

Chapter 7: Traffic and Transport

TRAFFIC AND TRANSPORT	
AUTHOR	Arup
SUPPORTING APPENDIX	<p>N/A</p> <p>Whilst this ES chapter is an independent study, the assessment presented within this ES chapter should be considered in the context of the Transport Assessment (TA) prepared by Arup which is submitted in support of the planning application.</p>
KEY CONSIDERATIONS	<p>This assessment considers likely significant traffic and transport environmental effects arising from the demolition and construction and the completed Proposed Development, including:</p> <ul style="list-style-type: none"> Severance of communities; Road vehicle driver and passenger delay; Non-motorised user delay; Non-motorised user amenity; Fear and intimidation; and Road user and pedestrian safety.
CONSULTATION	<p>An EIA Scoping Report was prepared and submitted to the London Borough of Southwark (LBS) on 11th January 2024 to confirm the general acceptance of the proposed scope of the EIA. The EIA Scoping Report is appended to this ES in ES Volume 3, Appendix: EIA Methodology – Annex 1 and sets out the proposed scope and methodology for the traffic and transport assessment and this ES chapter.</p> <p>An EIA Scoping Opinion was issued by LBS on 27th March 2024 and is provided in ES Volume 3, Appendix: EIA Methodology – Annex 2. The EIA Scoping Opinion broadly confirmed acceptance of the assessment methodology. The Transport for London (TfL) consultation response noted that impacts on congestion and bus operations, road safety, air quality, severance and noise arising from changes in travel demand should be assessed. All such impacts have been assessed, either in this ES chapter or (where relevant) in other ES chapters (in the case of air quality and noise). LBS's consultation response noted that Road User and Pedestrian Safety should be scoped into the assessment. In response, Road User and Pedestrian Safety has been scoped in and assessed in this ES chapter.</p> <p>In addition to the EIA Scoping Process, the design of the Proposed Development has been developed through extensive engagement with LBS, the Greater London Authority and TfL between 2022 and 2024. This included consultation on a Transport Assessment Scoping Report dated November 2022 and transport focussed pre-application meetings in September 2022, November 2022 and March 2024. The Proposed Development has been developed in the context of that engagement, but the outcome of that engagement does not affect the scope of the EIA.</p>

ASSESSMENT METHODOLOGY

Defining the Baseline

- 7.1** The baseline for the assessment is the future baseline which will prevail in the future in the absence of the Proposed Development. This is the standard approach for the assessment of traffic and transport effects. This is derived through an understanding of the existing baseline supplemented by a review of the evolution of the baseline.
- 7.2** The existing baseline conditions have been defined through a combination of desktop study, site visits, and the collection of new primary data. In particular:
- Published bus timetables and published rail timetables have been reviewed to understand prevailing public transport provision in the vicinity of the site;
 - 2019 traffic surveys (which remain up to date given the relatively static nature of traffic patterns in London) and 2022 transport surveys have been used to understand prevailing movement on the surrounding streets and routes;
 - TfL collision data has been used to understand the prevailing road safety characteristics of the surrounding highway network;
 - Desktop searches and site visits (in 2021, 2022 and 2024) were undertaken to understand existing conditions of the surrounding streets and routes.

Evolution of the Baseline / Future Baseline

- 7.3** The evolution of the baseline to determine the future baseline has been determined through a review of travel demand associated with cumulative schemes (which found that the cumulative schemes identified in **ES Volume 1, Chapter 2: EIA Methodology** do not materially affect the study area), a review of prevailing transport trends and patterns, and a review of committed transport schemes. The future baseline is representative of any future year, and is representative of conditions both throughout construction and during operation.

Impact Assessment Methodology

- 7.4** The impact assessment methodology is derived from the guidance set out in the following documents:
- 'Guidelines for Environmental Impact Assessment, IEMA, 2004'; and
 - 'IEMA (2023) Environmental Assessment of Traffic and Movement (the IEMA Guidelines).
- 7.5** The proposed scope also draws on the following Design Manual for Roads and Bridges documents which provide some helpful guidance and reference, although not directly applicable to this EIA as the Proposed Development is not a motorway or all-purpose trunk road:
- 'LA 104 Environmental Assessment and Monitoring, Rev 1, National Highways, 2020'; and
 - 'LA 112 Population and Human Health, Rev 1, National Highways, 2020'.
- 7.6** The methodology set out in this report gives strong regard to the 'IEMA Guidelines' which states in paragraph 4.5:
- "...For many, effects there are no simple rules or formulae which define thresholds of significance and there is, therefore, a need for interpretation and judgement on the part of the assessor, backed-up by data or quantified information wherever possible..."*
- 7.7** The IEMA Guidelines set out a number of potential environmental impacts, with the following being relevant to this assessment;
- Severance of communities;
 - Road vehicle driver and passenger delay;
 - Non-motorised user delay;
 - Non-motorised user amenity;
 - Fear and intimidation;
 - Road user and pedestrian safety; and
 - Hazardous/large loads.
- 7.8** Non-motorised user amenity and fear and intimidation on and by road users can be considered together as they are strongly interrelated. Assessment of hazardous/large loads was scoped out through the EIA Scoping Report on the basis that the Proposed Development is not expected to generate or attract hazardous loads during demolition and construction or during operation, see **ES Volume 3, Appendix: EIA Methodology – Annex 1** and **ES Volume 3, Appendix: EIA Methodology – Annex 2** for further details.

Severance of Communities

- 7.9** Severance is defined in paragraph 4.273.13 of the IEMA Guidelines:
- "Severance is the perceived division that can occur within a community when it becomes separated by major transport infrastructure. The term is used to describe a complex series of factors that separate people from*

places and other people. Severance may result from the difficulty of crossing a heavily trafficked road or a physical barrier created by infrastructure”.

Road Vehicle Driver and Passenger Delay

7.10 Drawing upon the IEMA Guidelines and professional experience, driver delay and delay to bus users may change where:

- Traffic flows change at junctions;
- New junctions are introduced;
- Existing junctions are changed;
- Speeds on existing links are changed;
- Existing links are closed;
- New links are opened;
- Frequency of use of controlled pedestrian or cycle crossings change; and
- New controlled pedestrian or cycle crossings are introduced.

7.11 Delay to bus users may also change where bus routes or bus stops are proposed to be changed or where demand for a bus route exceeds capacity.

Non-Motorised User Delay (Including Rail)

7.12 Drawing upon the IEMA Guidelines and professional experience, pedestrian and cyclist delay may change where:

- Pedestrians and cyclists cross existing roads where traffic flows are projected to change;
- Pedestrians and cyclists cross new roads;
- Existing roads which pedestrians and cyclists would have crossed are removed;
- Speed limit or prevailing speeds change;
- Pedestrian and cycle volumes change;
- New crossing facilities are provided; and
- Existing pedestrian crossing facilities change.

7.13 Drawing upon the IEMA Guidelines and professional experience, rail delay (experienced by passengers of National Rail and London Overground services) may change where:

- Passenger areas within stations become congested; and
- Demand for a train exceeds capacity.

Non-Motorised User Amenity, Fear and Intimidation on and by Road Users

7.14 Amenity is defined in paragraph 3.29 of the IEMA Guidelines as follows:

“Pedestrian amenity is broadly defined as the relative pleasantness of a journey, and is considered to be affected by traffic flow, traffic composition and pavement width/separation from traffic. This definition also includes pedestrian fear and intimidation, and can be considered to be a much broader category including consideration of the exposure to noise and air pollution, and the overall relationship between pedestrians and traffic”.

7.15 The IEMA Guidelines further describe fear and intimidation on and by road users as being ‘created by all moving objects’ and goes on to note the following in the context of fear and intimidation on and by road users:

“While the traffic and movement assessment has to consider motorcycles, cars, lorries and buses, this scope of consideration is not exclusive – it also has to consider other modes of travel, including horses, cycles, mobility scooters, e-scooters and e-cycles, if appropriate”.

7.16 The IEMA Guidelines describe fear and intimidation on and by road users as being dependent on:

- *“The total volume of traffic*
- *“The heavy vehicle composition*
- *“The speed these vehicles are passing*
- *The proximity of traffic to people – and/or the feeling of the inherent lack of protection created by factors such as a narrow pavement median, a narrow path or a constraint (such as a wall or fence) preventing people stepping further away from moving vehicles.’*

7.17 Non-motorised user amenity and fear and intimidation on and by road users may be considered for pedestrians, cyclists, bus passengers and rail passengers.

Road User and Pedestrian Safety

7.18 The key issue in assessing accidents and safety is in understanding the potential for change. There can be some small changes in prevailing road safety conditions arising simply as a result of having a greater number of journeys being made on a network; very simply, the more people that are travelling, the more people that are liable to become involved in an accident. By far the more important issue to consider is how travel and the design of the transport networks interrelate to affect prevailing road safety. In that context, prevailing road safety may change where:

- Fundamental changes are proposed to the form of nature of a transport network such as changes to the geometry of a junction or changing the form of a junction; and
- Fundamental changes are proposed to prevailing travel patterns on transport networks not designed to cater for them such as introducing a pedestrian demand on a rural road without footways or introducing a pedestrian demand across a heavily trafficked and high-speed road without a suitable crossing provision.

Summary

7.19 The proposed assessment scope is summarised below in Table 7.1.

Table 7.1 Assessment Scope Summary

Potential Effect	Demolition and Construction	Completed Development
Severance of communities	✓	✓
Road Vehicle Driver and Passenger Delay	✓	✓
Non-motorised User Delay	✓	✓
Non-motorised User Amenity, Fear and Intimidation on and by Road Users	✓	✓
Road User and Pedestrian Safety	✓	✓
Hazardous Loads	✗	✗

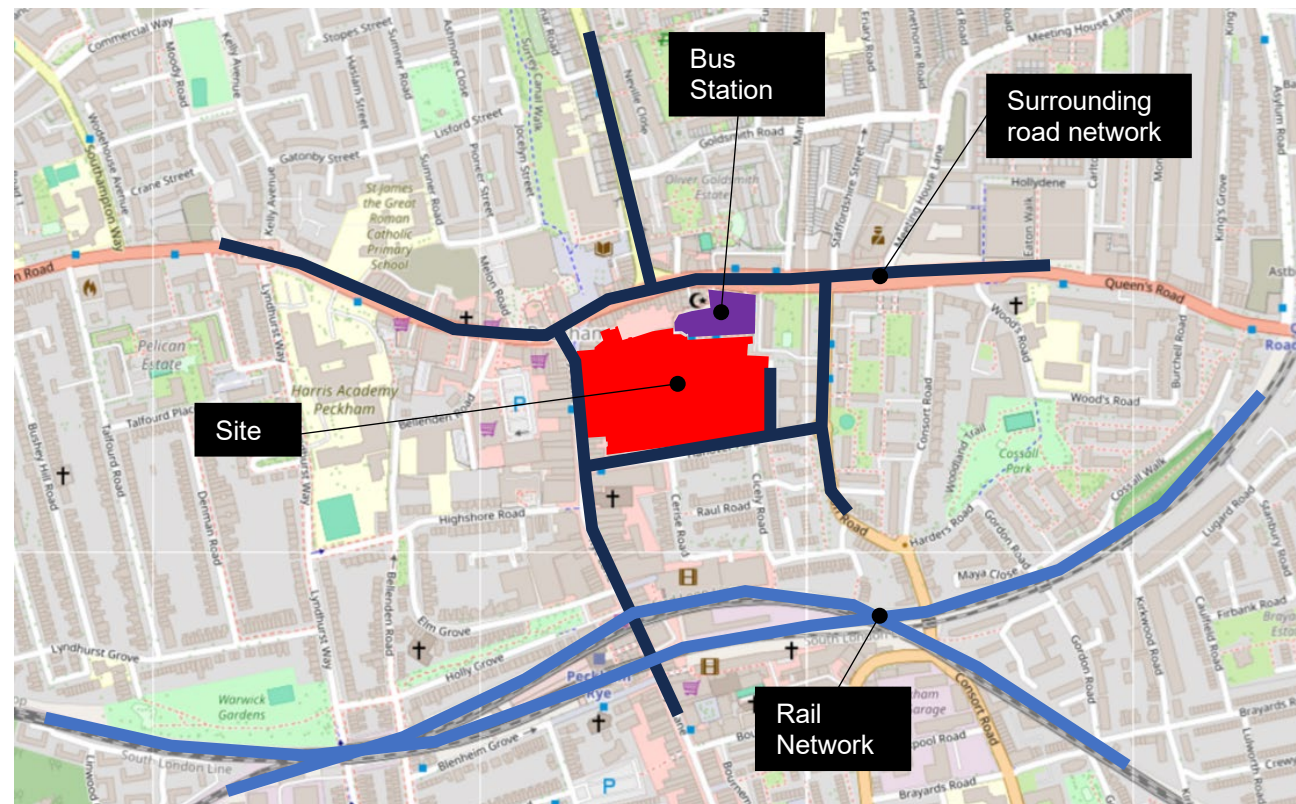
Study Area

7.20 The study area has been defined through a review of those routes which are likely to be significantly affected by travel demand associated with the Proposed Development and those routes which will be affected by works associated with the Proposed Development. This is in the context of paragraph 2.14 of the IEMA Guidelines as follows:

“Judgements will inevitably be required to define the geographical boundaries of the environmental assessment. Such judgements will tend to be based on a combination of experience and assumptions that should be made explicit in the EIA/non-statutory environmental assessment reporting.”

7.21 The study area is indicated on Figure 7.1.

Figure 7.1 Study Area



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Note: due to the nature of transport networks extending over large areas, it is not possible to fully define the study area within a figure.

Demolition and Construction

7.22 Demolition and construction effects have been determined from a review of the transport movements arising from the demolition and construction of the Proposed Development, as well as a review of the demolition and construction works themselves and any permanent or temporary transport closures or transport disruption which will be required to facilitate demolition and construction of the Proposed Development, as detailed in **ES Volume 1, Chapter 5: Demolition and Construction**. The traffic flows have been based on the peak construction traffic numbers.

7.23 An Outline Construction Logistics Plan (CLP) has been prepared and submitted in support of the planning application; the CLP details construction phasing, the development proposals, the controls and travel demand. A detailed CLP will be secured by way of a suitably worded planning condition or through a Section 106 ('s106') planning obligation.

Phasing

7.24 This assessment has taken into account the phasing shown in **ES Volume 1, Chapter 5: Demolition and Construction**. In particular, this includes a consideration of the construction of the Proposed Development and the implications this may have on existing routes and networks as the phases come forwards and the way in which travel demand will change as each phase come forwards.

7.25 For the purpose of assessment, the traffic arising from the Completed Development and the traffic associated with construction has been assessed in combination, reflecting a worst-case assessment of the cumulative effects of the phased completed development and the ongoing construction in the later phases.

Completed Development

7.26 The effects of the completed Proposed Development have been determined from a review of the transport movements arising from the completed Proposed Development derived from:

- A review of surveys of similar developments with similar land uses in similar locations to determine travel demand and mode share;
- A review of 2011 Census data to understand employee mode share (noting that 2021 Census was affected by a National Covid-19 lockdown);
- A review of development land use mix and reasonable worst-case employee numbers; and
- A review of 2011 Census data to understand origins and destinations of journeys to and from work (noting that 2021 Census was affected by a National Covid-19 lockdown) and a review of the locations of schools and other destinations to understand origins and destinations of other journeys.

7.27 The effects have also been determined from a review of the Proposed Development itself, as described in **ES Volume 1, Chapter 4: The Proposed Development**, and the creation of any new, or closure of any existing, routes as part of the Proposed Development.

7.28 This assessment refers to the travel demand described in the Transport Assessment, the controls described in the Parking Design and Management Plan, the controls described in the Travel Plan, and the controls described in the Delivery and Servicing Plan. The delivery of the aforementioned controls will be secured by way of a suitably worded planning condition or through a s106 planning obligation.

Assumptions and Limitations

7.29 The following assumptions and limitations apply to the assessment of traffic and transport within this ES chapter:

- The scope and nature of the assessment and the extent of survey collection is proportionate to the scale of the transport effects anticipated to arise from the Proposed Development;
- All future travel demand forecasts include a degree of uncertainty. The assessors have taken appropriate account of the reasonably conceivable uncertainty when assessing potential likely significant effects;
- This assessment is based on the data available at the time of submission of the planning applications for both the Proposed Development and the cumulative schemes;
- Durations of route closures, diversion or disruption and traffic management during the construction phase cannot be defined with certainty at this stage and will be subject to future agreement with the London Borough of Southwark (LBS) and/or TfL as relevant;
- Data used to compile this ES chapter consists of secondary information derived from a variety of sources. The assumption is made that this data, as well as that derived from other secondary sources, is reasonably accurate; and
- It is recognised that the baseline may not list all receptors within the study areas. However, it includes all identified receptors from the reviews undertaken and is considered representative of the baseline at the time of the desk-based assessment.

Embedded Mitigation

7.30 The following measures are considered as embedded mitigation associated with the demolition, construction and completed development:

- Implementation of the Outline Construction Logistics Plan (secured by planning condition or s106);
- Implementation of the Demolition and Construction Environment Management Plan (secured by planning condition or s106);
- Implementation of the Parking Design and Management Plan (secured by planning condition or s106);
- Implementation of the Travel Plan (secured by planning condition or s106);
- Implementation of the Delivery and Servicing Plan (secured by planning condition or s106);
- Implementation of highway works in accordance with a Section 278 (s278) agreement (required by the Highways Act, 1980) including Road Safety Audits and street works licence (required by New Roads and Streetworks Act 1991) which will, as far as necessary and reasonable, control and minimise adverse effects arising from works to the highway including controlling road closures, diversions and temporary traffic management.

Methodology for Defining Effects

Receptors and Receptor Sensitivity

- 7.31** The potential receptors are those people making journeys within the relevant study area for each mode, namely: pedestrians, cyclists, public transport users and road users. For each effect to be assessed, receptors are identified within each study area; with each study area being defined by assessor judgement based on available data, forecasts and proposals. The study areas include pedestrian, cycle, public transport and road networks and are described in the '*Potential Effects*' section of this ES chapter.
- 7.32** The sensitivity of receptors within study areas are defined with regard to Table 7.2.

Table 7.2 Receptor Sensitivity

Sensitivity	Typical description	Transportation approach
Very High	Very high importance and rarity, international scale and very limited potential for substitution.	Receptors travelling on internationally important routes/journeys (such as routes to ports) at significant volumes. Receptors travelling on routes/journeys where there is no alternative (such as a single route across a railway line for a particular mode/group/town) at significant volumes. Vulnerable road user Receptors travelling on networks at significant volumes (such as immediately outside schools or doctors' surgeries).
High	High importance and rarity, national scale, and limited potential for substitution.	Receptors travelling on nationally important routes/journeys (such as the national cycle network or motorways) at significant volumes. Receptors travelling on routes/journeys where there is little alternative (such as multiple but infrequent routes across a railway line for a particular mode/group/town) at significant volumes. Vulnerable road user Receptors travelling on networks at significant volumes (such as on main approaches to schools or doctors' surgeries).
Medium	High or medium importance and rarity, regional scale, limited potential for substitution.	Receptors travelling on routes/journeys important at a district level (such as a road or cycle route connecting two towns) at significant volumes. Receptors travelling on routes/journeys where there is some alternative (such as a public right of way or footway forming part of a coarse wider network of routes) at significant volumes. Vulnerable road user Receptors travelling on networks at a non-elevated rate (such as in a residential area away from schools and doctors' surgeries).
Low	Low or medium importance and rarity, local scale.	Receptors travelling on routes/journeys important at a town scale (such as local 'through' routes) at significant volumes. Receptors travelling on routes/journeys where there is similar/equivalent alternatives (such as a local street in a network of connected streets). Vulnerable road user Receptors travelling on networks at a very low rate (such as a rural road away from schools and doctors' surgeries).

Sensitivity	Typical description	Transportation approach
Negligible	Very low importance and rarity, local scale.	Receptors travelling on local estate level routes/journeys (such as residential streets not serving a significant 'through' function). Receptors travelling on routes/journeys where there is little demand for that route.

- 7.33** For the purposes of Table 7.2, vulnerable road users are those particularly sensitive groups (as described in Effective Scoping of Human Health¹) including people of a young age (such as children, young adults, unborn children), of an older age (such as older people, and frail older people), with low income or insecure income or social disadvantage (such as social isolation; and people who experience discrimination), with health issues (such as poor physical or mental health, disabilities, carers of people with poor health), and with vulnerability due to access and geographic factors (such as experiencing barriers in access to services/amenities, living in areas known to exhibit high deprivation or poor economic and/or health indicators) travelling as pedestrians, cyclists, motorcyclists and horse riders.
- 7.34** The sensitivity of each receptor is specific to each location for each assessment and is defined in the '*Potential Effects*' section based on these criteria.

Magnitude of Impact

- 7.35** In line with relevant guidance documents and using professional judgment, the following definitions for magnitude of impact have been defined:
- Very Large – changes which are likely to be perceptible and which would severely change conditions which would otherwise prevail to the extent that it would severely affect travel behaviour (such as the closure of a major junction or road during peak times on an already congested network or the creation of a pedestrian new route across a railway line on a strong desire line);
 - Large – changes which are likely to be perceptible and which would significantly change conditions which would otherwise prevail to the extent that it would significantly affect travel behaviour (such as the night-time closure of a road or the introduction of a new controlled pedestrian crossing on a busy road);
 - Medium – changes which are likely to be perceptible and which would materially change conditions which would otherwise prevail to the extent that it may affect travel behaviour to some degree (such as a change in road network capacity which may lead to some rerouting or retiming of journeys, or creation of a secondary supplementary route servicing a similar function as an existing route);
 - Small – changes which are likely to be perceptible but not to the extent that it would materially change conditions which would otherwise prevail (such as the introduction of a new site access junction or resurfacing of a footway);
 - Negligible – changes which are unlikely to be perceptible (such as a low change in traffic or pedestrian volumes); and
 - No Change – no change to the traffic and transport conditions that would affect travel behaviour.
- 7.36** For some potential effects, the IEMA Guidelines provides quantitative guidance on thresholds which may relate to each magnitude of change. The quantitative guidance provided is however subject to the judgement of the assessor and in the context of the specific situation being considered. Of relevance to this assessment, these guidelines include:
- "3.16...Changes in traffic flow of 30%, 60% and 90% are regarded as producing 'slight', 'moderate' and 'substantial' changes in severance respectively...";
 - "3.30... tentative threshold for judging the significance of changes in pedestrian amenity would be where the traffic flow (or HGV component) is halved or doubled".

¹ Effective Scoping of Human Health, IEMA, 2022

Defining the Effect

7.37 The scale of effect is determined through the combination of sensitivity of receptor and magnitude of impact. Table 7.3 sets out how these categorisations will be combined.

Table 7.3 Scale of Effect

		Magnitude of Impact (Degree of Change)					
		No Change	Negligible	Small	Medium	Large	Very Large
Receptor Sensitivity	Very High	None	Minor	Moderate	Major	Very Major	Very Major
	High	None	Minor	Minor	Moderate	Major	Very Major
	Medium	None	Negligible	Minor	Moderate	Moderate	Major
	Low	None	Negligible	Minor	Minor	Minor	Moderate
	Negligible	None	Negligible	Negligible	Negligible	Minor	Minor

7.38 The scale of effects (i.e. None, Negligible, Minor, Moderate, Major or Very Major effects) presented above in Table 7.3 can be described as follows:

- None – no effect and is therefore ‘not significant’;
- Negligible – no discernible effect and is therefore ‘not significant’;
- Minor – minor, very short-term or highly localised effect of no significant consequence and therefore the effect is considered to be ‘not significant’;
- Moderate – limited effect, (by extent, duration or magnitude) which may be considered locally significant;
- Major – considerable effect, (by extent, duration and magnitude) of more than local significance or in breach of recognised acceptability, legislation, policy or standards; and
- Very Major – very considerable effect, (by extent, duration and magnitude) of more than local significance or in breach of recognised acceptability, legislation, policy or standards.

7.39 The nature of potential effects is defined as follows:

- Beneficial – effects that produce benefits in terms of traffic and transport; and
- Adverse – effects that are detrimental in terms of traffic and transport.

7.40 The duration of effects has been reviewed based on the following criteria:

- Temporary: Short term – 0 – 2 years;
- Temporary: Medium term – 2 – 10 years;
- Temporary: Long term – more than 10 years; and
- Permanent: effects that are considered to be extremely long lasting.

7.41 Effects are either:

- Direct: resulting without any intervening factors; or
- Indirect: not directly caused or resulting from something else

7.42 The geographic extent of impacts may be :

- Local – affecting receptors in the site and immediate surroundings;
- Borough – affecting receptors in the London Borough of Southwark;
- Regional – affecting receptors in the Greater London area; and
- National – affecting receptors outside of London within the UK.

Categorising Likely Significant Effects

7.43 A significant effect in EIA terms is one which is moderate beneficial / adverse or above. An effect which is negligible or minor beneficial / adverse is generally considered to be ‘not significant’ in EIA terms.

BASELINE CONDITIONS

7.44 Reflecting the site's inner London location, the site is surrounded by an extensive and comprehensive network of streets including footways, bus routes and cycle infrastructure. The key routes in the vicinity of the site, comprising the study area, include:

- Peckham High Street: north of the site is a shopping street with footways on both sides and signal-controlled crossing points and also a primary traffic route (and the most highly vehicle trafficked street in the vicinity of the site) and a bus corridor providing access to Peckham Bus Station (adjacent to the site);
- Peckham Hill Street: north of the site is a secondary shopping street with footways on both sides and signal-controlled crossing points and also a primary traffic route (forming the main route for traffic to and from the north) and a bus corridor;
- Rye Lane (between Hanover Park and Peckham High Street): to the west of the site is the main town centre shopping street with footways on both sides and is the most highly pedestrian trafficked street in the vicinity, a single lane northbound bus and cycle lane and southbound cycle lane;
- Hanover Park: to the south of the site is predominantly residential in character with footways on both sides of a single carriageway (which carries buses) but is comparatively lightly used by both pedestrians and traffic compared with other surrounding streets with most traffic associated with the existing supermarket car park on the site;
- Mckerrell Road: to the east of the site is a cul-de-sac with no through access for vehicles, but with footways on both sides and continuous pedestrian access past the vehicle route closure, and is extremely lightly used by all modes relative to other streets in the area;
- Rye Lane (south of Hanover Park): to the south-west of the site is a shopping street with footways on both sides and forms the primary route between the site and Peckham Rye rail station for pedestrians, with a single carriageway which is restricted to buses, taxis and limited servicing activity only; and
- Clayton Road: connects Hanover Park to Peckham High Street and is a predominantly residential character street with footways on both sides and carrying general through traffic and buses.

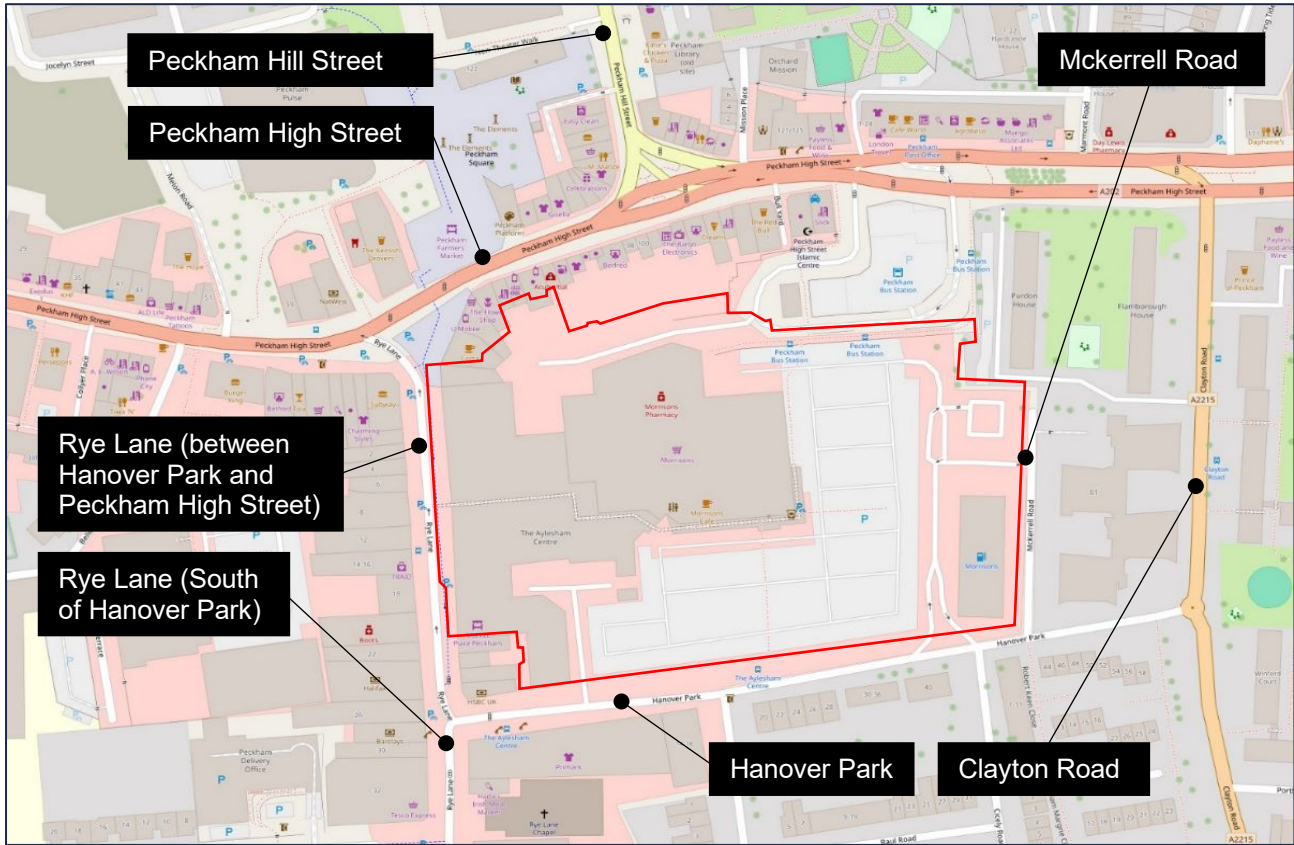
7.45 These are shown on Figure 7.2.

7.46 The site forms part of an existing north-south route between Hanover Park to the south and Peckham High Street to the north via the existing car park and bus station

7.47 Due to the local urban grain and severance created by railway lines cycle journeys are focussed on particular corridors including Rye Lane (towards cycle route 35 which runs north of Peckham High Street towards Southbank and City of London) for north-south movements and Peckham High Street for east-west movements.

7.48 The proximity of the site to Peckham Rye Station and the Peckham town centre bus services affords the site a public transport accessibility level ('PTAL') of 6b (on a scale of 1a to 6b, with 6b being excellent).

Figure 7.2 Surrounding Roads



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7.49 Bus services are accessible from stops located in Peckham Bus Station, on Hanver Park, Rye Lane, Peckham High Street and Clayton Road. These stops provide access to 16 bus routes providing approximately 88 buses per hour in each direction as shown inn Table 7.4.

Table 7.4 Bus Services

Route No.	Frequency per Direction	Route No.	Frequency per Direction
36	8	343	8
136	6	P12	4
171	5	P13	4
436	5	345	8
63	7	381	5
78	6	177	5
363	6	37	6
12	5	197	5
TOTAL		88	

7.50 Peckham Rye Station is approximately 300m from the edge of the site by foot and provides access to Southern, Thameslink, Southeastern and London Overground services connecting to central London and Kent providing 12 trains per hour in each direction (17 in the peak), as shown in Table 7.5.

Table 7.5 Rail Services

Rail Operator	Route	Frequency per Direction
London Overground	Windrush (Clapham Junction branch)	4
Southern	Terminating London Bridge	4 (6 in peak)
Southeastern	Terminating London Victoria	2 (3 peak)
Thameslink	Via London St Pancras	2 (4 in peak)
TOTAL		12 (17 in peak)

7.51 Network Rail has plans to improve the station, however it is understood that these plans are not yet fully funded and are not subject to planning permission. Therefore, due to uncertainty, these plans are not included in the future baseline for the purposes of the assessment of traffic and transport effects.

7.52 The site is located within a Controlled Parking Zone.

7.53 Collision records indicate a pattern which reflects the relative volumes of traffic and pedestrian movement in the local area with a larger number of collisions recorded on Peckham High Street (which carries a high volume of traffic) than on Rye Lane (which carries a low volume of traffic).

7.54 Baseline traffic flows on the network and at the site, determined from traffic surveys and a review of cumulative schemes (which concluded that cumulative schemes would not materially change future traffic conditions), are set out in Table 7.6 (traffic flows on the network) and Table 7.7 (traffic flows entering and exiting the site two-way).

Table 7.6 Future Baseline Vehicle Demand

Ref	Link	Location	AM Peak		PM Peak		18hr AAWT	
			Vehs	HGVs	Vehs	HGVs	Vehs	HGVs
1	Peckham Hill Street	North of Hanover Park	750	70	784	37	10,865	931
2	Peckham High Street	West of Peckham Hill Street	1,189	137	1,273	56	17,427	1,645
3		West of Clayton Road	1,841	243	2,204	125	28,567	3,192
4		East of Clayton Road	1,120	162	1,320	81	17,230	2,114
5	Clayton Road	North of Hanover Park	878	134	1,231	96	14,846	2,051
6		South of Hanover Park	669	23	777	3	11,246	202
7	Hanover Park	West of Clayton Road	415	116	810	83	11,244	1,558
8		East of Rye Lane	120	106	111	87	1,648	1,414

Table 7.7 Baseline Site Vehicle Activity

	AM Peak		PM Peak		18hr AAWT	
	Vehs	HGVs	Vehs	HGVs	Vehs	HGVs
Total Site	269	6	650	1	8,812	105

RECEPTORS AND RECEPTOR SENSITIVITY

Existing

7.55 Table 7.8 summarises the sensitivity of the receptors identified in this assessment.

Table 7.8 Sensitivity of Transportation Receptors (Existing)

Receptor Type	Receptor Location	Receptor Sensitivity	Receptor Sensitivity Reason
Non-motorised users	Hanover Park	Medium	Town importance / similar/equivalent alternatives / vulnerable road users at a non-elevated rate
Non-motorised users	The site (Existing)	Medium	Town importance / similar/equivalent alternatives / vulnerable road users at a non-elevated rate
Non-motorised users	Mckerrell Road	Medium	Town importance / similar/equivalent alternatives / vulnerable road users at a non-elevated rate
Non-motorised users	Rye Lane	High	District importance / some alternative / vulnerable road users at significant volumes
Non-motorised users	Peckham High Street	High	District importance / some alternative / vulnerable road users at significant volumes
Non-motorised users	Peckham Hill Street	High	District importance / some alternative / vulnerable road users at S significant volumes
Non-motorised users	Clayton Road	Medium	Town importance / similar/equivalent alternatives / vulnerable road users at a non-elevated rate
Non-motorised users	Peckham Bus Station	Medium	Town importance / similar/equivalent alternatives / vulnerable road users at a non-elevated rate
Non-motorised users	The study area rail services	Medium	District importance / some alternative / vulnerable road users at a non-elevated rate
Road vehicle drivers and passengers	The study area road network (including bus passengers)	Medium	District importance / similar/equivalent alternatives
Road vehicle drivers and passengers	Peckham Bus Station	Medium	District importance / some alternative
Road vehicle drivers and passengers	Hanover Park	Medium	District importance / some alternative

Introduced

7.56 The Proposed Development will change the number of people (receptors) travelling on routes identified as existing receptors but will not result in the creation of new receptors. However, due to the change in volume of non-motorised user movement within the site the sensitivity of the receptor has been reclassified for the assessment of the Completed Development as set out in Table 7.9.

Table 7.9 Sensitivity of Transportation Receptors (Introduced)

Receptor Type	Receptor Location	Receptor Sensitivity	Receptor Sensitivity Reason
Non-motorised users	The site (Completed Development)	High	Town importance / similar/equivalent alternatives / vulnerable road users at significant volumes

POTENTIAL EFFECTS

Demolition and Construction

7.57 Table 7.10 sets out the forecast traffic demand arising from site (two way, in and out) during demolition and construction during the busiest (peak) month.

Table 7.10 Peak Construction Vehicle Travel Demand

	AM Peak		PM Peak		18hr AAWT	
	Vehs	HGVs	Vehs	HGVs	Vehs	HGVs
Total Site	6	4	2	1	86	60

7.58 At the outset of the demolition and construction works, the existing Morrisons supermarket car park (353 spaces) will be reduced in size as a temporary car park (140 spaces) which will be of the same size as the permanent car park (140 spaces) included in the completed Proposed Development.

7.59 The petrol filling station on the site will also be closed at the outset. The peak construction period is estimated to be during Q4 2031, when Phase 1 of the Proposed Development will be complete and operational. For simplicity, and to ensure a worst-case scenario, the Proposed Development is assumed to be fully operational during the peak construction stage.

7.60 Table 7.11 sets out the forecast net change in activity at the site (the two-way change in traffic) associated with these pre-requisite changes (i.e. the closure of the petrol filling station and the reduction in the size of the car park) required to enable construction, and for the purposes of assessment includes the activity arising from the Completed Development (as a representation of the phased opening of the development). This change is representative of every year from the start of demolition and construction onwards.

Table 7.11 Change in Baseline Site Vehicle Activity to Enable Construction

	AM Peak		PM Peak		18hr AAWT	
	Vehs	HGVs	Vehs	HGVs	Vehs	HGVs
Total Site	-86	-8	-324	1	-4,288	-35

7.61 Changes in traffic demand arising from the site during construction have been assigned across the site and is shown in Table 7.12.

Table 7.12 Net Change in Vehicle Activity Demolition and Construction

Ref	Link	Location	AM Peak		PM Peak		18hr AAWT	
			Vehs	HGVs	Vehs	HGVs	Vehs	HGVs
1	Peckham Hill Street	North of Hanover Park	-16 (-2%)	-2 (-2%)	-56 (-7%)	0 (1%)	-767 (-7%)	-3 (0%)
2	Peckham High Street	West of Peckham Hill Street	-24 (-2%)	0 (0%)	-95 (-7%)	2 (3%)	-1,244 (-7%)	40 (2%)
3		West of Clayton Road	-43 (-2%)	-2 (-1%)	-158 (-7%)	1 (1%)	-2,077 (-7%)	29 (1%)
4		East of Clayton Road	-7 (-1%)	0 (0%)	-31 (-2%)	0 (0%)	-375 (-2%)	6 (0%)
5	Clayton Road	North of Hanover Park	-45 (-5%)	-1 (-1%)	-177 (-14%)	2 (2%)	-2,333 (-16%)	51 (2%)
6		South of Hanover Park	-25 (-4%)	-3 (-11%)	-116 (-15%)	1 (26%)	-1,581 (-14%)	-3 (-2%)
7	Hanover Park	West of Clayton Road	-68 (-16%)	-3 (-2%)	-288 (-36%)	3 (4%)	-3,862 (-34%)	55 (4%)
8		East of Rye Lane	-6 (-5%)	0 (0%)	-23 (-20%)	0 (0%)	-190 (-12%)	-8 (-1%)

7.62 The data in Table 7.12 shows a reduction in total traffic flow on all parts of the network with some small increases in HGV flow on some links in some periods, but always associated with a far greater reduction in overall traffic volume. No traffic is assigned to Rye Lane and is therefore not included in the study area traffic flow changes.

Severance of Communities

7.63 The data in Table 7.12 shows a general reduction in vehicle travel demand across the network, but in most circumstances the change in demand is too small to be perceptible. This has been assessed as follows:

- The Proposed Development will result in a reduction in traffic on Hanover Park, west of Clayton Road, between 30 and 60% (Small change with reference to the IEMA Guidelines). The magnitude of impact is Small as the change is likely to be perceptible but not to the extent that it would materially change conditions/travel behaviour. The receptor sensitivity is Medium. The effect is therefore Minor Beneficial (not significant) on non-motorised users (Hanover Park) and is temporary long term, direct, local in nature.
- The Proposed Development will result in a reduction in traffic on Peckham Hill Street of less than 10% (effectively no change). The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham Hill Street).
- The Proposed Development will result in a reduction in traffic on Peckham High Street of less than 10% (effectively no change). The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham High Street).
- The Proposed Development will result in a reduction in traffic on Clayton Road between 10% and 30% (imperceptible). The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible (not significant) on non-motorised users (Clayton Road) and is temporary long term, direct, local in nature.

7.64 Physical changes to the network have been assessed as follows:

- The existing Aylesham Centre and Morrison's car park serves a function as a through route for pedestrians on a north-south and on an east-west axis. Parts of these routes will need to be closed temporarily to facilitate demolition and construction of the Proposed Development. The magnitude of impact is Large as the change is likely to be perceptible and would significantly change conditions/travel behaviour. The receptor sensitivity is Medium. The effect is therefore Moderate Adverse (significant) on non-motorised users (the site (Existing)) and is temporary short term, direct, local in nature.

Road Vehicle Driver and Passenger Delay

7.65 Where the implementation of works to the existing highway network requires temporary traffic control or diversion, changes to delay will be perceptible. The Proposed Development includes several highway accesses on to Hanover Park and will require revisions to pedestrian crossing infrastructure on Hanover Park. Beyond the redline of the site, the Proposed Development also includes works to enhance footways on Hanover Park and within the Peckham Bus Station as part of a package of s278 works.

- The works on Hanover Park (subject to engagement and agreement with LBS and TfL but as a reasonable worst case assumed to include the narrowing of the carriageway, planting of street trees, the introduction of raised tables, and some resurfacing) will require temporary traffic management affecting capacity and delay, but would not require a road closure. The magnitude of impact is Small as the change is likely to be perceptible but not to the extent that it would materially change conditions/travel behaviour. The receptor sensitivity is Medium. The effect is therefore Minor Adverse (not significant) on road vehicle drivers and passengers (Hanover Park) and is temporary short term, direct, local in nature.
- The works in Peckham Bus Station (subject to engagement and agreement with TfL but as a reasonable worst case assumed to include the narrowing of the northern carriageway to introduce a new footway and some resurfacing throughout the bus station) can be delivered while retaining sufficient trafficable space

for buses and would therefore not require temporary traffic management affecting capacity or delay. The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible (not significant) on road vehicle drivers and passengers (Peckham Bus Station) and is temporary short term, direct, local in nature.

7.66 The data in Table 7.12 shows a general reduction in vehicle travel demand across the network. This has been assessed as follows:

- Changes to traffic demand will not materially affect road vehicle driver and passenger delay (on all links) by virtue of the fact that changes are small in both amount and proportion, and reflect a reduction in all cases. The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible (not significant) on road vehicle drivers and passengers (the study area road network (including bus passengers)) and is temporary short term, direct, local in nature.

Non-Motorised User Delay

7.67 Physical changes to the network have been assessed as follows:

- The existing Aylesham Centre and Morrison's car park serves a function as a through route for pedestrians on a north-south and on an east-west axis. Parts of these routes will need to be closed temporarily to facilitate demolition and construction of the Proposed Development. The magnitude of impact is Medium as the change is likely to be perceptible and would materially change conditions/affect travel behaviour to some degree. The receptor sensitivity is Medium. The effect is therefore Moderate Adverse (significant) on non-motorised users (the site (Existing)) and is temporary short term, direct, local in nature.
- Footways on Hanover Park will be affected by demolition and construction. This will include narrowing of footways to provide working space where buildings abut footways and will include temporary closure of footways on one side of a street where works are proposed to footways or crossings. The magnitude of impact is Small as the change is likely to be perceptible but not to the extent that it would materially change conditions/travel behaviour. The receptor sensitivity is Medium. The effect is therefore Minor Adverse (not significant) on non-motorised users (Hanover Park) and is temporary short term, direct, local in nature.
- Footways on Mckerrell Road will be affected by demolition and construction. This will include narrowing of footways to provide working space where buildings abut footways and will include temporary closure of footways on one side of a street where works are proposed to footways or crossings. The magnitude of impact is Small as the change is likely to be perceptible but not to the extent that it would materially change conditions/travel behaviour. The receptor sensitivity is Medium. The effect is therefore Minor Adverse (not significant) on non-motorised users (Mckerrell Road) and is temporary short term, direct, local in nature.
- Footways on Rye Lane will be affected by demolition and construction. This will include narrowing of footways to provide working space where buildings abut footways. The magnitude of impact is Small as the change is likely to be perceptible but not to the extent that it would materially change conditions/travel behaviour. The receptor sensitivity is High. The effect is therefore Minor Adverse (not significant) on non-motorised users (Rye Lane) and is temporary short term, direct, local in nature.
- Footways in Peckham Bus Station will be affected by demolition and construction. This will include temporary closure of footways on one side of a street where works are proposed to footways (away from bus stops and away from primary routes to/from bus stop). The magnitude of impact is Small as the change is likely to be perceptible but not to the extent that it would materially change conditions/travel behaviour. The receptor sensitivity is Medium. The effect is therefore Minor Adverse (not significant) on non-motorised users (Peckham Bus Station) and is temporary short term, direct, local in nature.

7.68 The data in Table 7.12 shows a general reduction in vehicle travel demand across the network. This has been assessed as follows:

- The Proposed Development will result in a reduction in traffic on Hanover Park west of Clayton Road over 10% (imperceptible). The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible Beneficial (not significant) on non-motorised users (Hanover Park) and is temporary long term, direct, local in nature.

- The Proposed Development will result in a reduction in traffic on Peckham Hill Street less than 10% (effectively no change). The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham Hill Street).
- The Proposed Development will result in a reduction in traffic on Peckham High Street less than 10% (effectively no change). The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham High Street).
- The Proposed Development will result in a reduction in traffic on Clayton Road over 10% (imperceptible). The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible (not significant) on non-motorised users (Clayton Road) and is temporary long term, direct, local in nature.

Non-Motorised User Amenity, Fear and Intimidation on and by Road Users

7.69 The data in Table 7.12 shows a general reduction in travel demand across the network, but in most circumstances the change in demand is too small to be perceptible. This has been assessed as follows:

- The Proposed Development will result in a reduction in traffic on Hanover Park west of Clayton Road between 25 and 50% (Small change with reference to the IEMA Guidelines). The magnitude of impact is Small as the change is likely to be perceptible but not to the extent that it would materially change conditions/travel behaviour. The receptor sensitivity is Medium. The effect is therefore Minor Beneficial (not significant) on non-motorised users (Hanover Park) and is temporary long term, direct, local in nature.
- The Proposed Development will result in a reduction in traffic on Peckham Hill Street less than 10% (effectively no change). The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham Hill Street).
- The Proposed Development will result in a reduction in traffic on Peckham High Street less than 10% (effectively no change). The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham High Street).
- The Proposed Development will result in a reduction in traffic on Clayton Road between 10% and 25% (imperceptible). The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible (not significant) on non-motorised users (Clayton Road) and is temporary long term, direct, local in nature.

Road User and Pedestrian Safety

- 7.70** The Proposed Development is not expected to result in changes which could significantly affect accidents and safety during demolition and construction because it is an explicit requirement of the highway authorities that any planning application proposals do not unacceptably increase safety risks. The Proposed Development has been designed following the process set out in the 'Construction, Design and Management Regulations, 2015' applying the principles of 'ERIC' to eliminate, reduce, isolate and control hazards.
- 7.71** During construction, vehicle activity arriving at, within, and leaving the site will be closely controlled with banks persons provided where appropriate to control vehicle movements. Suitable controls will be secured through the Outline Construction Logistics Plan (secured by planning condition or s106) and Demolition and Construction Environment Management Plan, as well as through Section 278 (s278) agreements (required by the Highways Act, 1980) including Road Safety Audits and street works licences (required by New Roads and Streetworks Act 1991).
- 7.72** With reference to Table 7.12, changes to traffic demand are not sufficiently material to affect road user and pedestrian safety during demolition and construction. This has been assessed as follows:

- The Proposed Development will result in a reduction in traffic on Hanover Park west of Clayton Road over 10% (imperceptible) balanced by the addition of a small number of pedestrians and cyclists associated with the Proposed Development. The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is Medium. The effect is therefore None (not significant) on non-motorised users (Hanover Park).
- The Proposed Development will result in a reduction in traffic on Peckham Hill Street less than 10% (effectively no change) balanced by the addition of a small number of pedestrians and cyclists associated with the Proposed Development. The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham Hill Street).
- The Proposed Development will result in a reduction in traffic on Peckham High Street less than 10% (effectively no change) balanced by the addition of a small number of pedestrians and cyclists associated with the Proposed Development. The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham High Street).
- The Proposed Development will result in a reduction in traffic on Clayton Road over 10% (imperceptible) balanced by the addition of a small number of pedestrians and cyclists associated with the Proposed Development. The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is Medium. The effect is therefore None (not significant) on non-motorised users (Clayton Road).

Completed Development

7.73 The forecast change in travel demand arising from the site with the completed Proposed Development in place is set out in Table 7.13. This is comprised of the additional demand from the Proposed Development, the reduction in the supermarket car park, the removal of the petrol filling station, and the replacement of the commercial space on the site. The Proposed Development results in an overall increase in travel demand but a reduction in vehicle demand.

Table 7.13 Net Change in Travel Demand from the Completed Proposed Development

Mode	AM Peak			PM Peak		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Total People	62	358	420	112	70	182
Pedestrians	29	67	96	59	48	108
Bus	53	120	171	156	130	286
Rail	26	179	206	85	63	147
Cyclists	7	23	30	19	16	35
Car Drivers	-49	-33	-82	-165	-150	-315
Motorcycles	0	0	0	0	0	0
Car Passengers	-7	-1	-8	-48	-42	-91
Taxi	3	3	6	6	6	12

7.74 Table 7.14 sets out the forecast change in vehicle demand arising from the site with the completed Proposed Development.

Table 7.14 Completed Development Vehicle Travel Demand

	AM Peak		PM Peak		18hr AAWT	
	Vehs	HGVs	Vehs	HGVs	Vehs	HGVs
Total Site	-86	-8	-324	1	-4,288	-35

7.75 Changes in traffic demand arising from the site with the completed Proposed Development have been assigned across the study area and is shown in Table 7.15

Table 7.15 Net Change in Vehicle Activity Completed Development

Ref	Link	Location	AM Peak		PM Peak		18hr AAWT	
			Vehs	HGVs	Vehs	HGVs	Vehs	HGVs
1	Peckham Hill Street	North of Hanover Park	-16 (-2%)	-2 (-2%)	-56 (-7%)	0 (1%)	-767 (-7%)	-3 (0%)
2	Peckham High Street	West of Peckham Hill Street	-29 (-2%)	-3 (-2%)	-96 (-8%)	0 (1%)	-1309 (-8%)	-5 (0%)
3		West of Clayton Road	-48 (-3%)	-5 (-2%)	-160 (-7%)	0 (0%)	-2141 (-7%)	-16 (-1%)
4		East of Clayton Road	-9 (-1%)	-1 (-1%)	-31 (-2%)	0 (-1%)	-396 (-2%)	-9 (0%)
5	Clayton Road	North of Hanover Park	-51 (-6%)	-5 (-4%)	-179 (-15%)	1 (1%)	-2419 (-16%)	-10 (0%)
6		South of Hanover Park	-25 (-4%)	-3 (-11%)	-116 (-15%)	1 (26%)	-1581 (-14%)	-3 (-2%)
7	Hanover Park	West of Clayton Road	-74 (-18%)	-7 (-6%)	-290 (-36%)	2 (2%)	-3948 (-35%)	-6 (0%)
8		East of Rye Lane	-6 (-5%)	0 (0%)	-23 (-20%)	0 (0%)	-190 (-12%)	-8 (-1%)

7.76 The data in Table 7.15 shows a reduction in total traffic flow on all parts of the network with some small increases in HGV flow on some links in some periods, but always associated with a far greater reduction in overall traffic volume. No traffic is assigned to Rye Lane and is therefore not included in the study area traffic flow changes.

7.77 Table 7.16 sets out the forecast change in vehicle demand crossing the Hanover Park north footway to enter and exit the site.

Table 7.16 Hanover Park Site Accesses Vehicle Movement Comparison

	AM Peak	PM Peak	18hr AAWT
Existing	263	635	8,649
Proposed (Completed Development)	183	326	4,524
Net Change	-80 (-30%)	-309 (-49%)	-4,125 (-48%)

7.78 Table 7.17 sets out the forecast change in vehicle demand circulating within the street level area of the site with the completed Proposed Development (as arrivals only, to reflect 'number of vehicles circulating' rather than 'movements').

Table 7.17 Street Level Vehicle Movement Comparison (Arrivals)

	AM Peak	PM Peak	18hr AAWT
Existing	129	310	4,219
Proposed (Completed Development)	3	9	155
Net Change	-126 (-98%)	-301 (-97%)	-4,063 (-96%)

Severance of Communities

7.79 The data in Table 7.15 shows a general reduction in vehicle travel demand across the network, but in most circumstances the change in demand is too small to be perceptible. This has been assessed as follows:

- The Proposed Development will result in a reduction in traffic on Hanover Park west of Clayton Road between 30 and 60% (Small change with reference to the IEMA Guidelines). The magnitude of impact is Small as the change is likely to be perceptible but not to the extent that it would materially change conditions/travel behaviour. The receptor sensitivity is Medium. The effect is therefore Minor Beneficial (not significant) on non-motorised users (Hanover Park) and is permanent, direct, local in nature.

- The Proposed Development will result in a reduction in traffic on Peckham Hill Street less than 10% (effectively no change). The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham Hill Street).
- The Proposed Development will result in a reduction in traffic on Peckham High Street less than 10% (effectively no change). The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham High Street).
- The Proposed Development will result in a reduction in traffic on Clayton Road between 10% and 30% (imperceptible). The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible (not significant) on non-motorised users (Clayton Road) and is temporary long term, direct, local in nature.
- The Proposed Development will result in a reduction in traffic across the Hanover Park northern footway (into and out of the site) between 30 and 60% (Small change with reference to the IEMA Guidelines). The magnitude of impact is Small as the change is likely to be perceptible but not to the extent that it would materially change conditions/travel behaviour. The receptor sensitivity is Medium. The effect is therefore Minor Beneficial (not significant) on non-motorised users (Hanover Park) and is permanent, direct, local in nature.

7.80 Physical changes to the network have been assessed as follows:

- The existing Aylesham Centre and Morrison's car park serves a function as a through route for pedestrians on a north-south (crossing traffic through the car park) and on an east-west axis (traffic free). These routes will be enhanced with the Proposed Development and will create routes which are traffic free on both axes, and the traffic movements within the site will reduce substantially. The Proposed Development will also reduce vehicle movement within the development generally from a 'car park' level of activity to a 'servicing only' level of activity. The magnitude of impact is Medium as the change is likely to be perceptible and would materially change conditions/affect travel behaviour to some degree. The receptor sensitivity is High. The effect is therefore Moderate Beneficial (significant) on non-motorised users (the site (Completed Development)) and is permanent, direct, local in nature.

Road Vehicle Driver and Passenger Delay

7.81 Table 7.15 shows a general reduction in vehicle travel demand across the network. This has been assessed as follows:

- Changes to traffic demand will not materially affect road vehicle driver and passenger delay (on all links) by virtue of the fact that changes are small in both amount and proportion, and reflect a reduction in all cases. The changes proposed to the highway network in the Proposed Development are also not expected to result in a perceptible change to road vehicle driver and passenger delay. The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible (not significant) on road vehicle drivers and passengers (the study area road network (including bus passengers)) and is permanent, direct, local in nature.

7.82 Table 7.13 shows a small increase in bus passenger travel demand across the network. This has been assessed as follows:

- The Proposed Development will result in a maximum of 156 bus users either arriving at, or departing from, the site in one hour (the peak flow in any one direction). Those bus users will split across the available bus services (approximately 88 buses per hour per direction) and will not result in a perceptible change in the delay experienced by bus passengers on those services. The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible (not significant) on road vehicle drivers and passengers (the study area road network (including bus passengers)) and is permanent, direct, local in nature.

Non-Motorised User Delay

7.83 Physical changes to the network have been assessed as follows:

- While the Proposed Development includes new and enhanced routes through the site, these are not expected to result in meaningfully perceptible changes to non-motorised user delay. The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is High. The effect is therefore Minor Beneficial (not significant) on non-motorised users (the site (Completed Development)) and is permanent, direct, local in nature.

7.84 Table 7.15 shows a general reduction in vehicle travel demand across the network. This has been assessed as follows:

- The Proposed Development will result in a reduction in traffic on Hanover Park west of Clayton Road over 10% (imperceptible). The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible Beneficial (not significant) on non-motorised users (Hanover Park) and is permanent, direct, local in nature.
- The Proposed Development will result in a reduction in traffic on Peckham Hill Street less than 10% (effectively no change). The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham Hill Street).
- The Proposed Development will result in a reduction in traffic on Peckham High Street less than 10% (effectively no change). The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham High Street).
- The Proposed Development will result in a reduction in traffic on Clayton Road over 10% (imperceptible). The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible (not significant) on non-motorised users (Clayton Road) and is permanent, direct, local in nature.

7.85 Table 7.13 shows a small increase in rail passenger travel demand across the network. This has been assessed as follows:

- The Proposed Development will result in a maximum of 179 rail users either arriving at, or departing from, the site in one hour (the peak flow in any one direction). Those rail users will split across the available rail services (approximately 17 trains per hour per direction in the peak) and will not result in a perceptible change in the delay experienced by bus passengers on those services. The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible (not significant) on non-motorised users (the study area rail services) and is permanent, direct, local in nature.

Non-Motorised User Amenity, Fear and Intimidation on and by Road Users

7.86 The data in Table 7.15 shows a general reduction in travel demand across the network, but in most circumstances the change in demand is too small to be perceptible. This has been assessed as follows:

- The Proposed Development will result in a reduction in traffic on Hanover Park west of Clayton Road between 25 and 50% (Small change with reference to the IEMA Guidelines). The magnitude of impact is Small as the change is likely to be perceptible but not to the extent that it would materially change conditions/travel behaviour. The receptor sensitivity is Medium. The effect is therefore Minor Beneficial (not significant) on non-motorised users (Hanover Park) and is permanent, direct, local in nature.
- The Proposed Development will result in a reduction in traffic on Peckham Hill Street less than 10% (effectively no change). The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham Hill Street).

- The Proposed Development will result in a reduction in traffic on Peckham High Street less than 10% (effectively no change). The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham High Street).
- The Proposed Development will result in a reduction in traffic on Clayton Road between 10% and 25% (imperceptible). The magnitude of impact is Negligible as the change is unlikely to be perceptible. The receptor sensitivity is Medium. The effect is therefore Negligible (not significant) on non-motorised users (Clayton Road) and is permanent, direct, local in nature.

7.87 Physical changes to the network have been assessed as follows:

- The existing Aylesham Centre and Morrison's car park serves a function as a through route for pedestrians on a north-south (crossing traffic through the car park) and on an east-west axis (traffic free). These routes will be enhanced with the Proposed Development and will create routes which are traffic free on both axes, and the traffic movements within the site will reduce substantially. The Proposed Development will also reduce vehicle movement within the development generally from a 'car park' level of activity to a 'servicing only' level of activity. The magnitude of impact is Medium as the change is likely to be perceptible and would materially change conditions/affect travel behaviour to some degree. The receptor sensitivity is High. The effect is therefore Moderate Beneficial (significant) on non-motorised users (the site (Completed Development)) and is permanent, direct, local in nature.

Road User and Pedestrian Safety

7.88 The Proposed Development is not expected to result in changes which could significantly affect accidents and safety once completed and operational because it is an explicit requirement of the highway authorities that any planning application proposals do not unacceptably increase safety risks. The Proposed Development has been designed following the process set out in the 'Construction, Design and Management Regulations, 2015' applying the principles of 'ERIC' to eliminate, reduce, isolate and control hazards.

7.89 With reference to Table 7.15, changes to traffic demand are not sufficiently material to affect road user and pedestrian safety during the completed Proposed Development. This has been assessed as follows:

- The Proposed Development will result in a reduction in traffic on Hanover Park west of Clayton Road over 10% (imperceptible) balanced by the addition of a small number of pedestrians and cyclists associated with the Proposed Development. The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is Medium. The effect is therefore None (not significant) on non-motorised users (Hanover Park).
- The Proposed Development will result in a reduction in traffic on Peckham Hill Street less than 10% (effectively no change) balanced by the addition of a small number of pedestrians and cyclists associated with the Proposed Development. The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham Hill Street).
- The Proposed Development will result in a reduction in traffic on Peckham High Street less than 10% (effectively no change) balanced by the addition of a small number of pedestrians and cyclists associated with the Proposed Development. The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is High. The effect is therefore None (not significant) on non-motorised users (Peckham High Street).
- The Proposed Development will result in a reduction in traffic on Clayton Road over 10% (imperceptible) balanced by the addition of a small number of pedestrians and cyclists associated with the Proposed Development. The magnitude of impact is No Change as the change is effectively nil. The receptor sensitivity is Medium. The effect is therefore None (not significant) on non-motorised users (Clayton Road).

MITIGATION, MONITORING AND RESIDUAL EFFECTS

Demolition and Construction Mitigation

- 7.90** No additional mitigation measures to those set out within Embedded Mitigations sections are required during the demolition and construction phase of the Proposed Development.
- 7.91** Whilst there will be temporary, short-term significant adverse effects on severance and delay for non-motorised users within the site as a result of the temporary closure of routes through the site, the closures are necessary to facilitate the construction of the Proposed Development. Appropriate management plans, such as the Demolition and Construction Environmental Management Plan (DCEMP) and CLP will be in place during the works to limit the impact on non-motorised users.

Completed Development Mitigation

- 7.92** No additional mitigation measures to those set out within Embedded Mitigations sections are required during the completed development phase of the Proposed Development.

Residual Effects

- 7.93** All of the residual effects resulting from the Proposed Development, are presented in Table 7.18, identifying whether the effect is significant or not.

Table 7.18 Residual Effects

Receptor	Description of the Residual Effect	Scale and Nature	Significant / Not Significant	Geo	D I	P T	St Mt Lt
Demolition and Construction							
Non-motorised users (Hanover Park)	Severance of communities	Minor Beneficial	Not Significant	L	D	T	Lt
Non-motorised users (Peckham Hill Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Peckham High Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Clayton Road)		Negligible	Not Significant	L	D	T	Lt
Non-motorised users (the site (Existing))		Moderate Adverse	Significant	L	D	T	St
Road vehicle drivers and passengers (Hanover Park)	Road vehicle driver and passenger delay	Minor Adverse	Not Significant	L	D	T	St
Road vehicle drivers and passengers (Peckham Bus Station)		Negligible	Not Significant	L	D	T	St
Road vehicle drivers and passengers (the study area road network (including bus passengers))		Negligible	Not Significant	L	D	T	St
Non-motorised users (the site (Existing))		Moderate Adverse	Significant	L	D	T	St
Non-motorised users (Hanover Park)	Non-motorised user delay	Minor Adverse	Not Significant	L	D	T	St
Non-motorised users (Mckerrell Road)		Minor Adverse	Not Significant	L	D	T	St

Receptor	Description of the Residual Effect	Scale and Nature	Significant / Not Significant	Geo	D I	P T	St Mt Lt
Non-motorised users (Rye Lane)		Minor Adverse	Not Significant	L	D	T	St
Non-motorised users (Peckham Bus Station)		Minor Adverse	Not Significant	L	D	T	St
Non-motorised users (Hanover Park)		Negligible Beneficial	Not Significant	L	D	T	Lt
Non-motorised users (Peckham Hill Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Peckham High Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Clayton Road)		Negligible	Not Significant	L	D	T	Lt
Non-motorised users (Hanover Park)	Non-motorised user amenity; fear and intimidation	Minor Beneficial	Not Significant	L	D	T	Lt
Non-motorised users (Peckham Hill Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Peckham High Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Clayton Road)		Negligible	Not Significant	L	D	T	Lt
Non-motorised users (Hanover Park)	Road user and pedestrian safety	None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Peckham Hill Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Peckham High Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Clayton Road)		None	Not Significant	N/A	N/A	N/A	N/A
Completed Development							
Non-motorised users (Hanover Park)	Severance of communities	Minor Beneficial	Not Significant	L	D	P	N/A
Non-motorised users (Peckham Hill Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Peckham High Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Clayton Road)		Negligible	Not Significant	L	D	P	N/A
Non-motorised users (Hanover Park)		Minor Beneficial	Not Significant	L	D	P	N/A
Non-motorised users (the site (Completed Development))		Moderate Beneficial	Significant	L	D	P	N/A
Road vehicle drivers and passengers (the study area road network (including bus passengers))	Road vehicle driver and passenger delay	Negligible	Not Significant	L	D	P	N/A
Road vehicle drivers and passengers (the study area road network (including bus passengers))		Negligible	Not Significant	L	D	P	N/A
Non-motorised users (the site (Completed Development))	Non-motorised user delay	Minor Beneficial	Not Significant	L	D	P	N/A

Receptor	Description of the Residual Effect	Scale and Nature	Significant / Not Significant	Geo	D I	P T	St Mt Lt
Non-motorised users (Hanover Park)		Negligible Beneficial	Not Significant	L	D	P	N/A
Non-motorised users (Peckham Hill Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Peckham High Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Clayton Road)		Negligible	Not Significant	L	D	P	N/A
Non-motorised users (the study area rail services)		Negligible	Not Significant	L	D	P	N/A
Non-motorised users (Hanover Park)	Non-motorised user amenity; fear and intimidation	Minor Beneficial	Not Significant	L	D	P	N/A
Non-motorised users (Peckham Hill Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Peckham High Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Clayton Road)		Negligible	Not Significant	L	D	P	N/A
Non-motorised users (the site (Completed Development))		Moderate Beneficial	Significant	L	D	P	N/A
Non-motorised users (Hanover Park)	Road user and pedestrian safety	None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Peckham Hill Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Peckham High Street)		None	Not Significant	N/A	N/A	N/A	N/A
Non-motorised users (Clayton Road)		None	Not Significant	N/A	N/A	N/A	N/A
Notes: Residual Effect <ul style="list-style-type: none">Scale = Negligible / Minor / Moderate / Major / Very MajorNature = Beneficial or Adverse Geo (Geographic Extent) = Local (L), Borough (B), Regional (R), National (N) D = Direct / I = Indirect P = Permanent / T = Temporary St = Short Term / Mt = Medium Term / Lt = Long Term N/A = not applicable / not assessed							

management plans, such as the DCEMP and CLP will be in place during the works to limit the impact on non-motorised users.

- 7.96** Once operational, there will be significant beneficial effects on non-motorised users within the site with respect to severance and non-motorised user amenity, fear and intimidation.

ASSESSMENT OF THE FUTURE ENVIRONMENT

- 7.94** As detailed in Paragraph 7.3, the cumulative schemes identified in **ES Volume 1, Chapter 2: EIA Methodology** do not materially affect the study area and have therefore not been considered further. The future baseline assessed within this ES chapter is representative of any future year, and is representative of conditions both throughout construction and during operation.

LIKELY SIGNIFICANT EFFECTS

- 7.95** During the demolition and construction works there will be short-term significant adverse effects on severance and delay for non-motorised users within the site as a result of the temporary closure of routes through the site. The closures are necessary to facilitate the construction of the Proposed Development. Appropriate