

3rd Floor - Regal House - 70 London Road - Twickenham - TW1 3QS

Churchview Road, Twickenham

Transport Statement Report

June 2017

A report prepared on behalf of UK & European Investments

Transport Planning & Highway Solutions Limited has prepared this report in accordance with the instructions of their client for their sole and specific use. Any other persons who use any information contained herein do so at their own risk. The use of this report and the contents by the client is strictly under licence from Transport Planning & Highway Solutions Limited.

Contents

1	Introd	duction	1
	1.1	Background	1
	1.2	Scope of the Report	2
2	Existi	ng Travel Conditions	4
	2.1	Background	4
	2.2	Existing Pedestrian Environment	4
	2.3	Existing Cyclist Environment	6
	2.4	Existing Public Transport Environment	7
	2.5	Existing Highways & Parking Environment	9
	2.6	Proximity to Local Amenities	11
3	Descr	iption of Development Proposals	15
4	Parkii	ng, Servicing & Sustainable Travel Initiatives	17
	4.1	Background	17
	4.2	Parking Provisions	17
	4.3	Servicing & Refuse Strategy	20
	4.4	Sustainable Travel Initiatives	20
5	Devel	opment Trips Characteristics & Impacts	22
	5.1	Background	22
	5.2	Proposed Residential Trip Generation	22
	5.3	Potential Scheme Impacts	24
6	Sumn	nary & Conclusions	26

1 Introduction

1.1 Background

- 1.1.1 This report has been prepared by Transport Planning & Highway Solutions (TPHS) on behalf of UK & European Investments, in relation to the redevelopment of the land to the northernmost end of Churchview Road. The scheme would comprise demolition of the existing block of ten garages and the building of a replacement three-storey block comprising three two-bed mews townhouses, each supported a dedicated car port.
- 1.1.2 The site sits to the northwest of Sontan Court, which is the end block of a series of residential blocks running along the full length of the eastern side of Churchview Road between the A305 Staines Road to the south and the redevelopment site. General vehicular access is taken by means of Churchview Road, the latter stretch of which is a private road.
- 1.1.3 In assessing the impacts of the proposal, given the scale of the proposed residential development which this planning application would support, the preparation of a Transport Statement is considered appropriate to support the submission. This is supported by current Policy DM TP2 'Transport and New Development' of London Borough of Richmond upon Thames' Development Management Plan (November 2011) which references (in part) that:

'All planning applications for.....smaller developments should be accompanied by a Transport Statement.'

- 1.1.4 However, it is referenced within the final draft version of the emerging Local Plan, issued for consultation in January 2017, that this current policy will be superseded upon adoption of the Local Plan, and with this version of the Local Plan adopted for Development Management purposes from mid-December 2016 following agreement at Council Cabinet level.
- 1.1.5 Policy LP 44 'Sustainable Transport Choice' includes references similarly that:

'Planning applications will need to be supported by the provision of a Transport Assessment if it is a major development, and a Transport Statement if it is a minor development.'

1.1.6 Whereas as within the current Development Management Plan the definition of the scale of development in terms of local policy is guided by the generic thresholds put forward in the Department for Transport's 'Guidance on Transport Assessment', the final draft version of the Local Plan makes reference to generic Department for Transport and Transport for London guidance in advance of the preparation of a separate Supplementary Planning Document.

- 1.1.7 Though now withdrawn the Department for Transport guidance suggested large development in terms of residential land-use to be a scheme comprising more than 80 units, whereas the Transport for London guidance suggests large development to comprise more than 150 units with respect to Transport Assessment reports but a lesser 80 or more units with respect to Travel Plans. This confirms the appropriateness of preparing a Transport Statement
- 1.1.8 The purpose of this report is to demonstrate that there would not be any material impacts on the local travel networks, highways and other modes of travel, as a result of the proposed development and that the operational requirements of the proposed land-use would be satisfactorily accommodated without materially impacting upon the local amenity.

1.2 Scope of the Report

- 1.2.1 The commentary supporting Policy DM TP2 presents a summary scope of the information which should be brought forward within a TS for a small-scale development, whilst the emerging policy will be supported by the subsequent preparation of a supplementary planning document relating to 'Sustainable Transport Choices'.
- 1.2.2 The summary scope presented in support of the current borough planning policy is recognised within the following commentary, which presents a summary scope for this TS:
 - review of the full range of existing travel networks running within the vicinity of the site, including consideration of the full range and extent of public transport services, supported by a PTAL assessment, as well as of the form of the local highway network and how these accommodate pedestrians and cycling routes and desire lines;
 - in relation to the local highway network, confirmation of the current on-street parking provisions and restrictions within the vicinity of the site, as well as reference to current parking demands and stresses within the local area;
 - consideration of the key facilities which can be practically accessed from the site by the full
 range of travel modes, including local nurseries and schools, health centres, local retail and
 leisure facilities, but particularly in relation to non-car travel and through the identification
 of potential walk and cycle catchments;
 - description of the development proposals in terms of how the site would be accessed by all modes of travel, with additional information relating to how the residential units would be serviced and of the proposed strategy for parking, with reference to planning policy;
 - multi-modal trips assessment for the proposed residential units, undertaken through a
 review of information available within the industry-recognised TRICS database, as well as
 patterns identified from local census statistics, from which to appraise the limited impacts
 of the proposed scheme;

- in lieu of the preparation of a draft Travel Plan, given the scale of the scheme, identify measures and incentives which would be brought forward as part of the proposals in relation to sustaining and further encouraging travel by sustainable transport.
- 1.2.3 Against the background of the preceding summary scope, this brief introduction is to be followed by the following sections, before presenting the key points in a summary and then the related conclusions:
 - Section 2 of this report presents commentary relating to the existing travel conditions at
 and around the site, considering all modes of travel and including baseline records in terms
 of current street activity, as well as with regard to access to the range of key local facilities.
 - Section 3 of this report provides an overview of scheme proposals for the site.
 - Section 4 of this report discusses both the parking strategy and the servicing strategy to be brought forward for the site, in relation to the surrounding conditions and policy, as well as outlining sustainable travel measures and incentives to be introduced.
 - Section 5 of this report presents the assessment of the likely tripmaking characteristics of the proposed residential development, to consider the likely impacts of the scheme upon the full range of travel networks to inform the key conclusions.
- 1.2.4 This Transport Statement is also cognisant of the response relating to 'Highways and Parking; issued within the response to a pre-application submission to London Borough of Richmond upon Thames, with the full response to the scheme issued by letter under the reference 16/P0338/PREAPP and dated 23rd February 2017.
- 1.2.5 In response to the pre-application advice presented within the above-referenced letter, a separate draft Construction Management Plan has been prepared and is submitted with the application. This separate plan covers a number of matters relating to construction management, including a number in relation to site access and the corresponding logistics.

2 Existing Travel Conditions

2.1 Background

- 2.1.1 The proposed development site at Churchview Road comprises solely the land to the northernmost end of Churchview Road, that currently occupied by an existing block of ten garages and open space to the rear of this.
- 2.1.2 The site is accessed both for vehicular traffic and for pedestrians from the south via Churchview Road, which runs initially as public highway for a length of around 200m from the simple priority junction with the A305 Staines Road and then as a private road for a length of around 70m. A continuous footway route runs along the eastern side of the public stretch.
- 2.1.3 The site is bounded to the north by the River Crane corridor and to the south by the access route to the rear of Sontan Court, which forms the end block of the series of residential blocks along the eastern side of Churchview Road. The neighbourhood surrounding the site is primarily residential in nature, with houses also fronting the western side of Churchview Road.
- 2.1.4 Twickenham town centre is located to the east of the site, with the western periphery at a typical walk distance of around kilometre and the central area (when measured to the junction between King Street / London Road / York Street) at a typical walk distance of around two kilometres; this equates to a typical walk time of initially between twelve minutes and thirteen minutes and then up to around twenty-five minutes.
- 2.1.5 The A305 Staines Road to the south of the site is a key local corridor running between the Twickenham town centre area and areas to the west, along which runs a number of local bus services. There are further local bus services operating within a practical walk distance of the site, whilst the nearest railway station is at Strawberry Hill to the south-west of the site.
- 2.1.6 An initial overview of the census population data for the local area, based on the 2011 census, suggests that 23% of households do not have access to a car and that less than half (41%) of residents travelling to work outside of the home travel by car, with a similar proportion (42%) using public transport and 15% using the 'slow' modes (walking and cycling).
- 2.1.7 A plan illustrating the location of the development site in the context of the surrounding area is included at **Appendix A**.

2.2 Existing Pedestrian Environment

2.2.1 Along Churchview Road there is a continuous footway running along the eastern side for a length of around 200m, from the junction with Staines Road to the south to the transition from public highway to private road. This footway is shared between pedestrian use and vehicle parking, with the pedestrian-only section approximately 1.8m in width and the parking section approximately 0.8m in width closest to the kerb.

- 2.2.2 This effective width is typical of a residential area and provides appropriate capacity to accommodate typical pedestrian demands within a primarily residential environment, including sufficient space for a pedestrian with a pram to pass a wheelchair user with comfort.
- 2.2.3 Along the western side of Churchview Road there is a footway running from the junction with Staines Road for approximately 60m through to outside No. 80 Churchview Road. Running northwards from this initial stretch there is a series of dropped kerbs and verges outside All Saints Church and the adjacent buildings, with the footway resuming outside of No. 79a Churchview Road and running for approximately 50m through to the private road.
- 2.2.4 Along the private stretch of Churchview Road running through to the site there is no footway running along either side, thus this area operates effectively as a shared surface environment for a length of around 70m and is considered appropriate given the limited traffic activity.
- 2.2.5 The footways running along both sides of the A305 Staines Road are reasonably wide, generally no less than two metres in width, and thus with the capacity to accommodate high pedestrian flows in both directions. This width is consistent with the current general guidance put forward in Manual for Streets for typical minimum footway width requirements.
- 2.2.6 Both along Staines Road and Churchview Road the footways are generally well-maintained and in good condition, with the widths available conforming generally with design guidance and also supporting acceptable pedestrian comfort levels in terms of general movement.
- 2.2.7 At the junction between the A305 Staines Road and Churchview Road there are dropped kerbs on each side of the road at the junction to assist with crossing the junction bellmouth. Indeed, all roads joining Staines Road, The Green and Heath Road along the route to and from the town centre area are provided with dropped kerbs arrangements on each side of the road.
- 2.2.8 Whilst there are no signal-controlled crossings on Staines Road within the immediate vicinity of the junction with Churchview Road, the nearest signal-controlled crossings are located within the signal-controlled junction between the A305 Staines Road and Meadway about 150m east of the Staines Road / Churchview Road junction equivalent to a typical walk time of around two minutes. These crossings sit on key desire lines, such as to and from the Twickenham town centre area, Twickenham Green and a number of local schools.
- 2.2.9 With the footway network and crossing facilities available within the vicinity of the site the pedestrian environment is considered to be of an overall good level, when also considering accommodation of key pedestrian desire lines, quality of the pedestrian infrastructure and maintenance of pedestrian facilities.
- 2.2.10 The quality of the pedestrian environment is highlighted because the census population data for the local area, based on the 2011 census, identifies that 8% of residents travelling to work outside the home do so on foot, which is not dissimilar to the London-wide 9%.

- 2.2.11 Additionally, advice issued by The Institution of Highways & Transportation (IHT) within 'Guidelines for providing for journeys on foot' suggests (at Table 3.2 of the document) acceptable walking distances for a number of different trip purposes.
- 2.2.12 For the purpose of either commuting or travelling to and from school, which are key travel purposes particularly during peak periods, the acceptable walking distance is defined as 1 kilometre and the preferred maximum as 2 kilometres, whilst for trips to and from a town centre the acceptable walking distance is defined as a lesser 400m and the preferred maximum as 800m. The reference from the IHT guidelines is attached at **Appendix B**.
- 2.2.13 The western periphery of the Twickenham town centre area sits at around the initial 1km catchment for local commuting, whilst the central area of the town centre sits at around the wider 2km catchment for local commuting, thus demonstrating that there is a range of local employment opportunities within an acceptable walk of the site.
- 2.2.14 Similarly, in terms of access to education facilities, Trafalgar Infants and Juniors Schools on Elmsleigh Road are around 500m of the site, thus well within the initial 1km catchment for school-related travel, and Waldegrave Secondary School on Fifth Cross Road is around 900m of the site, thus also within the initial 1km catchment.

2.3 Existing Cyclist Environment

- 2.3.1 Cycling is a key mode of travel, both for commuting and for leisure journeys, and has the scope to be used to undertake shorter-distance journeys otherwise undertaken by the car; indeed, Transport for London acknowledges that the London Borough of Richmond upon Thames has the highest proportion of cyclists in an outer London borough cycling to and from work.
- 2.3.2 The census population data for the local area, based on the 2011 census, confirms this by identifying that 7% of residents travelling to work outside the home do so by cycle, which is consistent with the borough-wide cycle-based mode share and greater than the London-wide cycle-based mode share.
- 2.3.3 The existing cycle network in the vicinity of the site consists of a number of roads 'signed or marked for use by cyclists on a mixture of quiet or busier roads', which connect with a number of roads of a similar nature and also a network of off-road routes.
- 2.3.4 The Meadway to the east of the site forms part of this local network, connecting firstly with a signed on-street route leading directly to Twickenham railway station via Andover Road and Edwin Road and then running beyond Twickenham through St Margarets to Richmond. The Meadway also connects with an off-road route running between the Richmond upon Thames College site to Hanworth via Kneller Gardens and Crane Park and an off-road route running parallel to the A316 Great Chertsey Road running locally between Richmond and Hanworth.

- 2.3.5 Similarly, Fifth Cross Road to the south of the site forms part of the local network and the initial stretch of two signed routes running through to the commercial and retail centre of Kingston, one via Stanley Road and Fulwell and one via Wellesley Road and Strawberry Hill.
- 2.3.6 Literature published by Sustrans suggests a comfortable cycling distance could be up to 5 miles (about 8 kilometres) over a half-hour period, as this ties in with the recommended minimum amounts of weekly adult physical activity of five units of thirty minutes.
- 2.3.7 This distance threshold is greater than the advice given previously in the superseded Planning Policy Guidance 13 '*Transport*', which suggested that those short-distance journeys which had the scope to be undertaken by cycle instead of the car were about a distance of 5 kilometres, although it not being uncommon for greater timed and lengthier journeys to be undertaken on regular occasions, in particular to a place of work.
- 2.3.8 Within the full threshold of eight kilometres, the cycle catchment would extend northwards through to the Great West Road (A4) corridor running between Brentford and Heathrow Airport through Hounslow, eastwards through Richmond to Mortlake, southwards through Kingston to Surbiton, and westwards through Feltham and Sunbury towards Ashford.
- 2.3.9 This catchment area would evidently encompass a number of key centres, within which there are a number of local employment opportunities as well as other key facilities for residents such as further schools and leisure centres / open spaces, with Heathrow Airport and the A4 corridor being key employment hubs and Kingston and Richmond key area centres.

2.4 Existing Public Transport Environment

- 2.4.1 Public transport routes, by bus and rail, provide realistic and viable means of travel to and from the site and surrounding area, both for the commuting purpose and for other trips such as for leisure. However, initially, the measured public transport accessibility level for the site has a score of 1b, which is considered to represent 'very poor' accessibility by public transport.
- 2.4.2 The online PTAL calculation is attached at **Appendix C**, identifying that three bus routes are easily accessible from the site. These three services (110, 490, H22) run via the 'Meadway' pair of stops along Staines Road, with that for eastbound services located about 450m of the site beyond the Meadway junction and that for westbound services about 300m of the site before the Meadway junction, so a typical walk of six minutes and four minutes respectively.
- 2.4.3 Whilst sitting outside of the practical walk distance considered by the PTAL methodology to be appropriate to access bus services, a further four bus routes (267, 281, 290, R70) operate via the 'Trafalgar Road / Prince of Wales' pair of stops on Hampton Road at a distance of around 800m and so equivalent to a typical walk of around ten minutes.

- 2.4.4 The census population data for the local area, based on the 2011 census, confirms that around two-fifths of residents travelling to work outside the home do so by public transport (42%), with around three-quarters of these doing so by rail (including underground / tram) and a quarter by bus. This suggests that whilst Strawberry Hill and Whitton railway stations are about 1.4km and 1.6km of the site respectively, which correspond with typical walk times of around 18 minutes and 20 minutes respectively, access to these may be considered practical.
- 2.4.5 Table 2.1 presents a summary firstly of the bus routes operating within an acceptable walk distance of the site as defined by the PTAL methodology (a walk distance of 640m equivalent to a typical walk of eight minutes) and secondly of the additional bus routes operating outside of the PTAL-defined walk distance but continuing to be within a walk distance of around 800m and equivalent to a typical walk of ten minutes. A route spider map, prepared by TfL for Twickenham Green and which covers these local routes, is attached at **Appendix D**.

Route No.	Route Summary	Closest Bus Stops	Typical Hourly Freq.
110	West Middlesex Hospital - Isleworth – Twickenham – Whitton Corner - Hounslow	Ctainea Dead	3
490	Richmond – Twickenham – Hanworth – Feltham – Hatton Cross – Heathrow Airport	Staines Road (Meadway)	5-6
H22	Hounslow – Whitton – Hospital Bridge Road - Twickenham Green – Twickenham - Richmond		5-6
		STAINES ROAD TOTAL	13-15
267	Hammersmith – Chiswick – Gunnersbury - Brentford – Isleworth – Twickenham - Fulwell		6
281	Tolworth – Surbiton – Kingston – Hampton Wick - Teddington – Fulwell - Twickenham - Hounslow	Hampton Road	7
290	Staines – Ashford – Sunbury Cross – Hampton – Twickenham Green - Twickenham	(Trafalgar Road / Prince of Wales)	3
R70	Nurserylands – Hampton – Hampton Hill – Fulwell – Twickenham Green – Twickenham - Richmond		6
		HAMPTON ROAD TOTAL	22
		CUM. HOURLY FREQ.	35-37

Table 2.1: Summary of Local Bus Services

2.4.6 The summary table providing details of the range of bus services accessible of the site and the frequencies of these illustrates that this mode of travel is both practical and convenient for those travelling to and from the site, for a range of trip purposes. During a typical daytime hour there are thirteen to fifteen buses running in each direction via the closest stops along Staines Road, which equates to a bus in each direction every four to five minutes.

- 2.4.7 Each of these bus routes run to and from Twickenham town centre, with two of the three routes continuing to and from Richmond with a cumulative frequency of ten to twelve services in each direction during a typical daytime hour, equivalent on average to a service every five to six minutes, and the third service continuing to and from the West Middlesex Hospital via Twickenham railway station, with a service typically every twenty minutes in each direction.
- 2.4.8 Additionally, there are twenty-two buses running in each direction via the stops along Hampton Road, which equates to a bus in each direction of every three minutes or so. Again, all of these services run to and from Twickenham town centre, with a further service continuing to and from Richmond and two of the services running via Twickenham Railway station at a cumulative frequency averaging at a service every four to five minutes.
- 2.4.9 In addition to the high frequency of bus services running between the site area and the Twickenham town centre area, Richmond and Hounslow are the nearest key centres with the highest overall service frequencies. During a typical daytime hour there are sixteen to eighteen services via the two sets of stops running both to and from Richmond, averaging a service every three to four minutes, whilst running between Twickenham and Hounslow there are fifteen to sixteen services in each direction, averaging a service every four minutes.
- 2.4.10 Other key centres and/or facilities accessible from the site directly by the range of bus services include Hammersmith, Kingston and Staines in particular for employment and retail opportunities, Heathrow Airport for business / leisure travel and employment opportunities, and West Middlesex Hospital for strategic health facilities and further employment.

2.5 Existing Highways & Parking Environment

- 2.5.1 Churchview Road is a cul-de-sac running in a north-westerly direction from a junction with the A305 Staines Road. The initial stretch of around 200m running from this junction is designated as a public road, with the final 70m designated as a private road. Given the cul-de-sac and the residential nature of the street, the road is subject to relatively light traffic flows.
- 2.5.2 The junction between the A305 Staines Road and Churchview Road operates as a simple priority junction, with no restrictions to the direction of movement into and out from Churchview Road. The double yellow line restrictions running along the north side of the A305 Staines Road continue into Churchview Road, along both sides, for around 9m or so.
- 2.5.3 Other than these initial restrictions running from the junction, there are no further restrictions with respect to on-street parking or loading / unloading other than the guidance that on-street parking along the eastern side of Churchview Road should be undertaken by means of vehicles straddling the kerb so as to ensure a clear carriageway along Churchview Road. Along the western side, whilst the on-street parking is wholly on-street it is intermittent with a number of dropped kerb arrangements and private accesses serving individual residential properties.

- 2.5.4 On-street parking is typically available along the full length of the eastern side of Churchview Road designated as public highway, whilst along the western side there are two significant separate stretches of around 45m and 35m respectively as well as a number of shorter intervening stretches running between the dropped kerb arrangements and private accesses. On-street parking is also feasible along the eastern side of part of the private stretch of Churchview Road, though restricted to residents in the adjacent blocks permitted to do so.
- 2.5.5 In order to investigate the existing peak on-street parking demand, which typically corresponds with the overnight period, a series of parking beat surveys were undertaken to support the pre-application submission. This survey comprised the full length of Churchview Road as shown on the plan attached at **Appendix E** and also including the private parking to the rear of the site. The results of these surveys have been considered separately in terms of the public stretch of Churchview Road and the private parking areas, the latter being those additionally available to residents by permission.
- 2.5.6 The scheduling and extent of these surveys were based upon LBRuT's preferred methodology for the undertaking of residential parking beat surveys at the time of the survey work, which is summarised below:
 - The area to be surveyed must cover a 200m / 2 minute waking distance around the site; this area can be extended / amended for a number of reasons.
 - Surveys must only be undertaken during term time and not within public / school holidays / half-term week or week before / after to take into account independent school holidays.
 - For residential surveys 2 x weekday surveys between 01h00 and 05h30 (Mon to Thurs) and 1 x Sunday survey between 01h00 and 05h30 are required.
 - Surveys must be provided in map form on which x's show parked cars and s's show empty spaces exactly where they are parked on the night.
 - Noted on the survey map should be the date and time the survey was undertaken as well as whether the area is within a Community Parking Zone or not; an inventory map must be provided showing lengths of all parking and all restrictions.
 - The first 7.5m of a junction is to be omitted, but cars parked within will be considered in the calculations as contributing to on street stress; illegally parked cars must be shown on the plan and these will be included in the stress calculation.
 - Available bays on street must be calculated using 5.5m bay lengths.
- 2.5.7 The surveys to support initially the pre-application submission and thus carried through into this assessment were undertaken between 04:00 and 04:30 on Wednesday 21st September, Thursday 22nd September and Sunday 25th September 2016. The full results of the parking beat surveys in the form of both the tabulated inventory record and the corresponding mapping are attached at **Appendix F**.

- 2.5.8 With regard to the public highway stretch of Churchview Road, the results of the series of parking beat surveys suggest that within the outlined study area there is a logical capacity for 48 to 51 vehicles to park on-street. With 51 to 56 vehicles observed as being parked over the course of the three survey days (inclusive of five vehicles parked inappropriately primarily across dropped kerb arrangements), the resultant parking stress exceeds the current capacity.
- 2.5.9 The average parking stress across the three surveys days was 106.68%, thus in excess of the 90% threshold from which parking stress, again at the time of survey, was not considered manageable. It is acknowledged that since the time of the survey LBRuT has updated their preferred survey methodology to consider a lesser threshold of 85%, but based on on-street parking spaces being measured at a shorter 5m in length compared to the 5.5m considered.
- 2.5.10 With regard to the private stretch of Churchview Road and the existing parking to the rear of the site, the results of the parking beat surveys suggest that there is a logical capacity for sixteen vehicles to park either on-street or within the demarcated spaces.
- 2.5.11 With nine to ten vehicles observed as being parked over the course of the three survey days (with none parked inappropriately), the resultant parking stress within the private area averaged at 58.33% and thus well within the 90% threshold from which parking stress was not considered manageable again at the time of the survey and also the lesser 85% threshold since adopted by LBRuT within the preferred parking stress survey methodology.

2.6 Proximity to Local Amenities

- 2.6.1 The Building Research Establishment (BRE) has developed the Home Quality Mark (HQM) to form part of the BREEAM group of quality and sustainability standards. Assessment under the HQM measures a range of issues, including a number relating to 'Our Surroundings'. 'Our Surroundings' considers site context and movement and connectivity, with a key factor within the latter being the range of local amenities accessible of the site.
- 2.6.2 The 'Home Quality Mark Technical Manual' identifies the range of amenities which should be targeted firstly to be within a walking distance of 650m of a site, via a safe pedestrian route. These include administrative services (such as post offices, banks or cash points), health services (such as GPs, health centres, pharmacies) and small-scale retail services (such as grocers, butchers, corner shops). The assessment only requires for three different types of these facilities to be within the defined walk distance to achieve the first of the criteria.
- 2.6.3 The guidance then references the additional range of amenities which should be targeted within a travel time of 30mins of the site, either again via a safe pedestrian route or by public transport. These include purpose-built recreation or leisure facilities, primary or early education facilities / schools, large-scale retail (such as restaurants, cinemas, non-food shops) and community facilities (such as community hall or library). The assessment only requires two of these facilities to be within the defined travel time to achieve the additional criteria.

2.6.4 The following tables list the full range of local amenities referenced in the 'Home Quality Mark – Technical Manual', with Table 2.2 considering firstly the key local amenities and Table 2.3 considering the additional beneficial local amenities, demonstrating whether or not these are within the travel distance or travel time thresholds of the site.

Distance / Time		Cumporting Commentary	
650m.	30mins*	Supporting Commentary	
✓		There is a post box on the corner of Fourth Cross Road / Staines Road about 450m from the site.	
×		Lloyds Bank on Heath Road is approximately 1.5km from the site, with other banks also within the Twickenham town centre area.	
✓	APPLICAB	There is a cash point at the Esso filling station on the corner of Manor Road, about 520m from the site.	
×	NOT	The Green Surgery and Staines Road Surgery are each about 1km from the site, equivalent to a 12-13 minute walk.	
Pharmacy ×		The Maple Leaf Pharmacy on Twickenham Green is about 900m from the site.	
✓		There is a Londis convenience store on Staines Road about 350m from the site.	
	650m. ✓ × ✓	650m. 30mins*	

Table 2.2: Summary Assessment of Proximity to Key Local Amenities

- 2.6.5 This assessment demonstrates that three of the six key local facilities would be accessible from the site within the shorter distance threshold of 650m of the site, equivalent to a walk of around eight minutes. Against this background, the initial criteria set out within the 'Home Quality Mark' would be achieved, which supports demonstration of reducing the dependency of travel by the car.
- 2.6.6 Additionally, two of the three facilities outside of the shorter distance threshold, surgery and pharmacy, are within a kilometre of the site, equivalent to a walk typically of between twelve and thirteen minutes, with the bank around 1.5 kilometres of the site, equivalent to a walk approaching nineteen minutes. These walk distances and walk times can be considered to represent reasonable walk journeys, particularly given that they sit well within the travel time threshold the 'Home Quality Manual' references as being acceptable for additional amenities.

	Distance	e / Time	Suppositing Commonton.	
	650m.	30mins*	Supporting Commentary	
			Whitton Sports and Fitness Centre on Percy	
Leisure Centre		√	Road is about 2km from the site, a walk of	
			around 25 minutes.	
Public Park		./	Kneller Gardens is about 750m from the	
Public Park		•	site, a walk of between 9 and 10 minutes.	
Children's Dlay Area		./	There is a children's play area in Kneller	
Children's Play Area		•	Gardens, again 9-10 minutes from the site.	
			Trafalgar Day Nursery & Pre-School on	
Nursery / Pre-School		\checkmark	Meadway is about 650m from the site, a	
			typical walk of around 8 minutes.	
			Trafalgar Infants and Juniors Schools on	
Primary School		\checkmark	Elmsleigh Road are about 500m from the	
			site, a walk of between 6 and 7 minutes.	
			Waldegrave School in Fifth Cross Road is a	
Secondary School		\checkmark	typical walk of between 11 and 12 minutes	
	믜		from the site, at a distance of around 900m.	
	AB		Twickenham Café on Staines Road is about	
Café / Restaurant		✓	350m from the site, so a typical walk of	
	ΥРР		between 4 and 5 minutes.	
	NOT APPLICABLE		The Odeon Cinema in Richmond is about	
Cinoma	N	✓	4km from the site and by using local buses	
Cinema			and / or rail is accessible of the site within	
			around 30 minutes, including walk time.	
			Marks & Spencer Simply Food is about	
Main Food Datail			1.6km from the site, with a large Waitrose	
Main Food Retail		✓	Supermarket at about 2km, both within a	
			typical walk time of 25 minutes.	
Main Non Food			The main non-food retail outlets are located	
Main Non-Food		\checkmark	in the Twickenham town centre area, up to	
Retail Outlets			2km from the site and a walk of 25 minutes.	
			Whitton Community Centre & Social Club in	
Community Centre		\checkmark	Percy Road is about 2km from the site,	
			again a walk of approximately 25 minutes.	
			Whitton Library in Nelson Road is about	
Library			1.8km away, equivalent to a typical walk of	
·			between 22 and 23 minutes.	
*NOTE: The 30mins. travel time threshold, as a walk, equates to a walk of 2.4km.				

Table 2.3: Summary Assessment of Proximity to Beneficial Local Amenities

- 2.6.7 This additional assessment demonstrates that all of the beneficial local amenities sit within the longer travel time threshold of 30 minutes (equivalent to a walk of up to 2.4km), with indeed all but one of these facilities being within the travel time threshold wholly on foot. The single facility not within a practical walk on foot, the cinema, would be within a travel time of around thirty minutes by a combination of public transport and foot.
- 2.6.8 Such level of access to this range of local facilities would be in excess of the two facilities required to meet the additional criteria within the 'Home Quality Mark'.

2.6.9 As such, it is evident that a wide range of key facilities are accessible of the site by non-car modes, with these facilities being accessible in the first instance primarily by foot and not requiring the additional use of the car. Additionally, public transport would only be required to reach one of the full range of facilities within a half-hour travel time and none of the facilities considered within the assessment would fall outside of a reasonable cycle journey.

3 Description of Development Proposals

- 3.1.1 The development proposals comprise the redevelopment of the land to the northernmost end of Churchview Road, which currently comprises a block of ten garages to the front and gated open space to the rear. The proposals are for demolition of the existing block of ten garages and the building of a replacement three-storey block comprising three two-bed townhouses.
- 3.1.2 The proposed site plan prepared by Dickson Architects and which accompanies the submission are attached at **Appendix G** for ease of reference.
- 3.1.3 Each of the three new-build units would be supported by a dedicated car port to address the vehicular parking requirements specifically of the residential new-build scheme, each of which would have access to a charging point for use by electric vehicles. Should planning be granted, each of the car ports would be subject to a condition that doors would not be installed at a later date to convert the car port into an enclosed garage unit.
- 3.1.4 Access to the dedicated parking and by pedestrians for each of the units would be taken from the southern façade of the new build block, which would front onto the hardstanding currently in place between the end block of Sontan Court and the existing block of garages, which provides also vehicular access to the area to the rear of Sontan Court.
- 3.1.5 This area connects with the shared-surface private stretch of Churchview Road, which is considered an appropriate environment given the current lightly-trafficked nature of this route and that this environment would not materially differ with the coming forward of the additional three residential units and the corresponding vehicle and pedestrian movements.
- 3.1.6 Additionally, to address the vehicular parking requirements specifically of those which may be displaced from the existing garages to be demolished to facilitate the residential new-build scheme there would be minor amendments to the existing arrangements to the rear of Sontan Court and modifications to the existing verge opposite the lower ground floor garage units under Sontan Coourt, as shown on the site attached at Appendix G.
- 3.1.7 The number of on-site parking spaces as a result of the proposed scheme which would be brought forward to the rear would be twelve, each of which would be of a standard 2.4m by 4.8m size for perpendicular parking spaces, whilst the number of spaces which would be brought forward through use of the verge area would be four, each of which would be of a standard 2.0m by 6.0m size for parallel parking spaces.
- 3.1.8 These sixteen external spaces would be coming forward to accommodate an existing demand, that associated with the current rear spaces and the existing garage units, which is supported by neither electric vehicle charging points nor accessible parking spaces, so the reconfigured rear parking and the inset verge parking spaces would come forward as standard spaces only.

- 3.1.9 There would continue to be the scope to park on-street along the eastern side of the private stretch of Churchview Road running in front of the conjoined residential blocks comprising primarily Nos. 55 to 71 for a length of around 43m. At the time of survey this was appraised as having the scope for seven vehicles to park, based on the 5.5m-length space parameter, but with the updated 5m-length space parameter may have a capacity for eight vehicles.
- 3.1.10 With regard to access of these existing lower ground units, a swept path assessment has been undertaken to confirm that the insertion of the inset verge parking spaces opposite would not compromise access. The results of this exercise are presented on drawing TPHS/124/TR/001, attached at Appendix H for reference.
- 3.1.11 These external parking spaces (totalling twenty-three to twenty-four spaces) would continue to be available only to those residents of the existing residential blocks along the upper stretch of Churchview Road, thus no change to the current arrangements which restrict access to the existing external parking spaces within the private area to residents which permission to do so. Residents of the proposed residential units would not have access to these spaces.
- 3.1.12 Each of the proposed three residential units would be supported by a separate storage unit adjacent to the rear parking area to accommodate two cycles, whilst in terms of the collection of general waste and recyclables a communal enclosure would be provided adjacent to the proposed verge parking opposite the end block of Sontan Court.
- 3.1.13 Whilst no Travel Plan is prepared to support the proposals, a series of measures and incentives would be brought forward nonetheless to actively sustain and promote sustainable travel behaviours by the residents of the dwellings. Such measures and incentives would feature within a 'Home Users Guide' to be prepared for each unit at sale.

4 Parking, Servicing & Sustainable Travel Initiatives

4.1 Background

- 4.1.1 This section of the report considers the parking strategy to be brought forward for the site in terms of the general level of car parking and cycle parking provisions, with reference to current policy at both the London-wide level and the borough level. The commentary then considers the servicing strategy to be brought forward for the site considering the proposals for the general storage and collection of waste and recyclables, as well as the means of access.
- 4.1.2 The final commentary presented in this section of the report presents an overview of the likely sustainable travel measures and initiatives which would be brought forward to actively sustain and further promote sustainable travel behaviour by residents of the units. Such measures and incentives would feature within any Home Users Guide prepared for the units.

4.2 Parking Provisions

Vehicle Parking

4.2.1 Each of the proposed three two-bed units would be supported by a single off-street car parking space, by means of a dedicated car port incorporated into the new-build block. Current LBRuT policy and guidance references at Policy DM TP8 'Off Street Parking – Retention and New Provision' of the adopted Development Management Plan that:

'Developments, redevelopments, conversions and extensions 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.

A set of maximum car parking standards and minimum cycle parking standards are set out...for all types of development, these take into account bus, rail and tube accessibility as well as local highway and traffic conditions including demand for on-street parking. These standards will be expected to be met, unless it can be shown that in proposing levels of parking applicants can demonstrate that there would be no adverse impact on the area in terms of street scene or on-street parking.'

- 4.2.2 The corresponding parking standards guidance suggest up to one space per residential unit with one-bedroom or two-bedrooms, be the site located in a controlled parking zone or located outside of a controlled parking zone, so the level of off-street parking provision put forward specifically for the proposed three two-bed units accords fully with current policy.
- 4.2.3 Policy LP 45 'Parking Standards and Servicing' of the borough's final draft version of the Local Plan introduces the following in relation to car parking provision:

'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...'
- 4.2.4 The emerging guiding standards put forward within the final draft version of the Local Plan (Appendix 3) for residential development continue to suggest a level of provision for one-bedroom units and two-bedroom units of one space per unit, thus similarly the level of off-street parking provision put forward specifically for the proposed three two-bed units accords fully with emerging policy also.
- 4.2.5 However, in addition to addressing the vehicle parking requirements of the proposed units within the new-build block, it is acknowledged that the parking strategy for the site has to address also the potential displacement of parking demands which may currently be associated with the existing block of ten garages which would be demolished.
- 4.2.6 Currently on-site there is the scope to park up to seven to eight vehicles on-street along the eastern side of the private stretch of Churchview Road in advance of the lower ground floor garage units, the seven vehicles reflective of each space being no less than 5.5m in length as required at the time of the original survey work and the eight vehicles reflective of each space being no less than 5m in length as reflective of LBRuT's current requirements. Additionally, there are up to nine spaces within the demarcated area located to the rear of Sontan Court, though site visits have determined the latter two of these spaces difficult to identify.
- 4.2.7 Thus, outside of the garage units, there is a total of sixteen to seventeen spaces on-site, the difference reflecting the number of parallel parking along the private stretch of the road.
- 4.2.8 As referenced in Section 2.5 'Existing Highways & Parking Environment' of this report, a series of parking beat surveys determined a typical parking stress across the site of between 56% and 63%, with typically six or seven on-site spaces spare during the peak overnight period. Based on the peak stress and so as to not reach or exceed a parking stress threshold of 90%, that considered as the threshold at the time of the survey work, this identifies that four of the existing on-site parking spaces could assist in accommodating the potential displacement of up to ten vehicles as a result of the demolition of the garage block.
- 4.2.9 Based on the lesser 85% threshold recently put forward by LBRuT with regard to the threshold of manageable parking stress, but also acknowledging that based on 5m-long parallel parking spaces the overall capacity within the private parking area increases to seventeen spaces, this continues to confirm that four of the existing on-site parking spaces could assist in accommodating the potential displacement of up to ten vehicles as a result of demolition of the garage block without exceeding this lesser threshold.
- 4.2.10 To ensure that the potential displacement of up to ten vehicles would be fully accommodated on-site, as referenced in the preceding section of this report (Section 3) there would be minor amendments to increase the available parking at the rear to twelve spaces and modifications to the verge to the front to provide four spaces opposite the lower ground floor garage units.

- 4.2.11 With these additional on-site spaces there would be a total of twenty-three to twenty-four spaces to accommodate both the existing observed demand (up to ten spaces) and the potential displacement of demand from the existing garage block to be demolished (again up to ten spaces), whilst retaining the resultant stress level below the 90% threshold based on the previous LBRuT survey methodology (with the twenty-three space capacity a stress of 87%) or below the 85% threshold based on the current LBRuT survey methodology (with the twenty-four space capacity a stress of 83%).
- 4.2.12 This strategy also accords with the policy at the borough level in demonstrating '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'.
- 4.2.13 Additionally, this approach continues to be consistent with emerging policy as presented in the final draft version of the London Borough of Richmond upon Thames' Local Plan (January 2017), which references as part of Policy LP45 'Parking Standards and Servicing' that:

'The Council will require new development to make proper 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.'

Cycle Parking

4.2.14 Each of the proposed three two-bed residential units would be supported by a separate storage unit adjacent to the rear parking sufficiently sized to accommodate two cycles. Current LBRuT policy and guidance references at Policy DM TP7 'Cycling' of the adopted Development Management Plan that:

'To maintain and improve conditions for cyclists, the Council will ensure that new development or schemes provide appropriate cycle access and sufficient, secure cycle parking facilities'.

- 4.2.15 This policy also makes cross-reference to Policy DM TP8 'Off Street Parking Retention and New Provision', since it is within the wording of this policy that reference is made to the minimum cycle parking requirements being presented in the corresponding Appendix 4.
- 4.2.16 The corresponding guiding standards for cycle parking set out for the borough within that appendix suggest a provision of no less than one cycle parking space for up to 3-bed units, which sits below the guiding standard set within the current London Plan for a minimum provision of two spaces for units with two-beds or more.
- 4.2.17 This approach, of providing two cycle parking spaces per unit, is consistent with emerging policy as presented in the final draft version of the London Borough of Richmond upon Thames' Local Plan (January 2017), which references additionally as part of Policy LP45 'Parking Standards and Servicing' that:

'Requiring new development to provide for car, cycle, 2 wheel and...electric vehicle charging points, in accordance with the standards set out in Appendix 3.'

- 4.2.18 Appendix 3 of the final draft version of the Local Plan confirms that cycle parking for residential development should be provided in accordance with the London Plan requirements.
- 4.2.19 As such, the form and level of cycle parking provision which would be brought forward with the scheme would be consistent with both the current policy and the emerging policy at the borough level, by virtue of according with the current London Plan standards.

4.3 Servicing & Refuse Strategy

- 4.3.1 Servicing of the proposed three two-bed residential dwellings to be brought forward would be undertaken no differently to the existing units within the residential blocks along the private stretch of Churchview Road to the south of the site, with drivers of vehicles seeking access of the residential dwellings, such as home food deliveries, having to find an appropriate location to temporarily wait whilst unloading and/or loading.
- 4.3.2 As with the existing units within the residential blocks, there would be no preclusion for vehicles making deliveries to the proposed new-build block to run along the private stretch of Churchview Road to reach the retained hardstanding vehicular area and such that the servicing vehicle could sit within the immediate vicinity of the proposed units.
- 4.3.3 Additionally, the proposed development and the corresponding amendments to both the existing parking area to the rear and the verge opposite the lower ground floor parking under Sontan Court would not reduce either the width of the vehicular access route provided between the public stretch of Churchview Road and the rear area or the extent of hardstanding area to the rear of Sontan Court, thus the route and space available for occasional servicing vehicles currently would be retained in full.
- 4.3.4 In terms of the collection of general refuse and recyclables, as outlined previously a communal storage enclosure would be provided adjacent to the proposed verge parking opposite the end block of Sontan Court, conveniently located for access by both residents and operatives. This storage area would be no more than 25m from the front of any of the proposed units.
- 4.3.5 Given the number of additional residential dwellings proposed, it is anticipated that the general waste and recyclables for the proposed units would be collected as part of the current routing and collection strategy for the existing units in the nearby residential blocks along Churchview Road and, as referenced previously, there would be no less space available for the refuse collection vehicles to access and service the site than that currently available.

4.4 Sustainable Travel Initiatives

4.4.1 Each of the residential properties would be issued with a 'Home Users Guide', which would include a range of material relating to travel options available to residents.

- 4.4.2 Information to be provided within the guide pack would include a map identifying the cycle paths and routes in the area, similarly a map identifying the local bus routes running through the area, and timetables for these corresponding bus services.
- 4.4.3 The information provided to residents in relation to the travel modes would also be complemented by information on the range and location of local amenities and demonstration of how these amenities can be accessed on foot or by cycle initially and then by public transport services.
- 4.4.4 Whilst no Travel Plan is proposed to support the proposed development, a series of measures and incentives would be brought forward nonetheless to actively sustain and further promote sustainable travel behaviours by the residents of the three dwellings. These measures would be in addition to the infrastructure to be brought forward, including the dedicated cycle storage for each unit and the provision of an electric vehicle charging point for each car port.
- 4.4.5 Such sustainable measures and incentives would be confirmed within the Home Users Guide prepared, with these being to provide each household with the following:
 - provision of London Transport monthly Travelcards for Zones 1 to 6, totalling no more
 than three per household within the first year of occupation, but which can be made
 available to any resident within each household during that period;
 - reimbursement of costs of up to £200 per household within the first year of occupation in relation to purchases made at a number of cycling and sportswear local outlets within the Richmond upon Thames borough (a list to be provided within the Home Users Guide).

5 Development Trips Characteristics & Impacts

5.1 Background

- 5.1.1 This section of the report considers the likely trip patterns and impacts of the proposed development scheme comprising three two-bed residential units, each supported by a single dedicated car port integrated into the new-build residential block.
- 5.1.2 Whilst the site does not accommodate a built unit which could be considered as an existing or extant development, as referenced previously in this report the site comprises an existing block of ten garages for which alternative on-site parking to the rear of Sontan Court and within verge opposite the lower ground garage units under Sontan Court have been identified.
- 5.1.3 In projecting the trips associated with the proposed residential development, an objective assessment can be undertaken as to the magnitude of the impacts of the proposed scheme being brought forward. To determine the likely trips associated with the proposed residential use, a review of the industry-recognised TRICS database has been undertaken and the information available considered in light of any site-specific characteristics.
- 5.1.4 Additionally, a review of the local census data has been undertaken to bring forward an objective understanding of travel characteristics with regard to the local context.

5.2 Proposed Residential Trip Generation

- 5.2.1 The proposed development of the Churchview Road site would bring forward three two-bed residential units, each coming forward with a single dedicated off-street car port space.
- 5.2.2 Data from the TRICS 7.3.3 database, the version used to with the original pre-application report submission, has been used in order to determine the trip generation associated with the proposed development. The initial search within the 'Flats Privately Owned' sub-category of the 'Residential' category was of sites in Greater London, with no more than 50 units and with a weekday multi-modal survey dating from 2008 onwards, which yielded twelve sites from which a further site was discounted due to having a non-C3 class.
- 5.2.3 The remaining eleven sites were then reviewed in terms of PTAL rating and on-site parking provision, with only those with a PTAL rating of less than 4 and with on-site parking close to one parking space per unit to be considered further. For the sites for which the information was referenced, six were discounted firstly for having a PTAL rating of 4 or more and then three for having either zero or limited on-site parking provision.
- 5.2.4 One of the two remaining sites based on the search criteria was subsequently discounted, as a separate online PTAL assessment using TFL's WebCAT tool identified that it also had a PTAL rating of 4 or more (the TRICS data had no reference attached), thus only one site matched the full range of criteria considered appropriate to identify sites analogous with the scheme.

5.2.5 Details of the site taken forward to support the proposed residential trip generation are summarised in Table 5.1 below, whilst the results of the corresponding TRICS analysis are summarised in Table 5.2 for the peak hour and daily (07:00-19:00) periods. The full TRICS output data is contained for reference within **Appendix I**.

Site	Survey Year	No. of Units	Parking Spaces	PTAL
Arthingworth Street, Stratford, E15	2013	12	16	3

Table 5.1: Summary of TRICS Residential Sites - Private Apartments

	AM Peak		PM Peak		Daily				
	(08:00-09:00)		(18:00-19:00)			(07:00-19:00)			
	Arr.	Dep.	Total	Arr.	Dep	Total	Arr.	Dep.	Total
Person Trips (per unit)	0.167	0.667	0.834	0.667	0.833	1.500	3.668	3.833	7.501
Person Trips (3 units)	1	2	3	2	3	5	11	12	23
NOTE: 18:00-19:00 put forward as PM Peak, as both trips by direction and as total higher than preceding hour.									

Table 5.2: Proposed Person Trip Generation Summary – Residential Units

- 5.2.6 Given that the review of the multi-modal survey data from the TRICS database identified a single site potentially analogous with the proposed development site, a further interrogation was undertaken of the vehicle-only surveys but with all other search criteria retained; this identified a site in Enfield. The daily (07:00-19:00) vehicle trip rate for the Enfield site was then compared with that for the Stratford site, with 1.621 vehicle trips per unit attached to the former and 1.666 vehicle trips per unit attached to the latter.
- 5.2.7 As the results of the comparison exercise found the vehicle trip rates to be similar, this it is considered validatethe use of the multi-modal data from the single site.
- 5.2.8 The following table, Table 5.3, summarises the 'journey to work' mode shares for residents of the area surrounding the site (Richmond-upon-Thames Super Output Area 015G), having first discounted those classified as 'not in employment' and as 'work mainly at or from home', but noting those which have specified 'other'. The information presented in the table has been expanded to illustrate the corresponding person trips by mode for the proposed scheme.
- 5.2.9 The projected trips associated with the proposed residential units would support a very low level of tripmaking activity overall on an hour-by-hour basis, as identified initially by the peak hour trips and then subsequently confirmed by the daily (twelve-hour) trips.

	MODE SHARE & PERSON TRIPS (TWO-WAY)					
Travel Mode	Local Area	A.M. Peak	P.M. Peak	Daily		
	LOCAL ATEA	Hour	Hour	Daily		
Car Driver	41%	1	2	10		
Car Passenger	1%	0	0	0		
Motorcycle	1%	0	0	0		
Bus	10%	1	1	2		
Tram / Underground	6%	0	0	1		
Rail	26%	1	1	6		
Bicycle	7%	0	0	2		
Foot	8%	0	1	2		
Other	0%	0	0	0		
TOTAL	100%	3	5	23		
NOTE: Where appropriate, trips by mode have been rounded to ensure figures tally.						

Table 5.3: Summary of Mode Share & Trips by Mode – Proposed Residential Units (3)

5.3 Potential Scheme Impacts

- 5.3.1 Based upon an objective review of the TRICS database, the proposed three two-bed residential units at the application site could generate trips over the course of a typical day of 23 two-way movements, with three two-way movements during the a.m. peak hour (13% of the daily total) and five two-way movements during the p.m. peak (22% of the daily total).
- 5.3.2 These proposed development trips could not be considered as material and would not impact upon the operational efficiency of the range of travel networks, particularly given that there would be no more than two additional movements on any given travel mode during the peaks.
- 5.3.3 With regard to the potential trips and their corresponding impacts on a mode-by-mode basis, the main modes for which there would be additional trips would be by car with ten movements over the course of the day (assumed to be five arrivals and five departures) and by rail (including underground) with seven movements over the course of the day (assumed to be three to four arrivals and three to four departures). Other modes are each projected to have no more than two additional trips over the course of the day.
- 5.3.4 The low volume of development-related car trips during the peak hours, of no more than two such movements as identified for the p.m. peak hour, would be indiscernible against the background of current traffic movements running along the A305 Staines Road and through the Twickenham town centre area and would not at all affect the local operational efficiency of the existing highway network.
- 5.3.5 Similarly, with typically four trains per hour running from Strawberry Hill railway station in the direction of central London, no more than an additional single rail-based movement during the peak hours would equate on average to an additional person every four services. This additional activity would again be indiscernible and again not at all affect the level of service currently afforded to those using local rail services, particularly given that there would be further additional rail services which could be accessed through Whitton railway station.

- 5.3.6 The low volumes of site-related trips by the different modes would evidently be accommodated by the network capacities (highway and public transport services) available to those seeking access to the site, demonstrating that there would be no adverse impacts upon the operation of the full range of travel networks.
- 5.3.7 With regard to potential impacts on on-street parking, given that the existing stress level along the public stretch of Churchview Road has been identified at being at / above capacity, the proposed scheme has come forward with additional on-site parking to accommodate the demands of not only the proposed residential units (through three integral off-street car port parking spaces) but of the potential displaced vehicles from the garages to be demolished.
- 5.3.8 With these additional provisions increasing the on-site parking from sixteen / seventeen spaces to twenty-three / twenty-four spaces, the resultant on-site parking stress would be up to 86.96% with the lesser twenty-three space provision (with no less than three spare spaces), so not be at or exceed the threshold of 90% which was considered to represent an unmanageable level of on-street parking stress at the time of the original survey, or 83.33% with the higher twenty-four space provision (with no less than four spaces), so not be at or exceed the threshold of 85% which is considered to represent an unmanageable level of on-street parking according to the updated LBRuT parking stress survey methodology.

6 Summary & Conclusions

- 6.1.1 This report has been prepared on behalf of UK & European Investments, in support of the redevelopment of the land to the northernmost end of Churchview Road, Twickenham, to provide a scheme bringing forward three two-bed residential units, each supported by a dedicated car port integrated into the new-build block.
- 6.1.2 Whilst the site is not defined as being highly accessible through the PTAL methodology, there are three regular bus services running via stops along Staines Road to the south of the site and a typical walk of between four and six minutes, with buses to and from Twickenham town centre averaging at a service in each direction every four to five minutes. There are additional services also running along Hampton Road within a typical walk of the site of ten minutes.
- 6.1.3 In addition to the direct connection by bus with Twickenham town centre, the range of local bus services provides connectivity also with key centres such as Hounslow, Kingston and Richmond as well as further employment areas such as Hammersmith and Heathrow Airport.
- 6.1.4 These access opportunities are in addition to a range of cycle and walking routes and supporting infrastructure available in the area, including signal-controlled crossing facilities at the Staines Road / Meadway junction and off-road cycle routes running both through Crane Park and along the A316 Great Chertsey Road accommodating key local desire lines.
- 6.1.5 An assessment of the residential tripmaking characteristics of the proposed scheme has identified twenty-three person trips during the course of a typical day, with three trips during the a.m. peak hour and five trips during the p.m. peak hour, which when considered on a mode-by-mode basis would not have any material impact upon any of the travel networks.
- 6.1.6 The proposed residential development scheme would accord with the policy requirements and guidance as they relate to key design aspects such as car parking provision, by providing not only a dedicated space for each of the proposed units but also additional on-site parking to accommodate the potential displacement of vehicles from the garages to be demolished, and cycle parking provision, by providing for two spaces for each of the units.
- 6.1.7 Therefore, against this background, it is considered that there are no highways and transport reasons to refuse the proposal for the redevelopment of the land at Churchview Road to provide a scheme bringing forward three two-bed residential townhouse units.



APPENDICES



APPENDIX A





SITE LOCATION

Local Rail Stations

Local Bus Stops

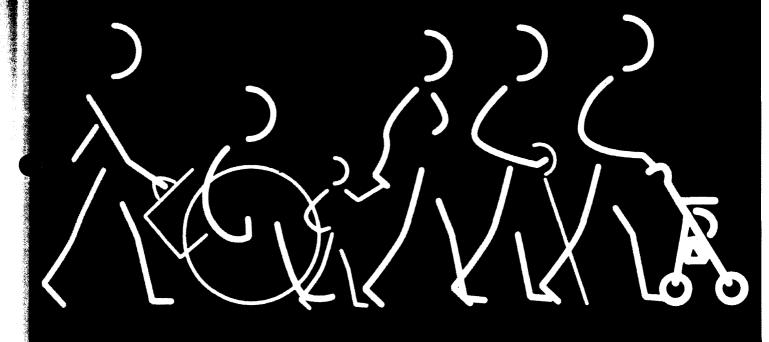
Local Schools





APPENDIX B

Providing for Journeys on Foot



THE INSTITUTION OF HIGHWAYS & TRANSPORTATION



Sainsbury's

He taste better



London Walking Forum



Table 3.2: Suggested Acceptable Walking Distance.

	Town centres (m)	Commuting/School Sight-seeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred maximum	800	2000	1200

- **3.33.** Planning Policy Guidance Note 6 states that the acceptable distance from a supermarket car park to the town centre is about 200–300m (DOE, 1996). Further sources of information on acceptable walking distances are provide by IHT (1997 and 1999) and DETR (1998).
- **3.34.** For shopping, Carley and Donaldsons (1996) advise that that "acceptable" walking distances depend on the quality of the shops, the size of the shopping centre and the length of stay of the shopper. Specifically, they state that parking time governs the distance walked from parking. See Table 3.3) Higher quality and larger centres generate longer acceptable walking distances with up to 1250m of walking journey to 100,000m² of floor space.

Table 3.3: Acceptable walking distances for car—borne shoppers.

Y	Parking time (hours)	Acceptable walking distance (metres)
	30 mins	100
	1	200
	2	400
	4	800
	8	1000

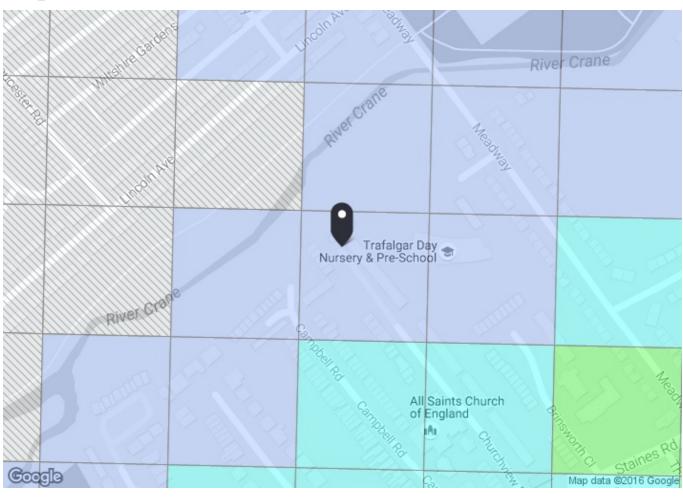
Individual Sites/Redevelopment

- **3.35.** For smaller areas and individual new developments or redevelopment, usually within an existing urban area, origin /destination surveys and network planning may not be appropriate. It will be important to identify the anticipated desire lines, crossing locations, volume and type of pedestrian activity. The practicality and attractiveness of walking depend not only on the general location but also on the access details. The most important considerations are likely to be:
 -) the ease of pedestrian access to the site
 -) the orientation and location of buildings within the site
 -) the access arrangements within the site
 -) the architectural style of the development (car or pedestrian oriented).
- **3.36.** Additional walking distances or gradients, can be crucial in determining whether a development is pedestrian friendly. Layouts that require pedestrians to walk through car parks or to follow indirect footpaths should be avoided as far as possible. These are issues that should be addressed jointly by planners and engineers involved in development control.
- **3.37.** If the development is sufficiently large to warrant a Transport Impact Assessment, the local authority should ensure that this thoroughly addresses the issues of pedestrian access, both to the site and within it. Some guidance is provided in IHT *Guidelines for Providing for Public Transport in Developments* (IHT, 1999). Further Guidelines on Transport Assessments are expected from DETR.

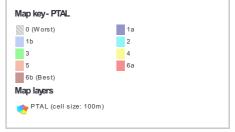


APPENDIX C









Calcula	Calculation data									
Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	A
Bus	STAINES RD THIRD CROSS R	110	358.45	3	4.48	12	16.48	1.82	0.5	0.91
Bus	STAINES RD THIRD CROSS R	490	358.45	5	4.48	8	12.48	2.4	1	2.4
Bus	STAINES RD THIRD CROSS R	H22	358.45	5	4.48	8	12.48	2.4	0.5	1.2
									Total Grid Cell Al:	4.52



APPENDIX D

Buses from Twickenham Green

Route finder

Bus route	Towards	Bus stops
110	Hounslow	60 60 6E 6F 6S
	West Middlessex University Hospital	GH GJ GR GL GP
267	Fulwell	@ © ©
	Hammersmith	GA GM GP
281 D24hr Daily	Hounslow	GA GM GP
	Tolworth	68 65 67
290	Staines	68 65 67
	Twickenham	GA GM GP
490	Heathrow Terminal 5	60 GD GE GF GS
	Richmond	GH GJ GK GL GP
H22	Hounslow	60 GD GE GF GS
	Richmond	GH GJ GK GL GP
R70	Nurserylands	68 65 67
	Richmond	GA GM GP

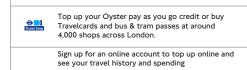
Night buses

Bus route	Towards	Bus stops
N22	Fulwell	@ G G
	Piccadilly Circus	GA GM GP

Key

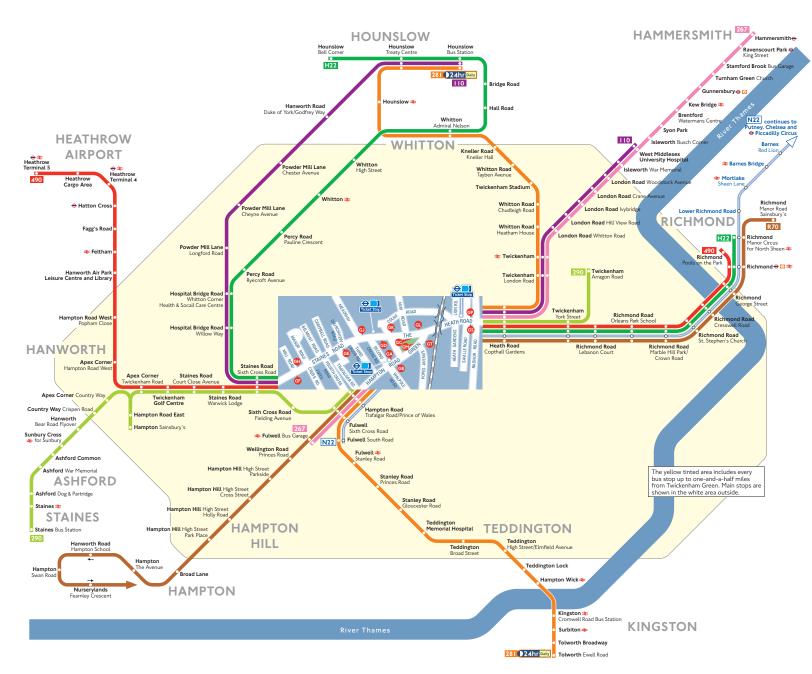
	267	Day buses in black
	N22	Night buses in blue
	0	Connections with London Underground
Т	0	Connections with London Overground
_	-≥=	Connections with National Rail

Ways to pay



Use your contactless debit or credit card. It's the

same fare as Oyster and there is no need to top up.





APPENDIX E

CHURCHVIEW ROAD, TWICKENHAM – PARKING SURVEY CATCHMENT





STUDY AREA Within 200m catchment

STUDY AREA Minor Extension



APPENDIX F

PARKING BEAT SURVEY FOLLOWING LB RICHMOND PREFERRED METHODOLOGY

DATE: 21/09/16 to 25/09/16

LOCATION : CHURCHVIEW ROAD, TWICKENHAM, TW4					Wednesday 21st	
<u> </u>					Septe	ember
-					04:00	-04:30
ROAD NAME	AREA	RESTRICTION	METRES	NOTES REF.	PARKED	SPACES
		Double Yellow Lines	9.5		0	0
		Unrestricted kerb length	5.0		0	0
		Parking (Partly on footpath)	158.1		24	1
	From Staines Road - East Side	Perpendicular Parking (Crescent area)	14.6		4	0
		Parking	43.0		6	1
		Dropped Kerb/Garages	23.7		0	0
		Hard standing to rear of flats (Perpendicular Parking)	23.7		3	6
		Double Yellow Lines	9.2		0	0
		Parking	44.9		9	0
			6.6		0	0
Churchview Road		Parking	5.9		1	0
Charchiview Road		Dropped Kerb	4.3		0	0
		Parking	36.7		5	1
	From Staines Road - West	Dropped Kerb	6.6		0	0
	Side	Parking 4.8 See	See Note 1	1	0	
	Cido	Dropped Kerb	11.8		2	-2
		Parking	8.7		1	0
		Dropped Kerb	12.0		2	-2
		Parking	6.4		1	0
		Dropped Kerb	25.0		1	-1
		Parking	4.7		0	0
		No parking (Cones)	66.4		0	0
				SUB-TOTAL	60	4

	ay 22nd
Septe	ember
04:00	-04:30
O PARKED	SPACES
χ̈́	٥AC
Δ	S
0	0 -1
1	-1
26	1 0 0 0 6 0 1
4	0
7	0
0	0
3	6
0	0
8	1
0	0
1	0
0	0
6	0
0	0
1	0 0 0
1	-1
0	1
2	-2
1 26 4 7 0 3 0 8 0 1 0 6 0 1 1 0 2 1 1 0	0
1	-1
0	0
0	0
62	4

Sun	Sunday 25th September 04:00-04:30		
04:0	0-04:30		
0 1 28 4 5 0 4 0 9 0 1 1 0 7 1 1 1 1 1	SPACES		
0	0		
1	-1		
28	0		
4	0 -1 0 0 2 0 5 0		
5	2		
0	0		
4	5		
0	0		
9	0		
0	0		
1	0		
0	0 0 -1		
7	0		
1	-1		
0	0		
1	0 -1 0 -1		
1	0		
1	-1		
1	0		
1	-1		
0	0		
0	0 -1 0		
65	2		
	·		

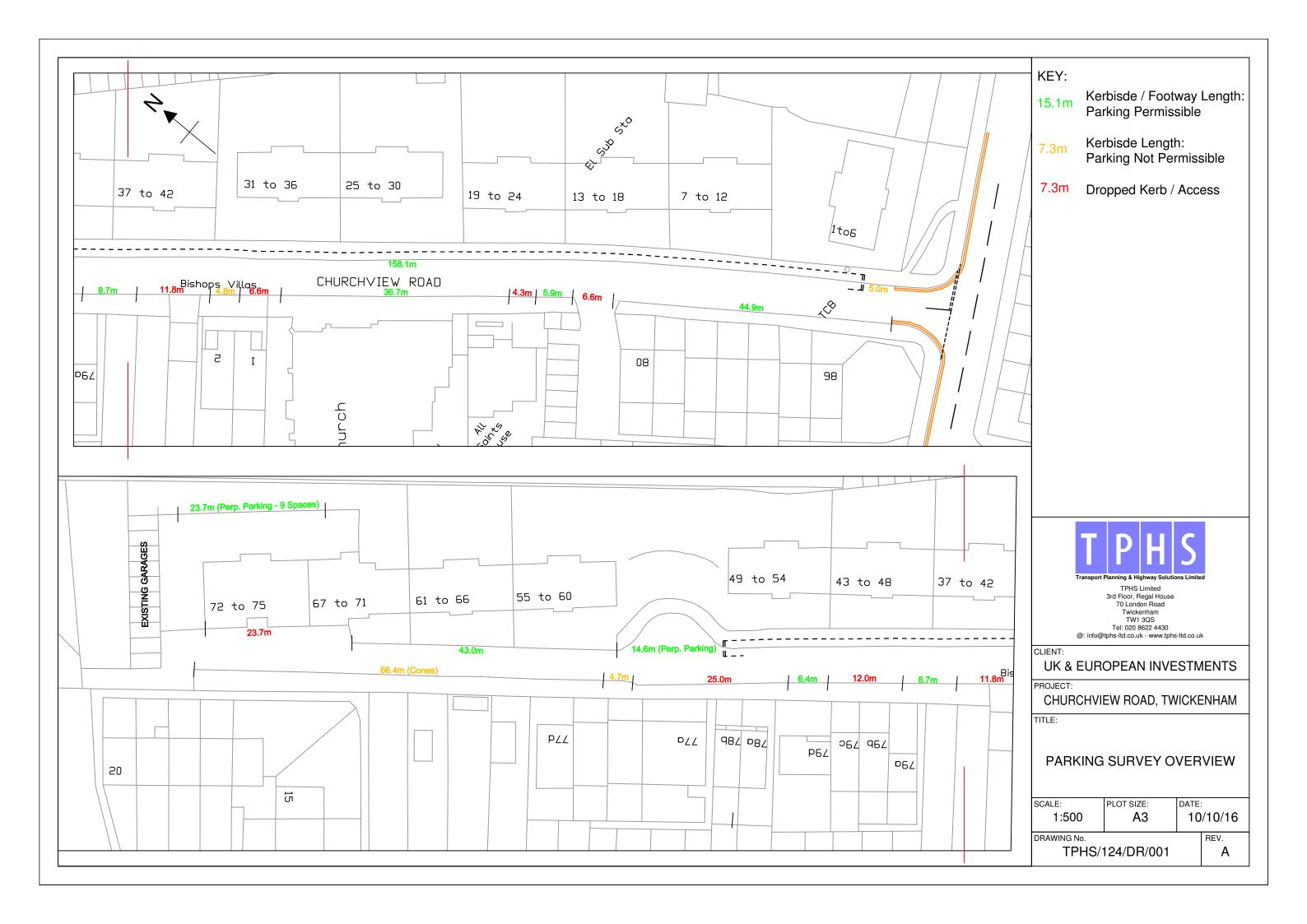
NOTES:

1. Whilst kerbside length less than standard space, vehicle not parked inapproportately; however, if vacant, length not considered as spare space.

PUBLIC	51	-3
HIGHWAY	Stress	106%
PRIVATE	9	7
AREA	Stress	56%

52	-2
Stress	104%
10	6
Stress	63%

56	-5
Stress	110%
9	7
Stress	56%



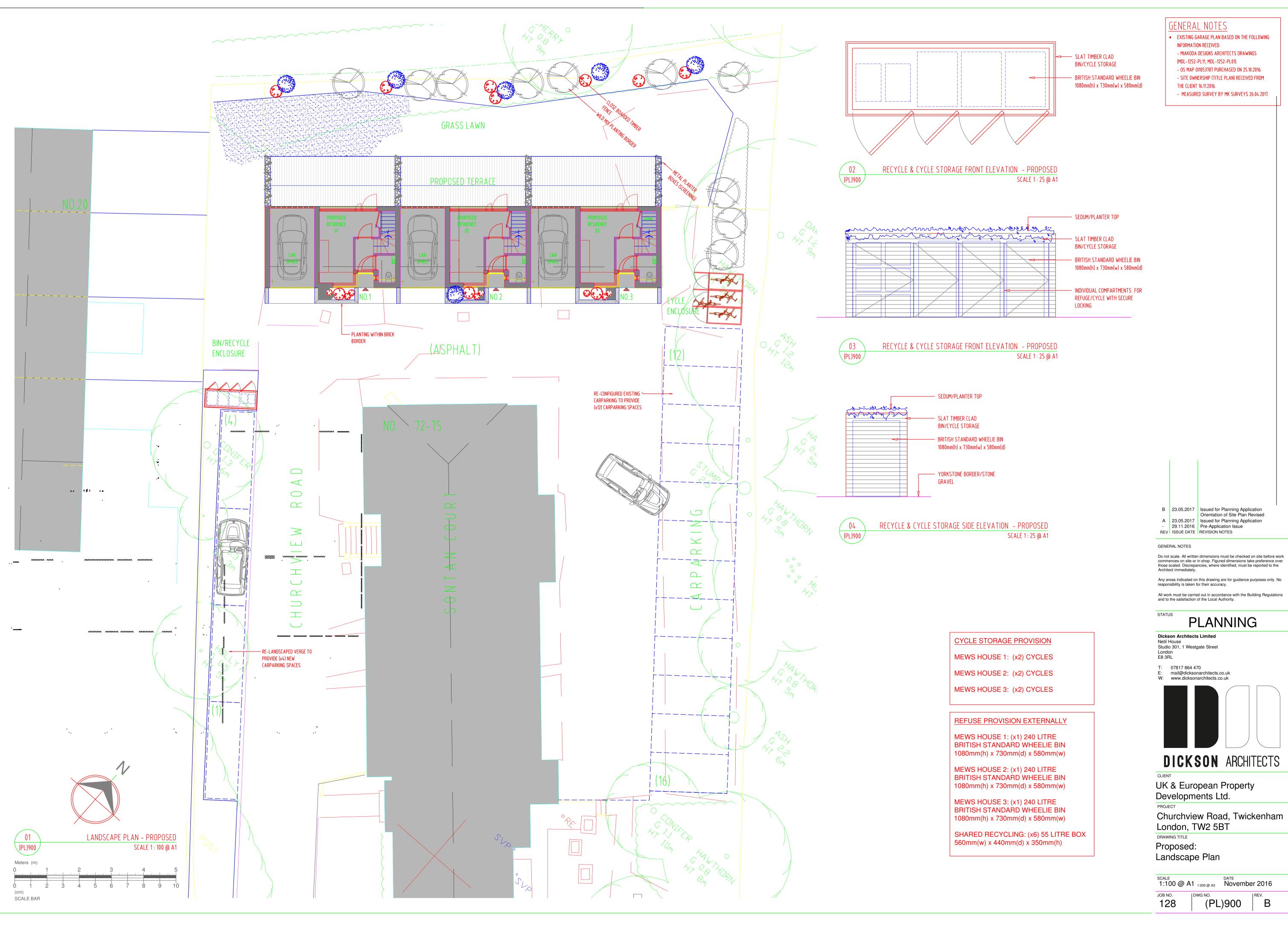








APPENDIX G







APPENDIX H





APPENDIX I

Thursday 06/10/16 Churchview Road, Twickenham - Proposed Residential Use Page 1 TPHS Limited London Road Twickenham Licence No: 857401

Calculation Reference: AUDIT-857401-161006-1059

TRIP RATE CALCULATION SELECTION PARAMETERS:

: 03 - RESIDENTIAL Land Use

: C - FLATS PRIVATELY OWNED Category MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

GREATER LONDON NH **NEWHAM**

1 days

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

Filtering Stage 2 selection:

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

Parameter: Number of dwellings Actual Range: 12 to 12 (units:) Range Selected by User: 9 to 50 (units:)

Public Transport Provision:

Selection by: Include all surveys

01/01/08 to 23/04/15 Date Range:

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:

Thursday 1 days

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

Selected survey types:

Manual count 1 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:

Neighbourhood Centre (PPS6 Local Centre)

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

Selected Location Sub Categories:

Residential Zone 1

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

Filtering Stage 3 selection:

Use Class:

C3 1 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®.

(C) 2016 TRICS Consortium Ltd TRICS 7.3.3 240916 B17.41

Thursday 06/10/16 Churchview Road, Twickenham - Proposed Residential Use Page 2 TPHS Limited London Road Twickenham Licence No: 857401

Filtering Stage 3 selection (Cont.):

Population within 1 mile:

50,001 to 100,000 1 days

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

Population within 5 miles:

500,001 or More 1 days

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

Car ownership within 5 miles:

0.6 to 1.0 1 days

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:

1 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.

TRICS 7.3.3 240916 B17.41 (C) 2016 TRICS Consortium Ltd Churchview Road, Twickenham - Proposed Residential Use

TPHS Limited London Road Twickenham Licence No: 857401

Thursday 06/10/16

LIST OF SITES relevant to selection parameters

NH-03-C-01 **BLOCK OF FLATS NEWHAM**

ARTHINGWORTH STREET

STRATFORD

Neighbourhood Centre (PPS6 Local Centre)

Residential Zone

Total Number of dwellings:

Survey date: THÜRSDAY 14/11/13 Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CN-03-C-01	Parking not analogous to site.
HG-03-C-02	PTAL rating not analogous to site.
HK-03-C-02	Parking not analogous to site.
HK-03-C-03	PTAL rating not analogous to site.
HM-03-C-01	PTAL rating not analogous to site
IS-03-C-01	Parking not analogous to site.
IS-03-C-03	PTAL rating not analogous to site.
SK-03-C-02	PTAL rating not analogous to site.
TH-03-C-02	Separate TfL WebCAT assessment confirms PTAL rating not analogous to site.
WH-03-C-01	PTAL rating not analogous to site.

Licence No: 857401

TPHS Limited London Road Twickenham

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

MULTI-MODAL TOTAL PEOPLE Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	1	12	0.083	1	12	0.500	1	12	0.583
08:00 - 09:00	1	12	0.167	1	12	0.667	1	12	0.834
09:00 - 10:00	1	12	0.083	1	12	0.083	1	12	0.166
10:00 - 11:00	1	12	0.167	1	12	0.000	1	12	0.167
11:00 - 12:00	1	12	0.000	1	12	0.167	1	12	0.167
12:00 - 13:00	1	12	0.000	1	12	0.000	1	12	0.000
13:00 - 14:00	1	12	0.167	1	12	0.083	1	12	0.250
14:00 - 15:00	1	12	0.167	1	12	0.250	1	12	0.417
15:00 - 16:00	1	12	0.917	1	12	0.583	1	12	1.500
16:00 - 17:00	1	12	0.833	1	12	0.667	1	12	1.500
17:00 - 18:00	1	12	0.417	1	12	0.000	1	12	0.417
18:00 - 19:00	1	12	0.667	1	12	0.833	1	12	1.500
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.668	3.833					7.501

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

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

Parameter summary

Trip rate parameter range selected: 12 - 12 (units:)
Survey date date range: 01/01/08 - 23/04/15

Number of weekdays (Monday-Friday): 1
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 10

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