

# **Chapter 7 Traffic and Transport**

TOPIC	TRAFFIC AND TRANSPORT
<b>AUTHOR</b>	Peter Brett Associates LLP (PBA)
<b>SUPPORTING APPENDIX</b>	ES Volume 3: Appendix: Traffic and Transport: Annex 1: Transport Assessment.
<b>KEY CONSIDERATIONS</b>	The primary issues and considerations that have been borne in mind throughout design of the Proposed Development relate to pedestrian and cycle provision through the site, car parking and delivery and servicing arrangements. These have been finalised and developed to ensure that any significant traffic and transport related effects are avoided at the first instance.
<b>KEY LEGISLATION</b>	n/a – there is no legislation relevant to the assessment of traffic and transport effects of a new / proposed development.
<b>KEY NATIONAL PLANNING POLICY</b>	<ul style="list-style-type: none"> <li>MHCLG, 2018; National Planning Policy Framework (NPPF)</li> </ul>
<b>KEY REGIONAL PLANNING POLICY</b>	<ul style="list-style-type: none"> <li>GLA, 2016; The London Plan;</li> <li>GLA 2017; Draft London Plan; and</li> <li>GLA, 2018; Mayor's Transport Strategy.</li> </ul>
<b>KEY LOCAL PLANNING POLICY</b>	<ul style="list-style-type: none"> <li>LBS, 2017; New Southwark Plan (Proposed Submission Version); and</li> <li>LBS, 2011; Southwark Core Strategy.</li> </ul>
<b>OTHER RELEVANT STANDARDS &amp; GUIDANCE</b>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> <li>Department for Communities and Local Government, 2014; Planning Practice Guidance - Travel Plans, Transport Assessments and Statements;</li> <li>Institute of Environmental Management and Assessment (IEMA), 2004; Guidelines for Environmental Impact Assessment;</li> <li>Institute of Environmental Assessment (now IEMA), 1993; Guidelines for the Environmental Assessment of Road Traffic;</li> <li>Institute of Environmental Management and Assessment (IEMA), 2004; Guidelines for Environmental Impact Assessment (the 'IEMA Guidelines');</li> <li>Highways Agency, 2007; Design Manual for Roads and Bridges;</li> <li>Manual for Streets, 2007; Chartered Institution of Highways &amp; Transportation;</li> <li>Manual for Streets 2, 2010; Chartered Institution of Highways &amp; Transportation;</li> <li>LBS, 2014; Waste management guidance notes for residential developments;</li> <li>GLA, 2016; Housing Supplementary Planning Guidance; and</li> <li>TfL, 2017; Healthy Streets for London.</li> </ul> <p>Plus, other standards and guidance referenced where relevant throughout this chapter.</p>
<b>CONSULTATION</b>	<p>The EIA Scoping Opinion is presented in ES Volume 3 Appendix: EIA Methodology Annex 1 which confirmed acceptability of the scope and method proposed for the Transport Assessment (TA). The LBS specifically requested that the TA be appended to the ES.</p> <p>TfL responded to the request for a scoping opinion with several comments on the scope of the TA. These have been taken into consideration throughout preparation of the TA and this ES chapter on Traffic and Transport.</p> <p>TfL and LBS officers have been engaged throughout the pre-application process in order to agree aspects of the Proposed Development's design and the assessment of its impacts and effects on the local transport networks.</p>

## ASSESSMENT METHODOLOGY

### Defining the Baseline

#### Current Baseline Conditions

- 7.1** The current baseline conditions have been determined based on a site visit which has been supplemented by detailed reviews of the site's existing uses and the current transport networks within the site's vicinity that are expected to be used by the site's users, including; bus, underground, national rail, pedestrian, cycle and local highway routes.
- 7.2** Traffic counts of the site's existing uses and the surrounding local highway network have been undertaken using automatic traffic counters (ATCs) and arrival/departure counts. The ATCs were in place for 7 days between 5<sup>th</sup> and 12<sup>th</sup> July 2017.

**7.3** The arrival/departure counts of the existing site were conducted on Wednesday 5<sup>th</sup> July 2017 for a 16-hour period between 04:00 and 20:00. These were tabulated by the survey company, however; video footage was also obtained between 22:30 on Tuesday 4<sup>th</sup> and 22:00 Wednesday 5<sup>th</sup> July. PBA undertook further counts using the video footage to extend the assessment period to a full 24-hour period.

**7.4** Information relating to public transport services has primarily been obtained from TfL's online resources which set out bus and underground routes and frequencies whilst the National Rail website provided detail on local rail services, such as at Denmark Hill and Peckham Rye stations.

**7.5** An assessment of the current pedestrian and cycle environments has been undertaken through audits of each; a Pedestrian Environment Review System (PERS) for the former and a Cycling Level of Service (CLoS) for the latter. The scope of each of these was agreed with both LBS and TfL officers.

**7.6** A personal injury collision (PIC) review has been conducted across a study area agreed with LBS and TfL officers comprising the local highway network surrounding the site. An assessment has been made of the most recent three-year study period up to 31<sup>st</sup> December 2016 and determines whether there are any integral highway safety issues that could be exacerbated by the Proposed Development.

**7.7** A review of accidents occurring over a three-year period up to 31<sup>st</sup> December 2016 within the area surrounding the site has been undertaken in order to identify any existing accident clusters, where 10 or more accidents occurred over the three-year period.

**7.8** In order to understand local car ownership and travel characteristics of existing residents and individuals working in the local area, 2011 Census 'car or van ownership' and 'method of travel to work' data have been ascertained and reviewed for the two middle layer super output areas (MSOAs) within which the site is situated; Southwark 017 and Southwark 020.

#### Future Baseline Conditions / Do Nothing Scenario

**7.9** A quantitative assessment of the Proposed Development's impacts on the local highway network has been made within the Transport Assessment (TA). This necessitates determining the traffic flows on the local highway network in the future with (when complete and operational) and without the Proposed Development.

**7.10** The assessment year for the demolition and constructions works is taken as 2019, the peak for vehicle movements associated with the demolition and construction programme. The assessment year for the completed and operational Proposed Development is taken as 2021.

**7.11** The DfT's TEMPro database (v7.2, NTM AF15 Dataset) has been used to determine the locally adjusted growth factors for background traffic within the MSOAs of Southwark 017 and Southwark 020 in both 2019 and 2021. An average of the factors for the weekday AM peak (08:00-09:00), PM peak (17:00-18:00), average day and average weekday are shown in Table 7.1 and Table 7.2 for 2019 and 2021 respectively. An average of the two MSOAs has been applied to the assessments.

**Table 7.1 TEMPro Locally Adjusted Growth Factors (2017-2019)**

MSOA	AM peak	PM peak	Average weekday	Average day
Southwark 017	1.0372	1.0370	1.0369	1.0371
Southwark 020	1.0358	1.0357	1.0356	1.0359
<b>Average</b>	<b>1.0365</b>	<b>1.0364</b>	<b>1.0363</b>	<b>1.0365</b>

**Table 7.2 TEMPro Locally Adjusted Growth Factors (2017-2021)**

MSOA	AM peak	PM peak	Average weekday	Average day
Southwark 017	1.0748	1.0744	1.0743	1.0746
Southwark 020	1.0720	1.0718	1.0716	1.0722
<b>Average</b>	<b>1.0734</b>	<b>1.0731</b>	<b>1.0730</b>	<b>1.0734</b>

**7.12** Concerning future baseline public transport networks, there would likely be some changes to bus routing and frequency of the bus, rail and underground services serving the area. However, it is likely that this would not yet be determined by the operators and any information relating to these is not publicly-available. Furthermore, a quantitative assessment of impacts on these networks in the future year is not undertaken as part of the TA or this ES chapter.

**7.13** In respect of the future baseline for pedestrian and cycle networks, there are a number of proposals for cycle routes by LBS and TfL that would enhance the local network and access into the strategic routes (such as Cycle Superhighways) in the future. These proposals include Quietway 7 and the Southwark Spine. As with public transport, no quantitative assessment of the Proposed Development's impacts on pedestrian and cycle network is undertaken within the future year.

**Impact Assessment**

*Demolition and Construction*

**7.14** Estimates of demolition volumes and the quantities of materials to be used throughout the construction of the Proposed Development are presented within **Chapter 5: Demolition and Construction of this ES (Volume 1)** and these have been used to estimate the peak periods of daily heavy goods vehicle (HGV) movements associated with the proposed demolition and construction works.

**7.15** It is anticipated that peak vehicle movements will occur in 2019. The anticipated number of vehicle movements during this peak period is 20 per hour (10 vehicles in, 10 vehicles out).

**7.16** The works will generate a maximum of 100 vehicle movements per day (50 vehicles in, 50 vehicles out) during the peak works period in 2019.

**7.17** There will be a general policy of not providing any car parking on the site for construction workers, who will be encouraged to use public transport. Provisions will be made within the site for essential on-site parking, such as for emergencies.

*Assumptions*

**7.18** Several assumptions have been made by Bouygues relating to demolition volumes and quantities of materials to be used through the construction. These affect the level of vehicle movements associated with demolition and construction.

**7.19** Assumptions have been made by PBA relating to the routing of demolition and construction vehicle movements on the local highway network as this has not been agreed at this stage with LBS and TfL. However, it is expected that the majority would route to the site from the TfL Road Network (TLRN) at the A202 Camberwell New Road and A202 Peckham Road. Therefore, the assessment assumes that 50% of vehicles routes south on Southampton Way and 50% north on Southampton Way/New Church Road.

**7.20** Access to the site will be from Wells Way and Parkhouse Street, with all arriving vehicles routing via Cottage Green and Wells Way due to Parkhouse Street being one-way westbound. It has been assumed that 50% of departing vehicles would route via Parkhouse Street and 50% via Wells Way.

*Completed Development*

**7.21** An assessment of the completed development has been undertaken for a future year of 2021, when it is anticipated to be fully constructed and operational.

**7.22** Appropriate transport modelling tools have been used to assess the transport implications of the Proposed Development. Expected multi-modal trip generation for the Proposed Development has been based on the trip rate information databases TRICS v7.4.1, 2011 Census data and other survey information. Further detail on the trip generation approach is set out in the TA (**ES Volume 3, Appendix: Traffic and Transport, Annex 1 Transport Assessment**).

**7.23** Given the level of existing observed vehicle trip generation and the expected trip generation of the Proposed Development, no junction capacity assessments have been undertaken due to the proposals generating fewer vehicle trips.

**7.24** Residential vehicle trips have been robustly determined as the assessment assumes that all 18 blue badge parking spaces would be used, and all would be well-used in both peak periods.

**7.25** Vehicle and bus passenger trips have been distributed onto their respective networks through assessment of 2011 Census method of travel to work data, which is set out in greater detail in the TA (**ES Volume 3, Appendix: Traffic and Transport, Annex 1 Transport Assessment**).

*Assumptions*

**7.26** Assumptions have been made regarding the distribution of vehicle trips onto the local highway network for both residential trips and delivery and servicing trips associated with both the residential and non-residential elements of the Proposed Development. Distribution has been based on 2011 Census data and assignment onto the local highway network has been undertaken using professional judgement.

**7.27** Due to limited data availability, assumptions have had to be made in relation to the delivery and servicing trip generation of several of the proposed non-residential uses including the café, gym, microbrewery and bike shop. The assumptions are robust in terms of daily trip generation.

**7.28** It is important to note that the trip generation exercise undertaken applies to a single weekday and it is assumed to be a single day with no differentiation between 18-hour and 24-hour. Therefore, the change in flows is the same for AADT and AAWT, whilst the percentage changes are slightly different.

**Defining Significance**

*Receptor Sensitivity*

**7.29** The IEMA Guidelines identify groups, locations and special interests which should be considered in the assessment. Categories of receptor sensitivity have been defined from the principles set out in the IEMA Guidelines and these have been used to outline in broad terms the sensitivity of receptors to traffic for the categories of effect assessed in this chapter, although in detail, each receptor assessed will have a different sensitivity to each specific effect (Table 7.3). The sensitive receptors considered within this assessment and their sensitivity are presented at the end of the Baseline Conditions section of this ES chapter.

**Table 7.3 Example Sensitive Receptors to Traffic and Transport Conditions, IEMA Guidelines**

High Sensitivity	Medium Sensitivity	Low Sensitivity
schools, colleges and other educational institutions (nurseries have been assumed to be included in this category)	hospitals, surgeries and clinics	open space
retirement / care homes for the elderly or infirm	parks and recreation areas	tourist / visitor attractions
roads used by pedestrians with no footways;	shopping areas	historical buildings
road safety black-spots	roads used by pedestrians with narrow footways	churches

**7.30** Given that a robust assessment of impacts on the public transport network is not possible due to the limited availability of baseline and future baseline data on which to assess impacts, such assessments are beyond the scope of this chapter and the TA. This chapter sets out a review of the Proposed Development's AM and PM peak hour bus trip generation and a review of the level of trips estimated to be on the Underground and National Rail network. These are reviewed in the context of the known available capacity across these modes of transport to ascertain (based on professional opinion) the scale of the effect and so effect significance.

*Magnitude of Impact*

**7.31** The 'Guidelines for the Environmental Assessment of Road Traffic' identify that the main transport impacts that could arise from new developments relate to the following:

- Severance;
- Driver delay;
- Pedestrian and cycle delay and amenity;
- Fear and intimidation;
- Accidents and road safety;
- Dust and dirt; and
- Hazardous loads.

**7.32** These impacts could arise during the demolition and construction works, in addition to when the Proposed Development is completed and in use. Further details of the approach to the assessment are provided below.

**7.33** The 'dust and dirt' criterion is not considered further within this chapter as it is covered within **Chapter 5: Demolition and Construction** and **Chapter 9 Air Quality of the ES (Volume 1)**.

**7.34** The 'hazardous loads' criterion is also not considered in this assessment, as it is deemed unlikely that the construction or operation of the Proposed Development will require the transportation of hazardous loads that would have the potential for a significant effect on receptors.

Severance

- 7.35 The IEMA Guidelines state that “severance is the perceived division that can occur within a community when it becomes separated by a major traffic artery.” Furthermore, “changes in traffic flow of 30%, 60% and 90% are regarded as producing ‘slight’, ‘moderate’ and ‘substantial’ changes in severance respectively”. However, the IEMA Guidelines acknowledge that the measurement and prediction of severance is extremely difficult. The assessment of severance needs to pay full regard to specific local conditions, in particular the location of pedestrian routes to key local facilities and whether or not crossing facilities are provided.
- 7.36 Volume 11, Section 3, Part 8, Chapter 6 of the Design Manual for Roads and Bridges entitled ‘Pedestrians and Others and Community Effects’ provides further guidance on the aspect of New Severance within a community in terms of the two-way Annual Average Daily Traffic flow (AADT) on a link. It states that new severance should be described in terms of “Slight”, “Moderate” or “Severe” and that these categories “... should be coupled with an estimate of the numbers of people affected, their location and the community facilities from which they are severed.”
- 7.37 The potential for severance effects are based on an assessment of the magnitude of traffic flow impact, which takes into account the thresholds within the IEMA Guidelines. Table 7.4 summarises these thresholds.

**Table 7.4 Severance – Magnitude of Impact**

Magnitude of Impact	Traffic Flow (AADT) Increase
High	>90%
Medium	60 – 90%
Low	30 – 60%
Very Low	<30%

Driver Delay

- 7.38 Delay to drivers can be estimated through capacity assessments at key points on the local highway network. The addition of new development-generated traffic could result in an increase in the number of vehicles using key routes and junctions. This may lead to additional delays depending on the existing operation, levels of background traffic and development-generated traffic.
- 7.39 Assessment of junction capacity and delay is undertaken through the use of standard practice analytical tools and junction analysis programs. Driver delay is only likely to be an issue requiring mitigation where junctions are operating beyond capacity.
- 7.40 Table 7.5 shows the magnitude of impact scale applied to the category of ‘driver delay’ at junctions and along road corridors.

**Table 7.5 Driver Delay – Magnitude of Impact**

Magnitude of Impact	Definition
<b>Driver Delay at Junctions</b>	
High	Average vehicle delay increases of more than 1 minute as a result of the Proposed Development during the peak hour periods
Medium	Average vehicle delay increases are between 30 and 60 seconds as a result of the Proposed Development during the peak hour periods
Low	Average vehicle delay increases are between 20 and 30 seconds as a result of the Proposed Development during the peak hour periods
Very Low	Average vehicle delay increases are less than 20 seconds as a result of the Proposed Development during the peak hour periods
<b>Driver Delay along Road Corridors</b>	
High	Average vehicle delay increases of more than 10 minute as a result of the Proposed Development during the peak hour periods
Medium	Average vehicle delay increases are between 5 to 10 minutes as a result of the Proposed Development during the peak hour periods
Low	Average vehicle delay increases are between 1 and 5 minutes as a result of the Proposed Development during the peak hour periods
Very Low	Average vehicle delay increases are less than 1 minute as a result of the Proposed Development during the peak hour periods

Pedestrian Delay and Amenity

- 7.41 Pedestrian delay for a particular walking journey can be increased by changes to traffic flows, and can affect the ability of pedestrians to cross roads. This, therefore, will affect an individual’s desire to make a particular walking journey. Changes in the volume, speed or composition of traffic are most likely to affect pedestrian delay, with the level of severity dependent on the general level of pedestrian activity and the physical condition of crossing points. Guidelines for the calculation of pedestrian delay are identified in DMRB Volume 11, Section 3.
- 7.42 It is important to note that qualitative aspects such as the quality of the pedestrian environment, and the trip generators served by these environments, also influence the propensity for individuals to walk. Sense of personal security and safety, gradient, permeability, legibility and maintenance of these infrastructures aid in encouraging their use and discouraging the use of the private car. These, in addition to the quantitative aspects of assessment such as changing traffic flows, are therefore an important consideration for a number of the criteria.
- 7.43 The determination of what constitutes a material impact on pedestrian delay is generally left to the judgement of the assessor and knowledge of local factors and conditions. However, the IEMA Guidelines suggest “a lower threshold of 10 seconds delay and an upper threshold of 40 seconds delay, for a link with no crossing facilities”. It further advises that the lower threshold equates to a two-way flow of approximately 1,400 vehicles per hour.
- 7.44 Table 7.6 shows the magnitude of impact categories applied to the assessment of pedestrian delay.

**Table 7.6 Pedestrian Delay – Magnitude of Impact**

Magnitude of Impact	Definition
High	Link subject to a two-way flow of 5,600+ vehicles per hour
Medium	Link subject to a two-way flow of 3,500-5,600 vehicles per hour
Low	Link subject to a two-way flow of 1,400-3,500 vehicles per hour
Very Low	Link subject to a two-way flow of less than 1,400 vehicles per hour

- 7.45 Pedestrian amenity is broadly defined as the relative pleasantness of a journey, which is affected by traffic flow, traffic composition and footway width/separation from traffic. The IEMA Guidelines suggest a “tentative threshold for judging the significance of changes in pedestrian amenity of where traffic flow (or its lorry component) is halved or doubled”. The magnitude of impact is a matter of professional opinion.

Fear and Intimidation

- 7.46 A further effect of traffic flows on pedestrian movements is the element of fear and intimidation individual travellers will experience with respect to vehicular movements. The impact of this factor is dependent on the volume of traffic, the heavy-duty vehicle (HDV) content, the width of footway and its proximity to the carriageway edge. As is the case with pedestrian delay and amenity, there are no commonly agreed thresholds for determining the magnitude of this impact, with appraisal based on the judgement of the assessor.
- 7.47 Nevertheless, the IEMA Guidelines do suggest some thresholds, based on previous research, which can be used and these are shown in Table 7.7.

**Table 7.7 Suggested Threshold Guidelines for Pedestrian Fear and Intimidation**

Degree of Hazard	Change in Average Traffic Flow over 18 Hour day (vehicles/hour)	Average 18-Hour HDV Flow	Change in Average Speed over 18 Hours (mph)
Extreme	1,800+	3,000+	20+
Moderate	1,200-1,800	2,000-3,000	15-20
Slight	600-1,200	1,000-2,000	10-15

- 7.48 Notwithstanding the thresholds set out above, the IEMA Guidelines suggest that they should be approached with a certain level of caution as the individual factors could be weighted by local circumstances to decide the overall value of intimidation. For example, a road may show higher speeds but lower flows; making crossing easier, or high flows but congested and constant traffic, therefore reducing total fear of passing vehicles but increasing crossing difficulties.

7.49 As outlined in the above sections on severance and pedestrian delay, the majority of roads in the surrounding area of the Proposed Development provide pedestrian facilities, including signalised pedestrian crossings.

7.50 Table 7.8 shows the magnitude-scale applied to the category ‘fear and intimidation’ for the purpose of this assessment.

**Table 7.8 Fear and Intimidation – Magnitude of Impact**

Magnitude of Impact	Definition
High	Increase in average traffic flow over 18 hours of 1,800+ vehicles/hr An average 18-hour HDV flow of 3,000+
Medium	Increase in average traffic flow over 18 hours of 1,200-1,800 vehicles/hr An average 18-hour HDV flow of 2,000-3,000
Low	Increase in average traffic flow over 18 hours of 600-1,200 vehicles/hr An average 18-hour HDV flow of 1,000-2,000
Very Low	Increase in average traffic flow over 18 hours of less than 600 vehicles/hr An average 18-hour HDV flow of less than 1,000

Accidents and Road Safety

7.51 The assessment of accident risk and highway safety is based upon existing accident rates and specific local circumstances to identify accident clusters. For example, should a particular link or junction be found to have a high existing accident rate, the addition of substantial traffic volumes generally would be expected to have an adverse effect on highway safety due to further increased opportunities for conflict. Mitigation measures may therefore be required.

7.52 A further assessment of highway safety may also include the comparison of accident rates at those locations identified for highway improvements related to capacity issues. An assessment of expected accident rates for a new junction design compared to the existing layout will identify future accident risk related to development-generated traffic.

7.53 The IEMA Guidelines state that “professional judgement will be needed to assess the implications of local circumstances, or factors, which may elevate or lessen risks of accidents, e.g. junction conflicts”.

7.54 As noted above, for the purpose of this assessment, a review of accidents occurring over a three-year period up to 31<sup>st</sup> December 2016 within the area surrounding the site has been undertaken in order to identify existing accident clusters, where 10 or more accidents occurred over the three-year period. No clusters have been identified within this assessment, which is further discussed later in this chapter under ‘Current Baseline Conditions’.

7.55 Table 7.9 shows the magnitude of impact categories applied to ‘accidents and road safety’ for the purpose of this assessment.

**Table 7.9 Accident and Road Safety – Magnitude of Impact**

Magnitude of Impact	Definition
High	Expected increase in accident risk of 15+% at the location of existing accident cluster
Medium	Expected increase in accident risk of 10%-15% at the location of existing accident cluster
Low	Expected increase in accident risk of 5%-10% at the location of existing accident cluster
Very Low	Expected increase in accident risk of less than 5% at the location of existing accident cluster

*Effect Nature and Scale*

7.56 The scale of traffic and transport effects has been determined based on the magnitude of impact, receptor sensitivity and professional judgement. This is shown in Table 7.10.

7.57 In terms of the nature of effects, these can either be beneficial or adverse.

**Table 7.10 Effect Scale Matrix**

		Sensitivity of Receptor		
		High	Medium	Low
Magnitude of Impact	High	Major	Major	Moderate
	Medium	Major	Moderate	Minor
	Low	Moderate	Minor	Negligible
	Very Low	Negligible	Negligible	Negligible

*Effect Significance*

7.58 Major and moderate adverse/beneficial effects are deemed to be significant, whilst negligible and minor adverse/beneficial effects are considered to be not significant.

**BASELINE CONDITIONS**

*Current Baseline Conditions*

7.59 The site bounded to the east by Wells Way, the north by Parkhouse Street and to the south by further warehousing space.

7.60 The site is currently occupied by buildings providing office, light industrial (packaging), storage and warehousing uses and is known as Burgess Business Park. Many of the existing properties on the site are vacant or underused, and some have deteriorated.

7.61 There are approximately 50 car parking spaces within the main site and a number of areas of hard standing outside of the public highway that are informally parked on along Parkhouse Street and Wells Way.

7.62 It is understood that there is a total of 145 existing jobs within the site whilst the total commercial floor area is 12,559.3m<sup>2</sup> GIA of which approximately 41% (5,117.4m<sup>2</sup>) is occupied. There are also three dwellings at 45 Southampton Way which will be unaffected by the Proposed Development.

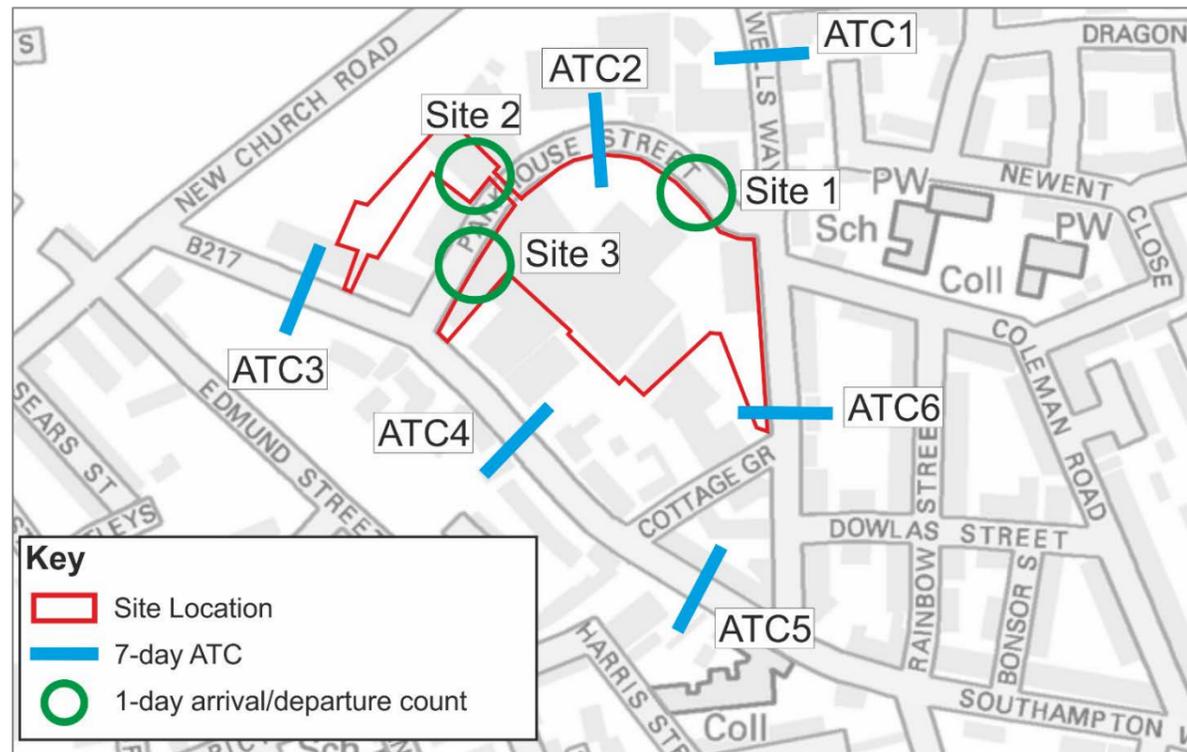
Existing Trip Generation

7.63 Traffic counts of the site and local highway network have been undertaken using automatic traffic counters (ATCs) and arrival/departure counts. The ATCs were in place for 7 days between 5<sup>th</sup> and 12<sup>th</sup> July 2017.

7.64 The arrival/departure count locations were as follows:

- Site 1 represents the main part of Burgess Business Park, which predominantly comprises a fruit distribution service for offices across London.
- Site 2 is the western part of the Proposed Development, situated on the western side of Parkhouse Street which is a site of the ‘Healthcare and Transport Services (HATS) group. This site operates minibus services for healthcare patients and pupils with special educational needs; and
- Site 3 comprises a car wash and garage on Parkhouse Street.

Figure 7.1 Traffic Survey Locations



7.65 The 7-day 24-hour average results from the ATCs are presented in Table 7.11. This includes the proportion of HDVs.

Table 7.11 ATC Summary Results

Link	Direction	Total Vehicles	% HDVs	Average Speed (mph)
Wells Way (North)	NB	4,714	11.0%	19.8
	SB	6,764	11.5%	18.4
Parkhouse Street	-	3,735	12.2%	19.2
Southampton Way (West)	NB	5,825	8.1%	16.5
	SB	5,378	9.4%	17.0
Southampton Way (Mid)	NB	2,579	6.9%	18.9
	SB	5,638	9.6%	14.8
Southampton Way (East)	NB	5,044	10.8%	16.8
	SB	3,460	6.6%	17.8
Wells Way (South)	NB	4,832	10.1%	16.7
	SB	3,243	11.8%	16.4

7.66 The peak hour and daily trip generation of each site is presented in Table 7.12.

7.67 It is worth noting that much of the existing site is only partly occupied and so its trip-generating potential is much higher than is observed currently.

Table 7.12 Existing Vehicle Trip Generation

Time	Site 1			Site 2			Site 3			Total		
	Arr	Dep	Two-Way	Arr	Dep	Two-Way	Arr	Dep	Two-Way	Arr	Dep	Two-Way
AM peak (08:00-09:00)	7	7	14	4	18	22	0	0	0	11	25	36
PM peak (17:00-18:00)	8	13	21	7	7	14	4	4	8	19	24	43
Daily	189	190	379	152	158	310	40	40	80	381	388	769

Public Transport

7.68 According to TfL’s online WebCAT toolkit, the majority of the site has a current PTAL of 2 which represents a ‘poor’ level of accessibility. The part of the site to the west side of Parkhouse Street has a PTAL of 4; a ‘good’ level of accessibility. This discrepancy is due to poor pedestrian connectivity within the main part of the site, which will be improved with the Proposed Development, thus reducing walking distances to the provision of bus services on Camberwell Road.

7.69 The nearest public transport provision to the site is bus provision on Wells Way, which borders the site to the east. The nearest national rail station, Denmark Hill is 1.4km away and Peckham Rye station is 2.0km away. The nearest London Underground stations are Kennington and Oval, both on the Northern line, which are approximately 2.0km away.

7.70 The nearest bus stops to the site are stops G and F on Wells Way. These stops are served by bus routes 343 and 136 which provide a frequent service northbound into central London via Elephant & Castle and southbound towards Peckham, New Cross, Nunhead and Lewisham. These services offer good access onto the Underground and national rail network for central London trips via Elephant & Castle station, which is approximately 10 minutes away by bus. To the south they connect with Peckham Rye station which is a 15-minute journey from the site.

7.71 The Wells Way bus stops are also served by the N343 night service which runs from New Cross Bus Garage to Trafalgar Square at a headway of 30 minutes between 01:00 and 05:30.

7.72 Alternatively, buses on Camberwell Road provide a wider range of services into central London as well as Southwark, Lambeth, Lewisham and Croydon. The bus stops on Camberwell Road are approximately 650m from the site, an 8-minute walk.

Pedestrian Network

7.73 The key pedestrian network to the site comprises Parkhouse Street to the north, Wells Way to the east, Cottage Green to the south and Southampton Way to the south and west. These form the key pedestrian links that would frequently be used by those accessing the site.

7.74 Parkhouse Street is well-lit with footways provided on both sides of the road along its length between Southampton Way and Wells Way. However, in some places the footways are relatively narrow which may pose access issues to wheelchair users and there are a number of vehicle crossovers into various adjacent uses.

7.75 Wells Way in proximity to the site has very good pedestrian provision as a result of the recent public realm improvements implemented by LBS. It has relatively wide footways and there is a pedestrian refuge island at the Parkhouse Street / Wells Way junction providing access to the nearby bus stop. At the junctions of Wells Way with Cottage Green, there is a raised table with provides level access for pedestrians crossing Cottage Green.

7.76 Cottage Green has footways on both sides, though with a number of vehicle crossovers. There are also a number of obstacles within the southern footway, such as refuse bins, street furniture and a tree.

7.77 Southampton Way borders the site to the south-west and provides a link to Camberwell Road to the west and Peckham to the south. There are signalised crossings at Southampton Way’s junctions with Cottage Green and Wells Way, and there is a raised table across the Parkhouse Street. Southampton Way becomes New Church Road then Bowyer Place with continuous footways either side of the carriageway.

**7.78** There are signalised crossings at the Bowyer Place junction with Camberwell Road and wide footways along Camberwell Road.

**7.79** The primary observations from the PERS audit related to the poor quality pedestrian environment on the southern side of Parkhouse Street and parts of Cottage Green where there were obstructions in the footway at the time of audit.

**7.80** Generally speaking, the crossing provision and public transport waiting areas, comprising two bus stops on Wells Way and two on Camberwell Road, are of an acceptable standard.

Cycle Network

**7.81** The cycle network surrounding the site is generally of a good standard with routes marked for cyclists connecting to and from major trip generators such as Elephant & Castle and Denmark Hill stations.

**7.82** Wells Way has a northbound contraflow cycle lane to the south of the Cottage Green junction. Along its length there are raised humps as well as associated cycle route markings. Cottage Green also has cycle route marking within the centre of the carriageway encouraging cyclists to adopt a primary position.

**7.83** There is advanced stop lines (ASLs) on all approaches of both Southampton Way / Wells Way and Southampton Way / Cottage Green signalised junctions. Southampton Way has intermittent sinusoidal humps and cycle route markings. There is a short stretch of advisory cycle lane further west on Southampton Way as it becomes New Church Road, with the cycle route then continuing into Addington Square via a right-turn pocket which connects with Quietways 7 (and the proposed Quietway 8).

**7.84** At the junction of Bowyer Place and Camberwell Road there are no ASLs on any approaches.

**7.85** The most direct route to Elephant & Castle station is via Quietway 7 which is slightly to the north of the site in Burgess Park, via Wells Way. There is a continuous cycle route connecting Quietway 7 to Cycle Superhighway 7 (CS7) avoiding the Elephant & Castle junction, with onwards travel to central London via CS7 or Superhighway 6 (CS6).

**7.86** Southbound travel on CS7 is made possible via Southampton Way and connecting to Quietway 8. This joins CS7 either at Oval or slightly north towards Kennington.

**7.87** Cyclists heading towards Denmark Hill station, located south of the site, would route via Wells Way and connect to Benhill Road which becomes Quietway 7 that routes slightly to the east of Denmark Hill.

**7.88** The site is well-located to connect into the proposed Southwark Spine; a new north-south route through the borough to complement proposed Quietway routes and link to CS6 on Blackfriars Road. The preferred Spine route would pass through Burgess Park between Chandler Way and Thurlow Street; however, the alternative route is via St George's Way, Wells Way (approximately 150 metres to the north of the site) and Albany Road. The short-term proposal is for the Spine to link up with Quietway 7 (which goes north on Portland Street), and the proposed Quietway 8, through the western end of Burgess Park.

**7.89** The CLoS assessment identifies that the existing network within the vicinity of the site is of a relatively good standard, though there are several aspects of the network that could be improved. These include the Addington Square connection to New Church Road, the shared use path between Grove Lane and Camberwell Grove, as well as the means through which filtered permeability is implemented on Liverpool Grove.

Highway Network

**7.90** Southwark is a 20mph borough meaning that all borough roads, including those referenced below, have a speed limit of 20mph. The site is situated within a controlled parking zone (CPZ) enforced weekdays between 08:30 and 18:30.

**7.91** It is understood that parking surveys were undertaken as part of the nearby 21-23 Parkhouse Street planning application (planning ref: 17/AP/1723), which has not yet been determined. These surveys have been reviewed in the context of this Proposed Development.

**7.92** Parkhouse Street which borders the site to the north, is a one-way single carriageway aligned east-west providing connection between Wells Way and Southampton Way. The road is mostly double yellow lined with intermittent speed humps with the exception of approximately eight pay and display (P&D) bays, 10 resident permit parking spaces and a disabled bay. Both the P&D and permit parking are operational Monday to Friday between 08:30 and 18:30, with a maximum stay in the P&D of two hours.

**7.93** Wells Way borders the site to the east and has recently undergone improvements to enhance the public realm and safety of pedestrians and cyclists. This comprised introducing a contra-flow cycle lane with a protected cycle right-turn ghost island the Wells Way junction with Southampton Way. The footway has been widened

and the radii of Parkhouse Street junction narrowed to reduce vehicle speeds and reduce the width of the junction for pedestrians. Furthermore, sinusoidal humps have replaced the speed humps on Wells Way.

**7.94** Cottage Green provides the northbound part of the gyratory with Southampton Way and Wells Way. The Cottage Green approach with the Wells Way junction has been simplified to reduce approach lanes from two to one; reducing the junction width.

**7.95** Southampton Way borders the site to the west and is a two-way single carriageway road typified by on-street parking either side of the carriageway. Southampton Way connects with Peckham Road to the south-east and Camberwell Road to the west. Peckham Road forms part of the Strategic Road Network (SRN) and Camberwell Road forms part of the TfL Road Network (TLRN).

**7.96** There are approximately 25 car club vehicles within 1.5 kilometres of the site. Several spaces are within 500 metres, approximately a 10-minute walk.

Personal Injury Collision Review

**7.97** A Personal Injury Collision (PIC) review has been conducted across a study area agreed with LBS and TfL officers comprising the local highway network surrounding the site.

**7.98** An assessment has been made of the three-year period up to 31<sup>st</sup> December 2016 and determines whether there are any integral highway safety issues that could be exacerbated by the Proposed Development.

**7.99** In reviewing this data, it is important to note that streetscape improvements were made to Wells Way and its junctions with Parkhouse Street and Cottage Green in 2015/2016 to discourage speeding on Wells Way and to improve the walking environment for pedestrians. Table 7.13 summarises the results of the PIC review.

**Table 7.13 Summary of Collisions**

Casualty	Severity	Year			Total
		1	2	3	
All	Fatal	0	0	0	0
	Serious	1	0	0	1
	Slight	4	0	3	7
	<b>Total</b>	<b>5</b>	<b>0</b>	<b>3</b>	<b>8</b>
Pedestrian	Fatal	0	0	0	0
	Serious	0	0	0	0
	Slight	2	0	2	4
	<b>Total</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>
Cyclist	Fatal	0	0	0	0
	Serious	0	0	0	0
	Slight	0	0	1	1
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>

**7.100** There are no clear clusters of collisions and no collisions occurring in the study area were assessed as having contributory factors linked to the road environment, such as the road layout, defective road surfaces, signs or markings or defective traffic signals. This suggests that there are no integral highway safety issues within the study area, and there are therefore no road safety issues that would be of concern in relation to the Proposed Development.

**Future Baseline Conditions / Do Nothing Scenario**

**7.101** In the absence of the Proposed Development, the site itself would be expected to remain in the same condition from a transport perspective, though its trip generation could conceivably increase should different occupiers be in place or existing occupiers increase their trip generation.

**7.102** It is assumed that there will be growth in the level of background traffic using the local highway network surrounding the Proposed Development in the future for both the 2019 and 2021 (without the Proposed Development) assessment years. This growth is associated with assumed committed developments in the area and assumptions on travel behaviour change in the future. These inform the DfT's TEMPro growth factors that are presented in Table 7.1 and Table 7.2.

7.103 By applying the relevant growth factors to the 2017 baseline traffic flows presented in the TA (ES Volume 3, Appendix: Traffic and Transport, Annex 1 Transport Assessment), the future baseline traffic flows (without the Proposed Development) are derived, as shown in Table 7.14 and Table 7.15 for the AADT and AAWT respectively.

**Table 7.14 Future Baseline AAWT Traffic Flows (without the Proposed Development)**

Link	2019 Future Baseline	2021 Future Baseline
Wells Way (North)	11,630	12,042
Parkhouse Street	3,859	3,995
Southampton Way (West)	11,370	11,773
Southampton Way (Mid)	8,377	8,673
Southampton Way (East)	8,542	8,844
Wells Way (South)	8,140	8,428

**Table 7.15 Future Baseline AADT Traffic Flows (without the Proposed Development)**

Link	2019 Future Baseline	2021 Future Baseline
Wells Way (North)	11,897	12,320
Parkhouse Street	3,871	4,009
Southampton Way (West)	11,612	12,025
Southampton Way (Mid)	8,518	8,821
Southampton Way (East)	8,814	9,128
Wells Way (South)	8,369	8,667

7.104 In addition to increased traffic flows on the local highway network, it is expected that there would also be increases in pedestrian and cycle flows in the area in the future (in the absence of the Proposed Development), though there is no data available to determine what level of increase this may be.

## RECEPTORS AND RECEPTOR SENSITIVITY

### Existing

7.105 Based on the sensitive receptors to traffic defined by the IEMA Guidelines, Table 7.16 outlines the identified potential sensitive receptors for this assessment together with their sensitivity rating and description.

7.106 It should be recognised that most of the significance criteria apply to 'link' receptors, with the exception of driver delay, which is only relevant for 'junction' receptors. Therefore, 'link' receptors are assessed in terms of severance, pedestrian delay and amenity, and fear and intimidation; whilst 'junction' receptors are assessed in terms of driver delay.

7.107 'Accidents and road safety' has not been assessed further because, as demonstrated under the 'Current Baseline Conditions', there are no identifiable existing clusters of accidents within the local area that could be exacerbated by the Proposed Development.

**Table 7.16 Potential Traffic and Transport Sensitive Receptors**

Sensitivity	Receptor	Definition
<b>Severance / Pedestrian Delay and Amenity / Fear and Intimidation</b>		
High	Southampton Way (Mid)	Link provides access to secondary school
Medium	Wells Way (North)	Link provides access to open space, war memorial, park and recreation area, bus stops
	Southampton Way (West)	Link provides access to open space, park and recreation area
	Parkhouse Street	Link used by pedestrians with narrow footway
	Wells Way (South)	Link provides access to place of worship
<b>Driver Delay</b>		
High	Southampton Way/Peckham Road junction	Key junction on the TLRN
Medium	Bowyer Place/Camberwell Road/Wyndham Road junction	Key junction on the Strategic Road Network

### Introduced

7.108 There are no new sensitive receptors introduced as part of the Proposed Development. Whilst there are several new roads being implemented as part of the scheme, these will all be very lightly trafficked and vehicle speeds would be very low such that the magnitudes of impact would be very low and any resultant effects negligible (regardless of the receptor sensitivity) and so not significant.

## POTENTIAL EFFECTS

### Demolition and Construction

7.109 An outline Construction Logistics Plan (CLP) has been produced which sets out the approach to managing demolition and construction-related traffic. This seeks to ensure that impacts related to the demolition and construction works are minimised from the outset. This will be updated when a contractor has been appointed and when greater information relating to the demolition and construction programme, materials and other variables are better understood.

7.110 The CLP aims to reduce the volume of demolition and construction vehicle trips and sets out the following measures to reduce any significant adverse effects generated by demolition and construction road vehicle movements:

- Any bulk transit trips/abnormal loads will be undertaken during off-peak periods in order to minimise road user delays;
- If lane closures on the local highway network are deemed necessary, these will take place during off-peak periods to minimise road user delay;
- Designated construction routes will be utilised by all vehicles associated with the demolition works and construction of the Proposed Development; and
- Parking will not be provided for construction workers, only for emergency vehicles and essential vehicles.

7.111 A requirement to prepare and implement a detailed CLP will be secured through an appropriately worded planning condition attached to any planning consent.

### Severance

7.112 As outlined above, severance is the perceived division that can occur within a community when it becomes separated by a major traffic artery.

**7.113** The PERS audit, the outputs of which are presented within the section of this chapter titled ‘Current Baseline Conditions’, identified that there are an acceptable number of crossing opportunities, both formal and inform, on the local highway network.

**7.114** Table 7.17 shows the percentage change in average daily traffic flows on the links in close proximity to the Proposed Development. It compares traffic flows of the 2019 Future Baseline With Development Scenario (i.e. including an allowance of road traffic associated with the peak of the construction works in 2019) with the 2019 Future Baseline Without Development Scenario.

**Table 7.17 Demolition and Construction Works – Severance Assessment**

Link	Change in AADT in 2019 as a result of the Proposed Development
Wells Way (North)	-1%
Parkhouse Street	-10%
Southampton Way (West)	-3%
Southampton Way (Mid)	-4%
Wells Way (South)	-4%

**7.115** As shown above, the vehicle trip generation during the peak of the construction works of the Proposed Development is less than that of the site’s existing uses across all links. Given that all changes in AADT flows are below 30%, the impact is of very low magnitude whilst the resultant effect is temporary, **negligible** (beneficial) and not significant for all receptor links identified (regardless of their sensitivity).

Driver Delay

**7.116** Delay to drivers can be predicted through capacity assessments at key points (junctions) on the local highway network. However, given that the vehicle trip generation associated with the peak of the demolition and constructions works is of very low magnitude (very low magnitude of impact) no capacity assessments have been considered necessary.

**7.117** Based on professional judgement, the very low magnitude of impact will result in temporary **negligible** effects (not significant) on the operation of the local highway network and so driver delay, specifically the Southampton Way/Peckham Road junction and Bowyer Place/Camberwell Road/Wyndham Road junction.

Pedestrian Delay and Amenity

**7.118** As outlined above, pedestrian delay is related to traffic flows, which influence the ability of pedestrians to cross individual links.

**7.119** All links surrounding the site provide good formal and informal crossing opportunities which serve pedestrian desire lines. These crossing facilities provide convenient opportunities for pedestrians to cross links in close proximity of the site without being delayed. Furthermore, the change in traffic volumes on the links as a result of the peak period of the demolition and construction works of the Proposed Development is a reduction rather than an increase.

**7.120** As such, the Proposed Development is deemed to have **no impact or effect on pedestrian delay** along all the high, medium and low sensitivity road links considered by this assessment.

**7.121** Pedestrian amenity is affected by factors including traffic flow, traffic composition and pavement width / separation from traffic. The IEMA Guidelines suggests a “*tentative threshold for judging the significance of changes in pedestrian amenity of where traffic flow (or its lorry component) is halved or doubled*”. In this context a lorry is deemed to be a HGV.

**7.122** No links will experience a halving or doubling of traffic flow or its lorry component during the peak period of the demolition and construction work of the Proposed Development and therefore, it is considered that there will be **no impact or effect on pedestrian amenity** along all the high, medium and low sensitivity road links considered by this assessment.

Fear and Intimidation

**7.123** An increase in the HGV movements can cause adverse effects on pedestrian fear and intimidation. The suggested threshold guidance for pedestrian fear and intimidation proposes a low magnitude of impact if

average 18-hour HGV flows are in the region of 1,000 to 2,000. A very low magnitude of impact equates to less than 1,000 18-hour HGV flows.

**7.124** The number of HGV movements associated with the peak period of the demolition and construction works will be considerably less (50 one-way trips per day) than the suggested thresholds.

**7.125** The link that will experience the highest increase in HGV movements is Wells Way to the south of Parkhouse Street, which will experience an uplift of 75 two-way movements per day (50 northbound and 25 southbound). Over the working day of 08:00-18:30 this equates to 7 two-way vehicles per hour or one per eight minutes.

**7.126** As a result, it is anticipated that the peak period of demolition and construction works associated with the Proposed Development would result in **no impact or effect on pedestrian fear and intimidation due to HGV movements** along all the high, medium and low sensitivity road links considered by this assessment.

**7.127** Apart from a change in the proportion of HGVs, increased fear and intimidation can also be caused by a rise in average speeds over 18 hours which is not expected to be affected by the demolition and construction works. As such, it is anticipated to result in **no impact or effect on fear and intimidation of pedestrians as a result of changes in traffic speeds** along all the high, medium and low sensitivity road links considered by this assessment.

**7.128** Furthermore, an increase in average traffic flows over 18 hours per day of 600 or more vehicles per hour has the potential to raise fear and intimidation levels amongst pedestrians, according to IEMA Guidelines. The assessment of fear and intimidation, considering all traffic over 18 hours, has shown that no link will experience an increase in traffic near this level. Therefore, it is considered that the demolition and constructions work associated with the Proposed Development would result in **no impact or effect on pedestrian fear and intimidation due to average traffic flows** along all the high, medium and low sensitivity road links considered by this assessment.

**Completed Development**

**7.129** There will be 9 residential blue badge parking spaces provided across the Proposed Development. The spaces will be allocated to specific units and new residents will be exempt from applying for on-street residential parking permits.

**7.130** There will be no car parking provided for visitors, who would be able to use the existing on-street P&D spaces if necessary.

**7.131** Electric vehicle charging points (EVCPs) will be provided as per the minimum requirements set out within the Draft London Plan. Their locations will be presented within a plan to be submitted and agreed with the LBS prior to commencement of construction works on site.

**7.132** There are two distinct parts to the site, which are bisected by Parkhouse Street. The northern part of the site, comprising Blocks A and B, has a two-way access from Parkhouse Street.

**7.133** The main part of the site has one small car park accessed from Wells Way. There will also be a central street, with controlled access from Parkhouse Street to the north of the site, west through the site with one-way operation westbound, exiting back onto Parkhouse Street.

**7.134** This central street will have restricted vehicular access from Parkhouse Street for refuse collection and some deliveries only. This would be managed by automatic bollards or a barrier connected to the concierge via an intercom system. This bollard/barrier would be situated at least 6.0m from the back of footway of Parkhouse Street to ensure any vehicle awaiting entry is not obstructing the highway.

**7.135** There will be a number of pedestrian and cycle accesses around the site to serve entrances to the blocks and secure cycle parking. The central street will serve as an important east-west route through the area for residents and visitors to the site, as well as other local residents. It will connect Wells Way and the eastern end of Parkhouse Street with Parkhouse Street to the west.

**7.136** There are also north-south connections that are provided within the Proposed Development which will link through to other developments to the south of the site towards Southampton Way.

**7.137** The demand from pedestrians to cross between the two parts of the Proposed Development is expected to result in an increase on current pedestrian flows crossing Parkhouse Street in this location. Therefore, a raised table is to be provided on Parkhouse Street connecting the two parts of the site which will reduce vehicle speeds and provide an opportunity for informal crossing of the carriageway for pedestrians.

**7.138** Although not quantified, pedestrian flows on Parkhouse Street are expected to increase and the current footway along the southern of the carriageway is currently sub-standard in terms of its width, quality and provision of

necessary features such as dropped kerbs. Therefore, as part of the Proposed Development, an improved footway will be provided along the southern side of Parkhouse Street.

- 7.139** Long-stay and short-stay cycle parking will be provided to minimum London Plan (2016) standards and will be conditioned pending confirmation of final occupiers. 854 cycle spaces are provided for the residential uses (long and short stay). Short stay or visitor cycle storage is provided in Sheffield stands in four locations around the site. These provide for 72 bike spaces in total.
- 7.140** A contribution to a new Cycle Hire docking station will be made by the Applicant in order to facilitate cycle trips to and from the Proposed Development.
- 7.141** There have been extensive discussions with LBS officers regarding the delivery and servicing strategy for the Proposed Development. Inset loading bays on Parkhouse Street were initially discussed and designed into the scheme, however a strategy revolving around yards has replaced that and provides greater flexibility and capacity to the site's occupiers to undertake their necessary activities. The central street will also be available for some essential delivery and servicing activity.
- 7.142** Design of the residential refuse strategy for the site has been developed to accord with LBS's 'Waste management guidance notes for residential developments'<sup>1</sup>. This document states that the maximum distance residents should have to walk to a bin store is 30 metres. Communal waste streams in LBS comprise general waste and mixed recycling, not food and garden waste.
- 7.143** The commercial refuse strategy comprises a number of refuse stores across the Proposed Development, with commercial waste separate to residential waste. It is envisaged that a coherent, development-wide commercial refuse contract is operated in order to ensure that refuse vehicle trips to the site are minimised.
- 7.144** A Delivery and Servicing Plan (DSP), which forms an appendix of the TA (**ES Volume 3: Appendix Traffic and Transport, Annex 1**), will be implemented for the Proposed Development when completed. The DSP will set out how all types of freight vehicle movements to and from the Proposed Development will be managed to ensure the safe operation of the highway network within the site, which is of particular significance given the central street will be an important link for the site's users.
- 7.145** An Interim Residential Travel Plan (RTP) and a Framework Travel Plan (FTP), which form appendices of the TA (**ES Volume 3: Appendix Traffic and Transport, Annex 1**), for the non-residential uses have been prepared for the Proposed Development. These set out how residents, visitors and employees based at the site can access the Proposed Development by sustainable forms of transport. Each will address, amongst other things, the following:
- Local cycle and walking routes and cycle parking provision within the site;
  - Benefits of using local car club provision for both the commercial occupiers and residents;
  - Health benefits of active travel; and
  - Incentives for staff using sustainable modes of transport.

Public Transport

- 7.146** The Proposed Development's AM and PM peak hour bus trip generation by route has been determined within the TA (**ES Volume 3: Appendix Traffic and Transport, Annex 1**). It is considered that the level of bus trip generation and so magnitude of impact, when split across the number of buses per hour that operate, is very low resulting especially when accounting for the existing spare capacity on the local bus network. The resulting effect is negligible and not significant.
- 7.147** Similarly to the bus network impact assessment, the level of trips estimated to be on the Underground and National Rail network is very low resulting in effects that are negligible and not significant across these modes of public transport.

Severance

- 7.148** As outlined above, severance is the perceived division that can occur within a community when it becomes separated by a major traffic artery.
- 7.149** The PERS audit, the outputs of which are presented within the section of this chapter titled 'Current Baseline Conditions', identified that there are an acceptable number of crossing opportunities, both formal and inform, on the local highway network.

**7.150** Table 7.18 shows the percentage change in average daily traffic flows on the links in close proximity to the Proposed Development. It compares traffic flows of the 2021 Future Base With Development Scenario with the 2021 Future Baseline Scenario.

**Table 7.18 Completed Development – Severance Assessment**

Link	Change in AADT in 2021 as a result of the Proposed Development
Wells Way (North)	-1%
Parkhouse Street	-9%
Southampton Way (West)	-2%
Southampton Way (Mid)	-2%
Southampton Way (East)	-1%
Wells Way (South)	-2%

**7.151** As shown above, the vehicle trip generation of the Proposed Development is less than that of the site's existing uses. Given that all changes in AADT flows are below 30%, the impact is of very low magnitude and the resultant effect is **negligible** (beneficial) and not significant for all receptor links identified (regardless of their sensitivity).

Driver Delay

- 7.152** Delay to drivers can be predicted through capacity assessments at key points on the local highway network. However, given that the vehicle trip generation associated with the Proposed Development is lower than that of the existing site uses, capacity assessments have not been considered necessary. The vehicle trip generation associated with the Proposed Development represents a very low magnitude of impact.
- 7.153** The Proposed Development has very low parking provision and it is expected that most delivery and servicing trips would be conducted outside of peak hours when the local highway network has the least spare capacity.
- 7.154** For these reasons, the Proposed Development will have a **negligible effect (not significant) on the operation of the local highway network** and so driver delay, specifically the Southampton Way/Peckham Road junction and Bowyer Place/Camberwell Road/Wyndham Road junction.

Pedestrian Delay and Amenity

- 7.155** As outlined within the methodology section of this chapter, pedestrian delay is related to traffic flows, which influence the ability of pedestrians to cross individual links.
- 7.156** As set out above, all links surrounding the site provide good formal and informal crossing opportunities which serve pedestrian desire lines. These crossing facilities provide convenient opportunities for pedestrians to cross links in close proximity of the site without being delayed. Furthermore, the change in traffic volumes on the links as a result of the Proposed Development is a reduction rather than an increase.
- 7.157** As such, the Proposed Development is deemed to have **no impact or effect on pedestrian delay** along all the high, medium and low sensitivity road links considered by this assessment.
- 7.158** Regarding pedestrian amenity, as outlined above, this is affected by factors including traffic flow, traffic composition and pavement width / separation from traffic. The IEMA Guidelines suggest a *"tentative threshold for judging the significance of changes in pedestrian amenity of where traffic flow (or its lorry component) is halved or doubled"*.
- 7.159** No links will experience a halving or doubling of traffic flow or its lorry component as a result of the Proposed Development and therefore it is considered that there will be **no impact or effect on pedestrian amenity** along all the high, medium and low sensitivity road links considered by this assessment.

Fear and Intimidation

**7.160** An increase in the HGV movements can cause adverse effects on pedestrian fear and intimidation. The suggested threshold guidance for pedestrian fear and intimidation proposes a low magnitude of impact if

<sup>1</sup> LBS, 2014; Waste management guidance notes for residential developments

average 18-hour HGV flows are in the region of 1,000 to 2,000. A very low magnitude of impact equates to less than 1,000 18-hour HGV flows.

**7.161** It is anticipated that the only HGV movements associated with the operation of the Proposed Development will be delivery and servicing trips. The number of servicing trips will be considerably less (89 one-way trips per day) than the suggested threshold. As a result, it is anticipated that the Proposed Development's delivery and servicing trips would result in **no impact or effect on pedestrian fear and intimidation due to HGV movements** along all the high, medium and low sensitivity road links considered by this assessment.

**7.162** Apart from a change in the proportion of HGVs, increased fear and intimidation can also be caused by a rise in average speeds over 18 hours. The operation of the Proposed Development is considered unlikely to alter the current traffic speed levels on the local road network. As such, it is anticipated to result in **no impact or effect on fear and intimidation of pedestrians as a result of changes in traffic speeds** along all the high, medium and low sensitivity road links considered by this assessment.

**7.163** Furthermore, an increase in average traffic flows over 18 hours per day of 600 or more vehicles per hour, as the potential to raise fear and intimidation levels amongst pedestrians, according to IEMA Guidelines. The assessment of fear and intimidation, considering all traffic over 18 hours, has shown that no link will experience an increase in traffic near this level. Therefore, it is considered that the Proposed Development would result in **no impact or effect on pedestrian fear and intimidation due to average traffic flows** along all the high, medium and low sensitivity road links considered by this assessment.

**MITIGATION AND RESIDUAL EFFECTS**

**7.164** Table 7.19 confirms that no mitigation measures are required. Table 7.20 provides a tabulated summary of the outcomes of the traffic and transport impact assessment.

**Table 7.19 Summary of Proposed Mitigation Measures**

Potential Effects Identified	Proposed Mitigation / Enhancement Measures
<b>Demolition and Construction</b>	
HGV Movements – Severance, Driver Delay, Pedestrian Delay and Amenity, Fear and Intimidation	None Required
<b>Completed Development</b>	
Trip Generation – Public Transport Capacity, Severance, Driver Delay, Pedestrian Delay and Amenity, Fear and Intimidation	None Required

**Table 7.20 Summary of Residual Effects**

Receptor (and Sensitivity)	Description of Residual Effect	Nature* and Scale**	+	D	P	R	St
			-	I	T	IR	Mt Lt
<b>Demolition and Construction</b>							
High – Southampton Way (Mid) Medium – Wells Way (North) Medium – Southampton Way (West) Medium – Parkhouse Street Low – Wells Way (South)	Severance and Driver Delay,	Beneficial, Negligible	+	D	T	R	St

Receptor (and Sensitivity)	Description of Residual Effect	Nature* and Scale**	+	D	P	R	St
			-	I	T	IR	Mt Lt
High – Southampton Way (Mid) Medium – Wells Way (North) Medium – Southampton Way (West) Medium – Parkhouse Street Low – Wells Way (South)	Pedestrian Delay and Amenity, Fear and Intimidation	No Effect	+	D	T	R	St
<b>Completed Development</b>							
Low – Local bus routes Low – Northern line, Bakerloo line and stations Low – Denmark Hill station, Peckham Rye station	Capacity	Negligible	+	D	P	IR	Lt
High – Southampton Way (Mid) Medium – Wells Way (North) Medium – Southampton Way (West) Medium – Parkhouse Street Low – Wells Way (South)	Severance and Driver Delay	Beneficial, Negligible	+	D	P	IR	Lt
High – Southampton Way (Mid) Medium – Wells Way (North) Medium – Southampton Way (West) Medium – Parkhouse Street Low – Wells Way (South)	Pedestrian Delay and Amenity, Fear and Intimidation	No Effect	+	D	P	IR	Lt
<b>Notes:</b> *Nature = Beneficial or Adverse **Scale = Negligible / Minor / Moderate / Major D = Direct / I = Indirect P = Permanent / T = Temporary R = Reversible / IR= Irreversible St = Short Term / Mt = Medium Term / Lt = Long Term							

**LIKELY SIGNIFICANT EFFECTS**

**7.165** No likely significant effects relating to traffic and transport during the demolition and construction works or completed and occupied Proposed Development have been identified.

**CUMULATIVE EFFECTS ASSESSMENT**

**Demolition and Construction**

**7.166** Due to the size of the development and the study area covered by the ES, the traffic effects of committed developments in the area have been included as part of the 2019 future baseline against which the potential effects of the demolition and construction works associated with the Proposed Development have been

assessed. This approach comprises application of growth factors, which have been set out in Table 7.1 and Table 7.2.

**7.167** No cumulative effects have been identified during the demolition and construction works of the Proposed Development.

#### ***Completed Development***

**7.168** Due to the size of the development and the study area covered by the ES, the traffic effects of committed developments in the area have been included as part of the 2021 future baseline against which the potential effects of the completed and occupied Proposed Development have been assessed. This approach comprises application of growth factors, which have been set out in Table 7.1 and Table 7.2.

**7.169** No cumulative effects that have been identified once the Proposed Development is complete and in use.

### **DESIGN CHANGES POST EIA**

**7.170** The traffic and transport impact assessment presented within this chapter of the ES has been based on a design for the Proposed Development issued by HTA (the architects) on 27<sup>th</sup> October 2017. Following this information release, there was a requirement for further pre-application consultation with the LBS and other consultees on the scheme. This resulted in some design amendments which have been factored into the scheme that has been submitted for planning.

**7.171** The design amendments relevant to the traffic and transport impact assessment can be summarised as follows:

- a) A reduction in commercial floorspace across the entire Proposed Development from 6,382 m<sup>2</sup> GIA to 4,462 GIA m<sup>2</sup>.
- b) A reduction in residential dwellings across the entire Proposed Development from 505 units to 499 units.

**7.172** The reduction in floorspace and residential dwellings has been reviewed by PBA and is 'non-material' in that it does not have an effect on the conclusions presented within this ES chapter. These reductions are beneficial in that trip generation will be reduced because of the lower amount of commercial floorspace and fewer dwellings provided by the Proposed Development. The traffic and transport impact assessment address a greater amount of floorspace and dwellings; therefore, impacts and resultant effects are based on a higher trip generation than will be generated as a result of the completed and occupied Proposed Development.

**7.173** Based on the above, the results presented in this ES chapter are representative of the Proposed Development submitted for planning and as such, the results and conclusions of the traffic and transport impact assessment (as presented within this ES chapter) remain valid irrespective of the design amendment summarised above.