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Churchview Road, Twickenham

Transport Statement Report

May 2019

A report prepared on behalf of UK & European Property Developments Limited

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Contents

1	Introd	duction	1				
	1.1	Background	1				
	1.2	Planning History	2				
	1.3	Scope of the Report	3				
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	Description of Development Proposals						
	3.1	Background	14				
	3.2	Layout Appraisal	16				
	3.3	Landscaping Considerations	17				
4	Parki	ng, Servicing & Sustainable Travel Initiatives	20				
	4.1	Background	20				
	4.2	Parking Provisions	20				
	4.3	Servicing & Refuse Strategy	22				
	4.4	Sustainable Travel Initiatives	23				
5	Development Trips Characteristics & Impacts						
	5.1	Background	24				
	5.2	Proposed Residential Trip Generation	24				
	5.3	Potential Scheme Impacts	26				
6	Sumn	nary & Conclusions	30				

1 Introduction

1.1 Background

- 1.1.1 This report has been prepared by Transport Planning & Highway Solutions (TPHS) on behalf of UK & European Property Developments Limited, 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 two two-bed mews townhouses, each supported by a dedicated car parking space.
- 1.1.2 The site sits to the north-west 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 LP44 *'Sustainable Transport Choices'* of London Borough of Richmond upon Thames' Local Plan (adopted July 2018) which references that:

'In assessing planning applications the cumulative impacts of development on the transport network will be taken into account. 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.'

- 1.1.4 There is no reference within the supporting commentary to the policy as to the thresholds of development assigned to each of the Transport Statement and Transport Assessment reports, but with reference that 'matters to be included are set out in the London Plan, the latest Department for Transport as well as Transport for London guidance, the Council's Local Validation Checklist and will also be included in a forthcoming SPD...'.
- 1.1.5 The current 'Local Validation Checklist', last updated in October 2017, confirms that a Transport Statement is appropriate for 'all schemes involving 1-9 residential units or commercial floor space over 100m²', thus confirming the appropriateness of preparing a Transport Statement in support of this proposed residential development scheme.
- 1.1.6 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 Planning History

- 1.2.1 This proposed scheme comprising two two-bed mews townhouses follows on from an earlier scheme proposed for the site comprising three two-bed mews townhouses, considered by London Borough of Richmond of Thames (LBRuT) under planning application reference 17/2759/FUL and which followed on from an earlier formal pre-application submission.
- 1.2.2 Permission for this earlier scheme was refused under the decision notice issued on 14th September 2017, which put forward four detailed reasons for refusal, with two supporting informatives, with Reason U30279 (Substandard parking & permit eligibility) being that primarily in relation to highways and transport matters and set out below for reference:

'The proposal provides substandard integral garaging and no segregated pedestrian access giving rise to an inconvenient and unsafe form of development and in the absence of a binding obligation securing an exemption from future car parking permit eligibility in the event that this area is designated a Community Parking Zone, the development would give rise to additional pressure for kerbside parking prejudicial to local highway conditions, traffic movement and public safety. The proposal is therefore contrary to policy DM TP 2 and DM TP 8 of the adopted London Borough of Richmond upon Thames Development Management Plan 2011 and Policy LP45 of the Local Plan and Supplementary Planning Document: Parking in Front Gardens.'

1.2.3 There was also reference to the impact of the proposed scheme parking arrangements within Reason U30276 (Amenity) and Reason U30277 (MOL, POS and Wildlife Corridor), as follows:

'The proposed dwellings and new surface parking spaces, by reason of their combined siting, design, bulk and mass and resultant loss of trees would result in a visually intrusive, overbearing and overlooking form of development, including new views from Sontan Court, that detracts from the amenities of the occupants of neighbouring properties...' (Amenity)

"...the new parking arrangements on the northern boundary would prejudice tree retention, local biodiversity and a wildlife corridor link to Crane Park...." (MOL, POS and Wildlife Corridor)

- 1.2.4 An appeal against the refusal decision notice was submitted to the Planning Inspectorate, with this considered under appeal reference APP/L5810/W/18/3196558. A note seeking to address the highways and transport matters raised, to demonstrate that there should be no reason for the refusal to be upheld, was submitted as part of the material on behalf of the appellant, with this note considering the following topic areas:
 - design of the proposed car parking arrangements for the mews units (Reason U30279);
 - road safety issues as they relate to aspects of the proposed site layout (Reason U30279);
 - potential pressures on kerbside parking as a result of the scheme (Reason U30279);
 - impact of proposed parking on tree retention and wildlife (Reasons U30276 and U30277).

- 1.2.5 Whilst the appeal was dismissed under the decision notice issued on 8th November 2018, the conclusion put forward in this notice referenced that 'the proposal would not result in harm to the character and appearance of the area, trees, biodiversity and ecology, highway safety', confirming that there were no highway safety grounds on which to refuse this earlier scheme.
- 1.2.6 This recent planning context for the earlier three-unit scheme proposed for the development site should be borne in mind when appraising the potential highways and transport impacts of the current two-unit scheme proposed for the development site.

1.3 Scope of the Report

- 1.3.1 Against the background of the typical requirements for a Transport Statement report, 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 the 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.
- 1.3.2 The commentary put forward in this Transport Statement is also cognisant of the additional highways and transport material submitted in support of the appeal for the earlier three-unit scheme proposed for the site, thus of the comments made previously by both LBRuT Highways and the Planning Inspectorate with regard to the development at the site.
- 1.3.3 Additionally, similarly to the technical reporting submitted in support of the previous proposed three-unit scheme, a separate draft Construction Management Plan has been prepared. This separate plan covers a number of matters relating to construction management, including those 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 a 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 through 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 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.
- 2.3.8 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 Baad	3
490	Staines Roa Richmond – Twickenham – Hanworth – Feltham – Hatton Cross – Heathrow Airport (Meadway		5-6
H22	Hounslow – Whitton – Hospital Bridge Road - Twickenham Green – Twickenham - Richmond		5
		STAINES ROAD TOTAL	13-14
267	Hammersmith – Chiswick – Gunnersbury - Brentford – Isleworth – Twickenham - Fulwell		5-6
281	Tolworth – Surbiton – Kingston – Hampton Wick - Teddington – Fulwell - Twickenham - Hounslow	Hampton Road	5-6
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		5-6
		HAMPTON ROAD TOTAL	18-21
		CUM. HOURLY FREQ.	31-35

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 fourteen 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 eleven 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 eighteen to twenty-one 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 five to six 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 fifteen to seventeen services via the two sets of stops running both to and from Richmond, averaging a service every four or so minutes, whilst between Twickenham and Hounslow there are thirteen to fourteen services in each direction, averaging a service every four to five 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 A series of overnight parking beat surveys were undertaken in September 2016 to support the pre-application submission relating to the previous proposed three-unit scheme. This survey comprised the full length of Churchview Road as shown on the plan attached at **Appendix E** and also included the private parking to the rear of the site.
- 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 earlier survey work, which is summarised below:
 - The area to be surveyed must cover a 200m / 2 minute walking 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 results of these surveys were 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, and against a stress threshold of 90% being that at and above which parking stress was not considered to be manageable at the time of the survey. A copy of these earlier surveys are attached for reference at **Appendix F**.
- 2.5.8 With regard to the public highway stretch of Churchview Road, the results of the earlier series of parking beat surveys suggested within the outlined study area a logical capacity for 48 to 51 vehicles to park on-street, but 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). Thus, the surveyed parking stress exceeded capacity.
- 2.5.9 Whilst it is acknowledged that since the time of the survey LBRuT has updated their preferred survey methodology to be based on on-street parking spaces being measured at a shorter 5m in length compared to the previous 5.5m, there has been an update similarly with regard to the threshold against which parking stress is to be considered as not being manageable with this being reduced to 85% compared to the previous 90%.

- 2.5.10 Based on the shorter length of 5m corresponding with an on-street parking space, a review of the mapped results of the earlier series of parking beat surveys for the public highway stretch of Churchview Road would suggest a marginally increased logical capacity for 50 to 52 vehicles to park on-street, thus with the observed stress continuing to be at or in excess of capacity.
- 2.5.11 With regard to the private stretch of Churchview Road and the existing parking to the rear of the site, the results of the earlier series of parking beat surveys suggested a logical capacity for sixteen (16) vehicles to park on-street or within the demarcated spaces, with nine (9) to ten (10) vehicles observed as parked over the course of three survey days (with none parked inappropriately). Thus, the resultant stress within the private area averaged at 58.33%.
- 2.5.12 Neither the logical parking capacity nor the recorded parking stress within the private area would differ as a result of the changes in to the LBRuT parking survey methodology, with the recorded stress continuing to sit below both the original level of 90% and the revised level of 85% stress at and above which parking demand is not considered to be manageable.

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' and with one of these being 'Transport and Movement'. The scope to access a range of local amenities is considered a key contributor to the 'Transport and Movement' characteristics of a site.
- 2.6.2 The 'Home Quality Mark Technical Manual' identifies the range of key local 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 office, bank and cash point), health services (such as GP surgery / medical centre and pharmacy) and food retail (such as supermarket or grocer). 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 beneficial local amenities which should be targeted within a walking distance of 1.5 miles (around 2.4km), again via a safe pedestrian route, or a public transport travel time of thirty minutes. These include purpose-built recreation or leisure facilities (for the purpose of fitness or sports), childcare facility or school, large-scale retail and community facilities. The assessment only requires two of these facilities to be within the defined travel distance or 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	e / Time			
	650m. 2.4km / 30mins		Supporting Commentary		
Post Office	×		Fulwell Park post office is approximately 1.2km from the site, but with a post box on the corner of Fourth Cross Road / Staines Road about 450m from the site.		
Cash Point	✓	BLE	There is a cash point at the Esso filling station on the corner of Manor Road, about 520m from the site.		
Bank	*	NOT APPLICABLE	Lloyds Bank on Heath Road is approximately 1.5km from the site, with other banks also within the Twickenham town centre area.		
Surgery / Health Centre	*	NON	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.		
Local Food Retail	✓		There is a Londis convenience store on Staines Road about 350m from the site.		

Table 2.2: Summary Assessment of Proximity to Key Local Amenities

- 2.6.5 This assessment demonstrates that two of the six key local amenities would be accessible from the site within the shorter distance threshold of 650m of the site, equivalent to a walk of around eight minutes. Whilst this would not achieve the initial criteria set out within the 'Home Quality Mark', the four facilities outside of the initial distance threshold would sit well within the distance threshold considered appropriate for further beneficial local amenities.
- 2.6.6 As such, the walk distances and walk times associated with access to each of the six ley local amenities, with none in excess of a typical walk time of nineteen (19) minutes, can be considered to represent reasonable walk journeys, which supports the demonstration of the scope to reduce the dependency of travel by the car for such trip purposes.
- 2.6.7 This additional assessment with regard to access of the additional beneficial local amenities demonstrates that each of these sit within the longer travel distance threshold of 2.4km (equivalent to a typical walk time of 30 minutes), with indeed all of these further facilities being within the travel distance threshold wholly on foot. Such level of access to this range of local facilities would be in excess of the requirements of this additional HQM criteria.
- 2.6.8 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, none of the facilities considered within the assessment would fall outside of a reasonable cycle journey.

	Distance / Time					
	650m.	2.4km / 30mins	Supporting Commentary			
Leisure Centre		✓	Whitton Sports and Fitness Centre on Percy Road is about 2km from the site, a walk of around 25 minutes.			
Public Park		✓	Kneller Gardens is about 750m from the site, a walk of between 9 and 10 minutes.			
Nursery / Pre-School		✓	Trafalgar Day Nursery & Pre-School on Meadway is about 650m from the site, a typical walk of around 8 minutes.			
Primary School	111	✓	Trafalgar Infants and Juniors Schools on Elmsleigh Road are about 500m from the site, a walk of between 6 and 7 minutes.			
Secondary School	NOT APPLICABLE	√	Waldegrave School in Fifth Cross Road is a typical walk of between 11 and 12 minutes from the site, at a distance of around 900m.			
Main Food Retail	NOT AF	√	Marks & Spencer Simply Food is about 1.6km from the site, with a large Waitrose Supermarket at about 2km, both within a typical walk time of 25 minutes.			
Main Non-Food Retail Outlets		✓	The main non-food retail outlets are located in the Twickenham town centre area, up to 2km from the site and a walk of 25 minutes.			
Community Centre		✓	Whitton Community Centre & Social Club in Percy Road is about 2km from the site, again a walk of approximately 25 minutes.			
Library		√	Whitton Library in Nelson Road is about 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

3 Description of Development Proposals

3.1 Background

- 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 two two-bed townhouses.
- 3.1.2 The proposed site plan prepared by Dickson Architects and which accompanies the submission is attached at **Appendix G** for ease of reference.
- 3.1.3 Both of the new-build units would be supported by a dedicated car parking space, located adjacent to the new-build block. These external spaces would be no less than 2.4m in width and no less than 4.8m in depth, in accordance with the requirements as set out in London Borough of Richmond upon Thames 'Front Garden and Other Off Street Parking Standards' Supplementary Planning Document (SPD).
- 3.1.4 Indeed, to further support practical and convenient access, given the immediate proximity of the wall of the new-build block to one side and the landscape buffer to the other side, both of these spaces would have a width of 2.75m; additionally, each of these spaces would have access to a charging point for use by electric vehicles.
- 3.1.5 To confirm the appropriateness of these proposed external spaces in terms of both sizing and location, a swept path assessment has been undertaken. The results of this exercise are presented on drawing TPHS/124/TR/005, attached at **Appendix H** for reference.
- 3.1.6 Access to the dedicated car 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.
- 3.1.7 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 two residential units and the corresponding vehicle and pedestrian movements. This is discussed further within the following 'Layout Appraisal' sub-section of this report.
- 3.1.8 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 Court, as shown on the site plan attached at Appendix G.

- 3.1.9 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, again in line with LBRUT's guidance, 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.
- 3.1.10 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.
- 3.1.11 The potential impacts that these further spaces may have on site landscaping, as well as wildlife, are discussed further within the following *'Landscaping Considerations'* sub-section.
- 3.1.12 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. Based upon the updated 5m-length space parameter as guided by LBRuT Highways, this kerbside stretch could have the capacity to accommodate up to eight vehicles, subject to how individuals have chosen to park.
- 3.1.13 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, also attached at Appendix H for reference.
- 3.1.14 These external parking spaces (totalling 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 with permission to do so. Residents of the proposed residential units would not have access to these spaces.
- 3.1.15 Each of the proposed two 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.
- 3.1.16 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.

3.2 Layout Appraisal

- 3.2.1 When considering the previous scheme for the site, LBRuT Highways commented with regard to highway safety that as a result of the proposed layout arrangements there would be '...no segregated pedestrian access giving rise to an inconvenient and unsafe form of development'.
- 3.2.2 There was further reference to matters of highway safety, in that 'the parking spaces provided to the northern and western boundary, which is an increase to what is currently arranged in the area, would rise an inconvenient and unsafe area within the presence of this development'.
- 3.2.3 The note relating to highways and transport matters raised with regard to the earlier scheme for the site, submitted as part of the material on behalf of the appellant for the appeal, sought to demonstrate that the highway authority's comments on highway safety were not material, with the conclusion in the Appeal Decision confirming this position by referencing:

"...the proposal would not result in harm to...highway safety..."

3.2.4 The commentary presented within the Appeal Decision considered the interaction between pedestrian circulation and vehicle circulation within he shared environment, referencing that:

'Pedestrian access to the houses would be shared with the circulation and parking area of the flats at Sontan Court and the proposed houses. Consequently, pedestrians would be expected to be moving around this area, as well as vehicles. On this basis, vehicle drivers would anticipate pedestrians such that there would not be a conflict.'

- 3.2.5 Similarly, the commentary presented within the Appeal Decision considered also the potential impacts of the proposed parking provision on highway safety, referencing in relation to this 'that the proposed parking provision would not result in harm to highway safety'.
- 3.2.6 The demonstration put forward within the appeal material was underpinned by the undertaking of a Stage 1 Road Safety Audit (RSA) of the proposed layout of the earlier scheme, a copy of which is attached for reference and completeness at **Appendix I** of this report.
- 3.2.7 As referenced in the introductory section of the audit report, this 'has examined and reported only on the road safety implications of the scheme as presented and how it impacts on all road users'. The audit report also references that 'absence of comment relating to specific road users / modes...does not imply that they have not been considered', but that it is considered that 'they are not adversely affected by the proposed changes'.
- 3.2.8 This independent audit report made no reference to either the lack of a segregated pedestrian access, additional pressures for kerbside parking or the increased number of parking spaces contributing to an unsafe environment in and around the site to local road user groups.

- 3.2.9 The report identified only one 'problem' issue and with this relating to the proposed bin store. In summary, the audit suggests a 'risk of pedestrians being struck when walking away from the enclosure' and a recommendation to 'orientate the enclosure so that there is clear width between it and the edge of the carriageway to aid visibility'.
- 3.2.10 The Designer's Response incorporated into the final audit report confirmed that this issue would be investigated and how it had been envisaged that this could be addressed, which had been based on the size of the communal bin store then proposed. With the proposed two-unit scheme requiring a smaller-sized communal bin store than that proposed for the previous three-unit scheme, this has allowed further layout options in this area to be considered.
- 3.2.11 The key principle underpinning the recommended course of action, to improve intervisibility between those using the bin store area and the drivers of vehicles, has been carried forward within the development of the current proposed layout, with the clear width between the proposed communal bin store and the carriageway edge maximised. This provides the improved intervisibility both to and from the access (to the south) and to from the rear area (to the east), seeking to reduce the potential risk and resolve the corresponding safety issue.
- 3.2.12 Whilst it is acknowledged that there are differences between the current proposed layout and that of the earlier scheme, in terms of highways and transport matters this is primarily in relation to the means of providing the car parking to support the proposed mews units, which previously were proposed as being integrated within the units but with the current proposed scheme would be wholly external. However, within both schemes access of the dedicated parking spaces would be by means of the shared route running to / from the rear area.
- 3.2.13 As such, with no material difference in the operational characteristics between the earlier proposed scheme and the current proposed scheme, it is considered that both the demonstration previously put forward with regard to potential highway safety issues and the Inspector's informed considerations and conclusions on these continue to be valid.

3.3 Landscaping Considerations

- 3.3.1 When considering the previous scheme, LBRuT commented with regard to potential impacts as they related to landscaping (and with this wildlife), referencing that 'the proposed dwellings and new surface parking spaces, by reason of their combined siting...and resultant loss of trees would result in a visually intrusive, overbearing and overlooking form of development', which was in relation to the contribution of the proposed verge parking in particular.
- 3.3.2 Whilst not necessarily wholly a highways-related matter, the previously-referenced note submitted as part of the material on behalf of the appellant for the appeal to address the series of highways and transport matters raised with regard to the earlier scheme for the site, similarly sought to demonstrate that the corresponding impacts were not material.

- 3.3.3 Whilst the conclusion in the Appeal Decision confirmed that 'the proposal would not result in harm to...trees, biodiversity and ecology...', it is acknowledged that the commentary with regard to the potential impacts corresponding with the proposed verge parking references:
 - '...the Arboricultural Implications Assessment concludes that these are low quality trees and it may be possible to retain or replace them depending on the construction of the parking spaces. However, details of construction have not been provided such that provision of parking on the verge in this location would limit the ability to replace these trees with planting ...'
- 3.3.4 Based on technical work undertaken by ACD Environmental and discussed further in the reporting of others, it had been considered that there was a strong case for the continued removal of the series of trees which would be in the vicinity of the proposed verge parking spaces, as the three trees proposed for removal had been flagged as low quality within the ACD Environmental 'Arboricultural Impact Assessment & Method Statement'.
- 3.3.5 However, notwithstanding the above, given the commentary provided within the Appeal Decision, it can be confirmed that it is the current position of the project design team that the trees around the proposed verge parking spaces would be retained and that there is a solution available to bring forward the proposed verge parking which would support this, with further design of these parking spaces to be based wholly on a solution to support such a strategy.
- 3.3.6 Against this background and to demonstrate the commitment to retain the trees around the proposed verge parking area, it can be confirmed also that the client would be willing to accept a condition of planning such that a scheme for these arrangements has to be further developed and submitted to the planning authority for approval prior to implementation, setting out the materials and methodologies which would be utilised so as to not materially impact upon the underlying roots running from these trees and thus to allow their retention.
- 3.3.7 With regard to the potential impacts of the proposed rear car parking area as they related to landscaping (and with this wildlife), LBRuT commented that 'the new parking arrangements on the northern boundary would prejudice tree retention, local biodiversity and a wildlife corridor link to Crane Park'. As referenced, the conclusion in the Appeal Decision confirmed that 'the proposal would not result in harm to...trees, biodiversity and ecology...'.
- 3.3.8 Additionally, the commentary within the Appeal Decision referenced with regard to the potential impacts corresponding with the proposed reconfigured parking area that:
 - 'The proposal would make slight adjustment to the boundary of the parking area under the canopy of the trees. There would be limited space for replacement planting, but this would not be materially different from the existing situation were those trees to be lost.'

- 3.3.9 The demonstration put forward within the appeal material first made reference to the 'Arboricultural Impact Assessment & Method Statement' prepared by ACD Environmental, which had identified that the four trees proposed for removal on the site-side of the boundary running along the back of the existing parking bank had been flagged as having less than ten years useful life, thus with a strong case for the continued removal.
- 3.3.10 The concerns relating to the potential impacts on the wildlife and biodiversity corridor in terms of the proposed rear parking arrangements were appraised also by comparing the width available currently between the site boundary and the back of parking with the width which would be available as a result of the proposed amendments to the parking.
- 3.3.11 This appraisal confirmed that the northern end of the rear parking bank sits at around 0.9m off of the site boundary, whilst the southern end (and narrowest point) of the rear parking bank sits at around 0.4m off of the site boundary; the widest point along this stretch has been identified as having a width at around 1.5m.. This earlier appraisals also confirmed the overall area between the back of the parking and the boundary currently measures at around 30sqm..
- 3.3.12 As referenced in the earlier appraisal, which continues to be valid with regard to the current scheme, with the proposed amendments both the northern end and the southern end of the rear parking bank would sit around 0.8m off the site boundary; the width at the narrowest point would be around 0.6m, whilst at the widest point this would measure around 1.1m. The overall area between the back of the parking and boundary would measure around 31sqm..
- 3.3.13 Given that at its narrowest the width between the back of the proposed parking bank and the site boundary would be greater than with the existing arrangements and that the overall area between the back of the proposed parking bank and the site boundary would be no less than with the existing arrangements, the earlier appraisal concluded that there would continue to be scope to support a wildlife and biodiversity corridor running adjacent to the site boundary.
- 3.3.14 As such, again with no material difference in the operational characteristics between the earlier proposed scheme and the current proposed scheme, it is considered that both the demonstration previously put forward with regard to potential landscaping impacts and the Inspector's informed considerations and conclusions on these continue to be valid.

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 two two-bed units would be supported by a single off-street car parking space, located to the west of the properties. Current LBRuT policy and guidance introduces at Policy LP45 'Parking Standards and Servicing' of London Borough of Richmond upon Thames' Local Plan (adopted July 2018) 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...'
- 4.2.2 The guiding standards put forward within the 2018 Local Plan (Appendix 3) for residential development suggest a level of provision for one-bedroom units and two-bedroom units of one space per unit for sites in areas with a PTAL of 0-3, which is commensurate with the site of the proposed scheme, thus the level of off-street parking provision (two spaces) put forward for the proposed two two-bed units accords fully with current local policy.
- 4.2.3 The level of residential car parking provision proposed for the scheme, of two off-street spaces for the two two-bed units, would be in accordance also with current policy at the London-wide level, given that the adopted London Plan (March 2016) puts forward a maximum car parking space standard of 'less than 1 per unit' for both one-bed and two-bed units.

- 4.2.4 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.
- 4.2.5 Whilst in accordance with LBRuT Highways current parking survey methodology, there could be the scope to park up to eight (8) vehicles on-street along the eastern side of the private stretch of Churchview Road in advance of the lower ground floor garage units, based on each parking space being no less than 5m in length, based on how vehicles were parked at the time of the original survey work the observed capacity of seven (7) vehicles would be unchanged.
- 4.2.6 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 may be difficult to identify, thus confirming the logical parking capacity within the private area outside of the garage units continuing to be a total of sixteen (16) vehicles.
- 4.2.7 As referenced in Section 2.5 'Existing Highways & Parking Environment' of this report, the original parking beat surveys determined a typical parking stress across the site of 58.33%; this being based on the average across of the survey days of nine (9) vehicles parked and seven (7) spare spaces. This would continue to be the stress carrying forward the results from the original survey work against the background of LBRuT Highways updated survey methodology.
- 4.2.8 Based on the 85% threshold put forward by LBRuT within the preferred survey methodology with regard to the threshold of manageable parking stress, this confirms that four of the spare 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 threshold.
- 4.2.9 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.
- 4.2.10 With these additional on-site spaces there would be a total of twenty-three (23) spaces to accommodate both the recorded average demand (nine spaces) and the potential displacement of demand from the existing garage block to be demolished (up to ten spaces), whilst retaining the resultant stress level below the 85% threshold based on the current LBRuT survey methodology the resultant parking stress would be 83%.
- 4.2.11 This strategy also accords with the policy at the borough level as presented in the London Borough of Richmond upon Thames' Local Plan (July 2018), which again 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

- 4.2.12 Each of the proposed two two-bed residential units would be supported by a separate storage unit adjacent to the rear parking sufficiently sized to accommodate two cycles.
- 4.2.13 This approach, of providing two cycle parking spaces per unit, is consistent with policy as presented in the London Borough of Richmond upon Thames' Local Plan (July 2018), which again references 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.'
- 4.2.14 Appendix 3 of the Local Plan (July 2018) confirms that cycle parking for residential development should be provided in accordance with the London Plan requirements. The current London Plan, that version adopted in March 2016, puts forward a minimum cycle parking space standard of 1 space for studios and one-bed units and a minimum cycle parking space standard of 2 spaces for all other dwelling sizes.
- 4.2.15 As such, the form and level of cycle parking provision which would be brought forward with the scheme would be consistent with policy at the borough level, by virtue of according with the current London Plan standards of two cycle parking spaces per two-bed unit.

4.3 Servicing & Refuse Strategy

- 4.3.1 Servicing of the proposed two 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 two dwellings. These measures would be in addition to the infrastructure to be brought forward, including the dedicated cycle storage and the access to electric vehicle charging for the car parking for each unit.
- 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 two two-bed residential units, each supported by a single dedicated car parking space adjacent to 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, though given the number of residential units being proposed neither the resultant trips nor the corresponding impacts could at all be considered as significant.
- 5.1.4 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. 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 two two-bed residential units, each coming forward with a single dedicated off-street car parking space.
- 5.2.2 Data from the TRICS 7.6.1 database has been used in order to determine the trip generation associated with the proposed development. The initial search was undertaken within the 'Houses Privately Owned' sub-category of the 'Residential' category, of sites in the Greater London area with no more than 50 units and with a weekday multi-modal survey dating from 2011 onwards (the current TRICS default cut-off date).
- 5.2.3 Whilst this initial search yielded two sites, neither was considered analogous to the proposed development in that each site was characterised by a predominance of larger-sized (three-bed or more) units whereas the proposed scheme comprises smaller-sized (two-bed) units.
- 5.2.4 A second search was undertaken using the 'Flats Privately Owned' sub-category, which is consistent with the approach undertaken in relation to the trip generation exercise in support of the previous scheme. All other search criteria were unchanged.

- 5.2.5 This further search yielded eleven sites, but from which eight were discounted for having a PTAL rating of 4 or over. The remaining three sites had a PTAL rating of less than 4, on-site parking close to one parking space per unit and were comprised mainly of two-bed units, thus considered to be more so analogous with the proposed residential development.
- 5.2.6 Details of the sites 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 J**.

Site	Survey Year	No. of Units	Parking Spaces	PTAL
Arthingworth Street, Stratford, E15	2013	12	16	3
North Circular Rd, Palmers Green, N13	2016	18	18	2
Portsmouth Road, Surbiton, KT6	2018	20	25	2

Table 5.1: Summary of TRICS Residential Sites – Private Apartments

	AM Peak (08:00-09:00)		PM Peak (18:00-19:00)			Daily (07:00-19:00)			
	Arr.	Dep.	Total	Arr.	Dep	Total	Arr.	Dep.	Total
Person Trips (per unit)	0.360	1.020	1.380	0.720	0.540	1.260	4.900	5.340	10.240
Person Trips (2 units)	1	2	3	2	1	3	10	10	20

NOTES: i. Where appropriate, movements by direction have been rounded to ensure tally with total trips. ii. 18:00-19:00 put forward as PM Peak hour, as busiest hour within wider period of 16:00-19:00.

Table 5.2: Proposed Person Trip Generation Summary – Residential Units

- 5.2.7 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.
- 5.2.8 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. These cannot be considered as significant in terms of overall magnitudes or magnitudes by each mode, which is as expected given the limited number of residential units to come forward with the scheme.

	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	1	8			
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	5			
Bicycle	7%	0	0	2			
Foot	8%	0	0	2			
Other	0%	0	0	0			
TOTAL	100%	3	3	20			
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 (2)

5.3 Potential Scheme Impacts

Trips Considerations

- 5.3.1 Based upon an objective review of the TRICS database, the proposed two two-bed residential units at the application site could generate trips over the course of a typical day of 20 two-way movements, with three two-way movements during the a.m. peak hour (15% of the daily total) and three two-way movements during the p.m. peak hour (15% 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 a single additional movement on any 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 eight movements over the course of the day (assumed to be four arrivals and four departures) and by rail (including underground) with six movements over the course of the day (assumed to be three arrivals and three departures). Other modes (bus, bicycle, foot) 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 a single movement as identified for each of the a.m. peak hour and 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 each of 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 With also no more than an additional single bus-based movement during each of the peak hours, this additional activity would be similarly indiscernible and similarly not at all affect the level of service currently afforded to those using local bus services, given that there are typically 13-14 services in each direction hourly travelling along the Staines Road corridor and typically 18-21 services in each direction hourly travelling along the Hampton Road corridor.
- 5.3.7 The low volumes of site-related trips by the different modes, which cannot at all be considered significant, would evidently be accommodated by the network capacities (highway and public transport services) available to those seeking access of the site, demonstrating that there would be no adverse impacts upon the operation of the full range of travel networks.
- 5.3.8 When considering the comments made by LBRuT Highways with regard to highway safety as a result of the proposed layout arrangements with the previous scheme, as presented within the note relating to highways and transport matters submitted as part of the material on behalf of the appellant for the appeal, the demonstration put forward an assessment based upon the projected additional peak hour and daily vehicle and pedestrian movements.
- 5.3.9 This assessment, undertaken to again demonstrate the appropriateness of the retention of the shared-space environment for vehicles and pedestrians within the vicinity of the site, has been updated to reflect the current scheme proposals and the corresponding tripmaking.
- 5.3.10 The trip generation exercise undertaken for the proposed additional two residential units projects one (1) additional vehicle movement during each of the a.m. peak and p.m. peak hours and a total of eight (8) additional vehicle movements between 07:00 and 19:00 (typically split between four (4) arrivals and four (4) departures. These levels of vehicular traffic are not considered to be materially significant, as either stand-alone movements or traffic increases.
- 5.3.11 The additional single peak hour vehicle movement during each of the peak hours would be against the background of an additional two (2) pedestrian movements during each of the peak hours, which are likewise considered limited in volume and not materially significant.
- 5.3.12 Thus, it is not considered that the projected additional vehicle movements and additional pedestrian movements, as a result of increasing the number of residential units taking access through the shared-space area from the existing twenty-one units (those in Sontan Court) to the twenty-three units when including the proposed mews units, would materially change the environment within and around the shared-space area and that the level of amenity and safety afforded to future users would not materially differ to that afforded to current users.

5.3.13 This was similarly concluded by the Inspector with regard to the appeal, with the Appeal Decision concluding that 'the proposal would not result in harm to...highway safety...' and having referenced within the preceding commentary that:

'Pedestrian access to the houses would be shared with the circulation and parking area of the flats at Sontan Court and the proposed houses. Consequently, pedestrians would be expected to be moving around this area, as well as vehicles. On this basis, vehicle drivers would anticipate pedestrians such that there would not be a conflict.'

Parking Considerations

- 5.3.14 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 two off-street car parking spaces) but of the potential displaced vehicles from the garages to be demolished.
- 5.3.15 With these additional provisions increasing the on-site parking from sixteen (16) spaces to twenty-three (23) spaces, based on the original survey work the resultant average on-site parking stress would be up to 82.6% (with four spare spaces), so not be at or in excess of the threshold of 85% which is considered to represent an unmanageable level of on-street parking according to the current LBRuT parking stress survey methodology.
- 5.3.16 Additionally, the current arrangements at and around the Sontan Court building which would be impacted upon by the proposed residential scheme comprises a bank of parking to the rear with a capacity for nine (9) vehicles and a block of ten (10) garage units a total of nineteen (19) parking spaces. There is additional parking available through garage units under Sontan Court and a kerbside stretch of around 43m, which would be unchanged.
- 5.3.17 The proposed parking arrangements at and around the Sontan Court building would comprise a modified bank of parking to the rear with an increased capacity for twelve (12) vehicles, an additional bank of parking to the front with a capacity for four (4) vehicles and the separate dedicated parking specifically to support the proposed residential units with a capacity for two (2) vehicles a total of eighteen (18) parking spaces.
- 5.3.18 Evidently, the number of site parking spaces, on-street and off-street, as result of the proposed residential scheme replacing the existing block of garages would be reduced by one, thus it could be argued also that based on movements to and from the on-site parking spaces the vehicle tripmaking potential may be little unchanged and thus also the parking impacts.
- 5.3.19 Notwithstanding the preceding appraisal of the potential impacts of and on parking as result of the proposed residential scheme, the client is willing to enter into a unilateral undertaking to preclude residents from obtaining permits to park on-street should at any such time a community parking zone be brought forward within the vicinity of the site.

5.3.20 To demonstrate this commitment, it should be noted that the applicant has submitted a draft Unilateral Undertaking with this planning submission, with the wording in line with the template produced by London Borough of Richmond upon Thames such that this agreement would preclude residents of the proposed new-build residential units from being able to access permits to park on-street should Churchview Road and the surrounding area become a community parking zone, thus also mitigating against scope for kerbside parking pressures.

6 Summary & Conclusions

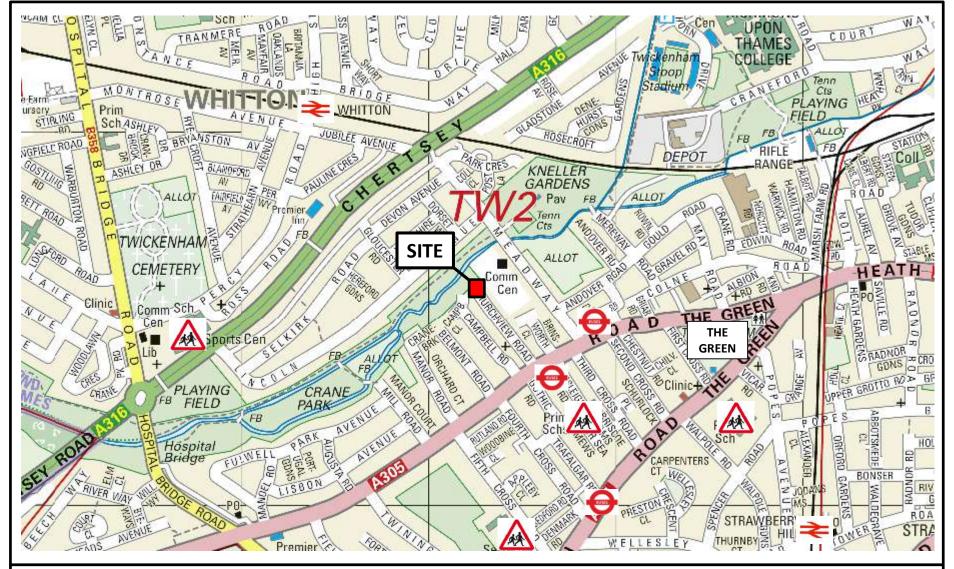
- 6.1.1 This report has been prepared on behalf of UK & European Property Developments Limited, in support of the redevelopment of the land to the northernmost end of Churchview Road, Twickenham, to provide a scheme bringing forward two two-bed residential units, each supported by a dedicated car parking space adjacent 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 person trips during the course of a typical day, with three trips during the a.m. peak hour and three trips during the p.m. peak hour, which cannot at all be considered as significant in magnitude and when considered on a mode-by-mode basis similarly would not have any material or discernible 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 This current proposed scheme of two two-bed residential units comes forward against the background of an earlier proposed scheme of three two-bed residential units, which whilst dismissed at appeal it had been considered that there were no highway safety grounds on which to refuse with the notice putting forward that 'the proposal would not result in harm to the character and appearance of the area, trees, biodiversity and ecology, highway safety'.
- 6.1.8 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 two two-bed residential townhouse units.



APPENDICES



APPENDIX A





SITE LOCATION

Local Rail Stations

Local Bus Stops

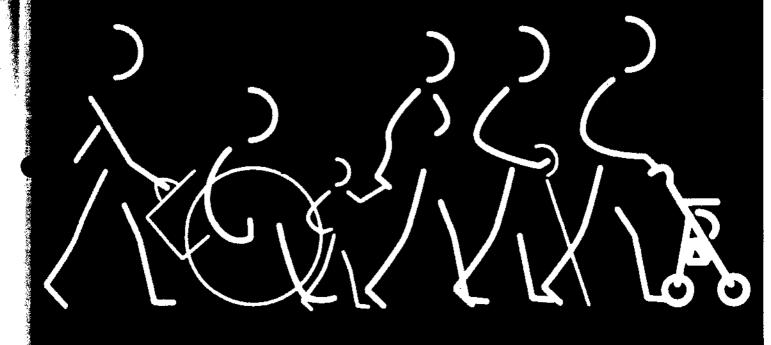
Local Schools





APPENDIX B

Providing for Journeys on Foot



THE INSTITUTION OF HIGHWAYS & TRANSPORTATION



Sainsbury's

me me to the series of the stran



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.

Ì	Parking time (hours)	Acceptable wali	king 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.

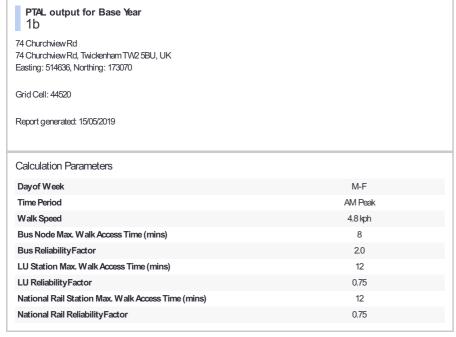
3.37. If the development is sufficiently large to warrant a Transport Impact Assessment, the local authority should ensure that this thoroughly addresses the issues of pedestrian access, both to the site and within it. Some guidance is provided in IHT Guidelines for Providing for Public Transport in Developments (IHT, 1999). Further Guidelines on Transport Assessments are expected from DETR.



APPENDIX C







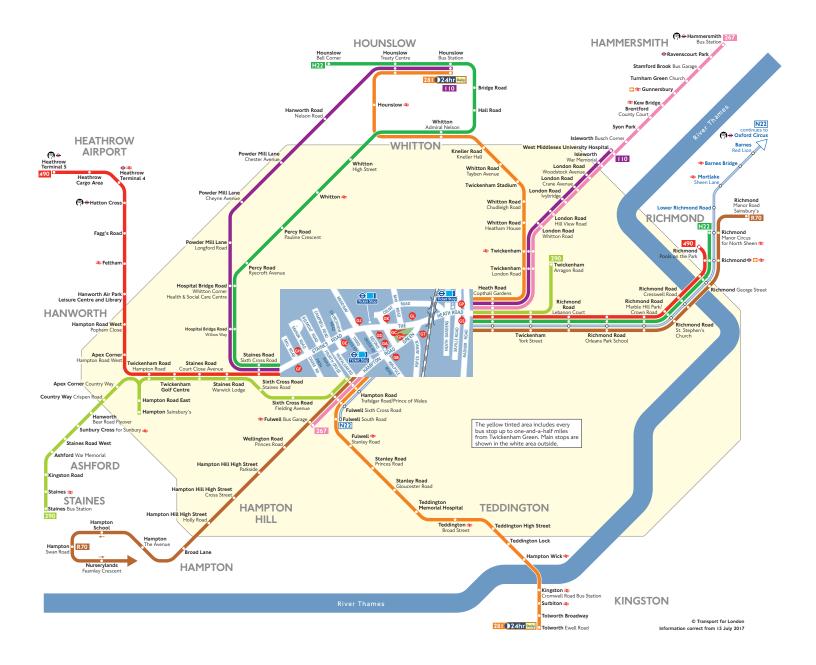


Calcul	Calculation data									
Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	Al
Bus	STAINES RD THIRD CROSS R	110	358.45	3	4.48	12	16.48	1.82	0.5	0.91
Bus	STAINES RD THIRD CROSS R	490	358.45	5	4.48	8	12.48	2.4	1	2.4
Bus	STAINES RD THIRD CROSS R	H22	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	GC GD GE GF GS
	West Middlessex	GH GJ GR GI GP
	University Hospital	
267	Fulwell	68 65 67
	Hammersmith	GA GM GP
281 24hr Daily	Hounslow	GA GM GP
	Tolworth	6 6 6
290	Staines	6 6 6
	Twickenham	GA GM GP
490	Heathrow Terminal 5	@ @ @ G G
	Richmond	GH GJ GK GL GP
H22	Hounslow	@ @ @ G @
	Richmond	GH GJ GK GL GP
R70	Nurserylands	68 63 61
	Richmond	GA GM GP

Night buses

Bus route	Towards	Bus stops
N22	Fulwell	68 65 67
	Oxford Circus	GA GM GP

Other Buses

Bus route	Towards	Bus stops
681	Hounslow	GA GM GP
School journey	Teddington School	6 6 6

Key

267	Day buses in black
N22	Night buses in blue
0	Connections with London Underground
0	Connections with London Overground
₹	Connections with National Rail
-	Connections with river boats
(%) ↔	Tube station with 24-hour service Friday and Saturday nights

Ways to pay



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



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 September	
-					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
Churchview Road		Hard standing to rear of flats (Perpendicular Parking)	23.7		3	6
		Double Yellow Lines	9.2		0	0
		Parking	44.9		9	0
		Access Road	6.6		0	0
		Parking	5.9		1	0
Charchiview Road	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 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					
04:0	September 04:00-04:30					
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					
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1	0					
1	-1					
0	0					
0	0 -1 0					
65	2					
	·					

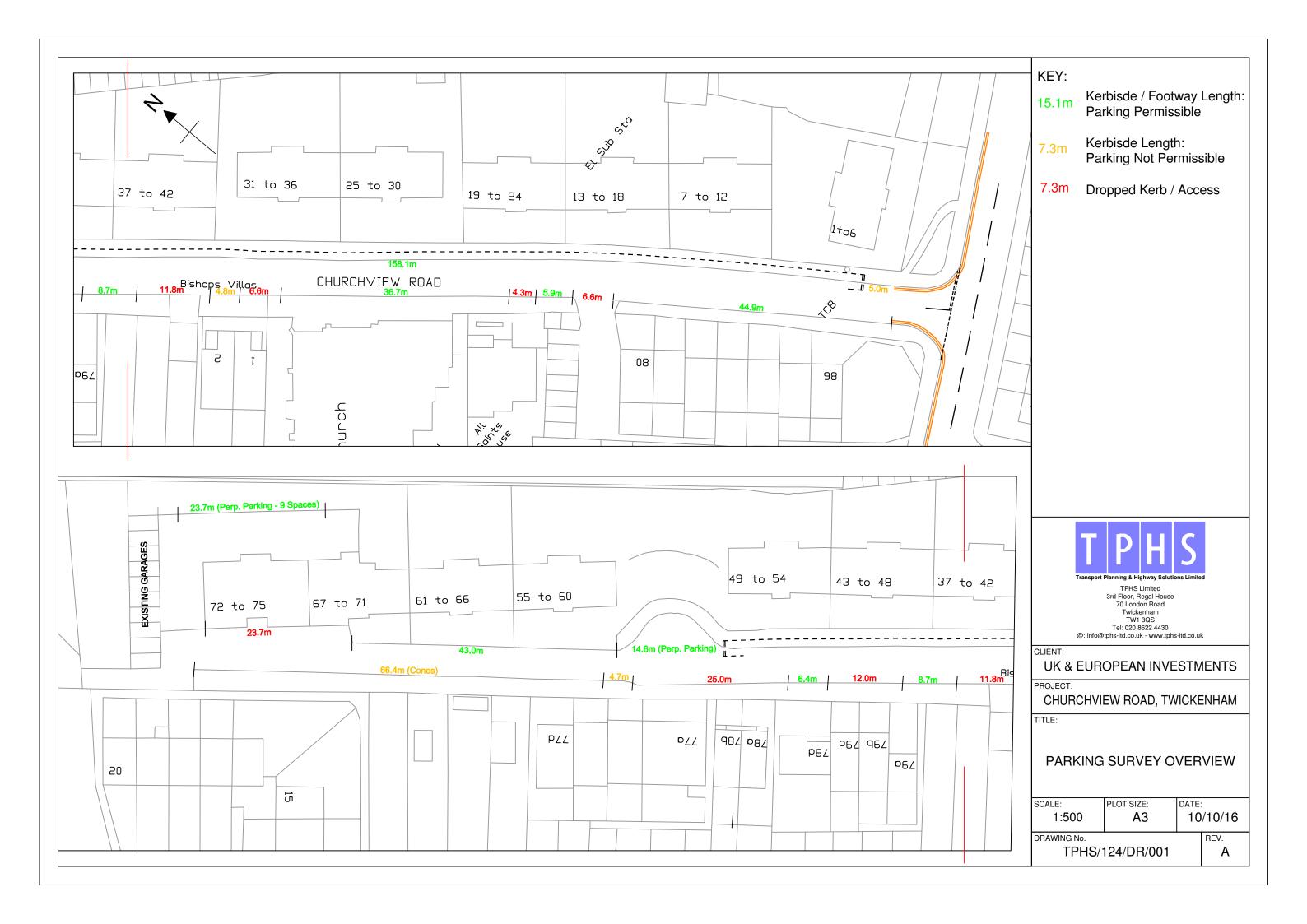
NOTES:

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%			



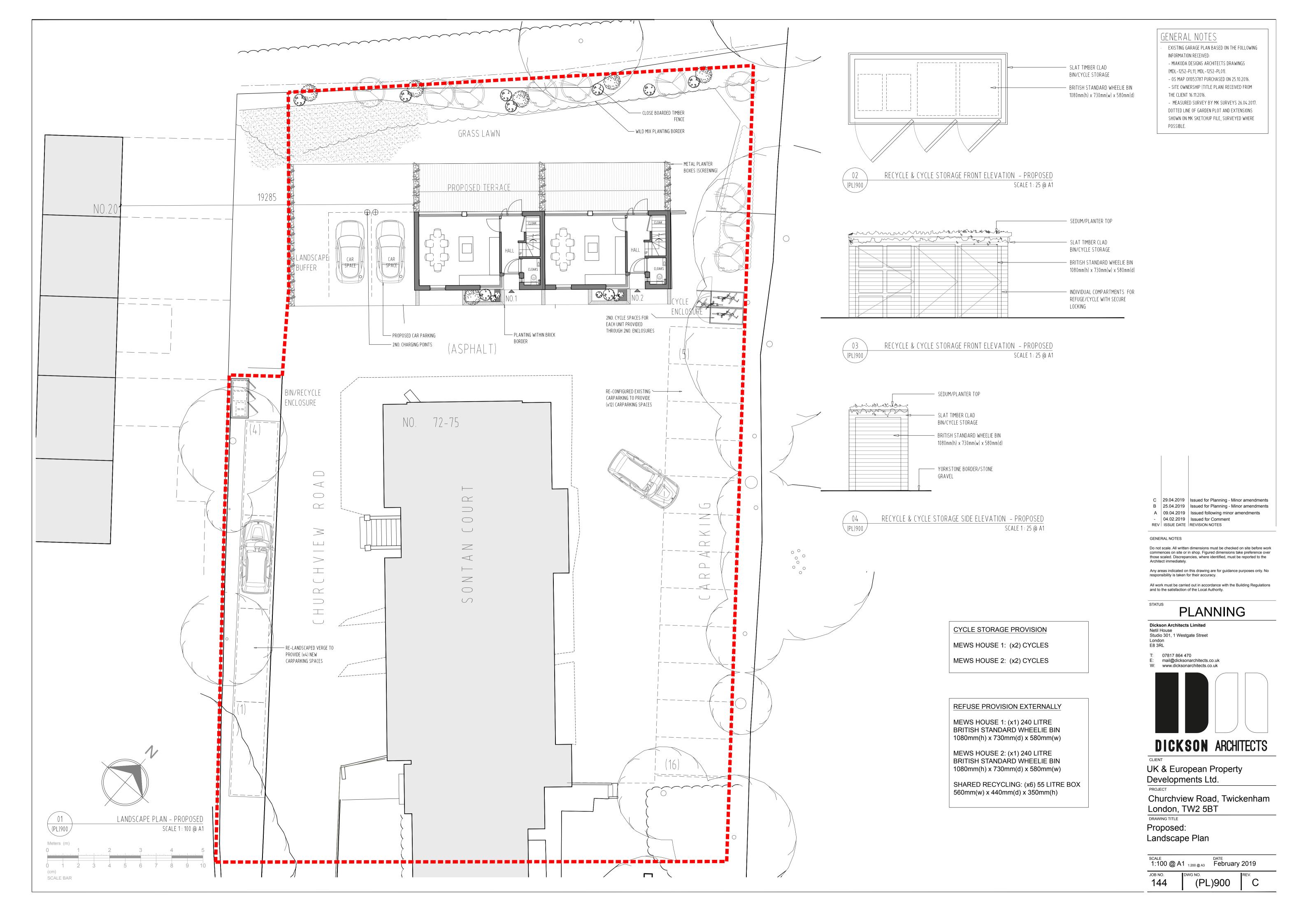






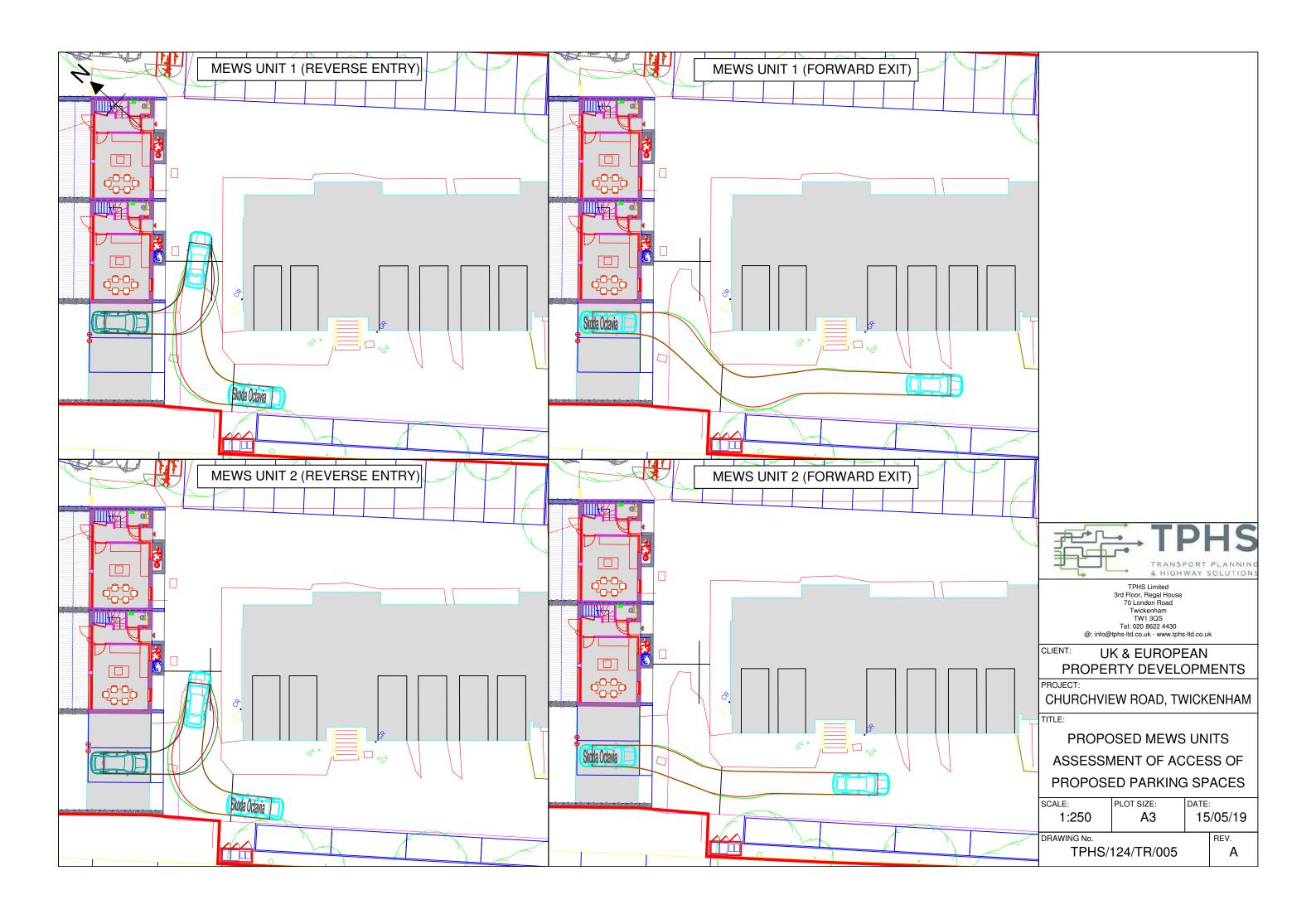


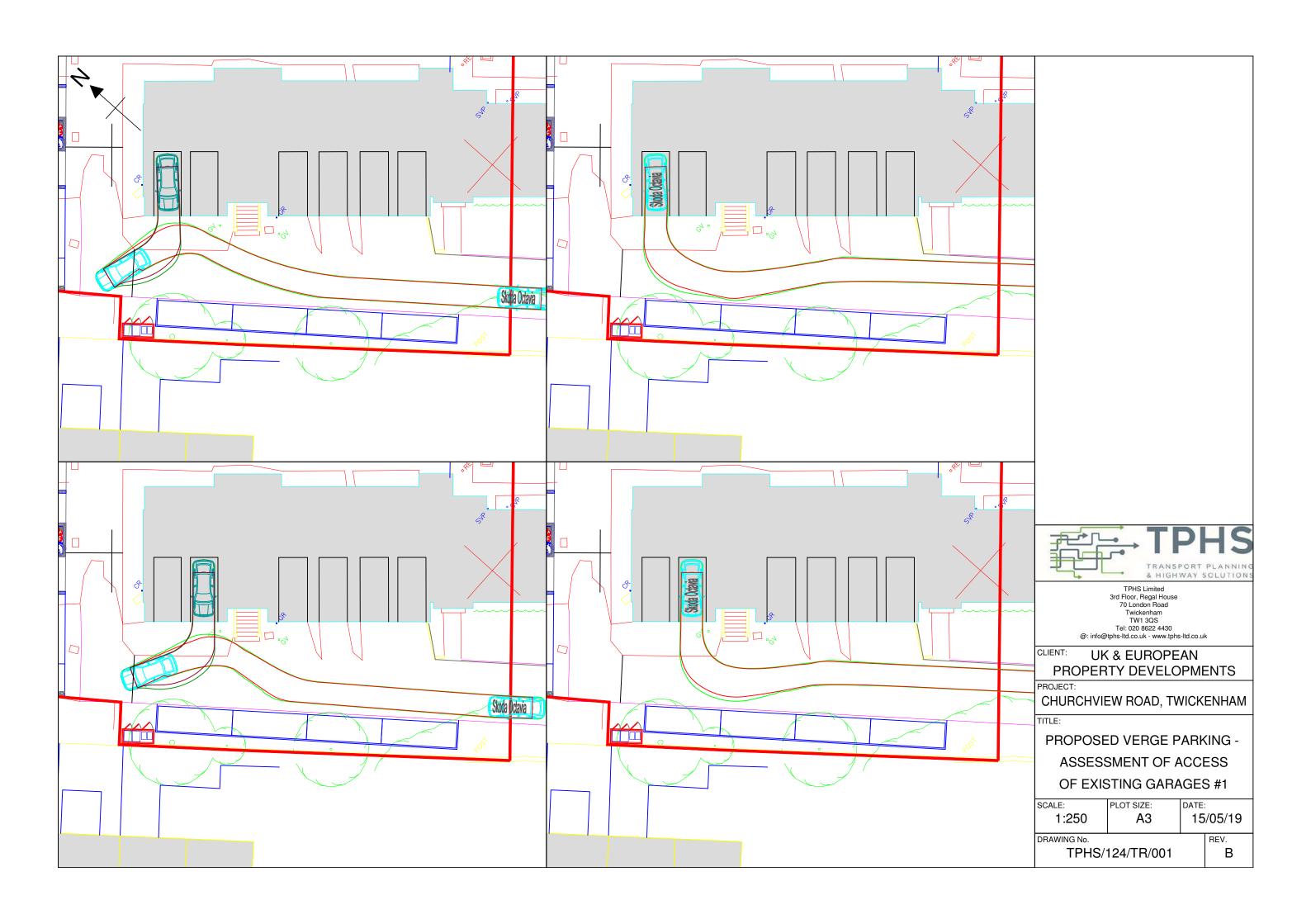
APPENDIX G





APPENDIX H







APPENDIX I



The Old Council Yard Hedingham Road Great Yeldham Essex, CO9 4HS

Churchview Road, Twickenham:

Proposed Residential Development

Stage 1 Road Safety Audit

Ref: 1483-RSA-01

Prepared for:

Transport Planning & Highway Solutions Limited

On behalf of UK & European Investments

By:

Capital Traffic

Prepared by: Andy Haunton, Audit Team Leader

Checked by: Jonathan Thompson, Audit Team Member

Approved by: Andy Haunton, Audit Team Leader

Version	Status	Date			
Α	Audit report issued to Client	19 th January 2018			



1.0 INTRODUCTION

1.1 Commission

- 1.1.1 This report results from a Stage 1 Road Safety Audit carried out on a proposed residential development situated on Churchview Road, Twickenham. The Audit was undertaken by Capital Traffic in accordance with the Audit Brief confirmed by the Design Organisation on 10th January 2018. It took place at the Great Yeldham offices of Capital Traffic during mid January 2018 and comprised an examination of the documents provided as listed in Appendix A, plus a visit to the site of the proposed scheme.
- 1.1.2 The Audit Team visited the site of the proposed scheme during the hours of 10:00 to 11:00 on 16th January 2018. During the site visit the weather was fine and the existing paved highway surfaces were dry to drying with a few surface water puddles present. Traffic flows were observed to be very low.

1.2 Terms of Reference

- 1.2.1 The Terms of Reference of this Audit are as described in TfL Procedure SQA-0170 Issue 1 dated 26/02/2016. The Audit Team has examined and reported only on the road safety implications of the scheme as presented and how it impacts on all road users and has not examined or verified the compliance of the designs to any other criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem the Audit Team may, on occasion, have referred to a design standard without touching on technical audit. An absence of comment relating to specific road users / modes in Section 3 of this report does not imply that they have not been considered; instead the Audit Team feels they are not adversely affected by the proposed changes.
- 1.2.2 This Safety Audit is not intended to identify pre-existing hazards which remain unchanged due to the proposals; hence they will not be raised in Section 3 of this report as they fall outside the remit of Road Safety Audit in general as specified in the procedure SQA-0170. Safety issues identified during the Audit and site visit that are considered to be outside the Terms of Reference, but which the Audit Team wishes to draw to the attention of the Client Organisation, are set out in Section 4 of this report.
- 1.2.3 Nothing in this Audit should be regarded as a direct instruction to include or remove a measure from within the scheme. Responsibility for designing the scheme lies with the Designer and as such the Audit Team accepts no design responsibility for any changes made to the scheme as a result of this Audit.
- 1.2.4 In accordance with TfL Procedure SQA-0170, this Audit has a maximum shelf life of 2 years. If the scheme does not progress to the next stage in its development within this period, then the scheme should be re-audited.

Date: January 2018 2 Version: A



- 1.2.5 Unless general to the scheme, all comments and recommendations are referenced to the detailed design drawings and the locations have been indicated on the plan located in Appendix B.
- 1.2.6 It is the responsibility of the Design Organisation to complete the Designer's response section of this Audit report. Where applicable and necessary it is the responsibility of the Client Organisation to complete the Client comment section of this Audit report. Signatures from both the Design Organisation and Client Organisation must be added within Section 5 of this Audit report. A copy of which must be returned to the Audit Team.

1.3 Main Parties to the Audit

1.3.1 Client Organisation

Client contact details: UK & European Investments

Highway Authority: London Borough of Richmond upon Thames

1.3.2 Design Organisation

Design contact details: Barrie Sheppard, Transport Planning & Highway

Solutions Limited

1.3.3 Audit Team

Audit Team Leader: Andy Haunton – Capital Traffic

Audit Team Member: Jonathan Thompson – Capital Traffic

Audit Team Observer: None

1.3.4 Other Specialist Advisors

Specialist Advisor Details: None appointed

1.4 Purpose of the Scheme

1.4.1 The scheme proposes the redevelopment of the land to the northernmost end of Churchview Road. It proposes the 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 by a dedicated car port.

1.5 Special Considerations

1.5.1 None noted.

Audit Ref: 1483-RSA-01

Date: January 2018 3 Version: A



2.0 ITEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

2.1 The Audit Team is not aware of any other audits having been carried out on the proposals.

Date: January 2018 4 Version: A



3.0 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1 PEDESTRIANS

3.1.1 PROBLEM

Location: A – Proposed bin/recycle enclosure.

Summary: Risk of pedestrians being struck when walking away from the

enclosure.

A bin/recycle enclosure is proposed to the western side of the development site. It will span the width of the existing verge from the site boundary up to the edge of the Churchview Road carriageway. This configuration may increase the risk of a pedestrian being struck when walking away from the enclosure by any vehicle driving clockwise around the site towards the new houses or parking behind Sontan Court as it may mask visibility of them. Younger children may be especially vulnerable as they are shorter and have less risk awareness.

RECOMMENDATION

Orientate the enclosure so that there is clear width between it and the edge of the carriageway to aid visibility.

Design Organisation Response Part Accepted

Within the context of any permission, the scope to rotate the bin store by 1800, with the back of the unit sitting against the red-line boundary, will be investigated, as this would improve intervisibility between those using the bin store area and the drivers of vehicles approaching both from the access road (to the south) and the rear area (to the east) and thus seek to reduce the potential risk.

Client Organisation Comments

We accept the Design Organisation's response.

End of list of problems identified and recommendations offered in this Stage 1 Road Safety Audit

Date: January 2018 5 Version: A



Version: A

4.0 ISSUES IDENTIFIED DURING THE STAGE 1 ROAD SAFETY AUDIT THAT ARE OUTSIDE THE TERMS OF REFERENCE

Safety issues identified during the audit and site inspection that are considered to be outside the Terms of Reference, but which the Audit Team wishes to draw to the attention of the Client Organisation, are set out in this section. It is to be understood that, in raising these issues, the Audit Team in no way warrants that a full review of the highway environment has been undertaken beyond that necessary to undertake the Audit as commissioned.

NONE IDENTIFIED

Audit Ref: 1483-RSA-01
Date: January 2018 6



5.0 SIGNATURES AND SIGN-OFF

5.1 AUDIT TEAM STATEMENT

We certify that we have examined the drawings and documents listed in Appendix A. to this Safety Audit report. The Road Safety Audit has been carried out in accordance with TfL Procedure SQA-0170, with the sole purpose of identifying any feature that could be removed or modified in order to improve the safety of the measures. The problems identified have been noted in this report together with associated suggestions for safety improvements that we recommend should be studied for implementation.

No one on the Audit Team has been involved with the design of the measures.

AUDIT TEAM LEADER:

Name: Andy Haunton BEng (Hons) MCIHT FSoRSA Signed:

Position: Director Date 19/01/2018

Organisation: Capital Traffic

Address: The Old Council Yard, Hedingham Road, Great Yeldham,

Essex CO9 4HS

Contact: enquiries@capitaltraffic.co.uk (01787 237 509)

AUDIT TEAM MEMBER:

Name: Jonathan Thompson IEng FIHE MSoRSA Signed:

Position: Director Date 19/0/2018

Organisation: Capital Traffic

Address: The Old Council Yard, Hedingham Road, Great Yeldham,

Essex CO9 4HS

Contact: enquiries@capitaltraffic.co.uk (01787 237 509)

Date: January 2018 7 Version: A



5.2 DESIGN TEAM STATEMENT

In accordance with SQA-0170 dated May 2014, I certify that I have reviewed the items raised in this Stage 1 Safety Audit report. I have given due consideration to each issue raised and have stated my proposed course of action for each in this report. I seek the Client Organisations endorsement of my proposals.

Name:

Barrie Sheppard

Position:

Technical Director

Organisation: Transport Planning & Highway Solutions Ltd

Signed:

Dated: 31/01/18

19/02/2018

5.3 CLIENT ORGANISATION STATEMENT

I accept these proposals by the Design Organisation.

B.Shappan

Name:

Toby Saggers

Position:

Asset Manager

Organisation: UK & European Investments

Signed:

Dated:

Audit Ref: 1483-RSA-01 Date: January 2018

8

Churchview Road, Twickenham: Proposed Residential Development Stage 1 Road Safety Audit Report



APPENDIX A

Documents Forming the Audit Brief

DRAWING NUMBER	DRAWING TITLE
128/(PL)900 Rev B	Proposed: Landscape Plan
DOCUMENTS Safety Audit Brief Site Location Plan Traffic signal details TfL signal safety checklist Departures from standard Previous Road Safety Audits Previous Designer Responses Collision data Collision plot Traffic flow / modelling data Pedestrian flow / modelling data	DETAILS (where appropriate)
Speed survey data Other documents	Transport Statement Report, June 2017 Planning Application 17/2759/FUL (online)

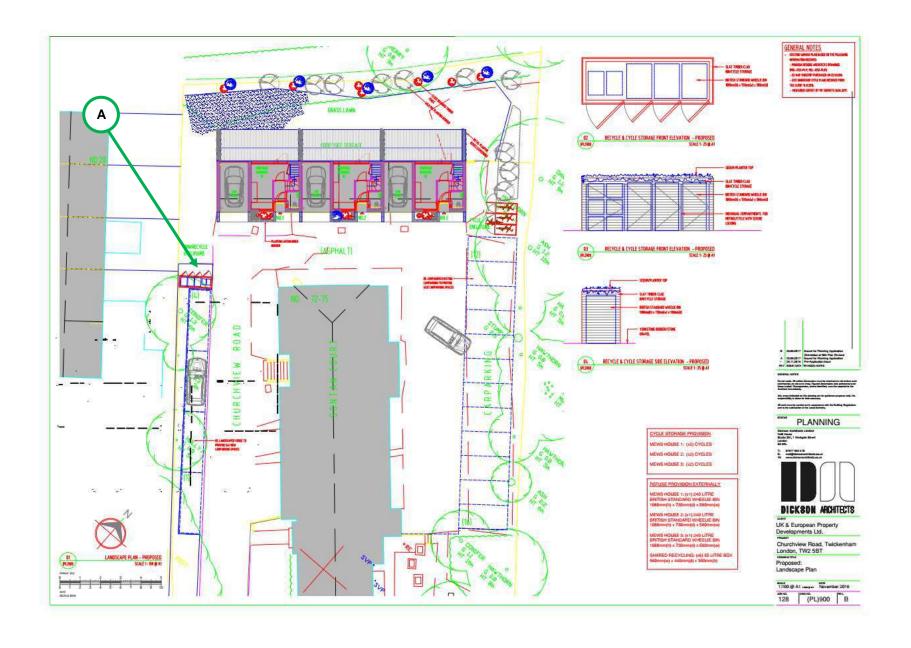
Audit Ref: 1483-RSA-01

Churchview Road, Twickenham: Proposed Residential Development Stage 1 Road Safety Audit Report



APPENDIX B

Problem Locations





APPENDIX J

TRICS 7.6.1 290419 B19.08 Database right of TRICS Consortium Limited, 2019. All rights reserved Wednesday 15/05/19 Churchview Road, Twickenham - Proposed Residential Trip Rates

Page 1 TPHS Limited London Road Twickenham Licence No: 857401

Calculation Reference: AUDIT-857401-190515-0509

TRIP RATE CALCULATION SELECTION PARAMETERS:

: 03 - RESIDENTIAL

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

Selected regions and areas:

01 **GREATER LONDON**

FΝ **ENFIFLD** 1 days KINGSTON 1 days ΚI 1 days NH **NEWHAM**

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

Secondary Filtering selection:

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

Parameter: Number of dwellings 12 to 20 (units:) Actual Range: Range Selected by User: 9 to 50 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 08/11/17

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

Selected survey days:

Monday 1 days Wednesday 1 days Thursday 1 days

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

Selected survey types:

Manual count 3 days Directional ATC Count 0 days

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

Selected Locations:

Edge of Town Centre 1 Suburban Area (PPS6 Out of Centre) 1 Neighbourhood Centre (PPS6 Local Centre) 1

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

Selected Location Sub Categories:

Residential Zone 3

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

Secondary Filtering selection:

Use Class:

C3 3 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®.

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Secondary Filtering selection (Cont.):

Population within 1 mile: 25,001 to 50,000 1 days 50,001 to 100,000 2 days

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

Population within 5 miles:

500,001 or More 3 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 2 days 1.1 to 1.5 1 days

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

Travel Plan:

No 3 days

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

PTAL Rating:

1 days No PTAL Present 1 days 2 Poor 3 Moderate 1 days

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

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LIST OF SITES relevant to selection parameters

EN-03-C-03 **BLOCKS OF FLATS ENFIELD**

NORTH CIRCULAR ROAD PALMERS GREEN

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Number of dwellings: 18

Survey date: WEDNESDAY 08/11/17 Survey Type: MANUAL

KI-03-C-03 BLOCK OF FLATS KINGSTON

PORTSMOUTH ROAD

SURBITON

Edge of Town Centre Residential Zone

Total Number of dwellings: 20

> Survey date: MONDAY 11/07/16 Survey Type: MANUAL

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

ARTHINGWORTH STREET

STRATFORD

Neighbourhood Centre (PPS6 Local Centre)

Residential Zone

Total Number of dwellings: 12

Survey date: THURSDAY 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
HG-03-C-02	PTAL rating not analogous with proposed development site.
HK-03-C-03	PTAL rating not analogous with proposed development site.
HM-03-C-01	PTAL rating not analogous with proposed development site.
IS-03-C-03	PTAL rating not analogous with proposed development site.
IS-03-C-05	PTAL rating not analogous with proposed development site.
IS-03-C-06	PTAL rating not analogous with proposed development site.
SK-03-C-02	PTAL rating not analogous with proposed development site.
WH-03-C-01	PTAL rating not analogous with proposed development site.

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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	3	17	0.100	3	17	0.640	3	17	0.740
08:00 - 09:00	3	17	0.360	3	17	1.020	3	17	1.380
09:00 - 10:00	3	17	0.280	3	17	0.500	3	17	0.780
10:00 - 11:00	3	17	0.240	3	17	0.260	3	17	0.500
11:00 - 12:00	3	17	0.200	3	17	0.220	3	17	0.420
12:00 - 13:00	3	17	0.340	3	17	0.260	3	17	0.600
13:00 - 14:00	3	17	0.200	3	17	0.280	3	17	0.480
14:00 - 15:00	3	17	0.400	3	17	0.520	3	17	0.920
15:00 - 16:00	3	17	0.580	3	17	0.360	3	17	0.940
16:00 - 17:00	3	17	0.740	3	17	0.400	3	17	1.140
17:00 - 18:00	3	17	0.740	3	17	0.340	3	17	1.080
18:00 - 19:00	3	17	0.720	3	17	0.540	3	17	1.260
19:00 - 20:00	2	19	0.711	2	19	0.474	2	19	1.185
20:00 - 21:00	2	19	0.605	2	19	0.184	2	19	0.789
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates: 6.216 5.998						12.214			

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.