Appendix A Scoping Correspondence

Agar Grove, Camden

Transport Assessment Scope of Works

On behalf of **The London Borough of Camden**

Project Ref`: 28732/002 | Rev: 1 | Date: July 2013

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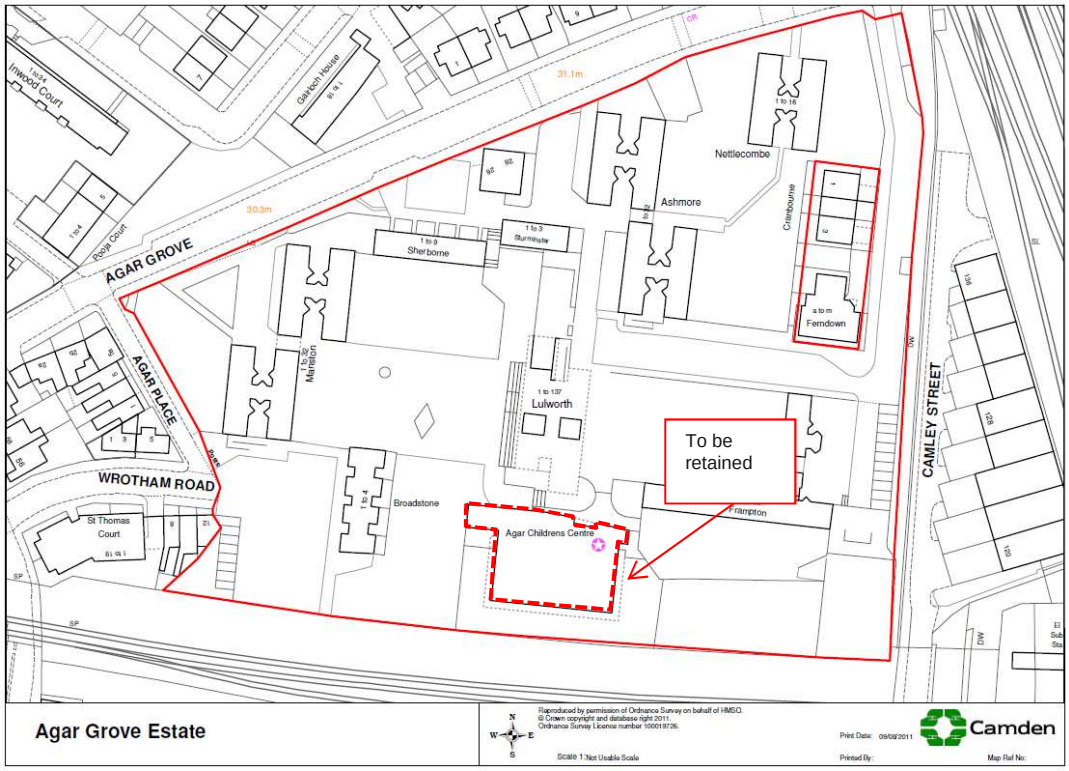
1 Introduction

1.1.1 Peter Brett Associates LLP (PBA) has been commissioned by The London Borough of Camden (LBC) to produce a Transport Assessment in support of a planning application for the redevelopment of the Agar Grove housing estate in the LBC.

1.1.2 The redevelopment site is located to the south of Agar Grove, to the west of Camley Street and to the east of Agar Place. The site boundary is shown in Figure 1.1; it is bounded to the south by railway lines. To the west it is bounded by residential units, to the north by Agar Grove and to the east by industrial units on Camley Street. The Agar Children's Centre to the south of the site will remain in its current state, though servicing and emergency access will be considered for the facility through the site.

Figure 1.1: Site boundary



1.1.3 The site is currently a residential estate with some local shops and community facilities. It currently provides 249 residential units; following redevelopment the site will have up to 600 homes. The redevelopment of the site will be phased.

1.1.4 This report sets down the proposed method and scope of work to be undertaken in the preparation of the Transport Assessment and Travel Plan that will form part of the supporting documentation for the planning application.

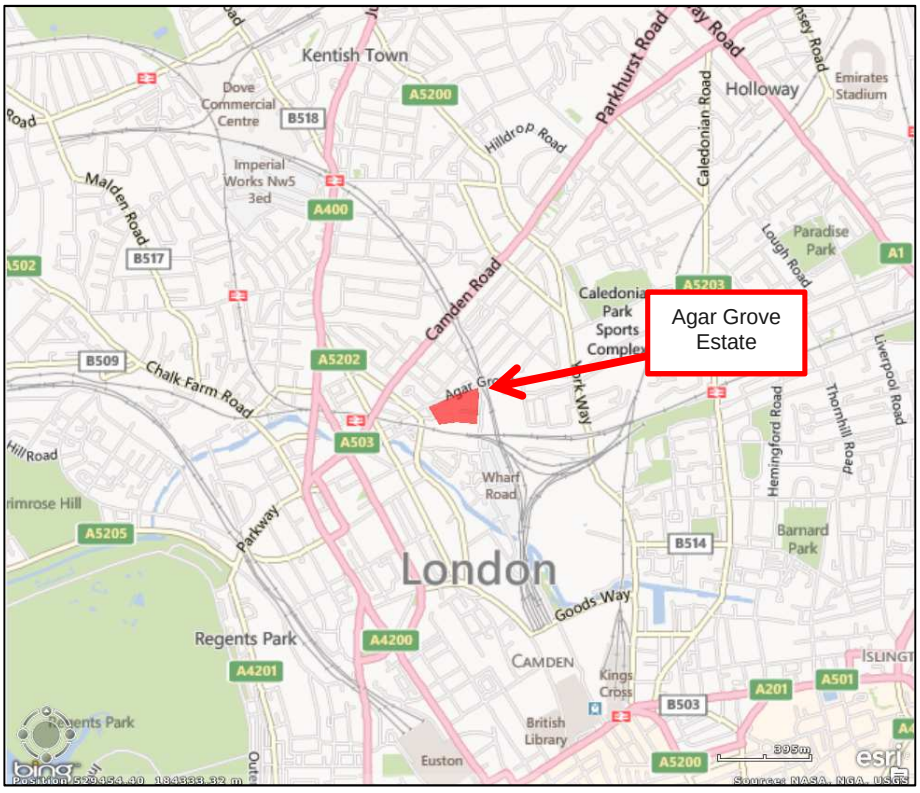
2 Development Proposals

2.1 Development background

2.1.1 The current land use of the site is predominantly residential. The housing is distributed across 12 housing blocks. Agar Grove estate has been identified by the LBC for regeneration as part of their community investment programme.

2.1.2 Figure 2.1 presents the location of the site.

Figure 2.1: Site location plan



2.2 Site access

2.2.1 This section of the Transport Assessment will consider links from the site to the surrounding area. Travel to the site by different modes will be considered and GIS maps will be included.

2.2.2 For the purposes of this scoping note, a brief outline of our understanding of the links has been included below.

Pedestrian and cycle

2.2.3 To the north, the site can be accessed from Agar Grove and to the west from Wrotham Road via St Pancras Way and Agar Place via Agar Grove.

2.2.4 The frontage of the estate onto Agar Grove is fenced with private gated pedestrian accesses at the entrances to the blocks. At the north eastern corner of the site there is a pedestrian and vehicle access which runs along the eastern border of the site and then in towards the car

park and Lulworth. This access does not provide a through route to the south or east of the site.

2.2.5 Alongside Camley Street there is a segregated pedestrian and cycle route, however it does not provide a direct access route to the estate. This is also true of Camley Street.

2.2.6 To the north of the site there is an off-carriageway cycle route between Agar Grove and Stratford Villas. Agar Place, to the west of the site, has a dedicated cycle turning lane onto Agar Grove. To the south of the site, the Grand Union Towpath offers an off-carriageway cycle route.

Public transport

2.2.7 Public Transport Accessibility Levels (PTALs) are a measure of the accessibility of a point from a development site to the public transport network, taking into account walk access times and service availability. The method is essentially a way of measuring the density of the public transport network at particular points. A PTAL score can range from 1a to 6b, where a score of 1 indicates a "very poor" level of accessibility and 6b indicates an "excellent" accessibility level.

2.2.8 The PTAL on the Agar Grove estate varies between 5 and 6a near Agar Grove. Towards the centre of the site, the PTAL is between 2 and 3. Around the site's perimeter the PTAL is much higher, between 5 and 6a. PTALs have been calculated using Transport for London (TfL)'s online calculator at (www.webptals.org.uk).

2.2.9 The Transport Assessment will look into PTAL in further detail, using the TfL tool in conjunction with accession modelling and primary spread sheet calculations.

2.2.10 The site is generally easily accessed from public transport. Bus route 274 runs past the site on Agar Grove and the Overground station is approximately 700m walk from the site. St Pancras Way and York Way provide access to further bus routes.

Highways

2.2.11 The vehicular access to the site is via Agar Grove which links to York Way (A5200) in the east and St Pancras Way (A5202) in the west.

2.2.12 Camden Road (A503) runs to the north of the site and is part of the Transport for London Road Network (TLRN).

2.2.13 The A1 is approximately two kilometers east of the site. In order to understand the traffic flow in the surrounding road network it is anticipated that traffic turning counts will be commissioned at the following junctions:

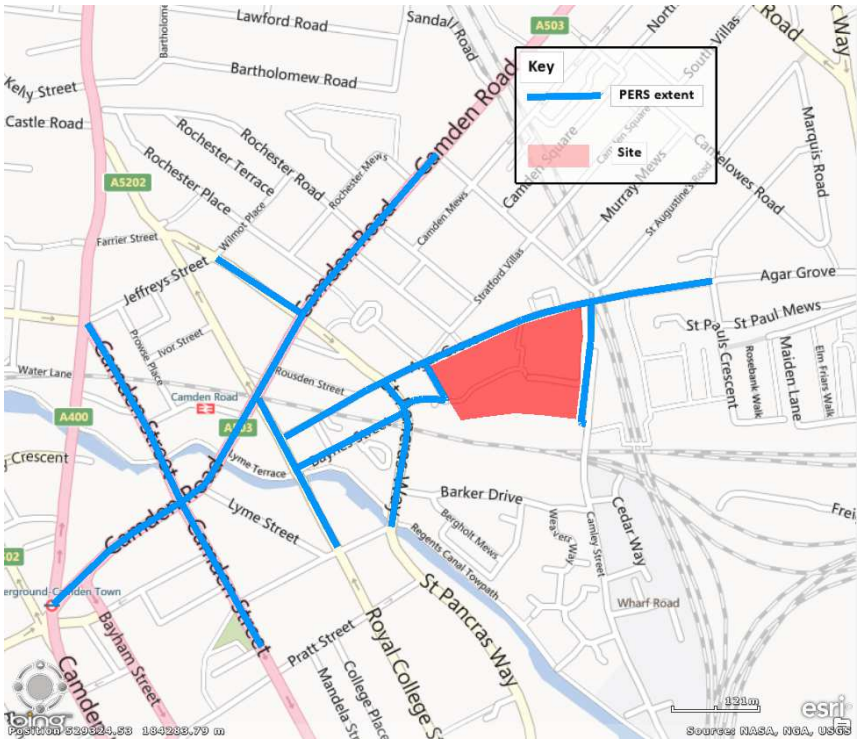
- Agar Grove / Agar Place;
- Agar Grove / Estate Access/ Murray Street; and
- Agar Grove / St Pancras Way / Randolph Street.

2.2.14 This is subject to discussions and agreement with LBC Highways.

2.3 PERS audit

2.3.1 It is proposed that a Pedestrian Environment Review System (PERS) audit is undertaken as part of this redevelopment. The suggested extent of this audit is given in Figure 2.2.

Figure 2.2: Proposed PERS audit extent



2.3.2 This extent will be split up into individual links and any formal crossing points will be identified for review. The bus stops outside of the site will be reviewed as public transport waiting areas and the routes to the two stations will be audited as routes.

2.3.3 The PERS audit will give a set of results identifying each link, route, crossing and public transport waiting areas as Red, Amber or Green. Red indicates that a specific facility requires improvement and Green represents good or very good provision. These results will be combined with observations and photographs from the audit to complete a PERS audit report which will be appended to the Transport Assessment.

2.4 Parking provision

2.4.1 There are currently approximately 67 parking spaces on site. It is LBC's aspiration that the returning residents will be re-provided with car parking spaces if they already have one on the existing site. The rest of the development will be car-free.

2.4.2 The Agar Grove estate lies within Controlled Parking Zone (CPZ) CAN. The parking in this zone is restricted to residents with parking permits only during the hours of 08:30 and 18:30 from Monday to Friday.

2.4.3 Agar Grove has 25 parking spaces for Residential Permit Holders between St Pancras Way and Murray Street. There are also six pay and display parking bays on Agar Grove outside of the Ashmore block. Agar Place has four bays for Residential Permit Holders and Wrotham Road has six.

2.4.4 On Agar Grove and Agar Place there is provision for permit holder parking, there are also six pay and display bays on Agar Grove outside the Ashmore block.

2.5 Development quantum

2.5.1 The development proposals are not final at this stage. However, there will be approximately 600 units and 67 parking spaces. The cycle parking will be provided according to the standards set in the London Plan early minor alterations 2012.

3 Scope of Work

3.1 Transport Assessment structure

3.1.1 Due to the scale of the redevelopment it is proposed that we provide a full Transport Assessment alongside a Delivery and Servicing plan and a full Travel Plan for residential land use as per the TfL March 2011 Travel Plan Guidance.

3.1.2 Consideration has also been given to the TfL guidance `Transport Assessment Best Practice` published in April 2010 as well as Department for Transport (DfT) guidance.

3.1.3 Based on both the DfT and TfL guidance, the production of our Transport Assessment report will include the following sections:

- Introduction and Background;
- Baseline Conditions, including PERS audit;
- Committed Developments;
- Development Proposals;
- Policy Review;
- Parking Standards;
- Trip Generation Assessment;
- Transport Impact Assessment;
- Mitigation, including Framework Delivery and Service Plan; and
- Summary and Conclusions.

3.1.4 The Transport Assessment will be appended by a Travel Plan and a PERS audit report.

3.2 Introduction and background

3.2.1 This section would include contextual background including a description of the application site in terms of its location, existing land use and access to local facilities.

3.2.2 This section will also identify the site challenges and opportunities.

3.3 Baseline conditions

3.3.1 This task will involve providing a description of the baseline transport conditions in the vicinity of the site. It will also identify key strategic issues that may impact on the redevelopment proposals.

3.3.2 Existing land uses and any vehicle, cycle and motorcycle parking associated with the site would be described along with on-street parking controls and usage.

3.3.3 Information will be provided regarding existing delivery and servicing arrangements and highlight any possible issues.

3.3.4 Attention will be given to pedestrian flows in the vicinity of the site and a detailed study will be undertaken to identify existing pedestrian and cycle networks and facilities.

3.3.5 An audit of current public transport provision (including all modes) will be required including routes, frequencies, interchanges and capacities.

3.3.6 Accident data for the previous three years in the study area will be obtained and analysed to identify any significant highway safety issues and provide an analysis of the recent accident history in the area.

3.3.7 Base trip generation will be estimated for the existing residential site use using the TRAVL database. This will provide a basis for estimating the net impacts of the proposed development upon the transport networks.

3.3.8 To provide a greater understanding of the highway network in proximity to the site, traffic turning counts will be undertaken.

3.4 Committed developments

3.4.1 Planning permission has recently been granted for the redevelopment of the Maiden Lane estate which is approximately 200 meters from the Agar Grove estate. The redevelopment of Maiden Lane will comprise of circa 270 units. This committed redevelopment will be considered in our Transport Assessment in terms of a cumulative effect.

3.4.2 This section will also take into consideration any other committed developments the LBC bring to our attention and discuss the potential impacts these developments might have on our proposed development.

3.5 Development proposals

3.5.1 The Transport Assessment will include a detailed description of the redevelopment proposals that have an influence on transport matters, for example; development quanta, facilities to support alternative modes (e.g. bicycle parking), car parking supply, public transport facilities and access options

3.6 Policy review

3.6.1 A review of local, regional and national policy related to the redevelopment site and the proposals will be required to identify potential constraints to redevelopment. The policy review will include:

- National Planning Policy Framework;
- The London Plan July 2011;
- The Mayor's Transport Strategy;
- LBC Local Development Framework; including
- LBC Core Strategy.

3.6.2 The completion of this task will provide guidance on development proposal requirements such as the number of car and cycle parking spaces required.

3.7 Parking standards

3.7.1 The approach to car parking will be discussed with LBC. As part of the Transport Assessment we will outline what levels of car and cycle parking are required for this redevelopment in line with policy requirements and standards. The redevelopment is likely to be car-free with parking only for returning car-owning residents.

3.7.2 A brief outline of current policy guidelines on cycle parking is given below for purposes of reference.

3.7.3 LBC's Development Policies document suggests one cycle parking space be provided per residential unit with visitor cycle parking to be provided at one space per every 10 units after the first 20 units.

3.7.4 The London Plan suggests that one space should be provided for each 1 to 2 bedroom dwelling, two for each dwelling with three or more bedrooms and an additional space for every 40 units, to be used by visitors.

3.7.5 Higher standards are outlined in the Code for Sustainable Home (CFSH). To achieve the higher two credit rating, cycle parking must be provided at a rate of; one space per dwelling of up to one bedroom; two spaces per dwelling of between two and three bedrooms; and four spaces for every dwelling with four or more bedrooms.

3.7.6 London Plan standards for cycle parking will be followed as a minimum.

3.8 Trip generation assessment

3.8.1 In this section, the existing trips generated by the site would be estimated using the TRAVL and TRICS databases. These trips would then be distributed over the highways, public transport and pedestrian networks. The trips on the network as a result of the proposed redevelopment would be calculated in the same way.

3.8.2 Future delivery and servicing trip distribution and timing would also be discussed in this section.

3.8.3 We have undertaken an initial review of the TRAVL and TRICS databases to identify sites that broadly match the existing and proposed sites in terms of land use and locational characteristics. This is detailed in Chapter 4.

3.9 Transport impact assessment

3.9.1 The total additional number vehicle trips calculated to be generated by the redevelopment will be assigned to the road network based on the current traffic counts.

3.9.2 Based upon the identified trip rates; the proposed development of up to 600 units would generate a total of 818 trips in the morning peak hour and 796 trips in the evening peak hour.

3.9.3 The impact of the development will also be assessed on the public realm, public transport network and on the pedestrian and cycle routes.

3.10 Mitigation strategy

3.10.1 The impact of the development on the transport network will be mitigated through measures such as travel plans, delivery and servicing plans and further design measures such as enhanced pedestrian and cycle links within the site.

3.10.2 A mitigation strategy will be prepared to ensure that any residual traffic impacts from the development are minimised and acceptable to LBC.

3.11 Delivery and Servicing Plan

3.11.1 A Delivery and Servicing plan will be prepared as part of the Transport Assessment which will include information about refuse collection points and delivery points. Strategy to reduce the delivery and servicing related trips will also be included within this section.

3.11.2 Access and servicing for the nursery that will be retained to the south of the site will also be considered here.

3.11.3 The Transport Assessment will include swept path analysis for a refuse collection vehicle and a delivery vehicle servicing the site which will be agreed with LBC to ensure that the proposed internal network is suitably accessible by a refuse collection vehicle. Currently refuse is collected weekly on a Tuesday from the estate.

3.12 Construction Management Plan

3.12.1 The Transport Statement will also include an outline Construction and Logistics Plan. This will set down the measures that will be considered in order to ensure that the demolition of the existing building and the construction of the proposed development is undertaken in an efficient but sustainable way. Further it will ensure that there is negligible impact on the neighbouring residents due to construction traffic.

3.13 Travel Plan

3.13.1 A Residential Travel Plan will be prepared and appended to the Transport Assessment, it will provide a set of measures aimed at encouraging sustainable travel tailored to the use of the site. An action plan for implementation of these measures and monitoring the impact the travel plan has on the travel behaviour of the site occupants will also be included.

3.13.2 The travel plan will be based on March 2011 TfL Travel Plan Guidance. The development will require a strategic level travel plan and will be submitted with an ATTrBuTE assessment.

3.14 Summary

3.14.1 This section will provide a summary and conclude the Transport Assessment.

4 Trip Generation

4.1 Introduction

4.1.1 This section details the methods and assumptions used to estimate trip generation. This is subject to agreement with LBC.

4.1.2 The agreed trip rates and mode splits are proposed to be used on the net increase in residential units. This section presents the trip rates and mode splits proposed to be used to assess the trip generation.

4.1.3 Trip rates will be compared from the TRAVL and TRICS databases and mode splits will be compared from the TRAVL database and the 2011 Census. A final trip rate per unit and mode split will then be concluded.

4.1.4 When calculating trip rates and mode splits, two different sets of selections are made. The proposed site will be made up of 600 units, of which circa 67 will have one parking space provided per unit. The remaining circa 533 units will be largely car-free.

4.2 Trip rate estimation

4.2.1 This section will compare the trip rates provided by the TRAVL and TRICS databases in context of the proposed site. Trip rates will be considered for the car-free units separately to the units with parking provision. A final trip rate will then be concluded.

TRAVL database

4.2.2 Sites which have been surveyed in the last ten years and are located in inner London have been selected from the TRAVL database, a full list of these sites is given in Appendix A. The suitability of the sites in the context of the proposed development is also presented in Appendix A, the sites which are contextual to the units which have parking are labelled as ‘A’ and those that are contextual to the car-free units are labelled as ’B’. Any sites with an ‘N’ in the suitability column were not taken forward for trip generation calculations.

4.2.3 Since the PTAL across the site varies so much, it has not been considered in the trip generation, rather walking distance to bus and rail links has been considered. Further detail as to what made a site suitable or not suitable is provided in Appendix A.

A: Units with car parking

4.2.4 Table 4.1 provides a summary of the TRAVL sites chosen to calculate the trip generation for the units which will have one parking space provided per unit. Since it is recognised that many of the residents currently provided with parking do not use it, a site with a lower parking ratio has been included in the calculations.

Table 4.1: Comparison of TRAVL sites (units with parking)

Ref	Site	Borough	Units	Parking	Parking ratio	Daily trips per unit
A	Agar Grove – 1:1 parking	Camden	67	67	1	-
5	Stanley Close	Greenwich	156	175	1.12	10.25
16	Sewardstone Road	Tower Hamlets	67	29	0.42	5.55

4.2.6 The trip rate per unit generated by the selected sites is given in Table 4.2

Table 4.2: TRAVL trip rate per unit (units with parking)

Time period	Trips in	Trips out	Total
AM Peak (08:00 to 09:00)	0.13	0.76	0.89
PM Peak (17:00 to 18:00)	0.56	0.39	0.95
Total Daily (07:00 to 22:00)	4.51	4.57	9.08

B: Car-free units

4.2.7 Table 4.3 summarises the TRAVL sites selected for the trip generation calculation for the car-free units.

4.2.8 There is a smaller selection of car-free sites on the TRAVL database than there are units with parking provided. In total there are only two car-free sites in the TRAVL database which are located in inner London and have been surveyed in the last ten years. One of these sites was part of a mixed use development which was less than 2 minutes walk from an Underground station and appeared to have no on-street parking restrictions. The remaining site provides a good fit for the proposed development since it is also located in Camden, in CPZ and there is a similar walking distance to the nearest rail/Underground interchange.

Table 4.3: Comparison of TRAVL site (car-free units)

Ref	Site	Borough	Units	Parking	Parking ratio	Daily trips per unit
B	Agar Grove – car-free	Camden	533	0	0	-
8	Green Dragon House	Camden	29	0	0	9.48

4.2.9 The trip rate per unit generated by the selected sites is given in Table 4.4.

Table 4.4: TRAVL trip rate per unit (car-free units)

Time period	Trips in	Trips out	Total
AM Peak (08:00 to 09:00)	0.17	0.86	1.03
PM Peak (17:00 to 18:00)	0.59	0.41	1.00
Total Daily (07:00 to 22:00)	4.72	4.76	9.48

4.2.10 The selections made on TRAVL allow the two different aspects of the site to be considered separately. The trip rates for the car-free units and those with parking provided are summarised in Table 4.5. As shown, the trip rate per unit is very similar for the units with car parking provision and those which are car-free.

4.2.11 Overall approximately nine trips a day are expected per residential unit and this is considered reasonable.

Table 4.5: Comparison of TRAVL trip rates (units with and without parking)

Time Period	Trips In		Trips Out		Total	
	Parking provided	Car-free	Parking provided	Car-free	Parking provided	Car-free
AM Peak (08:00 to 09:00)	0.13	0.17	0.76	0.86	0.89	1.03
PM Peak (17.00 to 18.00)	0.56	0.59	0.39	0.41	0.95	1.00
Total Daily (07:00 to 19:00)	4.51	4.72	4.57	4.76	9.08	9.48

TRICS database

4.2.12 The TRICS database has also been consulted to provide an alternative set of trip rates. Since many of the sites in TRICS are not located in London the following selection criteria has been used:

- Located in town centre, edge of town centre, suburban area or neighbourhood centre;
- Mix of private and non-private housing;
- Surveys from the last ten years;
- Located in England; and
- Sites which provide multi-modal trip rates.

4.2.13 Within these selection criteria, no TRICS sites that were car-free could be found. Therefore the same selection would have to be used for both the car-free units and those with parking provided; adjusting the mode split to redistribute car drivers to other modes.

4.2.14 The sites which have been selected from the TRICS database are summarised in Table 4.6.

Table 4.6: Comparison of TRICS sites

Ref	Site	Location	Units	Parking	Parking ratio	Daily trips per unit
A	Agar Grove – 1:1 parking	Camden	67	67	1	-
B	Agar Grove – car-free	Camden	533	0	0	-
2	DV-03-M-01 – Topsham Road (houses and flats)	Exeter	61	58	0.95	4.967
4	HC-03-M-02 – Coombe Way (blocks of flats)	Farnborough	253	219	0.87	3.791
6	KC-03-M-01 – High Street (blocks of flats)	Ramsgate	103	76	0.74	4
8	NH-03-M-01 – Memorial Avenue (terraced / flats)	Plaistow	45	44	0.98	9.023

4.2.15 The trip rate per unit generated by the selected sites is given in Table 4.7.

Table 4.7: TRICS trip rate per unit

Time period	Trips in	Trips out	Total
AM Peak (08:00 to 09:00)	0.1	0.36	0.46
PM Peak (17:00 to 18:00)	0.33	0.17	0.50
Total Daily (07:00 to 19:00)	2.16	2.34	4.50

4.3 Trip rate comparisons

4.3.1 Trip rates have been taken from both the TRAVL and TRICS databases.

4.3.2 The TRICS database did not have any trip rates for similar sites which were car-free, and the surveys only covered 07:00 to 19:00. Therefore trip rates can only be compared for the part of the site which provides parking and only until 19:00.

4.3.3 To compare these sites, the daily trip rates calculated using the TRAVL database for the units which provide parking have been adjusted to cover the 07:00 to 19:00 time period only, as done in TRICS. The peak and daily trips for the units with parking provided from each database are compared in Table 4.8.

Table 4.8: Comparison between TRICS and TRAVL trip rates

Time Period	Trips In		Trips Out		Total	
	TRAVL	TRICS	TRAVL	TRICS	TRAVL	TRICS
AM Peak (08:00 to 09:00)	0.13	0.1	0.76	0.36	0.89	0.46
PM Peak (17.00 to 18.00)	0.56	0.33	0.39	0.17	0.95	0.50
Total Daily (07:00 to 19:00)	3.36	2.16	3.71	2.34	7.07	4.50

4.4.1 As shown the trip rates given by TRAVL are higher and this is generally more representative of a London site. The trip rate information given by the TRAVL database also extends past 19:00, to 22:00 which is again more representative of an inner London site where people are more likely to work later or socialise after work. The TRAVL database also allows for trip rates to be generated separately for the car-free aspect of the site.

4.4.2 The separate trip rates given by TRAVL for the car-free units and the units with parking will be taken forward as they are the best fit to the site. Appendix C shows these trip rates by the hour.

4.5 Mode split estimations

4.5.1 This section will compare the trip rates given by the TRAVL database and the 2011 Census in context of the proposed site. Where possible, mode splits will be considered for the car-free parts of the development separately to the units with parking provision. A final mode split will then be concluded.

TRAVL database

4.5.2 As in calculation of trip rates, calculations have been completed separately for the car-free units and the units to have parking provided. The mode splits have been calculated using the same selection of sites as were used for the trip generation calculations.

4.5.3 The mode split given by TRICS is less specific, only identifying vehicle occupants, public transport users, cyclists and pedestrians. This mode split would not allow for differentiation between those who use the bus and those who use the train; and between vehicle passengers and vehicle drivers. In addition to this, the mode share given by TRICS is not specific to London or inner city sites, where it is likely to differ due to the alternative options available. The Census provides site specific data.

A: Units with parking provided

4.5.4 The mode split for the units with parking from by TRAVL is presented in Table 4.9.

4.5.5 It suggests that approximately 30% of people are likely to drive. Approximately 3% would get the Underground, approximately a quarter would use rail and approximately 5% would use the bus. The site is approximately 700m walk from the Overground and a kilometre from the Underground. The nearest rail station is St Pancras International which is 1.4 kilometres, and buses run past the site.

Table 4.9: TRAVL mode split (units with parking)

Mode	Mode split
Car Drivers	29.58%
Bus	5.02%
Car Passenger	13.55%
Motorcycle	0.30%
Pedal cycle	3.65%
Rail	25.42%
Taxi	0.41%
Underground/DLR	3.09%
Walk	18.98%
Total	**100.00%**

B: Car-free units

4.5.6 The mode split for car-free units from TRAVL is given in Table 4.10.

4.5.7 The public transport mode share in Table 4.10 does not fit the site's characteristics. No consideration is given to rail though the site is closer to the Overground than the Underground.

Table 4.10: TRAVL mode split (car-free units)

Mode	Mode split
Bus	31.75%
Motorcycle	4.74%
Pedal cycle	9.49%
Underground	16.43%
Walk	37.59%
Total	**100.00%**

Census 2011

4.5.8 The site is located in the Cantelowes ward. The 2011 Census gives vehicle ownership for this ward as 0.44 vehicles per residential unit.

4.5.9 The 2011 Census has been consulted to provide the mode split for people travelling to work. Of those travelling to work in the Cantelowes ward, approximately 8% work from home. Table 4.11 gives the mode split for those who travel to work according to the 2011 Census and then redistributes the car drivers across the public transport modes to provide a mode split for the car-free units.

Table 4.11: 2011 Census travel to work mode split in the Cantelowe ward

Mode	Census mode split (with car ownership)	Census redistributed (for car-free units)
Underground, Metro, Light Rail, Tram	25.6%	30.3%
Train	6.9%	8.2%
Bus, Minibus or Coach	25.1%	29.7%
Taxi	0.6%	0.6%
Motorcycle, Scooter or Moped	1.2%	1.2%
Driving in a car or van	10.5%	0%
Passenger in a car or van	0.7%	0.7%
Bicycle	12.0%	12.0%
On foot	16.7%	16.7%
Other	0.7%	0.7%

4.6 Comparison of mode splits

4.6.1 Mode splits have been obtained from the 2011 Census and the TRAVL database. These are compared in Table 4.14.

4.6.2 The TRAVL database gave a mode split for car-free units which did not include the Overground/national rail. The mode splits given for the units with parking provided were also not representative of the site's characteristics.

Table 4.12: Comparison of Census and TRAVL mode splits

Mode	Census mode split		TRAVL mode split	
	With parking	Car-free	With parking	Car-free
Underground, Metro, Light Rail, Tram	25.6%	30.3%	3.09%	16.43%
Train	6.9%	8.2%	25.42%	-
Bus, Minibus or Coach	25.1%	29.7%	5.02%	31.75%
Taxi	0.6%	0.6%	0.41%	-
Motorcycle, Scooter or Moped	1.2%	1.2%	0.30%	4.74%
Driving in a car or van	10.5%	0	29.58%	-
Passenger in a car or van	0.7%	0.7%	13.55%	-
Bicycle	12.0%	12.0%	3.65%	9.49%
On foot	16.7%	16.7%	18.98%	37.59%
Other	0.7%	0.7%	-	-

4.6.3 The Census mode split takes account of the locational characteristics since it is ward specific. It is also more up to date, and reflects the recent changes in London's transport network such as the increasing popularity of cycling.

4.7 Conclusion

4.7.1 It is concluded that the trip rates generated by TRAVL for the units that provide parking and those that are car-free will be used to estimate trip generation. This is since they appear to provide the best context for the redevelopment site and separately consider the car-free units and those with car parking.

4.7.2 The 2011 Census mode split will be applied to these trip rates, with the car driver trips redistributed across the public transport modes for car-free units. The mode splits from TRAVL do not seem to reflect the increasing popularity of cycling and the provisions of local public transport.

4.7.3 Data from Camden will be requested to ascertain exactly how many existing residents have parking permits or access to a parking space. The trips for these residents will be then calculated using the trip rates calculated for the units with parking provided and the original Census mode split. This will provide a more accurate trip generation.

4.7.4 Disabled units will be provided with a parking space. No new residents will be able to request an on street parking permit. Trips for the existing site will be calculated in the same way as the proposed.

4.7.5 For the remaining units in the existing and future scenarios, the trip rates calculated for the car-free aspect will be used. The redistributed mode split will then be applied to these trip rates.

4.7.6 The trips calculated for the existing site will then be subtracted from the trips calculated for the proposed site using the updated information. This will give a net increase in trips.

4.7.7 For the purposes of scoping, trip rates have been calculated for the proposed site assuming that all residents with access to a parking space use it and that no resident has an on street parking permit. Table 4.13 presents these trip rates whilst Table 4.14 gives the total number of AM peak, PM peak, and daily trips distributed by mode.

Table 4.13: Estimated number of trips generated by existing site

Time period	Trips in	Trips out	Total
Parking provided (67 units)			
AM Peak (08:00 to 09:00)	9	51	60
PM Peak (17:00 to 18:00)	37	26	63
Total Daily (07:00 to 22:00)	302	306	608
Car-free units (533 units)			
AM Peak (08:00 to 09:00)	92	459	551
PM Peak (17:00 to 18:00)	312	221	533
Total Daily (07:00 to 22:00)	2,518	2,536	5,054
Total (to nearest whole number)			
AM Peak (08:00 to 09:00)	101	511	611
PM Peak (17:00 to 18:00)	350	247	596
Total Daily (07:00 to 22:00)	2,820	2,842	5,662

Table 4.14: Estimated trips generated by mode for existing site

Mode	AM			PM			Daily		
	Trips in	Trips out	Total	Trips in	Trips out	Total	Trips in	Trips out	Total
Underground, Metro, Light Rail, Tram	30	152	182	104	73	178	839	846	1,685
Train	8	41	49	28	20	48	226	228	454
Bus, Minibus or Coach	29	149	179	102	72	174	823	829	1,653
Taxi	1	3	4	2	1	4	17	17	34
Motorcycle, Scooter or Moped	1	6	7	4	3	7	34	34	68
Driving in a car or van	1	5	6	4	3	7	32	32	64
Passenger in a car or van	1	4	4	2	2	4	20	20	40
Bicycle	12	61	73	42	30	72	338	341	679
On foot	17	85	102	58	41	100	471	475	946
Other	1	4	4	2	2	4	20	20	40
Total	**101**	**511**	**611**	**350**	**247**	**596**	**2,820**	**2,842**	**5,662**

5 Sources of Data

5.1.1 This section details where the external information for the Transport Assessment will be sourced from.

5.1.2 The trip generation study as shown in Chapter 4 will draw upon data from relevant sources including the TRAVL database, the TRICS database and Census as appropriate.

5.1.3 A traffic survey is proposed to be commissioned for the site. Subject to agreement with LBC Highways, this would include turning counts at the following junctions:

- Agar Grove / Agar Place
- Agar Grove / Estate Access
- Agar Grove / St Pancras Way / Randolph Street

5.1.4 Accident data for the site will be requested from TfL for the last three years.

6 Programme and Confirmation of Scope

6.1.1 The likely timescales are; the collation of planning application documents in September and October 2013; and final submission to take place November 2013.

6.1.2 This report has been prepared to agree the scope of the Transport Assessment and the trip generation and methodology with LBC Highways.

6.1.3 The proposed structure of the Transport Assessment follows the Transport for London guidance `Transport Assessment Best Practice`, April 2010.

Appendix A TRAVL site selection

Ref	Site	Borough	Units	Parking	Parking ratio	Daily trips per unit	Similarities to site	Differences to site	Suitability
A	Agar Grove – 1:1 parking	Camden	67	67	1	-	-	-	-
B	Agar Grove – car-free	Camden	533	0	0	-	-	-	-
1	Battersea Reach (private units)	Wandsworth	440	650	1.48	5.15	-	Mixed Use, Private units, Very high parking ratio	N
2	St George's Wharf (aff and priv)	Lambeth	927	793	0.86	6.39	Affordable and private units	Very high parking ratio, Adjacent to Vauxhall station	N
3	Riverside West (Priv and Aff)	Wandsworth	533	578	1.08	4.12	Includes affordable units, at least 5 minutes walk from rail and bus stops	Mixed use, only 3% of units are affordable	N
4	St George's Wharf (affordable)	Lambeth	173	76	0.44	3.4	All affordable units, 44% parking	Mixed use	N
5	Stanley Close	Greenwich	156	175	1.12	10.25	28% affordable units, parking just over 1:1, ten minute walk to railway station, within CPZ		A
6	St George Wharf (Aff and Priv) (2)	Lambeth	291	226	0.78	3.61	Includes affordable and private	Adjacent to Vauxhall station	N
7	Chelsea Bridge Wharf	Wandsworth	893	690	0.77	3.68	One third affordable housing, ten mins walk from nearest rail	Many regular bus services on road outside development	N
8	Green Dragon House	Camden	29	0	0	9.48	Car-free, affordable, in Camden, 5 minutes walk to Holborn Station	-	B
9	St George Wharf (Private)	Lambeth	118	150	1.23	3.92	-	All private, adjacent to Vauxhall Station	N
10	Winchester Mews	Camden	22	0	0	13.55	Car-free, includes affordable, in Camden	Mixed Use (includes leisure centre, library, doctors surgery and café), less than 2 mins walk from Underground and bus stops	N
11	Merryweather Place	Greenwich	226	104	0.46	4.49	Includes affordable units, DLR 350m from site, rail 450m walk, local bus 50m from site , parking ratio reflects under use at Agar Grove	Development only partially occupied	N
12	Imperial Wharf (Aff and Priv)	Hammersmith and Fulham	1263	1157	0.92	4.55	Approx 50% affordable	Adjacent to Imperial Wharf Overground/Rail Station, Mixed Use	N

Ref	Site	Borough	Units	Parking	Parking ratio	Daily trips per unit	Similarities to site	Differences to site	Suitability
13	Discovery Dock	Tower Hamlets	192	180	0.94	7.4	-	Adjacent to Canary Wharf Underground station	N
14	Putney Wharf (Private Units)	Wandsworth	209	240	1.15	8.15	-	Mixed use, Private units only	N
15	Sewardstone Road	Tower Hamlets	67	29	0.42	5.55	9 mins walk to nearest rail, some local bus services between 4-10 mins walk. Lower parking reflects current under-use at Agar Grove	-	A

Appendix B TRICS site selection

Ref	Site	Borough	Units	Parking	Parking ratio	Daily trips per unit	Similarities to site	Differences to site	Suitability
A	Agar Grove – 1:1 parking	Camden	67	67	1	-	-	-	-
B	Agar Grove – car-free	Camden	533	0	0	-	-	-	-
1	BR-03-M-02	BRISTOL	42	43	1.02	4.143	Bus stops within walking distance	Free on street parking nearby	N
2	DV-03-M-01	EXETER	61	58	0.95	4.967	some parts within CPZ, Bus stops within walking distance		A
3	ES-03-M-01	NEAR UCKFIELD	74	123	1.66	7.5	within walking distance of bus stops	Very rural, high parking provision and free on street parking	N
4	HC-03-M-02	FARNBOROUGH	253	219	0.87	3.791	within walking distance of bus stops and railway, built up area, all available parking on site is restricted	Free on street parking nearby	A
5	HE-03-M-01	HEREFORD	57	88	1.54	11.438		All houses, free on street parking	N
6	KC-03-M-01	RAMSGATE	103	76	0.74	4	Off-street parking is charged, within walking distance of bus stops		A
7	MS-03-M-01	LIVERPOOL	40	42	1.05	20.125	within walking distance of bus stop	All houses, free on street parking	N
8	NH-03-M-01	PLAISTOW	45	44	0.98	9.023	Within CPZ, in London, walking distance of bus stops and Underground/DLR		A
9	NY-03-M-03	HARROGATE	14	28	2.00	10.286		Very high parking provision, all houses	N
10	SC-03-M-02	NEAR FRIMLEY	342	622	1.82	6.371		Rural, very high parking provision	N
11	SC-03-M-04	GUILDFORD	130	268	2.06	5.846		Very high parking provision	N
12	SC-03-M-05	STAINES	52	66	1.27	5.019	within walking distance of bus stops	Mainly houses, unrestricted on street parking	N
13	WF-03-M-01	CHINGFORD	40	61	1.53	19.1	In London	Unrestricted free on street parking, all houses	N
14	WS-03-M-03	SHOREHAM BY SEA	48	132	2.75	8.958		Very high parking ratio	N

Appendix C Trip rates by hour

TRAVL - Average Trip Rate by Mode and Time

Report ID 9

List of Surveys:

Name	Address	Postcode	Survey Date
Sewardstone Road	Sewardstone RoadTower Hamlets	E2 9JN	14/06/2012
Stanley Close	Stanley CloseGreenwich,London	SE9 2DR	24/04/2008

Number of sites considered

2

Counts By Mode:

Mode: All Modes

Time Band	No of Sites	Trip Rate In	Trip Rate Out	Trip Rate	Predicted	Predicted	Predicted Trips Total			
07:00-07:3	2	0.00448	0.11211	0.11659	0.0	0.1	0.1			
07:30-08:0	2	0.05381	0.19283	0.24664	0.1	0.2	0.2			
08:00-08:3	2	0.08072	0.31839	0.39910	0.1	0.3	0.4	AM Peak	0.13	0.76	0.89
08:30-09:0	2	0.04933	0.44395	0.49327	0.0	0.4	0.5				
09:00-09:3	2	0.12108	0.16592	0.28700	0.1	0.2	0.3				
09:30-10:0	2	0.12108	0.06726	0.18834	0.1	0.1	0.2				
10:00-10:3	2	0.06278	0.18386	0.24664	0.1	0.2	0.2				
10:30-11:0	2	0.06726	0.13453	0.20179	0.1	0.1	0.2				
11:00-11:3	2	0.09865	0.08072	0.17937	0.1	0.1	0.2				
11:30-12:0	2	0.09417	0.09865	0.19283	0.1	0.1	0.2				
12:00-12:3	2	0.12108	0.07623	0.19731	0.1	0.1	0.2				
12:30-13:0	2	0.10762	0.08520	0.19283	0.1	0.1	0.2				
13:00-13:3	2	0.08969	0.13004	0.21973	0.1	0.1	0.2				
13:30-14:0	2	0.07175	0.10314	0.17489	0.1	0.1	0.2				
14:00-14:3	2	0.10762	0.09865	0.20628	0.1	0.1	0.2				
14:30-15:0	2	0.08072	0.08969	0.17040	0.1	0.1	0.2				
15:00-15:3	2	0.17040	0.15695	0.32735	0.2	0.2	0.3				
15:30-16:0	2	0.35426	0.13004	0.48430	0.4	0.1	0.5				
16:00-16:3	2	0.18834	0.12556	0.31390	0.2	0.1	0.3				
16:30-17:0	2	0.20628	0.16143	0.36771	0.2	0.2	0.4				
17:00-17:3	2	0.29148	0.17937	0.47085	0.3	0.2	0.5	PM Peak	0.56	0.39	0.95
17:30-18:0	2	0.26457	0.21076	0.47534	0.3	0.2	0.5				
18:00-18:3	2	0.26009	0.19283	0.45291	0.3	0.2	0.5				
18:30-19:0	2	0.29596	0.17040	0.46637	0.3	0.2	0.5				
19:00-19:3	2	0.19731	0.17040	0.36771	0.2	0.2	0.4				
19:30-20:0	2	0.32287	0.26457	0.58744	0.3	0.3	0.6				
20:00-20:3	2	0.20179	0.08969	0.29148	0.2	0.1	0.3				
20:30-21:0	2	0.18834	0.15695	0.34529	0.2	0.2	0.3				
21:00-21:3	2	0.11659	0.06278	0.17937	0.1	0.1	0.2				
21:30-22:0	2	0.12108	0.11211	0.23318	0.1	0.1	0.2				
Daily		**4.51120**	**4.56501**	**9.07621**							

Managed by MVA Consultancy on behalf of Transport for London

Printed On 04/07/2013 Predictor Type : No of Dwellings TRAVL Version : 8.18

Mode: All Modes	Total Trip Rate	Predicted	Predicted	Predicted Trips Total
Time Band	**No of Sites**	**Trip Rate In**	**Trip Rate Out**	
Peak Period For	**All Modes**			**0.35**
In	**15:30-16:00**			**0.44**
Out	**08:30-09:00**			**0.59**
Total	**19:30-20:00**			

Managed by MVA Consultancy on behalf of Transport for London

Printed On 04/07/2013 Predictor Type : No of Dwellings TRAVL Version : 8.18

TRAVL - Average Trip Rate by Mode and Time

Report ID 9

List of Surveys:

Name	Address	Postcode	Survey Date
Green Dragon House	Green Dragon House,Stukeley Street,Camd	WC2H 5LQ	11/09/2008

Number of sites considered **1**

Counts By Mode:

Mode: All Modes

Time Banc	No of Sites	Trip Rate In	Trip Rate Out	Total Trip Rate	Predicted Trips In	Predicted Trips Out	Predicted Trips Total				
07:00-07:3	1	0.00000	0.13793	0.13793	0.0	0.1	0.1				
07:30-08:0	1	0.00000	0.41379	0.41379	0.0	0.4	0.4				
08:00-08:3	1	0.03448	0.41379	0.44828	0.0	0.4	0.4				
08:30-09:0	1	0.13793	0.44828	0.58621	0.1	0.4	0.6				
09:00-09:3	1	0.06897	0.24138	0.31034	0.1	0.2	0.3	**am peak**	**0.17**	**0.86**	**1.03**
09:30-10:0	1	0.13793	0.17241	0.31034	0.1	0.2	0.3				
10:00-10:3	1	0.00000	0.10345	0.10345	0.0	0.1	0.1				
10:30-11:0	1	0.00000	0.20690	0.20690	0.0	0.2	0.2				
11:00-11:3	1	0.20690	0.10345	0.31034	0.2	0.1	0.3				
11:30-12:0	1	0.06897	0.10345	0.17241	0.1	0.1	0.2				
12:00-12:3	1	0.17241	0.20690	0.37931	0.2	0.2	0.4				
12:30-13:0	1	0.17241	0.13793	0.31034	0.2	0.1	0.3				
13:00-13:3	1	0.27586	0.10345	0.37931	0.3	0.1	0.4				
13:30-14:0	1	0.06897	0.13793	0.20690	0.1	0.1	0.2				
14:00-14:3	1	0.10345	0.06897	0.17241	0.1	0.1	0.2				
14:30-15:0	1	0.10345	0.20690	0.31034	0.1	0.2	0.3				
15:00-15:3	1	0.10345	0.24138	0.34483	0.1	0.2	0.3				
15:30-16:0	1	0.20690	0.06897	0.27586	0.2	0.1	0.3				
16:00-16:3	1	0.13793	0.06897	0.20690	0.1	0.1	0.2				
16:30-17:0	1	0.20690	0.10345	0.31034	0.2	0.1	0.3				
17:00-17:3	1	0.17241	0.17241	0.34483	0.2	0.2	0.3	**pm peak**	**0.59**	**0.41**	**1.00**
17:30-18:0	1	0.41379	0.24138	0.65517	0.4	0.2	0.7				
18:00-18:3	1	0.34483	0.06897	0.41379	0.3	0.1	0.4				
18:30-19:0	1	0.27586	0.10345	0.37931	0.3	0.1	0.4				
19:00-19:3	1	0.13793	0.06897	0.20690	0.1	0.1	0.2				
19:30-20:0	1	0.24138	0.03448	0.27586	0.2	0.0	0.3				
20:00-20:3	1	0.20690	0.13793	0.34483	0.2	0.1	0.3				
20:30-21:0	1	0.24138	0.06897	0.31034	0.2	0.1	0.3				
21:00-21:3	1	0.34483	0.10345	0.44828	0.3	0.1	0.4				
21:30-22:0	1	0.13793	0.06897	0.20690	0.1	0.1	0.2				
Daily		**4.72415**	**4.75866**	**9.48274**							

Peak Period For All Modes

In	**17:30-18:00**	**0.41**
Out	**08:30-09:00**	**0.45**
Total	**17:30-18:00**	**0.66**