Within the basement and separate to the residential provision 2 x Sheffield standards are provided for use by occupants of the site's commercial premises.

4.4.4 Two Sheffield Stands for short term use are proposed at ground floor level, accessible from the High Street.

4.5 Refuse and Servicing Vehicles

4.5.1 Refuse vehicles will service the site as per the existing arrangements for residential properties fronting onto Hampton Hill High Street, and as per the arrangement of the site's existing office premises. This means that refuse vehicles will service the development from High Street, and there will not be any requirement for the vehicle to access the development site.

4.5.2 On collection days the refuse bins will be moved from the basement by the goods lift to the ground floor presentation areas located either side of the vehicle entrance keeping the entrance clear for entering and exiting vehicles. At the time of collection the refuse vehicle will pull across the access and the bins will be emptied. Once the bins are emptied they will be returned to the presentation area before being taken down in the goods lift to the basement.

4.5.3 The TRAVL database has been interrogated to identify servicing requirements of each land use within the development from comparable sites in London. Full details of these trip rates are included in the **Appendix F**. A summary of the relevant information from the TRAVL assessment is provided in **Table 4.3** overleaf.

4.5.4 The daily service vehicle trip rates used for this assessment are as follows:

- Retail (A1/A3/A4 retail land use) 0.477 trips per day per 100 sq.m for A3 Food and Drink use as a robust assessment.
- Residential (C3 land use) 0.056 trips per day per unit.

	A3 Food and Drink		Residential		Total	
	In	Out	In	Out	In	Out
LGV (per 100 sq.m or unit)	0.358	0.358	0.046	0.048	-	-
OGV1 (per 100 sq.m or unit)	0.119	0.119	0.005	0.007	-	-
OGV2 (per 100 sq.m or unit)	0.000	0.000	0.003	0.001	-	-
Total (per 100 sq.m or unit)	0.477	0.477	0.054	0.056	-	-
Floor area/units	234 sq.m	234 sq.m	39 units	39 units	-	-
Daily trips LGV	1	1	2	2	3	3
Daily trips OGV	0	0	0	0	0	0
TOTAL	1	1	2	2	3	3

Table 4.3 Summary of predicted service vehicle trips from TRAVL for each land use

- 4.5.5 From Table 4.3 above it can be estimated that the development is likely to attract 3 two way trips per day by Light Goods Vehicles (LGVs).
- 4.5.6 Subject to planning approval, an amendment to the scheme currently being implemented by LBRuT is being proposed as part of this application as detailed in **Appendix E**. If approved this would move the bus stop clearway outside the site to the north of the proposed site access. The proposed site access would be protected by an at any time waiting restrictions to prevent vehicles parking across the entrance and also allowing buses to access the bus stop without obstruction.
- 4.5.7 The predicted attraction of 3 service vehicles per day to the site could be accommodated on High Street to the north or south of the site where the current scheme makes provision for waiting and loading to take place. This provision is in line with the provision made for existing developments along High Street and, considering the low number of vehicles predicted, would be accommodated without detrimental impact on traffic conditions.

4.6 Construction Vehicle Access (HGVs) and hours of operation

- 4.6.1 The nearest major strategic route to the site is the A316 Twickenham Road/ Great Chertsey Road, which is part of the TfL Road Network (TLRN) and this is likely to be used as the primary route into to the area by HGV traffic associated with the construction phase of the development. The primary route to the site from the A316 will be via the A312 Uxbridge Road to the junction with the A311 High Street. From here inbound traffic would turn left into High Street. Outbound vehicles from the site would turn right and travel south down High Street, turning right on to the A312 Uxbridge Road. This would be a two way route where it is possible for HGVs to turn around on site. This reduces the impact on High Street and avoids congestion at the junction of High Street and Park Road.
- 4.6.2 If at any stage of the construction vehicles cannot be turned on site, the return journey would be along the High Street to the junction with Park Road where the vehicle would turn left into A313 Park Road before re-joining the A312 Uxbridge Road.
- 4.6.3 The site is located within the London Lorry Control area which restricts vehicles over 18 tonnes before 7am and after 9pm, from Monday to Friday. On Saturday the restriction is before 7am and after 1pm. The restriction applies all day on Sundays. The Contractor appointed will take responsibility for managing vehicular activity and must ensure that deliveries are either undertaken using:
- Smaller vehicles;
 - Larger vehicles outside the restricted hours; or
 - A permit for larger vehicles during restricted hours.

5 TRIP GENERATION

5.1.1 This section of the Transport Statement will compare the potential trip generation rates of the proposed residential development with that which could be associated with continued B1 occupation of the existing buildings on the site.

5.1.2 The existing development comprises 2,055 sq.m of B1 land use and 3 residential flats.

5.1.3 The proposed development - 31 apartments, 8 town houses and 233 sq.m of A1 non-food retail in two units.

5.2 Existing Trip Attraction

5.2.1 The trip attraction rates for a B1 occupier has been derived from the industry recognised TRICS v7.3.2 (Trip Rate Computer Information System) trip rate database in order to provide the likely AM peak hour, PM peak hour and daily trip attraction for the existing development. Data has been extracted from the category '02 – Employment, A – Office'. Full TRICS outputs and information is included as **Appendix F** to this report.

5.2.2 In addition to the Office occupier consideration is given to the occupancy of the site's 3 existing on-site residential flats. The trip rates (per unit) for this land use has also been derived from the TRICS database and from the category for land use C3 (Dwelling houses), sub-category 03 - Residential, C – Flats Privately Owned'. For both the office and residential elements, only TRICS sites located in Greater London have been considered.

5.2.3 **Table 5.1** below presents the vehicle trip rates associated with the existing residential development.

Time Period	Arrivals		Departures		Total	
	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips
07:00-08:00	0.107	0	0.107	0	0.214	1
08:00-09:00	0.036	0	0.179	1	0.215	1
09:00-10:00	0.071	0	0.036	0	0.107	0
10:00-11:00	0.000	0	0.036	0	0.036	0
11:00-12:00	0.036	0	0.036	0	0.072	0
12:00-13:00	0.036	0	0.000	0	0.036	0
13:00-14:00	0.071	0	0.071	0	0.142	0
14:00-15:00	0.000	0	0.036	0	0.036	0
15:00-16:00	0.071	0	0.143	0	0.214	1
16:00-17:00	0.143	0	0.107	0	0.250	1

Table 5.1: Traffic Generation – Existing Residential Development (continued overleaf)

Time Period	Arrivals		Departures		Total	
	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips
17:00-18:00	0.179	1	0.036	0	0.215	1
18:00-19:00	0.071	0	0.036	0	0.107	0
Total	0.821	2	0.823	2	1.644	5

Table 5.1: Traffic Generation – Existing Residential Development

5.2.4 Table 5.2 below presents the vehicle trip rates associated with the existing B1 Office floor space (2,055sq.m).

Time Period	Arrivals		Departures		Total	
	Trip Rate (per 100sq.m)	Total Trips	Trip Rate (per 100sq.m)	Total Trips	Trip Rate (per 100sq.m)	Total Trips
07:00-07:30	0.049	1	0.008	0	0.057	1
07:30-08:00	0.228	5	0.024	1	0.252	5
08:00-08:30	0.277	6	0.033	1	0.310	6
08:30-09:00	0.244	5	0.041	1	0.285	6
09:00-09:30	0.285	6	0.090	2	0.375	8
09:30-10:00	0.326	7	0.098	2	0.424	9
10:00-10:30	0.252	5	0.090	2	0.342	7
10:30-11:00	0.155	3	0.138	3	0.293	6
11:00-11:30	0.187	4	0.195	4	0.382	8
11:30-12:00	0.098	2	0.065	1	0.163	3
12:00-12:30	0.122	3	0.171	4	0.293	6
12:30-13:00	0.163	3	0.179	4	0.342	7
13:00-13:30	0.114	2	0.179	4	0.293	6
13:30-14:00	0.081	2	0.090	2	0.171	4
14:00-14:30	0.163	3	0.122	3	0.285	6
14:30-15:00	0.138	3	0.106	2	0.244	5
15:00-15:30	0.098	2	0.138	3	0.236	5
15:30-16:00	0.114	2	0.106	2	0.220	5
16:00-16:30	0.081	2	0.195	4	0.276	6
16:30-17:00	0.090	2	0.220	5	0.310	6
17:00-17:30	0.090	2	0.293	6	0.383	8
17:30-18:00	0.057	1	0.228	5	0.285	6
18:00-18:30	0.073	2	0.277	6	0.350	7
18:30-19:00	0.000	0	0.130	3	0.130	3
Total	3.485	73	3.216	70	6.701	139

Table 5.2: Traffic Attraction – Existing Office Development (2,055sq.m)

5.2.5 **Table 5.3** below provides the combined traffic attraction of the site's existing office and residential accommodation.

Time Period	Arrivals		Departures		Total	
	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips
07:00-08:00	-	6	-	1	-	7
08:00-09:00	-	11	-	2	-	13
09:00-10:00	-	13	-	4	-	17
10:00-11:00	-	8	-	5	-	13
11:00-12:00	-	6	-	5	-	11
12:00-13:00	-	6	-	7	-	13
13:00-14:00	-	4	-	6	-	10
14:00-15:00	-	6	-	5	-	11
15:00-16:00	-	5	-	5	-	10
16:00-17:00	-	4	-	9	-	13
17:00-18:00	-	4	-	11	-	14
18:00-19:00	-	2	-	8	-	10
Total	-	74	-	69	-	143

Table 5.3: Traffic Attraction/ Generation – Existing Development

5.3 Proposed Traffic Generation

5.3.1 The traffic generation of the proposed 31 apartments, 8 town houses and the retail development has been derived using the TRICS database.

5.3.2 The traffic generation of the proposed 31 unit residential apartment part of the development has been derived from the same trips rates utilised above for the site's 3 existing flats. **Table 5.4** below presents the site's trip generation, and the TRICS assessment is provided in full in **Appendix F**.

Time Period	Arrivals		Departures		Total	
	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips
07:00-08:00	0.107	3	0.107	3	0.214	7
08:00-09:00	0.036	1	0.179	6	0.215	7
09:00-10:00	0.071	2	0.036	1	0.107	3
10:00-11:00	0.000	0	0.036	1	0.036	1
11:00-12:00	0.036	1	0.036	1	0.072	2
12:00-13:00	0.036	1	0.000	0	0.036	1
13:00-14:00	0.071	2	0.071	2	0.142	4

Table 5.4: Traffic Generation – Proposed Residential Apartments (continued overleaf)

Time Period	Arrivals		Departures		Total	
	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips
14:00-15:00	0.000	0	0.036	1	0.036	1
15:00-16:00	0.071	2	0.143	4	0.214	7
16:00-17:00	0.143	4	0.107	3	0.250	8
17:00-18:00	0.179	6	0.036	1	0.215	7
18:00-19:00	0.071	2	0.036	1	0.107	3
Total	0.821	25	0.823	26	1.644	51

Table 5.4: Traffic Generation – Proposed Residential Apartments

5.3.3 The trip generation of the proposed 8 town houses has been derived from data obtained from the TRICS database, using sites classed as privately owned houses. **Table 5.5** below presents the site's vehicle trip generation, and the TRICS assessment is provided in full in **Appendix F**

Time Period	Arrivals		Departures		Total	
	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips
07:00-08:00	0.035	0	0.105	1	0.140	1
08:00-09:00	0.140	1	0.211	2	0.351	3
09:00-10:00	0.105	1	0.053	0	0.158	1
10:00-11:00	0.140	1	0.211	2	0.351	3
11:00-12:00	0.263	2	0.211	2	0.474	4
12:00-13:00	0.105	1	0.088	1	0.193	2
13:00-14:00	0.140	1	0.123	1	0.263	2
14:00-15:00	0.193	2	0.175	1	0.368	3
15:00-16:00	0.228	2	0.228	2	0.456	4
16:00-17:00	0.140	1	0.175	1	0.315	3
17:00-18:00	0.088	1	0.070	1	0.158	1
18:00-19:00	0.263	2	0.175	1	0.438	4
Total	1.840	15	1.825	15	3.665	29

Table 5.5: Traffic Generation – Proposed Town Houses

5.3.4 **Table 5.6** below presents the combined vehicle trip rates associated with the proposed residential development.

Time Period	Arrivals		Departures		Total	
	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips
07:00-08:00	-	4	-	4	-	8
08:00-09:00	-	2	-	7	-	9
09:00-10:00	-	3	-	2	-	5
10:00-11:00	-	1	-	3	-	4
11:00-12:00	-	3	-	3	-	6
12:00-13:00	-	2	-	1	-	3
13:00-14:00	-	3	-	3	-	7
14:00-15:00	-	2	-	3	-	4
15:00-16:00	-	4	-	6	-	10
16:00-17:00	-	6	-	5	-	10
17:00-18:00	-	6	-	2	-	8
18:00-19:00	-	4	-	3	-	7
Total	-	40	-	40	-	80

Table 5.6: Trip Generation – Proposed Development

5.3.5 Trip attractions for the proposed retail development have not been produced, as the proposed retail development will not be occupied by a food retailer and therefore it is anticipated that the retail space will not be a destination in its own right. Therefore any trips to/ from the retail space will be linked to those of the wider Hampton Hill centre and no specific material impact to local traffic movements, public car parking provision, or public transport operation will result from the retail offer.

5.3.6 Using the figures from **Table 2.5** derived from the Census 2011 Travel to Work Mode Share data for Richmond Super Output Area 019D, a multi-modal trip assessment has been undertaken to understand the likely number of journeys by vehicle as well as other modes. The results of this assessment are given in **Table 5.7** overleaf.

Method of Travel to Work	Mode Split	AM Peak Hour (08:00-09:00)		PM Peak Hour (17:00-18:00)		12 Hour Day (07:00 – 19:00)	
		Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Underground, Light Rail, Tram	5.5%	0	1	1	0	5	5
Train	17.1%	1	3	2	1	16	16
Bus, Minibus or Coach	10.4%	1	2	1	1	10	10
Taxi	0.0%	0	0	0	0	0	0
Motorcycle, Scooter or Moped	2.6%	0	0	0	0	2	2
Driving a Car or Van	43.1%	2	7	6	2	40	40
Passenger in a Car or Van	2.3%	0	0	0	0	2	2
Bicycle	7.7%	0	1	1	0	7	7
On Foot	11.4%	1	2	2	1	11	11
Total	100%	5	16	13	5	93	93

Table 5.7 Multi-modal Trip Generation

5.3.7 As can be seen in **Table 5.7** above, the number of return journeys undertaken by car (as a driver or passenger) will be 42 per day. The daily number of return trips undertaken by public transport will be 31 per day with the number of return journeys (wholly undertaken) by either walking or cycling will be 19 per day.

5.4 Net Trip Impact

5.4.1 As a result of the development scheme, the number of peak hour and daily traffic movements to/ from the development site is expected to reduce significantly in comparison to the existing office development at the site. The net change in traffic movements is provided in **Table 5.8** overleaf.

Time Period	Arrivals		Departures		Total	
	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips	Trip Rate (per unit)	Total Trips
07:00-08:00	-	-2	-	3	-	1
08:00-09:00	-	-9	-	5	-	-4
09:00-10:00	-	-10	-	-2	-	-12
10:00-11:00	-	-7	-	-2	-	-9
11:00-12:00	-	-3	-	-2	-	-5
12:00-13:00	-	-4	-	-6	-	-10
13:00-14:00	-	-1	-	-3	-	-3
14:00-15:00	-	-4	-	-2	-	-7
15:00-16:00	-	-1	-	1	-	0
16:00-17:00	-	2	-	-4	-	-3
17:00-18:00	-	2	-	-9	-	-6
18:00-19:00	-	2	-	-5	-	-3
Total	-	-34	-	-29	-	-63

Table 5.7: Traffic Generation – Net Change

5.4.2 Based on TRICS data, it is estimated that trip generation of the site will reduce by 63 vehicle movements, two-way, over the course of a day (07:00-19:00).

6 Policy Considerations

6.1 Preface

6.1.1 This section of the Transport Statement sets out the national, regional and local development control and transport planning policies which are relevant to the development.

6.2 National Policy

National Planning Policy Framework (NPPF)

6.2.1 The National Planning Policy Framework (NPPF) was published in March 2012 by the Department for Communities and Local Government and is now the primary source of national planning guidance in England.

6.2.2 The NPPF contains the Government's strategies for economic, environmental and social planning policies in England and it is designed to be a single, tightly focused document setting out national planning priorities. It replaces previous national planning policy documents including all Planning Policy Statements (PPSs), all Planning Policy Guidance notes (PPGs) and all ministerial planning Circulars.

6.2.3 At the heart of the NPPF is a "*presumption in favour of sustainable development*", which for decision making means:

- Approving development proposals that accord with the development plan without delay; and
- Where the development plan is absent, silent or relevant policies are out of date, granting permission unless:
 - Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the NPPF taken as a whole; or
 - Specific policies in the NPPF indicate development should be restricted.

6.2.4 In terms of transport, the NPPF states the following at paragraph 32:

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

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

prevented or refused on transport grounds where the residual cumulative impacts of development are severe.”

- 6.2.5 Off-street car parking is referred to in paragraph 39, which states that in setting local parking standards for development, local planning authorities should take into account accessibility; the type, mix and use of the development; the availability of and opportunities for public transport; local car ownership levels; and an overall need to reduce the use of high-emission vehicles.
- 6.2.6 The proposals comply with NPPF since the proposed development will provide appropriate levels of cycle parking and the site is located within easy access to public transport services.

6.3 Regional Planning Guidance

The London Plan (2016)

- 6.3.1 This section refers to the London Plan 2016, the spatial development strategy for London, consolidated with alterations since 2011. The London Plan, (which was revised in March 2016 to incorporate minor alterations to Housing and Parking standards), continues to advocate the promotion of sustainable modes of transport.
- 6.3.2 Policy 6.3 of the London Plan “*Assessing Effects of Development on Transport Capacity: Planning Decisions*” seeks to ensure that development schemes fully consider their implications for the wider transport network and requires that new development does not have an adverse impact on safety. Items A to C of the policy are outlined below.

“A - Development proposals should ensure that impacts on transport capacity and the transport network, at both a corridor and local level, are fully assessed. Development should not adversely affect safety on the transport network.”

“B - Where existing transport capacity is insufficient to allow for the travel generated by proposed developments, and no firm plans exist for an increase in capacity to cater for this, boroughs should ensure that development proposals are phased until it is known these requirements can be met, otherwise they may be refused. The cumulative impacts of development on transport requirements must be taken into account.”

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

- 6.3.3 Policy 6.3D relates to LDF preparation and states that *“Boroughs should take the lead in exploiting opportunities for development in areas where appropriate transport accessibility and capacity exist or is being introduced.”*
- 6.3.4 With regards to parking, Policy 6.13A states that *“the Mayor wishes to see an appropriate balance being struck between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport use.”* Policy 6.13C states that the maximum standards set out within the Parking Addendum should be applied to planning applications.
- 6.3.5 Policy 6.13E states that *“in locations with high public transport accessibility, car-free developments should be provided (while still providing for disabled people).”*
- 6.3.6 With regard to bicycle parking, the minimum standards set out in the Further Alterations to the London Plan (2015) relating to residential use is:
- 1 space per studio / 1 bedroom unit and 2 spaces per all other dwellings (long stay) (for the flats the requirement is 47 [15 x 1 + 16 x 2] and for the houses it is 2 each the scheme provides 49 stands for the flats and 2 each for the houses)
 - 1 space per 40 units (short stay) two stands are to be provided within the outer court.
- 6.3.7 The development proposals are in line with the London Plan and this assessment has been undertaken in accordance with TfL’s Transport Assessment Best Practice Guidance.
- 6.3.8 The London Plan recognises that improving conditions for cycling makes this sustainable mode an increasingly viable alternative to the private car, and requires cycle parking facilities within all new developments. Policies 6.9 and 6.10 aim to increase cycling and walking in London, in particular, to achieve a 5% modal share by 2026 for cycling. Proposed developments should therefore provide secure and accessible cycle parking facilities and ensure there is a high quality pedestrian environment and street space.
- 6.3.9 In November 2013 Transport for London (TfL) released its revised guidance on the requirements for travel plans for new developments in London. It supersedes the previous TfL guidance, Travel Planning for New Development in London: Incorporating Deliveries and Servicing (January 2012). The new guidance identifies development thresholds above which a Travel Plan is required. In the case of this development, the planning application will not require a Travel Plan.

6.4 Local Planning Guidance

LBRuT Local Plan

- 6.4.1 The Local Plan (previously known as Local Development Framework) sets out the priorities for the development of the borough and will be used for making decisions on planning applications. It consists of a number of planning documents and guidance. The consultation on the scope of review of policies was completed in February 2016 and the first consultation on the draft Local Plan was completed in August 2016.
- 6.4.2 The Core Strategy is one of the documents that make up the Local Development Framework and sets out the Strategic Planning Framework for the Borough for the next 15 years. Section 4.4.23 of the Core Strategy addresses travel in Richmond and states that *'alleviating traffic congestion continues to be identified by residents as a priority. The limitations of the road network mean that even if it were desirable it would not be possible to plan for unrestricted car use, and ways need to be found to reduce the need to travel, and encourage other more sustainable forms of transport. This would also help to reduce air pollution. The public transport accessibility is generally good, but there are some areas that are less accessible by public transport.'*

LBRuT Development Management Plan (DMP)

- 6.4.3 The Development Management Plan was adopted in November 2011 and is a statutory development plan document. It is part of the Local Plan and builds on the Core Strategy and includes more detailed policies for managing development.
- 6.4.4 Section 5.4 of the document deals with transport and car parking and seeks to promote sustainable travel by means of appropriate location, encouragement of the more sustainable modes of travel and other means to reduce the need to travel by private vehicle, with the aim of improving accessibility and reducing congestion and pollution.
- 6.4.5 Policy DM TP 1: Matching Development to Transport Capacity states that higher trip generating development will only be permitted in areas which are, or at the time of implementation are, easily accessible by transport other than the private car, and well located with respect to local services. The proposed development is not expected to be a significant trip generator.
- 6.4.6 Policy DM TP 2: Transport and New Development explains that the impact of new developments on the transport network will be assessed against other plan policies and transport standards. All planning applications for smaller developments should be accompanied by a Transport Statement.

- 6.4.7 Policy DM TP 6: Walking and the Pedestrian Environment relates to maintaining and improving the pedestrian environment and new developments should maintain and, where appropriate, improve the existing pedestrian infrastructure. The policy stresses the need for new development to not adversely impact on the pedestrian environment and provides appropriate pedestrian access.
- 6.4.8 Policy DM TP 7 relates to cycling and states that “*to maintain and improve conditions for cyclists, the Council will ensure that new development or schemes do not adversely impact on the cycling network or cyclists and provide appropriate cycle access and sufficient, secure cycle parking facilities*”. The development will provide adequate cycle storage provisions onsite.
- 6.4.9 Policy DM TP 8: Off Street Parking states that new developments will have to demonstrate that the new scheme provides an appropriate level of off street parking to avoid an unacceptable impact on on-street parking conditions and local traffic conditions. The proposals will comply with the parking standards set out in the London Plan.

LBRuT Local Implementation Plan (LIP)

- 6.4.10 The Local Implementation Plan (LIP) is a local and borough wide programme of measures and schemes to improve the provision of transport in the Borough. It is required by the 1999 Greater London Authority Act to demonstrate how the borough will implement the Mayor’s Transport Strategy.

The transport related objectives identified in the LIP are as follows:

- To support and maintain the economic vitality of local shops and the Borough’s thriving town and local centres;
 - To improve the local environment and quality of life for all residents of the Borough;
 - Improving safety for all road users;
 - Enhancing transport choice and reducing congestion;
 - Developing a transport system that is resilient and reflective of local needs and aspirations;
 - Deliver the “Uplift Strategy” for the regeneration of five particular areas of relative deprivation across the Borough; and,
 - Improve the accessibility, efficiency and attractiveness of transport Borough wide, thus increasing social inclusion.
- 6.4.11 The document also includes the Draft Cycling Strategy which outlines the cycling objectives as listed below:
- The provision of cycle friendly infrastructure on the highway network (on and off road routes);
 - The provision of secure cycle parking across the Borough including partnership working to provide secure cycle parking at places of employment, schools, visitor destinations and railway stations;

- Securing adequate funding for improved cycle facilities and maximising the benefits for cyclists from all traffic management schemes;
- Monitoring the outcomes and effectiveness of policies;
- Promoting training and support for members of the community to cycle safely and considerately; and,
- Seeking enforcement of Road Traffic laws for the benefit of all highway users.

Hampton Hill Village Plan Draft Supplementary Planning Document (SPD)

6.4.12 The Hampton Hill Village Plan (HHVP) describes a vision for the local Hampton Hill area and identifies the Council's strategies and steps local residents can take to achieve set objectives. The Plan sets out the key issues and priorities and provides background information on the village area.

6.4.13 Objectives outlined within the HHVP include:

- Improving public transport which will improve safety on the public transport network;
- Delivering an ongoing programme of accessibility improvements at bus stops throughout the borough; and,
- Delivering accessibility improvements at rail stations throughout the borough.

6.4.14 A review of Hampton Hill High Street was undertaken in 2012 and 2013 and improvements have been implemented including loading restrictions, cycle lanes and parking provision. In March 2014, three consultations were undertaken on 20mph speed limits with Hampton High Street included.

6.4.15 The Village Plan states: *"The vision is of a thriving local centre with a range of shops and community facilities to meet local needs through a good balance of independent shops, supported by sufficient convenient car parking. The appearance will be enhanced through improvements to buildings, particularly shop fronts and the public realm. The impact of through traffic on the High Street and residential roads will if possible be reduced and parking managed to ensure that residents can access their centre and enjoy the amenities of the area and its surroundings. Any new development, including the use of land within a built-up area for further construction (infill) will be expected to be well designed and provide sufficient car parking."*

6.4.16 Planning Policy Aims of the document are designed to achieve the following:

- Prevent any increase in unsightly car parking in front gardens where possible through planning powers and through publicising the design guidance leaflet.
- Ensure that new development is appropriate in terms of scale and materials with priority to traditional design and including sufficient car parking.

6.4.17 The development proposals will comply with the Hampton Hill Village Plan.

7 Summary and Conclusions

7.1 Summary

- 7.1.1 This Transport Statement (TS) has been prepared by Royal HaskoningDHV on behalf of Greatplanet Limited for a proposed residential led mixed-use development at 63-71 High Street (A311) in Hampton Hill.
- 7.1.2 The site is located on High Street, Hampton Hill, and as such the site's immediate surrounding area accommodates a range of key services and facilities, including chain food stores, other independent retail units, educational, health and social/ recreational facilities. The development is well located for access to key services on foot.
- 7.1.3 The site is located adjacent to north and southbound bus stops, which accommodate 3 frequent bus services. The site is also a walk distance of 1,200 metres from Fulwell Station, which can also be accessed via the local bus services. Census data (ref: Table 2.3) indicates that circa 33% of journeys to work locally are undertaken by public transport and that circa 19% of journeys to work are made on foot or by bike.
- 7.1.4 The site is provided with 45 car parking spaces, which will be sufficient to accommodate car parking demand associated with a 39 unit residential development. Census data for the local area indicates that car ownership is, on average, just below 1 car per dwelling.
- 7.1.5 Vehicular access to the site is provided via a new vehicle access leading to a ramped connection to the proposed basement car parking.
- 7.1.6 In addition to the car parking being provided, cycle parking will also be provided within the basement car park. Cycle parking will be provided to comply with the London Plan's requirements.
- 7.1.7 As is the case with the existing development, refuse collection will be collected from a holding area adjacent to High Street.
- 7.1.8 The proposed change of use means that the potential traffic attraction of the development site will reduce significantly. It is estimated that this planning submission will result in a reduction of around 63 vehicle movements over the course of a day (07:00-19:00).

7.2 Conclusion

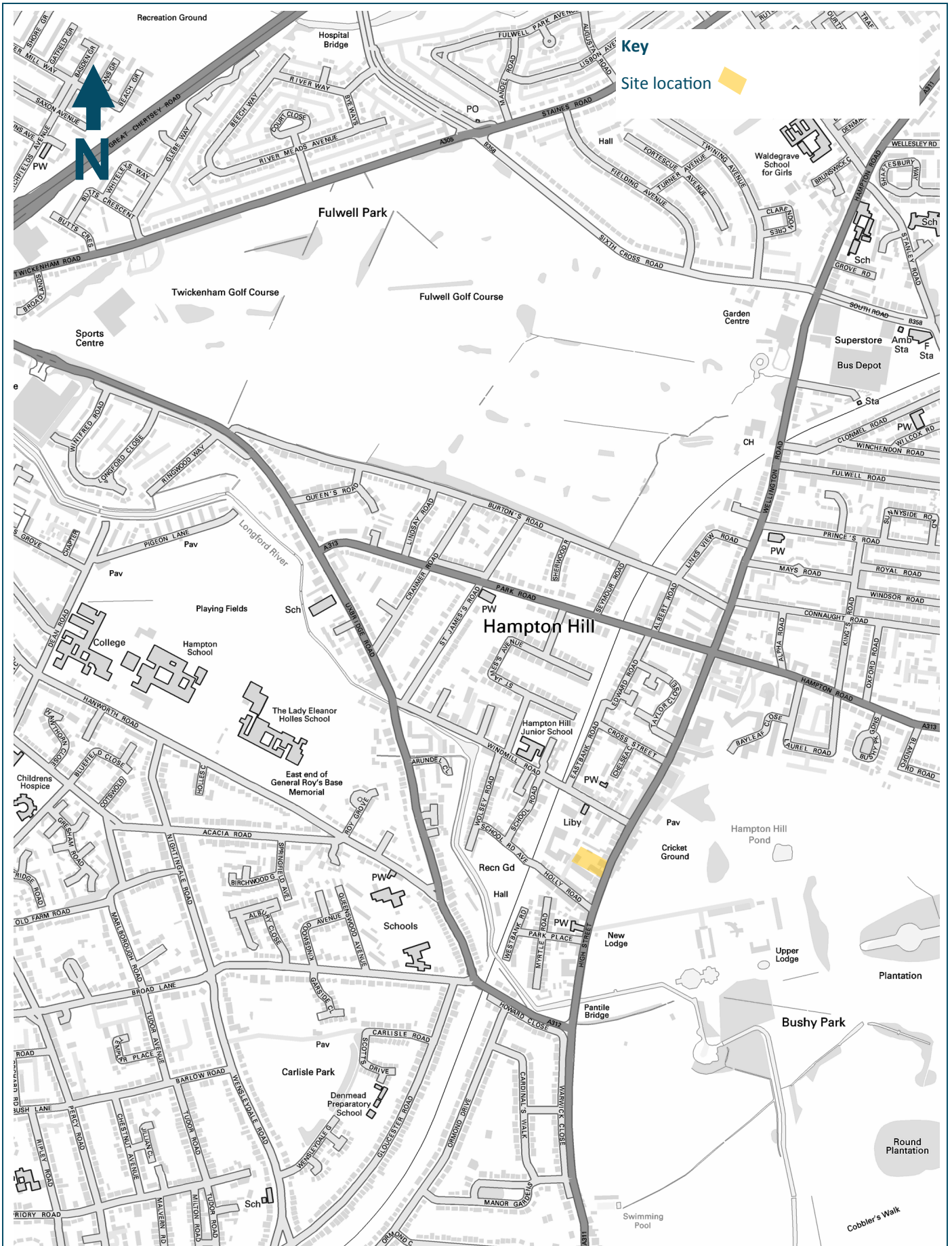
7.2.1 In overall conclusion:


- the site is well located for access to services on foot; the site is accessible by non-car modes of transport;
- the site can fully accommodate potential resident car ownership demand; and
- the traffic attraction of the development will reduce as a result of the application.

7.2.2 There is, therefore, no reason for this planning application to be refused on transport grounds.



A Site Location Plan

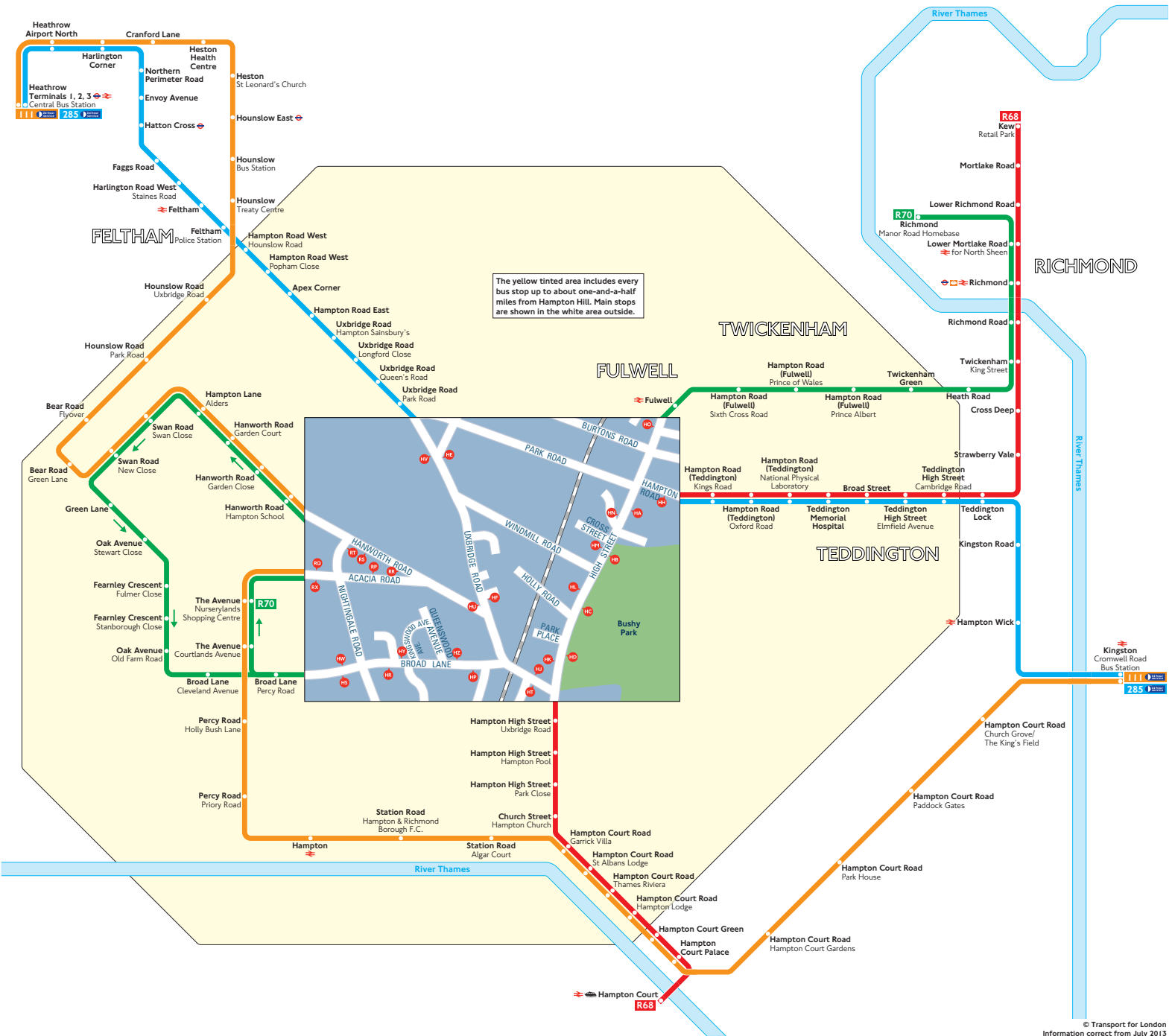


 <p>Royal HaskoningDHV Enhancing Society Together</p>	Drawn by:	AW	Project:	63-71 HAMPTON HILL
	Approved by:	AW	Drawing Title:	Site Location Plan
	Approved date:	16/08/16	Drawing No.:	Appendix 1



B Local Bus Services

Buses from Hampton Hill



The yellow tinted area includes every bus stop up to about one-and-a-half miles from Hampton Hill. Main stops are shown in the white area outside.

Key

- Connections with London Underground
- Connections with London Overground
- Connections with National Rail
- Connections with river boats

A Red discs show the bus stop you need for your chosen bus service. The disc **A** appears on the top of the bus stop in the street (see map of town centre in centre of diagram).

Route finder

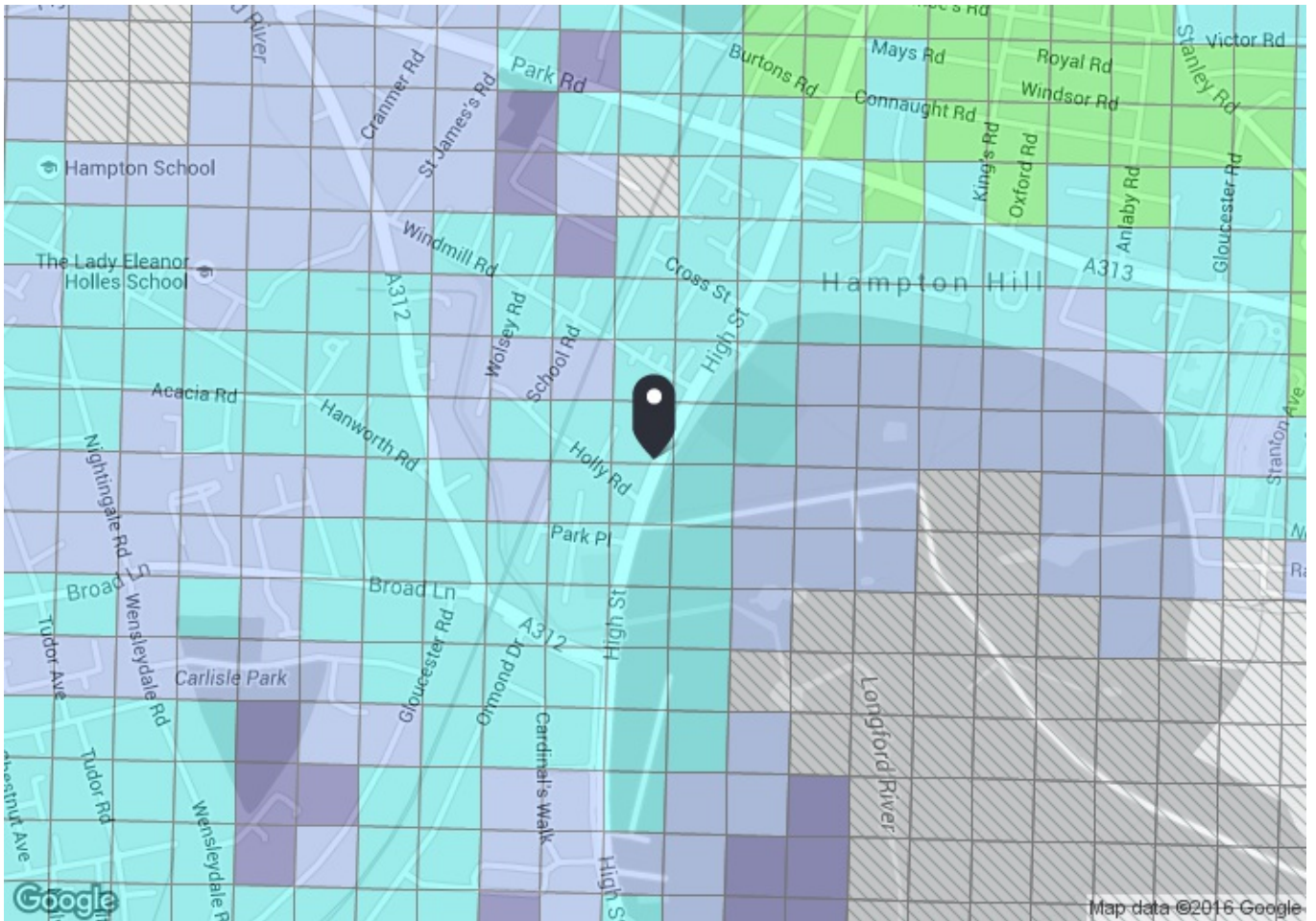
Day buses including 24-hour services

Bus route	Towards	Bus stops
111	Heathrow Terminals 1, 2, 3	R68
	Kingston	R70 RX
285	Heathrow Terminals 1, 2, 3	R68 R70 RX RU RV
	Kingston	R68 R70 RX RU RV RY
R68	Hampton Court	R68 R70 RX RU RV
	Kew	R68 R70 RX RU RV
R70	Hampton	R68 R70 RX RU RV RY
	Richmond	R68 R70 RX RU RV RY RZ

© Transport for London
Information correct from July 2013



C Public Transport Accessibility Level (PTAL)



PTAL output for 2011 (Base year)
2

61 High St, Hampton Hill, Hampton, Greater London TW12 1NH, UK

Easting: 514268, Northing: 170796

Grid Cell: 34942

Report generated: 19/04/2016

Calculation Parameters

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

Map key - PTAL

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

Map layers

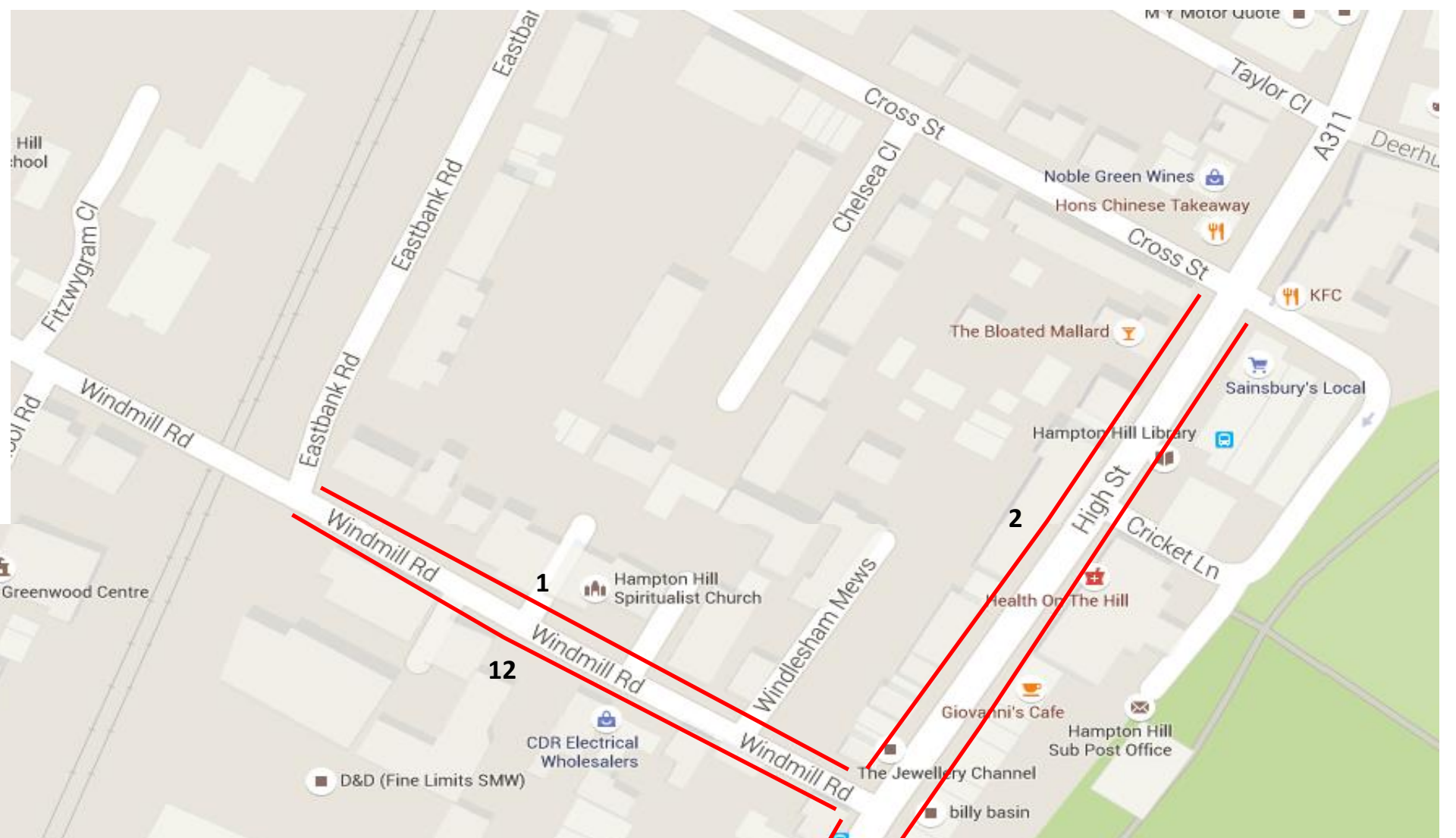
- PTAL (cell size: 100m)

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	HAMPTON HILL THE STAR	285	63.12	6	0.79	7	7.79	3.85	1	3.85
Bus	HAMPTON HILL THE STAR	R68	63.12	4	0.79	9.5	10.29	2.92	0.5	1.46
Bus	HAMPTON HILL THE STAR	R70	63.12	6	0.79	7	7.79	3.85	0.5	1.93
									Total Grid Cell AI:	7.24



D Parking Survey





KEY

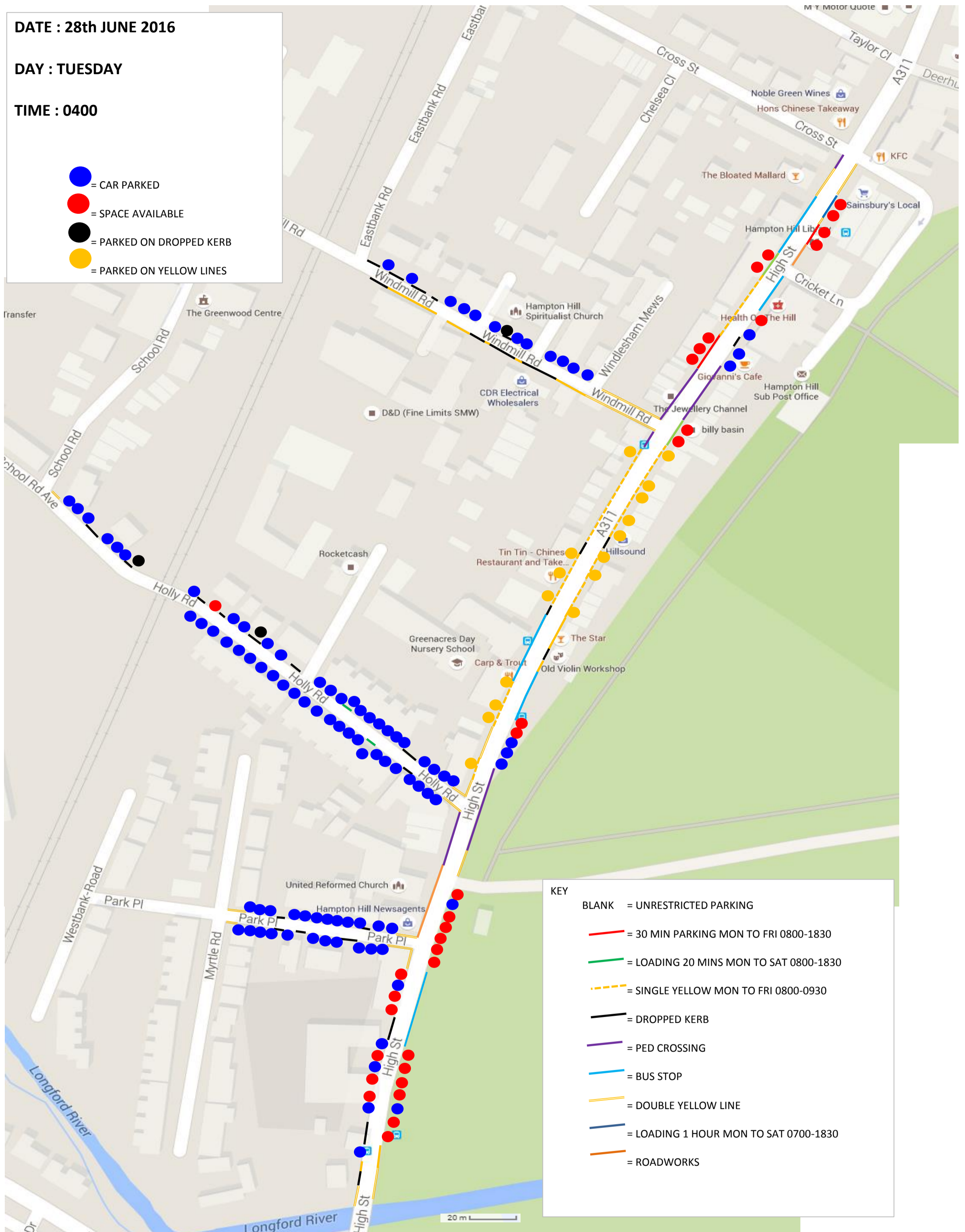
- BLANK = UNRESTRICTED PARKING
- = 30 MIN PARKING MON TO FRI 0800-1830
- = LOADING 20 MINS MON TO SAT 0800-1830
- = SINGLE YELLOW MON TO FRI 0800-0930
- = DROPPED KERB
- = PED CROSSING
- = BUS STOP
- = DOUBLE YELLOW LINE
- = LOADING 1 HOUR MON TO SAT 0700-1830
- = ROADWORKS

DATE : 28th JUNE 2016

DAY : TUESDAY

TIME : 0400

- = CAR PARKED
- = SPACE AVAILABLE
- = PARKED ON DROPPED KERB
- = PARKED ON YELLOW LINES



KEY

- BLANK = UNRESTRICTED PARKING
- = 30 MIN PARKING MON TO FRI 0800-1830
- = LOADING 20 MINS MON TO SAT 0800-1830
- - - = SINGLE YELLOW MON TO FRI 0800-0930
- = DROPPED KERB
- = PED CROSSING
- = BUS STOP
- = DOUBLE YELLOW LINE
- = LOADING 1 HOUR MON TO SAT 0700-1830
- = ROADWORKS

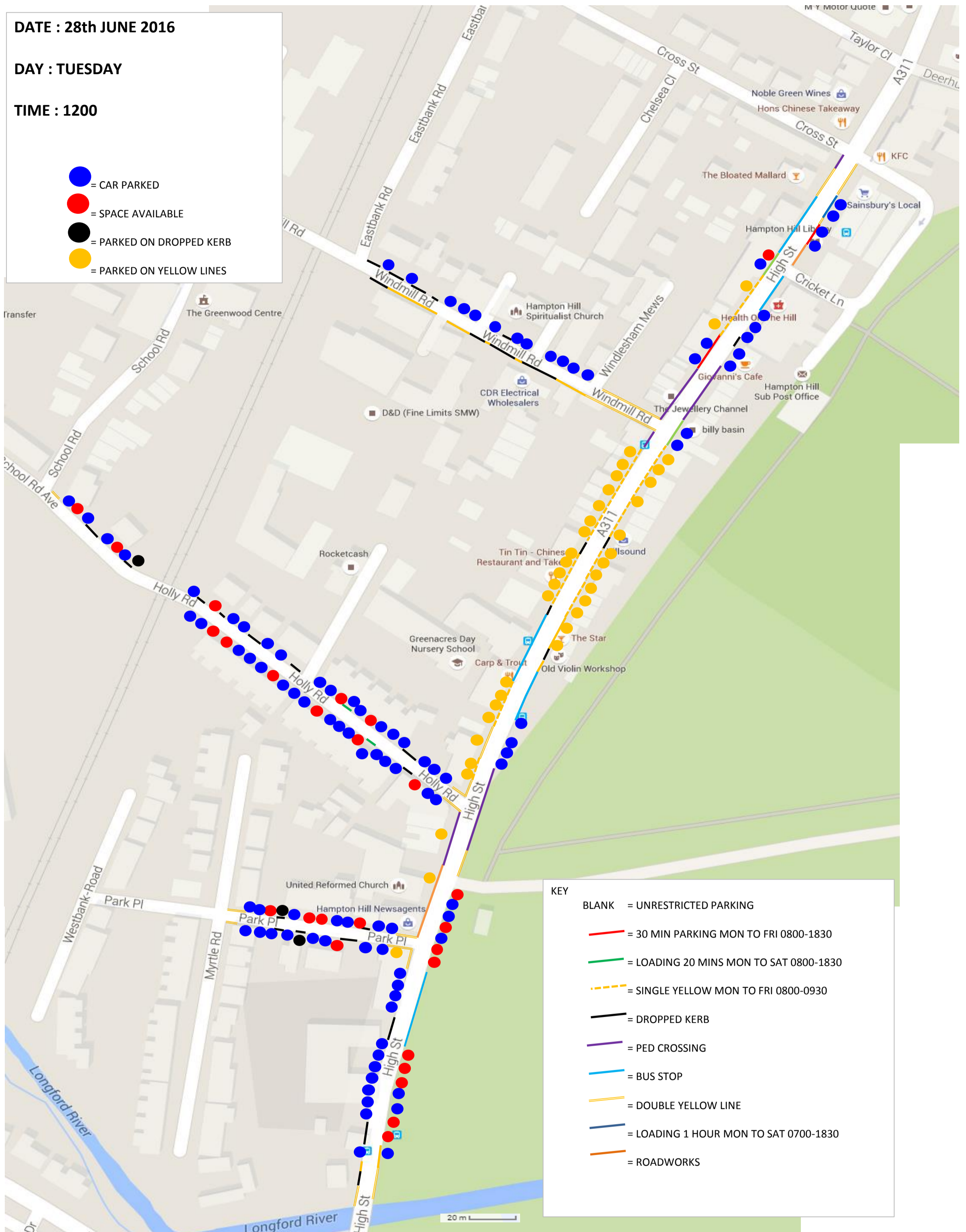
20 m

DATE : 28th JUNE 2016

DAY : TUESDAY

TIME : 1200

- = CAR PARKED
- = SPACE AVAILABLE
- = PARKED ON DROPPED KERB
- = PARKED ON YELLOW LINES



- KEY**
- BLANK = UNRESTRICTED PARKING
 - = 30 MIN PARKING MON TO FRI 0800-1830
 - = LOADING 20 MINS MON TO SAT 0800-1830
 - - - = SINGLE YELLOW MON TO FRI 0800-0930
 - = DROPPED KERB
 - = PED CROSSING
 - = BUS STOP
 - = = DOUBLE YELLOW LINE
 - = LOADING 1 HOUR MON TO SAT 0700-1830
 - = ROADWORKS

DATE : 30th JUNE 2016

DAY : THURSDAY

TIME : 0320

- = CAR PARKED
- = SPACE AVAILABLE
- = PARKED ON DROPPED KERB
- = PARKED ON YELLOW LINES



KEY

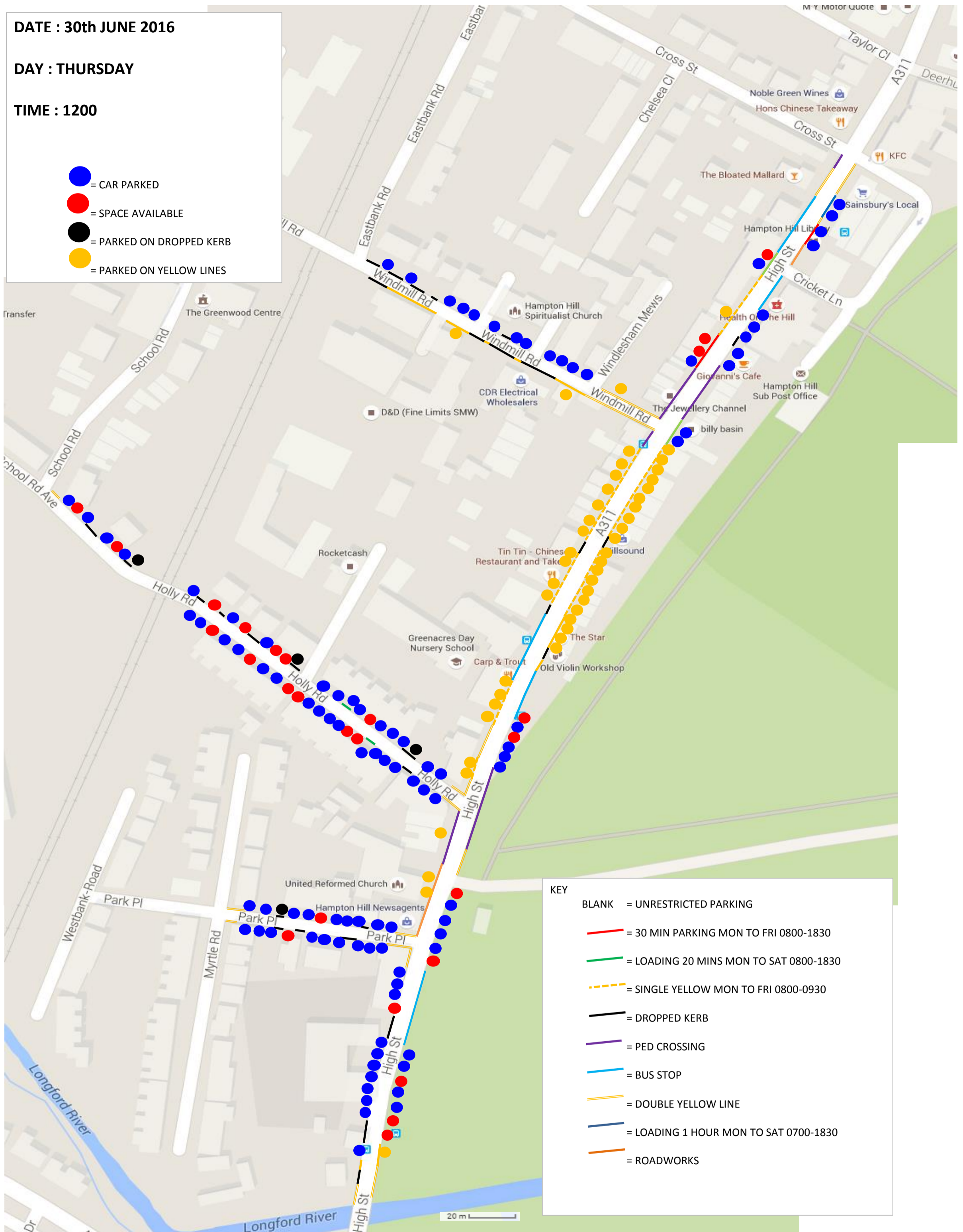
- BLANK = UNRESTRICTED PARKING
- = 30 MIN PARKING MON TO FRI 0800-1830
- = LOADING 20 MINS MON TO SAT 0800-1830
- = SINGLE YELLOW MON TO FRI 0800-0930
- = DROPPED KERB
- = PED CROSSING
- = BUS STOP
- = DOUBLE YELLOW LINE
- = LOADING 1 HOUR MON TO SAT 0700-1830
- = ROADWORKS

DATE : 30th JUNE 2016

DAY : THURSDAY

TIME : 1200

- = CAR PARKED
- = SPACE AVAILABLE
- = PARKED ON DROPPED KERB
- = PARKED ON YELLOW LINES

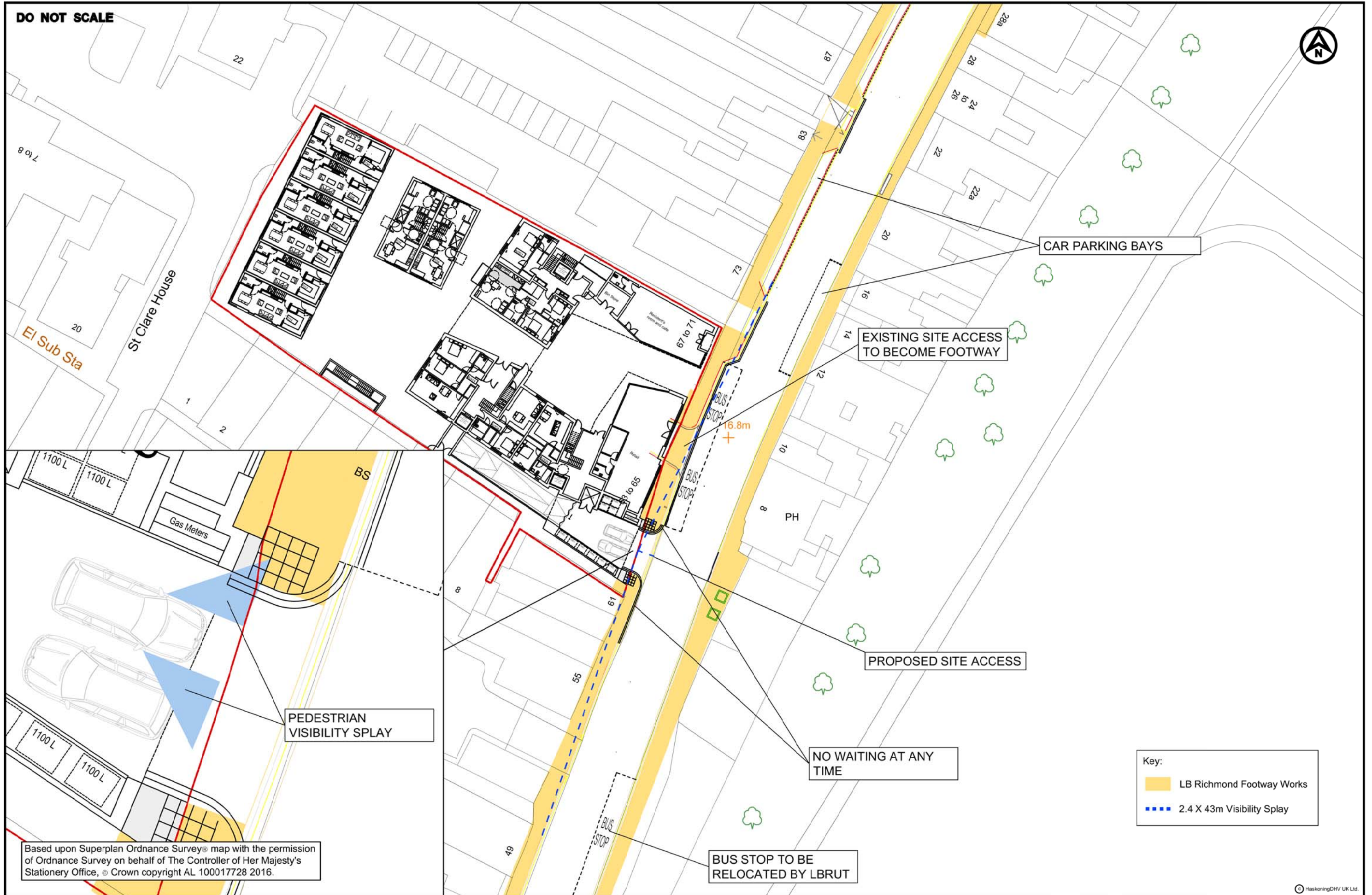


KEY

- BLANK = UNRESTRICTED PARKING
- = 30 MIN PARKING MON TO FRI 0800-1830
- = LOADING 20 MINS MON TO SAT 0800-1830
- - - = SINGLE YELLOW MON TO FRI 0800-0930
- = DROPPED KERB
- = PED CROSSING
- = BUS STOP
- = DOUBLE YELLOW LINE
- = LOADING 1 HOUR MON TO SAT 0700-1830
- = ROADWORKS

E Proposed Site Access

DO NOT SCALE



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Key:

- LB Richmond Footway Works
- 2.4 X 43m Visibility Splay

TITLE
**PROPOSED SITE ACCESS
 AND RELOCATED BUS STOP**

PROJECT
63 HIGH STREET, HAMPTON HILL

Enterprise House,
 Delta Way, Egham,
 Surrey TW20 8EX,
 Tel: +44 (0)1932 569569
 www.royalhaskoningdhv.com

JOB No. PB5253
 DRAWN DH
 AUTOCAD REF.

DATE OCT 16
 CHECKED RC
 DRG No. PB5253-SK02

SCALE 1:500
 PASSED AW
 REV P2

Appendix F TRICS and TRAVL Data

		AM Peak (08:00-09:00)		PM Peak (17:00-18:00)		07:00-19:00				
		Arrivals	Departure: 2-Way	Arrivals	Departure: 2-way	Arrivals	Departure: 2-way			
Underground, Metro, Light										
Rail, Tram	5.50%	0	1	2	1	0	1	6	7	14
Train	17.10%	1	4	5	2	1	4	20	22	42
Bus, Minibus or Coach	10.40%	1	2	3	2	1	2	12	14	26
Taxi	0.00%	0	0	0	0	0	0	0	0	0
Motorcycle, Scooter or	2.60%	0	1	1	0	0	1	3	3	6
Driving a Car or Van	43.10%	3	10	12	6	4	10	50	56	107
Passenger in a Car or Van	2.30%	0	1	1	0	0	1	3	3	6
Bicycle	7.70%	0	2	2	1	1	2	9	10	19
On Foot	11.40%	1	3	3	2	1	3	13	15	28
Total	100.00%	6	23	29	14	8	23	116	131	247

TRICS 7.3.3

Trip Rate Para Number of dwellings

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

Calculation Factor: 1 DWELLS

Count Type: TOTAL PEOPLE

Time Range	ARRIVALS			DEPARTURES			TOTALS				
	No. Days	Ave. DWELLS	Trip Rate	No. Trips	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	5	39	0.066	2.112	5	39	0.442	14.144	5	39	0.508
08:00-09:00	5	39	0.096	3.072	5	39	0.447	14.304	5	39	0.543
09:00-10:00	5	39	0.096	3.072	5	39	0.254	8.128	5	39	0.35
10:00-11:00	5	39	0.137	4.384	5	39	0.157	5.024	5	39	0.294
11:00-12:00	5	39	0.147	4.704	5	39	0.147	4.704	5	39	0.294
12:00-13:00	5	39	0.152	4.864	5	39	0.173	5.536	5	39	0.325
13:00-14:00	5	39	0.168	5.376	5	39	0.208	6.656	5	39	0.376
14:00-15:00	5	39	0.173	5.536	5	39	0.152	4.864	5	39	0.325
15:00-16:00	5	39	0.264	8.448	5	39	0.142	4.544	5	39	0.406
16:00-17:00	5	39	0.289	9.248	5	39	0.173	5.536	5	39	0.462
17:00-18:00	5	39	0.365	11.68	5	39	0.218	6.976	5	39	0.583
18:00-19:00	5	39	0.411	13.152	5	39	0.157	5.024	5	39	0.568
19:00-20:00	1	29	0.379	12.128	1	29	0.069	2.208	1	29	0.448
20:00-21:00	1	29	0.103	3.296	1	29	0.138	4.416	1	29	0.241
21:00-22:00											
22:00-23:00											
23:00-24:00											
Daily Trip Rates:			2.846				2.877				5.723

Reference	Descriptor	Town/City Area	Location	DWELLS	Status
HG-03-C-02	BLOCK OF WOOD GRI	HARINGEY	Suburban /	30	One-Off
HO-03-C-02	BLOCK OF BRENTFOR	HOUNSLO	Town Cent	86	One-Off
RD-03-C-02	BLOCK OF BARNES	RICHMOND	Suburban /	28	One-Off
SK-03-C-02	BLOCK OF BERMOND	SOUTHWA	Edge of To	29	One-Off
TH-03-C-02	FLATS	BETHNAL C TOWER HA	Suburban /	24	One-Off

Manually Deselected Sites

Site	Reason for Deselecting the Site
CN-03-C-01	Too Small
EG-03-C-02	Too Big
GR-03-C-01	Too Big
HK-03-C-01	Too Small
HK-03-C-02	Too Small
HK-03-C-03	Too Small
HM-03-C-01	PTAL too high
HO-03-C-01	Too Small
HV-03-C-01	Too Big
IS-03-C-01	.
IS-03-C-02	.
IS-03-C-03	.
IS-03-C-04	.
KI-03-C-02	PTAL too high
KN-03-C-02	PTAL too high
KN-03-C-03	PTAL too high
NH-03-C-01	Too Small
RD-03-C-01	Too Big
SK-03-C-01	PTAL too high
TH-03-C-01	.
TH-03-C-03	.
WH-03-C-01	PTAL too high

		AM Peak (08:00-09:00)			PM Peak (17:00-18:00)			07:00-19:00		
		Arrivals	Departure		Arrivals	Departure		Arrivals	Departure	
			s	2-Way		s	2-way		s	2-way
Underground, Metro, Light Rail, Tram	5.50%	0	1	1	1	0	1	4	5	9
Train	17.10%	1	2	3	2	1	3	13	15	28
Bus, Minibus or Coach	10.40%	0	1	2	1	1	2	8	9	17
Taxi	0.00%	0	0	0	0	0	0	0	0	0
Motorcycle, Scooter or Moped	2.60%	0	0	0	0	0	0	2	2	4
Driving a Car or Van	43.10%	1	6	7	5	3	8	33	37	69
Passenger in a Car or Van	2.30%	0	0	0	0	0	0	2	2	4
Bicycle	7.70%	0	1	1	1	1	1	6	7	12
On Foot	11.40%	0	2	2	1	1	2	9	10	18
Total	100.00%	3	14	17	12	7	19	76	85	161

TRICS 7.3.3

Trip Rate Pai Number of dwellings

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Calculation Factor: 1 DWELLS

Count Type: TOTAL PEOPLE

Time Range	ARRIVALS			DEPARTURES			TOTALS				
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate		
00:00-01:00											
01:00-02:00											
02:00-03:00											
03:00-04:00											
04:00-05:00											
05:00-06:00											
06:00-07:00											
07:00-08:00	3	19	0.123	0.984	3	19	0.439	3.512	3	19	0.562
08:00-09:00	3	19	0.386	3.088	3	19	1.035	8.28	3	19	1.421
09:00-10:00	3	19	0.351	2.808	3	19	0.456	3.648	3	19	0.807
10:00-11:00	3	19	0.351	2.808	3	19	0.474	3.792	3	19	0.825
11:00-12:00	3	19	0.684	5.472	3	19	0.491	3.928	3	19	1.175
12:00-13:00	3	19	0.333	2.664	3	19	0.404	3.232	3	19	0.737
13:00-14:00	3	19	0.509	4.072	3	19	0.298	2.384	3	19	0.807
14:00-15:00	3	19	0.421	3.368	3	19	0.561	4.488	3	19	0.982
15:00-16:00	3	19	0.439	3.512	3	19	0.544	4.352	3	19	0.983
16:00-17:00	3	19	0.561	4.488	3	19	0.333	2.664	3	19	0.894
17:00-18:00	3	19	0.351	2.808	3	19	0.158	1.264	3	19	0.509
18:00-19:00	3	19	0.596	4.768	3	19	0.491	3.928	3	19	1.087
19:00-20:00											
20:00-21:00											
21:00-22:00											
22:00-23:00											
23:00-24:00											
Daily Trip Rates:			5.105			5.684					10.789

Reference	Description	Town/City	Area	Location	DWELLS	Status
KN-03-A-01	TERRACED	NORTH KENSINGTON	KENSINGTON AND CHELSEA	Suburban Area	24	One-Off
SK-03-A-01	SEMI DET. & TERRACED	CANADA WATER	SOUTHWARK	Suburban Area	15	One-Off
WE-03-A-01	PRINCES MEWS	NOTTING HILL	WESTMINSTER	Suburban Area	18	One-Off

Manually Deselected Sites

Site	Reason for Deselecting the Site
BN-03-A-01	Too much parking
KI-03-A-01	Too much parking
KI-03-A-02	Too much parking

		AM Peak (08:00-09:00)		PM Peak (17:00-18:00)		07:00-19:00				
		Arrivals	Departure: 2-Way	Arrivals	Departure: 2-way	Arrivals	Departure: 2-way			
Underground, Metro, Light Rail, Tram	5.50%	0	0	1	0	0	0	2	3	5
Train	17.10%	1	1	2	0	0	1	7	8	15
Bus, Minibus or Coach	10.40%	0	1	1	0	0	0	4	5	9
Taxi	0.00%	0	0	0	0	0	0	0	0	0
Motorcycle, Scooter or Moped	2.60%	0	0	0	0	0	0	1	1	2
Driving a Car or Van	43.10%	1	4	5	1	1	2	18	20	37
Passenger in a Car or Van	2.30%	0	0	0	0	0	0	1	1	2
Bicycle	7.70%	0	1	1	0	0	0	3	4	7
On Foot	11.40%	0	1	1	0	0	0	5	5	10
Total	100.00%	3	8	11	3	1	4	41	45	86



Appendix G Vehicle Tracking

DO NOT SCALE



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Large Car (2006)

Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	5.900m

© HaskoningDHV UK Ltd.

TITLE

**SWEPT PATH ANALYSIS-
LARGE CAR**

PROJECT

63-71 HIGH STREET, HAMPTON HILL

Royal HaskoningDHV
Enhancing Society Together

2 Abbey Gardens,
Great College Street, Westminster,
London, SW1P 3HL
Tel +44(0)207 222 2115
www.royalhaskoningdhv.com

JOB No. PB5253

DRAWN JW

AUTOCAD REF. PB5253 TR01.DWG

DATE 11/11/2016

CHECKED AW

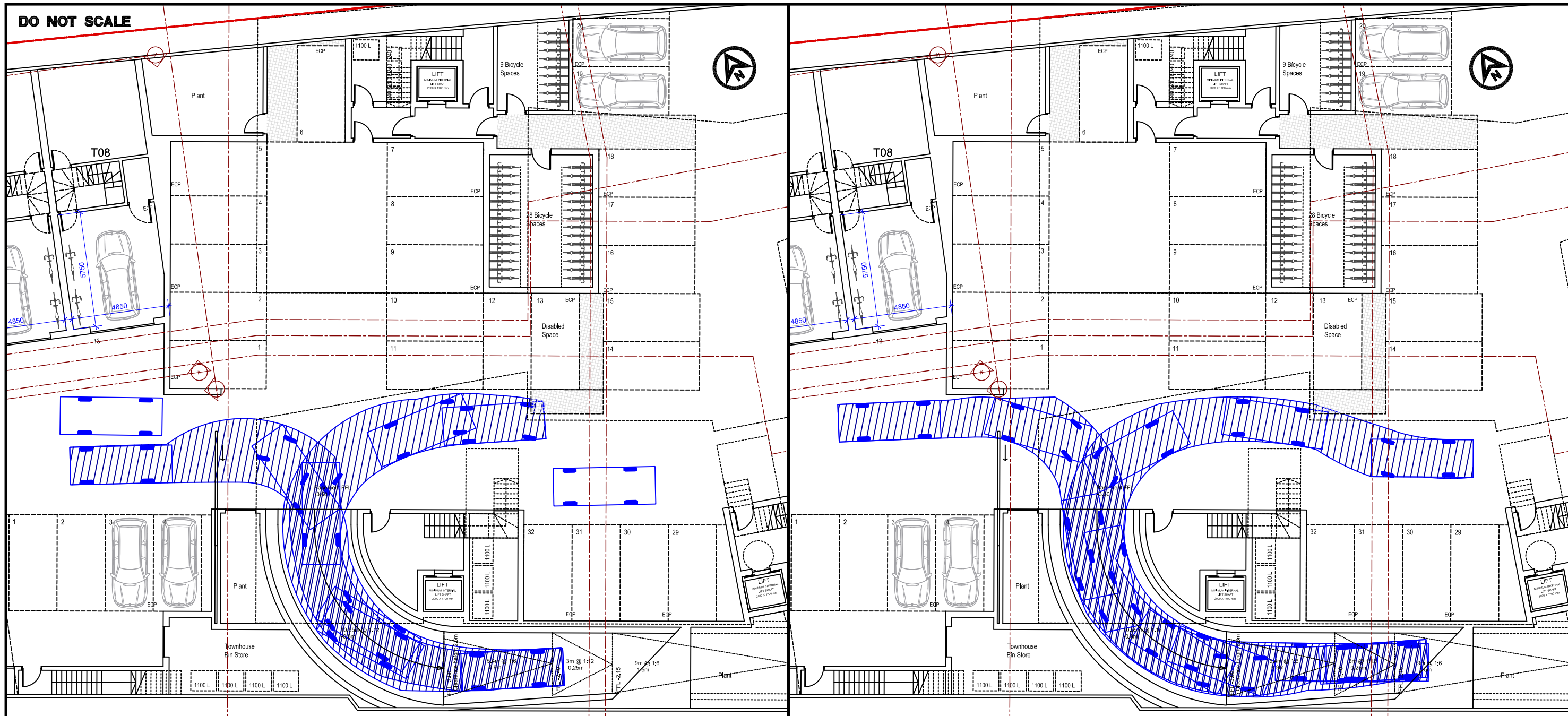
DRG No. TR01

SCALE 1:100

PASSED AW

REV P1

DO NOT SCALE



INBOUND

OUTBOUND

Large Car (2006)

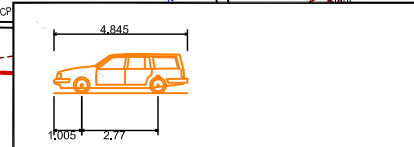
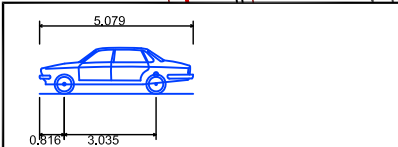
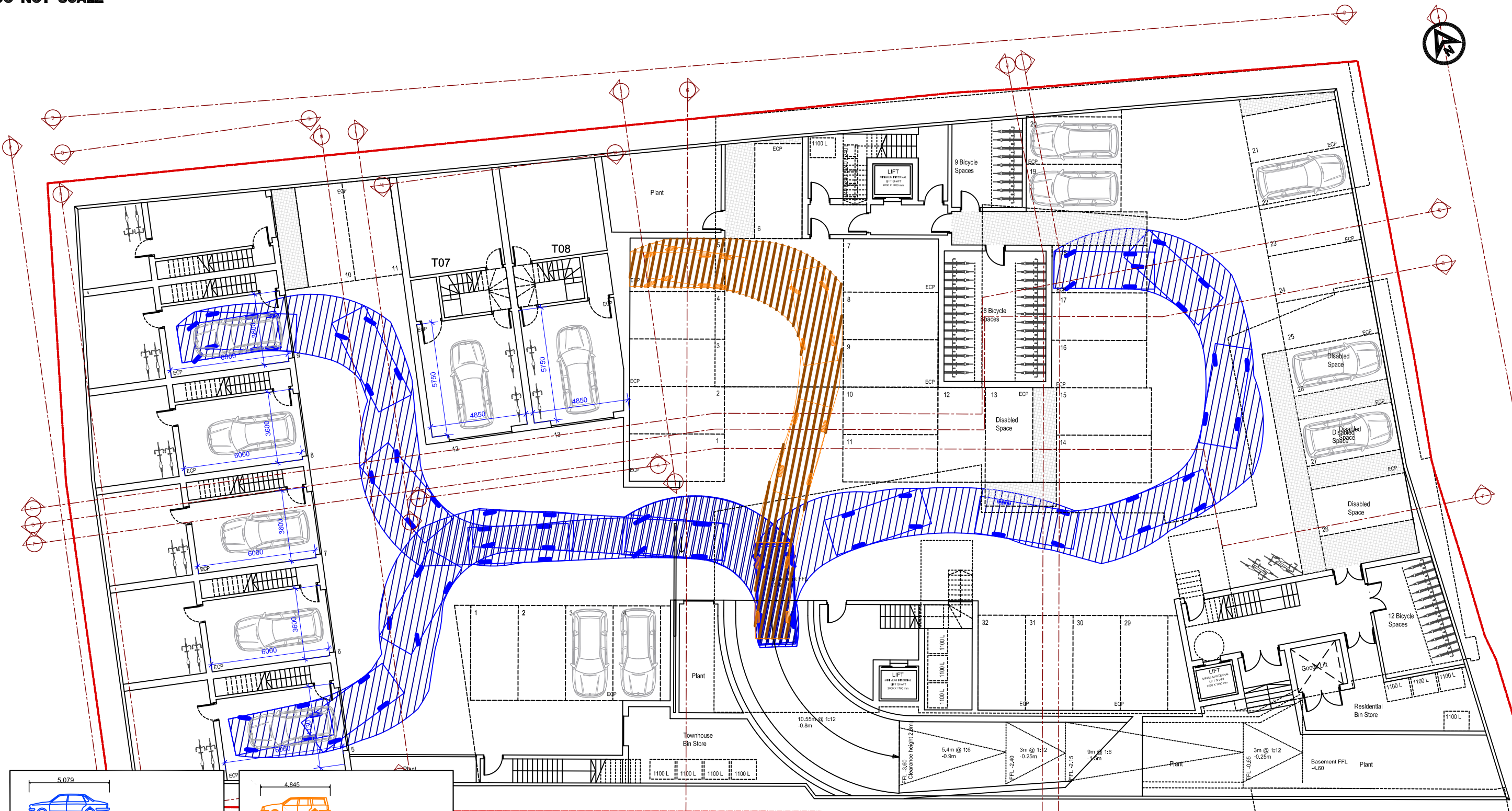
- Overall Length 5.079m
- Overall Width 1.872m
- Overall Body Height 1.525m
- Min Body Ground Clearance 0.310m
- Max Track Width 1.831m
- Lock to Lock Time 4.00s
- Kerb to Kerb Turning Radius 5.900m

This drawing has been produced using 3s architects and designers drawing: 1525 / PA.LG - Proposed Basement Plan. HaskoningDHV UK Ltd cannot guarantee the accuracy of data.

© HaskoningDHV UK Ltd.

TITLE SWEPT PATH ANALYSIS - LARGE CAR	PROJECT 63-71 HIGH STREET, HAMPTON HILL	Enterprise House, Delta Way, Egham, Surrey TW20 8RX Tel: +44(0)1932 569566 www.royal-haskoningdhv.com		JOB No. PB5253	DATE NOV 16	SCALE 1:200
		DRAWN DH	CHECKED AW	PASSED AW		
		AUTOCAD REF. PB5253 TR04.DWG	DRG No. TR04	REV P3		

DO NOT SCALE



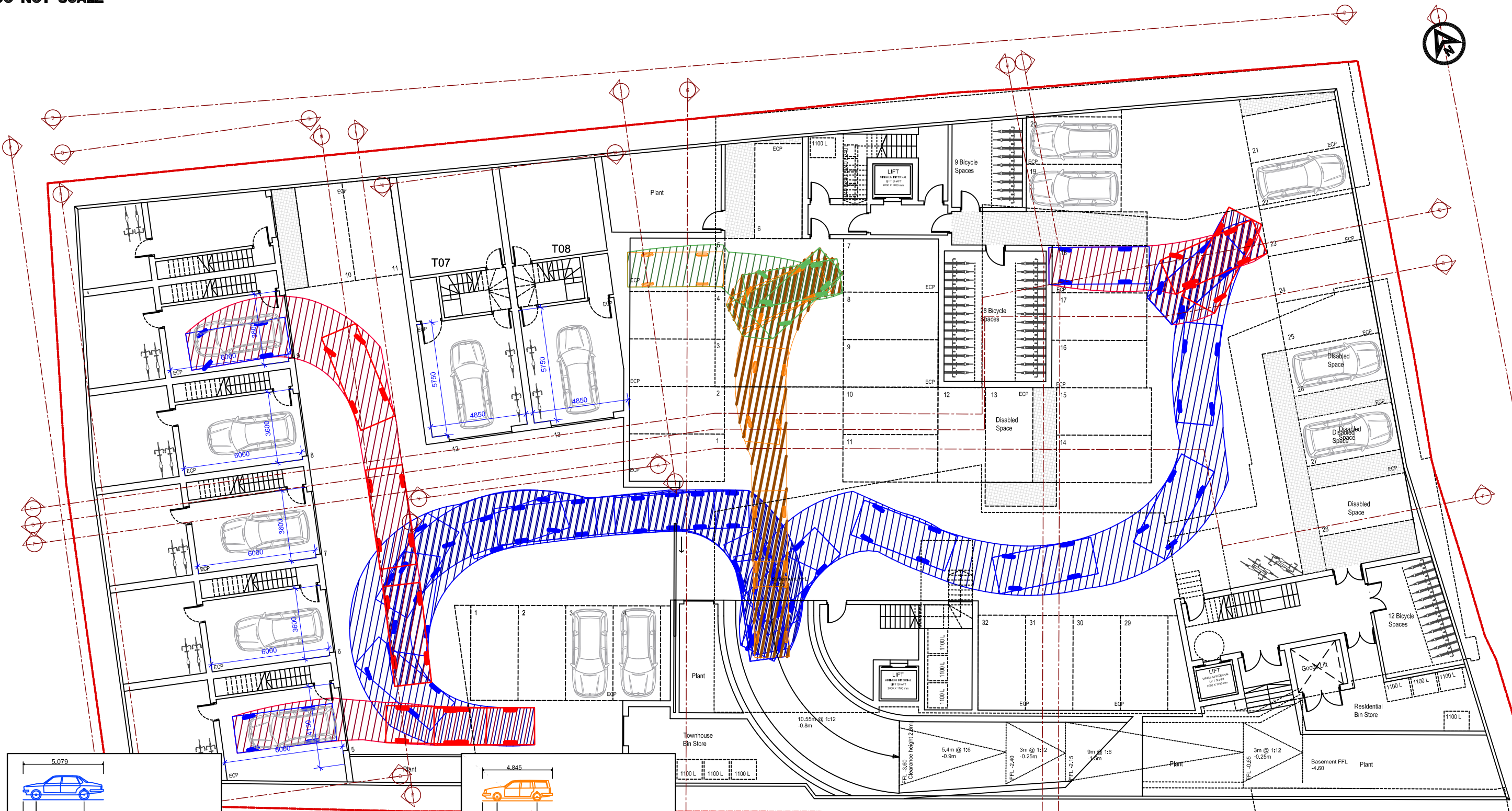
Large Car (2006)		Estate Car	
Overall Length	5.079m	Overall Length	4.845m
Overall Width	1.872m	Overall Width	1.750m
Overall Body Height	1.525m	Overall Body Height	1.424m
Min Body Ground Clearance	0.310m	Min Body Ground Clearance	0.189m
Max Track Width	1.831m	Max Track Width	1.655m
Lock to Lock Time	4.00s	Lock-to-lock time	4.00s
Kerb to Kerb Turning Radius	5.900m	Curb to Curb Turning Radius	4.950m

This drawing has been produced using 3s architects and designers drawing: 1525 / PA.LG - Proposed Basement Plan. HaskoningDHV UK Ltd cannot guarantee the accuracy of data.

TITLE	PROJECT		<small>Enterprise House, Delta Way, Egham, Surrey TW20 8RX Tel +44(0)1332 569596 www.royalhaskoningdhv.com</small>	JOB No.	PB5352	DATE	NOV 16	SCALE	1:200
SWEPT PATH ANALYSIS - LARGE CAR (INBOUND)	63-71 HIGH STREET, HAMPTON HILL			DRAWN	DH	CHECKED	AW	PASSED	AW
				AUTOCAD REF.	PB5253 TR05.DWG	DRG No.	TR05	REV	P3

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DO NOT SCALE



Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.316m
Max Track Width	3.035m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	5.900m

	Vehicle in a forward gear
	Vehicle in reverse gear

Estate Car	
Overall Length	4.845m
Overall Width	1.750m
Overall Body Height	1.424m
Min Body Ground Clearance	0.189m
Max Track Width	2.77m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	4.950m

	Vehicle in a forward gear
	Vehicle in reverse gear

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TITLE
SWEPT PATH ANALYSIS - LARGE CAR (OUTBOUND)

PROJECT
63-71 HIGH STREET, HAMPTON HILL



JOB No.	PB5352	DATE	NOV 16	SCALE	1:200
DRAWN	DH	CHECKED	AW	PASSED	AW
AUTOCAD REF.	PB5253 TR06.DWG	DRG No.	TR06	REV	P3

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